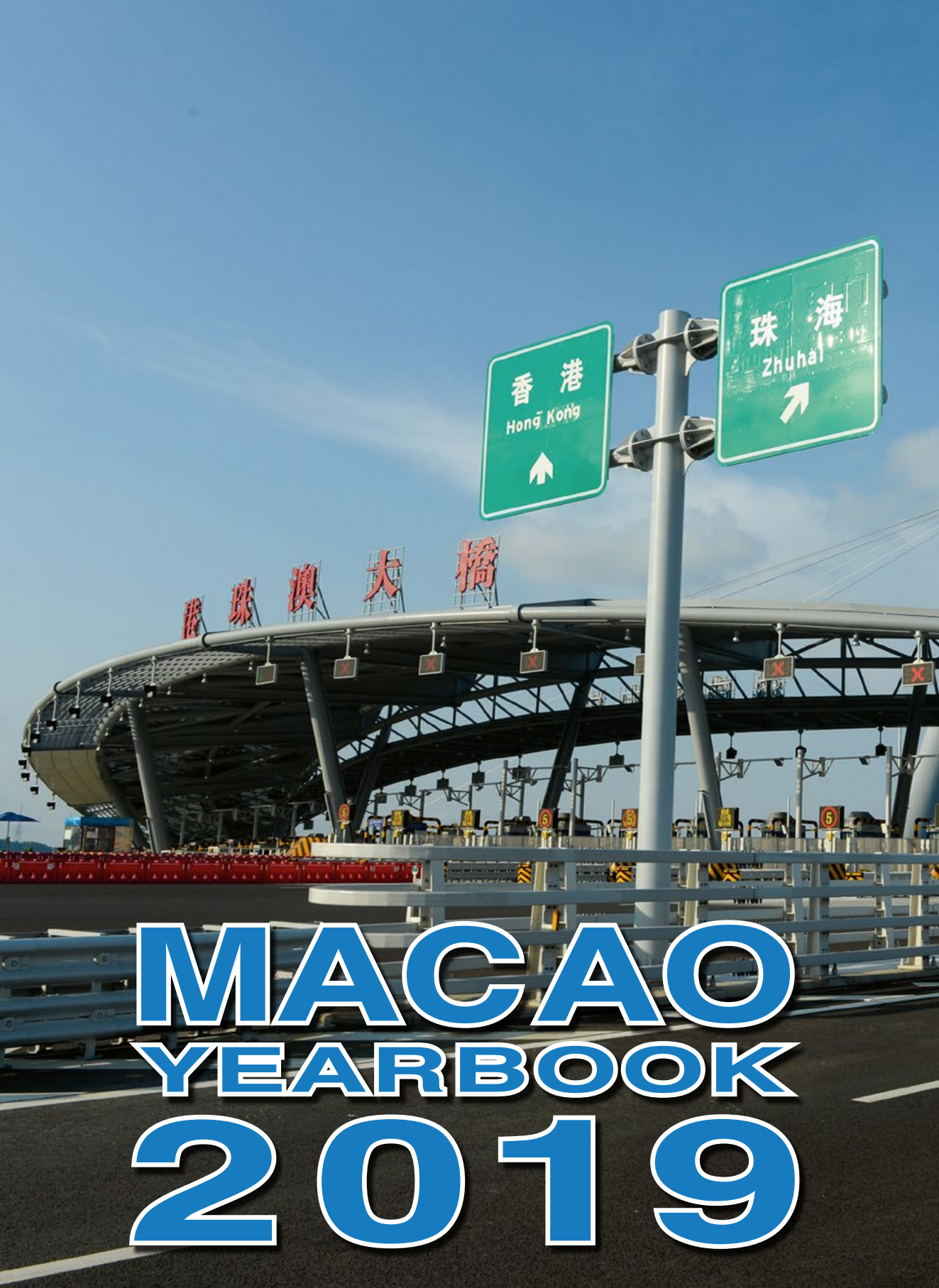
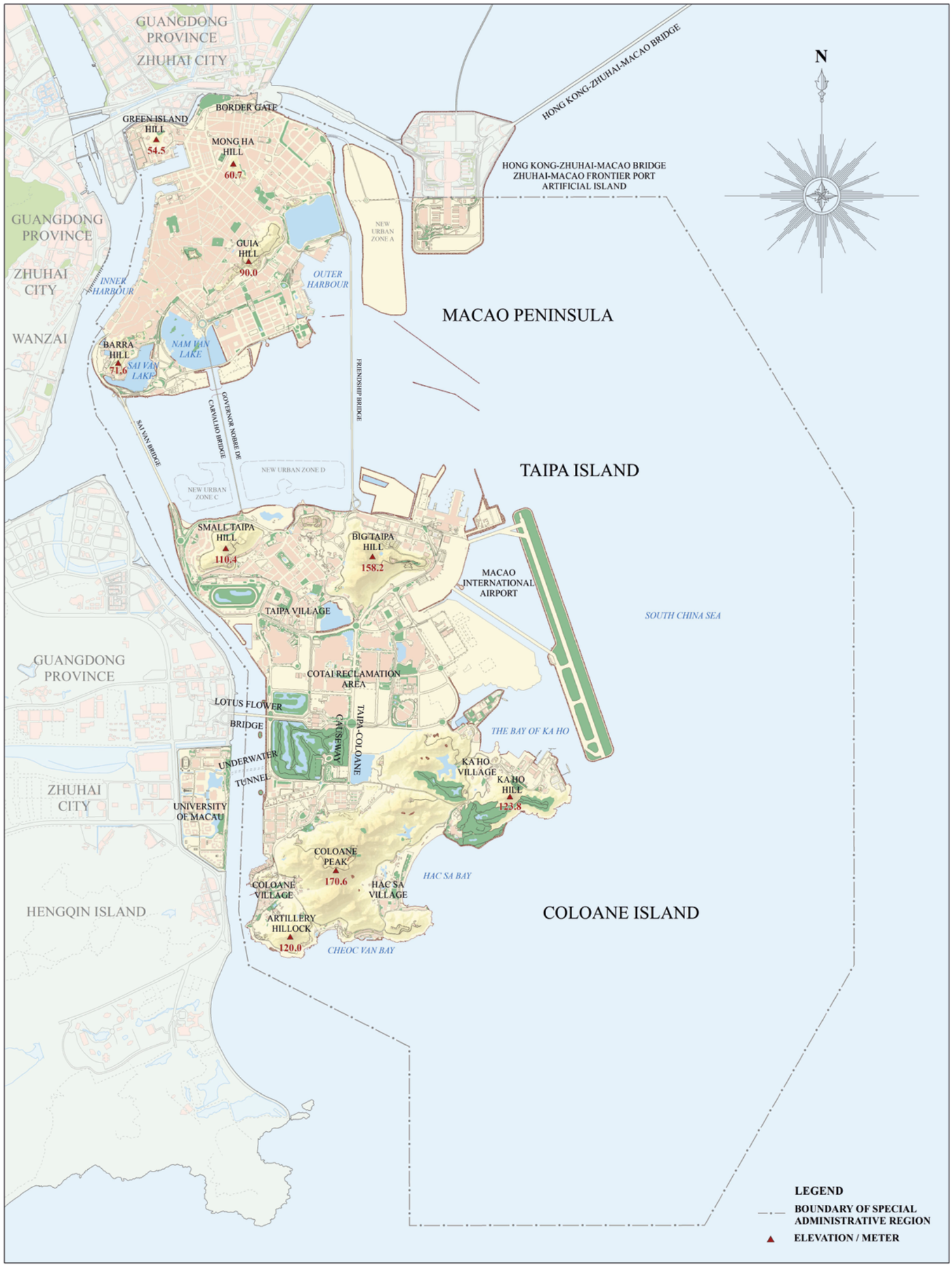


MACAO YEARBOOK 2019

MACAO SPECIAL ADMINISTRATIVE REGION



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MACAO YEARBOOK 2019

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Editor's note

The *Macao Yearbook* is a reference book published annually by the Government Information Bureau of the Macao Special Administrative Region (MSAR). It outlines major events, details of progress achieved, and changes made in the course of Macao's political, economic, social and cultural development. The Macao Yearbook has been published since 2002, with the aim of promoting Macao and providing detailed information and data for all who wish to study and understand Macao.

The Macao Yearbook is divided into four sections: Administrative Priorities of the MSAR Government; Calendar of Events; Overview of the Macao SAR; and Appendices.

The Overview of the MSAR in 2018 records all the major work undertaken in the administrative, legislative and judicial areas in Macao during the year. It also presents, in a systematic and integrated manner, data and information on 15 areas, namely the political and administrative system; legal and judicial system; external relations; economy; tourism; public order; education; culture and sport; health and social welfare; media, communications and information technology; land, infrastructure, housing and public utilities; transport; geography, environment and population; religion and customs; and history..

Most of the figures and data quoted in the *Macao Yearbook 2019* were provided by relevant departments and the Statistics and Census Service, and they correspond to the situation at the end of 2018. However, some content is more up to date, reflecting the current situation in Macao, including Government directories and details of the visa validity of MSAR Passports and travel permits. Unless specified otherwise, all the monetary amounts shown are in Macao's currency – the pataca.

In consideration of the surging popularity of digital reading along with environmentally friendliness, from 2016 onwards, the Chinese, Portuguese and English editions of Macao Yearbook are only being published in electronic format instead of printed versions. However, the yearbook will be enhanced with video clips in addition to its interesting text and pictorial contents.

The success of the Macao Yearbook is due to the strong support and cooperation received from various departments of the Macao SAR Government, as well as other public bodies and institutions. We wish to express our gratitude to all whose efforts to provide detailed documentation and data have enabled us to complete our editorial work smoothly. Its content has been carefully checked and proofread during the editorial process, production and printing. However, we apologise in advance if any errors remained undetected. We also welcome all comments and suggestions.

The Macao Yearbook Editorial Committee

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MACAO AT A GLANCE

Population and Households

Total population
(As at 31 December 2018): 667,400
Of whom 312,800 were males
357,600 were females

Age structure:
Under 14 years old: 13.2 percent
15 - 64 years old: 75.7 percent
65 years old and above: 11.1 percent

Major nationalities (according to By-census 2016)
Chinese: 88.4 percent
Filipino: 4.6 percent
Vietnamese: 2.4 percent
Portuguese: 1.4 percent

Major birthplaces of Macao population (according to By-census 2016)
Macao: 40.7 percent
Mainland China: 43.6 percent
Of whom 73.3 percent were born in Guangdong
13.5 percent in Fujian provinces
Hong Kong: 3.3 percent
The Philippines: 4.4 percent
Vietnam: 2.5 percent
Portugal: 0.3 percent

Crude birth rate: 9.0 per 1,000 population
Crude death rate: 3.1 per 1,000 population
Marriage rate: 5.8 per 1,000 population
Divorce rate: 2.3 per 1,000 population
Ageing index: 84.1 percent
Total number of households (as at 31 December 2018): 194,400
Average persons per household: 3.03
Total number of households living in apartments (according to By-census 2016): 193,400
Of which 66.2 percent lived in private housing;
25.8 percent lived in rented housing;
1.2 percent lived in housing provided by employers.
Population density: 20,000 persons per square kilometre

Geography and Weather

Longitude: 113° 31′ 41.4″ E – 113° 35′ 48.5″ E
Latitude: 22° 06′ 36″ N – 22° 13′ 01.3″ N
Total land area: 32.9 sq. km
Macao peninsula: 9.3 sq. km
Taipa island: 7.9 sq. km
Coloane island: 7.6 sq. km
COTAI Reclamation Area: 6.0 sq. km
New Urban Zone A and the Port of the Hong Kong-Zhuhai-Macao Bridge: 2.1 sq. km
Coastline: 76.7 kilometres
Altitude: Highest point on the Macao peninsula: 90 metres (Guia Hill)
Highest point on Taipa island: 158.2 metres (Taipa Grande)
Highest point on Coloane island: 170.6 metres (Alto de Coloane)
Average temperature: 22.8°C
Total rainfall: 1,795.6 mm
Average relative humidity: 81 percent
Total sunshine: 1,744.4 hours

Employment

Employed population: 385,400
Of whom 6,400 were employed in manufacturing
31,100 in construction
10,800 in finance and banking
84,100 in gaming
Labour force participation rate: 70.9 percent
Unemployment rate: 1.8 percent
Underemployment rate: 0.5 percent

Motor Roads and Licensed Vehicles

Total length of motor roads: 448.9 kilometres
Newly registered vehicles: 14,509
Licensed vehicles: 240,145
Of which 115,659 were automobiles
124,078 were motorcycles

Major Economic Indicators

GDP at current prices: 440.316 billion patacas[P]
GDP (chain volume 2016): 416.235 billion patacas[P]
GDP per capita at current prices: 666,800 patacas[P]
Median monthly earnings: 16,000 patacas
Narrow money supply (M1): 80.758 billion patacas (at year-end)
Broad money supply (M2): 651.438 billion patacas (at year-end)
Residents' deposits: 635.431 billion patacas (at year-end)
Inflation rate (Composite CPI): 3.01 percent
Total merchandise imports and exports
Total imports: 90.103 billion patacas
Total exports: 12.193 billion patacas
Inbound and outbound container movements by land: 16,043 tonnes
Inbound and outbound container movements by sea: 171,026 tonnes
Seaborne container throughput: 138,639 TEUs
Air cargo movements: 41,481 tonnes
Inbound commercial flights: 31,016

Tourism

Visitor arrivals: 35,803,660
By sea: 10,355,396
By land: 22,152,467
By air: 3,295,800
Hotel and guesthouse occupancy: 91.1 percent
Per-capita spending of visitors (excluding gaming): 1,946 patacas

Note: Due to round-up adjustment, the total figures may not exactly equal the sum of individual items.
[P] *Provisional figures*

Administrative Priorities of the MSAR Government in 2019

Seize opportunities for balanced development

2018 proved a critical year for continuing progress with implementing China's 13th Five Year Plan. Macao is moving towards a new era, with the mother country giving rise to unprecedented development opportunities. The Government will work together with the public to seize opportunities, secure our foothold with the support of the motherland to plan for the future, and advance the great cause of "One country, two systems", "Macao people governing Macao" and a high degree of autonomy.

In 2019, we will celebrate the 20th anniversary of Macao's reunification with the motherland. This year will also see a change of administration in the MSAR. We must create a harmonious social environment to ensure effective administration. We will strive to realise our policy goals of maintaining overall stable growth, prioritising livelihood projects, and emphasising balanced economic and social development.

1. Focus on improving people's livelihoods

Adhering to providing comprehensive support and multi-level coverage, the Government integrates short-, medium-, and long-term policies to enhance social security for people's basic quality of life.

The Non-mandatory Central Provident Fund System has come into effect, marking a milestone in development of the two-tier social security system. According to the related assessment mechanism, the Minimum Subsistence Index has been increased to 4,230 patacas. The Government continues disbursing an extra one month's financial assistance to families registered with the Social Welfare Bureau, a special subsidy for three categories of disadvantaged families, and a special living allowance through the Social Inclusion Scheme. The Government also continues implementing the Short-term Food Assistance Programme, and enhancing temporary and emergency relief measures.

The Government continues implementing a rent waiver for public housing tenants, and disbursing temporary housing subsidies for eligible families on the waiting list for public housing.

Regarding caring for the disabled, the Ordinary Disability Gratuity and the Special Disability Gratuity will be increased to 9,000 patacas and 18,000 patacas per year, respectively. The Government continues providing a subsidy of 5,000 per month

to eligible employees with disabilities. Employers hiring people with disabilities are granted a tax deduction of up to 5,000 patacas on profit tax or personal income tax per employee with disabilities. The pension are also being increased to 3,630 patacas per month, while the old age allowance remains at 9,000 patacas per month.

Regarding students from families with financial difficulties, the Government continues disbursing tuition fee subsidies every academic year: each kindergarten pupil or primary school student receives 4,000 patacas, each junior secondary school student receives 6,000 patacas, and each senior secondary school student receives 9,000 patacas. A stationery allowance is disbursed every academic year: the allowance for each kindergarten pupil or primary school student is being increased to 2,500 patacas, while the allowance for each secondary school student is being increased to 3,250 patacas. The meal allowance per student is also increased to 3,800 patacas for every academic year.

The Government is upgrading the Positive Life Programme and the Community Employment Assistance Scheme, to enhance self-reliance among the underprivileged, and continues providing a monthly subsidy of up to 5,000 patacas for eligible low-income, full-time employees.

Pursuant to the law on Provident Fund Personal Accounts, the personal account of every eligible permanent resident of the MSAR receives a 10,000-pataca initiation allowance. The Government also continues injecting an extra sum of 7,000 patacas from the fiscal surplus into the provident fund account of every MSAR resident. We also continue the Wealth Partaking Scheme, through offering 10,000 patacas to each permanent resident and 6,000 patacas to each non-permanent resident.

The Government continues disbursing the Textbook Allowances. The allowances per academic year for each kindergarten and pre-school pupil, primary school student and secondary school student are being increased to 2,300 patacas, 2,900 patacas and 3,400 patacas, respectively. We also continue providing tuition fee subsidies for eligible Macao students who study in non-tertiary institutions in Guangdong Province. The subsidy for each primary and secondary school student is up to 6,000 patacas, while the subsidy for each kindergarten and pre-school pupil is up to 8,000 patacas.

The Government continues providing a stationery allowance to each Macao student pursuing tertiary education or postgraduate studies. This allowance will be increased to 3,300 patacas. The Government is also implementing the third phase of the Continuing Education Programme, offering a subsidy of 6,000 patacas per Macao citizen aged 15 or older, until the programme concludes by the end of 2019.

A 600-pataca healthcare voucher continues being offered to each resident of Macao. The Government also continues offering an electricity bill subsidy of 200 patacas and a tap water tariff subsidy for each residential unit, and bus fare concessions for the elderly, students, people with disabilities, and other members of the public.

The Government implements the policy of promoting healthy births and increasing the fertility rate. The birth allowance under the Social Security Fund will be increased

to 5,260 patacas, and both parents can apply for this simultaneously.

To support the middle-income group, the Government continues implementing the 30 percent exemption in personal income tax applicable to all Macao residents, with the basic allowance set at 144,000 patacas. We also continue the 60 percent rebate of tax payable for 2018, subject to an increased ceiling of 14,000 patacas. The tax rebates will be disbursed in 2020.

The Government continues implementing tax cuts and waivers as follows:

- Profit tax allowance remains at 600,000 patacas;
- Waivers of all business taxes, hawker licence fees, wet market stall rents, inspection and quarantine fees for live food, stamp duty on life or non-life insurance, and bank service charges;
- Waivers of signboard taxes for businesses;
- Exemption from tourism tax for restaurants;
- Waiver of the first 3,500 patacas of real estate tax for Macao residents;
- Waivers of stamp duty on entrance passes and tickets for cultural and arts performances, exhibitions and entertainment programmes;
- Waivers of stamp duty for auctions;
- Waiver of real estate stamp duty on the first three million patacas of a home's value, for Macao permanent residents purchasing a residential property for the first time; and
- Waivers of profit tax for local enterprises on revenue gained from Portuguese-speaking countries.

The Government also implements the following four tax incentives:

1. To align with the implementation of the Greater Bay Area development plan, the Government encourages local enterprises to participate in innovative research and development. Enterprises can enjoy a triple reduction in profit tax for the first three million patacas of joint venture R&D expenditure, and a double reduction in profit tax for the additional expenditure, subject to a ceiling of 15 million patacas;
2. To encourage an increase in real estate rental market supply, the Government reduces the property tax rate for leased properties to eight percent, while property tax rate for non-leased properties remains at six percent;
3. To encourage employment of senior citizens aged 65 or above and eligible persons with disabilities, the Government is increasing the basic allowance of personal income tax for these persons to 198,000 patacas; and
4. To foster the development of specialised financial services, the Government provides waivers of profit tax on investment income from local bonds issued by

mainland China governments and state-owned enterprises, and exempts the stamp duty for issuing and acquiring these bonds.

In accordance with the Basic Law of Macao, the Government is responsible for managing land resources within the territory. The Government persistently fulfils its duties in accordance with the Land Law, to strictly manage and reasonably allocate land resources. As of September 2018, a total of 73 annulled land grants involving a total area of 530,000 square metres have been announced. The Government prioritises construction of public housing and public facilities on the recovered land.

The Government will complete the preliminary plan for Macao's urban development master plan and listen to public opinion. It will also implement the Medium-to-long-term Plan for Usage and Development of the Waters of the Macao Special Administrative Region (2016-2036), to achieve the short-term goals for coastline remediation and use of nearshore waters, and resolve major issues affecting people's livelihoods.

The Government will expedite development of new urban zones, including the design and construction projects of Zones A and E1, the design of the administration and justice zone in Zone B, as well as the reclamation work for Zones C and D.

The Government will fully implement urban renewal work and endeavour to conclude discussions on property rights percentages of redeveloped buildings. The Government will accelerate the legislative procedures of the Legal System for Provision of Interim Housing and Replacement Housing, to support the city's urban renewal scheme, and formulate the by-law for establishing a government-owned urban renewal corporation and the Articles of Incorporation of the urban renewal body.

The Government continues implementing the policy of "Public housing as the core, supplemented by the Home Ownership Scheme", enhances supervision of the quality of public housing construction, and improves the management of public housing estates.

The Government will expedite construction of the Toi San Public Housing project and phase 2 of the Mong Ha Public Housing project, and announce the finalised waiting list of public housing applications. Revisions of the Legal System for Public Housing have been submitted to the Legislative Assembly for deliberation. The amendment to the Home-Ownership Scheme Housing Law has been submitted to the Legislative Assembly for deliberation. The Government will resume the application process for about 4,000 Home-Ownership Scheme housing units.

The Government fully implements the "post-19,000 units" public housing construction plan. The target of constructing 28,000 public housing units in the New Urban Zone Area A will be realised in four phases. The first phase will provide about 7,000 housing units on seven pieces of land. An estimated 6,500 housing units will be provided on Wai Long Avenue; the phase one design work has commenced. An estimated 2,000 housing units will be provided on the western stretch of Jogos da Asia Oriental Avenue, Taipa; the land clearance work and initial preparatory planning have commenced. An estimated 1,500 housing units will be provided at the original site of the power station, where work has commenced on the pile foundations. The Government will expedite

building plan approvals for private residential developments, to optimise the business environment and foster healthy development of the real estate market.

Non-tertiary education – Perfect related laws and regulations to consolidate the 15-year compulsory education system; raise overall teaching quality; promote popular science education and develop smart campus; strengthen patriotic education; and expand the sister school partnership programme to enhance exchanges and interactions.

Tertiary education – The Law on the Tertiary Education System has come into effect, and the Tertiary Education Council and the Tertiary Education Fund have been established. The Government is committed to cultivating talented people in technology and enhancing technological innovation. We also reinforce the foundations and conduct research to strengthen cooperation between the industrial, academic and research and development sectors. The Government is steadily developing Macao as a base for tourism education and fostering cooperation around the Greater Bay Area; integrating Chinese and Portuguese bilingual teaching resources and infrastructure in tertiary institutions, and establishing a training base for cultivating bilingual talents who are fluent in Chinese and Portuguese. The Government supports local institutions of higher education with launching programmes in the Greater Bay Area, to foster synergy and cooperation.

Talent cultivation – The Government optimises a long-term mechanism for talent cultivation, enhances transparency and the mechanism for monitoring the import of talented people, fosters information exchanges regarding talented people in the Greater Bay Area, formulates policies to facilitate cross-border flows of talented people and regional integration, and is exploring a mechanism to import high-calibre talented people and experts, to enable local people to broaden their horizons through interactions. The Manpower Development Committee will conduct three studies on human resources and demand for talented people, including on supply of and demand for professional drivers, the ageing population trend in Macao, and the flows of talented people and competitive trends, to provide data for use as a reference in formulating related policies.

The Government diligently continues its youth development work to pass on the core values of loyalty to our country and to Macao, strengthen these values, and create a favourable environment for young people's growth. The first phase of the Thousand Talents Programme attracted over 3,000 participants, while the second stage of the Thousand Talents Programme has been launched, to discover and nurture more talented youth. The Government coordinates the Greater Bay Area Youth Cooperation Development Plan, and has launched the Greater Bay Area Macao Youth Internship Scheme. The Government also extends youth entrepreneurship support services to more cities in the Greater Bay Area, and leverages the functions of the China and Portuguese-speaking Countries Young Entrepreneur Exchange Centre, to consolidate the construction of "One Centre, One Platform".

The Government continues optimising the primary healthcare services network, to enhance cooperation between the Government, non-profit medical institutions

and private medical institutions; strengthen publicity and law enforcement related to smoking control; and raise citizens' health awareness.

Pile foundations have been completed for six of the seven planned blocks in the Islands District Medical Complex, and construction is expected to commence for three of the major blocks. The nursing academy that is under construction will also be completed soon. The Government will expedite the construction of the public hygiene specialist building. The Ka Ho Rehabilitation Hospital has commenced operations, providing 160 beds for rehabilitation and palliative care. In addition, two more health centres are planned for construction in New Urban Zone Area A, for perfecting Macao's healthcare services network.

The newly established Macao Academy of Medical Specialists provides centralised training for medical specialists in public and private hospitals. The System for Professional Qualification and Licensing for Medical Workers has passed its first reading at the Legislative Assembly.

The Government encourages employers to implement flexible and diverse working hours, to help employees fulfil both their work and family responsibilities. The Government also actively promotes breast-feeding, improves and builds children's playgrounds; strengthens protection of rights of women and children; and realises the development goals of women in Macao.

The Government will perfect the system to prioritise the distribution of childcare places for disadvantaged families, and pay attention to children with special needs and their families. Plus, the Government will implement the Legal System for Protection of Rights of the Elderly, the Ten-year Action Plan for the Provision of Services for the Elderly, and the Elderly Persons' Social Enterprise Scheme, and continue perfecting services for homes for the elderly. The number of subsidised places in homes for the elderly is expected to increase to 2,400.

The bill of the Professional Accreditation and Licensing for Social Workers is undergoing its second reading in the Legislative Assembly, and will provide a system for professional development and cultivation of social workers.

The Government is optimising the public sports network, and perfecting sports facilities. The construction of the Athletes Training Centre will soon be completed. An area of 26,500 square metres at the original site of Macao (Yat Yuen) Canidrome Club is earmarked for sports facilities. The Government also maintains and optimises the existing athletics grounds and football pitches, and is constructing a new sports complex. The Government will also strengthen regional sporting exchanges, and nurture and retain sport talents.

2. Deepen urban development

It is the Government's responsibility to protect the lives and property of the public. After developing a mechanism for long-term disaster prevention and mitigation, the Government has succeeded in overall implementation of 18 short-term measures and 12 medium- and long-term measures, which proved effective in limiting the impact of Typhoon Mangkhut.

The Government is proceeding with legislation of the "Civil Protection Fundamental Law", to improve the contingency planning system; and is implementing the "Medium-to-long-term Plan for Disaster Prevention and Mitigation in Macao" (2019-2028); facilitating development of an insurance scheme for catastrophes; optimising disaster prevention and mitigation software and hardware, and enhancing staff training. The Government also uses advanced technology to raise overall effectiveness of disseminating civil protection information, and is strengthening the capability for monitoring, anticipating and raising awareness of major incidents.

To ensure the safety of electricity and water supplies, the third Guangdong-Macao electric power transmission channel has been completed, improving electricity facilities in low-lying coastal areas; and construction of the fourth water supply pipeline has been completed, while construction of the Seac Pai Van Water Treatment Plant and work on expanding Ka Ho Reservoir will be expedited.

The Government is resolving flooding problems and improving the capabilities of flood prevention and drainage infrastructure – including by expediting construction of sluices at the Inner Harbour, flood barriers in low-lying coastal areas, drains to intercept rainwater and stormwater pumping stations in the Inner Harbour, and rainwater drainage in northern areas, which is expected to be completed before the rainy season; and implementing plans for flood prevention and drainage on the west shore of Coloane. The Government also clears sludge from river beds, and dredges anti-flood valves.

The Government continues optimising the city's disaster prevention and evacuation system and the system for providing disaster relief; plans and refines the distribution and training of community volunteer teams; and is establishing a system for education on contingencies by including public safety as a compulsory course in all non-tertiary institutions. The Government also enhances the overall capability for implementing contingencies in the event of large-scale public health incidents; makes food safety and its supervision a priority; and enhances publicity regarding post-disaster food safety, while strictly enforcing post-disaster food safety supervision and waste disposal.

The Government is optimising community policing, improving the disciplinary forces, and strengthening the efficiency and capability of law enforcement. The Government also promotes interactions to prevent and respond to major incidents in the Greater Bay Area; strengthens exchanges of information on and analyses of all cross-border

illegal activities; and combats and prevents all types of crime.

The Government is committed to promoting development of innovative technologies, and has established the Working Committee for the Construction of Guangdong-Hong Kong-Macao Greater Bay Area, and its Sub-committee on Technology, Innovation and Smart City. The Government has also established the Tax Concession Incentive Scheme for Scientific Research and Innovation, and commenced a study on a strategy for scientific innovation and development.

The Government is increasing subsidies for the existing State Key Laboratory, while providing one-off start-up funding to two new State Key Laboratories; and provides targeted subsidies to young scientific research scholars. Various studies have been launched – including on the mechanism for providing financial support for and forms of funding to support technological innovation; strengthening support for major domains, such as Chinese medicine, computer chips, the new infrastructure for the Internet of Things (IoT) and artificial intelligence, space science and deep space exploration; and optimising admissions to high-calibre scientific research.

The Government actively participates in construction and use of major scientific and technological infrastructure; engages in establishing a platform for regional collaboration in innovation; and improves policies supporting innovation and entrepreneurship, to encourage innovation by teams of entrepreneurs. The Government's cloud computing centre has been renovated and recommenced operations.

To promote smart governance, the Government has established a government data services platform, which increases value-added services through sharing and innovative application of data resources. The number of e-public service items has been increased to 90. The Government facilitates the electronic processing of licence applications and public services, and is digitalising the restaurant licence renewal process.

To implement smart policing, the Government is establishing an application platform to enable effective overall command during emergencies, thus enhancing the capacities for monitoring, forecasting and coordination. The Government facilitates smart transport through optimising the transportation system, transport configuration and road works coordination. Through big data analytics, the Government provides more scientific data to support decision-making on medical policies and services, as well as tourism policies. The Government has also begun preparations for rolling out a 5G network while pressing ahead with constructing infrastructure for telecommunications operators; and facilitates legislation of the Convergence of Telecommunication Networks and Services System, which integrates the three telecommunication networks.

The Government attaches great importance to citizens' concerns regarding mitigation of transportation problems, continues optimising the bus network, and has resume operation of the Border Gate underground bus terminal. Some 100 new ordinary taxis and 200 new special taxis have commenced operations in phases, and the Government will launch public bidding for another 150 ordinary taxi licences. Hence, the number of taxis in Macao is expected to increase to 2,050. The bill on the Legal System Governing Taxi Services is undergoing its second reading.

The Government perfects walking routes, strengthens greening and beautification of roads, and creates comfortable and convenient pedestrian pathways. The Government also expedites skyway construction, and improves old footbridges, to enhance convenience for pedestrians and accessibility of facilities; and constructs green open spaces and improves and lengthens trails and cycling tracks.

The Light Rapid Transit (LRT) Taipa line will soon commence operations; while the LRT A-Ma station and its transport interchange are under construction, and will connect Taipa and the Macao peninsula. The project to construct a connection with the Seac Pai Van line has also commenced. The Government is studying connectivity of LRT East line with Taipa Ferry Terminal, New Urban Zone Area A and the Border Gate, and the connectivity of Area A with the artificial island of the Hong Kong-Zhuhai-Macao Bridge and the Outer Harbour Ferry Terminal. The legislation on the future operation of the LRT has been submitted to the Legislative Assembly for deliberation. An LRT operating company has been established, and will be responsible for establishing and operating the LRT system.

The Government is expediting commencement of construction of the fourth Macao-Taipa cross-harbour bridge, and achieving progress with studies and preliminary design of the fifth Macao-Taipa cross-harbour route. The Government is also exploring the potential for new ferry routes in Macao and nearby waters, following up regarding modest opening of the civil aviation market, and facilitating the renovation and expansion of Macau International Airport. The Government leverages the commencement of operations of the Hong Kong-Zhuhai-Macao Bridge to improve passenger flows and logistics.

The Government is deepening ecological education; strengthening public awareness of environmental protection; encouraging reduction of plastic waste by introducing plastic bottle recycling machines; completing the legislation on "plastic bag levy"; implementing the Macao Sewage Treatment Facilities Master Plan; optimising the Macao Peninsula Sewage Treatment Plant and its operations and maintenance; and completing the design for upgrading Coloane Sewage Treatment Plant. The Government also promotes electric vehicles, and aims to instal 200 electric chargers throughout Macao.

The Government has allocated an area of 15,000 square metres at the construction waste landfill, to invite tenders from Macao's recycling industry to build a facility to pre-process paper, plastic and metal wastes before they are exported; together with an area of 30,000 square metres for constructing a centralised food waste processing facility. The Government is also introducing the Food Waste Recycling Pilot Programme.

The Cooperation Agreement on Regional Air Pollution Control and Prevention in Guangdong, Hong Kong and Macao will be implemented, to jointly improve air quality with other cities in the region. Pilot operation of transfer of scrapped vehicles to Guangdong has begun, and will be expanded in the coming year.

The Government promotes cultural heritage education, popularises education on culture and art, and continues enriching cultural facilities and Macao people's cultural

life. The Xian Xinghai Memorial Centre and the Seac Pai Van Library will be completed. The Government is establishing a cultural exchange and cooperation base, to foster cultural exchanges between China and Portuguese-speaking countries and enhance Macao's cultural soft power. The Government also perfects the heritage monitoring mechanism, expedites the formulation of the Plan for Protection and Management of the Historic Centre of Macao, and conserves tangible and intangible cultural heritage.

The Macanese and Portuguese residents of Macao have greatly contributed to the intermingling of Chinese and foreign cultures. The Government fully respects and safeguards their unique cultures, customs and legitimate rights, to support them with participating in the development of the Macao SAR together with the general public.

3. Continue Promoting Stable Economic Development

Though the trade relationship between the United States of America and China has led to uncertainties in the global economy, Macao's economic foundation remains sound. As of the third quarter of 2018, Macao's economy has achieved positive growth for nine consecutive quarters.

During 2019, the internal and external environments will remain complex and volatile, but the Government expects the economy to remain stable and will continue making progress while ensuring stability. The Government maintains cautious optimism, is well-prepared for adverse situations, and clearly assesses the current and foreseeable situations.

The Government encourages gaming operators to invest more in non-gaming elements, continues prioritising procurement of products and services that are designed and made in Macao, and helps gaming operators to cooperate with local traditional industries. The Government is continuing the follow-up work on the post-interim review of the gaming industry, persists with the principle of "adequate scale, sound management and sustainable development", and strictly controls the number of gaming tables, to achieve progress with developing the gaming industry in an orderly manner. The Government also strengthens the supervision of gaming promoters, and will continue carrying out special audits, while promoting responsible gaming and improving the industry's comprehensive competitiveness.

The existing concession agreements on gaming operations will expire in 2020 and 2022. The Government is expediting research on follow-up work, and extensively listening to opinions from all walks of life.

The Government will continue fostering development of budget hotels, theme parks and integrated shopping centres. The renovation of the Grand Prix Museum will be completed within the year. In helping continue Macao's gastronomic culture, the Government will enhance the influence of Creative City of Gastronomy, to enrich new business structures.

The Government promotes Macao tourism in countries along the Belt and Road, helps the industry to develop tourism products which cater to the market, promotes development of multiple-destination itineraries, deepens cooperation with the Greater Bay Area by broadening the scope of cross-boundary pleasure boat sailing and improving related services, and is exploring the feasibility of jointly establishing marine industry clusters and high-end service industry clusters.

The Government continues fostering the development of the convention and exhibition industry by attracting more quality conventions and exhibitions to be held in Macao, and promoting cooperative development of associated industries such as convention and exhibition, food and beverage, and retail.

The Government is consolidating and expanding the development of the Guangdong-Macao Traditional Chinese Medicine Technology Industrial Park, enabling priority projects and enterprises to more swiftly commence development in the park, and promotes international trade in Chinese medicine products and culture.

The Government is further striving to foster cultural and creative industries, and has launched the Community Cultural and Creative Production Subsidy Scheme, to integrate culture and creativity into the community.

To promote development of specialised financial services, the Government encourages Macao's financial institutions to develop financial leasing services, and attracts well-established foreign lease finance companies to establish bases in Macao. The Government is also exploring the formulation of the Trust Law, and is establishing a monetary services platform between China and Portuguese-speaking countries, to develop Macao as a Renminbi clearing centre for Portuguese-speaking countries.

Leveraging Macao's advantages in its geographical position within coastal waters and in policies, the Government is fostering a unique marine industry by promoting coastal tourism and water sports, and exploring regional cooperation to expand the scope of maritime tourism. The Government is also establishing a coastal, ecological and cultural tourism system, by developing accessible waterfront spaces, and recreational areas for residents and tourists.

Small- and medium-sized enterprises (SMEs) are vital components for promoting adequate diversification of Macao's economy. The Government continues optimising various financial and administrative supportive measures, and streamlining licensing procedures, to create a business-friendly environment. The Government is also expediting improvement of the import and export credit insurance scheme, and developing human resources targeting SMEs.

To promote integrated development of traditional industries and cultural and creative industries, the Government is strengthening support for "Made in Macao" brands, and fostering the "Scheme to Assist the Re-branding of Time-honoured Local Shops", to help local shops to enhance their competitiveness and brand value.

Making use of modern technology, the Government helps to open up the mainland

China market through cross-boundary e-commerce, supports chambers of commerce to establish Macao pavilions on recognised e-commerce platforms in mainland China, seizes opportunities for cross-regional development of Macao's quality products, strives to attract quality business operators in the Greater Bay Area to establish bases in Macao and cooperate with local SMEs, and is considering the establishment of a platform for women's innovation and entrepreneurship, to encourage women to participate in the development of the Greater Bay Area.

The Government sticks to the principle of importing foreign workers only to make up for inadequacies in local labour, to guarantee prioritised employment of local workers, to promote upward mobility and better career development.

The Government enhances administrative systems, protects labour rights, continues facilitating amendments to seven priority topics covered by the Labour Relations Law – including maternity leave, paid paternity leave, overlapping leave and compensation leave. The Government is also formulating regulations for part-time employment and the minimum wage, and following up regarding the legislative progress of the Employment Agency Law. Plus, the Government is fully implementing the occupational safety and health system, to create a safe working environment for employees.

The Government fully implements its regional cooperation and platform-based economic strategies. According to the country's needs, the Government fully leverages Macao's unique advantages to enhance overall capabilities. The Government actively engages in and facilitates the implementation of the "Belt and Road" initiative. With unimpeded trade, financial integration and people-to-people bonds as major goals, the Government coordinates policies and measures, and integrates all resources, to achieve complementary advantages and joint developments.

To pragmatically promote the development of the Greater Bay Area, and enhance exchanges and alignment between Guangdong province, Hong Kong and Macao, the Government is actively participating in development of Hengqin and Nansha sub-zones of the Guangdong Free Trade Zone, and deepening cooperation in livelihood areas, to enable residents to live, work, start business, study and retire in mainland China.

The Government is expediting the interconnectivity of border-crossing infrastructure, facilitating the construction of the new Guangdong-Macao border crossing, and moving the Lotus Flower checkpoints to Hengqin. The Government has introduced "joint inspections for one-stop border crossing", which will be implemented in other new checkpoints. The Government is also exploring development of the intercity ticket payment system. Against the background of the Greater Bay Area, the Government is working with other bay area cities to explore the feasibility of including Macao in the high-speed railway network in the development plan for the western coast of the Pearl River Delta.

The Government is coordinating cooperation with mainland China provinces and cities; deepening cooperation with Beijing-Tianjin-Hebei region, Changjiang economic belt and the Pan-Pearl River Delta Region; building the "Beijing-Macao Cooperative Partnership"; launching the Macao-Shanghai cooperation thematic year; steadily

establishesing Jiangsu-Macao Cooperation Zone; working for poverty alleviation in Guizhou through the Pan Pearl River Delta regional cooperation network; deepening cooperation with Fujian, Sichuan, Hainan and Guangxi, to explore markets in the Portuguese-speaking, European Union and Southeast Asian countries; exploring exchanges and cooperation with Jilin in Chinese Medicine; and fully leveraging the functions of the Macao Economic and Cultural Office in Taiwan.

4. Committed to sound social governance

We realise sound social governance is necessary in upholding our principles to serve the public. Based on our established work principles and arrangements, the Government implements various reforms, and continues implementing work related to functional restructuring, which mainly involves departments concerned with economy and finance, public security, social affairs and culture. We also optimise the consultation system, and pursue the restructuring of consultation bodies related to tourism, cultural heritage and protection of consumer rights.

The Municipal Affairs Bureau has been officially established, and commenced operations on 1 January 2019, to strengthen interactions between community services and the public, and listen to residents' opinions and suggestions. The Government facilitates cross-departmental cooperation, to handle cross-departmental municipal affairs and improve municipal services. The Islands District Integrated Government Services Centre will be established this year, and is expected to provide up to 310 services.

Civil servants are invaluable assets of the Government, which continues improving the system for managing and training civil servants, and optimising measures to support their living, welfare and counselling. The Government follows up regarding the revision of the Civil Servant Ranking System, has commenced the second stage of revision of the Macao Public Servants Statutes and Regulations, is revising the system for assessing performances and optimising the promotion mechanism, and is implementing the government official accountability system, to strengthen its performance management. The government may also facilitate exchanges and studies between civil servants in Greater Bay Area cities, to integrate Macao into the overall national development plan.

After considering views and suggestions from civil servants' associations and the Civil Servant Pay Council, the Government has adjusted each point on the civil service salary scale to 88 patacas.

The Government is enhancing multiple communication mechanisms to enable public participation in social affairs, encourages young people and professionals to participate in consultative bodies, enhances administrative transparency, and lawfully safeguards freedom of the press, freedom of publication and freedom of speech.

The Government strives to promote the constitutional law and the Basic Law of Macao

to the public, to raise awareness of the Constitution of the People's Republic of China and enhance citizens' knowledge of the Basic Law of Macao. In strict compliance with the Chief Executive Election Law, the Government will ensure smooth implementation of the Chief Executive election 2019 in a fair, just and corruption-free manner.

To enhance the efficiency of legislation, the Government is expediting implementation of legislation in major areas, including revision of the Penal Code, Criminal Procedural Code and the System of Administrative Conditions, and laws and regulations related to protecting secrets of the state and the region.

The Government strengthens international and regional judicial cooperation, and facilitates bilateral discussions on judicial cooperation and criminal judicial assistance. In line with the development of the Greater Bay Area, the Government facilitates cooperation in legal services and mutual judicial assistance among Guangdong, Hong Kong and Macao, while intensifying its efforts to support the establishment of software and hardware of the judiciary, improve judicial training mechanisms, and enhance judicial effectiveness.

The Government continues emphasising building a corruption-free society, perfecting the anti-corruption system and safeguarding the public's legitimate rights and interests. The Commission of Audit continues exercising its authority in audit, based on the principles of law-abidance and independence; and makes good use of modern technology, to improve audit performance and intensify ongoing audits.

Conclusion

In the face of rapid developments and advances in innovation, the Government fully understands that, to achieve a brighter future, there is a need to strive harder. The Government will persist with the spirit of solidarity, and pass down the core values of loyalty to our country and to Macao, to enhance people's sense of national responsibility and mission.

The Government will continue strengthening its strategies and being aware of national development, to ensure stable implementation of the principles of "One country, two systems", "Macao people governing Macao" and a high degree of autonomy. The Government will also integrate into the overall national development plan, fully leverage Macao's advantages and uniqueness, and explore opportunities for innovative cooperation, driving regional cooperation to new milestones.

Expediting economic development and improving people's livelihoods are general trends, and the aspirations of the people. The Government has every confidence regarding forming a clear mindset in forging a consensus and joining forces, uniting people from all walks of life, broadening the horizons for the growth and success of the younger generation, improving people's livelihoods, expediting Macao's economic development and realising a civilised society, for balanced economic and social

development. The Government is determined to fulfil its duties, to achieve better results in Macao's contributions to our country.

Chui Sai On
Chief Executive of the Macao SAR

MACAO YEARBOOK 2019

CALENDAR OF EVENTS IN 2018

CALENDAR OF EVENTS IN 2018

JANUARY

1 The newly amended Law on Smoking Prevention and Control comes into force, which bans smoking in all indoor venues and within ten metres of taxi stands and bus stops and terminals. The fine has been increased to 1,500 patacas. The sale of e-cigarettes is prohibited and display of tobacco products is also restricted.

2 The Transport Bureau announces increases in removal charges for illegal parking to 750 patacas for motorcycles and 1,500 patacas for light vehicles, respectively, starting from 1 February.

4 The Government announces the Macao Medium-to-long-term Talent Cultivation Scheme – Five-year Action Plan to provide a policy guideline for talent cultivation in Macao.

5 According to the Chief Executive's Office, Chief Executive Chui Sai On has met with Liao Zhengrong, the newly-appointed Commander of the Macao Garrison of the Chinese People's Liberation Army (PLA), to exchange views on cooperation in maintaining the security of Macao and ensuring stability and prosperity.

8 The *Macao SAR Gazette* publishes the Regulations on the Use and Operation of the West Car Park of the Border Checkpoint of the Hong Kong-Zhuhai-Macao Bridge. The car park provides 5,143 public parking spaces, with 3,089 for light vehicles and 2,054 for motorcycles.

The MSAR Government and the Guangdong Provincial Government sign the Consensus on Guangdong-Macao Cooperation in the Event of a Guangdong Nuclear Power Plant Emergency, in Zhuhai.

10 The Guangdong-Macao Co-operation Joint Conference is held in Guangzhou. The two parties sign a total of eight cooperation agreements and memoranda concerning areas such as youth development, food safety and protection of intellectual property rights.

17 The Macao Government Tourist Office announces that there were more than 32.6 million visitors in 2017 – representing an increase of 5.4 percent; with numbers of international visitors and overnight visitors increasing by 6.2 percent and nearly 10 percent, respectively.

21 The results of mainland China universities' first round of admissions for recommended students are released. Out of 1,077 candidates from Macao, 792 students are admitted, while 159 candidates are admitted through a voluntary recruitment examination held on 22 January. A record high of 951 students are admitted throughout the year.

FEBRUARY

1 The Gaming Inspection and Coordination Bureau announces that the gross gaming revenue in January was 26.26 billion patacas, representing a year-on-year increase of 36.4 percent. Gross gaming revenues have been increasing for 18 consecutive months, hitting the highest record for single-month gaming revenue since October 2014.

2 The Heritage Foundation releases its report on the Index of Economic Freedom for 2018, rating Macao as a "mostly free" economy for the tenth consecutive year, and the 34th freest economy among 180 in the world. In the Asia Pacific region, Macao is ranked ninth out of 43 economies.

5 The *Macao SAR Gazette* publishes an executive order issued by the Chief Executive regarding an increase of the social security system birth allowance to 5,000 patacas, which will apply retrospectively from 1 January.

6 The Legislative Assembly passes the urgent bill on the Amendment to Regulations on Urban Real Estate Tax. Vacant properties for lease are regarded as non-leased properties and are no longer exempted from the 6-percent residential property tax.

Chief Executive Chui Sai On issues a condolence letter for the late renowned sinologist Jao Tsung-I.

7 The Legislative Assembly passes the bill relating to Stamp Duty on Acquisition of Second and Subsequent Residential Properties ("Acquisition Stamp Duty"). Non-first-time homebuyers will be obliged to pay an additional five percent stamp duty on acquisition of a second residential property. For acquisition of a third or subsequent properties, the additional stamp duty payable will be 10 percent.

The Monetary Authority launches the regulations regarding the maximum loan-to-value (LTV) ratio for eligible first-time young homebuyers, relaxing the restrictions for eligible applicants who apply for a mortgage of up to 80 to 90 percent on a property, in order to help young residents aged between 21 and 44 to purchase their homes. The regulation will become effective on the same day that the acquisition stamp duty comes into effect.

Chief Executive Chui Sai On meets with the Director of the Overseas Chinese Affairs Office of the State Council, Qiu Yuanping, to exchange views on Macao's participation in and contribution to the Belt and Road initiative, the development of the Guangdong-Hong Kong-Macao Greater Bay Area, and matters regarding overseas Macao residents.

The new round of application for public housing ends. The Housing Bureau has received 9,621 applications. The provisional list of successful applicants was announced on 5 December 2018. A total of 6,301 applications were accepted.

8 The Governor of Hebei Province, Xu Qin, meets with the Secretary for Economy

and Finance, Leong Vai Tac, to exchange views on promoting cooperation in economic investment, tourism and culture, for benefiting people of Macao, Hebei province and the Xiong'an New Area.

13 The Hong Kong-Zhuhai-Macao Bridge Authority announces that the customs clearance will adopt the "separate locations" mode of clearance arrangement, while customs clearance between Zhuhai and Macao will adopt 24-hour "Joint Inspections for One-stop Border Crossing" once the Bridge commences operations.

The quota allocation of cross-boundary private cars using Hong Kong-Zhuhai-Macao Bridge and arrangement for park-and-ride are announced. The regular quota for Macao private cars is set at 600, of which 500 are valid for one year, and the remaining 100 for six months.

21 The *Macao SAR Gazette* publishes the Regulations on Use and Operation of the East Wing Car Park of the Hong Kong-Zhuhai-Macao Bridge. The car park has a capacity of 3,000 parking spaces for light vehicles. Each parking session lasts up to 12 hours, with a minimum charge of 180 patacas.

27 The Secretary for Economy and Finance, Leong Vai Tac, says the Government is extending Macau Jockey Club's horse-racing concession to 31 August 2042.

Chief Executive Chui Sai On, the Commission for Reviewing and Monitoring the Improvements of the Response Mechanism to Major Disasters, and the China National Commission for Disaster Reduction's Expert Group meet to review the General Assessment Report on the Damage Caused by Typhoon Hato, with Proposals for Optimising the Emergency Management System.

MARCH

5 Chief Executive Chui Sai On attends the opening of the First Session of the 13th National People's Congress. Premier Li Keqiang says during his report on the government's work that the outline plan for the development of the Guangdong-Hong Kong-Macao Greater Bay Area will be launched and implemented to facilitate cooperation between mainland China, Hong Kong and Macao.

6 Chief Executive Chui Sai On pays courtesy visits to the Director of the National Development and Reform Commission, He Lifeng; the Minister of Commerce, Zhong Shan; and the China Food and Drug Administration, during his visit to Beijing.

14 One hundred body-worn video cameras for police officers commence operations.

15 The Macao border crossing area of Hong Kong-Zhuhai-Macao Bridge is officially handed over for the use of the Macao Special Administration Region from midnight, and will be administered according to the laws of the Macao SAR.

20 The 13th National People's Congress is concluded at the Great Hall of the People in Beijing. President Xi Jinping delivers a keynote speech urging the strengthening of national awareness and patriotism among the people of Hong Kong and Macao, to maintain the long-term stability and prosperity of the two special administrative regions.

Chief Executive Chui Sai On meets with the Secretary of the CPC Hebei Provincial Committee, Wang Dongfeng, and the Governor of Hebei provincei, Xu Qin, hoping Macao could learn from and take part in the development of Hebei province and the Xiong'an New Area.

22 Chief Executive Chui Sai On visits Tsinghua University and meets with the Secretary of the CPC and head of the University's Institute for Public Safety Research, Chen Xu, to exchange views on improving the public safety system, disaster prevention and mitigation capabilities.

23 The Statistics and Census Service announces Macao received 3,070,900 visitors in February, hitting a record high since August 2014; the figure represents a month-on-month increase of 12 percent, and a year-on-year increase of 23.1 percent.

28 Chief Executive Chui Sai On meets with the Governor of Guangdong Province, Ma Xingrui, to exchange views on further deepening Guangdong-Hong Kong-Macao cooperation, and the feasibility of establishing a trilateral coordination institution.

A public tender is opened for 100 all-electric taxi licences, which will be valid for eight years. Out of the 968 accepted tender submissions, the highest winning bid is over 980,000 patacas, while the lowest is over 810,000 patacas.

29 The Government announces the General Assessment Report on the Damage Caused by Typhoon Hato, with Proposals for Optimisation of the Emergency Management System.

APRIL

4 Chief Executive Chui Sai On meets with the Secretary of the CPC Zhuhai Municipal Committee, Guo Yonghang, to exchange views on deepening Zhuhai-Macao cooperation for further integration with national development.

9 Chief Executive Chui Sai On meets with the Secretary of Hainan Province, Liu Cigui, and the Governor of Hainan, Shen Xiaoming, while attending the Boao Forum for Asia Annual Conference in Hainan, to explore further cooperation in tourism between the two cities.

Chief Executive Chui Sai On meets with the Deputy Secretary of the CPC Guangzhou Municipal Committee and Secretary of CPC Guangzhou Municipal Government, Ren Xuefeng. Both parties strengthen connections on planning for development of the Guangdong-Hong Kong-Macao Greater Bay Area, and exchange views on innovation and young entrepreneurship.

10 Chief Executive Chui Sai On attends the opening ceremony of the Boao Forum for Asia Annual Conference 2018.

11 The Government commissions MTR Corporation Limited (MTRC) of Hong Kong to provide operation and maintenance services for the Macao Light Rapid Transit (LRT) Taipa line. The 5.88-billion-patacas contract covers a period of 80 months.

12 Chief Executive Chui Sai On and the Commission for Reviewing and Monitoring the Improvements to the Response Mechanism to Major Disasters hold a press conference to introduce the phased deployments and measures of disaster prevention and mitigation work in different areas.

15 Chief Executive Chui Sai On officiates at the opening ceremony of an educational exhibition on national security, which is jointly hosted by the MSAR Government and the Liaison Office of the Central People's Government in the Macao SAR.

16 The Macao SAR Gazette publishes an Executive Order to authorise Secretary for Transport and Public Works Raimundo Arrais do Rosario to sign the Agreement on Mutual Recognition of Driving Licences Between Macao and Mainland China with the Ministry of Public Security, on behalf of the MSAR Government.

Chief Executive Chui Sai On meets with the Minister of Education, Chen Baosheng, to exchange views on enhancing support for education development and youth cultivation in Macao.

On behalf of the MSAR Government, the Secretary for Economy and Finance, Leong Vai Tac, signs a bilateral agreement with the Finance Deputy Minister of the Government of the Socialist Republic of Vietnam, Do Hoang Anh Tuan, to prevent double taxation and evasion of income tax.

18 Chief Executive Chui Sai On meets with the Governor of Jiangsu province, Wu Zhenglong, to explore bilateral cooperation in future, especially regarding planning and positioning of the Jiangsu-Macao Cooperation Park.

21 New bus fares come into effect. All bus fares in Macao cost six patacas. Macau Pass holders are charged three patacas for normal routes, and four patacas for express routes. Student card holders are charged half price, while fares for senior citizens and disabled persons are waived.

All principal officials and the Public Prosecutor-General of the MSAR Government attend a 5-day duty training in Beijing and Jiangsu, to gain insights on national development strategies and the country's latest socio-economic developments, for better integration of Macao into national development.

24 Member of the Standing Committee of the Political Bureau of the CPC Central Committee and Vice Premier of the State Council, Han Zheng, meets with the principal officials and Public Prosecutor-General of the MSAR Government during their duty training visit to Beijing. Mr Han hopes that the core administration team of the MSAR Government will diligently follow the important guidelines of President

Xi Jinping regarding development of Macao, and puts forward four requests.

28 The civil protection mechanism system organises a typhoon drill – "Crystal Fish". Chief Executive Chui Sai On oversees the drill at the Civil Protection Operations Centre, and is briefed on corresponding reports.

MAY

1 The Medical Subsidy Scheme 2018 commences. The Government issues electronic vouchers worth 600 patacas to each beneficiary. The period for using the vouchers is extended to two years.

4 The Secretary for Economy and Finance, Leong Vai Tac, and the Deputy Governor of Guangdong province, Chen Liangxian, witness the contract signing for the Guangdong-Macao Cooperation and Development Fund in Guangzhou, marking the fund being set to commence operation in the near future.

7 Chief Executive Chui Sai On leads a government delegation to Cambodia and Thailand, with the aim of strengthening cooperation in tourism and trade, and assisting development of the "Belt and Road" initiative.

The *Macao SAR Gazette* publishes an order issued by the Secretary for Social Affairs and Culture, to adjust Conde S. Januario Hospital's charges for antenatal and delivery services for "doubly non-permanent resident" pregnant women (both the pregnant woman and her spouse are not Macao residents). The charges for 20 antenatal and delivery services are increased by 900 percent. Local residents are not subject to the new charges.

8 Chief Executive Chui Sai On meets with the President of the National Assembly of the Kingdom of Cambodia, Heng Samrin; the Deputy Prime Minister and Minister of the Interior, Sar Kheng; and the President of the Senate of Cambodia, Say Chhum, on separate occasions, to seek closer cooperation in tourism and tourism training.

9 A delegation of the MSAR Government arrives in Bangkok, Thailand. Chief Executive Chui Sai On and the Foreign Minister of Thailand, Don Pramudwinai, witness the signing of the Memorandum of Understanding on Establishment of a Friendship City Relationship between Phuket Province and the Macao SAR. He also meets with the Ambassador Extraordinary and Plenipotentiary of the People's Republic of China to the Kingdom of Thailand, Lyu Jian, to explore and seize development opportunities of the "Belt and Road" initiative.

10 Chief Executive Chui Sai On meets with the Deputy Prime Minister of the Kingdom of Thailand, Somkid Jatusripitak, and witnesses the signing of five agreements and memoranda between the two parties.

Organised by the MSAR Government and the State Administration of Traditional Chinese Medicine, the 2018 Traditional Medicine International Development

Forum (Thailand) opens in Bangkok, Thailand. The Guangdong-Macao Traditional Chinese Medicine Technology Industrial Park and the Traditional Chinese Medicine Doctor Association of Thailand sign a memorandum of cooperation to provide a platform for Macao to promote Chinese medicine culture and techniques in acceding countries of the "Belt and Road" Initiative.

On the invitation of Sichuan Provincial Government, the MSAR Government organises a delegation for a 4-day visit to Sichuan for an event in commemoration of the 10th anniversary of the Wenchuan earthquake. The delegates pay visits to understand the progress of redevelopment and people's livelihoods.

12 Secretary of the CPC Sichuan Province, Peng Qinghua, meets with the MSAR delegation led by the Secretary for Administration and Justice, Chan Hoi Fan, for an event in commemoration of the 10th anniversary of the Wenchuan earthquake.

16 The *Macao SAR Gazette* publishes an order issued by the Secretary for Transport and Public Works to announce the revocation of land grants for 16 pieces of land with an area totalling 58,000 square metres in Nam Van Lake Zones A, C and D, due to expiry of the temporary land lease period, according to the Land Law.

The Ministry of Culture and Tourism of the People's Republic of China announces the fifth batch of inheritors of the representative items of national intangible cultural heritage. The four Macao applicants selected are Au Kuan Cheung for Cantonese Naamyam, Chan Kin Chun for A-Ma belief and customs, and Chiang Kun Kuong and Ip Tat for Na Tcha belief and customs.

19 Chief Executive Chui Sai On meets with the Director of the State Council Leading Group Office of Poverty Alleviation and Development, Liu Yongfu, to exchange views on the nation's poverty alleviation projects and the launch of anti-poverty support measures in Congjiang, Guizhou.

21 The Judiciary Police and Macao Customs announce at a press conference that the Guangdong and Macao police have solved a case that involved drug-smuggling by parcel delivery; about 16 kilograms of khat (a stimulant) was seized.

22 The Central People's Government approves the suggestion of making Conjiang County in Qindongnan Miao and Dong Autonomous Prefecture, Guizhou Province, the target for Macao's poverty alleviation efforts. Chief Executive Chui Sai On and the Director of the Liaison Office of the Central People's Government in the Macao SAR, Zheng Xiaosong, lead a delegation to Guiyang of Guizhou province for a 3-day visit.

23 The Court of Final Appeal rules against Polytex Corporation Ltd, the developer of Pearl Horizon. The Government will recover the site of the Pearl Horizon development, to provide interim housing primarily for people affected by urban redevelopment in old districts.

Chief Executive Chui Sai On and the Director of the Liaison Office of the Central People's Government in the Macao SAR, Zheng Xiaosong, witness the signing of

agreements regarding Macao's poverty alleviation measures, at a ceremony held in Congjiang county, Guizhou. A total of nine agreements are signed by the three parties.

24 The second phase delivery of Light Rail Transit (LRT) carriages begins. The first batch of ten carriages will be delivered to the LRT depot starting from this day.

25 Delegations from the Civil Aviation Authority of the Macao SAR and the Civil Aviation Administration of China sign a memorandum of understanding on air traffic control, with the aim of speeding up expansion of the Macau International Airport, promoting efficient use of airspace, and enhancing cooperation in aviation safety management.

28 The Judiciary Police and Macao Customs announce that the Guangdong and Macao police have cracked a cross-border human smuggling syndicate, and arrested 36 people for allegedly being involved in trafficking Vietnamese migrants to illegally work in Macao.

Chief Executive Chui Sai On witnesses the signing of agreements at the opening ceremony of the Beijing-Macao Cooperation Partnership 2018 in Beijing. Beijing and Macao sign agreements and letters of intent regarding cooperation in sport, vocational training and tourism.

Chief Executive Chui Sai On meets with the Secretary of the CPC Beijing Municipal Committee, Cai Qi, to explore future cooperation between Beijing and Macao.

29 Chief Executive Chui Sai On meets with the Minister of the General Administration of Customs, Ni Yuefeng. The two parties agree to promote improvements and innovation in custom clearance operations and expedite construction of new border-crossing channels between Guangdong and Macao.

31 The Zhuhai-Macao Cooperation Conference 2018 is held in Zhuhai. The two governments sign the Framework Memorandum of Cooperation on the Internship and Employment Projects for Macao Youth in Zhuhai, the Framework Memorandum for Economic and Trade Cooperation and Investment between Macao and Zhuhai, and the Framework Memorandum on Financial Cooperation between Macao and Zhuhai.

The Executive Council concludes discussions on the draft by-law regarding tuition fee subsidies for Macao students who are studying in schools in Guangdong Province during the school year 2017/18. The tuition fee subsidy scheme is expanded to include Macao students studying in 21 cities in Guangdong province. The maximum allowance is 6,000 patacas for primary and secondary education, and 8,000 patacas for pre-school education.

JUNE

1 Secretary for Administration and Justice Chan Hoi Fan and the Minister for

Justice and Attorney-General of the Federal Republic of Nigeria, Abubakar Malami, represent the two governments in the signing of the Agreement on Transfer of Sentenced Persons Between the Macao Special Administrative Region of the People's Republic of China and the Federal Republic of Nigeria, at the Government Headquarters of Macao.

4 The Transport Bureau announces that from 1 July, there will be tighter limits for exhaust emissions from in-use vehicles, and improved methods for measuring emissions.

6 The plenary meeting of the Legislative Assembly passes its first reading of the Arbitration Law, to unify the two existing arbitration regimes. Arbitration awards will not be subject to appeal.

7 Chief Executive Chui Sai On meets with the Prime Minister of the Republic of Equatorial Guinea, Francisco Pascual Obama Asue, to exchange views on supporting the "Belt and Road" initiative, and enhancing Macao's role as a platform for cooperation between China and Portuguese-speaking countries.

11 According to the work requirements of the Medium-to-long-term Plan for Usage and Development of the Waters of the Macao Special Administrative Region (2016-2036), the MSAR Government invites experts from central government ministries and Macao to form a research group on planning Macao's future industrial development, and holds research seminars from this day till 15 June.

12 The Zhuhai Municipality Government revises the Rules for Macao-licensed Motor Vehicles Entering and Leaving Hengqin. Macao residents who own real estate in Hengqin New Area, or work and make social security contributions there, or employees of Macao-based institutions stationed in Hengqin, are eligible to apply for vehicle permits.

13 The *Macao SAR Gazette* publishes the Rules on the Quota for Permits for Macao Private Cars to Enter Hong Kong; the quota is set at 600 permits, of which 300 are for individuals and 300 for companies.

14 Chief Executive Chui Sai On meets with a delegation of the Chinese Language Press Institute to exchange views on Macao's participation in development of the Greater Bay Area and other issues of mutual concern.

20 The Vice Chairman of the Chinese People's Political Consultative Conference, Edmund Ho Hau Wah, and the Secretary for Economy and Finance, Leong Vai Tac, meet with the Minister of Foreign Affairs of the Portuguese Republic, Augusto Santos Silva, in Lisbon, Portugal, to exchange views on enhancing Macao-Portugal cooperation in economic and trade affairs, tourism, culture and education.

The MSAR Government, the HKSAR Government and the People's Government of Guangdong Province jointly organise a seminar in Paris on joint promotion

of the Guangdong-Hong Kong-Macao Greater Bay Area, to encourage French businesses to seize the opportunities arising in the three places and invest in the Greater Bay Area.

21 Chief Executive Chui Sai On leads a government delegation to nine cities in the Guangdong-Hong Kong-Macao Greater Bay Area, and meets with the Secretary of the CPC Zhuhai Municipal Committee, Guo Yonghang, and the Deputy Secretary of the CPC Guangzhou Municipal Committee and Secretary of CPC Guangzhou Municipal Government, Ren Xuefeng.

The Secretary for Economy and Finance, Leong Vai Tac, and Portugal's Secretary of State of Tax Affairs, Antonio Mendonca Mendes, sign the Protocol on the Avoidance of Double Taxation and Prevention of Fiscal Evasion with Respect to Taxes on Income on behalf of their respective administrations, in Lisbon.

22 Chief Executive Chui Sai On leads a government delegation to Shenzhen and meets with the Deputy Secretary of the CPC Shenzhen Municipal Committee and Mayor of Shenzhen, Chen Rugui, with the aim of enhancing cooperation between the two cities in tourism, culture, trade, finance and service industries.

The Vice Chairman of the Chinese People's Political Consultative Conference, Edmund Ho Hau Wah, and the Secretary for Economy and Finance, Leong Vai Tac, meet with the Prime Minister of the Portuguese Republic, António Costa, in Lisbon.

25 Chief Executive Chui Sai On leads a government delegation to Zhongshan and Jiangmen, and meets with the Mayor of Zhongshan, Jiao Lansheng, and the Secretary of the CPC Jiangmen Municipal Committee, Lin Yingwu.

26 The Vice Chairman of the Chinese People's Political Consultative Conference, Edmund Ho Hau Wah, and the Secretary for Economy and Finance, Leong Vai Tac, together with the chairman of the board of directors of the Monetary Authority, Chan Sau San, visit the Bank of Portugal and Euronext, to engage in an in-depth discussion on further promoting the role of Macao as a financial services platform between China and Portuguese-speaking countries.

The Judiciary Police solves its largest ever case involving a loan-shark syndicate and arrests 113 people from Hong Kong, Macao and mainland China, including the ringleader in Hong Kong – who was operating a loan-shark syndicate in the guise of a company.

28 Member of the Standing Committee of the Political Bureau of the CPC Central Committee and Vice Premier of the State Council, Han Zheng, meets with Chief Executive Chui Sai On to listen to opinions and recommendations regarding the Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area.

29 The *Macao SAR Gazette* publishes an order issued by the Secretary for Security, approving the 601 cameras of phases 2 and 3 of the Urban Closed Circuit

Television ("CCTV") Cameras System for Macao to commence operation from midnight on 30 June, marking the expansion of coverage of surveillance in various districts of Macao.

JULY

6 Chief Executive Chui Sai On meets with the Minister of Culture and Tourism, Luo Shugang, and the Minister of Culture of the Portuguese Republic, Luis Filipe de Castro Mendes, to exchange views on deepening cultural cooperation between mainland China, Portugal and Macao.

9 Chief Executive Chui Sai On leads a government delegation to visit cities in the Guangdong-Hong Kong-Macao Greater Bay Area, including Zhaoqing, Foshan, Huizhou and Dongguan, and meets with the Secretary of the CPC Zhaoqing Municipal Committee and the Chairman of the Standing Committee of Municipal People's Congress, Lai Zehua, and the Secretary of the CPC Foshan Municipal Committee, Lu Yi.

10 TCM and New Era hold a joint press conference to announce that the two bus companies will merge on 1 August. In a related development, the Internet of Vehicles (IoV) will cover all Macao buses within three years.

Chief Executive Chui Sai On leads a government delegation to Huizhou, a Greater Bay Area city, and meets with the Deputy Secretary of the CPC Huizhou Municipal Committee and Mayor of Huizhou, Liu Ji, to jointly explore and enhance cooperation in projects covered by the Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area.

11 Chief Executive Chui Sai On visits Dongguan to meet with the Secretary of the CPC Dongguan Municipal Committee, Liang Weidong. Both parties discuss issues related to industry, economy and trade, transportation, and cooperation in youth development.

12 The draft bill on the Maritime Area Management Framework Law passes its second reading in the Legislative Assembly. The law establishes the general principles and framework for the management of Macao's maritime areas. The Government will establish a mechanism on concession and use of the waters according to the Law on Use of Maritime Areas.

The draft bill on the Tax Incentives for Hiring People with Disabilities passes its second reading in the Legislative Assembly. Employers can enjoy a tax reduction of 5,000 patacas per year for each disabled Macao resident they employ, which can be applied retroactively to 2016.

16 Responding to flooding at the Inner Harbour caused by astronomical tides, Chief Executive Chui Sai On holds a cross-departmental meeting to hear department heads' reports on the progress with and difficulties involved in implementing flood control and prevention.

17 Chief Executive Chui Sai On meets the Chairman of Beijing CPC Municipal Committee, Ji Lin, to exchange views on deepening relations between Beijing and Macao, particularly on enhancing cooperation in youth development work.

20 The concession of the Macau (Yat Yuen) Canidrome Club expires, and the Government takes over its premises.

The Executive Council announces the draft by-law on the Tertiary Education Council and the Tertiary Education Fund, in turn launching the 300 million patacas Tertiary Education Fund, which will be used for supporting activities in tertiary education institutions, funding academic research projects, and constructing and acquiring campuses and facilities.

24 The Court of Final Appeal revokes the tender for construction of the LRT depot superstructure, due to a flawed evaluation. The Government must re-evaluate the seven public tenders. On 8 August, the Transportation Infrastructure Office issues a press release stating that over 90 percent of the depot construction has been completed. According to "Legitimate cause of non-performance" of the Code of Administrative Litigation, it will not execute the judgement of the Court of Final Appeal.

25 A ceremony is held to unveil a plaque for the Liaison Office of the Guangdong Food and Drug Administration in the Guangdong-Macao Traditional Chinese Medicine Technology Industrial Park and the Traditional Chinese Medicine Technology and Policy Research Centre.

26 To enhance disaster prevention and control capability within the ambit of security, the Macao Customs, Fire Services Bureau and Public Security Police have made substantial purchases of emergency rescue equipment. The three departments introduce and demonstrate the use of more than 70 types of equipment.

The Social Security Fund publishes its Annual Report 2017. During 2017, benefits including pensions totalled over four billion patacas, benefiting 102,012 pension recipients.

27 Macau (Yat Yuen) Canidrome Club and Anima Macau announce that they have reached a consensus on cooperation regarding the wellbeing of 533 greyhounds. The Canidrome Club will rent a standalone building in Largo de Pac On, Taipa with an adjacent outdoor area for establishing a non-profit international centre for rehoming all greyhounds in Macao. On 31 July, the Canidrome Club submits a plan for domestic greyhound fostering to the Government. A piece of land in Coloane is later designated for the rehoming of greyhounds.

The Macao Trade and Investment Promotion Institute (IPIM) and the Department of Commerce of Guangdong Province jointly organise the Guangdong and Macao Branded Products Fair 2018, marking the tenth anniversary of the event. At the opening ceremony, five cooperation memoranda and agreements are signed regarding joint efforts for development of the Greater Bay Area.

30 The draft bill on Establishment of Municipal Affairs Bureau passes its second reading in the Legislative Assembly. The Civil and Municipal Affairs Bureau (IACM) will be replaced by the Municipal Affairs Bureau, with effect from 1 January 2019.

31 Bairro da Ilha Verde Health Centre, the eighth and largest health centre in Macao, becomes operational.

The public concession contracts of the three bus companies expire. The Transport Bureau renews the contracts on a short-term basis for 15 months based on the existing public concession contracts, with effect from 1 August.

AUGUST

1 The Science and Technology Development Fund issues a press release, announcing it has been granted approval by the Ministry of Science and Technology to establish two more state key laboratories – the State Key Laboratory on the Internet of Things for Smart Cities of the University of Macau, and the State Key Laboratory of Lunar and Planetary Sciences of the Macau University of Science and Technology.

2 The Civil Protection Centre introduces the High Ground Emergency Alarm System on three high ground areas of Macao, and a broadcasting and alarm system which includes 90 surveillance camera poles in low-lying areas, to strengthen the public emergency alert system. The two systems will come into operation later in the month.

3 The State Council announces the abolition of 11 administrative licences, including the permits for Hong Kong, Macao and Taiwan residents to work in mainland China.

7 Kiang Wu Hospital Charitable Association decides to donate 13 buildings at the Pátio da Eterna Felicidade in the vicinity of the Ruins of St Paul's to the Government, for cultural conservation.

13 The *Macao SAR Gazette* publishes an Executive Order to delimit the coastline in accordance with the Maritime Area Management Framework Law, and approve the coastline boundary plan, which also includes the coastline of the Macao port management area of the Zhuhai-Macao artificial islands.

The Amendment to the Law on the Use and Protection of the National Flag, National Emblem and National Anthem passes its first reading in the plenary meeting of the Legislative Assembly. The bill proposes that when the national anthem is performed and sung, those present shall stand up respectfully. Any disrespectful behaviour regarding the national anthem is prohibited. Offenders are subject to a fine from 2,000 patacas to 10,000 patacas.

The *Macao SAR Gazette* publishes an Executive Order to conduct public bidding for not more than 200 special taxi licences, which are valid for eight years.

14 Macao is hit by Severe Tropical Storm Bebinca. The Meteorological and Geophysical Bureau issues the first Typhoon Signal No. 8 in 2018. Typhoon Signal is in force for 138 hours during the passage of Bebinca, the longest on record. The previous record was 107.5 hours during Typhoon Viola in 1976.

15 Chief Executive Chui Sai On attends the first plenary meeting of the leading group for development of the Guangdong-Hong Kong-Macao Greater Bay Area in Beijing, and says Macao will fully support the national development strategy, and adjust Macao's Five-year Development Plan by adding new measures to align with the development of the Greater Bay Area.

The Zhuhai checkpoint of Hong Kong-Zhuhai-Macao Bridge passes an inspection by the Guangdong Provincial Checkpoint Office.

19 The General Office of the State Council issues measures for Applications for and Issuance of Residence Permits for Hong Kong, Macao and Taiwan Residents. As of 1 September, Hong Kong, Macao or Taiwan residents who have lived in mainland China for six months or longer – providing they have a stable job, stable accommodation or are studying in mainland China – are eligible to apply for a residence permit.

21 The MSAR Government and the Shanghai Municipal Government hold a ceremony for signing cooperation agreements, including four memoranda regarding tourism, convention and exhibition, finance, and exchanges between young people.

28 Flight JD5759, operated by Capital Airlines, which is en route from Beijing to Macao, encounters wind shear during its landing at the Macau International Airport, causing damage to the landing gear. It is then forced to divert to and land in Shenzhen Airport instead. The aircraft carries 157 passengers and nine cabin crew. Five people are slightly injured.

The Central People's Government appoints Ms Shen Beili to replace Ye Dabo as Commissioner of the Ministry of Foreign Affairs of the People's Republic of China in the Macao SAR.

29 The Lands, Public Works and Transport Bureau holds a briefing on a preliminary proposal for the future use of the Canidrome land plot. About 40,000 square metres of land will be reserved for leisure, cultural and sports facilities, but not for commercial or residential use. Apart from 8,000 square metres of education facilities, some 65.5 percent of the land will be used to build sports facilities. Also, an underground stormwater storage tank will be situated here, to help with disaster prevention.

SEPTEMBER

1 Mainland China's Applications for and Issuance of Residence Permits for Hong Kong, Macao and Taiwan Residents scheme commences. Local public security

authorities set up more than 6,000 registration offices to handle applications.

2 The Asian Games closes in Jakarta, Indonesia. The Macao delegation wins a total of five medals: one gold, two silvers and two bronzes. Huang Junhua wins the gold medal for men's overall southern fist and southern cudgel event.

3 The *Macao SAR Gazette* publishes By-law No. 22/2018 to establish the Commission for the Defence of National Security of the Macao Special Administrative Region, chaired by the Chief Executive, with the Secretary for Security as vice chairman. The by-law will come into effect 30 days after the publication date.

4 Secretary for Economy and Finance Leong Vai Tac leads a government delegation to Guangzhou, to attend the 12th Pan-Pearl River Delta Regional Cooperation and Development Forum and Trade Fair (PPRD Forum), where they meet with senior officials including the Deputy Secretary of the CPC Jiangxi Provincial Committee and Acting Governor of Jiangxi province, Yi Lianhong, and the Governor of Sichuan province, Yin Li.

5 The 12th Pan-Pearl River Delta Regional Cooperation and Development Forum and Trade Fair is held in Guangzhou.

6 Secretary for Economy and Finance Leong Vai Tac meets with member of the Standing Committee of CPC Guangdong Provincial Committee and Secretary of the CPC Guangzhou Municipal Committee, Zhang Shuofu. Both parties hope to enhance communications, leverage strengths for complementary advantages, and explore innovations in mechanisms and systems, to achieve mutual benefits.

15 Macao is hit by Typhoon Mangkhut. The Government introduces new measures that include offering free parking in public department buildings and gaming venues, implementing an evacuation plan for residents of low-lying areas, and shutting down all casinos. All casinos suspend gambling activities at 11 p.m., and reopen at 8 a.m. on 17 September. It is the first time for Macao to shut down all casinos since the opening-up of the gaming market in 2002.

16 Hit by Typhoon Mangkhut, Macao is impacted by heavy rain, squalls and a severe storm surge. The Meteorological and Geophysical Bureau (SMG) issues Typhoon Signal No. 8, No. 9 and No. 10 in succession, and the Black Storm Surge Warning. The storm brings severe floods to Inner Harbour and low-lying areas. Typhoon Signal No. 10 is issued for nine hours, the longest duration on record since 1968.

Affected by Typhoon Mangkhut, the three land border checkpoints – the Border Gate Checkpoint, the Zhuhai-Macao Crossborder Industrial Zone Border Checkpoint, and the Lotus Flower Checkpoint – are closed from 1 a.m. The Border Gate Checkpoint and the Zhuhai-Macao Crossborder Industrial Zone Border Checkpoint resume operations at 8 a.m. on 17 September, while the Lotus Flower Checkpoint resumes operations at 12 noon.

17 During the passage of Typhoon Mangkhut, Chief Executive Chui Sai On chairs an interdepartmental meeting at the Civil Protection Action Centre to hear briefings by representatives of civil protection authorities and heads of relevant departments on the arrangements made in response to the typhoon. He also visits low-lying areas to understand the situation, and gives instruction on clearing debris and restoring community life.

18 Chief Executive Chui Sai On meets with the Secretary of CPC Hangzhou Municipal Committee, Zhou Jiangyong, to exchange views on maritime economy and smart city development.

Chief Executive Chui Sai On meets with the newly-appointed Commissioner of the Ministry of Foreign Affairs of the People's Republic of China in the Macao SAR, Shen Beili, to discuss external affairs of the MSAR and promoting Macao residents' awareness and sense of national identity.

21 The Executive Council concludes its discussion on the draft by-law on the Amendment to the Organisation and Operation of the Health Bureau and draft by-law on Abolishment of Decree-Law No. 58/99/M of 18 October. The Amendment to the Organisation and Operation of the Health Bureau proposes the establishment of Macao Academy of Medical Specialists, to provide training for medical specialists in Macao, while the Abolishment of Decree-Law No. 58/99/M of 18 October proposes abolishing tax exemption for all offshore companies in Macao. These companies will not be permitted to operate offshore businesses from 2021 onwards.

28 The governments of Hong Kong, Zhuhai and Macao commence 3-day trial operations of the Hong Kong-Zhuhai-Macao Bridge, for testing the operations of their respective border checkpoints.

OCTOBER

1 The Government holds a series of activities to celebrate the 69th anniversary of the establishment of the People's Republic of China, including a flag-raising ceremony, a large-scale reception, a Fun Run, a variety show, and a fireworks display contest.

3 The *Macao SAR Gazette* publishes an Executive Order to establish a cross-departmental committee responsible for compiling the draft of Macao's urban development master plan, confirming 11 objectives as the core strategies for developing Macao as a world tourism and leisure centre and a beautiful home.

The Executive Council concludes discussions on the draft by-law on the Organisational Structure and Operations of the Municipal Affairs Bureau. The Municipal Affairs Bureau will be established on 1 January 2019. The Municipal Administration Committee will lead 12 departments and 36 divisions.

5 A Government inter-departmental clearing taskforce has recently conducted joint

operations to resume two pieces of land: one in Travessa do Cais on the Macao peninsula, the other adjacent to Lago Building in Taipa.

6 According to the Civic and Municipal Affairs Bureau (IACM), Canidrome Club (Yat Yuen) is ineligible to take back more than 500 greyhounds from the site, and will be fined under the Animal Protection Law.

8 A plaque unveiling ceremony was held for the first national-level innovative space in Hong Kong and Macao at the Young Entrepreneur Incubation Centre. Chief Executive Chui Sai On and the Vice Minister of the Ministry of Science and Technology, Mr Zhang Jianguo, officiate at the ceremony.

The MSAR Government, the Liaison Office of the Central People's Government in the MSAR, and the Guizhou Provincial Government hold a working meeting on cooperation in poverty alleviation and follow up regarding implementation of the Cooperative Framework Agreement on Poverty Alleviation and the promotional work related to the poverty alleviation agreements. Chief Executive Chui Sai On, the Director of the Liaison Office of the Central People's Government in the MSAR, Zheng Xiaosong, and the Governor of Guizhou province, Shen Yiqin, lead the representatives of their delegations to the meeting.

10 The Vice Premier of the State Council, Han Zheng, meets with the delegation of the Legislative Assembly of Macao at the Great Hall of the People in Beijing, stating that the Central People's Government recognises the performance of the Legislative Assembly of Macao and putting forward three aspirations.

Chief Executive Chui Sai On meets with the Secretary of the CPC Fujian Provincial Committee, Yu Weiguo, and delegation. Both parties agree to broaden the scope for mutual cooperation in the new era for the "Belt and Road" initiative.

11 The Office of the Government Spokesperson issues a press release in response to the 2018 annual report published by the Congressional-Executive Commission on China of the United States, declaring that the affairs of the Macao SAR are internal affairs of China, and foreign countries shall have no rights to intervene. The Government strongly opposes the United States' report, which is totally oblivious to the truth, meddlesome and judgmental.

12 Chief Executive Chui Sai On meets with the leading officials from the cities of the Greater Bay Area, who come for a youth forum with the theme of joining forces for development of the Greater Bay Area. The Chief Executive says the MSAR Government will cooperate with the sister cities of the Greater Bay Area to achieve mutual complementarities and benefits, to jointly build a world-class metropolis.

13 The youth forum with the theme of joining forces for development of the Greater Bay Area opens. Chief Executive Chui Sai On and other guests officiate at the opening ceremony.

19 Chief Executive Chui Sai On meets the delegation led by the Chairwoman of Inner Mongolia Autonomous Regional People's Government, Bu Xiaolin, to exchange

views on enhancing cooperation between the two regions, and contributions to the development of the country's "Belt and Road" initiative.

20 Chief Executive Chui Sai On meets with the Minister of Foreign Affairs of the Portuguese Republic, Professor Doutor Augusto Santos Silva, at the Government Headquarters. Both parties review their cooperation in the past, and exchange views on deepening cooperation between Macao and Portugal.

The Director of the Liaison Office of the Central People's Government in the MSAR, Zheng Xiaosong, dies in a fall. Chief Executive Chui Sai On sends a telegram of condolence to express his great sorrow in the following day.

23 The opening ceremony of Hong Kong-Zhuhai-Macao Bridge is held at the bridge's Zhuhai Checkpoint Building. President Xi Jinping officiates at the ceremony, to announce the official opening of the bridge. The bridge commences normal operations the following day.

Chief Executive Chui Sai On meets with the Secretary-General of the World Tourism Organization of the United Nations (UNWTO), Zurab Pololikashvili, to exchange views on tourism development.

26 The Commission against Corruption (CCAC) announces that three persons including the President of Macao Trade and Investment Promotion Institute (IPIM), who are suspected of having committed work-related crimes when approving important investment immigration cases, are subject to mandatory suspension of duty and restrained from leaving Macao by the judiciary.

NOVEMBER

5 Chief Executive Chui Sai On is invited to attend the opening ceremony of the 1st China International Import Expo at the Shanghai National Exhibition and Convention Center. The MSAR Government sets up a "Macao Hub" in the Hong Kong and Macao exhibition area of the China Pavilion. At "Macao Hub", the Chief Executive receives President Xi Jinping and other guests who are touring the exhibition right after the opening ceremony, and briefs them about Macao's development.

8 The Unitary Police Service cooperates with the People's Liberation Army Macao Garrison for the first time, and coordinates with various departments and institutions to organise a joint counter-terrorism drill, code-named "Bright Dog".

9 Chief Executive Chui Sai On meets with the Secretary of the CPC Sichuan Provincial Committee, Peng Qinghua, at the Government Headquarters, to exchange views on further cooperation between Sichuan and Macao.

The first Sichuan-Macao Cooperation Conference commences in Macao. The Secretary for Economy and Finance, Leong Vai Tac, and the Vice Governor of Sichuan Province, Li Zeyun, sign the Agreement on Establishment of the

Mechanism Originating via the Framework of the Sichuan-Macao Cooperation Conference and the Memorandum of the First Sichuan-Macao Cooperation Conference.

The Labour Affairs Bureau announces an increase in permits for domestic helpers from seven provinces: Guangxi, Hunan, Hubei, Jiangxi, Anhui, Sichuan and Guizhou.

10 Chief Executive Chui Sai On leads a delegation to Beijing for an event held on 11 and 12 November 2018, to celebrate the 40th anniversary of the reform and opening up of China.

12 President Xi Jinping receives Chief Executive Chui Sai On, HKSAR Chief Executive Mrs Carrie Lam, and members of the Hong Kong and Macao delegations to celebrate the 40th anniversary of the reform and opening up of China. President Xi affirms Hong Kong's and Macao's contributions and role in supporting national reform and opening up throughout the past four decades, and raises four aspirations regarding Hong Kong's and Macao's integration with the nation's development in the new era.

The *Macao SAR Gazette* publishes an Executive Order regarding the establishment of the Working Committee for the Development of the Guangdong-Hong Kong-Macao Greater Bay Area, which is chaired by the Chief Executive.

The Statistics and Census Service (DSEC) estimates that Typhoon Mangkhut has caused losses totalling 1.55 billion patacas, with 520 million patacas of direct losses, and 1.03 billion patacas of indirect losses.

13 The Director General of Guangdong Sub-Administration of the General Administration of Customs of the People's Republic of China (GACC), Li Shuyu; the Commissioner of Hong Kong Customs and Excise, Tang Yi-hoi; and the Director General of Macao Customs Service, Vong Iao Lek, sign a memorandum on arrangements for cooperation and mutual-assistance between GACC and Hong Kong and Macao Customs at the Hong Kong-Zhuhai-Macao Bridge ports, to strengthen the tripartite partnership in customs affairs and further enhance cooperation in customs clearance.

The Judicial Police smashes two international drug trafficking cases, seizing 2.2 kilograms of heroin and 3.1 kilograms of methamphetamine, with an estimated total market value of about 10.9 million patacas, at Macao International Airport. Four Malaysians and one Hong Kong teenager are arrested.

15 The four-day, 65th Macau Grand Prix commences. On 18 November, a rare accident occurs at the Lisboa Bend during a Formula-Three Race. German driver Sophia Floersch's car catapults over the crash barriers into a photographer's tribune. Five people are injured and taken to hospital.

Chief Executive Chui Sai On delivers the Policy Address for the Fiscal Year 2019, titled "Seize Opportunities for Balanced Development".

21 Chief Executive Chui Sai On meets with the Secretary of the CPC Guangdong Provincial Committee, Li Xi, at a meeting for senior officials. Both parties agree to jointly promote development of the Guangdong-Hong Kong-Macao Greater Bay Area and enhance cooperation between Guangdong and Macao, providing support for Macao's adequate industrial diversification.

24 Various border checkpoints in Macao receive a new single-day record of over 622,000 passengers in total. At one time, crowd control measures are implemented at the Border Gate.

26 At a seminar with principal officials, Chief Executive Chui Sai On conveys the essence of the keynote speech of President Xi Jinping, which he gave in Beijing when receiving the Hong Kong and Macao delegations to celebrate the 40th anniversary of the reform and opening up of China.

28 The Government recovers a piece of occupied land in Hac-Sa Village, with a total area of 70,740 square metres.

The Mandarin's House receives the title of "World Heritage Youth Education Base" from the World Heritage Institute of Training and Research for the Asia and the Pacific Region under the Auspices of UNESCO (Suzhou).

29 The Department of Public Security of Guangdong Province Traffic Management Bureau announces that from 1 December, Macao private cars and Guangdong and Macao government vehicles that are permitted to cross into other ports may also access Hong Kong-Zhuhai-Macao Bridge without permits being extended. Permissions will be given in phases.

The fifth Macao-Taipa cross-harbour passage project – "Governador Nobre de Carvalho Bridge Cross-Harbour Passage: Preliminary Design, Inspection Works and Consultancy Studies" – is awarded to the Macao branch of CCCC Highway Consultants Company Limited, with a projected cost of 99.27 million patacas and an anticipated duration of 800 days.

30 Chief Executive Chui Sai On meets with the Governor of Liaoning Province, Tang Yijun. Both parties agree to serve the country together in realising the "Belt and Road" initiative and development of the Guangdong-Hong Kong-Macao Greater Bay Area, enhancing regional cooperation, and leveraging Macao's advantages as a platform for exploring development opportunities between China and Portuguese-speaking countries.

DECEMBER

2 2018 Macao Light Festival — Time Travel in Macao opens.

4 Chief Executive Chui Sai On meets with the Secretary of the CPC Shanxi Provincial Committee, Luo Huining, and a delegation he is leading. Both parties agree to deepen cooperation in cultural tourism, Chinese medicine, small- and medium-

sized enterprises, and leveraging the advantages of Macao as a platform for China and Portuguese-speaking countries.

5 The Executive Council concludes its discussion on the draft by-law on Listing the Shipyard at Lai Chi Vun as a Site for Cultural Relics and Setting its Buffer Zones. The shipyard is listed as a "site" in the cultural relics category.

The *Macao SAR Gazette* publishes a notice issued by the Infrastructure Development Office to announce the commencement of the process to invite tenders for the design and construction of the fourth Macao-Taipa cross-harbour bridge.

6 Chief Executive Chui Sai On and the Chairman of the National Development and Reform Commission, He Lifeng, sign the Arrangements Between the National Development and Reform Commission and the Government of the Macao Special Administrative Region (SAR) for Advancing Macao's Full Participation in and Contribution to the Belt and Road Initiative on behalf of the two parties.

7 The Director of the Land, Public Works and Transport Bureau, Li Canfeng, discloses that the project to construct tidal sluices at the Inner Harbour has been approved by the Central People's Government, and work has commenced on the engineering design. Construction is expected to commence in the second half of 2019.

8 The 3rd International Film Festival & Awards • Macao opens, with "A New Avenue to the World of Films" as the theme.

11 The bill of the Legal System for Provision of Interim Housing and Replacement Housing passes its first reading and the bill of Amendment to Law No. 3/2004 Chief Executive Election Law passes its second reading in the Legislative Assembly. The number of Representatives of Members of the National Committee of the Chinese People's Political Consultative Conference in Macao on the Chief Executive Election Committee is reduced from 16 to 14, while two representatives of the municipal organisation are added.

12 Chief Executive Chui Sai On leads a delegation of Macao government officials for a visit to Nanjing, Jiangsu Province, and meets with the Governor of Jiangsu Province, Wu Zhenglong.

The Commission on Economic and Trade Cooperation between Mainland and Macao holds its first conference in Macao. Afterwards, the representative and vice minister of International Trade of Ministry of Commerce of the People's Republic of China signs the CEPA Agreement on Trade in Goods with the Secretary of Economy and Finance, Leong Vai Tac.

13 The Government holds a remembrance ceremony for the National Memorial Day for Nanjing Massacre Victims.

Chief Executive Chui Sai On, the Secretary of the CPC Changzhou Municipal

Committee, Wang Quan, and the Mayor of Changzhou, Ding Chun, participate in a seminar regarding construction and overall planning of the Jiangsu-Macao Cooperation Park, and visit the site of the industrial park.

The Macao SAR Government and Zhuhai Municipal People's Government announce the imposition of the third-phase of the policy on quotas for Macao Motor Vehicles Entering and Exiting Hengqin. The quota for Macao motor vehicles entering and exiting Hengqin will gradually increase to 1,700, and then to a maximum of 2,500. Applications will be accepted from 20 December 2018.

The Secretary of the CPC Hengqin New Area Committee, Niu Jing, says the State Council has approved the relocation of the Lotus Flower checkpoint to Hengqin checkpoint, together with implementing joint inspections for one-stop border crossing. It is planned that inspection venues with an area of at least 100,000 square metres will be administered by Macao.

15 The bus terminal at the Border Gate Square reopens, and operates smoothly in general. In the first phase of the reopening, 13 bus routes resume.

16 "2018 Macao International Parade" is held in celebration of the 19th anniversary of Macao's return to the motherland.

17 President Xi Jinping and Premier Li Keqiang receive Chief Executive Chui Sai On, during the Chief Executive's duty visit to Beijing.

18 The bill of Amendment to Law No. 10/2012 - Regulations on Conditions for Entering, Working and Gaming in Casinos passes its second reading in the Legislative Assembly. Casino workers are forbidden to enter casinos during off-duty periods.

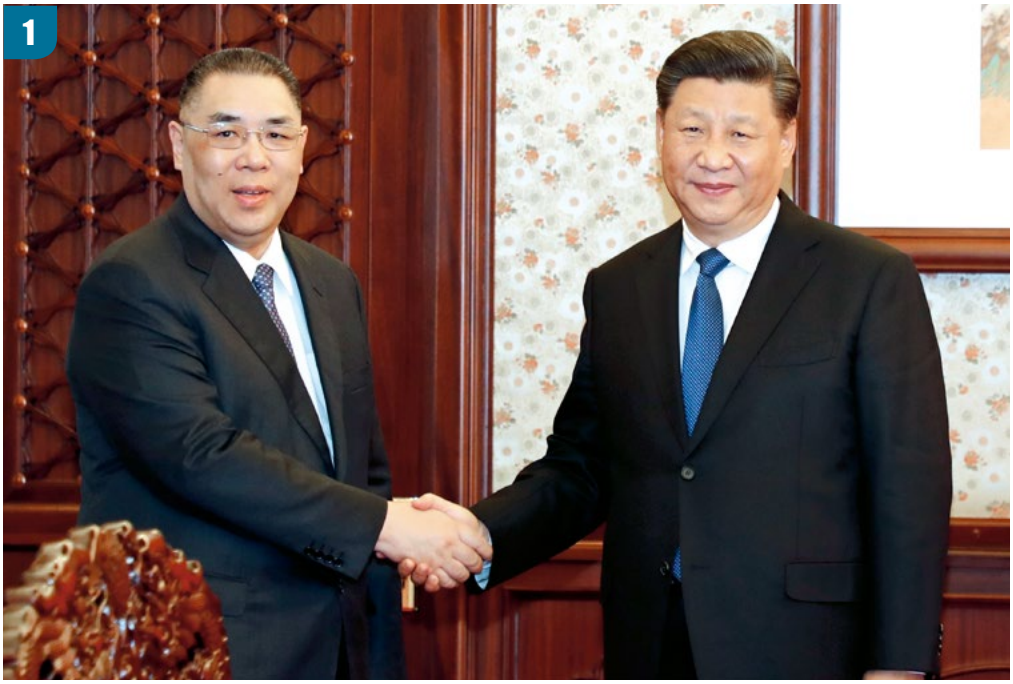
19 The *Macao SAR Gazette* publishes an order issued by the Secretary for Transport and Public Works regarding the annulment of the land concession for the former site of "Ocean World" in Taipa.

20 The Government holds a series of activities to celebrate the 19th anniversary of the establishment of the MSAR.

The Hong Kong-Zhuhai-Macao Bridge border checkpoint receives over 58,000 passengers, setting a record high for the checkpoint.

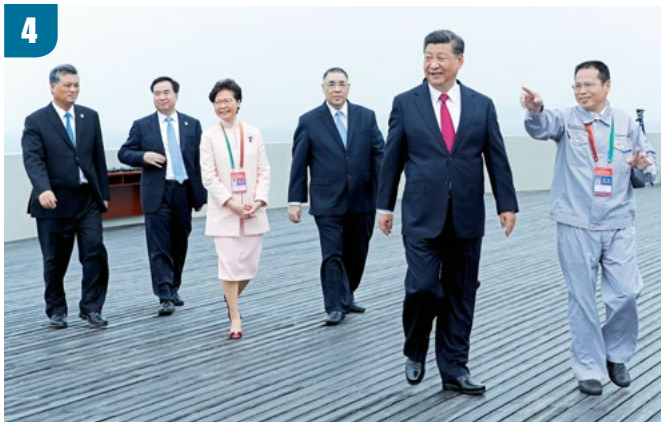
In response to an outbreak of swine fever at a slaughterhouse in Xiangzhou District, Zhuhai, the Civil and Municipal Affairs Bureau meets with the representative of the Department of Animal and Plant Quarantine of the General Administration of Customs, to ensure stable and safe supplies of live pigs to Macao.

28 The State Council has recently decided to appoint Fu Ziying as Director of the Liaison Office of the Central People's Government in the Macao Special Administrative Region.



1. On 17 December, President Xi Jinping meets with Chief Executive Chui Sai On during Chui's duty visit to Beijing.

2. Also on 17 December, Premier Li Keqiang meets with Chief Executive Chui Sai On during Chui's duty visit to Beijing.



1. On 12 November, President Xi Jinping meets with Chief Executive Chui Sai On, the Chief Executive of the Hong Kong SAR, Carrie Lam, and members of the Hong Kong and Macao delegations in celebration of the 40th anniversary of the country's reform and opening up.

2. On 11 November, Chief Executive Chui Sai On attends a seminar on participation by Hong Kong and Macao in the reform and opening up of the country during the past 40 years, at the Diaoyutai State Guesthouse, Beijing.

3. On 23 October, the opening ceremony of the Hong Kong-Zhuhai-Macao Bridge is held at the Zhuhai border checkpoint building of the bridge.

4. On 23 October, President Xi Jinping (second from right), Chief Executive Chui Sai On (third from right), and other officiating guests take a walk on the Hong Kong-Zhuhai-Macao Bridge, right after the opening ceremony.

5. On 10 April, President Xi Jinping poses for a photo with the Hong Kong and Macao government delegations and business leaders attending the BOAO Forum for Asia Annual Conference 2018.

6. On 15 August, Chief Executive Chui Sai On, in his role as a member of the leading group for development of the Guangdong-Hong Kong-Macao Greater Bay Area, attends the group's first plenary meeting at the Great Hall of the People in Beijing.

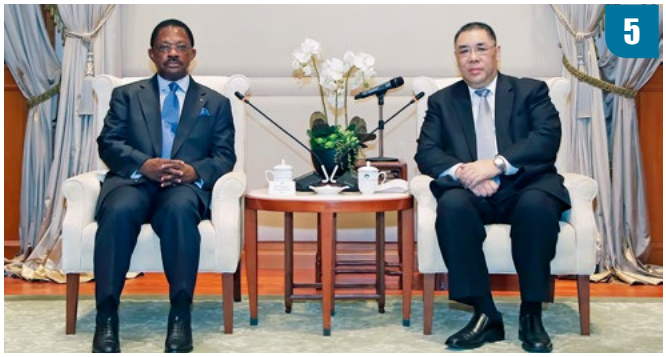
1. From 7 May to 11 May, Chief Executive Chui Sai On leads a government delegation to visit two countries along the "Belt and Road" - Cambodia and Thailand, to enhance cooperation in tourism, commerce and trade.

   The photo was taken on 8 May, when Chief Executive Chui Sai On cordially shook hands with the Prime Minister of the Kingdom of Cambodia, Hun Sen.

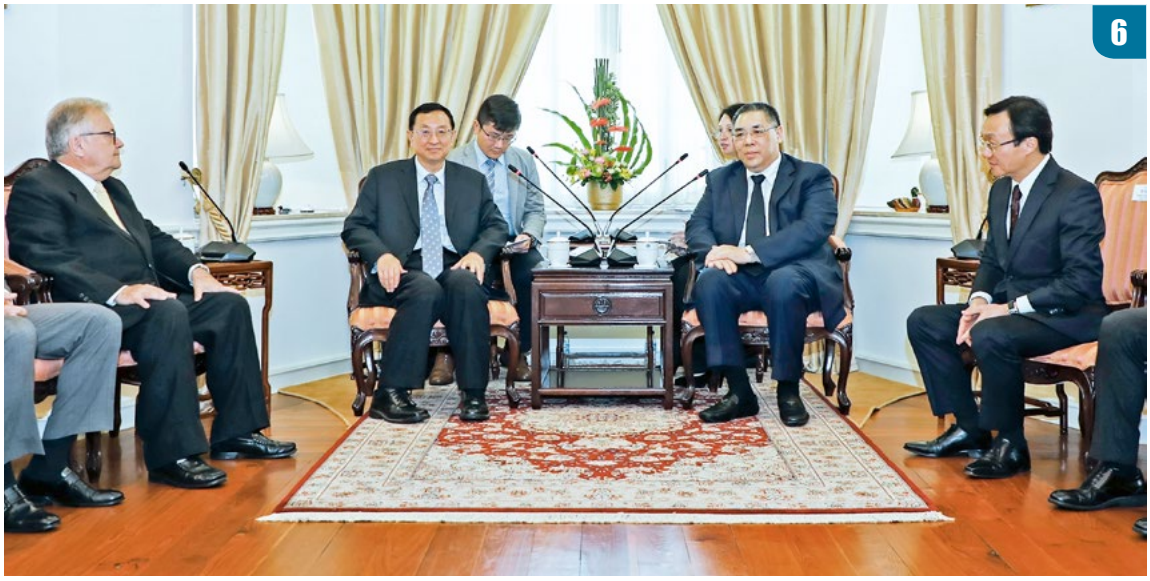
2. On 10 May, Chief Executive Chui Sai On meets with the Prime Minister of the Kingdom of Thailand, Prayuth Chan-ocha.

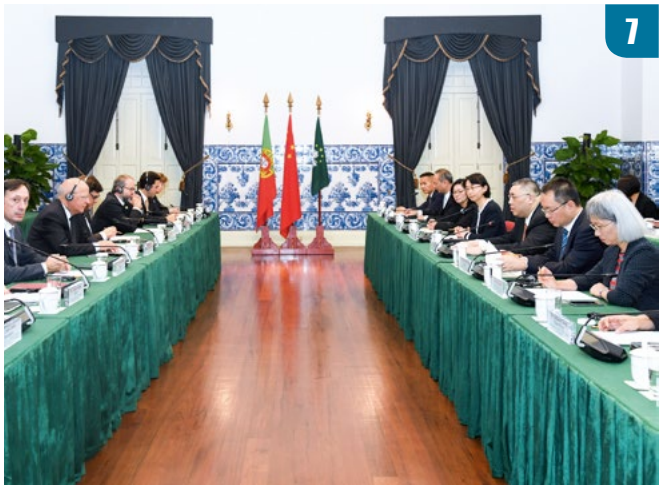
3. On 27 March, Chief Executive Chui Sai On and the Governor of the Siem Reap Province, Khim Bunsong, represent their respective governments at the signing of the Memorandum of Understanding between Siem Reap Province of the Kingdom of Cambodia and the Macao Special Administrative Region of the People's Republic of China on the Establishment of Friendship Relation.

4. On 20 April, Chief Executive Chui Sai On meets with a delegation visiting for the Fourth "Mayors' Visiting Programme".



5. On 7 June, Chief Executive Chui Sai On meets with the Prime Minister of the Republic of Equatorial Guinea, Francisco Pascual Obama Asue.



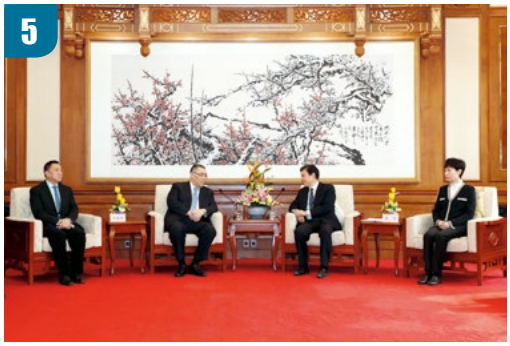


6. On 6 July, Chief Executive Chui Sai On meets with the Minister of Culture of the People's Republic of China, Luo Shugang, and the Minister of Culture of the Portuguese Republic, Luís Filipe de Castro Mendes.

7. On 20 October, Chief Executive Chui Sai On and the Minister of Foreign Affairs of the Portuguese Republic, Augusto Santos Silva, co-chair the fifth meeting of the Macao-Portugal Joint Committee.

1. On 22 June, the Vice Chairman of the CPPCC National Committee and former Chief Executive of the Macao SAR, Edmund Ho Hau Wah, and the Secretary for Economy and Finance, Leong Vai Tac, meet with the Prime Minister of the Portuguese Republic, Antonio Costa, in Portugal.

2. On 22 June, the Vice Chairman of the CPPCC National Committee and former Chief Executive of Macao SAR, Edmund Ho Hau Wah, and Secretary for Economy and Finance, Leong Vai Tac, attend a cocktail reception celebrating the 15th anniversary of the establishment of the Forum for Economic and Trade Cooperation Between China and Portuguese-speaking Countries in Portugal.



3. On 28 June, the Vice Premier of the State Council, Han Zheng, meets with Chief Executive Chui Sai On to listen to opinions and recommendations regarding the Outline Plan for the Development of the Guangdong-Hong Kong-Macao Greater Bay Area.

4. Chief Executive Chui Sai On attends the opening of the first plenum of the 13th National People's Congress. During his stay in Beijing, he visits the National Development and Reform Commission, the Ministry of Commerce and the China Food and Drug Administration.

   The photo was taken when Chief Executive Chui Sai On met with the Director of the National Development and Reform Commission, He Lifeng, on 6 March.

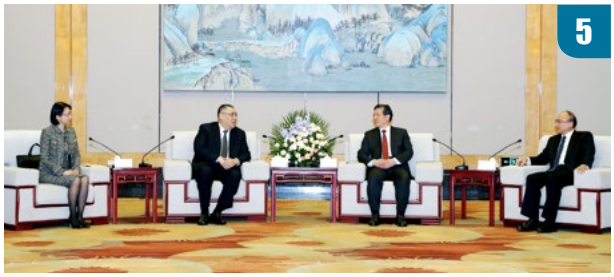
5. On 6 March, Chief Executive Chui Sai On meets with the Minister of Commerce, Zhong Shan.

1. On 16 April, Chief Executive Chui Sai On meets with the Minister of Education, Chen Baosheng (seventh from left), to officiate at the unveiling ceremony for The Wall of Great Wisdom in the University of Macau.

2. On 29 May, Chief Executive Chui Sai On meets with the Minister of the General Administration of Customs of China, Ni Yuefeng. The two parties agree to promote improvements in innovative customs clearance models and expedite construction of the new Guangdong-Macao border crossing.

3. On 28 May, Chief Executive Chui Sai On meets with the Secretary of the CPC Beijing Municipal Committee, Cai Qi, to explore future cooperation between Beijing and Macao.

4. On 28 May, Chief Executive Chui Sai On and the Chairman of the Beijing Municipal Committee of the Chinese People's Political Consultative Conference, Ji Lin, witness the signing of Vocational Training Cooperation Agreement Between the Beijing Municipality and the Macao SAR; Letter of Intent of the Macao Government Tourist Office for Joining the China World Tourism Heritage Promotion Alliance; and Winter Sports Cooperation Agreement Between Beijing Municipal Bureau of Sports and the Macao SAR at the launch ceremony of the Beijing-Macao Cooperation Partnership 2018.



5. On 20 March, Chief Executive Chui Sai On (second from left) meets with the Secretary of the CPC Hebei Provincial Committee, Wang Dongfeng (third from left), and the Governor of Hebei Province, Xu Qin (fourth from left).

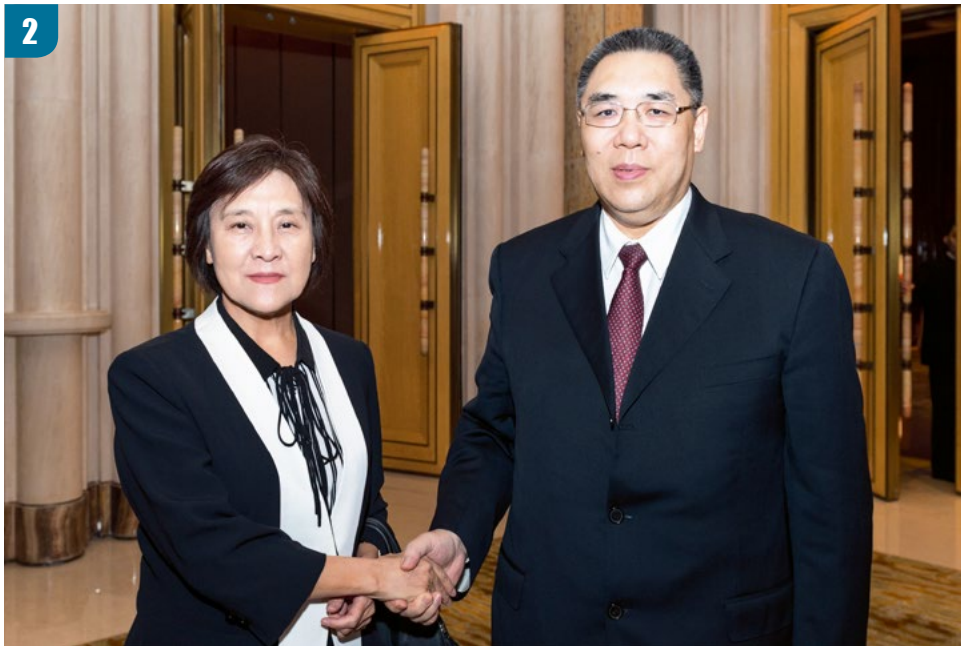
6. On 9 April, Chief Executive Chui Sai On meets with the Secretary of Hainan Province, Liu Cigui, while visiting Hainan to attend the Boao Forum for Asia Annual Conference 2018.

7. On 21 August, Chief Executive Chui Sai On meets with the Mayor of Shanghai, Ying Yong, and other senior officials.

8. On 18 September, Chief Executive Chui Sai On meets with the Standing Committee Member of CPC Zhejiang Provincial Committee and the Secretary of CPC Hangzhou Municipal Committee, Zhou Jiangyong.

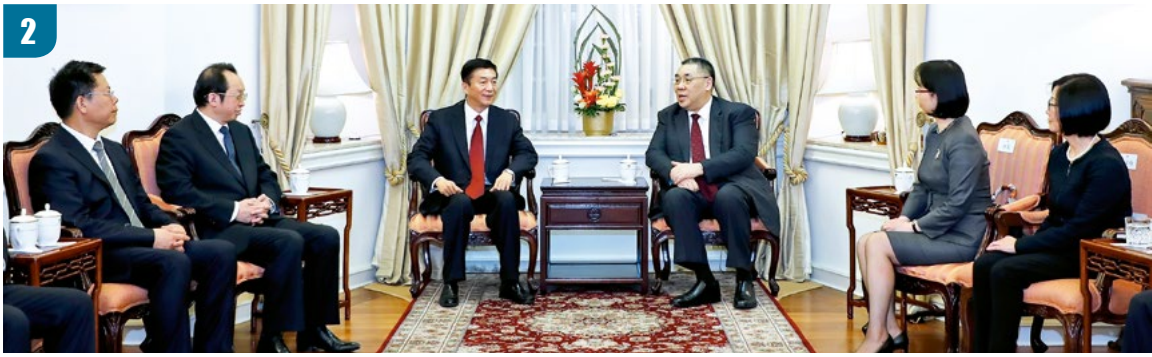
1. On 10 October, Chief Executive Chui Sai On meets with the Governor of Fujian Province, Yu Weiguo. Both parties agree that given the new era and the "Belt and Road" initiative, Fujian and Macao can boost their cooperation to a new level by broadening the scope for collaboration.

2. On 19 October, Chief Executive Chui Sai On meets with the Chairwoman of the Inner Mongolia Autonomous Region People's Government, Bu Xiaolin.



3. On 9 November, Chief Executive Chui Sai On and the Secretary of the CPC Sichuan Province, Peng Qinghua, lead government delegations attending the first Sichuan-Macao Cooperation Conference.

4. On 21 November, a meeting is held for Guangdong and Macao senior officials. Chief Executive Chui Sai On; the Secretary of the CPC Guangdong Provincial Committee, Li Xi; the Governor of Guangdong Province, Ma Xingrui; and delegations from the two governments pose for a group photo.



1. On 30 November, Chief Executive Chui Sai On meets with the Governor of Liaoning Province, Tang Yijun.

2. On 4 December, Chief Executive Chui Sai On meets with the Secretary of CPC Shanxi Provincial Committee, Luo Huining.

3. On 12 December, Chief Executive Chui Sai On meets with the Governor of Jiangsu Province, Wu Zhenglong.

4. On 13 December, Chief Executive Chui Sai On meets with the Secretary of the CPC Changzhou Municipal Committee, Wang Quan, and the Mayor of Changzhou, Ding Chun, to exchange views on construction and overall planning of the Jiangsu-Macao Cooperation Park.

5. In late June, Chief Executive Chui Sai On begins a series of visits to cities of the Greater Bay Area. On 21 June, he visits Canton East Tower in Guangzhou, and is briefed by the Secretary of CPC Guangzhou Municipal Government, Ren Xuefeng, on the city's economic and industrial development.

6. On 21 June, Chief Executive Chui Sai On meets with young entrepreneurs at a seminar held in the Macao-Hengqin Youth Entrepreneurship Valley in Hengqin, Zhuhai.

7. On 21 June, Chief Executive Chui Sai On visits the Traditional Chinese Medicine Science and Technology Industrial Park of Cooperation between Guangdong and Macao in Hengqin, Zhuhai.

8. On 21 June, Chief Executive Chui Sai On cordially shakes hands with the Secretary of the CPC Zhuhai Municipal Committee, Guo Yonghang.

1. On 22 June, Chief Executive Chui Sai On meets with the Mayor of Shenzhen, Chen Rugui.

2. On 25 June, Chief Executive Chui Sai On meets with the Mayor of Zhongshan, Jiao Lansheng.

3. On 25 June, Chief Executive Chui Sai On, the Secretary of the CPC Jiangmen Municipal Committee, Lin Yingwu, and other representatives of the "Thousand Talents Union" pose in front of the environmentally friendly electroplating plant of the New Fortune Environmental Company Limited, in Yamen.

4. On 9 July, Chief Executive Chui Sai On attends a seminar with the Secretary of the CPC Zhaoqing Municipal Committee, Lai Zehua.

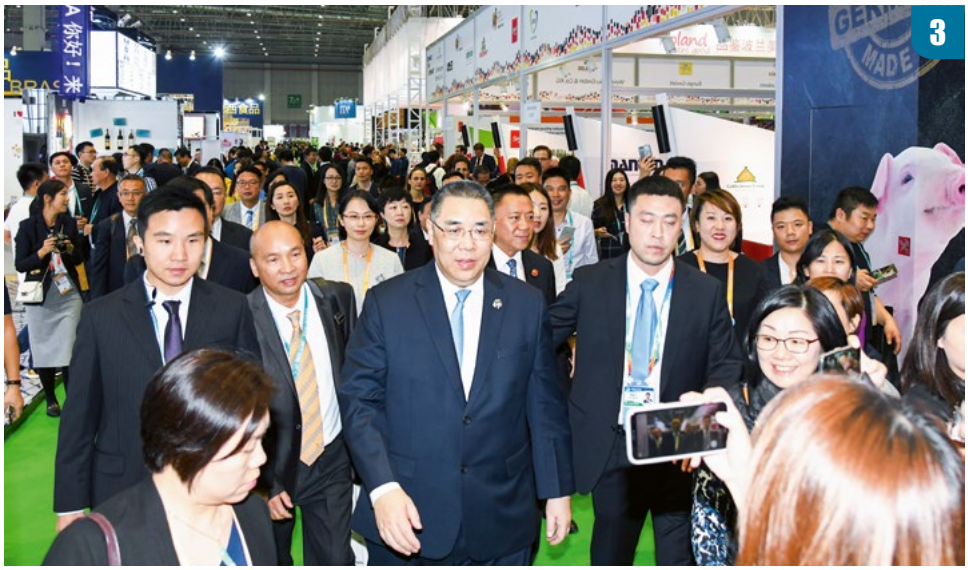
5. On 9 July, Chief Executive Chui Sai On meets with the Secretary of the CPC Zhaoqing Municipal Committee, Lai Zehua.

6. On 10 July, Chief Executive Chui Sai On, meets with the Mayor of Huizhou, Liu Ji.

7. On 11 July, Chief Executive Chui Sai On meets with the Secretary of the CPC Dongguan Municipal Committee, Liang Weidong.

1. On 22 May, Chief Executive Chui Sai On, the Director of the Liaison Office of the Central People's Government in the Macao SAR, Zheng Xiaosong, and the Secretary of the CPC Guizhou Provincial Committee, Sun Zhigang, witness the signing of a framework agreement on cooperation between the People's Government of Guizhou Province, the Government of the Macao Special Administrative Region (SAR) and the Liaison Office of the Central People's Government in the Macao SAR regarding poverty alleviation.

2. On 24 May, Chief Executive Chui Sai On visits the demonstration centre of the Guizhou big data pilot zone in Guizhou, accompanied by the Secretary of the CPC Guizhou Provincial Committee, Sun Zhigang.



3. On 5 November, Chief Executive Chui Sai On visits the Macao pavilion "Trade in Goods – Foods and Agricultural Products Zone" set up by the Macao Trade and Investment Promotion Institute (IPIM) at the first China International Import Expo.

4. On 5 November, the MSAR Government sets up a Macao exhibition zone titled "Macao Hub" at the first China International Import Expo, in Shanghai.

1. At midnight on 15 March, the Macao Customs Service and the Guangdong Provincial Public Security Department hold the handover ceremony for the Macao border-crossing area of the Hong Kong-Zhuhai-Macao Bridge.

2. From 15 March, the MSAR Government officially administers the Macao border-crossing area of the Hong Kong-Zhuhai-Macao Bridge. The law enforcement team becomes responsible for border control and security.

3. On 15 March, the Macao border-crossing area of the Hong Kong-Zhuhai-Macao Bridge comes under the jurisdiction of the Macao SAR Government. Chief Executive Chui Sai On visits the border-crossing area and poses for a photo with the Secretary for Security, Wong Sio Chak; the Secretary for Transport and Public Works, Raimundo do Rosário; the Commissioner-General of the Unitary Police Service, Ma Io Kun; and the Director-General of the Macao Customs Service, Vong Iao Lek.

4. On 3 May, Chief Executive Chui Sai On inspects the facilities of the Macao border-crossing area of the Hong Kong-Zhuhai-Macao Bridge.

5. On 6 December, the National Development and Reform Commission and the MSAR Government hold a joint conference on the Arrangements Between the National Development and Reform Commission and the Government of the Macao Special Administrative Region (SAR) for Advancing Macao's Full Participation in and Contribution to the Belt and Road Initiative.

6. On 1 October, the Government organises a reception at the Macau Tower Convention and Entertainment Centre, to celebrate the 69th anniversary of the establishment of the People's Republic of China.

7. On 20 December, a flag-raising ceremony in celebration of the 19th anniversary of the establishment of the Macao SAR is held at the Golden Lotus Square.

1. On 18 September, Chief Executive Chui Sai On meets with the newly-appointed Commissioner of the Ministry of Foreign Affairs of the People's Republic of China in the Macao SAR, Ms Shen Beili.

2. On 6 June, the 2018 International Conference on Belt and Road and Macao's Development commences.

3. On 8 October, Chief Executive Chui Sai On attends the 2018 Awards Ceremony of the Science and Technology Awards of the Macao Special Administrative Region and the new state key laboratory plaque-unveiling ceremony.

4. On 5 October, Chief Executive Chui Sai On chairs the first plenary meeting of the Commission for the Defence of State Security of the Macao Special Administrative Region.

5. On 13 October, Chief Executive Chui Sai On, the Vice Chairman of the Chinese People's Political Consultative Conference Edmund Ho Hau Wah and the Director of the State Council's Hong Kong and Macao Affairs Office, Zhang Xiaoming, attend the launch ceremony of the Roundtable Conference of Young Leaders under the "Youth Forum on Jointly Building the Guangdong-Hong Kong-Macao Greater Bay Area".

1. On 8 February, Chief Executive Chui Sai On attends a Spring Festival reception hosted by the Liaison Office of the Central People's Government in the Macao Special Administrative Region.

2. On 1 August, Chief Executive Chui Sai On attends a reception to commemorate the 91st anniversary of the founding of the People's Liberation Army.

3. On 12 April, Chief Executive Chui Sai On and members of the Commission for Reviewing and Monitoring the Improvements of the Response Mechanism to Major Disasters hold a press conference to introduce the comprehensive plans and measures for disaster prevention and mitigation.

4. On 15 April, an educational exhibition on national security – jointly hosted by the MSAR Government and the Liaison Office of the Central People's Government in the Macao SAR – commences.

5. On 7 August, Chief Executive Chui Sai On presents a Macao SAR flag to representatives of the Macao delegation participating in the 18th Asian Games.

6. On 15 November, Chief Executive Chui Sai On delivers the policy address for the fiscal year 2019.

7. On 13 December, the Government holds a ceremony to commemorate the Nanjing Massacre National Memorial Day.

1. On 13 September, Chief Executive Chui Sai On holds a meeting at the Civil Protection Action Centre, to hear briefings by members of civil protection authorities on work arrangements and give instructions in response to Typhoon Mangkhut.

2. On 15 September, the Government holds a press conference regarding the arrangements in response to Typhoon Mangkhut. The Secretary for Security, Wong Sio Chak; the Commissioner-General of the Unitary Police Service cum Director of the Joint Action, Ma Io Kun, the Director-General of the Macao Customs Service, Vong Iao Lek and representatives from relevant departments are also present.

3. On 19 January, the 2017 Decorations, Medals and Certificates of Merit Awards Ceremony of the MSAR is held at the Cultural Centre.

4. On 12 April, the 2018 Macao International Environmental Cooperation Forum (MIECF) opens.

5. On 4 May, the signing ceremony of the Guangdong-Macao Cooperation and Development Fund is held in Guangzhou. The establishment of the fund is the first achievement of innovative financial cooperation between the two regions under the Framework Agreement on Cooperation Between Guangdong and Macao.

6. On 23 January, Chief Executive Chui Sai On hosts a banquet for persons-in-charge of local Chinese language media.

7. On 24 January, Chief Executive Chui Sai On hosts a banquet for persons-in-charge of local Portuguese and English language media.

1. On 14 June, Chief Executive Chui Sai On meets with a delegation of the Chinese Language Press Institute that is visiting the Guangdong-Hong Kong-Macao Greater Bay Area.

2. On 21 May, Chief Executive Chui Sai On attends the opening ceremony of the Macao Global Media Industry Development Conference 2018.

3. On 24 March, Chief Executive Chui Sai On attends the 2018 general meeting of the “Thousand Talents Union” and a dialogue session with the Chief Executive.

4. On 4 July, Chief Executive Chui Sai On inspects the site of an LPG explosion incident at Pak Lei Building, Areis Preta, and listens to reports on follow-up work from officials-in-charge of the public security authorities.

1. On 5 February, Chief Executive Chui Sai On visits Seac Pai Van to interact with residents and gain more understanding of their living environment.

2. On 29 March, the Office of the Government Spokesperson and the Government Information Bureau hold a tea gathering with the media.

3. On 14 June, the Office of the Government Spokesperson holds a seminar on dissemination of government news, and invites the Director-General of the Department of Information of the Ministry of Foreign Affairs, Lu Kang, to share his experience as a spokesperson.

1. On 19 October, the Office of the Government Spokesperson, the Public Security Police, the Transport Bureau and the Infrastructure Development Office hold a joint press conference regarding the opening of the Hong Kong-Zhuhai-Macao Bridge.

2. On 7 July, the Cultural Forum between China and Portuguese-speaking Countries commences.

3-7. On 8 November, the People's Liberation Army (PLA) Macao Garrison coordinates with the Macao Customs, the Unitary Police Service, the Judicial Police, the Fire Service, the Health Bureau, the Government Information Bureau and the Sports Bureau to hold a counter-terrorism drill code-named "Bright Dog" at the Macao East Asian Games Dome. The drill aims to strengthen cross-departmental collaboration mechanisms and enhance capabilities to respond to public emergencies.

8. The Government strives to promote and implement policies and measures regarding disaster prevention and mitigation.

On 26 July, representatives of the Public Security Police brief the media on emergency equipment.

1. On 7 November (6 November, Geneva time), a meeting of the Universal Periodic Review mechanism of the United Nations Human Rights Council is held in Geneva, Switzerland. The meeting examines China's third report under the mechanism, which incorporates a part concerning the HKSAR and MSAR. The Secretary for Administration and Justice of the Macao SAR, Chan Hoi Fan (first from left), as the China delegation deputy leader, leads a government delegation to attend the meeting.

2. On 12 December, the Secretary for Economy and Finance, Leong Vai Tac, and the Vice Minister of Commerce, Fu Ziying, co-chair the first meeting of the Mainland and Macao Economic and Trade Cooperation Committee.

3. On 18 February, the Secretary for Security, Wong Sio Chak, inspects the Border Gate checkpoint during the Chinese New Year holidays.

4. On 17 January, the Secretary for Social Affairs and Culture, Tam Chon Weng, officiates at the launching ceremony of the Macao Year of Gastronomy 2018.

5. On 2 August, the Secretary for Transport and Public Works, Raimundo Arrais do Rosario, officiates at the unveiling ceremony of the post office at Fai Chi Kei.

6. On 1 June, the Secretary for Administration and Justice, Chan Hoi Fan, and the Minister for Justice and Attorney-General of the Federal Republic of Nigeria, Abubakar Malami, represent their governments to sign the Agreement on Transfer of Sentenced Persons Between the Macao Special Administrative Region of the People's Republic of China and the Federal Republic of Nigeria.

7. The Secretary for Economy and Finance, Leong Vai Tac, visits Brazil, and at a seminar on 25 June (local time), meets with the Deputy Secretary of Ministry of Planning, Development and Management of Brazil, Gleisson Rubin; the Ministry's Undersecretary, Jorge Arbache; the Vice Minister of Industry, Foreign Trade and Services of Brazil, Douglas Finardi Ferreira, and other department representatives.

1. On 28 June, the Secretary for Security, Wong Sio Chak, attends a press conference on the Civil Protection Framework Law.

2. On 24 September, the Secretary for Social Affairs and Culture, Tam Chon Weng, is vaccinated while attending a promotional event for the 2018-2019 Seasonal Influenza Vaccine Programme, organised by the Health Bureau.

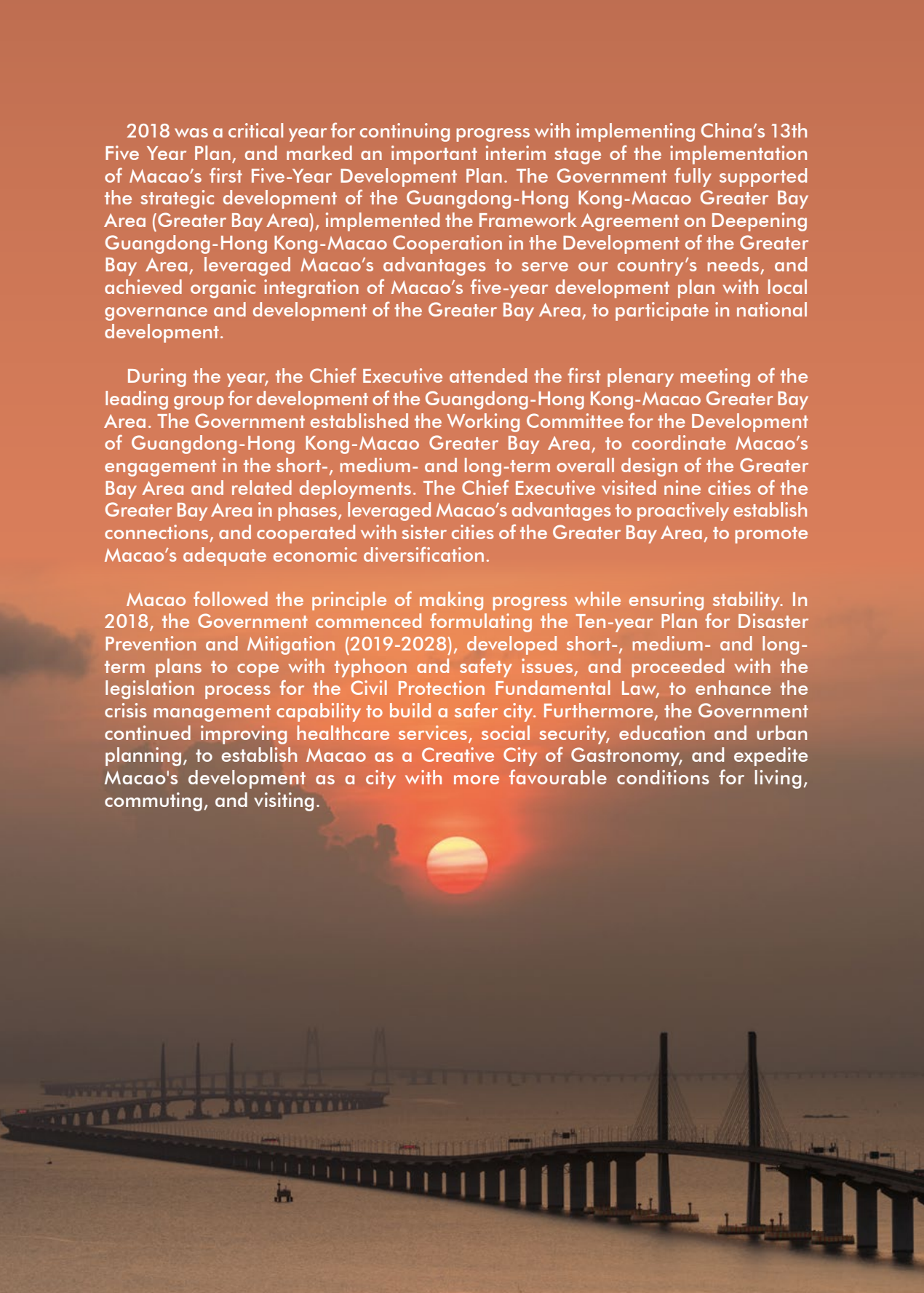
3. On 19 September, the Secretary for Transport and Public Works, Raimundo Arrais do Rosario, chairs the third meeting in 2018 of the Urban Renewal Committee.

OVERVIEW OF THE MACAO SPECIAL ADMINISTRATIVE REGION IN 2018

2018 was a critical year for continuing progress with implementing China's 13th Five Year Plan, and marked an important interim stage of the implementation of Macao's first Five-Year Development Plan. The Government fully supported the strategic development of the Guangdong-Hong Kong-Macao Greater Bay Area (Greater Bay Area), implemented the Framework Agreement on Deepening Guangdong-Hong Kong-Macao Cooperation in the Development of the Greater Bay Area, leveraged Macao's advantages to serve our country's needs, and achieved organic integration of Macao's five-year development plan with local governance and development of the Greater Bay Area, to participate in national development.

During the year, the Chief Executive attended the first plenary meeting of the leading group for development of the Guangdong-Hong Kong-Macao Greater Bay Area. The Government established the Working Committee for the Development of Guangdong-Hong Kong-Macao Greater Bay Area, to coordinate Macao's engagement in the short-, medium- and long-term overall design of the Greater Bay Area and related deployments. The Chief Executive visited nine cities of the Greater Bay Area in phases, leveraged Macao's advantages to proactively establish connections, and cooperated with sister cities of the Greater Bay Area, to promote Macao's adequate economic diversification.

Macao followed the principle of making progress while ensuring stability. In 2018, the Government commenced formulating the Ten-year Plan for Disaster Prevention and Mitigation (2019-2028), developed short-, medium- and long-term plans to cope with typhoon and safety issues, and proceeded with the legislation process for the Civil Protection Fundamental Law, to enhance the crisis management capability to build a safer city. Furthermore, the Government continued improving healthcare services, social security, education and urban planning, to establish Macao as a Creative City of Gastronomy, and expedite Macao's development as a city with more favourable conditions for living, commuting, and visiting.



Integrating with national development and undertaking mission for the Greater Bay Area

The Guangdong-Hong Kong-Macao Greater Bay Area ("Greater Bay Area") is a major integral part of overall national strategic development in the new era, a crucial step in the new implementation of the reform and opening-up policy, and an innovation in actions propelling the execution of "One country, two systems". The development of Guangdong-Hong Kong-Macao Greater Bay Area will deepen cooperation, leverage complementary advantages, foster synergies and win-win benefits, and promote mutual prosperity of Guangdong, Hong Kong and Macao.

The Government fully understands Macao's role in the reform and opening up of the country in this new era. As we "fully leverage Macao's advantages according to the country's requirements", the Government is determined to fully participate in the deepened implementation of national reform and opening-up strategy, with an innovative mindset and pioneering ambition.

Outline Development Plan brings Greater Bay Area project to the next level

The Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area ("outline development plan") was officially announced on 18 February 2019, setting out the strategic positioning, development objectives, spatial layout and every

other aspect of the Greater Bay Area. According to the outline development plan, the Greater Bay Area will develop into not only an energetic world-class city cluster, an international innovation and technology hub, a strong pillar supporting the Belt and Road Initiative, a demonstration zone for comprehensive cooperation between mainland China, Hong Kong and Macao, but also a quality region for living, working and travelling, making itself an exemplar of high-quality development.

Macao is already positioned as "One Centre, One Platform" in China's 12th Five-year Plan and 13th Five-Year Plan. The outline development plan adds one more aspect to Macao's positioning: "A base for international multi-cultural exchanges and cooperation with an emphasis on Chinese culture". In an article signed by Chief Executive Chui Sai On titled "Integrate with national development and take on Macao's new-era mission", the positioning of Macao in the development of the Greater Bay Area is said to reveal the positioning of Macao in the strategic development of the country. It is, on one hand, a kind of recognition, expectation and historical opportunity; and on the other hand, a duty and a challenge.

As pointed out by Chui Sai On, "The outline development plan, as the strategic regional development approach of the country, entrusts Macao with the tasks of 'acting as a base for exchanges and cooperation among diverse cultures' and 'taking forward the transmission and development of the fine traditions of Chinese culture, emphasising Chinese culture as the mainstream', having paid due recognition to Macao's advantages with respect to its political system, its unique historical status, and its rich history and culture. In other words, Macao is expected to undertake even more responsibilities and tasks.

"Within the overarching strategy and context of national development, the future development of Macao will be oriented towards its defined positioning and tasks," wrote Chui Sai On, who added, "No matter whether as a Centre, or a Platform, or a Base, Macao is positioned between China and the world. On one hand, this demonstrates the historical status and internationalisation of Macao; and on the other hand, it signifies the important mission of Macao in the interactions between China and the world."

Fostering alignment to demonstrate the advantages of Macao

On 1 July 2017, President Xi Jinping witnessed in Hong Kong the signing of the Framework Agreement on Deepening Guangdong-Hong Kong-Macao Cooperation in the Development of the Greater Bay Area between the National Development and Reform Commission and the three municipal governments, laying down the objectives and principles of the Greater Bay Area development, and outlining three major areas of cooperation.

2018 was a crucial year for the National 13th Five-Year Plan, and marked an

important period when the execution of Macao's first Five-Year Plan entered its medium term. To ensure consistent implementation of the Guangdong-Hong Kong-Macao Greater Bay Area strategy and the Framework Agreement on Deepening Guangdong-Hong Kong-Macao Cooperation in the Development of the Greater Bay Area, the Government joined hands with representatives of ministries of the Central People's Government and local governments to seek breakthroughs in administrative policies with an open and innovative mindset, jointly pushing ahead with the development of the Guangdong-Hong Kong-Macao Greater Bay Area.

At the Guangdong-Macao Cooperation Joint Conference held in early January 2018, both governments set out major areas for cooperation, including alignment regarding implementation of the seven major cooperative projects defined in the framework agreement on the Greater Bay Area, thereby joining both regions even more closely through the Greater Bay Area development. To better integrate Macao into the development of the Guangdong-Hong Kong-Macao Greater Bay Area, and to consistently implement the Framework Agreement on Cooperation Between Guangdong and Macao, the Guangdong-Macau Development Cooperation Fund ("Guangdong-Macao Fund") signing ceremony was held in Guangzhou on 4 May.

The establishment of the Guangdong-Macao Fund was the first accomplishment of innovative financial cooperation between the two regions under the Framework Agreement on Cooperation Between Guangdong and Macao, essentially providing for the cooperative participation of Macao and Guangdong in the Greater Bay Area development. The fund will significantly contribute to infrastructure interconnection, the building of major platforms, the growth of nascent industries, and the building of a quality living area which is favourable for living, work and tourism within the Greater Bay Area, further unifying the development of Macao and Guangdong.

During late June to early July, Chief Executive Chui Sai On led a government delegation to visit nine mainland China cities within the Guangdong-Hong Kong-Macao Greater Bay Area: Zhuhai, Guangzhou, Shenzhen, Zhongshan, Jiangmen, Zhaoqing, Foshan, Huizhou and Dongguan. Building on long-standing good relationships and the Framework Agreement on Deepening Guangdong-Hong Kong-Macao Cooperation in the Development of the Greater Bay Area, the visits helped to further promote close cooperation between Macao and its Greater Bay Area sister cities, and facilitated discussions about cooperation in areas including urban industries, economy and commerce, transportation and youth development, making the best preparations for planning the Greater Bay Area.

As pointed out by Chief Executive Chui Sai On in his report to the Vice Premier of the State Council, Mr Han Zheng, on the Macao projects that are underway for the development of Guangdong-Hong Kong-Macao Greater Bay Area, Macao is committed to the Greater Bay Area development to integrate into the country's master development plan, upholding the essence of the 19th National Congress of

the Communist Party of China. To this end, Macao attached special importance to local developments, launched abundant preliminary studies and preparations, taking the initiative to foster organic integration among Macao's five-year plan, annual administrative policies and the development of the Greater Bay Area.

As recent developments reveal, the adequate economic diversification of the Macao SAR has been limited by factors including inadequacies in talented people and land resources. Now, the Greater Bay Area brings Macao valuable new opportunities to foster the next phase of adequate economic diversification, thereby creating more new opportunities for various social sectors.

Five-year plan modified to align with Greater Bay Area development

In 2018, the Central People's Government set up the leading group for development of Guangdong-Hong Kong-Macao Greater Bay Area, and Chief Executive Chui Sai On, as one of the members, took part in the first plenary meeting held on 15 August. The leading group confirmed the Central People's Government's support for the building of an international technology and innovation centre in the Greater Bay Area, as well as enhanced cooperation among Guangdong, Hong Kong and Macao in technology and innovation.

Chief Executive Chui Sai On said the Macao SAR will fully support the overall national development plan, actively demonstrate its unique advantages in the building of the Greater Bay Area with a focus on the establishment of new mechanisms, modify Macao's five-year plan by adding new content complementing the Greater Bay Area development, and better support the Greater Bay Area with innovative policies and pilot projects.

On 1 September, the Macao SAR Government Policy Research Office and the mainland China affairs task force that was formed under the Chief Executive's Office merged to form the Policy Research and Regional Development Bureau. In line with the unified plan of the leading group for development of Guangdong-Hong Kong-Macao Greater Bay Area, the Committee for Development of the World Centre for Tourism and Leisure led by the Chief Executive held its annual plenary meeting on 20 September, mainly to compile the addendum to Macao's five-year development plan by adding new content complementing the Greater Bay Area development, covering five major areas:

1. Promoting adequate economic diversification of the Macao SAR;

2. Participating in the technological innovation of the Greater Bay Area;

3. Supporting the employment, entrepreneurship and innovation of young people coming to the Greater Bay Area;

4. Fostering infrastructure interconnections in the Greater Bay Area, and

5. Improving measures for the convenience of Macao citizens working and living in the Greater Bay Area.

Setting up the Working Committee for the Development of Guangdong-Hong Kong-Macao Greater Bay Area

In November, the Chief Executive signed an executive order to set up the Working Committee for the Development of Guangdong-Hong Kong-Macao Greater Bay Area to undertake duties including: overall design and planning of MSAR's participation in the development of the Guangdong-Hong Kong-Macao Greater Bay Area over short, medium and long terms; pushing ahead with related studies and policymaking; devising annual work schedules and scrutinising their implementation; setting out the approach and guidelines for planned activities; and further improving the building of mechanisms. The Working Committee reports to and is chaired by the Chief Executive.

On 6 December, the Chief Executive, on behalf of the Government, signed the Arrangements for Supporting Macao's Full Participation in Belt and Road Construction together with the National Development and Reform Commission. Focusing on financial cooperation, economic and trade exchange, people-to-people bonds, and the

building of Guangdong-Hong Kong-Macao Greater Bay Area, the arrangement serves to allow Macao to demonstrate its unique advantages, enhance its competitiveness, foster the growth of new strengths, and explore new development opportunities through supporting and participating in Belt and Road construction. Such further self-development has major significance for Macao, which can contribute even more value to the country's reform and opening up as well as further integrate into the country's master development plan.

Hong Kong-Zhuhai-Macao Bridge opens to facilitate close integration with Greater Bay Area

The opening ceremony of the Hong Kong-Zhuhai-Macao Bridge was held in Zhuhai, Guangdong, in the morning on 23 October. The General Secretary of the Communist Party of China (CPC) Central Committee, President of the People's Republic of China and Chairman of the Central Military Commission, Xi Jinping, attended the ceremony to announce the official opening of the Hong Kong-Zhuhai-Macao Bridge followed by an on-site visit. The first massive sea-crossing transportation infrastructure jointly built by Guangdong, Hong Kong and Macao under the principle of "One country, two systems", the inauguration of the Hong Kong-Zhuhai-Macao Bridge marks a major milestone for the development of the Guangdong-Hong Kong-Macao Greater Bay Area.

With the support of related ministries and the Guangdong provincial government, the construction of the Macao border crossing management area of the Hong Kong-Zhuhai-Macao Bridge together with the networking links and various preparatory works were essentially completed in December 2017. With the approval of the State Council, they were officially delivered to the MSAR at 0:00 a.m. on 15 March 2018, thereby coming under the jurisdiction of the Macao SAR.

The Macao border crossing management area on the artificial island for the Zhuhai/Macao boundary crossing facilities is a major component of the Hong Kong-Zhuhai-Macao Bridge. The Zhuhai-Macao Passenger Clearance Building employs an innovative clearance mechanism of "joint inspections for one-stop border crossing". The opening of the Hong Kong-Zhuhai-Macao Bridge and Zhuhai-Macao passenger clearance facilities are strong examples of regional cooperation under the principle of "One country, two systems", signifying the vast potential for effective development of Guangdong-Hong Kong-Macao Greater Bay Area cities in future.

The opening of the Hong Kong-Zhuhai-Macao Bridge also marks an acceleration in Guangdong-Hong Kong-Macao integration, directly benefiting Macao in the economy, conventions and exhibitions, and trade and commerce.

According to the Outline Development Plan for the Guangdong-Hong Kong-Macao

Greater Bay Area, Macao will further demonstrate its advantages as a world tourism and leisure centre and a commercial and trade services platform between China and Portuguese-speaking countries, fostering the growth of nascent industries and expediting adequate economic diversification. Given the varied industrial orientation and positioning of Greater Bay Area cities, it is necessary for Macao to fully utilise its unique advantages, follow the strategy of positioned cooperation and complimentary development, and make the best use of policy benefits and the momentum of innovation to make Greater Bay Area cities the bases for its adequate economic diversification, thereby opening up vast development potential for Macao.

Enhancing crisis management capacity to build a safer city

Building a city favourable for living, commuting and tourism is one of the major tasks in the MSAR Government's Five-Year Development Plan. While commencing various construction projects and enhancing living and commuting conditions, the Government attaches great importance to building a safer city, to protect the lives and property of Macao people.

Since Typhoon Hato hit Macao on 23 August 2017, the Government has continued to review and improve its mechanism for responding to major disasters and their aftermath, as well as promoting and implementing policies on weather disaster prevention and mitigation. The security related departments followed recommendations

from the National Commission for Disaster Reduction to draw up short-, medium-, and long-term plans for response to typhoon and safety issues, and launched relevant follow-up work and refinements for civil protection, disaster relief work coordination and reforming systems.

Promptly releasing accurate information to effectively coordinate disaster relief

Ensuring accurate information flows is important for tackling disasters and preventing secondary disasters. The civil protection management team is strengthening the coordination mechanism while further expanding information distribution and communication channels. As the core of disaster prevention and mitigation, the Civil Protection Operations Centre set up a public broadcasting system to facilitate information exchanges between the centre's staff members.

Regarding external communications, the Civil Protection Operations Centre set up 12 assistance and enquiry hotlines after the civil protection management team commenced full operations. Hotlines have also been established for the Customs Service, the Public Security Police and the Fire Service. Upon commencement of operations of the civil protection management team, the number of public hotlines available will increase from 25 to 55. Police transceivers have also been distributed to neighbourhood associations in various districts, for communicating and enhancing cooperation with the Civil Protection Centre, medical institutions, water supplies and power companies for situation reporting and requesting assistance during disasters.

To ensure the public can receive accurate information on a timely basis, the civil protection management team set up audible sirens in low-lying areas, and installed high frequency alarms on the radio transmitters at Guia Lighthouse, Taipa Grande and Alto de Coloane, to broadcast weather warning, flood warning and typhoon warning signals. Civil protection information broadcasts and display systems have also been installed at major border checkpoints, to disseminate the latest news to any stranded passengers and the public.

After Typhoon Hato, the public security forces established a working group for dissemination of civil protection information. Apart from consolidating and coordinating releases of information under the fully operational civil protection management team, the working group also cooperates with other departments to deepen publicity and education on disaster relief, and raise public awareness of preventing and responding to disasters.

Coordinated by the Office of the Secretary for Security, various units and departments have been working with the Government Information Bureau to discuss and refine work related to dissemination of civil protection information, and will continue establishing

a mechanism for closer communication with and improved information dissemination to the media.

Effective measures proven and recognised for tackling another strong typhoon

After a year of optimisation and preparation, the disaster prevention and mitigation mechanism was proven effective when Typhoon Mangkhut hit Macao on 16 September 2018. Led by the Chief Executive, the public security forces joined hands with other administrative units, departments under the civil protection management team and Macao residents, to cope with the typhoon. Causalities were prevented, injuries and losses were minimised, and society quickly returned to normal. The adopted measures received wide recognition and appreciation from all.

On 13 September, Typhoon Mangkhut was on a track towards Macao. The Chief Executive held a meeting and paid site visits to low-lying areas. He listened to reports from members of the civil protection management team on how to tackle Typhoon Mangkhut, and the implementation of the evacuation plan for storm surge in low-lying areas during the typhoon. As Macao was forecast to be hit by Typhoon Mangkhut, the Chief Executive visited the Civil Protection Operations Centre five times, to hold meetings to be briefed about the situation and give instructions on disaster response efforts.

On the morning of 15 September, the Secretary for Security called for a general meeting with the public security forces, urging all departments to maintain close communications, and be well prepared for the typhoon impact. That afternoon, the Secretary for Security and representatives of the civil protection management team jointly organised a press conference to introduce their preparations for tackling the typhoon.

Through coordination by the Government, 627 parking spaces of various government department car parks and many temporary parking spaces were opened for public parking. Six casino operators also provided 2,770 free private vehicle parking spaces to the public from 15 to 18 September, with the aim of minimising damage to vehicles arising from flooding.

Based on a risk assessment by the Civil Protection Operations Centre, the Chief Executive also requested the six casino operators to suspend operation from 11 p.m. on 15 September to 8 a.m. on 17 September, to ensure the safety of related personnel, and prevent public safety risks for casino workers and tourists, thus easing stress for casino employees.

After timely communication and coordination with the Zhuhai Municipal Government,

three checkpoints – at the Border Gate, the Zhuhai-Macao Cross-border Industrial Zone and Cotai – were closed at 1 a.m. on 16 September, to ensure the safety of local residents and visitors.

On 15 September, Macao issued the Red Storm Surge alert at 9 p.m. The civil protection management team commenced full operations, and implemented the evacuation plan for storm surge in low-lying areas during a typhoon. Twenty-nine representatives of bodies under the civil protection management team were stationed at the Civil Protection Operations Centre, to meet and coordinate all related operations.

From 2 a.m. to 11 p.m. on 16 September, Typhoon Signals No. 8, 9 and 10 were hoisted in succession. At 2 p.m., the Black Storm Surge alert was issued. Areas in S. Lourenco Market, Inner Harbour, Fai Chi Kei and Ilha Verde were heavily flooded, with the highest water depth of 1.9 metres recorded at the Inner Harbour. The Customs Service and Fire Service Bureau deployed a new model inflatable crafts and jet skis to evacuate residents.

As the evacuation plan for storm surge in low-lying areas during a typhoon was activated, all units of the Public Security Forces operated in their districts to evacuate residents and tourists from low-lying areas to safe places. Totals of 16 emergency shelters and four assembly points for people with limited mobility, and four places to stay during emergency evacuations were opened to the public. In all, 5,650 households were evacuated, with 1,343 people transferred to emergency shelters during the peak period.

When there were changes to typhoon signals and storm surge alerts, the civil protection management team broadcast the updated warnings in Cantonese, Putonghua, Portuguese and English via the alarm devices installed at three higher spots on Macao peninsula, Taipa and Coloane, and 90 closed circuit television camera posts in low-lying areas, to alert the public regarding the severity of the typhoon and urge evacuations.

During the typhoon, the Government disseminated accurate, detailed information on a timely basis through the media, to reassure people, allowing the Government to focus on its response measures so it could tackle the typhoon.

After Typhoon Signal No.3 was issued at 4 a.m. on 17 September, over 2,000 officials from the Unitary Police Service, the Customs Service, the Judiciary Police, the Public Security Police Force, the Fire Service and the Academy of Public Security Forces immediately joined hands with the Civic and Municipal Affairs Bureau to commence clean-up work. Major roads and streets were reopened to traffic before noon that day.

All clean-up work throughout Macao was completed on 18 September. The Correctional Service Bureau, Customs Service, Education and Youth Affairs Bureau and

over 2,700 volunteers from more than a dozen of community organisations formed clean-up teams. Three construction industry associations also offered their pumps and heavy-duty machinery, to assist in disaster relief work. Public order in Macao was restored within a short time.

The Government also decided to suspend classes for all students on 17 September, and exempted civil servants from going back to the office, to ensure smooth progress with clean-up work, to expedite the recovery of public order and people's normal lives.

Implementing short-, medium- and long-term plans to optimise disaster prevention and mitigation

Regarding facilities and hardware, the Government acquired a variety of rescue and reconstruction equipment and tools, to strengthen the public security forces' disaster prevention and mitigation capability. These included an unmanned undersea reconnaissance vehicle, a cable-operated underwater robot, underwater communication devices with snorkelling gear, a fibreglass offshore patrol boat with night vision and surveillance functions, several models of inflatable craft, generators, large diameter water pumps, motor saws, chain saws, large electric cutting machines, electric saws, and tree shears.

Medium-term plans include construction of the Civil Protection and Emergency Operations Centre Building. The construction plan was handed over to the public works department in 2018. Apart from building the essential facilities in the office building, storage for material supplies will be included for effective management and coordination of disaster relief work. Before the completion of the office building, the

Unitary Police Service has already commenced expansion work on the third floor of the Immigration Department Building in Taipa, which is serving as a temporary office before the authority responsible for civil protection affairs is established.

While optimising measures and operations, the Government also followed the short-, medium-, and long-term plans for responding to typhoon and safety Issues, to review the existing legal system related to civil protection, organisational structure, work and operational mechanism, and began drafting the Civil Protection Fundamental Law and its supplementary regulations.

Coordinated by the Office of the Secretary for Security, the Unitary Police Service conducted a 45-day public consultation from 28 June to 11 August, to collect opinions and suggestions from different sectors of society.

Also, the Secretary for Security, the Unitary Police Service and the Public Security Forces Affairs Bureau cooperated with high schools and scientific research companies in mainland China to develop an emergency command application platform. Parts of the sub-system were completed in April 2018. The platform framework was tested during the "Crystal Fish" drill on 28 April.

The system was further enhanced through referring to the feedback on the test, with the aim of establishing a preliminary application platform: the "Single Puzzle", with five sub-systems - resource management, incident reporting, emergency response, alert announcement, and a kernel module.

Safeguarding infrastructure to reduce impact of disasters on people's livelihoods

The Government also strived to further safeguard infrastructure against disasters, to support people's livelihoods. In 2018, Macao finished installing infrastructure for power supply facilities, altered the power grid circuits, enhanced waterproofing of facilities related to public utilities, and began implementing related measures, to ensure the safety of power and water supplies.

There were also improvements in over 80 transformer rooms in low-lying areas. The Government reviewed Macao's electricity supplies and expedited construction of the sets of new natural gas power generators, to upgrade local power generation capacity. It also worked with mainland China to review and formulate contingency plans, in order to safeguard emergency power supplies.

Three high-voltage substations have been built to optimise local power supply grids. Two of these – the substations at the Conde S. Januario Hospital and the Macao border crossing area of the Hong Kong-Zhuhai-Macao Bridge – commenced operations on

schedule in 2018, while construction of the Islands District Medical Complex substation was completed by the end of the year.

In another measure to safeguard electricity supplies, cable laying for the third Guangdong-Macao high-voltage electric power transmission channel commenced in 2018.

Regarding optimisation of water supplies, construction of Seac Pai Van Water Treatment Plant commenced in 2018. After completion, it will satisfy the increased demand for water supplies in the Islands District. To ensure stability of emergency water supplies, the Government finished reviewing the Contingency Plan for Ensuring Safety of Water Supplies in Macao, and conducted research on building more high storage reservoirs in elevated locations in Macao; these are expected to extend the buffer time of water supplies from 4 hours to 12 hours. The Government also facilitated formulation of a regional disaster contingency response collaboration mechanism by a Guangdong-Macao water supply taskforce.

Targeting the problems with flooding in low-lying areas, in 2018 work commenced on implementing a series of flood prevention and drainage plans, to improve flood prevention capability and drainage infrastructure. This included expedited construction of sluices at the Inner Harbour, flood barriers in low-lying coastal areas, drains to intercept rainwater, and stormwater pumping stations in the Inner Harbour, to reduce the risk of flooding in low-lying areas.

Regarding the medium-to-long-term perspective, the Government completed its report on the Research on the Master Plan for Flood Prevention, Drainage Infrastructure and Drainage of Floods in Macao Inner Harbour Seafront Area, in accordance with comments from related ministries of the Central People's Government, and submitted the revised version to the ministries for approval. Meanwhile, the Feasibility Study on

Constructing Sluices in Macao Inner Harbour — Engineering Research and Research Study was approaching completion. The Government will continue communicating with related departments in mainland China, and implement the projects through regional cooperation.

Based on the improvement work that has been completed in the Inner Harbour, the Government commenced the Study on the Optimisation and Emergency Plan for Flood Prevention and Drainage of Floodwaters in the Inner Harbour of Macao. It is planned that flood control barriers will be constructed in the Inner Harbour area, to reduce the risk of seawater spilling over the bund and flooding the low-lying areas of the Inner Harbour. The design has been completed, and the tender exercise for the construction project will commence.

The Government is committed to improving weather monitoring and alert capability, to cope with extreme weather and climate disasters that may happen in future. To expand the climate monitoring range, the Meteorological and Geophysical Bureau (SMG) set up more weather stations including precipitation monitoring stations in 2018, to strengthen weather monitoring in densely populated districts. The Government also optimised the equipment of water-level monitoring stations, to enhance flood monitoring.

Moreover, the tropical cyclone signals and the storm surge warning system were revised, to optimise the warning systems. The SGM also adjusted the assessment of tropical cyclone strengths and wind speeds for typhoon signals, and expanded the bandwidth dedicated to sharing meteorological data with Guangdong province, to enhance the capability for providing alerts regarding approaching severe weather and potential climate disasters.

Implementing the Five-year Development Plan for more comfortable living and commuting

Apart from being committed to boosting the ability to mitigate and prevent disasters, the Government continued implementing its Five-year Development Plan, with the aim of constructing a city for comfortable living and commuting.

There was further progress with reclamation for new urban areas. Work has commenced on designing infrastructure in Zone A, and the design of piping and sewage infrastructure within the district was completed in phases. For the New Urban Zone B (the government administration and judicial zone), a tender exercise has commenced on infrastructure and road design, while a study on selecting the site of the district's electricity substation was underway. The Government also expedited the

planning and analysis of facility construction in the district. Upon completion of the analysis, work will commence on preparing budgets and tenders.

The tender exercise for reclamation in New Urban Zone C was completed on schedule, and the project has already begun. The design of New Urban Zone D was also completed on schedule, and the tender exercise will soon be conducted.

To ensure that LRT Taipa line could satisfy the requirements for commencing operations in 2019, the Government established an LRT operating company in 2018. Drafting of the Light Rapid Transit Law was completed, and the draft law was submitted to the Legislative Assembly for deliberation.

As most work on the LRT Taipa line and construction of the LRT depot superstructure was completed, in 2018 the Government proceeded with installing the installation for LRT trains. A total of 110 carriages were delivered to Macao on schedule, and follow-up tests were conducted. Preliminary construction work of A-Ma station, which connects Taipa and Macao Peninsula, was completed in 2018, and construction of the major section of the station immediately commenced. Meanwhile, construction of A-Ma transport interchange proceeded as planned.

Regarding the LRT Seac Pai Van line, work on the connection between LRT Seac Pai Van line and Taipa line commenced on schedule in 2018, and the design of the route for LRT Seac Pai Van line was completed. During the year, work began on rerouting underground utilities along the route. The Government also conducted a study on the route for the LRT East line. According to the plan, this line will connect the Taipa Ferry Terminal, and pass through the New Urban Zone A to the Border Gate. The study on the route also assesses a plan to connect New Urban Zone A with the Macao border crossing area of Hong Kong-Zhuhai-Macao Bridge and the Outer Harbour Ferry Terminal.

To satisfy Macao people's demand for housing, construction of public housing continued during 2018. Projects completed during the year included Cheng Tou Building, Fai Ieng Building and Bairro da Ilha Verde Building. Moreover, construction of the second phase of Mong Ha Public Housing project, Toi San Public Housing Estate and Venceslau de Morais public housing project also commenced.

The public housing projects in the development plan include the tender exercise for the phase-one design of public housing in New Urban Zone A; and the tender exercise for the phase-one design of Wai Long public housing project; a feasibility study for the latter was completed on schedule in 2018.

Regarding public housing allocation and management, the Government continued upholding the policy of "Public housing as the core, supplemented by the Home Ownership Scheme" to accelerate the process for approving public housing

applications. The Government followed up the assessments of applications for multi-room housing units, and arranged for qualified applicants to select and purchase Home-Ownership Scheme housing units; it also followed up regarding assessments of public housing applications submitted since 2017.

Expediting construction of convenient border-crossing facilities for participation in development of the Greater Bay Area

To support the operation of Hong Kong-Zhuhai-Macao Bridge, construction of the Macao border crossing area was completed, and it was handed over to the Government on 15 March 2018. Construction of two bridges in New Urban Zone A – which connect with the Macao border crossing area of Hong Kong-Zhuhai-Macao Bridge and Pérola Oriental of the Macao Peninsula, respectively – was also completed.

Construction of a new Guangdong-Macao border crossing is among the Guangdong-Macao cooperation projects. It mainly includes construction of the new border checkpoint (Qingmau Checkpoint), the border crossing channel, and the Canal dos Patos improvement works.

To support the first phase of the construction, the old wholesale market was demolished in 2018, immediately after the completion of construction of the new wholesale market. Construction of the two checkpoint buildings of the Qingmu Checkpoint (one on the Macao side, the other on the Zhuhai side) and the connected crossing commenced on schedule. Guangdong province and Macao also reached a consensus regarding the final plan for the Canal dos Patos improvement project, after which work commenced on the design.

The third phase of construction of Taipa Ferry Terminal commenced on schedule during 2018. Meanwhile, the facilities of Taipa Ferry Terminal and Outer Harbour Ferry Terminal were also optimised.

Promoting environmental protection to build an ecologically advanced city

Environmental protection is an important element of sustainable development. In 2018, the Government made further progress in recycling, waste reduction, energy conservation, waste and sewage treatment, and air quality enhancement, to promote environmental protection.

According to Macao's Five-year Development Plan and the Framework Agreement on Cooperation Between Guangdong and Macao in Environmental Protection, the MSAR Government expedited coordination with related regulatory authorities in

mainland China regarding inter-regional transfers of scrapped vehicles. During the second half of the year, a pilot scheme was initiated to transfer two batches of pre-processing scrapped motor vehicles, totalling 300 vehicles, to mainland China. This was followed by the construction of a pre-processing facility for scrapped vehicles.

Regarding inert construction and demolition materials, the tender process for improving construction waste landfill material commenced in 2018. The Environmental Protection Bureau assisted the recycling industry by launching an equipment and vehicle subsidy scheme.

Regarding energy conservation and pollutant reduction, the number of light-vehicle charging spaces was increased to 170 by the end of 2018. Moreover, more than 30 percent of the transitional streetlights were replaced by LED lights, helping to save more energy.

The Macao Sewage Treatment Facilities Master Plan and the Assessment of Macao's Overall Solid Waste Management System were completed in 2018. Regarding the facilities, construction of the Cross-border Industrial Zone Sewage Treatment Plant in Macao – a facility for pre-processing sludge discharges from Qingzhou tap water supply company, was completed in 2018, further enhancing the water quality in Canal dos Patos. Tenders have been invited for design and expansion of Macao Incineration Centre, and optimisation and operational maintenance of Macao Peninsula Sewage Treatment Plant. Work has begun on the preliminary design for upgrading Coloane Sewage Treatment Plant.

The Government finished reviewing the new exhaust emission standards for imported vehicles and motor vehicles, and the exhaust emission standards for in-use vehicles. To tackle Macao's roadside air quality problem, the SMG assessed the roadside air quality monitoring stations in all districts, and acquired lightweight, mobile air quality monitoring equipment, which suits Macao's narrow streets.

The draft-by-law regulating the air pollutant emission standards and for monitoring companies operating facilities such as oil storage tanks, power plants and sewage treatment plants, and the chemical pharmaceuticals industry, has entered legislative procedures.

Making Stable Economic Progress and Integrating into the Greater Bay Area to Enhance Driving Force

In 2018, the trade relationship between the United States of America and China led to uncertainties in the global economy, but Macao's economic foundation remained sound. Macao's gross domestic product (GDP) for the year amounted to 440.3 billion patacas, with a growth rate of 4.7 percent in real terms, somewhat slower than in 2017, when there was a 9.7 percent increase. The GDP per capita was 666,893 patacas.

Macao's public finances remained sound and healthy, and the job market was favourable. The unemployment rate for the year was 1.8 percent, representing a year-on-year decrease of 0.2 percentage points. This was the seventh consecutive year in which the unemployment rate remained at two percent or below. The overall median monthly income of Macao's employed population was 16,000 patacas, while that of local residents was 20,000 patacas; both figures were 1,000 patacas than in the previous year. For 10 consecutive quarters, the inflation rate has remained relatively low. The annual inflation rate was 3.01 percent.

Leveraging Macao's advantages and serving our country's needs, the Government rolled out a series of initiatives dedicated to actively engaging in the development of the Guangdong-Hong Kong-Macao Greater Bay Area, striving to strengthen its positioning as "One Centre, One Platform", and supporting the implementation of the Five-year Development Plan of the Macao Special Administration Region (2016-2020).

Engaging in regional cooperation and strengthening Macao's position as Sino-Portuguese platform

In 2018, the Government continued establishing a financial services platform between China and Portuguese-speaking countries, and developing Macao as a Renminbi clearing centre for Portuguese-speaking countries. The Monetary Authority of Macao signed the new Cooperation and Technical Assistance Agreement with the Portuguese Insurance and Pension Funds Supervisory Authority, while the Macao Branch of Bank of China signed the Renminbi Clearing and Settlement Agreement and the Renminbi Business Agreement with Portuguese Commercial Bank and Portuguese Agricultural Credit Cooperatives, respectively.

The Government also enhanced the promotion of Portuguese-speaking countries' products and expedited the development of Macao as a food trading and distribution centre for Portuguese-speaking countries. Through cooperating with chambers of commerce and enterprises, a display network for food products from Portuguese-speaking countries was formed in Macao and various cities in mainland China.

In the first half of 2018, Portuguese-speaking Countries Food Promotion and Business Matching Sessions were held in Foshan, Zhaoqing, Huizhou, Dongguan and Fuzhou; while in the second half of 2018, similar promotion and business matching sessions were held in Shenyang and Wuhan, to facilitate the entry of Portuguese-speaking countries' products to the mainland China market.

Fostering development of nascent industries to promote adequate economic diversification

The Government continued improving the supporting measures and incentives for the development of the convention and exhibition industry, with conventions as the priority. In 2018, the number of large-scale quality conventions with over a thousand participants was more than doubled compared with that of 2017; meanwhile, to enhance the internationalisation and professionalism of the industry, the Government continued joining hands with "Convention Ambassadors" to attract more professional conventions and events to be held in Macao.

The Macao Trade and Investment Promotion Institute received the "Best Convention and Exhibition Bureau" award at the 29th Annual TTG Travel Awards. To promote external interactions and cooperation and raise the quality of human resources of the industry, for the first time, training places at CEMCHINA Certified Exhibition Management and the UFI Exhibition Management Degree (EMD) in Macao were reserved for employees in the convention and exhibition industry in countries and regions along the "Belt and Road", and in Portuguese-speaking countries, the Guangdong-Hong Kong-Macao Greater Bay Area and Pan-Pearl River Delta cities.

In 2018, the Cultural Industry Fund launched the Community Cultural and Creative Production Subsidy Scheme and the Specific Subsidy Scheme for Brand Building. Subsidies totalling 6.3 million patacas were provided to 22 projects in the first phase of the scheme, with the aim of encouraging retail and catering companies in the community to embrace culture and creativity, in order to tie in with Macao's positioning as a world tourism and leisure centre and a Creative City of Gastronomy.

The Specific Subsidy Scheme for Brand Building aims to encourage collaboration between more Macao enterprises in various sectors, especially in the fashion, design, cultural performance, and film and television industries, in order to expedite the export of Macao's cultural products and services to overseas markets.

By the end of 2018, a total of 108 enterprises had registered in the Traditional Chinese Medicine Science and Technology Industrial Park of Cooperation Between Guangdong and Macao (GMTCM Park), including 26 Macao enterprises in fields such as traditional Chinese medicine, health care products, medical devices and health care services. The Government expedited the park's software and hardware development. The public services platform was completed and commenced operations.

Regarding regional cooperation in Chinese medicine, the Liaison Office of Guangdong Food and Drug Administration and the Research Centre of Traditional Chinese Medicine Technology and Policy were officially launched in the park in July 2018; the Chengdu University of Traditional Chinese Medicine (Macao) International Education project was also driven forward; while traditional Chinese medicine enterprises of Fujian were helped to register in Macao, and register their products and engage in trade in Mozambique. A plaque unveiling ceremony for the Preparatory Office for the Traditional Chinese Medicine Centre of Mozambique was held in Maputo in July 2018, and preparations were made for establishing an overseas centre for Chinese medicine in Mozambique.

Regarding specialised financial services, the Government strived to attract quality financial institutions to establish bases in Macao, improved the legal system, and implemented several measures to foster the development of the financial leasing industry. In May 2018, the Legal System Governing Financial Leasing Business passed its first reading at the Legislative Assembly; the Government will proceed with the legislation.

Legal experts were commissioned to study the feasibility of introducing the Trust Law to Macao; and the industry was encouraged to create more investment products, especially Renminbi-denominated wealth management products.

Work commenced on amending the Interest Subsidy Scheme on Bank Loans to Enterprises commenced, and consideration was given to making green financial loans eligible for interest subsidies.

The Government organised professional training courses to facilitate development of the financial services industry and, through the interdepartmental cooperation mechanism, financial institutions were assisted with bringing in overseas professionals and senior management personnel who can also nurture the industry.

Strengthening supervision of the gaming industry and promoting integrated development with non-gaming industries

In 2018, gaming revenue totalled 302.846 billion patacas, representing year-on-year growth of 14 percent, and a record high record since the peaks in 2012 and 2014.

The Government continued following up on the post-interim review of the gaming industry, and conducted special audits and audits of gaming enterprises and gaming promoters.

While strictly processing all gaming table applications, and regulating the pace of gaming industry expansion, the Government continued enabling gaming enterprises to increase input of non-gaming elements, and give priority to procuring local products and services, while monitoring how the gaming industry gave impetus to non-gaming industries and benefited local enterprises.

Improving the business environment to help SMEs grow and innovate

In 2018, the Government continued implementing various schemes to support small and medium-sized enterprises (SMEs). Partnering with social groups, the Government commenced the procedures for assessing "Time-honoured Local Shops", to support

the development of these shops. A first batch of 12 shops were bestowed the title of "Time-honoured Local Shop". Also, the Government continued supporting chambers of commerce with launching the one-stop cross-boundary e-commerce service, to help Macao SMEs to more effectively tap into the mainland China market.

In 2018, the SME Subsidy Scheme for Installation of Anti-flooding Lifts and the SME Subsidy Scheme for Installation of Anti-flooding Gates and Water Pumps were rolled out, to subsidise the installation of anti-flooding lifts and anti-flooding gates by SMEs.

By the end of 2018, 53 applications had been received for the SME Subsidy Scheme for Installation of Anti-flooding Lifts, and 1,164 applications for the SME Subsidy Scheme for Installation of Anti-flooding Gates and Water Pumps. Also, the SME Assistance Scheme had received 11,249 applications, of which 9,930 were approved, for assistance totalling 2.924 billion patacas.

Comprehensive support and multi-level coverage model to improve livelihoods

In 2018, the Government adhered to the administrative principle of "Be pragmatic yet enterprising, and share the fruits of development", implemented the development

goals in the Five-year Development Plan of the Macao Special Administration Region (2016-2020), strived to enhance people's livelihoods, improved healthcare services, promoted building Macao as a healthy city, strengthened the social security system, upheld the development strategies of "letting Macao thrive through education" and "building Macao with talented people", promoted Macao as a "Creative City of Gastronomy" through interdepartmental collaboration, and facilitated development of culture, tourism and sports.

Improving medical services and prioritising prevention to continue building Macao as a healthy city

Regarding health-related issues, the Government implemented the principle of "improve medical services and prioritise prevention", supported the Ten-year Plan for Disaster Prevention and Mitigation, strengthened the ability to respond to disasters and emergencies, optimised the contingency system and planning, prepared and applied for accreditation for membership of the WHO Emergency Medical Teams (EMT) Initiative; expanded sentinel surveillance of infectious diseases to private clinics, and encouraged residents to receive immunisation, thus building a strong immunological barrier in the community.

The Government attached extra importance to healthcare services for particular groups, including the elderly, women, children, the disabled and the underprivileged. In recent years, we have increased provision of early treatment services and strengthened family support, so that the average waiting time for diagnosis and treatment has shortened by 90 percent to one month, while people in urgent need receive immediate treatment. Some new measures were introduced, including a pilot scheme for specialist outreach treatment services, and health assessment services for senior citizens.

The Government added new check-up items in prenatal check-up services and tests for genetic diseases, and promoted breast-feeding, to ensure the health of pregnant women and children. The mortality rates of newborn babies and pregnant women remained at very low levels. The five-year survival rates of breast cancer, cervical cancer and colorectal cancer remained among the highest in the world. The average life expectancy in Macao was 83.4 years, which was among the highest life expectancies for any country or territory.

The public health services continued improving. The construction of the Ka Ho Rehabilitation Hospital was completed, to cater for the demands for rehabilitation services. On 31 July, the Bairro da Ilha Verde Health Centre commenced operations, increasing the total number of health centres in Macao to eight, and optimising the grassroots healthcare service network in the northern district.

The Health Bureau continued introducing new technologies and equipment,

extended service hours, optimised the mental health service mechanism, commenced work related to organ transplants, expanded the application of Chinese medicine in the community, commenced work under the Plan for Improvement of the Medical and HealthCare System, and further strengthened cooperation with non-profit and private medical institutions, to provide quality medical services.

The Macao Academy of Medical Specialists commenced operations, to coordinate specialist training for medical doctors in Macao. The Government strived to follow up the legislation for the System for Professional Qualifications and Licensing for Medical Workers, to ensure Macao meets international standards for medical professional accreditation.

The Government actively promoted "Smart Healthcare", introduced electronic healthcare vouchers, and extended the vouchers' eligibility period to two years. Self-service registration kiosks for the Electronic Health Record Sharing System were introduced, to make good use of the diverse new media channels and deepen health education. Moreover, the Tobacco Control Law was strictly enforced to foster healthy lifestyles.

Regarding sports, the Government promoted sports for all, and continued implementing a dual-track policy on promoting sport-for-all and competitive sports.

The Sports Bureau published the Report on an Investigation of Sports Venues in Macao 2017, showing that sports venues in Macao occupied a total area of 873,512.58 square metres. This provides scientific data for sports facility planning in future. The Government strived to expand sports facilities, create opportunities in sport, and expand the public sports facility network to cover different sectors in the community and develop sports businesses for the benefit of people's health.

Improving the social security system to support the elderly and the underprivileged

The Government continued perfecting the social security system, including the two-tier social security system, social support and social welfare, to enhance support for the underprivileged; widened the scope of innovative services – including rehabilitation and services for the elderly, children's early treatment services, services for elderly persons with dementia, and child-care services; constructed accessibility facilities; supported the underprivileged and financially disadvantaged families; disbursed old age allowances and disability gratuities; and established a disaster prevention mechanism, to safeguard people's wellbeing and safety.

Regarding social support, the Government has completed assessing 10,000 financial subsidy applications and formulated poverty alleviation plans for eligible applicants.

In the past five years, an average of some 500 families were lifted out of poverty every year. Their living burdens were also relieved by the food assistance programme and special living allowances.

The Law on Preventing and Combating Domestic Violence was fully implemented, and underprivileged families were prioritised for childcare services. In 2018, quotas for childcare services were increased to 11,000, ten percent more than in 2017.

To facilitate the long-term development of retirement protection, after years of research, discussion and consultation, the Legal System for Protection of Rights of the Elderly (Law No. 12/2018) was promulgated on 20 August 2018, and came into effect on 19 November.

There was further progress in implementing the Ten-year Action Plan for Elderly Services (2016-2025). Among the Action Plan's 141 medium-term (2018-2020) projects, 13 projects were completed ahead of schedule in 2017, and 58 projects were rolled out in 2018. The Outdoor Emergency Tele-assistance Service was introduced, to help dementia patients. The new Ka-Ho Nursing Home commenced operations, providing more than 200 places for residential care services.

There was also progress with rehabilitation services, as the Government continued coordinating with relevant departments regarding the implementation of the Ten-year Development Plan for Rehabilitation Services 2016-2025. Out of 125 medium term items (2018-2020), 53 had been completed in 2017, and 38 would be implemented in 2018.

To meet the needs of social development, the Taipa and Coloane Social Service Centre in Seac Pai Van commenced operation during the year, while the services provided by the Central and Southern District (Patane) Social Service Centre were restructured. The General Guidelines on Design and Construction of Accessibility Facilities in the Macao SAR were fully implemented, and projects to enhance social service facilities will be implemented.

A cross-departmental disaster prevention working committee was set up, to coordinate with the civil protection authorities. The Government set up 16 emergency shelters and four emergency assembly and evacuation points, which played important roles during Typhoon Mangkhut.

The Non-mandatory Central Provident Fund System came into effect in 2018, marking the official establishment of the two-tier social security system, to ensure retirement security for residents.

The Old-age Allowance was increased from 8,000 patacas per year to 9,000 patacas per year, representing an increase of 12.5 percent. The Government continued

disbursing disability gratuities, and converted temporary disability allowances into a long-term welfare measure through amendment to a law. These disability allowances are disbursed through the Social Security Fund. Meanwhile, the Employment Incentive Programme for Disability Pension Beneficiaries was launched, to promote community participation by people with disabilities.

To implement a healthy birth policy and increase the fertility rate, the birth allowance under the Social Security Fund was increased to 5,000 patacas, and both parents may simultaneously apply for this allowance for babies born after 1 January 2018.

The Government continued to open Non-Mandatory Central Provident Fund individual accounts for eligible Macao residents, who were entitled for a special allocation of 7,000 patacas. This marked the ninth year of allocations from the fund. In 2018, over 370,000 residents fulfilled the requirements for receiving allocations from the fund.

Letting Macao thrive through education and emphasising cultivation of youth talent

The Government adhered to the development approaches of "letting Macao thrive through education" and "building Macao with talented people", promoted talent cultivation through education, exchanges, internships and launching support and subsidy programmes, encouraged and supported young people in Macao to seize opportunities arising through the Belt and Road initiative and the development of the

Guangdong-Hong Kong-Macao Greater Bay Area, to expand their scope for further studies, employment and potential for starting businesses.

Regarding non-tertiary education, the Government expanded the structure and content of cooperation on education in the Guangdong-Hong Kong-Macao Greater Bay Area. Eligibility for tuition fee subsidies for Macao students studying in Guangdong was expanded to cover 21 cities throughout Guangdong province.

The targeted completion rates of the Ten-year Development Plan for Non-tertiary Education (2011-2020) were raised to 83 percent. The public consultation on Non-tertiary Technical and Vocational Education System was completed. The Government prioritised free education and actively implemented integrated education to realise fair education. The by-law on Recurrent Education Subsidies Scheme came into effect in the 2018/2019 academic year, to enhance the competitiveness of students receiving recurrent education. The third phase of the Continuing Education Programme was implemented, to promote lifelong learning.

Regarding tertiary education, the Government continued supporting students in pursuing further studies. In 2018, 951 recommended students were admitted to 69 mainland China tertiary educational institutions. The enrolment rate to higher education institutions of third-year senior secondary school students receiving formal education remained at above 94 percent.

The Law on the Tertiary Education System and related regulations came into effect on 8 August 2018. The Tertiary Education Council and the Tertiary Education Fund commenced operation, with a start-up fund of 300 million patacas, providing tremendous support to the development of tertiary institutions. The Government encouraged tertiary institutions to launch more scientific research projects, stepped up efforts in scientific innovation, promoted the establishment of state key laboratories, and cultivated talented people. It also continued developing Macao as a base for tourism education, and a cradle for cultivating talented individuals who are bilingual in Chinese and Portuguese.

The Government announced the Macao Medium-to-long-term Talent Cultivation Scheme – Five-year Action Plan to consolidate data regarding shortages of talented people and compile lists of labour shortages in seven industries – including convention and exhibition, food and beverage, hotel, retail, gaming, finance and construction, to provide direction and a scientific reference for planning talent cultivation policies and measures.

The first phase of the Thousand Talents Programme was completed; over 3,300 local talented young people were identified and nurtured over a three-year period. A youth forum was held, with the theme of joining forces for developing the Guangdong-Hong Kong-Macao Greater Bay Area, to promote exchanges between young people in the Greater Bay Area, and seize opportunities arising from the development of the Greater Bay Area.

The Government also supported the development of innovative business start-ups by young people. The first national-level mass innovation space in Hong Kong and Macao regions opened at the Young Entrepreneur Incubation Centre, to further enhance cooperation with innovative mainland China entrepreneurs, and provide more opportunities to local newly-founded enterprises, especially regarding career development for young people.

Facilitating exchanges on culture conservation and developing Macao as a world tourism and leisure centre

Regarding culture, the Government worked actively on heritage conservation, cultural exhibitions, and development of cultural and creative industries. We completed the Update Report on Urban Renewal of the Historic Centre of Macao, which was submitted to the UNESCO by the State Administration of Cultural Heritage.

The second phase of the public consultation for the Plan for Protection and Management of the Historic Centre of Macao was completed. The Lai Chi Vun Shipyard area was listed as a heritage site. The Government also commenced an assessment of the second batch of nine tangible cultural heritages in Macao, and achieved progress in compiling the List of Macao Intangible Cultural Heritage.

The Mandarin's House was officially opened, the restoration of five houses in the Ka Ho Village of Our Lady was completed, and the renovation of St. Mary Village Activity Centre (the original Chapel of Our Lady of Sorrows) was in progress.

The Cultural Affairs Bureau organised the first "Encounter in Macao – Arts and Cultural Festival between China and Portuguese-speaking Countries", marking the establishment of an art and cultural exchange platform between China and Portuguese-speaking countries. The bureau will organise more events and festivals. To facilitate development of the cultural industry, the Cultural Industry Fund launched the Community Cultural and Creative Production Subsidy Scheme and the Specific Subsidy Scheme for Brand Building, to support the development of competitive cultural and creative brands.

The Government was committed to raising public awareness of cultural heritage conservation – encouraging the public, especially young people, to become involved in inheriting and disseminating local culture. We also continued identifying, training and supporting talented local people in culture and art, and implementing the Arts and Cultural Studies Subsidy Scheme; strengthened cooperation across the Guangdong-Hong Kong-Macao Greater Bay Area, and co-organised activities with other groups and organisations – such as "A Showcase of Guangdong, Hong Kong and Macao Cantonese Opera New Stars", "Youth Internship Programme at the Palace Museum" and "Cultural Heritage Summer Course for Secondary School Students of the Mainland, Hong Kong and Macao ", to facilitate cross-border exchanges and cooperation.

Regarding tourism, the Government leveraged its advantages to establish Macao as a destination for tourism along the Belt and Road and in the Guangdong-Hong Kong-Macao Greater Bay Area. There was progress with implementing the Master Plan for Developing the Tourism Industry of Macao, including through work on 67 short-term action plans. The Government also actively developed maritime tourism and began renovating the Grand Prix Museum.

The Macao Year of Gastronomy 2018 was officially launched, to enhance Macao's comprehensive strength as a Creative City of Gastronomy. We continued leveraging synergy of large-scale events through a combination of sports, tourist, cultural and creative elements, to enrich the experience of residents and tourists, and hence enhance the attractiveness of Macao as a world tourism and leisure centre.

In 2018, the tourism industry in Macao enjoyed favourable development. During the

year, Macao received 35.8 million tourists, representing year-on-year growth of 9.8 percent. The Government improved the tourism environment, promoted application of smart tourism, implemented the tourism information interchange platform, conducted studies on tourism carrying capacities, conducted site management and developed strategies for crowded tourist attractions, explored the possibilities for developing potential tourism areas into new tourist attractions, to create new activity spaces for residents and visitors, in order to foster the sustainable development of the tourism industry and the city as a whole.

Legislative Assembly Addresses Public Aspirations through Legislation, Fulfils its Supervisory Functions and Listens to Public Opinion

During the first session of the sixth Legislative Assembly, from 16 October 2017 to 15 October 2018, 51 plenary meetings and 167 committee meetings were held, with 13 laws, one resolution and 24 simple-majority resolutions passed during the plenary meetings.

Legislative function:

Regarding people's livelihoods and the economy, the Legislative Assembly passed Law No. 1/2018 on Amendments to Regulations on Urban Real Estate Tax and Law No. 2/2018 on Stamp Duty for Non-first Time Buyers of Residential Property through emergency procedures. The former abolished the provisions of the relevant regulations whereby vacant properties were exempt from taxation, thereby reducing the hoarding of vacant properties for speculation; the latter imposed an additional five percent or ten percent stamp duty on non-first time buyers of residential property, thereby discouraging property speculation.

Regarding the protection of rights of the disabled, in order to ensure long-term financial support for the disabled, promote employment, and help them integrate into society, the Legislative Assembly passed Law No. 6/2018 on Amendments to Law No. 4/2010 on the Social Security System, and Law No. 8/2018 on Provision of Tax Concessions to Employers Who Hire People with Disabilities, thereby transforming the temporary disability allowance scheme into a long-term measure, and granting employers hiring people with disabilities a certain amount of tax deduction.

Law No. 12/2018 on Legal System for Protection of Rights of the Elderly was also passed, to establish the overall framework for the protection of rights of the elderly, and provide the Government with clear principles and guidelines for formulating policies on elderly persons.

The Legislative Assembly also passed Law No. 3/2018 on Amendments to the General Rules for Disciplined Personnel of Macao Security Forces, approved by Decree-Law No. 66/94/M dated 30 December 1994, concerning public administration, thereby improving the human resources allocation of the public security forces.

Regarding the enhancement of system establishment, Law No. 9/2018 on Establishment of the Municipal Affairs Bureau was passed, thereby establishing a municipal body that is not an organ of political power, in strict compliance with the Basic Law of Macao, to ensure a smooth transition of the functions and personnel of the Civic and Municipal Affairs Bureau.

For optimisation of division of functions, Law No. 11/2018 on Amendments to the Rights of Assembly and Demonstration, approved by Decree-Law No. 2/93/M dated 17 May 1993 was passed, under which notification of a demonstration should instead be given to the Public Security Police Force, thereby simplifying the administrative procedure and improving administrative efficiency.

Regarding improvement of welfare for civil servants, Law No. 5/2018 on Adjustment of the Amount of Birth Allowance was also passed, thereby increasing the birth allowance for civil servants giving birth to their children to an amount comparable to that under the Social Security Fund, hence fully implementing financial support measures to encourage childbirth.

For stability of financial order, Law No. 4/2018 on Amendments to Law No. 9/2012 on the Deposit Protection System was passed, thereby improving the effectiveness of the deposit protection system by improving its payout efficiency and reinforcing account holders' confidence in the deposit system.

Furthermore, in response to the cancellation of registration of a large number of damaged vehicles following the passage of Typhoon Hato on 23 August 2017, Law No. 10/2018 on Special Tax Concession for Acquisition of Motor Vehicles was passed, thereby offering a special tax concession to relieve the financial burdens of those who had to purchase new vehicles due to the damage caused by the typhoon.

As the Central People's Government had demarcated Macao's marine boundaries, with an area of 85 square kilometres of inshore waters falling under the administration of Macao, Law No. 7/2018 on Maritime Area Management Framework Law was passed, to define the objectives and principles of maritime area management, and foster the establishment of an overall planning system, thereby ensuring the effective management and appropriate development and use of the maritime area.

The above-mentioned laws were proposed by the Government.

Supervisory functions:

In accordance with the authority conferred by the Basic Law of the Macao Special Administrative Region, the Legislative Assembly oversaw the government budget and public finances. This involved tasks included passing Law No. 16/2017 on the 2018 Government Budget, deliberating the Government's Reports on Budget Implementation for 2016, and listening to and discussing the 2018 Policy Address delivered by the Chief Executive.

In addition, during the legislative session, legislators raised 636 written and 63 oral questions, and called for eight plenary meetings regarding the oral questions. During the plenary meetings, legislators gave 341 pre-agenda speeches, covering housing policy, public transport, healthcare and education, economy and culture, environmental protection, public administration, talent cultivation and labour rights protection.

Moreover, the Follow-up Committee for Land and Public Concession Affairs, the Follow-up Committee for Public Finance Affairs and the Follow-up Committee for Public Administration Affairs actively followed up on and prepared 14 reports on important administrative issues and implementation of relevant laws.

Other responsibilities of the Legislative Assembly include listening to and fully reflecting different views, suggestions and criticisms from the public, and making prompt responses regarding public aspirations. During the session, legislators

continued to strengthen the roster system for receiving public visitors, and 50 residents were personally received by legislators through this service. The Legislative Assembly also received 169 opinions and suggestions from the public through phone and email. Moreover, the Legislative Assembly received three petitions from citizens and groups, and handled these appropriately.

CCAC successfully combats corruption and CA promotes optimal use of public funds

In 2018, the Commission Against Corruption ("the CCAC") stepped up its efforts in fulfilling its anti-corruption mission. Building on past experiences, the CCAC continued improving law enforcement models, strengthened law enforcement skills, upgraded law enforcement equipment and optimised workforce management, to achieve the anticipated results in anti-corruption and regional law enforcement cooperation.

Regarding complaints to the Ombudsman, the CCAC actively monitors the operations of public departments, conducts special investigations on cases of major public interest, and publishes reports on the investigations. With the combination of traditional media and online platforms, the CCAC has expanded promotion and education regarding integrity. During the year, the CCAC continued organising activities to promote external exchanges and cooperation at all levels with related organisations.

In 2018, the CCAC received 733 complaints and reports, of which 141 involved anti-corruption cases and 592 were complaints to the Ombudsman.

At the end of the year, the CCAC concluded 889 cases, 180 of which were concluded and transferred to the Public Prosecutions or were closed; while 709 complaints to the Ombudsman were concluded and closed.

The CCAC also received 1,171 inquiries of various kinds during the year, 728 of which involved criminal offences, while 443 were complaints to the Ombudsman.

Regarding promotion and education, the CCAC continued fulfilling its duty of promoting integrity education. In all, 476 talks and seminars were held during the year. They were attended by 23,443 participants, and targeted civil servants, members of community organisations, employers and employees in the private sector, young people, and primary and secondary school students.

In 2018, the CCAC published its first integrity education picture book for parents and children, Big Tooth's Jackpot. It also launched a series of related promotional and educational activities. To align with ways teachers use moral education teaching kits, an integrity education resources website was launched, to enable teachers to readily search for CCAC's teaching resources.

The two CCAC branch offices, in Areia Preta and Taipa, continued their promotional functions in the community, along with receiving complaints and reports. They received 940 complaints, reports, requests for assistance and simple inquiries during the year.

Regarding external affairs, the CCAC organised delegations to visit, in China, the National Supervisory Commission, the Supreme People's Procuratorate, the Ministry of Public Security, the Hong Kong and Macao Affairs Office of the State Council, the Department of Public Security of Zhejiang Province, and Zhejiang Police College; and in Portugal, the Ministry of Justice, the Office of the Ombudsman, the Institute of Registries and Notaries, the Embassy of the People's Republic of China in Portugal and the Macao Economic and Trade Office in Lisbon. The CCAC also sent delegations to attend the Presentation Ceremony of the Ombudsman's Awards 2018 in Hong Kong; a conference related to the United Nations Convention against Corruption (UNCAC) in Vienna; and the third International Academic Conference on Criminal Investigation and Forensic Science in Shenyang, Liaoning Province.

The CCAC also received delegations from the People's Procuratorate of Guangdong Province, the Hong Kong and Macao Affairs Office of the Jiangsu Provincial People's Government, officials of the People's Government of Changzhi, Shanxi, who were attending an advanced training course in Hong Kong and Macao, the Supreme Office of the Prosecutor of the Democratic Republic of Sao Tome and Principe, the Supreme Office of the Prosecutor of the Democratic Republic of Timor-Leste, the Casino Regulatory Authority of Singapore, and the Government Inspectorate of Vietnam, to exchange work experiences and enhance cooperation with these parties.

In 2019, in response to the development of information technology, the CCAC will optimise its law enforcement technology and equipment, enhance staff training, improve the effectiveness of anti-corruption, and comprehensively monitor the fifth Chief Executive Election, to ensure a corruption-free, fair and just election.

The CCAC will also continue paying attention to issues that are of major public interest, conduct special investigations and provide recommendations for improvements when necessary, strengthen liaison and collaboration with public departments, and enhance the effectiveness of prevention of work-related crimes and administrative irregularities. It will continue updating strategies for advocating integrity, deepening integrity education for all walks of life, and strive to deepen and broaden the scope of international and regional cooperation.

In 2018, the Commission of Audit (CA) released four audit reports: two performance audit reports – Management of Public Library Collections and Planning and Implementation of Electronic Governance; a special audit report – Light Rapid Transit System – the Fourth Report; and the Audit Report on the General Accounts 2017.

The performance audit report Management of Public Library Collections mainly covers the Cultural Affairs Bureau's processes regarding new books, from acquisition to their release to the public. The audit assessed whether the books in storage areas are in good condition, and whether the Cultural Affairs Bureau sets suitable standards for the acquisition of books.

The audit result shows that by the end of May 2017, there were around 100,000 library items in the "registered but not catalogued or in the process of being shelved" status in the new computer system for public libraries. Most had been in this status for more than five years, while some had been for 17 years. Moreover, the hygiene of

the central reserve was of very poor quality, while the standard of purchasing books was not uniform. The Cultural Affairs Bureau is determined to solve the problems and undergo a thorough reform.

The performance audit report Planning and Implementation of Electronic Governance analyses whether the Public Administration and Civil Service Bureau (SAFP) had planned and implemented electronic governance work with detailed consideration and arrangements, to ensure this work would be properly carried out and meet the expected targets.

From 2001 to 2016, SAFP invested 237,346,502.41 patacas into developing electronic governance and drew up four planning documents. Until 31 December 2016, 61 projects were available for investigation by the auditor, and only 39 of them had been completed, representing 63.93 percent of this total, reflecting a low implementation rate. Of the 22 uncompleted projects, 16 had been proposed at least 10 years ago yet were still unfinished.

As for the personnel management system and the ePass developed by SAFP, the auditor randomly assessed their implementation, and found that the three personnel management modules proposed in 2001 had been developed in a reckless way without basic analyses. This led to these systems only becoming available to departments after 9 to 13 years of development. Regarding the implementation of ePass, the SAFP was unable to achieve the anticipated results in terms of planning service targets, enactment of laws to regulate ePass, and the number of registered users.

The Commission of Audit also released the special audit report Light Rail Transit System – the Fourth Report, which revealed that until December 2017, only the civil engineering work for the 9.3 kilometre long Taipa Line, had been completed, accounting for 44.28 percent of the construction work in phase one of the Light Rail Train (LRT) project, while for the Macao Peninsula Line, only preliminary work had begun on Barra Station.

Regarding the investment cost, the estimated construction cost for the LRT phase one was significantly increased from 4.2 billion patacas in 2007 to 14.273 billion patacas in September 2012.

The main finding of this follow-up audit is that for the three sections of Taipa Line, approval had been given several times to extend the construction period after work had commenced, and the extension periods were 95 percent to 111 percent as long the original construction period. It was found that there were serious deficiencies in the Transportation Infrastructure Office regarding analyses and approvals of applications for extensions, as well as the coordination and management work. CA urged departments regulating public works to enhance their management mechanisms regarding construction periods and implementation of all public works, to help resolve

the long-standing problems.

As a member of the China Audit Delegation, the Commissioner of Audit, Ho Weng On, attended the 14th Assembly of the Asian Organization of Supreme Audit Institutions from 19 to 22 September. During the assembly, he exchanged views on the assembly's theme and the management and development of audit authorities with the Commissioner of Audit of the National Audit Office, Hu Zejun; the then Deputy Director of Audit of Hong Kong Audit Commission, John Chu; and leading officials from the audit authorities of various Asian countries.

From 26 to 28 September, Mr Ho attended as an observer the Tenth General Assembly of Supreme Audit Organisations of the Portuguese-speaking Countries Alliance (OISC/CPLP), which was held in the capital of Timor-Leste, Dili. He held discussions with other participants based on the assembly's theme— "The impact of cooperation between public and private institutions on improving the supervision and management work of supreme audit institutions".

To maintain good communications with the audit industry, and keep up with the latest information related to auditing, the Commissioner of Audit, Ho Veng On, led delegations to the National Audit Office and the Audit Office of Guangdong Province in April and June, respectively. He met with the Commissioner of Audit, Hu Zejun, and the Secretary of the Leading Party Members' Group of Audit Office of Guangdong Province, Lu Rongchun, to exchange views on boosting the development of computer-aided audit systems, leveraging Macao's positioning as an economic and trading service platform between China and Portuguese speaking countries, management of government audit, planning for big data audits, and provision of training for auditors.

On the invitation of China Society of Audit, a CA delegation participated in the Cross-Strait, Hong Kong and Macao Audit Theories and Practices Conference 2018, which was held in Ordos, Inner Mongolia, in August. Apart from delivering two reports, the delegation also exchanged views with audit practitioners and academics on the latest developments in auditing.

To enhance professional knowledge of the auditing team, in 2018 the CA invited experts and academics from the National Audit Office and Hong Kong, respectively, to host training courses. These courses, including "Accountability Audit on Government Leaders and Employees", "Audit Laws and Regulations", "Public Works Investment Audit", "Information System Audit" and "International Financial Reporting Standard (IFRS) 15 – Revenue from Contracts with Customers", were offered to auditing staff, providing updated audit knowledge and an understanding of the latest situations in various regions. The courses were applicable to auditing work, enabling participants to fulfil their duties in a more professional manner.

Regarding promotion and publicity, CA continued organising talks on auditing

culture, for cadets of the Academy of Macao Public Security Forces, new government recruits and community organisations, to promote optimised use of public funds. In all, 25 talks were held during the year, and were attended by about 900 participants.

Adjudicating according to the law and judicial independence, and prosecuting to secure justice and rule of law

Numbers of cases handled by the three-tier court system

2018	Court of Final Appeal	Court of Second Instance	Court of First Instance (including the Examining Magistracy)	Administrative Court	Total
Cases handled	121	1,204	19,401	96	20,822
Cases concluded	110	1,219	19,971	1,478	22,778
Cases pending	76	725	12,632	103	13,536

The majority of the cases in the three-tier court system were criminal cases and

criminal labour cases, which totalled 7,403 (excluding Examining Magistracy cases). Ranking second were civil and labour cases, which totalled 5,103. There were also 327 administrative cases, and 7,989 other cases.

Law promotion and legal consulting services

To strengthen the promotion of law and foster transparency of the judicial system, starting from 9 October 2013, the court issues press releases about typical concluded cases, and publishes them on the websites of the court and the Government Information Bureau. Various media may republish and report on these cases, which will hopefully promote legal awareness and law abidance in society, and inform the public regarding the judicial approaches and methods for settling various disputes. As at the end of 2018, an accumulated total of 555 articles had been released, 89 of which were released in 2018.

Summary of consulting services provided by the Court of First Instance is as follows:

2018	Criminal Courts	Civil Courts	Court for Minor Civil Cases	Total
Total number of inquiries	6,210	4,649	1,482	12,341
Number of cases	6,362	4,313	1,482	12,157
Number of cases directly handled by the information centre	6,249	3,897	1,482	11,628
Number of cases transferred to the Public Prosecutions Office	100	366	-	466
Number of cases transferred to other departments	13	50	-	63
Number of telephone inquiries	598	875	-	1,473

Legal assistance and enforcement

Regarding delivery of judicial writs and assistance in investigations and evidence collection in civil and commercial cases, in 2018 the Court of Final Appeal received 188 judicial writs from mainland China courts, and delivered 52 judicial writs to mainland China courts on behalf of courts in Macao.

In 2018, the Court of Second Instance received 21 requests for reviewing and endorsing judgments made by mainland China courts or arbiters; of these, three judgments endorsed by the Court of Second Instance were sent to the Court of First Instance for enforcement.

Declarations of assets and interests

In 2018, the Court of Final Appeal followed the regulations in Law No.11/2003 amended by Law No.1/2013 in the process of receiving individuals for the declaration of assets. It opened 201 individual dossiers, processed 2,071 documents for the declaration of assets that involved 1,575 people, and organised and updated the contents of the individual dossiers according to the law.

According to the stipulations in Law No.11/2003, which was amended according to Law No.1/2013, the office of the Court of Final Appeal has uploaded Part IV of the disclosure document of asset declaration to the website of the Courts of Macao, ensuring it is available in the public domain as required by law. In 2018, the disclosure documents (Part IV) of 457 individual dossiers, involving 319 people, were published online and can be retrieved. A total of 2,727 disclosure documents, involving 712 people, are now published online and can be retrieved.

Adhering to legal judgments to uphold judicial independence, promoting justice to support Greater Bay Area development

Speaking at the opening ceremony of the 2018-2019 judicial year, the President of the Court of Final Appeal, Sam Hou Fai, said that the courts put the judiciary at the heart of struggles pertaining to the MSAR's policies, economy and society in the previous judicial year, since they handled typical cases of judicialisation of politics and cases involving significant public interest and interests of corporate legal persons. The judiciary had no other choice but to face these challenges.

However, some people deviated from the basic requirements of fairness and justice of the judiciary, and criticised the judges of rigid adjudication or even openly requested the judicial officers handling certain cases to adjust the mainstream judicial opinions for different interests, when there was no change in law. Yet, judicial officers could only execute laws but not create new laws or amend or revoke old laws that were still in force, and could not bend laws with judicial opinions to satisfy claims by certain parties.

People should adhere to the rule of law, and society's requirements and expectations regarding the judiciary and judicial officers, when attempting to resolve various conflicts and disputes with the judicial mindset and legal means.

Judicial independence was the premise and foundation of a fair judiciary, and respect for judicial authority and maintenance of judicial independence were the core values of Macao. When the judiciary was not independent and judicial authority was not respected, the judiciary would not be free of interference and judicial decisions could be ignored. If so, the law would no longer be the fair standard of judgment, and the judiciary would no longer be the last line of defence in protecting the public interest. The value of a fair judiciary and authority of law could not be maintained.

The President of the Court of Final Appeal, Sam Hou Fai, also mentioned that the development of the Guangdong-Hong Kong-Macao Greater Bay Area was a major decision of the Central People's Government for the national development strategy, with "One country, two systems" as its significant characteristic and advantage. Since its establishment was a result of the cooperation between different judicial systems, judiciaries and legal systems, legal conflict is an inevitable challenge.

Regarding civil and commercial legal assistance, although the MSAR has signed five agreements on mutual legal assistance with mainland China and Hong Kong, there remained a problem regarding how to increase the efficiency of legal assistance, which requires reviewing and revising the existing arrangements in response to the establishment of the Guangdong-Hong Kong-Macao Greater Bay Area.

Regarding criminal legal assistance, Macao has only signed an agreement on arrangements for the transfer of sentenced persons with Hong Kong. However, work has not commenced on the arrangements for delivery of documents, investigations and collection of evidence, transfer of fugitives, and recognition and enforcement of criminal judgments. Notably, there was no agreement on arrangements for criminal legal assistance between Macao and mainland China. Therefore, it was necessary to focus on promoting criminal legal assistance throughout the region, and striving to make progress in formulating and implementing supporting laws and regulations regarding regional criminal legal assistance, as prescribed in Article 93 of the Basic Law.

The operations of the MSAR's Public Prosecutions Office in 2018 are summarised as follows:

1. Actively performed its prosecution duties to fight crime and maintain fairness and justice in rule of law and society;

2. Performed its prosecution functions to maintain legality, remained concerned about pressing issues in society, and protected the public interest and society's legitimate rights and interests;

3. Strengthened legal research to provide assistance with legislation and professional recommendations for refining and developing Macao's legal system;

4. Strengthened communications and coordination with government departments and provided legal opinions for legislation and legal amendments;

5. Continued enhancing internal administration of the Office of the Public Prosecutor-General, and strengthening the technical and administrative assistance functions of the Office of the Public Prosecutor-General, and judicial work of the Public Prosecutions Office; and

6. Continued enhancing information technology infrastructure to improve quality and efficiency of prosecutions.

Regarding cases in 2018, the number of criminal cases initiated by the Public Prosecutions Office was 14,418, 0.42 percent more than the 14,358 cases in 2017. The number of cases concluded by the Examining Magistracy was 14,453, representing a decrease of 11.35 percent; the number of prosecutions was 4,264, representing a decrease of 2.27 percent; the number of cases filed was 9,906, representing a decrease of 14.98 percent; and the number of cases reopened due to discovery of new evidence was 263, representing an increase of 5.62 percent.

There were slight decreases in the numbers of cases concluded and filed, and prosecutions, mainly due to the efforts of the Examining Magistracy of the Public Prosecutions Office's judicial officers in clearing old cases while handling newly initiated cases in 2018. The three major reasons for cases being filed were failure to identify offenders after investigations, victims of reported crimes no longer wishing to hold the purported offenders accountable, and insufficient criminal evidence.

During the year, the Public Prosecutions Office initiated investigations regarding:

- 4,938 theft, robbery and property damage cases (up 3.83 percent year on year);
- 1,559 offences involving physical assault (down 8.24 percent year on year);

- 1,482 fraud and extortion cases (up 26.78 percent year on year);
- I1,153 crimes related to traffic accidents (down 7.17 percent year on year); and
- 915 illegal immigration and immigration-related crimes (down 15.04 percent year on year).

In addition, the Public Prosecutions Office initiated relatively high numbers of investigations of the following crimes:

- 817 cases of illegal gambling and loan-sharking (up 2.77 percent year on year);
- 509 cases of forgery (up 56.62 percent year on year);
- 395 crimes against public authority (down 37.2 percent year on year); and
- 352 computer crimes (up 79.59 percent year on year).

Also in 2018, the Public Prosecutions Office initiated investigations of 53 money laundering cases, 8.62 percent less than 58 such investigations in 2017; and 190 investigations of drug-related crimes, 23.39 percent less than 248 such investigations in 2017. These figures revealed success in prevention of money laundering and drug-related crimes in 2018.

Each year since 2015, the Public Prosecutions Office has referred an average of over 4,000 prosecutions to the Lower Court. In 2018, besides handling criminal case trials and executing cases, the judicial officers of the Public Prosecutions Office handled 82 judicial appeals and 437 replies to appeals.

The judicial officers of the Public Prosecutions Office also handled litigation regarding civil and labour cases, and pre-litigation procedures for related cases, to help ensure the impartiality of the judiciary.

When handling labour cases, to maintain the rights of the relatively weak working class to the greatest extent and as quickly as possible, the Public Prosecutions Office attempted mediation to protect labour interests in accordance with the Code of Labour Procedure; in 2018, the Public Prosecutions Office was involved in 735 cases in the Labour Tribunal, as follows:

- 397 cases involving labour accidents and occupational diseases (395 were successfully mediated, while 28 cases required litigation due to failure to reach a mediation agreement);

- 338 ordinary labour litigation procedures were initiated (366 were successfully mediated, while further litigation was required for nine cases).

During 2018, 761 workers were involved in the successful mediation procedures

conducted by the Public Prosecutions Office, and 89 workers were involved in the cases initiated following failure to achieve mediation.

In addition, to protect the interests of minors and disadvantaged groups and the public interest, the Public Prosecutions Office handled civil cases involving minors, missing persons and incapacitated persons. In 2018, the Office investigated 44 maternity or paternity cases, and initiated 140 court actions for minors (18.64 percent more than the 118 such actions in 2017); and handled 564 proceedings concerning interdiction, disqualification, custody, litigation fees, bankruptcy, mandatory property inventories and settlement of unpaid taxes on behalf of the Finance Services Bureau (increased by 7.02 percent compared to 527 in 2017).

The Public Prosecutions Office also initiated 1,238 civil and labour pre-suite cases (administrative cases) in 2018, 16.14 percent more than the figure of 1,066 cases in 2017, in order to commence related civil and labour legal proceedings.

In 2018, the Administrative Court Office of the Public Prosecutions Office received 71 judicial appeals, 10 litigation cases and six cases involving urgent procedures, participated in four litigation procedures, completed 2,614 pleadings, and concluded 408 cases.

In 2018, the Public Prosecutions Office received fewer cases than in 2017. However, it also handled several cases that were received in 2017 and transferred to 2018, including administrative penalty cases concerning Uber, litigations related to public projects, arbitrations concerning qualifications of Home-Ownership Scheme and public housing, cases of medical incidents involving public medical services, and cases involving illegal guesthouses and taxation. Through the joint efforts by all staff of the Administrative Court office of the Public Prosecutions Office, the case conclusion rate was significantly higher in 2018 than in 2017.

In 2018, the five judicial officers of the Public Prosecutions Office before the Court of Final Appeal and the Court of Second Instance participated in 1,272 criminal, civil and administrative proceedings of the Court of Second Instance in the Court of Second Instance. They issued 1,354 opinions on appeals and replies to appeals, handled 129 cases of the Court of Final Appeal, and issued 102 opinions on appeals and replies to appeals.

1

POLITICAL SYSTEM AND ADMINISTRATION

幻覺園
(高樓里)
PÁTIO DA ILUSÃO
入便街
RUA DO INTERIOR
賊仔園
AZINHAGA DOS PIRATAS.
屠場前地
LARGO DO MATADOURO
TRAVESSA DA FORMIGA
跛腳梯
ESCADA DO COXO
水桶巷
TRAVESSA DA PIPA
TRAVESSA DAS TRINAS

Political Structure

Macao People Governing Macao with a High Degree of Autonomy

Macao became a Special Administrative Region (SAR) of the People's Republic of China on 20 December 1999. The MSAR's constitutional document, the Basic Law of the Macao Special Administrative Region, also came into force on the same day.

The Basic Law of the Macao Special Administrative Region establishes, at the highest level of legal authority, the guidelines and policies of the Central People's Government regarding Macao. It stipulates the system to be practised in Macao, and lays down the political and administrative framework of the MSAR for 50 years from 1999.The systems and policies of the MSAR – including its social and economic systems; safeguards for the fundamental rights and freedoms of its residents; the executive, legislature and judiciary; and Government policies – are all based on the provisions of the Basic Law.

Under the Basic Law, the MSAR is entitled to a high degree of autonomy in all areas except defence and foreign affairs. It enjoys executive autonomy, legislative autonomy, an independent judiciary and the right to final adjudication. The executive and the legislature of the MSAR consist only of permanent Macao residents. The MSAR maintains the status of free port and independent tariff region. It also maintains the free flow of capital and the freedom of operations of financial institutions. It may, under the name "Macao, China", independently maintain, develop relations with and sign agreements with various countries, regions and international organisations in fields such as the economy, trade, finance, transportation, communications, tourism, culture and sports.

The principles of "One country, two systems", "Macao people governing Macao" and a high degree of autonomy have passed their initial tests with flying colours, and are now broadly recognised in Macao and infused into its social and political culture. Macao people governing Macao" means that the people of Macao are in charge of their own affairs. Macao's Chief Executive, principal officials, members of the Executive Council and the Legislative Assembly, the President of the Court of Final Appeal and the Public Prosecutor-General shall be permanent residents, and some of these positions may only be assumed by permanent residents of Macao who are also Chinese citizens.

"A high degree of autonomy" means that the National People's Congress (NPC) authorises the MSAR to exercise a high degree of autonomy in accordance with the Basic Law, and that the central government will not interfere in affairs that fall within the autonomy of the MSAR. The MSAR enjoys executive, legislative and independent judicial power and the power of final adjudication, as well as other powers authorised by the NPC, the Standing Committee of the NPC and the Central People's Government.

However, a high degree of autonomy does not mean full autonomy. In order to maintain a unified China and to safeguard the sovereignty and territorial integrity of the country, the Central People's Government retains certain essential powers – for

example, the Central People's Government is responsible for the MSAR's foreign affairs and defence.

Chief Executive

The Chief Executive is the head of the MSAR and is accountable to the Central People's Government and the MSAR.

The Chief Executive is charged with the responsibility of leading the MSAR Government; implementing the Basic Law of the Macao Special Administrative Region and other laws applicable to Macao; signing bills passed by the Legislative Assembly and promulgating laws; signing budgets passed by the Legislative Assembly and reporting those budgets and final accounts to the Central People's Government for the record; making decisions on SAR Government policies and issuing executive orders; formulating by-laws and promulgating them for implementation; nominating and reporting to the Central People's Government candidates for the posts of Secretaries, Commissioner Against Corruption, Commissioner of Audit, and leading officials of the Police and Macao Customs Service, and recommending to the Central People's Government the removal of the above officials; appointing a proportion of the members of the Legislative Assembly; appointing and removing members of the Executive Council; nominating and reporting to the Central People's Government the appointment of the Public Prosecutor-General and recommending his or her removal; appointing or removing presidents and judges of the courts at all levels, public prosecutors and civil servants; and, under particular circumstances, dissolving the Legislative Assembly.

The first- and second-term Chief Executive of the MSAR was Edmund Ho Hau Wah. The third- and fourth-term Chief Executive is Chui Sai On.

The Executive Council

The Executive Council assists the Chief Executive in policymaking. Article 58 of the Basic Law of the Macao Special Administrative Region stipulates that, except for the appointment, removal and disciplining of officials and the adoption of emergency measures, the Chief Executive shall consult with the Executive Council before making important policy decisions, introducing bills to the Legislative Assembly, formulating by-laws or dissolving the Legislative Assembly. If the Chief Executive does not accept a majority opinion of the Executive Council, the specific reasons should be put on record.

Article 57 of the Basic Law of the Macao Special Administrative Region stipulates that the Executive Council shall be composed of seven to 11 Chinese citizens who are permanent residents of the MSAR. The Chief Executive shall appoint them from among principal officials, members of the Legislative Assembly and other public figures. The Chief Executive shall decide the appointment or removal of Executive Council members. The term of office of members shall not last beyond that of the Chief Executive who

appoints them, but the members shall remain in place until the new Chief Executive takes office.

Article 58 of the Basic Law of the Macao Special Administrative Region stipulates that the Executive Council shall be presided over by the Chief Executive and meet at least once a month. The proceedings of the Executive Council meetings are confidential, but a spokesperson announces important decisions to the public. The Executive Council held 42 formal meetings during 2018.

The first and second Chief Executive Edmund Ho appointed 10 members to the Executive Council in both his terms.

The third- and fourth-term Chief Executive, Chui Sai On, appointed 11 members to the Executive Council during his two terms in office: one Secretary, one Member of the Legislative Assembly and nine public figures.

The Legislature

According to the Basic Law of the Macao Special Administrative Region, the MSAR enjoys legislative autonomy and the Legislative Assembly is its sole legislature.

The Macao SAR has full legislative autonomy, which embodies and guarantees Macao's high degree of autonomy. The legislative power of Macao is exercised solely by the Legislative Assembly. No other body or entity has legislative power. Laws formulated by the Legislative Assembly shall conform to the Basic Law of the Macao Special Administrative Region.

The Legislative Assembly exercises its legislative power and supervisory power under the Basic Law of the Macao Special Administrative Region and the Rules of Procedure of the Legislative Assembly.

Legislative Authority

The term "legislative authority" broadly refers to the power to formulate general and abstract laws that are applicable to the MSAR and its residents. More specifically, the powers of the Legislative Assembly include the right to make laws, the right to amend laws, the right to suspend the execution of laws, and the right to abolish laws.

According to the Basic Law of the Macao Special Administrative Region and the Rules of Procedure of the Legislative Assembly, Legislative Assembly members and the Government have the right to introduce bills and propose amendments. The Government has exclusive sponsorship rights in the four following respects: electoral law for the Legislative Assembly, public income and expenditure, political structure and Government operation.

Bills passed by the Legislative Assembly shall come into effect only after being signed and promulgated by the Chief Executive.

Supervisory Authority and Other Responsibilities

The responsibilities of the Legislative Assembly include: examining and passing budgets introduced by the Government; examining the Government's reports on budget implementation; deciding on Government motions on taxation; approving debts to be taken on by the Government; and debating the policy addresses of the Chief Executive.

The term "issue of public interest" encompasses all aspects of Macao society; the Legislative Assembly may hold meetings to discuss such issues, and may require relevant Government officials to attend those meetings.

The Legislative Assembly receives and handles residents' complaints; it receives complaints concerning the existing legal system, but it does not directly handle individual cases or applications for legal consultations.

The Legislative Assembly also has the authority to impeach the Chief Executive.

When exercising the above-mentioned powers, the Legislative Assembly may summon, as required, persons to testify or give evidence.

Moreover, members of the Legislative Assembly are also entitled to address enquiries regarding the Government's work.

Composition and Term of Office of the Legislative Assembly

Members of the Legislative Assembly shall be permanent residents of the MSAR. The majority of them are elected and the term of office, except for the first term, is four years.

The first Legislative Assembly of the MSAR had 23 members, eight of whom were elected directly, eight indirectly and seven appointed by the Chief Executive. Their term of office expired on 15 October 2001. The second Legislative Assembly had 27 members, 10 of whom were elected directly, 10 indirectly and seven appointed by the Chief Executive. Their term expired in 2005. The third and the fourth Legislative Assembly likewise had 29 members, 12 of whom were elected directly, 10 indirectly and seven appointed by the Chief Executive. The fifth and the succeeding Legislative Assembly will have 33 members, 14 of whom are elected directly, 12 indirectly and seven appointed by the Chief Executive. However, the aforementioned does not apply to the amendments made through legal procedures to the method for forming the Legislative Assembly of the Macao Special Administrative Region.

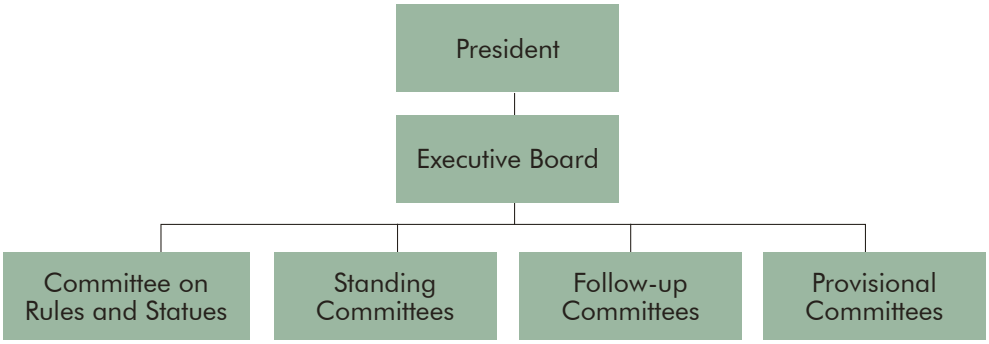
The Legislative Assembly has one president and one vice president, elected by and

from among its members. The president and vice president shall be permanent Chinese residents who have lived continuously in Macao for at least 15 years.

Structure and Operation of the Legislative Assembly

The structure of the Legislative Assembly comprises the president, the Executive Board, the Committee on Rules and Statutes, standing committees, follow-up committees and provisional committees. The president represents the Legislative Assembly and leads and coordinates the assembly's work. The president performs his or her duties in accordance with the Basic Law of the Macao Special Administrative Region and the Rules of Procedure of the Legislative Assembly.

Each Legislative Assembly usually serves four sessions. Each session lasts one year, normally from 16 October to 15 August of the following year. The Legislative Assembly uses Chinese and Portuguese, Macao's two official languages.



Administrative Agencies and Technical Support Offices

The administrative agencies of the Legislative Assembly include the president, the Executive Board and the Administrative Committee, all of which are responsible for the administrative affairs of the Assembly.

The Legislative Assembly's technical support offices report directly to the Executive Board. If the term of the Legislative Assembly expires or if the Legislative Assembly is dissolved, the Executive Board shall retain its responsibilities until the first meeting of the new Legislative Assembly. The technical support offices are led by the president and the Executive Board, and they report directly to the secretary-general. The technical support offices are divided into sections to handle different portfolios and to provide the administrative agencies and members of the Legislative Assembly with technical and administrative support.

The Legislative Assembly's Public Feedback System

The Legislative Assembly has established a public feedback system to collect opinions, suggestions and criticisms concerning legislation, Government activities, policies and other issues of public interest. The system also aims to explain the work of the Legislative Assembly and help citizens to exercise their rights to submit petitions and make complaints.

Citizens may voice their opinions via the feedback system in person or by telephone, post, fax or e-mail. Public reception is available during normal hours of government service.

In addition, legislators receive citizens by appointment at the Legislative Assembly building from noon to 1 pm on Mondays, Wednesdays, and Fridays. Legislators make themselves available according to a roster compiled by the Legislative Assembly.

Electoral Law

Macao's electoral system is based on Law No. 12/2000 the Voter Registration Law (as amended by Law No. 9/2008) and Law No. 3/2001 the Legislative Assembly Election Law of the Macao Special Administrative Region (as amended by Law Nos. 11/2008,12/2012 and 9/2016). The two laws govern both the direct and indirect elections of the Legislative Assembly, and the appointment of legislators as prescribed in Annex II (1) of the Basic Law.

The Voter Registration Law contains 60 articles, which govern the voter registration procedures for natural persons and legal persons, whereas the Legislative Assembly Election Law contains 222 articles, which govern the direct and indirect elections of members of the Legislative Assembly.

Electoral System for the Legislative Assembly

Under the Legislative Assembly Election Law, there are direct and indirect elections.

In direct elections, any individual aged 18 years or older and who is a permanent resident of the MSAR may, after registration under the Voter Registration Law, vote for the 14 directly elected members of the Legislative Assembly.

In indirect elections, representatives of legal persons who are confirmed as members of the relevant sectors for at least four years may, after being registered with and given legal personality by the Identification Services Bureau for at least seven years under the Voter Registration Law, vote for the 12 indirectly elected members of the Legislative Assembly.

Under the two election systems, the method used for converting the number of votes into seats in the Legislative Assembly is as follows: the first candidate on each list receives a quotient equal to the number of votes recorded for that list. The second candidate on each list receives a quotient equal to half the number of votes recorded for that list. The third candidate on each list receives a quotient equal to a quarter of the number of votes recorded for that list, and so on. Legislative Assembly seats are then awarded to the candidates who, among all lists, have the highest quotients. As regards the assignment of the final seat: if two candidates from different lists have equal quotients, the seat shall be given to the candidate from the list that has yet to win a seat. If both lists have won one or more seats, the seat shall be given to the list that received the most votes. If both lists have won the same number of votes, the winner of the seat shall be determined by the open drawing of lots.

The Chief Executive shall appoint seven legislators to the Legislative Assembly within 15 days of receiving the final verified results, as stipulated in Clause 2 of Article 133 of the Legislative Assembly Election Law.

Electoral Affairs Commission for the Legislative Assembly Election

The Electoral Affairs Commission for the Legislative Assembly Election is responsible for promoting, coordinating and supervising the elections of the Legislative Assembly.

The members of the Electoral Affairs Commission for the Legislative Assembly Election are appointed by the Chief Executive. The commission has one chairman and at least five members, appointed from among appropriately qualified permanent residents of the Macao SAR. The Public Administration and Civil Service Bureau provides support to the commission.

The Judiciary

The courts of the MSAR have judicial autonomy. They are subordinate only to the law and are guaranteed to be free from any interference. The MSAR has a Court of First Instance, a Court of Second Instance and a Court of Final Appeal. The power of final adjudication is vested in the Court of Final Appeal.

The Court of First Instance may, when necessary, establish special courts. The previous criminal prosecution system has been maintained since the establishment of the MSAR.

The MSAR also has an Administrative Court, which is responsible for administrative and tax litigation. Defendants and plaintiffs who find the ruling of this court unsatisfactory can file an appeal to the Court of Second Instance.

Judges at all levels are appointed by the Chief Executive on the recommendation

of an independent commission composed of local judges, lawyers and prominent members of the community. The Chief Executive appoints the presidents of the courts from among the judges. The President of the Court of Final Appeal shall be a Chinese citizen who is a permanent resident of the MSAR. Any appointment or removal of the President of the Court of Final Appeal shall be reported to the Standing Committee of the NPC for the record.

The Public Prosecutions Office is independent and free from interference, as defined by law.

The Public Prosecutor-General shall be a Chinese citizen who is a permanent resident of the MSAR. He or she shall be nominated by the Chief Executive and appointed by the Central People's Government. Other public prosecutors shall be nominated by the Public Prosecutor-General and appointed by the Chief Executive. The structure, powers, functions and remit of the Public Prosecutions Office are prescribed by law.

Relationship between the MSAR and the Central Government

The MSAR is a local administrative region with a high degree of autonomy under the Central People's Government of the People's Republic of China. No department, province, autonomous region or municipality under the Central People's Government may interfere in the MSAR's internal affairs as specified in the Basic Law of the Macao Special Administrative Region. Any person from another province, autonomous region or municipality must apply for an entry permit to enter Macao. If there is a need for central government departments, provinces, autonomous regions or municipalities to set up an office in Macao, they must obtain the consent of the MSAR Government and the approval of the Central People's Government.

The Central People's Government is responsible for the MSAR's defence and foreign affairs. However, it authorises the MSAR to conduct certain external affairs on its own, under the name of "Macao, China" as specified in the Basic Law of the Macao Special Administrative Region. The Central People's Government appoints and removes the Chief Executive, principal officials and the Public Prosecutor-General.

Laws enacted by the legislature of the MSAR must be reported to the Standing Committee of the NPC for the record. However, such reporting shall not affect the entry into force of such laws.

National laws shall not be applied in the MSAR except as follows, which shall be promulgated or legislated by the MSAR.

The national laws applicable in the MSAR as of 2018 were:

- Resolution on the Capital, Calendar, National Anthem and National Flag of the People's Republic of China;
- Resolution on the National Day of the People's Republic of China;

- Nationality Law of the People's Republic of China;
- Regulations of the People's Republic of China Concerning Diplomatic Privileges and Immunities;
- Regulations of the People's Republic of China Concerning Consular Privileges and Immunities;
- Law of the People's Republic of China on the National Flag;
- Law of the People's Republic of China on the National Emblem;
- Law of the People's Republic of China on Territorial Sea and the Contiguous Zone;
- Law of the People's Republic of China on the Exclusive Economic Zone and the Continental Shelf;
- Garrison Law of the Macao Special Administrative Region of the People's Republic of China; and
- Law of the People's Republic of China on the Immunity of the Property of Foreign Central Banks from Judicial Compulsory Measures.

The MSAR has no jurisdiction over acts of state such as defence and foreign affairs.

Chinese citizens who are residents of the MSAR are entitled to participate in the management of state affairs according to law.

Liaison Office of the Central People's Government in the MSAR

As a working agency stationed in Macao by the Central People's Government, the Liaison Office of the Central People's Government in the MSAR shall, in the light of the principles of "One country, two systems" and "Macao people governing Macao", support the SAR Government in administration in line with the Basic Law of the Macao Special Administrative Region, and be responsible for liaison between mainland China and Macao.

The liaison office is responsible for contacting the MSAR Commission of the Ministry of Foreign Affairs of the PRC and the People's Liberation Army Macao Garrison; contacting and assisting mainland China authorities in managing mainland Chinese-funded organisations in Macao; promoting social and economic exchanges and cooperation between mainland China and Macao; reporting to the Central People's Government the opinions of Macao people about mainland China; handling Taiwan-related affairs in the MSAR; and handling any other matters assigned by the Central People's Government.

In addition, the liaison office shall, through various channels, promote ties with all social segments in Macao, pay attention to development and stability issues, and provide assistance wherever necessary.

Office of the Commissioner of the Ministry of Foreign Affairs of the People's Republic of China in the Macao Special Administrative Region

Under the Basic Law of the Macao Special Administrative Region, the Central People's Government is responsible for handling foreign affairs related to the MSAR. To this end, the Office of the Commissioner of the Ministry of Foreign Affairs of the People's Republic of China in the MSAR was established on 20 December 1999.

The duties of the Office of the Commissioner of the Ministry of Foreign Affairs of the PRC in the MSAR are:

1. Handling foreign affairs issues related to the MSAR that are the responsibilities of the Central People's Government;

2. Handling and coordinating affairs related to the MSAR's participation in international organisations and conferences; issues concerning international organisations and associations that establish branch offices in the MSAR; and matters related to inter-governmental conferences to be held in the MSAR;

3. Handling matters concerning the application of international treaties in the MSAR; and assisting with issues concerning the Central People's Government's processing of authorisation for the MSAR Government to negotiate bilateral agreements with foreign countries;

4. Coordinating and handling issues related to the establishment of foreign consular bodies, or other official and semi-official organisations in the MSAR, and dealing with relevant consular affairs; and

5. Handling any other responsibilities assigned to it by the Central People's Government and the Ministry of Foreign Affairs.

The People's Liberation Army Macao Garrison

The People's Liberation Army Macao Garrison took up its role in Macao on 20 December 1999 with the establishment of the MSAR.

According to the Garrison Law of the Macao Special Administrative Region of the People's Republic of China, the Macao garrison is responsible for the defence of Macao without interfering in the local affairs of the MSAR. The MSAR Government may, if necessary, ask the Central People's Government for assistance from the Macao garrison in maintaining social order and relieving natural disasters. The Macao garrison has strictly observed the Basic Law of the Macao Special Administrative Region and the Garrison Law, loyally fulfilled its duty, strengthened exchanges with various sectors of Macao society, and actively participated in charitable activities.

The Judiciary

The MSAR Government is the executive authority of the MSAR. The Chief Executive is the head of the Government, supported by secretariats, bureaux, departments and divisions.

Secretariats: there are five secretariats in the Government, namely the Secretariat for Administration and Justice, the Secretariat for Economy and Finance, the Secretariat for Security, the Secretariat for Social Affairs and Culture, and the Secretariat for Transport and Public Works. Each is headed by a secretary. The secretaries, in the above order of seniority, stand in for the Chief Executive when the Chief Executive is unable to perform his or her duties.

Bureaux: units directly under the secretariats, performing designated functions.

Departments: units affiliated to the bureaux, responsible for establishing operational procedures.

Divisions: units affiliated to the bureaux or departments, responsible for operational duties.

The Government structure includes affiliated units, such as teams and sections.

The principal officials of the Government are the secretaries, the Commissioner Against Corruption, the Commissioner of Audit, and leading police and customs service officials. Principal officials of the MSAR shall be Chinese citizens who are permanent residents of Macao and who have ordinarily resided in Macao for a continuous period of not less than 15 years.

The Government is responsible for formulating and implementing policies; conducting administrative affairs; managing external relations as authorised by the Central People's Government under the Basic Law of the Macao Special Administrative Region; drawing up and introducing budgets and final accounts; introducing bills and motions and drafting by-laws; and designating officials to attend meetings of the Legislative Assembly to listen to opinions or to speak on behalf of the Government.

The Government must abide by the law and be accountable to the Legislative Assembly; implement laws passed by the Legislative Assembly and already in force; present policy addresses regularly to the Legislative Assembly; and answer questions raised by members of the Legislative Assembly.

Secretary for Administration and Justice

The Secretary for Administration and Justice holds authority in areas including:

public administration; civil affairs; legal translation and promotion; legislative affairs and legal administration; civil and criminal records; regulation of the registration and notarisation system; and publication of the Macao SAR Gazette.

In 2018, the Secretary for Administration and Justice, on behalf of the Government, signed the Agreement on Transfer of Sentenced Persons Between the Macao Special Administrative Region of the People's Republic of China and the Federal Republic of Nigeria; and attended a meeting of the United Nations Human Rights Council (UNHRC), during which China was assessed in the third Universal Periodic Review.

Secretary for Economy and Finance

The Secretary for Economy and Finance is responsible for the Government budget; supervision of industry, commerce and gaming; offshore businesses (except those under the jurisdiction of other secretaries); the currency, foreign exchange and monetary system (including the insurance sector); administration of public finances and the tax system; statistical data; labour and employment; vocational training; and consumer rights protection.

In 2018, the Secretary for Economy and Finance paid official visits to Cambodia (accompanying the Chief Executive), Portugal and Brazil; and signed the Protocol on the Avoidance of Double Taxation and Prevention of Fiscal Evasion with Respect to Taxes on Income between the MSAR Government and the Government of Portuguese Republic.

Secretary for Security

The Secretary for Security has authority over the internal security of the SAR; criminal investigations; immigration control; supervision of maritime traffic and the application of penalty provisions; civil protection; coordination and management of the prison system; customs affairs as defined in Law No. 11/2001; and the Reformatory for Juvenile Delinquents, as defined in Law No. 2/2007 'Education and Supervision System for Juvenile Delinquents'.

In 2018, the Secretary for Security participated in the 21st Guangdong-Macao Police Working Meeting, the Guangdong-Hong Kong-Macao Greater Bay Area Policing Collaboration Forum and the meeting on preparations for the commissioning of the Hong Kong-Zhuhai-Macao Bridge.

Secretary for Social Affairs and Culture

The Secretary for Social Affairs and Culture is responsible for education, health, social affairs, culture, tourism, sport, youth affairs, social security, cultural industry and social rehabilitation.

In 2018, the Secretary for Social Affairs and Culture attended the 71st Session of the World Health Assembly, the first Cultural Forum Between China and Portuguese-speaking Countries (Macao), the 18th Asian Games, the 10th China-Japan-South Korea Cultural Ministers' Meeting, the Global Tourism Economy Forum Macau 2018, the First Forum for Heads of Higher Education Institutions of China and Portuguese-Speaking Countries (Macao), and the Hong Kong International Tourism Convention.

Secretary for Transport and Public Works

The Secretary for Transport and Public Works is responsible for land regulation; traffic management; aviation and port affairs; infrastructure and public projects; transport and communication; environmental protection; Home-Ownership Scheme housing and public housing; and meteorology.

Commission Against Corruption

The Commission Against Corruption (CCAC) functions independently. The Commissioner Against Corruption shall be appointed by the Central People's Government on the nomination of the Chief Executive. The commissioner is accountable to the Chief Executive.

The Commission Against Corruption is responsible for tackling corruption and fraud. It investigates, in accordance with the law, corruption and fraud among civil servants and among individuals involved in voter registration and elections. It also promotes the protection of human rights, freedom, legal guarantees, and legitimate rights and interests, and aims to ensure the justice, legitimacy and efficiency of public administration, and investigates corruption in the private sector in accordance with the law.

In 2018, the Commissioner Against Corruption and the CCAC visited the Office of the Ombudsman of Portugal.

Commission of Audit

The Commission of Audit has been set up in accordance with the Basic Law of the Macao Special Administrative Region. It functions independently and is not subject to interference. The Commissioner of Audit is accountable to the Chief Executive.

The major duties of the Commission of Audit are to monitor the implementation of the Government budget; to compile an audit report on the overall Government accounts; to monitor the implementation of target departments' budget and the final accounts, as well as the management and expenditure of capital not included in the

budget, together with assessing everything including assets, debts, profits, losses, and accounts, and verifying that all public expenditure is according to the proper purview of audit; and to conduct "value-for-money" assessments, through reviewing efficiency and cost-effectiveness.

The following bodies are subject to audit: (1) Those deriving over half their income from the Government; (2) Those with less than half their income from the Government, but subject to audit by written consent.

For public interest, the Chief Executive can issue a written authorisation to the Commissioner of Audit to audit and inspect any person of interest.

In 2018, the Commissioner of Audit attended the 14th Assembly of the Asian Organization of Supreme Audit Institutions (ASOSAI), and the 10th General Assembly of Supreme Audit Institutions of the Community of Portuguese Speaking Countries (OISC/CPLP).

Unitary Police Service

The Unitary Police Service is part of Macao's internal security system, and it is responsible for the coordination of Macao's security affairs. It commands and leads police units that now include the Public Security Police and Judiciary Police.

The Commissioner-General is the head of the Unitary Police Service, and he or she is appointed by the Central People's Government on the nomination of the Chief Executive, to whom he or she reports. However, this shall not affect the supervisory power of the Secretary for Security granted through by-laws.

Macao Customs Service

The Macao Customs Service (Macao Customs) has been established in accordance with the Basic Law of the Macao Special Administrative Region.

It is a public body with administrative autonomy, which is responsible for directing, implementing and supervising customs policies, as well as conducting policing functions such as customs administration and supervision (as specified in Article 1 of Law No. 11/2001).

The head of the Macao Customs, the Director-General, is appointed by the Central People's Government on the nomination of the Chief Executive, to whom he or she reports. However, this shall not affect the supervisory power of the Secretary for Security granted through by-laws (as specified in Clause 6 of Article 50 in the Basic Law of the Macao Special Administrative Region and Article 6 of Law No. 11/2001).

In 2018, the Director-General of the Macao Customs attended the 19th World Customs Organisation Asia/Pacific Regional Heads of Customs Administrations Conference and the 132nd Meeting of the Customs Cooperation Council.

Office of the Government Spokesperson

The Office of the Government Spokesperson is responsible for formulating information strategies and coordinating their implementation; ensuring Government communications are coherent and efficient; and fostering the Government's relations with the media and the public, in accordance with the Government's policies, measures and work.

The Office of the Government Spokesperson reports directly to the Chief Executive and operates according to the Chief Executive's guidelines. The office collaborates with the Government Information Bureau when initiating activities. The office is run by a government spokesperson and a deputy government spokesperson.

Policy Research and Regional Development Bureau

The Policy Research and Regional Development Bureau is a public department of the MSAR Government, directly under the Chief Executive.

The bureau's duties include providing scientific background and information to support decisions made by the Chief Executive, the Government's administration and policy making, Macao's role in national cooperation and development strategies. It also coordinates work on major national strategies and national policies related to Macao and regional development, including exchanges, cooperation and development work with mainland China and other regions; coordinates implementation of major policies according to instructions from the Chief Executive, and facilitates policy implementation and other regional development work.

The Policy Research and Regional Development Bureau was formed by a merger between the Policy Research Office and a working team under the Chief Executive Office that was tasked with handling local issues related to mainland China.

Protocol, Public Relations and External Affairs Office

The Protocol, Public Relations and External Affairs Office was established according to Executive Order No. 233/2012. It is responsible for handling protocol and non-foreign policy related consular affairs for the Government.

Office of the Macao Special Administrative Region in Beijing

The Office of the Macao Special Administrative Region in Beijing reports directly to the Chief Executive, and it represents the MSAR in Beijing with administrative autonomy.

In 2018, the Office of the Macao Special Administrative Region in Beijing promoted Macao's political, economic, cultural and tourism achievements in the implementation of "One country, two systems" through various platforms and activities.

The office also assisted interactions between the Government and mainland China authorities and between enterprises and organisations in Macao and mainland China, in order to seek mutually beneficial opportunities in development and cooperation. It also assisted Macao and mainland China residents with resolving disputes and difficulties arising from investing, living, studying and travelling away from home. During the year, the office received numerous groups from Macao and mainland China organisations, which facilitated related activities of Macao organisations in Beijing.

For example, the office provided a venue for the Macao Wisdom Center to hold the Beijing and Macao Youth Seminar; participated in the 24th China Lanzhou Investment and Trade Fair and the Public Memorial Ceremony for Ancestor of Mankind, Fu Xi; the Sixth Eurasia Commodity and Trade Expo; the Fifth China Science Festival, with the Macao Science Center, and the Sixth China-Eurasia Expo; met with delegations that travelled to Beijing for exchanges regarding information and communication technologies; and arranged for Macao citizens in Beijing to attend the variety show and assembly celebrating the 40th anniversary of the Reform and Opening Up of the Country.

The Office of the Macao Special Administrative Region in Beijing enhanced its communications with Macao students studying in tertiary institutions in mainland China, particularly in Beijing. It organised various activities to deepen the students' understanding of mainland China and foster their sense of belonging; and participated in and provided assistance for activities organised by Macao student organisations in Beijing. The office also organised a Henan exchange tour for Macao students in Beijing; provided a venue for activities for Beijing (College) Macau Students Association; and organised a sharing session on the national CPC and CPPCC meetings, and a Beijing students' Cantopop singing competition.

The number of followers of the office's Weibo account (http://weibo.com/draemp) has increased to more than 860,000 since 2011, while the number of followers of its WeChat account has risen to more than 10,000 since the second half of 2013. Since November 2014, the office's official website has attracted more than 30,000 visitors.

The office made use of the Internet to establish positive interactions with mainland China, Macao and overseas netizens, and showcased Macao's latest developments to the world by widely spreading information about Macao's culture, tourism and news. A platform for effective communication and interaction with the public has been established, to enhance understanding of Macao by local residents and people from

mainland China and overseas, and establish a gateway linking Macao with mainland China.

Macao Economic and Trade Office in Lisbon

The Macao Economic and Trade Office in Lisbon, which represents and supports the MSAR in Portugal and has administrative autonomy, is responsible for safeguarding the MSAR's interests in Portugal.

Regarding regular administrative work, in 2018 the office issued Proof of Life certificates to 350 MSAR Identity Card and Portugal Residence Permit holders who worked or resided in Macao before or after the MSAR was established and are currently residing in Portugal. The office also assisted MSAR residents in Portugal and people who previously worked in Macao with applying for identification documents and verification of working hours.

Regarding promotion of cultural activities, the office was invited to organise a dance team for the Pui Ching Middle School in Macao. The office also participated in the Happy Chinese New Year celebration organised by the Chinese Embassy in Portugal, and assisted the Portugal China Photographers Association with holding its Establishment Ceremony and the First Portugal China Photography Exhibition together with the embassy; and co-organised the New Macao Photography Exhibition and Exchange Meeting with the Photographic Society of Macao.

Regarding student affairs, 345 students registered with the office at the beginning of the 2017/2018 academic year. In 2018, the office held "learning Portuguese with songs" activities for Macao students enrolled in summer Portuguese language classes organised by the Tertiary Education Services Office. The office also arranged museum visits for Macao students; and celebrations and parties for them on major festive occasions.

Regarding reception and exchange activities, in 2018 the office provided assistance to a delegation led by the Vice Chairman of the Chinese People's Political Consultative Conference and former Chief Executive Edmund Ho Hau Wah, and the Secretary for Economy and Finance, during their visit to Portugal. It also assisted with activities organised by delegations of the Macao Trade and Investment Promotion Institute, the Monetary Authority of Macao, and the Permanent Secretariat to the Forum for Economic and Trade Cooperation between China and Portuguese-speaking Countries.

The office assisted and received a delegation to Portugal led by the Commissioner Against Corruption; a delegation from the Legislative Assembly during their visit to the Congress of the Republic of Portugal; a delegation from the Macao Trade and Investment Promotion Institute and the Environmental Protection Bureau, for business exchanges on Pan-Pearl River Delta Cooperation "9+2" in Lisbon; a delegation from the Traditional Chinese Medicine Science and Technology Industrial Park; and a delegation to Lisbon led by the Secretary for Economy and Finance, for participating in the Portugal Young

Entrepreneurs Exchange Tour 2018. The office also organised an innovative youth business exchange session for Macao students.

The office assisted the chairman of the Macao Chamber of Commerce, for the plaque unveiling ceremony of the Belt and Road Business Centre, which was officiated by the Chinese Ambassador to Portugal, Cai Run; co-organised the exhibition "Memories of Moments - Macao and Lusophone African and Asian Regions in Photograph Postcards" with the Cultural Affairs Bureau; provided assistance requested by the Kiang Wu Nursing College of Macau, in signing an Internship Cooperation Agreement with the Hospital da Luz Lisboa; and signing a cooperation agreement with the Lisbon School of Nursing.

The office held a reception to celebrate the 19th anniversary of the establishment of the Macao SAR; this was attended by over 300 people.

Regarding the Union of Portuguese-speaking Capital Cities (UCCLA), in 2017 the office became its Vice Chairman, and in 2018 attended the general meeting and Executive Committee meeting of the UCCLA, and international seminars.

Macao Economic and Trade Office to the European Union

Based in Brussels, the Macao Economic and Trade Office to the European Union represents the MSAR, has administrative autonomy, and assists the Chief Executive with economic and trade liaison and cooperation between the MSAR, the EU and related organisations.

In 2018, the office received a delegation led by the head of the Macao Customs for the Annual General Meeting of the World Customs Organization in Brussels, and provided assistance to various MSAR public department delegations visiting Brussels. The office also followed up regarding and provided assistance to the EU-Macao Cooperation Programme.

The office received a student delegation from the Macau Association of European Youth Exchange; an outstanding high school students delegation from the Tertiary Education Services Office; a delegation from the Institute of European Studies of Macau; a delegation from the Guangdong-Macau Traditional Chinese Medicine Technology Industrial Park; and a delegation from the Kiang Wu Nursing College of Macau.

Also, the office was invited by the Chinese Embassy in the Kingdom of Belgium to jointly organise the Chinese New Year Reception with the embassy, ambassadors of China to the European Union and the Hong Kong Economic and Trade Office (Brussels).

Macao Economic and Trade Office to the World Trade Organization

Based in Geneva, Switzerland, the Macao Economic and Trade Office to the World

Trade Organization (WTO) represents the MSAR, promotes and handles economic and trade relations, and cooperation between the MSAR and WTO members.

In 2018, the office received a delegation led by the Secretary for Administration and Justice for a meeting of the United Nations Human Rights Council (UNHRC); a delegation led by the Secretary for Social Affairs and Culture for the 71st Annual Meeting of the World Health Organization; a delegation led by the Labour Affairs Bureau for the 107th Session of the International Labour Conference (ILO); and a delegation led by the Director of the Legal Affairs Bureau to attend a meeting of the United Nations Human Rights Council (UNHRC).

Macao's Economic and Cultural Office in Taiwan

Macao's Economic and Cultural Office in Taiwan provides comprehensive services for Macao citizens working, studying, travelling, doing business or living in Taiwan; promotes economic, trade, cultural, education, health, social services exchanges and cooperation between Macao and Taiwan; and enhances crime fighting and judicial support.

Municipal Services

The Civic and Municipal Affairs Bureau (IACM) is responsible for coordinating, monitoring and handling affairs concerning environmental hygiene and people's livelihoods; formulating, facilitating and promoting civic education within the scope of duties of the IACM; assisting non-governmental organisations and developing community spirit. It resolves practical problems encountered by Macao residents by receiving and handling their requests and complaints concerning their daily lives.

The IACM comprises an Administration Committee, a Consultative Committee and a Supervisory Committee. The Administration Committee is an executive body that supervises the work of the Civic and Municipal Affairs Bureau and takes all actions required for the bureau's operation and performance of duties. It holds closed meetings. Public sessions are held every month to listen directly to citizens' queries and suggestions. The IACM management also hosts community seminars in various community centres and districts, with local organisations and district residents invited to attend. Eleven community seminars were organised in 2018, and were attended by 133 associations and organisations and 356 residents.

The Municipal Affairs Bureau was officially established on 1 January 2019, according to Law No. 9/2018.

The Macao Foundation

The Macao Foundation's goal is to promote, develop and implement research relating to Macao's cultural, social, economic, educational, scientific, academic and philanthropic activities, including activities aimed at promoting Macao.

Subsidies and Charity Work

In 2018, the Board of Trustees and Executive Committee of the Macao Foundation reviewed 1,126 sponsorship applications, and approved 896 of them. The Executive Committee approved 65 plans for activities during the year, each with funding that exceeded 500,000 patacas. In total, the approved subsidies exceeded 2.368 billion patacas; most (48.18 percent) were given to support cultivation of talented young individuals.

The Macao Foundation cooperated with Kiang Wu Hospital Charitable Association, Caritas Macau, Macau Deaf Association, and the Macao General Neighbourhood Associations Union in launching the second phase of the Brain Health Action Campaign, Caritas Home Care Service, Climbing Ladder Service, "Listen, Talk, & Care" Scheme, and a care programme for elderly people living alone.

The foundation launched poverty alleviation measures in Congjiang county, Guizhou; and cooperated with China Soong Ching Ling Foundation, the Chinese Foundation for Lifeline Express and the China Foundation for Disabled Persons in launching various charity projects in mainland China. The foundation also continued to distribute gift to the needy during the Chinese New Year and the Mid Autumn Festival, benefiting 35,453 people.

Youth Programmes and Scholarships

In 2018, the Macao Foundation completed the first phase of the Thousand Talents Programme, which lasted for three years. A total of 1,291 people were grouped into 44 teams to visit various provinces and cities in mainland China. The programme provided in-depth and multi-faceted field trips, with participation by over 3,300 young Macao students during the three years. The Thousand Talents Programme also launched the School Connection Return Visit Programme. Meanwhile, the "Gathering a Thousand Talents" platform nurtured young talents in Macao.

In 2018, the foundation continued granting scholarships to Macao students. A total of 413 students were awarded tertiary scholarships, while scholarships approved for secondary and primary schools were awarded to a total of 11,021 students, totalling 59.99 million patacas.

For the first time, the Macao Foundation supported needy students from Congjiang

to pursue degree courses in Macao. It also continued approving scholarships for students from countries and regions along the "Belt and Road", mainland China students enrolled in Macao's tertiary education programmes, Portuguese-speaking countries, Namibia and Asia, and students recommended by the Education Forum for Asia Annual Conference in Beijing.

The Macao Foundation also cooperated with the Manpower Development Committee, Education and Youth Affairs Bureau (DSEJ), China Space Foundation, Institute of Social Sciences / Oriental Institute of the University of Lisbon, the University of Coimbra and Chinese Culture University of Taiwan in offering a variety of scholarships, in order to facilitate cultivation of talents and promote exchanges and cooperation among various regions in education and academic arenas. A total of 554 students were awarded scholarships, with a total approved amount of over 21.22 million patacas.

The Macao Foundation continued to launch youth programmes. These aimed to promote the core value of love for the country and for Macao, developing professional skills and broadening their horizons. The foundation cooperated with the Chinese People's Political Consultative Conference, the Liaison Office of the Central People's Government in the Macao SAR, the Union of Associations of Professional Accountants of Macau, Teledifusao de Macau, China Space Foundation, Macao Daily News, General Association of Chinese Students of Macao, and relevant agencies in mainland China in organising various activities.

History and Cultural Affairs

During the year, the Committee of History and Culture of the Macao Foundation launched two phases of the History and Culture Ambassadors Training Programme, with participation by 372 history and culture ambassadors. The committee also organised courses, field trips and subsidy schemes to train history and culture educators and to enhance students' interest in history and culture. The programme enjoyed wide acclaim. In all, 55 field trips were held, and 13 schools were subsidised to implement 36 projects, with total funding of 1.13 million patacas.

Promotion of Culture and Art

In 2018, the Macao Foundation solely organised, or organised together with other organisations, about 102 exhibitions, performances, talks and art appreciation activities. In all, eight local artists participated in the exhibitions through the Macao Artists Promotion Programme, while 17 local art groups participated in the Macao Foundation Citizens' Concert.

The Macao Foundation organised the Succession and Innovation: Macao Performing Arts Talent Exchange Tour to Korea of the China Federation of Literary and Art Circles 2018, the First Chinese-Portuguese Literary Translation Awards, and the award

presentation ceremony of the 23rd Book Review Contest for Secondary School Students in Macao.

Academic Research and Publishing

In 2018, the Macao Foundation organised 10 academic seminars and activities, which included the International Conference on the "Belt and Road" initiative and Macao's Development, co-organised with the Government's Policy Research Office and Grand Thought Think Tank; the Fourth Guangdong-Hong Kong-Macao Symposium; the Fourth Cross Strait, Hong Kong and Macau Philanthropy Symposium; the Opening Symposium of the 30th Anniversary of Macau Studies; the Macao Social Science Workshop; and an ambassadors seminar series.

The Macao Foundation continued compiling *The Macao Volume of the Chinese Folk and Ethnic Culture and Arts Collection*. *Chinese Quyi Chronicle – Macao Chapter, Collection of Chinese Proverbs – Macao Chapter* and the *Collection of Chinese Folk Songs – Macao Chapter* have been granted final approval. The foundation continued preparing for the compilation of *Macau Memories*.

The foundation established the Macau Foundation Collection with the Library of the University of Macau, and edited and published over 26 types of books and journals, with major works including the *Macau Studies Series* and the *Macao Knowledge Series*. The foundation also participated in book fairs held in Taipei, Hong Kong and Shenzhen; and donated books to 53 education institutions in Macao.

Cooperation with Other Organisations

In 2018, the Macao Foundation provided subsidies for the maintenance of the office premises and the rental cost of the quarters for the United Nations International Institute for Software Technology. The foundation also subsidised the Macao Science Center Limited and the Science and Technology Development Fund; subsidised local drivers to take part in local and overseas races through the Sports Bureau.

Office for Personal Data Protection

The Office for Personal Data Protection operates independently under the supervision of the Chief Executive. Its responsibilities are to monitor and coordinate the enforcement and implementation of the Personal Data Protection Act, to formulate confidentiality rules, and to monitor how the act is put into practice.

In 2018, the office received 109 complaints regarding, or reports of, leaks or mishandling of personal data; 39 requests for advice; 605 notifications concerning personal data processing; 25 applications for authorisation of data sharing; and 1,829

legal inquiries. It held or co-organised 28 briefing sessions, 22 seminars and talks, and 57 training sessions (19 classes) on the Personal Data Protection Act. In all, there were 7,416 attendees.

Civil Service System

The general eligibility requirements for civil servants are that they should be permanent residents of the MSAR, aged between 18 and 64; should possess relevant educational qualifications or work experience and be capable of performing the roles required; have no criminal record or other conditions as laid down by law that would render a person inappropriate for the post or job concerned on a full-time or part-time basis; and be of sound health and mind.

Civil servants are recruited either by appointment or on contract terms. The promotion and relocation of civil servants are prescribed by law. Civil servants who breach disciplinary rules may be sanctioned by written warning, fine, suspension, forced retirement or dismissal. Concerning the continued service, appointment and employment of civil servants, under Articles 98 and 99 of the Basic Law of the Macao Special Administrative Region, Macao's serving civil servants, including the police and supporting members of the judiciary, remained in employment after the establishment of the MSAR. They may remain in the civil service and retain their seniority with pay, allowances, benefits and conditions of service no less favourable than before. The Government shall pay such civil servants, or their dependents, all pensions and allowances due to them on terms no less favourable than before, and irrespective of their nationality or place of residence.

The Government may employ Portuguese and other foreign nationals previously employed in the civil service who are permanent residents of the MSAR to serve as public officials in Government departments at all levels, unless otherwise prohibited by the Basic Law of the Macao Special Administrative Region. The Government may also employ Portuguese and other foreign nationals as advisers or to fill professional and technical posts. These persons shall be employed only in their individual capacities and shall be responsible only to the Government.

At the end of 2018, Macao had 31,354 civil servants, of whom 31,084 were recruited locally and 270 from elsewhere. Of this total, 57 percent were male and 43 percent female. There were 21,534 civil servants with tertiary education qualifications, representing 69 percent of the total; 773 of the bureau directors, department heads, division and section chiefs – 95 percent of the total – held tertiary education qualifications.

Civil Servant Training

The objective of establishing the Civil Servant Training Centre under the Public Administration and Civil Service Bureau is to build up a team of high-quality civil servants by consolidating training resources, strengthening coordination and planning, and building a more systematic training programme framework according to the development of civil service ranking and duties. Civil servant training comprises both compulsory and elective courses.

To meet the training requirements for promotion in the Rank and Grade System for Civil Servants, the Government has included training as an important requirement for promotion of civil servants. There are two types of training courses for promotion: elective and compulsory courses.

Improving Public Services

An appraisal of public services has been implemented by commissioning a third-party academic institution to collect public opinion regarding the overall performance of public services provided by the Government. It will serve as a scientific and neutral reference for evaluating the effectiveness of public departments.

Facilitating Inter-departmental Cooperation and Enhancing the One-stop Service Functions of the Integrated Government Services Centre

In 2018, the Government continued enhancing the inter-departmental cooperation mechanism, including through improving inter-departmental work flows, refining laws, developing an electronic information platform and sharing data for certified documents, to provide better, more convenient and better quality one-stop services.

The Identification Bureau and the Civic and Municipal Affairs Bureau (IACM) trialled and prepared for "one-window" services in the Integrated Government Services Centre. These will enable residents to complete the applications for various services at one-stop counters. Plus, it will help departments to effectively utilise human resources and develop standardised procedures for providing public services, to establish a solid foundation for optimising and enhancing service quality.

In 2018, 26 public departments provided more than 300 services in the Integrated Government Services Centre. They handled more than 731,000 cases, representing an increase of 13 percent compared with 2017.

E-Governance

The Government advocates the construction of a smart city with smart governance, making use of innovative technology to further streamline administrative procedures and enhance administrative effectiveness. During the year, the Government continued implementing the Macao SAR Electronic Governance General Plan 2015-2019, to provide solid support to the development of smart governance.

Launching a public consultation on Smart City Strategies and Development of Principal Areas in Macao

Upholding the basic principles of "Putting people first" and "Promoting sustainable city development", the Government formulated consultation documents on Smart City Strategies and Development of Principal Areas in Macao, which included five objectives for development, seven development strategies, 13 key areas and six pilot projects. The public consultation was held from 17 May 2018 to 30 June 2018, to collect public opinions and draw on collective wisdom in creating a comprehensive final proposal for the blueprint of medium- and long-term development of a smart city in Macao.

Continuing to Implement the Macao SAR Electronic Governance Integrated Plan 2015-2019

The Government continues implementing various tasks in the Macao SAR Electronic Governance integrated Plan 2015-2019, with over 40 tasks mostly completed during the year. By the end of 2018, over 80 percent of the plan was implemented, and the remaining tasks would be implemented by 2019.

Optimising Inter-departmental Service Flows and Internal Administrative Management

The Government finished streamlining the services for approving 45 Administrative Permits/Licences scheduled for the first phase. In 2018, the Government selected and completed streamlining of 10 inter-departmental service procedures, including approval of vehicle advertising, Continuing Education Development Plan, pharmacist registration and licence approval and issuance, to enhance the effectiveness of administration and approval, and create a more favourable business environment.

Refining the Government Portal

In January 2018, the Government launched a brand new Government portal with

improved functions, style and layout, to enable users to read and search for information. Also, based on feedback from residents and departments, the portal has been improved by integrating electronic services of and information on various departments, to enrich public service information and enhance the quality of dissemination of government information and services. Take disaster prevention as an example: the portal centralises and unifies the release of information, so that through the portal residents and civil servants can keep up-to-date regarding information on public services during emergencies.

Facilitating E-governance

The Government actively refines laws regarding e-governance. In 2018, the by-law on handling and managing standardisation of electronic platforms, personal accounts and electronic documents was completed. The restructured Government portal, the Government public service mobile application and the Government public service account will be integrated to provide individualised services via a single account.

The Government continues formulating plans on e-public services, and is gradually digitising public services that are frequently used and of especial importance to the public. In 2018, about 15 services were provided in electronic form for the first time, including on social security and dutiable commodities (levies, exemptions from levies, refunds and enquiries regarding excise duty).

Optimising Infrastructure for E-Governance

In 2017, the Government and the Alibaba Group signed a Strategic Cooperation Framework Agreement to Build a Smart City, resulting in the completion of a temporary cloud computing centre in 2018. The Government's cloud computing centre, data resource platform and big data platform are service-oriented, to promote data integration and sharing among public departments and gradually expand the Government's collection of big data, to enhance its application in tourism, transport management, healthcare services and e-governance, in order to tackle issues with data siloing and gradually facilitate the development of Macao into a smart city.

As a core component of smart city construction, the Government consolidates data on the data resource platform, and is forming a centralised Government big data mechanism, to support data sharing.

As the cloud computing centre commences operations, to achieve the strategy of "One Account, One Website", the Government completed the development of a mobile app for an integrated government account, which provides common access to electronic public services, including making appointments for public services, applying for domestic helper quotas and Certificates of Residence, and applying for restaurant licences. It is expected that the integrated account will be expanded to include other services of various public departments in 2019.

Construction of the official cloud computing centre, inside the Pac On Ferry Terminal, commenced in 2018. The core facilities are expected to be completed in 2019, including through construction of the data centre in the ferry Terminal and installation of software and hardware, to prepare for the application of big data in different sectors.

Official Languages

In accordance with Article 9 of the Basic Law of the Macao Special Administrative Region, in addition to the Chinese language, Portuguese may also be used as an official language by the executive authorities, the legislature and the judiciary of the MSAR.

Award of Decorations, Medals and Merit Certificates

To commend individuals and organisations for their outstanding performance – in terms of personal achievements, contributions to the community or service to the MSAR – Chief Executive Edmund Ho in November 2001 promulgated By-law No. 28/2001, which established rules for awarding decorations, medals and merit certificates to them. It stipulated four categories of decorations and merit certificates in the MSAR: the Decoration of Honour, Medal of Merit, Medal for Distinguished Services and Certificate of Merit.

As of 2018, the Chief Executive had signed administrative orders to award decorations of honour, medals and certificates to 18 batches of individuals and entities.

Flag and Emblem of the MSAR

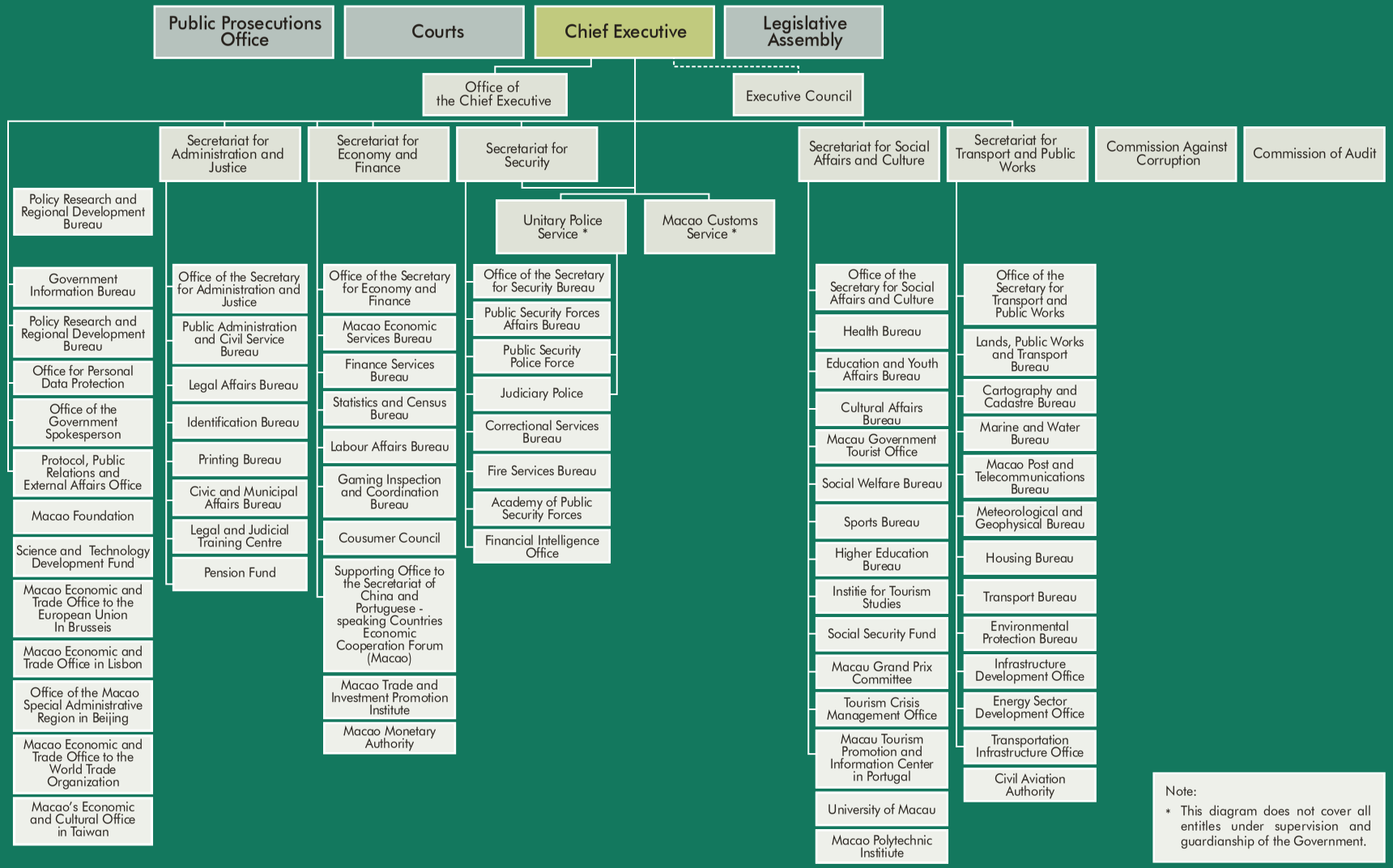
The flag of the MSAR has identical patterns and colours on both sides, with the five stars, lotus flower, bridge and seawater design on the front and back. The rectangular flag has a green background and a 3:2 length-height ratio. A white, three-petal lotus flower is in the centre of the flag. Five golden stars, including a larger one in the middle, form an arch over the lotus flower. Below the lotus flower, a white bridge and seawater are represented as green and white stripes (See Appendix II of Law No. 6/1999).

The Flag of the MSAR

The circular MSAR emblem consists of a narrow green border, a ring of characters on a white background, a green inner circle and elements including stars, a lotus flower, a bridge and seawater. The outer ring of characters lies between the narrow green border and the green inner circle. In the upper half of the ring of characters, 14 Traditional Chinese characters meaning "The Macao Special Administrative Region of the People's Republic of China" are set in a standard traditional font, evenly distributed along the width of the arch. The lower portion of each character points to the centre of the emblem. In the lower half of the ring of characters, the Portuguese word "Macau" is printed in a standard font. The letters are evenly spaced, with the upper portion of each letter pointing to the centre of the emblem. Both the Chinese and Portuguese characters are distributed symmetrically on opposite sides of a vertical axis through the emblem. A white lotus flower with three petals is in the centre of the green inner circle. Above the lotus flower, five golden stars, of which the middle one is largest, radiate from the centre of the emblem. The lower points of the stars are directed at the centre of the emblem. Below the lotus flower, a white bridge and seawater are represented as green and white stripes.

The Emblem of the MSAR

Structure of the Macao SAR Government*



Note:

* This diagram does not cover all entitles under supervision and guardianship of the Government.

幻覺園
(高樓里)
PÁTIO DA ILUSÃO
入便街
RUA DO INTERIOR
賊仔園
AZINHAGA DOS PIRATAS.
屠場前地
LARGO DO MATADOURO
TRAVESSA DA FORMIGA
跛腳梯
ESCADA DO COXO
水桶巷
TRAVESSA DA PIPA
TRAVESSA DAS TRINAS

RELIEF EFFORTS FOR TYPHOON MANGKHUT

FOODMART

On 16 September, Macao was hit by Super Typhoon Mangkhut, which was the most serious natural disaster since Typhoon Hato in 2017. Typhoon signal no.10 was issued and lasted nine hours, which was the longest duration recorded since 1968. As the severe typhoon approached, all government departments, the Civil Protection Action Centre, and all members of the civil protection system joined hands with the public under the leadership of the Chief Executive, to minimise damage and losses through mutual support and efficient response measures.

During the typhoon, the Civil Protection Action Centre received reports regarding 18 people being injured. Five departments under the public security forces evacuated 5,650 residents from flooded low-lying areas.

MACAO YEARBOOK 2019

2

THE LEGAL SYSTEM AND THE JUDICIARY

The Legal System

Macao's legal system is founded on a strong tradition of adherence to the rule of law and judicial independence. Under the principle of "One country, two systems", the Macao Special Administrative Region has retained its pre-Handover legal system based on Continental European law. Judging by the actual situation, Macao's former legal system has come largely intact through the period following the establishment of the MSAR. The rule of law, human rights and judicial independence are fully guaranteed on paper and in practice.

Pre-Handover Laws Remain Largely Unchanged

Almost all the laws, decrees, by-laws and other regulatory documents enacted in Macao before 20 December 1999 remain in effect. Only laws or portions of laws that conflicted with the Basic Law of the Macao Special Administrative Region were repealed. The principle that pre-Handover laws should remain essentially unchanged has been incorporated to ensure Macao's steady and sustained development.

Five resolutions and four annexes regarding the treatment of Macao's original laws were passed in accordance with the Basic Law of the Macao Special Administrative Region at the 12th Session of the Standing Committee of the 9th National People's Congress, which opened on 31 October 1999.

The resolutions resulted in the scrapping of 12 pre-Handover laws, decrees and regulatory documents that were found to conflict with the Basic Law of the Macao Special Administrative Region. Three more laws that contravened the Basic Law of the Macao Special Administrative Region were not retained but remained in effect as references under the principles of the Basic Law of the Macao Special Administrative Region, until replacement laws could be enacted. In total, 18 laws and decrees that were incompatible with the Basic Law of the Macao Special Administrative Region were repealed. The Standing Committee established guidelines for interpreting the nomenclature contained in pre-Handover laws, when used to explain or be made applicable to the laws of the MSAR.

Since the Reunification Law of December 1999 also accepts these guidelines, they have been included as integral parts of the law of the Macao SAR.

Improving the Laws of the Macao SAR

Some of Macao's original laws needed to be revised, in order to conform to the Basic Law of the Macao Special Administrative Region and reflect Macao's new status as a special administrative region. The Legal Statute Research and Adaptation Working Group was established for this purpose in 2001. Comprising legal experts and specialists from the Government and Legislative Assembly, it is studying the laws that are currently

in effect and proposing adaptations. It also recommends measures to ensure harmony and uniformity within the legal system.

In 2013, the Government completed a three-year project on the review and adaptation of the existing laws in Macao as planned. The project involved the revision of the 2,123 existing laws and decrees that were promulgated from 1976 to 19 December 1999. About 40,000 provisions were analysed article by article to verify whether the laws were still in effect and, if not, indicate the reasons the laws were not in effect. In addition, laws and acts that were still in effect were adapted in accordance with the regulations stipulated in the Reunification Law. Recommendations for amendments were made for provisions that were incompatible with existing legislation, as well as inaccurate translations between the Chinese and Portuguese versions of the texts of existing laws and acts.

A list of relevant existing laws and decrees was compiled through active cooperation between different departments. There are 668 items of legislation that remain in effect (108 laws and 560 decrees) and 1,455 items that are no longer in force (232 laws and 1,223 decrees). The review and adaptation of the existing laws of Macao is fundamental work of the legal system of the MSAR. The results of the review serve as an important reference for planning and improving legislation.

Laws of the Macao SAR

The laws presently in force in the Macao SAR are:

1. The Basic Law of the Macao Special Administrative Region;
2. National laws listed in Annex III to the Basic Law of the Macao Special Administrative Region;
3. Laws that were in effect before 20 December 1999 and which have been retained as laws of the Macao SAR by the Standing Committee of the National People's Congress; and
4. Laws enacted by the legislature of the Macao SAR.

The Penal Code, Criminal Procedural Code, Civil Code, Civil Procedural Code and Commercial Code, collectively known as the "Five Codes", form the authoritative framework of Macao's legal system.

National laws shall not be applied in the Macao SAR, except those listed in Annex III to the Basic Law of the Macao Special Administrative Region. Laws listed in Annex III shall be applied locally by way of promulgation or legislation by the Macao SAR. Currently, 11 national laws apply in the Macao SAR.

The Standing Committee of the National People's Congress may add to or delete from the list of laws in Annex III after consulting its Committee for the Basic Law of the Macao Special Administrative Region and the MSAR Government. Only those laws

relating to defence, foreign affairs and other matters outside the limits of the Region's autonomy as specified in the Basic Law are to be listed in Annex III to the Basic Law of the Macao Special Administrative Region.

Fundamental Rights

The Basic Law of the Macao Special Administrative Region safeguards the fundamental rights of the people of Macao. These include: freedom of speech, freedom of the press, freedom of association and assembly, freedom of procession and demonstration, the right to organise and join trade unions and to strike, freedom of religion, freedom to travel, and freedom to enter and leave Macao. Provisions applicable to Macao in the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights and International Labour Conventions also remain in force.

Macao continues to comply with the main international conventions on human rights, including the International Convention on the Elimination of All Forms of Racial Discrimination; the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment; the Convention on the Rights of the Child; and the Convention on the Elimination of All Forms of Discrimination against Women.

Judicial System

Judicial Independence

Under the Basic Law of the Macao Special Administrative Region, the Macao SAR enjoys independent judicial power, including the power of final adjudication. Courts of the Macao SAR exercise independent judicial power. They are subordinate to nothing but the law, and they are not subject to any interference.

Judges of the Macao SAR exercise judicial authority according to the law, and not according to any orders or instructions, except as prescribed in Article 19 of the Basic Law of the Macao Special Administrative Region. Judges are immune from legal action for discharging their judicial functions. The Macao Public Prosecutions Office likewise exercises the procuratorial functions vested in it by law, independently and free from any interference.

Judicial Organs

Under the Basic Law of the Macao Special Administrative Region and the Macao SAR Judicial Organisation Framework Law, Macao has two independent judiciary bodies: one is the court system, which exercises judicial power; the other is the Public Prosecutions Office, which exercises the power of prosecution.

The Courts

Designed in accordance with the Basic Law of the Macao Special Administrative Region and the Macao SAR Judicial Organisation Framework Law, Macao's three-level court system became fully operational following the formal establishment of the Macao SAR. This system's operations totally embody the independent judicial authority and final adjudication authority granted to Macao by the Central People's Government.

Courts are the only institutions vested with judicial functions. They seek to safeguard legally protected rights and interests, stop unlawful practices and settle public and private disputes. Each court hears legal proceedings belonging to its respective jurisdiction. Courts are not subject to interference by any other authority, and they do not abide by any order or instruction. This constitutes the foundation of judicial independence, promotion of justice, guarantee of social stability and protection of civil rights.

The Court of First Instance

With the establishment of the MSAR, two new courts came into being as constituent parts of the Court of First Instance. These new courts, the Lower Court and Administrative Court, obtain their judicial authority from the Basic Law of the Macao Special Administrative Region. The Basic Law of the Macao Special Administrative Region also permits the Lower Court to form specialised tribunals, as required, and to retain the Examining Magistracy created under the former Portuguese administration. The Examining Magistracy therefore functions as part of the Lower Court.

The President of the Court of First Instance is appointed by the Chief Executive from among the local judges of that level of court. The term of office of the President of the Court of First Instance is three years, and consecutive terms may be served. The current president is a judge of the Examining Magistracy. One of the duties of the president is to represent the Court of First Instance when dealing with other government agencies

The Lower Court

The Lower Court currently comprises an administrative centre, three Civil Courts, five Criminal Courts, two Examining Magistracies, one Court for Minor Civil Cases (commonly known as the Small Claims Tribunal), one Labour Tribunal, and one family and juvenile court. Lower Court Information Offices have been established in Criminal Courts, Civil Courts and the Court for Minor Civil Cases, to provide enquiry services for citizens and individuals involved in litigation about law court operations, and answer questions related to judicial documents issued by the courts.

Statutory claims limits of appeal cases of the Lower Court:

1. 50,000 patacas for civil cases regarding civil affairs and labour law;

2. Unlimited claims in criminal cases tried under criminal or labour law, or in cases concerning the educational and social protection system that fall within the jurisdiction of the juvenile judicial system.

As at December 2018, the Lower Court had 34 judges: eight presidents of Collegial Panels, 23 judges of Single-judge Benches, and three judges of the Examining Magistracy.

The Civil Court has the power to hear cases that are civil in nature, and which do not fall under the jurisdiction of other courts. It also hears cases of other types that do not fall under the jurisdiction of other courts or tribunals, including all the related matters and issues raised by such cases.

The Criminal Court has the power to hear criminal cases or misdemeanours that do not fall under the jurisdiction of other courts or tribunals, including all related matters and issues raised by such cases.

The Examining Magistracy hears criminal cases at various stages of investigation. It also conducts preliminary investigations and, based on the available evidence, decides whether a case should be brought to trial. This court also carries out judicial work related to imprisonment and detention.

The Court for Minor Civil Cases, commonly known as the Small Claims Tribunal, deals specifically with litigation concerning monetary debts and consumer rights not exceeding 50,000 patacas in cash value. These include, but are not limited to, consumer credit, management fees, rentals, use of letters of credit, and instalment payments.

As defined by law, the Court for Minor Civil Cases has the power to hear litigation conducted in accordance with the special proceedings for minor cases, which include all the matters and questions raised by such litigation, as long as it does not prejudice other jurisdictions attributed by law.

The Labour Tribunal hears civil cases, minor violations, incidental matters and problems in relation to labour laws, to which the Code of Labour Procedure can be applied.

The Family and Minors Court mainly prepares and hears proceedings related to non-contentious matters between spouses; proceedings concerning property divisions and divorce litigations and the resulting proceedings related to property inventory and custody; litigations regarding the annulment or revocation of marriages; litigations and proceedings related to the provision of maintenance to spouses, ex-spouses and children; incidental matters and problems related to disputes regarding maternity and presumed paternity.

In 2018, the Lower Court Information Office of the Criminal Court, Civil Court and the Court for Minor Civil Cases handled 12,341 enquiries from citizens, involving a total of 12,157 cases.

The Administrative Court

Statutory claims limits of appeal cases of the Administrative Court:

1. 50,000 patacas for administrative litigation and requests concerning administrative disputes;
2. 15,000 patacas for taxation and customs disputes;
3. Unlimited claims for other disputes related to administration, taxation and customs; or for cases involving the assessment of the legality of regulations.

The Administrative Court currently has two judges, who also oversee the office of the Administrative Court and assume the posts defined by Items 2 to 5 of Clause 4 of Article 33 of the Judicial Organisation Framework Law. Each post is occupied for a three-year term and is assumed on a rotation basis, according to descending seniority.

The Court of Second Instance has nine judges, one of whom is appointed President by the Chief Executive. The President of the Court of Second Instance serves a three-year term, and represents the Court of Second Instance when dealing with other government and judicial authorities. He or she may serve consecutive terms. In addition to the routine responsibilities that accompany the positions of judge and president, the president must ensure that the Court of Second Instance functions effectively.

Statutory claims limits of appeal cases of the Court of Second Instance:

1. 1,000,000 patacas for civil lawsuits regarding civil affairs and labour law;
2. 1,000,000 patacas for administrative litigation and requests concerning administrative disputes;
3. 1,000,000 patacas for taxation and customs disputes; and
4. Unlimited claims for criminal cases regarding criminal and labour law; or for cases regarding the education or social protection systems that fall within the jurisdiction of the juvenile judicial system; for legal actions stemming from disputes related to administration, taxation and customs; or for cases involving the assessment of the legality of regulations.

The Court of Final Appeal

The Court of Final Appeal is the highest level of court in Macao.

The Court of Final Appeal has three judges. The President of the Court of Final Appeal is appointed by the Chief Executive from among the serving judges of that level of court, and shall be a Chinese citizen who is a permanent resident of Macao. The president serves three-year terms, which may be consecutive.

The President of the Court of Final Appeal acts as a representative of the Macao

SAR courts and, besides fulfilling the general responsibilities of a judge and president, must ensure that the Court of Final Appeal and the Office of the President of the Court of Final Appeal function effectively.

In 2018, the President of the Court of Final Appeal visited Beijing, Guizhou province and Guangdong province, and attended the China and Portuguese-speaking Countries Supreme Court Presidents Conference.

The Office of the President of the Court of Final Appeal

The Office of the President of the Court of Final Appeal is an autonomous institution that runs its own affairs, administration and finances. The office is responsible for coordinating the affairs of all levels of courts, and offers the courts technical, administrative and financial support. It is headed by the President of the Court of Final Appeal, and comprises the Judicial and Technical Support Department, the Translation Support Division, the Administrative and Financial Department, as well as the Judicial Affairs Division, the Organisation and Information Division, the Human Resources Division, the Finance and Property Division, and the General Services Division.

The Judicial Council

The Judicial Council oversees the management and discipline of judicial officers and judicial support staff.

The Judicial Council comprises the President of the Court of Final Appeal as its Chairman; two prominent members of the community appointed by the Chief Executive on the recommendation of the Independent Committee for the Nomination of Judges; and two judges selected by judicial officers. Members of the Judicial Council serve three-year terms and may be reappointed at the end of their terms.

The Chairman of the Judicial Council shall exercise his or her powers as defined in the General Rules for Judicial Officers and the Internal Regulations and Rules of the Judicial Council.

An administrative office belonging to the Judicial Council assists in the handling of daily affairs.

Appointment of Judges

Judges at all levels of courts in Macao are appointed by the Chief Executive on the recommendation of an independent committee comprising local judges, lawyers and prominent members of the community. They are chosen on the basis of their professional qualifications, and qualified judges of foreign nationality may also be appointed.

The Independent Committee for the Nomination of Judges

The Independent Committee for the Nomination of Judges is composed of seven Macao citizens appointed by the Chief Executive. It comprises one locally serving judge, one lawyer, and five prominent members of the community. All its members participate in the committee and perform their functions in a personal capacity.

The committee functions according to the provisions of the Internal Regulations of the Independent Committee for the Nomination of Judges. A chairman is elected by the members of the committee from among their own ranks and exercises authority according to the committee's internal regulations. The committee also has a secretary to assist in the handling of affairs of all kinds.

Public Prosecutions Office

The Public Prosecutions Office is the only judicial organ in Macao that exercises a prosecutorial function. Its responsibilities include representing the Macao SAR in court, initiating criminal prosecutions, and safeguarding legality and legal rights. Moreover, under specific situations defined in the procedural laws, the Public Prosecutions Office oversees the implementation of the Basic Law of the Macao Special Administrative Region. The Public Prosecutions Office is an autonomous agency and exercises its functions independently and free from any interference. Its independence and autonomy are limited by the criteria of legality and objectivity of the Public Prosecutions Office, and the instructions and guarantees contained in other laws to which its officers must strictly adhere. Furthermore, the organisation, responsibilities and operations of the Public Prosecutions Office are clearly defined by law.

The Prosecutor-General is the head and representative of the Public Prosecutions Office and is appointed by the Central People's Government on the nomination of the Chief Executive. Judicial officers are nominated by the Public Prosecutor-General and appointed by the Chief Executive.

In 2018, the Prosecutor-General attended the 11th China and ASEAN Countries Procurators-General Conference.

Responsibilities and Powers of the Public Prosecutions Office

Article 56 of the Judicial Organisation Framework Law stipulates the responsibilities and powers of the Public Prosecutions Office, including specific tasks involving criminal proceedings, civil proceedings, administrative proceedings and legal affairs. They fall into four areas, as follows:

Leading and monitoring criminal investigations

Criminal investigations are led by the Public Prosecutions Office and implemented by the criminal police authority, such as:

- Authorising the criminal police authority to conduct all investigations not falling under the exclusive powers of judges of the Examining Magistracy, and establishing specific guidelines for doing so;
- Recommending special investigative measures for the Examining Magistracy according to the law;
- Interrogating detained suspects, reviewing legality of detention, and advising on appropriateness of mandatory measures;
- Deciding whether investigations should be initiated in response to crime-related information; and
- Confirming the validity of detention by the criminal policy authority.

Initiating and ensuring criminal proceedings

Upon completion of investigations, the Public Prosecutions Office will decide whether prosecutions should be made, and will carry out its legal duties in the subsequent proceedings. For example, the office will:

- Initiate prosecution when an investigation provides sufficient indication that a criminal offence has committed, and the identity of the offender(s) has been established;
- File cases without prosecution if evidence suggests no criminal activities, innocence of suspects, inability to conduct criminal proceedings according to the law, or lack of indications of a breach of law by the suspects, or occurrence of a crime for which the offender is unknown;
- Apply to the Examining Magistracy, under special circumstances, for suspension of proceedings or filing of cases due to penalty abatement; and
- File appeals to the Court of Second Instance with regard to the decisions, judgements or adjudications made by the judges of the Court of First Instance; provide written replies to the Court of Second Instance regarding appeals initiated by other parties involved in cases; and file appeals to the Court of Final Appeal within legal bounds.

Protecting civil rights

- Protect the legal rights of the MSAR and represent the MSAR in court;
- Safeguard the rights of a distinctly disadvantaged party in a litigation, represent incapacitated, unknown and missing persons;
- Monitor the legality of civil judgements;
- Protect civil rights of minors;
- Protect civil rights of workers; and
- Initiate civil litigation in collective or public interest.

Monitoring enactment of laws

- The Public Prosecutions Office participates in litigation in court to monitor proceedings of civil, criminal and administrative cases with the aim of maintaining legality, as well as to ensure proper enactment of the relevant litigation laws, and that the laws are properly interpreted and enforced.
- Monitor police investigations and ensure investigation procedures are carried out in accordance with the law;
- Defend the Government against administrative proceedings initiated by stakeholders, in order to maintain legality in accordance with the stipulations in the Administrative Procedural Law;
- Initiate judicial appeals against administrative actions by Government administrative officials that evidently contravene the law, and request the court to revoke or invalidate such administrative actions;
- Appoint representatives to attend opening of public tenders for works or service provision to the Government, to ensure that the tendering processes are conducted in a fair and lawful manner;
- Participate in the establishment of contracts in which the MSAR is a stakeholder, in accordance with the law or as requested by the Chief Executive; and
- Perform consultation duties or advise on the legality of specific issues as regulated by the law, or as requested by the Chief Executive or the president of the Legislative Assembly.

Operation of the Public Prosecutions Office

Based on the stipulations of the procedural laws and the judicial tradition, the Public Prosecutions Office of Macao adopts a single organisational structure, with three levels of Public Prosecutors assigned to the Court of Final Appeal, the Court of Second Instance, the Court of First Instance and the Administrative Court. They perform duties on behalf of the Public Prosecutions Office.

To tie in with the operation of the Public Prosecutions Office and complement the performance of duties by Public Prosecutors, the Public Prosecutions Office of Macao has set up offices for the Court of Final Appeal, the Court of Second Instance, the Court of First Instance, the Administrative Court, and the Examining Magistracy under the Court of First Instance. Each office is manned by Public Prosecutors, judicial clerks and administrative officers as appropriate.

Personnel of the Public Prosecutions Office

There are three types of Public Prosecutions Office personnel: magistrates, judicial support personnel, and professional and administrative officers.

Magistrates

According to the Basic Law of the MSAR, the Prosecutor-General shall be a Chinese citizen who is a permanent resident of the MSAR. He or she shall be nominated by the Chief Executive and appointed by the Central People's Government.

Public Prosecutors shall be nominated by the Prosecutor-General and appointed by the Chief Executive.

At present, there are 40 serving magistrates in the Public Prosecutions Office: one Prosecutor-General, nine Assistant Prosecutors-General and 30 Public Prosecutors. Their chief responsibilities include criminal investigations and prosecutions; participating as representatives of the Public Prosecutions Office in all levels of courts; and taking part in criminal, civil and administrative proceedings according to the law.

Judicial support personnel are mainly responsible for providing support to judicial officers in handling cases. They are categorised into supervisor and judicial clerk ranks. General Secretary, Assistant General Secretary and Chief Secretary belong to the supervisor rank, while Chief Clerk, Principle Clerk, Assistant Clerk and Junior Clerk belong to the judicial clerk rank.

Professional and administrative staff includes supervisors, professional staff and assistant staff. Their main responsibilities are to assist the Public Prosecutor-General in commencing work, to provide professional advice, and perform personnel and financial management duties.

The Prosecutors Committee

As an independent body, the Prosecutors Committee is responsible for the evaluation and discipline of prosecutors and judicial support personnel. Evaluations of professional skills and adherence to professional ethical standards of magistrates and judicial clerks are conducted every two years. As required by law, evaluators and disciplinary investigators are assigned by the Public Prosecutors Council, and the results of all evaluations are subject to its examination and confirmation.

Member composition:

- The Prosecutor-General, who acts as President ex officio;
- A representative of the Assistant Prosecutor-Generals and a representative of the public prosecutors, both elected by voting; and
- Two members of the community, appointed by the Chief Executive.

Legal Aid

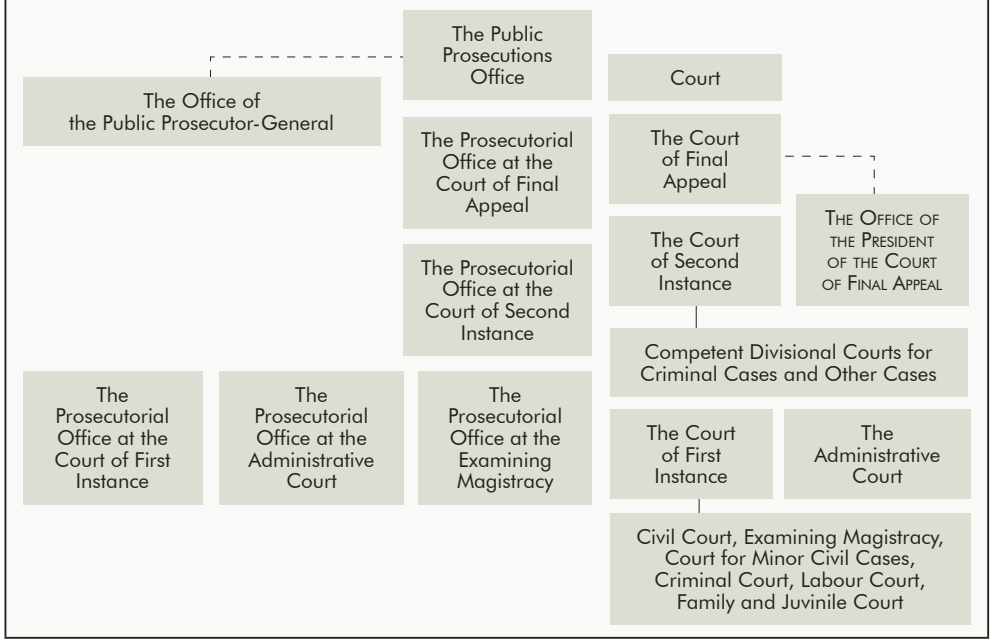
The Basic Law of the Macao Special Administrative Region provides that every resident of Macao shall have certain inalienable legal rights. These include the right to appeal to the law, the right to initiate a court action, the right to seek assistance from a lawyer in protecting his or her legitimate rights and interests, and the right to receive legal aid. Since not all residents are financially capable of paying court costs and lawyers' fees, the law also provides a legal aid system that assists residents who are less financially able to fully exercise their legal rights.

According to the General System of Legal Aid, legal aid includes the exemption of advance payment; exemption of litigation fees; appointment of a lawyer in the court and the payment of lawyers' fees.

All residents of Macao, including temporary residents, can apply for legal aid if they meet certain legal requirements. Legal aid can be applied for at any stage of a legal action.

The Legal Aid Committee has the right to make decisions on approval of legal aid and other relevant matters according to the law.

Organisational Structure of the MSAR Judiciary



Training of Legal and Judicial Officers

Faculty of Law of the University of Macau

Since its foundation in 1988, the Faculty of Law of the University of Macau has nurtured many local legal professionals. Most of Macao's incumbent judicial officers either graduated from the faculty or have enrolled in its programmes. The majority of Macao's Chinese judges, public prosecutors and lawyers are graduates of the university's Faculty of Law.

The faculty offers Bachelor of Law programmes in Portuguese, Bachelor of Law day and evening programmes in Chinese, and a five-year Bachelor of Law programme taught bilingually in Chinese and Portuguese; these essentially follow the Romano-Germanic education system. In addition to the Master of Law Programmes in Portuguese, a Master of Law Programme in Chinese is offered. A Master of Law programme in International Business Law and Master of Law programmes in European Union Law/ International Law and Comparative Law, Master of Law programme in legal translation and a Master of Law programme in Macao legal practice have been recently introduced, and taught in English. Postgraduate courses including Introduction to Macao Law, Legal Practice and Legal Terminology are also available. Doctor of Philosophy (Law) programmes in Chinese, Portuguese and English commenced in 2007.

The Bachelor of Law programme (taught bilingually in Chinese and Portuguese) underwent a curriculum reform during the 2017/2018 academic year, to refine the curriculum content and raise the research capability of the students. To cultivate legal professionals who are bilingual in Chinese and Portuguese, students who meet the Portuguese language proficiency requirement will be admitted to a university in Portugal to polish their Portuguese language skills in their second year of study.

During the 2018/2019 academic year, 582 students were enrolled in undergraduate law programmes, 349 graduate students were studying for master's degree in law programmes, 38 students were enrolled in postgraduate certificate programmes, and 88 students were studying for doctorate law programmes.

Faculty of Law of the Macau University of Science and Technology

Established in 2000, the Faculty of Law of the Macau University of Science and Technology offers programmes leading to a Bachelor of Law degree, a Master of Law degree and a Doctor of Law degree.

The Bachelor of Law degree programme spans four years, the Master of Law degree programme two years, and the Doctor of Law degree programme three years.

The Bachelor of Law degree curriculum covers Macao's legal system, mainland China law, major legal systems worldwide, and international law. Master's degree programmes include a Master of Law degree programme (covering five specialised

subjects: jurisprudence, comparative law, constitutional and administrative law, civil and commercial law, and criminal law), a Juris Master programme, a Master of International Economic Commercial Law degree programme, a Master of Criminal Justice degree programme, and a Master of International Arbitration programme. The doctorate law degree programme currently offers doctorates in nine areas of study: jurisprudence theory, legal history, civil and commercial law, criminal law, constitutional law and administrative law, economic law, international law, procedural law, and environmental protection and resources conservation law.

During the 2018/2019 academic year, a total of 753 students were enrolled in Bachelor of Law degree programmes, of whom 688 came from overseas and 65 were local residents. There were 367 students working towards a Master of Law degree, and 132 towards a Doctor of Law degree.

Legal and Judicial Training Centre

The Legal and Judicial Training Centre is an autonomous public institution that offers vocational training courses in judicature and law.

The training centre is responsible for induction training for judicial officers of the Public Prosecutions Office and the courts. It is also responsible for offering continued training to judicial officers.

According to the law, all judges and public prosecutors must complete a two-year training course and practical training provided by the training centre. Since the establishment of the MSAR, the centre has completed five training sessions for 50 local judicial officers (28 judges and 22 public prosecutors) for the MSAR.

As for continued training courses for judges and public prosecutors, the centre organised joint programmes with the Department of Treaty and Law of the Ministry of Foreign Affairs of China, the National Judges College, the National Prosecutors College of China, the Centre for Judicial Studies of Portugal and the National School for Magistrates of France. The centre also hosted training programmes featuring legal experts and other professionals in Macao as major speakers.

The training centre launched three one-year judicial clerk induction programmes, from which a total of 239 participants have been appointed as judicial clerks in the courts or the Public Prosecutions Office. To fill 58 vacancies for judicial clerks of courts and the Public Prosecutions Office, the fourth induction programme was held from February 2018 to February 2019; there were 70 students enrolled. It was estimated that there would be 41 vacancies for judicial clerks of the two judicial bodies by 2021. To fill these vacancies, the fifth judicial clerk induction programme is being held from November 2018 to November 2019, with 50 students enrolled.

As per requests from the Office of the President of the Court of Final Appeal and

the Office of the Public Prosecutor-General, since 2007 the centre has completed 19 promotion preparation programmes for judicial support staff of the courts or the Public Prosecutions Office. Promotion Preparation Programmes for Principal Clerks of the Public Prosecution's Office and Assistant Clerks of Court were organised during 2018.

To complement the examinations organised by the Legal Affairs Bureau, in 2017 the Training Centre organised an 18-month internship programme for registry officers and notaries. Also in 2018, the Training Centre organised an induction training programme for private notaries.

Another important task of the training centre is to provide training on general legal knowledge for civil servants. In 2018, the centre organised numerous training activities to promote the skills of public administrators and foster the development of the MSAR. The courses covered legal drafting, MSAR law consultancy training, in-depth study of international laws, and negotiation and mediation. The centre has continued to organise training for public administrators covering the Basic Law, civil service laws and regulations, disciplinary proceedings, administrative procedures, laws on procurement and provision of services, and public financial management systems.

Moreover, the centre continued to organise training courses for trainee lawyers, at the request of the Macau Lawyers Association.

Lawyers and the Macau Lawyers Association

Lawyers fulfil a vital role in Macao's legal and judicial system, especially with regard to ensuring the ability of residents to seek legal recourse and have access to the courts. No resident should be denied access to the courts due to financial difficulty or any other reason. Lawyers have an obligation to help residents exercise the right to litigate, and they are obliged to accept court-appointed legal aid cases.

The Lawyers' Statutes (Decree-Law No. 31/91/M) stipulate that the Macau Lawyers Association is a public corporate institute representing the legal profession. Its professional ethics and practices are defined by the Association's regulations.

The Macau Lawyers Association is composed of a Presidency, Executive Committee, Supervisory Committee and Higher Council of Lawyers. The Higher Council of Lawyers exercises exclusive disciplinary jurisdiction over lawyers and trainee lawyers, and is responsible for monitoring their discipline, professional ethics, and moral ethics.

Individuals who wish to practise law in Macao and who hold a Bachelor of Law degree from the University of Macau must register with the Macau Lawyers Association and undergo a period of practical training of no less than 18 months. Trainee lawyers must register as practising lawyers within 60 days of internship completion.

In line with relevant regulations, Bachelor of Law degree holders who graduated

from a university recognised by Macao and wish to become practising lawyers in Macao must take certain orientation courses. After completing the courses, such persons must undergo an internship before they may practise law.

At the end of 2018, there were 400 practising lawyers and 133 trainee lawyers in Macao.

The Legal Affairs Bureau

The Legal Affairs Bureau is a public department of the MSAR. It conducts research into judicial policy and centralised legislative coordination, and provides technical support; implements policies relating to legal drafting and translation, international and regional legal affairs, and promotion of laws; coordinates and supports registries, notary public offices and private notaries; and supports the operation of the general legal aid system.

The Legal Affairs Bureau is also responsible for providing technical, logistical and administrative assistance to the Law Reform Consultative Committee, the Legal and Judicial Training Centre, the Legal Aid Committee, the Treasury for Legal Affairs, the Registration and Notary Committee, the Committee for the Protection of Victims of Violence, and other organisations. It is also responsible for monitoring the legality of the establishment and continuance of voluntary arbitration institutions, managing the database of legal officers, and performing other duties as assigned by law.

The Legal Affairs Bureau also supervises registries and notary public offices, including the Real Estate Registry, the Commercial and Movable Goods Registry, the Civil Registry and the notary public offices.

Real Estate Registry

The Real Estate Registry is responsible for the registration of property in Macao, and publishing the legal status of real estate through the registration of acquisitions, mortgages and transfers, to ensure the security of transactions.

Commercial and Movable Goods Registry

The Commercial and Movable Goods Registry is responsible for the registration of businesses, motor vehicles and aircraft in Macao, and publishing the legal status of companies and their owners, motor vehicles and aircraft, to provide legal protection and security for transactions.

Civil Registry

The Civil Registry is responsible for the civil registration of births, parentage, adoption and custody, marriages, marriage agreements, deaths and the legal deaths of missing persons, and for issuing relevant certificates.

Notary Public Offices

The three notary public office – the First Office of the Notary Public, the Second Office of the Notary Public and the Islands Office of the Notary Public – are authorised to act as notaries, especially in the verification of signatures and documents, and the issuing of certificates, warranties, letters of authorisation, notarial testaments and notarial deeds.

Private Notaries

Macao's Private Notary system was established to undertake part of the work previously handled by the Notary Public Offices. The Legal Affairs Bureau is responsible for coordinating and supervising licensed private notaries. At the end of 2018, there were 53 private notaries in Macao.

行穩致遠 2018

紀念澳門基本法頒佈二十五周年晚會

THE 25TH ANNIVERSARY OF THE PROMULGATION OF THE BASIC LAW

To celebrate the 25th anniversary of the promulgation of the Basic Law of the Macao Special Administrative Region, the Macao Basic Law Promotion Association, the Legal Affairs Bureau, the Civic and Municipal Affairs Bureau, and the Education and Youth Affairs Bureau organised a series of activities, including academic seminars, training programmes, a legal quiz and campus publicity programmes, to promote the Basic Law through diverse channels.

The Basic Law of the Macao Special Administrative Region was promulgated on 31 March 1993. With the establishment of the Macao Special Administrative Region on 20 December 1999, the Basic Law of Macao officially came into force.

"邁向澳門'一國兩制'實踐新征程"—
紀念澳門特別行政區基本法頒佈25周年學術研討會
2018/3/22
協辦單位:
澳門大學法學院
澳門科技大學法學院
澳門理工學院一國兩制研究
贊助單位:

MACAO YEARBOOK 2019

3

EXTERNAL RELATIONS

The Central People's Government is responsible for the foreign affairs of the Macao SAR. When the MSAR was established, the Central People's Government set up the Office of the Commissioner of the Ministry of Foreign Affairs of the People's Republic of China in the Macao Special Administrative Region, to handle foreign affairs issues related to Macao.

The Central People's Government also authorised Macao to manage certain external affairs in accordance with the regulatory framework stipulated in Chapter 7 of the Macao Basic Law.

As a non-sovereign region, Macao enjoys wide-ranging and close relationships with most countries and regions throughout the world. This is an advantage for Macao in its longstanding, extensive, direct, friendly and beneficial relationships, particularly those with European Union (EU) member states and Romance language-speaking countries.

To facilitate Macao's further development, the Government frequently conducts external activities and makes great efforts to foster interactions and collaboration with countries and regions around the world, in areas such as economics, trade and culture.

Mutual Exemption from Visa Requirements

One of the Government's major tasks is to promote the Macao Passport and other travel permits. With the Central People's Government's support and assistance, it has made substantial progress in negotiating with other countries and regions to grant visa-free access to holders of Macao Passports and travel permits. By March 2019, a total of 141 countries and regions had agreed to grant visa-free access or visas on arrival to holders of Macao SAR Passports (see Appendix 9, "Visa-free Access for Holders of Macao SAR Passports and Travel Permits", for more details). In addition, 14 countries have agreed to grant visa-free access or visas on arrival to holders of MSAR travel permits.

The Government also grants visa-free access to nationals or citizens of 79 countries and regions (see Appendix 10, "Countries/Territories Granted Visa-free Access by the Macao SAR", for more details). Nationals or citizens of these countries and territories who are in possession of valid passports can stay in Macao for periods of 14-90 days. Visitors from certain countries, such as the United Kingdom, may be given permission to stay for up to six months.

Consulates in Macao

Under the provisions of Article 142 of the Macao Basic Law, the establishment of

foreign consular and other official or semi-official missions in the MSAR is subject to approval by the Central People's Government. Consular and other official missions established in Macao before the Handover by states with formal diplomatic relations with the People's Republic of China were allowed to remain. According to individual circumstances, consular and other official missions established in Macao by states with no formal diplomatic relations with the People's Republic of China were allowed either to remain, or to change to semi-official missions. States not recognised by the People's Republic of China were only allowed to establish non-governmental institutions in the MSAR.

By the end of December 2018, a total of 90 countries had reached agreements with the Macao SAR on establishing consular services in Macao or had extended the duties of their consulates general in Hong Kong to include Macao, or had empowered them to execute consular duties in Macao (see Appendix 8, "Countries Exercising Consular Jurisdiction in the Macao SAR").

Angola, Mozambique, the Philippines and Portugal are the four countries (in alphabetical order, similarly hereinafter) that have established a consulate general in Macao.

Fifty-seven other countries have assigned their consulates general in Hong Kong to cover consular affairs in Macao, including several countries that may execute consular duties in Macao. These are: Argentina, Australia, Austria, Bangladesh, Belgium, Brazil, Brunei, Cambodia, Canada, Chile, Colombia, the Czech Republic, Egypt, the European Union, Finland, France, Germany, Greece, Hungary, India, Indonesia, Iran, Ireland, Israel, Italy, Japan, Kazakhstan, Korea, the State of Kuwait, Laos, Malaysia, Mexico, Mongolia, Myanmar, Nepal, the Netherlands, New Zealand, Nigeria, Pakistan, Peru, Poland, Qatar, Romania, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Thailand, Turkey, the United Kingdom, the United States, Venezuela, Vietnam and Zimbabwe. (Note: Antigua, Barbuda, Samoa, the Bahamas and Denmark have not yet established consulates general in Hong Kong, but their agreements with China on provision or expansion of consulate services are still in force.)

Nine countries have appointed honorary consuls to Macao: Cape Verde, Estonia, Grenada, Guinea, Guinea-Bissau, Mali, Mozambique, Nigeria, Peru and the United Kingdom.

Twenty countries with honorary consulates in Hong Kong cover or extend services to Macao: Cyprus, Eritrea, Ethiopia, Hungary, Iceland, Kenya, Lithuania, Maldives, Morocco, Namibia, Norway, Rwanda, San Marino, Seychelles, Slovakia, Slovenia, Sri Lanka, Sudan, Tanzania and Uruguay.

International Organisations and Multilateral Treaties

As a modern international city, Macao participates in various international organisations and multilateral treaties. This helps it to maintain its unique position in the world and to develop external relations in areas such as economics, trade, finance, aviation, transportation, culture, education, environmental protection and health.

International Organisations

The principles contained in Articles 136 and 137 of the Macao Basic Law regarding the appropriate participation of Macao in international activities form the legal bases on which the Central People's Government and the MSAR Government handle issues relating to Macao's participation in international activities.

Since the establishment of the MSAR, the Central People's Government has assisted and supported Macao's participation in relevant international conferences and activities in accordance with the Macao Basic Law, and has also shown concern for and safeguarded Macao's rights and interests in these international organisations.

The Government participates in intergovernmental organisations in one of two ways: 1. As a full member of the organisation concerned, with the identity of a separate region that undertakes international obligations and enjoys corresponding rights and interests; or 2. As an associate member (or affiliate member) or member without voting rights that speaks as "Macao, China". In such circumstances, Macao undertakes its international obligations and enjoys corresponding rights and interests, subject to certain conditions.

In addition, Macao attends meetings of other intergovernmental organisations as a delegation member of the Central People's Government. Its delegates may express opinions on matters relevant to the MSAR in the name of "Macao, China". Macao may also attend non-governmental, regional and specialist meetings of international organisations.

Following the establishment of the MSAR, Macao's participation in international activities of non-governmental organisations should fall within the sphere of Macao's autonomous affairs. Hence, such participation is left to Macao's own discretion, and according to its needs.

During 2018, Macao attended several international conferences as a member of Central People's Government delegations, including:

- The Third Universal Periodic Review by the United Nations Human Rights Council;
- The 41st Session of the Codex Alimentarius Commission;
- The 107th Session of the International Labour Conference;

- The Third Session of the Intergovernmental Group of Experts on Consumer Protection Law and Policy;
- Asia Pacific Ministerial Conference on Civil Aviation;
- Universal Postal Union Extraordinary Congress 2018; and
- The International Telecommunication Union Plenipotentiary Conference 2018.

Macao also attended:

- The 13th Annual Conference of the International Academy of CIO;
- The 25th Meeting of the International Civil Aviation Organization (ICAO) Public Key Directory;
- The 22nd EU-Macao Joint Committee Meeting;
- The Fifth Meeting of Inclusive Framework on Base Erosion and Profit Shifting;
- The Sixth Session of the Committee on Statistics, UNESCAP;
- The World Investment Forum 2018;
- The 2018 Traditional Medicine International Cooperation Forum (Macao);
- Annual events of the International Monetary Fund (IMF) and the World Bank Group (WB);
- The 2018 General Assembly of the International Organization for Standardization (ISO);
- The 50th Session of the ESCAP/ World Meteorological Organization (WMO) Typhoon Committee; and
- The 72nd Session of the Marine Environment Protection Committee.

International Treaties

Article 138 of the Basic Law stipulates the applicability of multilateral treaties to Macao; and this forms the legal and regulatory framework for the Central People's Government and MSAR Government to implement multinational treaties applicable to Macao.

As of 2018, 628 multilateral treaties were applicable to Macao: 60 treaties on foreign affairs and defence; 15 on civil aviation; 10 on customs; 12 on drugs; eight on economics and finance; seven on education, science, technology, culture and sport; 26 on the environment and conservation; six on health; 17 on human rights; nine on intellectual property; 14 on international crime; two on international trade; 36 on labour; 339 on maritime affairs; 10 on private international law; three on road traffic; nine on postal affairs and telecommunications; and 45 on the establishment of international governmental organisations (see Appendix 11, "Multilateral Treaties Applicable to the Macao SAR", for details).

In 2018, the Law Reform and International Law Bureau commented on 11 international treaties or amendments. The bureau also received notifications from the Central People's Government regarding 34 international instruments applicable to the MSAR: eight multilateral treaties and 26 UN Security Council resolutions and/or sanction lists.

The Law Reform and International Law Bureau announced 52 international documents: 18 multilateral treaties, five bilateral treaties and 29 UN Security Council resolutions (with seven instruments translated into Portuguese). In addition, the Law Reform and International Law Bureau submitted regular compliance reports or follow-up reports on human right treaties applicable to Macao to the United Nations human rights treaty bodies and questionnaire responses to international organisations. It also provided information to other departments, assisting them in writing the reports required by the international organisations.

The Law Reform and International Law Bureau sent delegates to attend or take part in five international conferences and activities.

Macao and the European Union

Official relations between Macao and the EU have been steadily built on the foundation of the Macao-EC Trade and Cooperation Agreement signed in 1992. Macao has maintained good relations with the EU in terms of economic and trade affairs ever since the establishment of the MSAR. The Macao Economic and Trade Office at the Brussels headquarters of the EU seeks to enhance Macao's relationship with the organisation.

Under their agreement, Macao and the EU may cooperate in industry, investment, science and technology, energy, information, training and other areas. A joint committee established by both parties holds an annual meeting to review the implementation of the agreement and discuss its future development. The meeting venue alternates between Macao and Brussels, and 22 such sessions have been held to date.

Cooperative projects between EU and Macao included: Training for the Tourism Industry (1999-2001); European Programme Scheme (1999-2001); Services Development Programme (1999-2001); Asia-Invest Programme (2001 and 2002); EU-Macao Legal Cooperation Programme: Phase One (2002-2007), Phase Two (2010-2013) and Phase Three (2016-2019); Immigration Services Training Programme (2006-2007); EU Business Information Cooperative Programme (2009-2012); Chinese-Portuguese Translation and Interpretation Training Programme (2010-2014); the EU Academic Programme (2012-2016); Chinese-Portuguese Translation and Interpretation Training Cooperation (2016-2020); and Horizon 2020 (2016-2020).

Other joint projects inaugurated by Macao and the EU were: the Macao-Europe Centre for Advanced Tourism Studies (ME-CATS) and the Institute of European Studies of Macao.

The Business Cooperation Centre of Enterprise Europe Network Central China Macao Office (EENCC Macao Office) has provided useful information about Europe to SMEs in Macao, Hong Kong, the Pearl River Delta and neighbouring regions.

In 2018, the total value of Macao's exports to the EU was 209 million patacas, representing an increase of 10.6 percent over 2017; while imports from the EU were worth 22.53 billion patacas, 18.01 percent more than in 2017.

Visa-free Access

Currently, MSAR Passport holders are allowed to remain for 90 days or six months without a visa in the 28 EU member countries. These countries are: Denmark, Belgium, Lithuania, Spain, Hungary, Greece, Croatia, Poland, Finland, France, Latvia, the United Kingdom, Bulgaria, Ireland, Czech Republic, the Netherlands, Slovenia, Slovakia, Austria, Italy, Cyprus, Estonia, Sweden, Portugal, Germany, Luxembourg, Romania and Malta.

To enhance relations with EU member countries and increase economic and trade relations with them, the first- and second-term Chief Executive Edmund Ho Hau Wah led delegations to visit Portugal, France, Belgium and Germany in 2000, 2001 and 2004. During 2006, Edmund Ho Hau Wah led a delegation to Portugal and Belgium, including the EU headquarters in Brussels. In 2012, Chief Executive Chui Sai On led a delegation to visit the EU.

Macao and Portugal

Macao has remained on good terms with Portugal since the establishment of the MSAR. It has established the Macao Economic and Trade Office in Lisbon, further strengthening the relationship between Portugal and Macao.

The Agreement on the Mutual Encouragement and Protection of Investment between the Macao Special Administrative Region of the People's Republic of China and the Portuguese Republic, the Cooperation Framework Agreement between the Macao Special Administrative Region of the People's Republic of China and the Portuguese Republic, as well as the series of specific cooperation protocols with Portugal, covering administration and justice, medicine and hygiene, science and technology, sports and auditing have enhanced cooperation and communication between the two sides and promoted greater cooperation between Macao and Portugal in the areas of economics, finance, science, technology, culture, internal public security and justice.

In May 2014, Portuguese President Anibal Cavaco Silva visited Macao and signed the Amendment of the Cooperation Framework Agreement between the Macao Special Administrative Region of the People's Republic of China and the Portuguese Republic, to further enhance the mechanism for cooperation between the two places by changing the biennial bilateral meeting to an annual one.

In 2010, Chief Executive Chui Sai On led a delegation to Portugal, to deepen the friendship as well as trade, economic, social and cultural cooperation between Macao and Portugal. In September 2016, Chief Executive Chui Sai On led a delegation to Portugal. The two sides reached a consensus on strengthening economic and language training cooperation.

Macao's imports from Portugal during 2018 totalled 329 million patacas, representing an increase of 23.2 percent over the 2017 figure. Its exports to Portugal increased by 5,767.4.9 percent from 2017, to 24.25 million patacas.

Macao and the United States

Since the Handover, interactions and cooperation between Macao and the United States have strengthened in areas such as combating illegal transhipment, anti-piracy measures, law enforcement training and anti-terrorism measures. Both sides have expressed readiness to establish a good relationship, and to extend bilateral cooperation to promote trade and investment. The US Consulate General for Hong Kong and Macao encourages US officials to visit Macao in order to further consolidate ties between the two parties.

The total value of Macao's gross exports during 2018 was 12.19 billion patacas; of these, gross exports to the United States accounted for 129 million patacas, 30.6 percent less than in 2017. Macao's total imports from the United States were valued at 3.67 billion patacas, representing an increase of 10.6 percent over 2016.

Three US-based companies were granted casino concessions or sub-concessions after the liberalisation of the gaming industry.

Macao and Portuguese-speaking Countries

Eight Portuguese-speaking countries – Portugal, Brazil, Cape Verde, Sao Tome and Principe, Guinea-Bissau, Angola, Mozambique and Timor-Leste – formed the Community of Portuguese-speaking Countries in Lisbon, the capital of Portugal, in 1996. Besides its close links with Portugal, Macao also has traditional and special relationships with other members of the community. It is the only Chinese city capable of developing special relationships with the Portuguese-speaking countries on four continents. As a result, Macao has the unique advantage of serving as an economic and trading bridge between China and Portuguese-speaking countries.

In the 12th and 13th Five-Year Plans, mainland China expressed explicit support for Macao's establishment of "One Centre, One Platform", the latter of which refers to a business and trade cooperation and services platform for China and Portuguese-speaking countries.

The Central People's Government also attaches importance to this role. It arranged for Macao to host the Ministerial Conference of the Forum for Economic and Trade

Cooperation between China and Portuguese-speaking Countries. The first forum was held in October 2003. China and seven Portuguese-speaking countries – Angola, Brazil, Cape Verde, Guinea-Bissau, Mozambique, Portugal and Timor-Leste – sent government and business delegations to this major event. During the forum, ministerial-level officials of China and seven Portuguese-speaking countries signed the Economic and Trade Cooperation Action Plan. They agreed to establish a permanent secretariat for the forum in Macao.

In September 2006, the Second Ministerial Meeting of the Forum for Economic and Trade Co-operation between China and Portuguese-speaking Countries was held in Macao, with the theme "Deepening cooperation and developing together". Ministerial-level officials from China and seven Portuguese-speaking countries adopted and signed the Economic and Trade Cooperation Action Plan 2007-2009. During the Second Ministerial Meeting, the Meeting of Entrepreneurs for Commercial and Economic Cooperation between China and Portuguese-speaking Countries, bilateral meetings between China and the Portuguese-speaking countries, and an exhibition on the forum's achievements were held.

In November 2010, the third Ministerial Conference of the Forum for Economic and Trade Cooperation between China and Portuguese-speaking Countries was held in Macao under the theme of "Advance Common Development Through Diversified Cooperation". Premier Wen Jiabao attended the event and delivered a keynote speech. Attendees representing different countries jointly signed the 2010-2013 Action Plan on Trade and Economic Cooperation at the conference.

In November 2013, the fourth Ministerial Conference of the Forum for Economic and Trade Cooperation between China and the Portuguese-speaking Countries was held in Macao under the theme of "New Cycle, New Opportunities". Attendees representing different countries jointly signed the 2014-2016 Action Plan for Economic and Trade Cooperation at the conference. The action plan further reiterates the importance of Macao as a platform; proposes a professional development exhibition in Macao targeting markets in Portuguese-speaking countries; explores the establishment of a commercial and trade service centre in Macao for small and medium enterprises from the countries that attended the forum, as well as a food trading and distribution centre for Portuguese-speaking countries; and promotes Macao as a commercial arbitration centre for handling disputes between enterprises in China and Portuguese-speaking countries.

In October 2016, the fifth Ministerial Conference of the Forum for Economic and Trade Cooperation between China and the Portuguese-speaking Countries was held in Macao, with the theme "Working towards Stronger Sino-Portuguese-speaking Countries' Trade and Economic Relations – Combining Efforts, Jointly Building a Platform, Sharing Fruits of Development". Premier Li Keqiang attended the event, and delivered a keynote speech in which he announced 18 new measures for strengthening and deepening the economic and trade cooperation between China and Portuguese-speaking countries. Attendees representing different countries jointly signed the Strategic Plan for Economic and Trade Co-operation (2017-2019) and the Memorandum of Understanding on Promoting Co-operation in Production Capacity.

To strengthen sporting exchanges between Macao and Portuguese-speaking countries, Macao hosted the First Lusofonia Games in October 2006.

The first- and second-term Chief Executive, Edmund Ho Hau Wah, paid official visits to Mozambique and Brazil.

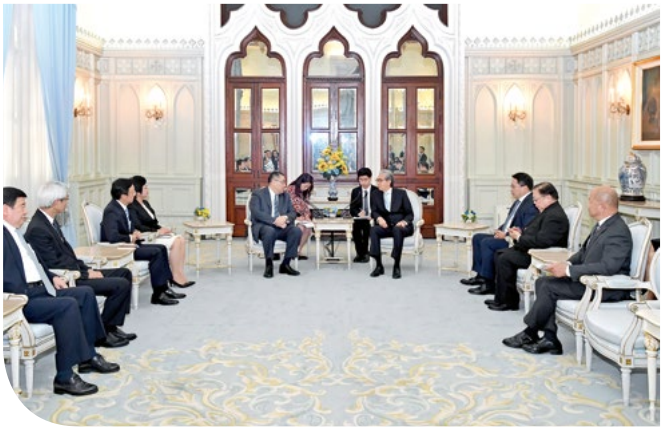
During 2018, the value of Macao's exports to Portuguese-speaking countries was 24.56 million patacas, while imports from Portuguese-speaking countries were worth 790 million patacas.

The Government also remained committed to strengthening its relations with East Asia, particularly Southeast Asian countries, for the enhancement of cooperation in areas such as the economy and tourism. The first- and second-term Chief Executive, Edmund Ho Hau Wah, led delegations to countries including Singapore, Japan, Korea, Vietnam, Thailand, and Malaysia. In 2011, the incumbent Chief Executive, Chui Sai On, led a delegation for an official visit to Singapore.

In 2018, Chief Executive Chui Sai On led a delegation to Cambodia and Thailand. The visits helped Macao to leverage its unique advantages in supporting the "Belt and Road" initiative, as well as to boost Macao's adequate economic diversification, and foster youth development.

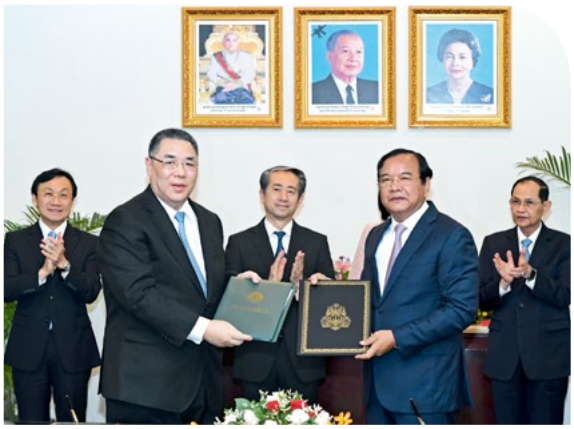
CHIEF EXECUTIVE'S VISITS TO CAMBODIA AND THAILAND

MAC 10



澳門特別行政區政府招待晚宴
Dinner Reception hosted by Macao SAR Government
2018.05.10

TMIF
2018傳統醫藥國際發展論壇(泰國)
2018 Traditional Medicine International Development Forum (Thailand)
泰國・曼谷 Bangkok, Thailand



Chief Executive Chui Sai On led a delegation to Phnom Penh in Cambodia and Bangkok in Thailand from 7 to 11 May, to meet with leaders and senior officials of the two countries, and participated in various activities held by the MSAR Government.

The Chief Executive described the visits as successful and fruitful. Through the visits, Macao could leverage its unique advantages in supporting the "Belt and Road" initiative, whilst promoting sustainable diversification and nurturing the growth and success of the younger generation.

MACAO YEARBOOK 2019

4

ECONOMY

Although Macao has a relatively small economy, it pursues an open economic policy. It is one of the two international free ports in China. Goods, capital, foreign exchange and people flow freely in and out of Macao. As a separate customs territory, it boasts one of the lowest tax regimes in the region. Macao is integrated with the global economy and maintains traditional and special economic ties with the European Union (EU) and Portuguese-speaking countries. Consequently, Macao plays a relatively important role in the regional economies and is an important gateway and bridge linking mainland China with international markets.

Investment Incentives

Macao provides a level playing field for investors from around the world. At the same time, the series of measures that have been implemented to encourage investment – including the provision of various tax and financial incentives – have gradually made Macao an ideal place for investors.

Tax Incentives

To promote Macao's long-term economic development, the Government offers tax incentives for projects that benefit the territory's development. Investment plans outlined in applications for these must meet one or more of the following criteria:

- They must promote economic diversity;
- They must contribute to the promotion of exports to new markets;
- They must add value to the production chain; or
- They must contribute to technological modernisation.

Once an application is approved, the applicant or his or her company will be eligible for a number of tax incentives, including:

Full exemption from property tax if the property purchased is to be used for industrial factory purposes. Factories on Macao Peninsula will enjoy an exemption period of up to 10 years, while those on the islands will enjoy an exemption period not exceeding twenty years;

Full exemption from business tax for cases of advance approval, while businesses on the islands will enjoy a basic allowance of 50 percent (excluding offshore banks);

Basic allowance of 50 percent on corporate income tax; and

For any transfer of properties related to industrial purposes, a 50-100 percent

reduction of stamp duty for property transfer may be available.

Financial Incentives

The Interest Subsidy Scheme on Bank Loans to Enterprises aims to encourage locally invested enterprises to increase their investments within their business fields, thereby facilitating diverse local economic activities, enhancing environmental protection, and assisting in technological innovation and transformation, to strengthen competitiveness and modernise business operations. Enterprises that benefit from the scheme enjoy a four percent interest subsidy per year. The maximum period of subsidy is four years, counting from the first day of loan repayments, and the subsidy is calculated according to the outstanding capital in each instalment.

Coverage of Interest Subsidy Scheme in 2017 (as at end of Q4)

Type of industry	Percentage (%)[1]	Approved subsidy amount (MOP) [2]	Approved cases [2]
Construction and public works	23.84%	74,055,713.80	14
Wholesale	18.21%	56,561,395.00	9
Food, beverage and tobacco products	11.89%	36,923,369.00	7
Corporate services	11.67%	36,259,840.00	6
Public services, social welfare and private services	9.66%	29,995,090.28	8
Retail	8.52%	26,465,641.00	6
Restaurants and hotels	7.39%	22,959,900.00	5
Transport and warehousing	7.21%	22,388,686.00	9
Communications	1.61%	5,000,000.00	1
Total	**100.00%**	**388,986,113.01**	**92**

Notes: *(1) As a percentage of the total approved subsidy amount*
(2) Subject to approval date

According to Law No. 1/86/M on Tax Incentives under Industrial Policy, the Government aims to provide concessionary tax benefits to entrepreneurs whose investment projects can contribute to Macao industries, stimulating increased investment, promoting the growth and development of local industries, through boosting productivity and levels of technology, the manufacturing of new products, and other developments related to manufacturing.

Economic overview

Following the transformation of both internal and external economic environments, the four pillars of Macao's economy – manufacturing; tourism and gaming; banking and finance; and construction and real estate – have seen remarkable changes in terms of their shares of local GDP. Recently, the contribution to Macao's GDP of the tourism and gaming industry has overtaken the combined total of the other three industries. The manufacturing industry has been on the decline since the 1990s, with a constantly decreasing share of local GDP.

Gaming industry

Macao's overall economy performed well during 2018. The annual gross revenue from games of fortune amounted to 302.846 billion patacas, representing an increase of 14 percent compared with 2017, and just below the peak of the gaming industry from 2012 to 2014. Macao's gaming industry remains the largest in the world. Various operators in the gaming industry strived to press ahead with their projects, to build Macao as a world tourism and leisure centre.

Lawful gaming businesses in Macao currently include games of fortune, interactive gaming, pari-mutuel and lotteries. Types of gaming are mainly categorised according to the Gaming Industry Regulatory Framework. Games of fortune form the biggest sector of Macao's gaming industry. Gross revenues from these games accounted for 99.66 percent of the industry's gross takings in 2018.

There are now six licensed gaming companies in Macao, each of which enjoys the right to autonomously operate casino gaming businesses as an independent legal person.

At the end of 2018, there were 41 casinos operating in Macao, of which 22 belonged to SJM, five to the Venetian Group, six to Galaxy, two to Wynn, four to Melco PBL, and two to MGM.

The number of gaming tables increased from 6,419 in 2017 to 6,588 at the end of 2018, a 2.6 percent rise; while the number of slot machines increased from 15,622 to 16,059, 2.8 percent more than the previous year.

At the end of 2018, there were 1,321 vacant gaming jobs, representing a year-on-year increase of 861 vacancies. The vacancies were mainly for clerical positions, accounting for 51.8 percent of the total; there were 445 vacancies for dealers. By the end of 2018, there were 57,246 gaming industry employees, representing a year-on-year increase of 1.1 percent.

Regarding breakdown by job, there were 24,719 dealers, representing a year-on-year increase of 1.1 percent.

Regarding salaries (excluding incentive bonuses and rewards), the average monthly wage for full-time paid employees in the industry at the end of 2018 was 23,740 patacas, 3.5 percent higher than the 2017 figure. The average monthly wage of dealers was 20,450 patacas, three percent higher than in the previous year.

Legal Regulations Refined and Junket Commissions Capped

To regulate gaming and related activities more effectively in the wake of changes in the industry, the Government has formulated and promulgated a series of laws and regulations since 2001. They included laws to regulate gaming promoters and gaming-related loan activities.

By-law No. 6/2002 on the Qualifications and Regulations for Casino Gaming Promoters is the main provision for regulating casino gaming promotion activities. In August 2009, after being amended by By-law No. 27/2009, it was renamed the By-law on the Regulation of Casino Gaming Promotion Activities. It includes detailed requirements for mandatory qualifications and the liabilities of promoters, licensing processes and registration of promoters with gaming concessionaires. The by-law strictly regulates the mandatory qualifications of gaming promoter licence applicants, as well as gaming promoters who serve a company or individual business owner. Under the by-law, only persons granted a gaming promoter's licence by the Gaming Inspection and Coordination Bureau (DICJ) are permitted to engage in gaming promotion activities.

As the market competition became more aggressive, the Government decided to set a cap on junket commissions, to maintain market order and effective regulation of the industry, as well as safeguard the healthy development of the gaming industry.

On 21 May 2008, the Government held the first joint meeting with the management of the six casino operators, to discuss the cap on junket commissions. After negotiations in several meetings, the Government and the industry operators reached a consensus to cap junket commissions at 1.25 percent. In September 2009, the Secretary for Economy and Finance signed Order No. 83/2009 to cap junket commissions at 1.25 percent of bets, and require each gaming concessionaire to submit a monthly report to the DICJ.

Following promulgation of the by-laws, the Government continues maintaining communications, discussions and reviews with the gaming concessionaires and other industry operators. The Government will also listen to opinions from all parties, and introduce more refined and detailed guidelines. The amended by-law came into force on 1 December 2009.

Gaming promoters are legally obliged to pay tax at a rate of five percent on commissions they collect from concessionaires, and other remuneration they receive.

The Government has also made efforts to regulate gaming-related loan activities. The Law on Regulating Credit Related to Gaming and Betting in Casinos or Other Gaming Venues stipulates that only concessionaires and sub-concessionaires are

authorised to conduct credit-related business. Gaming promoters and management companies are also allowed to conduct such business provided they have already signed relevant contracts with a concessionaire or sub-concessionaire. The credit provided in accordance with this law is regarded as statutory debt. The law also states principles and conditions governing the signing of contracts, credit activities and other related matters. It defines the granting of credit as being transfer of the ownership of casino gaming chips to a third party, when the lender is not immediately compensated by a monetary payment. It also clearly defines different types of money.

The Gaming Inspection and Coordination Bureau (DICJ)

The DICJ provides guidance and assistance to the Chief Executive on the formulation and implementation of the economic policies for the operations of casino games of fortune or other ways of gaming, pari-mutuels and gaming activities offered to the public.

In 2018, the DICJ maintained good communication and cooperation with major gaming companies, and enhanced software and hardware in response to the regulatory challenges arising from security problems in casinos, to continue effective monitoring of casinos in the light of increasingly complex environments and rapidly changing technologies.

In 2018, the DICJ also began amendments to Law No. 10/2012 on Regulations on the Conditions from Entering, Working and Gaming in Casinos, which was passed by the Legislative Assembly in December; streamlined procedures for imposing penalties for some particular cases to further enhance administrative efficiency; and continued encouraging gaming concessionaires and institutions to work towards responsible gaming, to minimise the potential impacts of the gaming industry on the community and surrounding areas. The DICJ's work during the year can be summarised as follows:

1. Based on Directive No. 1/2016 – Preventive Measures against Money-laundering and Terrorism-financing, the DICJ continued performing audits on gaming concessionaires' identity verification measures, to prevent them from establishing any business relationships with suspected terrorists or other high-risk customers;

2. The DICJ worked closely with the Government's security related departments and of gaming concessionaires security departments, followed up regarding the installation of doorways with metal detectors in Macao casinos, and improved the security of casinos, including through strengthening training for new security guards, formulating guidelines for emergency responses, and increasing the number and quality of video surveillance systems inside hotels;

3. In 2018, amendments were made regarding the Minimum Internal Control Requirements (MICR) and implementation guidelines were issued to casino operators to ensure that the internal control procedures of gaming concessionaires can effectively prevent irregularities in casinos, to foster healthy and orderly development of the industry;

4. The DICJ continued with financial audits of gaming promoters in Macao. During 2018, a special audit was performed to review the relevant accounts and business records of cash and chip inventories, to ensure that gaming promoters have established sound financial accounting systems, implemented appropriate internal audit measures, and maintain appropriate business records and comply with the commission ceiling;

5. As regards registration of gaming promoters, a total of 100 licences were issued in 2018, representing a decrease of 8.3 percent on the figure of 2017. Of these, 90 were issued to legal entities and 10 were issued to individuals;

6. The DICJ continued monitoring the accuracy and authenticity of data in gaming machine systems, to ensure that in-service gaming machine software is not modified, and that gaming operations comply with related regulations and technical standards. In 2018, several on-the-spot raids were conducted, requiring gambling concessionaires to follow up on suspected faulty gaming machines, to protect players' rights;

7. The year 2018 marked the 10th anniversary of the responsible gaming campaign. The DICJ co-organised an international forum on responsible gaming with the Social Welfare Bureau and the Institute for the Study of Commercial Gaming of the University of Macau, held in December; invited experts to Macao for exchanges; and collected scientific evidence and research data to review policies on responsible gambling in Macao and amend the guidelines on responsible gaming for gaming operators;

8. Up to 2018, a total of 85 casino staff members completed the "Macao Responsible Gaming Instructor" certificate programme organised by the DICJ. During 2018, 16 trainees completed the second round of the programme, which provided professional, localised training to gaming staff;

9. The DICJ provided a self-exclusion application service to the public. In 2018, the DICJ handled 490 applications, 24 of which were made via self-service machines at responsible gaming kiosks. They were then referred to gambling disorder prevention and treatment institutions, for gambling counselling on a voluntary basis;

10. The DICJ continued to actively work with all government departments, gaming operators, problem gambling prevention and treatment organisations, and educational and community groups, to promote responsible gaming. In 2018, with the help of the Civic and Municipal Affairs Bureau, Marine and Water Bureau and the Consumer Council, promotional videos on responsible gaming were broadcast in public facilities under various departments, border checkpoints and citizen service centres, to provide local residents and tourists with information regarding responsible gaming, 24-hour help lines, and self-exclusion application services;

11. The DICJ continued monitoring gaming operators to ensure they post clear notices

at casino entrances and properly verify visitors' age, to prevent people under the legal age from entering a casino. In 2018, 401,851 persons under the age of 21 were prevented from entering casinos by security staff. Also, 173 persons under the age of 21 were found to have entered casinos illegally.

12. For more efficient monitoring of casino operators' performance regarding their obligations in concession contracts, and to urge them to add non-gaming components, in 2018 the DICJ continued gathering financial data about non-gaming components, and information about local procurement exercises and SME facilities at casinos and gaming venues. By doing so, the DICJ could help small and medium-sized enterprises to seize opportunities arising from the development of gaming tourism;

13. Regarding administrative penalties for prevention and handling of illegal gambling, there were 26 cases of illegal gambling in 2018, 18 percent more than in 2017. A total of 145 individuals were involved, 144 of whom were Macao residents. The DICJ would continue educating the public, while stringently combating and preventing illegal gambling;

14. Under the Decree-Law No. 47/98/M and Law No. 10/2003, the DICJ issued permits to enterprises for the sale of lottery tickets and lucky draws for promotion of products and activities. In 2018, the DICJ issued 431 permits for the sale of lottery tickets and lucky draws, 49 percent more than in 2017; 195 email applications were received for 195 of these permits; and

15. To strengthen the DICJ team, in 2018, newly recruited inspectors were provided with theoretical and practical courses, to equip them with more comprehensive hands-on work knowledge and professional legal knowledge. The DICJ continued organising internal training courses on gaming laws and practical operations for current staff, to consolidate their understanding of the future development of the Macao gaming industry and society.

The Contribution of Casino Gaming to Macao's Gross Gaming Revenue in 2018

(Billion Patacas)

Item	2018
Gross revenue from casino gaming	302.846
Gross gaming revenue	303.879
Proportion of contribution	**99.66%**

Source: DICJ

Gross Revenues of Different Types of Casino Gaming during 2018 (Billion Patacas)	
Item	**Gross revenue**
Roulette	1.129
Blackjack	2.714
VIP Baccarat	166.097
Baccarat	102.397
Fan-tan	0.374
Cussec	8.251
Chinese Dominoes (Pai Gow)	0.105
Mahjong	0.137
Slot Machines	15.048
Three-card Poker	0.239
Three-card Baccarat	0.597
Wheel of Fortune	0.015
Live Multi Game	2.728
Stud Poker	1.258
Casino War	0.249
Dice/craps	0.27
Texas Poker	0.34
Fortune 3 Card Poker	0.898
Total	**302.846**

Source: DICJ

Manufacturing

Macao's manufacturing industry now faces changes in the worldwide manufacturing supply chain and disparities in regional manufacturing costs. Since the 1990s, Macao has gradually transformed into a more service-oriented economy. As a result, the

manufacturing industry's share of GDP decreased from 20.6 percent in 1989 to 0.6 percent in 2017.

In 2018, the total value of Macao's exports was 12.19 billion patacas, representing a year-on-year increase of 8.1 percent, with Macao's domestic product exports accounting for 1.53 billion patacas, down 14.3 percent year on year. The value of re-exports was 10.66 billion patacas, up 12.3 percent year on year. Hong Kong continued to be the major export market for Macao, with a share of 62.1 percent of Macao's total export value. Mainland China accounted for 16.5 percent of Macao's total export value. The United States accounted for 1.1 percent.

In 2018, the value of products exported under CEPA was 95.71 million patacas. Tax with a total value of 5.139 million patacas was waived. During the past 15 years, the cumulative total value of zero-tariff goods entering mainland China in accordance with CEPA provisions was 958 million patacas, with 67.08 million patacas of taxes waived.

Financial Services Industry

The financial services industry in Macao underwent rapid development towards the end of the 1980s. Following nearly 30 years of growth and refinement, Macao now boasts a sophisticated and open financial system, with characteristics that are unique in the region.

Macao's financial institutions consist of banks, insurance companies, financial companies, lease finance companies, financial intermediaries, bureaux de change, cash remittance companies, non-banking credit agencies, other financial institutions and the representative offices of overseas financial institutions. As of 31 December 2018, among financial institutions authorised to operate in Macao, there were 28 banks (including the Government-owned Postal Savings Office), 24 insurance companies, one pension-fund management company, one finance company, two lease finance companies, two financial intermediary companies, 11 bureaux de change, six bureaux de change counters, two cash remittance companies, one non-banking credit agency, three other financial institutions, and one representative office of an overseas financial institution.

The Banking System

The primary legislation regulating Macao's financial services industry, the Financial System Act, was promulgated in 1993, and focuses on measures to strengthen risk management. In particular, it emphasises strict requirements on operators, and monitors the suitability of major shareholders and managers, and risks. The act also introduced a new monitoring system based on financial institutions and their subsidiaries. The act takes into account the recommendations of the Basel Committee on Banking Supervision and lessons learnt from the EU's experience in harmonising banking legislation, while

drawing on the experiences of countries and territories whose financial systems are similar to that of Macao.

In accordance with the Financial System Act, the Chief Executive of the MSAR may, on an individual basis, approve the registration of credit institutions in Macao, the establishment of branches of overseas credit institutions, the setting-up of branches or representative offices outside Macao by locally registered credit institutions, and the establishment of financial intermediaries and other financial institutions in Macao, after considering the advice of the Monetary Authority. However, this provision does not include companies regulated by special laws.

At the end of 2018, the 28 banks in Macao owned assets with a total value of 1,815.8 billion patacas, and hired 6,237 employees at their 213 headquarters and branches (including overseas branches of registered banks in Macao). Deposits in Macao's banking system amounted to 1,114.1 billion patacas, while loans totalled almost 1,011.3 billion patacas; the loan-to-deposit ratio was 90.8 percent.

When classified by source of origin, the banking system of Macao – excluding the government-operated Macao Postal Savings – has nine local registered banks, with the other currently operating banks being branches of banking groups registered overseas, which mainly come from seven countries and regions: mainland China, Portugal, the United States, the United Kingdom, Singapore, Taiwan and Hong Kong.

Moreover, the operations of Macao's banks now make extensive use of computer software and hardware. With the popularity of electronic banking, inter-bank ATMs are now found all over Macao, serving customers of different banks. Additionally, certain banks offer 24-hour banking services via channels including mobile phones and the Internet.

Notwithstanding their relatively rapid development in recent years, Macao's banks have continued to achieve new heights in terms of financial results, thanks to their strong business tradition, prudent operations, and stringent regulation. Macao's banks also boast healthy capital, full liquidity and quality assets, keeping the whole banking system safe and reliable.

The Insurance Industry

Market Overview

At the end of 2018, 24 insurance companies were permitted to conduct business in Macao. Of these, 11 were life insurance companies and the other 13 were engaged in non-life insurance. Classified by their origins, nine of these companies were local, and the other 15 were branches of overseas companies. In addition, two fund-management companies were authorised to conduct pension-fund businesses in the MSAR. Also at the end of 2018, Macao's insurance industry employed 602 people. There were 6,459

authorised insurance intermediaries: 4,808 individual agents, 1,558 salespersons, 82 corporate agents, and 11 insurance brokers.

In 2018, total insurance premium income was 21.2 billion patacas, 3.5 percent less than that in 2017. Life insurance premium income accounted for 88.2 percent of the insurance market's total income, with the remaining 11.8 percent coming from non-life insurance. Life insurance premiums totalled 18.7 billion patacas, down by 4.9 percent from the previous year. Non-life insurance premiums totalled 2.5 billion patacas, representing an increase of 9.4 percent.

Regarding pension funds, at the end of 2018, seven life insurance companies and two pension-fund management companies were providing pension fund management services. So far, 58 pension funds have been established under the Legal Framework for Private Pension Funds, of which four are closed-end funds and 54 are open-end funds. To date, 1,681 private pension fund schemes and 35,000 non-mandatory central provident fund schemes have been established by businesses or individuals, benefiting more than 184,000 people. The assets of the managed funds totalled about 24.3 billion patacas.

Supervision and Regulation of the Insurance Industry

In Macao, the duty to supervise, coordinate and inspect insurance activities rests with the Chief Executive, with the Monetary Authority authorised to perform these functions.

The Macao Insurance Law, the Legal Framework for Private Pension Funds, and the Insurance agents and Brokers Law have been formulated to regulate insurance companies, private pension fund management companies, and insurance intermediaries, respectively.

The Macao Insurance Law stipulates the terms and conditions of insurance and reinsurance activities in Macao. The existing law was amended in 1997, with the purpose of aligning the regulatory levels of Macao's insurance activities with that of international standards. The law covers requirements for obtaining a licence, and the mandatory establishment of margins of solvency, technical reserves and financial disclosure. As the law has been enacted for many years, certain provisions required amending in response to the changing international trend in regulations, to meet the regulatory requirements. The Executive Council concluded discussions on the proposed amendment bill in 2018, and the legislation process will commence in 2019.

The Legal Framework for Private Pension Funds came into effect in 1999. The law requires that a pension fund must be managed by a life insurance company or a company established for the management of the pension fund. To further protect the interests of retirees, the legal framework also lays down articles regulating the management of pension funds.

The Legal System on Insurance Intermediaries, formulated in 1989 and amended

in 2001 and 2003, regulates the business practice of insurance intermediaries, the minimum requirements for obtaining an intermediary licence, the rights and duties of an intermediary, and the statutory power of regulatory bodies.

Compulsory Insurance

There are seven categories of compulsory insurance in Macao, all of which require uniform policy wording and tariff rates. The compulsory insurance categories include: motor vehicle (third-party risks) insurance, employees' compensation insurance, professional liability insurance for travel agents, public liability insurance relating to the installation of publicity and advertising objects, third party liability for pleasure boats, civil liability insurance for lawyers, and civil liability insurance for medical service providers.

Insurance Intermediaries Quality Assurance Scheme

To raise the overall level of professionalism of insurance intermediaries, it is required that all applicants must pass a qualification examination before obtaining an intermediary licence and conducting insurance business in Macao. In 2018, a total of 6,437 candidates sat the insurance intermediary qualification examination, with a pass rate of 86.1 percent.

The Monetary Authority launched the Continuing Professional Development Programme for Insurance Intermediaries in 2018, to encourage the intermediaries to promote professionalism and long term development opportunities in the insurance sector through further study.

The Construction and Real Estate Industry

The average sales price for residential units in 2018, calculated in terms of usable floor area, was 108,427 patacas per square metre, 7.5 percent higher than the previous year's figure. The average prices of properties in the Macao peninsula (101,914 patacas) and Coloane (135,527 patacas) increased by 11.1 percent and 5.7 percent, respectively; while the average property price in Taipa (112,391 patacas) decreased by 2.4 percent. The average prices for completed units (97,211 patacas) and uncompleted units (142,663 patacas) were 7.5 percent and 3.7 percent higher than the previous year's figures, respectively.

In 2018, the unit prices of offices and industrial units were 163,863 patacas and 56,393 patacas per square metre, up by 44.8 percent and 3.6 percent, respectively.

In 2018, the number of housing units and parking space transactions was 15,073, up 7.8 percent year on year. The transaction value totalled 89.6 billion patacas, up 5.1 percent year on year.

A total of 10,822 residential units – representing a net year-on-year increase of 241 units, with 574 more uncompleted units and 333 fewer completed units – with a total value of 69.43 billion patacas changed hands in 2017. The transaction values of uncompleted units (totalling 2,617) and completed units (totalling 8,205) were 22.05 billion patacas and 47.38 billion patacas, respectively.

In 2018, construction permits and occupying permits had been granted for a total of 1,493 and 4,158 residential units, respectively.

The price index of construction materials for residential buildings in 2018 rose by 4.6 percent year on year, to 107.3.

The real wage index for construction workers, discounted for inflation, averaged 99.3, down 7.5 percent on the previous year, while that of local construction workers decreased by 7.2 percent, to 97.4.

Employment and the Labour Market

In 2018, the full-year unemployment rate was 1.8 percent, down slightly by 0.2 percentage points from two percent in 2017. The unemployment rate among local residents was 2.4 percent, down 0.3 percent year on year.

In 2018, Macao recorded a labour population of 392,500 people, and a participation rate of 70.9 percent. The labour participation rate for males was 75.6 percent, and for females was 67 percent. Classified by age and gender, the 25-34 age group achieved the highest average labour participation rate, of 93.3 percent (97.5 percent for men and 89.7 percent for women).

Employment

In 2018, Macao's employed population increased 1.49 percent over the previous year and totalled 385,400, of whom 48.7 percent were male and 51.3 percent were female. Broken down by sector, the working population was mainly engaged in cultural, entertainment, gaming and other service industries (25 percent); hotels and catering (14.6 percent); construction (8.1 percent); and wholesale and retail (11.3 percent). Classified by occupation, clerical workers, service and retail workers, and non-technical workers accounted for 27.1 percent, 21.2 percent and 18 percent, respectively, of the entire working population.

Of the employed population, 11.7 percent had primary school education qualifications, 20.6 percent had completed junior secondary school education, 29.1 percent had completed senior secondary school education, and 36.4 percent had completed tertiary education. The main age group in the employed population was 25 to 34, accounting for 30.31 percent of the working population, while the age groups of 35 to 44 and 45 to 54 accounted for 24.3 percent and 21.76 percent, respectively.

Unemployment and Underemployment

In 2018, Macao recorded an unemployed population of around 7,100. Among the unemployed, 87.3 percent had work experience and were looking for jobs, whereas 12.3 percent had not worked before and were looking for their first job. In terms of education, 16.08 percent of the unemployed had completed only primary education; 20.38 percent had completed junior secondary, 21.65 percent had completed senior secondary, and 36.43 percent had completed tertiary education.

Among the unemployed, 28.41 percent were from the cultural, entertainment, gaming and other services sector, 14.46 percent from the wholesale and retail industry, 25.28 percent from the construction industry, and 12.7 percent from the hotel and catering sector. The major causes of unemployment were personal or family reasons (46.7 percent), termination of temporary jobs (21.5 percent), dismissal (10.3 percent), and unsatisfactory work conditions (11 percent).

Monthly Earnings

In 2018, the overall median monthly income of Macao's employed population was 16,000 patacas while that of local residents was 20,000 patacas, representing a year-on-year increase of 1,000 patacas. The median monthly income of the cultural, entertainment, gaming and other services sector, which employed the largest number of workers, was 20,000 patacas. Sectors with the highest median monthly income were, in descending order, public administration and social security (39,500 patacas), water, electricity and gas production and supply (30,000 patacas), and the education sector (25,000 patacas).

Non-Resident Workers

To alleviate local labour shortages, at the end of December 2018, Macao had 188,480 non-resident workers, representing an increase of five percent compared with the figure in 2017. The hotel and catering industry accounted for the largest share of non-resident workers (28.2 percent), which was followed by construction workers (16 percent), household jobs (15.2 percent), wholesale and retail (12 percent), and real estate and business and services (11.6 percent).

Financial Management

Financial Services Bureau

The Financial Services Bureau is mainly responsible for supervising, coordinating

and monitoring the financial activities of public departments of the MSAR.

The Financial Services Bureau fulfils its public finance management function by supervising the financial operations of the MSAR in accordance with the law. It puts in place a set of regulations and guidelines concerning budget management, and enhances its financial supervision over autonomous entities. The principle of setting budgets is that public resources should be allocated in the way that most appropriately serves the best interests of the public.

In accordance with the annual budget passed by the Legislative Assembly, the Financial Services Bureau oversees the financial status of each public department, and ensures compliance with the public accounting system and regulations, guaranteeing legitimacy of all expenses. These rigorous administrative measures are designed to maintain balance of the Government's revenues and expenses, foster steady economic development and increase the international competitiveness of Macao.

To fulfil the functions of coordinating and monitoring the financial operations of public departments, the Financial Services Bureau compiles the Budget of the Macao Special Administrative Region ("General Budget") and General Accounts of the Macao Special Administrative Region ("General Accounts") on an annual basis.

Budget of the Macao Special Administrative Region

The Budget of the Macao Special Administrative Region comprises three parts: the comprehensive government budget, the budget for specific organisations and the investment budget for specific organisations.

The comprehensive government budget adopts cash-basis accounting, and covers public departments that can be categorised into non-autonomous departments, autonomous administrative departments, and autonomous entities. A budget fiscal year is from 1 January to 31 December. Every year, the schedule for submitting budget proposals and the special requirements for compiling budget proposals are stipulated via an Executive Order. After consolidating the budget proposals of all public departments, a comprehensive budget proposal is submitted to the Chief Executive and later to the Legislative Assembly for discussion. The budget proposal can only come into effect after it has been approved by the Legislative Assembly and published in the *Macao SAR Gazette*. The General Budget lists all government income and expenditure. Any income that is not included in the General Budget should not be received. At the same time, expenses of public departments must not exceed the maximum levels stipulated in the General Budget.

The budget for specific organisations and the investment budget for specific organisations adopt accrual accounting, mainly as these organisations are engaged in special businesses such as credit, insurance, financial investment or postal services, as accrual accounting is necessary to truly reflect their financial status. Those considered as engaging in special businesses include the following eight organisations: Macao Post

and Telecommunications Bureau, Macao Postal Savings, the Pension Fund, Monetary Authority of Macao, Automobile and Maritime Security Fund, Macao Foundation, Deposits Guarantee Fund, and the Social Security Fund.

General Accounts of the Macao Special Administrative Region

The Budget of the Macao Special Administrative Region regulates government income and expenditure, while the General Accounts of the Macao Special Administrative Region record the Government's actual financial situation. The General Accounts are in two parts. The first part – on the general comprehensive government budget – reflects the results of implementing the general comprehensive budget as well as the year-end financial situation, and is prepared according to cash-basis accounting.

The second part – the budget of specific organisations – adopts accrual accounting to reflect the overall operating results of six specific organisations. The Financial Services Bureau is required to submit the information necessary for the General Accounts of the Macao Special Administrative Region to the Commission of Audit within five months of the end of a financial year, to facilitate the audit process.

Management of Public Property

The Public Property Management Department under the Financial Services Bureau is responsible for the management and maintenance of the durable assets of the Government. This includes carrying out procedures related to trading in the Government's physical property, assisting with clarification of the characteristics of vehicles owned by each government department, holding open tenders for goods and services required by the Government, organising and updating records of durable assets and lists of assets, and analysing the tangible asset accounts of public departments

To implement the above responsibilities, the Financial Services Bureau holds public auctions each year for vehicles and goods that are deemed unusable by government departments or are appropriated to the Government of Macao Special Administrative Region. To increase its revenue, the Government announces auction dates and ensures that auctions adhere to the principle that the highest bid wins. The Financial Services Bureau conducts open tenders for goods needed by various public departments. The tender notice is published in local newspapers, the Macao SAR Gazette and the Financial Services Bureau website, and the transparency of both options and tender procedures is thereby enhanced. Natural persons or companies already registered with the Business Registration Centre of the Financial Services Bureau as engaging in businesses related to items included in the tender can participate in the bidding for all or part of the commodities. The winner is generally the bidder who makes the best offer in terms of price, quality of goods, past delivery quality and delivery date.

The management of public property also includes the duty of allocating and managing government quarters and parking lots, as well as the maintenance of such

quarters. Other duties include renting office venues, warehouses, housing and car parks for both non-independently and independently administered departments, as well as making recommendations on the usage of government-owned properties and community and infrastructure facilities, and handling property and facility transfers.

Sources of Tax Revenue

Government Tax Revenue

Tax income provides funds for the administrative activities of all public entities. Macao has adopted a simple taxation structure with low tax rates. The annual assessment period is from 1 January to 31 December. Taxes levied in Macao include gaming tax, business tax, corporate income tax, personal income tax, real estate tax, tourism tax, excise duty, motor vehicle tax, asset transfer stamp duty, special stamp duty and additional stamp duty for acquisition of second residential property and beyond.

Gaming Tax

The operators of all types of gaming activities, including casino gaming, horse racing, dog racing and lottery bets, are liable to pay a certain percentage of their gross revenues in tax, or pay tax according to other levy scales. Gaming tax is calculated by gross casino gaming revenue taxed at the rate of 35 percent. Gaming tax is the Government's major source of revenue.

Business Tax

The Regulations on Business Tax require that business tax be levied on all natural persons and legal persons operating any activity with the nature of industrial or commercial business. The amount of tax of depends on the fixed amounts stipulated in the Table of General Activities contained in the Regulations on Business Tax. Although business tax is typically 300 patacas a year for each business, for commercial banks the tax is 80,000 patacas, plus a sales tax of five percent.

Note: Pursuant to Article 12 under the Budget of the Financial Year of 2018, approved by Law No. 16/2017, in 2018, no amount of industrial tax set out in Table 1 and 2 under the Regulations for Industrial Tax shall be collected.

Profit Tax

Regulations on Profit Tax require that profit tax be levied on the total income of natural persons or legal persons from local industrial or commercial activities. Rates of profit tax are as follows:

Taxable annual revenue	Percentage
Revenue up to 32,000 patacas	Waived
Progressively in excess of designated amount:	
32,001 patacas to 65,000 patacas	3%
65,001 patacas to100,000 patacas	5%
100,001 patacas to 200,000 patacas	7%
200,001 patacas to 300,000 patacas	9%
Over 300,000 patacas	12%

Note: Pursuant to Article 22 of the Budget of the Financial Year of 2018 approved by Law No. 16/2017, the tax allowance for profit tax in 2017 is set at 600,000 patacas.

Personal Income Tax

Regulations on Personal Income Tax require that personal income tax be levied on working income. Personal income tax payers are classified into two groups. One group is those working for others in any occupation, including daily wage earners and employees. The second group is self-employed freelance professionals. Personal income tax rates are as follows:

Taxable annual revenue	Percentage
Revenue up to 95,000 patacas	Waived
Progressively in excess of designated amount:	
Up to 20,000 patacas	7%
20,001 patacas to 40,000 patacas	8%
40,001 patacas to 80,000 patacas	9%
80,001 patacas to 160,000 patacas	10%
160,001 patacas to 280,000 patacas	11%
Over 280,000 patacas	12%

Note: Pursuant to Article 17 of the Budget of the Financial Year of 2018 approved by Law No. 16/2017, in 2018, a tax reduction of 30 percent was set for personal income tax, while the tax allowance for personal income tax in 2018 is set at 144,000 patacas.

Tourism Tax

Regulations on Tourism Tax require that a five-percent tourism tax be levied on the prices of services offered by hotels and similar establishments, gyms and saunas, massage parlours and karaoke bars.

Note: Pursuant to Article 17 of the Budget of the Financial Year of 2018, approved by Law No. 16/2017, in 2018, tourism tax shall be exempted for the settlement of services provided by luxury, class-1 and class-2 restaurants, and those venues that are established in hotels yet operating independently, particularly those under a different trade name.

Real Estate Tax

Regulations on Urban Real Estate Tax require that real estate tax be levied on the revenue of local housing properties, and that the tax rate shall be six percent on the taxable revenue for non-leased properties, while that for leased properties shall be ten percent.

Note: Pursuant to Article 21 of the Budget of the Financial Year of 2018, approved by Law No. 16/2017, in 2018, a tax reduction of up to 3,500 patacas per property is available for urban properties for tax subjects who are natural persons with right of residence in the Macao Special Administrative Region.

Asset Transfer Stamp Duty

Transfer of an immovable asset before death, whether such transfer be temporary or permanent, or paid or unpaid, is subject to asset transfer stamp duty at the following rates:

Taxable area	Tax rate
Paid transfer of an immovable asset with a value of up to two million patacas	1%
From over two million patacas to four million patacas	2%
Over four million patacas	3%
Unpaid transfer of an asset	5%

Note: (1) Pursuant to Article 14 of the Budget of the Financial Year of 2018 approved by Law No. 16/2017, in 2018, stamp duty shall be exempted for eligible taxpayers who purchase residential properties that are worth up to three million patacas;

(2) Legal persons, individual business owners or non-local residents purchasing residential properties are subject to an additional 10 percen tax, on top of the above mentioned tax rate.

Special Stamp Duty

Transfer of a residential property, commercial property, office premises, car-parking space within two years of its purchase, whether such transfer be temporary or permanent, is subject to special stamp duty at the following rates:

Taxable transfer	Tax rate
Transfer is made within a year of its purchase	20%
Transfer is made between one and two years after the purchase	10%

Property Acquisition Tax

Acquisition of a second residential property and beyond is subject to additional stamp duty at the following rates:

Taxable transfer	Tax rate
Acquisition of a second residential property	5%
Acquisition of a third residential property and beyond	10%

Excise Duty

Pursuant to Article 2 of Law No. 4/99/M of the Excise Duty Regulations which was amended by Law No. 8/2008 on 25 August, Law No. 7/2009 on 25 May, Law No. 11/2011 on 19 December and Law No. 9/2015 on 13 July, alcoholic drinks (Group II) and tobacco (Group III) are considered as excise duty taxable since the time they are produced or they enter Macao. Alcoholic drinks are levied an ad valorem tax subject to CIF (cost, insurance and freight) as well as fixed tax, while tobacco products are levied a fixed excise duty.

Motor Vehicle Tax

Natural persons or legal persons importing new motor vehicles for their own use, or buying new motor vehicles for resale or for their own use are subject to motor vehicle tax based on the taxable value of motor vehicles. The applicable tax rates are as follows:

Heavy and light motorcycles		
Level of taxable value (patacas)	**Corresponding rate of each level**	**Effective average tax rate**
Up to 15,000 patacas	---	24%
From over 15,000 patacas to 25,000 patacas	35%	32%
From over 25,000 patacas to 40,000 patacas	40%	42%
From over 40,000 patacas to 70,000 patacas	45%	50%
Over 70,000 patacas	---	50%

Cars		
Level of taxable value (patacas)	**Corresponding rate of each level**	**Effective average tax rate**
Up to 100,000 patacas	---	40%
From over 100,000 patacas to 200,000 patacas	50%	46%
From over 200,000 patacas to 300,000 patacas	80%	60%
From over 300,000 patacas to 500,000 patacas	90%	72%
Over 500,000 patacas	---	72%

Registered Auditors and Accountants

At the end of 2018, there were 14 registered auditing companies, three registered accounting firms, 119 registered auditors and 188 registered accountants in Macao.

The "Mainland Factor" in Macao's Economy

Under the principle of "One country, two systems", the Government actively strengthens economic and trade interaction and cooperation with provinces and cities in mainland China through appropriate institutions and mechanisms, further developing Macao's role as a gateway and bridge. Implementation of the Mainland China and

Macao Closer Economic Partnership Arrangement (CEPA) on 1 January 2004 and the framework agreement for Pan-Pearl River Delta (PPRD) regional cooperation signed in June 2004 marked new milestones for economic and trade cooperation between Macao and mainland China. Macao's emphasis on economic cooperation with mainland China and the use of the enormous China market as its hinterland has enhanced its economic position.

In March 2018, President Xi Jinping stressed the importance of seizing the opportunities arising from the development of the Guangdong-Hong Kong-Macao Greater Bay Area, and said Macao and Hong Kong should join hands to expedite the progress of building a world-class bay area and metropolis. Afterwards, the work report of the Central People's Government mentioned that the outline plan for the development of the Guangdong-Hong Kong-Macao Greater Bay Area would be launched and implemented, to facilitate cooperation between mainland China, Hong Kong and Macao.

In October 2018, the Hong Kong-Zhuhai-Macao Bridge officially opened to traffic. This was the first large-scale sea-crossing transport infrastructure between Guangdong, Hong Kong and Macao under the framework of "One country, two systems", creating a one-hour living circle in the Guangdong-Hong Kong-Macao Greater Bay Area.

In December 2018, mainland China and Macao signed the CEPA Agreement on Trade in Goods. Together with the previously signed CEPA Agreement on Trade Services, CEPA Investment Agreement and CEPA Agreement on Economic and Technical Cooperation, this meant the target for upgrading CEPA mentioned in the national 13th Five-Year Plan was completed ahead of schedule. The economic and trade cooperation between mainland China and Macao has been raised to a new level.

The CEPA Agreement on Trade in Goods includes a chapter on the Guangdong-Hong Kong-Macao Greater Bay Area, to launch a pilot scheme on exploring measures to expedite cross-boundary customs clearance, supporting participation by Macao industries in the overall national development plan, to jointly promote development of the Greater Bay Area and Macao's adequate economic diversification.

Interconnections with Other Mainland China Provinces and Cities

While striving to maintain close economic and trade relations with its neighbouring regions, the Government works to actively explore and enhance exchanges and cooperation with other provinces and cities in mainland China. Macao has already established healthy interactive relationships with a number of mainland China provinces, cities and autonomous regions, including Beijing, Tianjin, Inner Mongolia, Liaoning, Jilin, Heilongjiang, Jiangsu, Zhejiang, Fujian, Guangdong, Sichuan, Shaanxi and Hubei, developing every aspect of economic and trade cooperation.

In March 2018, the Government organised a business exchange delegation of the "9+2" Pan-Delta Pearl River (PPRD) Region to visit Portugal and Germany. They launched

a "Green Visit" to connect the PPRD regional governments and the environmental protection industry with the green network of Portuguese-speaking countries and European countries, exploring exchanges and cooperation in transforming, upgrading and diversifying environmental protection technologies.

During the year, Chief Executive Chui Sai On led a delegation to attend the Boao Forum for Asia Annual Conference 2018, held in Boao, Hainan.

The Macao Trade and Investment Promotion Institute (IPIM) also organised a delegation of Macao's convention, exhibition and tourism industries to attend the Incentive Travel and Conventions, Meetings China in Shanghai (IT&CM China 2018) to promote Macao as a Creative City of Gastronomy and its unique advantages in organising conventions and exhibitions.

In April 2018, the IPIM formed a delegation of Macao entrepreneurs to attend the 12th China (Henan) International Fair for Investment and Trade. It also organised a business promotion event – The Macao-Henan Promotion Seminar of the Economic and Trading Service Platform between China and Portuguese-Speaking Countries.

In May 2018, Chief Executive Chui Sai On and leading officials of the Liaison Office of the Central People's Government in the MSAR led a delegation to visit Congjiang county, Guizhou province, to observe the progress with poverty alleviation, and jointly launched the MSAR Government's anti-poverty supporting programme. During the visit, Guizhou Municipal People's Government signed the Cooperative Framework Agreement on Poverty Alleviation with the MSAR Government and the Liaison Office of the Central People's Government in the MSAR; while the IPIM and Congjiang county signed the Agreement on Cooperation in the Convention and Exhibition Industry to Facilitate External Trade and Promote Development.

Also in May, the grand opening and agreement signing ceremony of Beijing-Macao Cooperation Partnership 2018 was held in Beijing, to deepen exchanges and collaboration.

In June 2018, the MSAR Government, the Ministry of Science and Technology, and several institutions jointly held the 16th China Cross-Strait Technology and Projects Fair in Fuzhou, Fujian. The IPIM organised a delegation of Macao entrepreneurs to attend the fair. It also signed a strategic cooperation agreement with the Shanghai Diamond Exchange, to foster cooperation between the diamond and jewellery industries of Macao, mainland China and other parts of the world.

In July 2018, Dynamic Macao Promotion Week – Tianjin was held.

In August 2018, Chief Executive Chui Sai On met with the Mayor of Shanghai Municipality, Ying Yong, to exchange views on issues related to youth affairs, finance, the convention and exhibition industry and civil servant training, and to witness the signing of the Shanghai-Macao Cooperation Agreement.

In September 2018, the 20th China International Fair for Investment and Trade was held in Xiamen, Fujian. The IPIM organised the Forum for Investment Cooperation

between Macao and Fujian, to foster exchanges and cooperation between Fujian enterprises, representatives of chambers and associations of Portuguese-speaking countries and Macao entrepreneurs.

In November 2018, Chief Executive Chui Sai On attended the China International Import Expo in Shanghai, and received President Xi Jinping and senior officials of foreign countries at the "Macao Hub".

Three projects were signed during the Macao Forum for Investment Cooperation – Economic and Trading Service Platform Between China and Portuguese-Speaking Countries regarding promoting development of the Chinese-Portuguese Platform, supporting young entrepreneurs, specialised financial services, science and technology and international trade. The IPIM also facilitated participation by Macao related enterprises as exhibitors in the Goods Trading – Foods and Agricultural Products Zone and Services Trading – Integrated Services Zone.

Also in November, Chief Executive Chui Sai On and the Secretary of the CPC Sichuan Province, Peng Qinghua, led delegations of the two governments to attend the First Sichuan-Macao Cooperation Conference. During this, a signing ceremony was held for the Agreement on Establishment of the Mechanism Originating via the Framework of the Sichuan-Macao Cooperation Conference and the Memorandum of the First Sichuan-Macao Cooperation Conference.

Relationship with Guangdong Province

The PRD offers Hong Kong and Macao investors a vast area for expansion, with capital and technology from Hong Kong and Macao driving the region's economic development.

The Guangdong-Macao Cooperation Joint Conference mechanism was established in 2003. The conference set six priority projects for cooperation between the two regions. These were the service sector, the Zhuhai-Macao Cross-border Industrial Zone research on the joint development of Hengqin Island, a major cross-border traffic network, tourism, and cooperation between ports.

The Zhuhai-Macao Cross-border Industrial Zone, with a first-phase area of 400 thousand square metres, was approved by the State Council on 5 December 2003. The Zhuhai-Macao Cross-border Industrial Zone aims to enhance development of industries, and serves as a hub for logistics, transhipments and exhibitions.

In March 2011, the Framework Agreement on Cooperation Between Guangdong and Macao was signed in Beijing, representing a new milestone in the history of cooperation between the two places. The agreement has eight chapters and 38 articles, encompassing all areas of economic, social and cultural cooperation as well as cooperation in people's livelihoods. It serves to define the approach, principles and objectives of Guangdong-Macao cooperation, and covers major cooperative projects including joint development of Hengqin Island, synchronised development of industries,

infrastructure and customs clearance facilitation, community public services and regional cooperation planning. On 19 April in the same year, the Implementation of the Major Tasks for the Framework Agreement on Cooperation Between Guangdong and Macao, the Agreement on the Joint Implementation of the CEPA Pioneer Demonstration Zone in Nansha between Guangzhou and Macao, and the agreement on the joint development of Guangdong-Macau Traditional Chinese Medicine Technology Industrial Park by Zhuhai municipality and the MSAR Government were signed. Guangdong and Macao have since continued to maintain close interactions and gradually implemented the cooperative projects.

In 2014 and 2016, through the assessment mechanism under the Assessment Committee for Macao Projects for Hengqin Development, the Government recommended a total of 83 projects for Hengqin, including the first batch of 33 projects, and the remaining 50 projects that were intended for development in the Guangdong-Macao Cooperation Industrial Park. By the end of December 2018, 23 projects – mainly covering tourism and leisure, culture, new and high technologies, science, education, research and development, and trade and logistics – moved into their sites at the industrial park and commenced work on establishing their operations.

The IPIM and Administrative Committee of the Hengqin New Area initiated a new phase of investment recruitment for Guangdong-Macao Cooperation Industrial Park and started accepting applications for using the remaining 2.57 square kilometres in the park, with a new assessment mechanism, from 31 December 2018.

In January 2018, Chief Executive Chui Sai On and the Governor of Guangdong province, Ma Xingrui, led delegations of the two governments to attend the Guangdong-Macao Cooperation Joint Conference in Guangzhou. A total of eight cooperation agreements and memoranda were signed after the conference.

In January and October 2018, the IPIM supported the Department of Commerce of Guangdong Province with organising the Symposium on the Measures Adopted by Guangdong Province for Further Expanding Access to and Utilisation of Foreign Investment and a symposium on the revised version of the above policy, respectively.

In June and July 2018, Chief Executive Chui Sai On led a government delegation to nine cities in the Guangdong-Hong Kong-Macao Greater Bay Area. In July, the IPIM signed cooperation memoranda and agreements with four Greater Bay Area cities – Huizhou, Dongguan, Jiangmen and Zhaoqing – at the Guangdong and Macao Branded Products Fair 2018.

In October 2018, the IPIM and the Guangdong Province Administration for Market Regulation (the former Guangdong Province Administration for Industry and Commerce) signed the Cooperation Agreement between the Guangdong Province Administration for Industry and Commerce and the Macao Trade and Investment Promotion Institute, to help facilitate registration by trading companies in the nine cities of the Greater Bay Area.

In November 2018, the IPIM and the Department of Commerce of Guangdong

Province co-organised a commercial exchange delegation for Macao entrepreneurs to visit cities in the Greater Bay Area. The delegation visited the Economy, Trade and Information Commission of Shenzhen Municipality, and several technology enterprises in Shenzhen and Nansha. It also organised an entrepreneur business matching session between Macao and Nansha, to enable Macao entrepreneurs to gain an understanding of the latest developments and business environment of the Greater Bay Area, and to foster commercial exchanges between enterprises of the two places.

Furthermore, the IPIM and several cities of Guangdong province began their cooperation in organising exhibition and convention. In January 2018, the IPIM and the Guangzhou Municipal Commission of Commerce co-organised the Macao-Guangzhou Fine Products Fair 2018 in Guangzhou. The IPIM organised a delegation of entrepreneurs to join the event as exhibitors, and lined up over 40 business pairings and negotiations. The Dynamic Macao Business and Trade Fair was held in November in Zhaoqing. During the week, the IPIM organised the Macao-Guangzhou-Foshan-Zhaoqing Convention and Exhibition Industry Promotion Seminar, which facilitated discussions on investment, project bidding and talented people of the convention and exhibition industry.

Relationship with Jiangsu Province

While enhancing cooperation with Guangdong and PPRD, the Government puts equal emphasis on cooperation along the Yangtze River economic belt by commencing specialised cooperation with provinces including Jiangsu, thereby further promoting adequate economic diversification of Macao's economy. We expect to become more deeply involved in the country's development through regional cooperation, and will strengthen our position and functions in the course of China's economic development and opening up.

According to the Memorandum on the Collaborative Establishment of Jiangsu-Macao Cooperation Zone signed in October 2016, the Macao SAR Government and the People's Government of Jiangsu Province joined hands in developing the Jiangsu-Macao Cooperation Zone in Changzhou. In 2017, the two parties upheld the principle of scientific administration and timely planning, to jointly carry out opinion collection, survey and research, as well as formulation of a plan in preparation for the development of the cooperation zone.

In October 2017, the IPIM and the Department of Commerce of Jiangsu province signed a cooperation memorandum to strengthen economic and trade cooperation along the "Belt and Road", fully leverage the functions of both parties as exhibition platforms, and invite mutual visits by delegations from both places.

In December 2018, Chief Executive Chui Sai On led a government delegation to visit the Jiangsu-Macao Cooperation Zone in Jiangsu Province and meet with senior officials of Jiangsu province, to further explore cooperation and exchange opinions on the overall planning and construction of the Jiangsu-Macao Cooperation Zone. The

delegation also visited the site of the industrial park in Changzhou.

Jiangsu and Macao have maintained close commercial and trading cooperation. Jiangsu has attached particular importance to leveraging the advantages of Macao as a platform for China and Portuguese-speaking countries. Since 2011, the Jiangsu-Macao Industrial and Commercial Summit of Portuguese-Speaking Countries has been hosted by the Macao International Trade and Investment Fair for eight consecutive years. A cooperation mechanism has been established by the two sides, which has in turn developed a system for regular cooperation between Jiangsu, Macao and Portuguese-speaking countries in commercial and trading, cultural and education fields. Besides, there has been cooperation between Jiangsu and Macao in tourism, education, training of social service personnel, healthcare and hygiene.

Economic Services Bureau

The Economic Services Bureau is mainly responsible for assisting in the formulation and implementation of economic policies covering economic activities, intellectual property and other areas designated by law as its responsibilities.

Industrial Licences

Under Decree-Law No. 11/99/M dated 22 March 1999, all assembly and processing manufacturing enterprises licensed under Decree-Law No. 55/97/M dated 9 December 1997 and listed in Category D of the first revised edition of the Macao Industries Classification Index must apply for industrial licences from the Economic Services Bureau. Under Article 11 of Decree-Law No. 11/99/M, it is strictly prohibited to carry out the above activities in residential buildings.

Applications for industrial licences are classified as "general system" (for industrial buildings), "special system" or "special activities". In 2016, the charges for applying for all new or renewed industrial licences were waived.

In 2018, the Economic Services Bureau issued one general-system industrial licence and 17 special system/special activity industrial licences. In addition, five general-system industrial unit licences and 37 special-system/special-activity industrial unit licences were issued, 23 industrial licences and 40 industrial unit licences were revoked, and 161 industrial licences were re-issued due to the transfer, removal or merger of industrial establishments, or because information relating to them had changed.

Certificates of Origin

Certificates of Origin (CO) may be applied for from the Economic Services Bureau. These are used to prove to a third party that exports have been sufficiently assembled

and processed in Macao, and are thus classified as products originating in Macao. According to By-law No. 29/2003 Regulations on Certificates of Origin, which was amended by By-law No. 20/2016 that came into force on 4 August 2016, the charge for issuing certificates of origin has been cancelled, to reduce trading operating costs.

Certificates of Origin are classified into four types: General Certificates of Origin apply to general customs clearance; Generalised System of Preferences (GSP) Certificates of Origin apply to customs clearance in importing countries and regions that use GSP; Certificates of Origin (Foreign Products) are used for proving that Macao was not the origin of products re-exported via Macao; CEPA Certificates of Origin are for goods of Macao origin that enjoy zero tariff and other incentives under CEPA.

In 2018, the Economic Services Bureau issued 884 general certificates of origin; major export destinations included the United States and mainland China, accounting for 27.7 percent and 19.1 percent of the total issuance, respectively. It also issued 755 certificates of origin for CEPA.

Certificates of Macao Service Suppliers

To enjoy the incentives and benefits under CEPA, all Macao enterprises that conform to Annex 5 of CEPA, all regulations in supplementary protocols and Annex 3 of the Agreement on Trade Services under CEPA are required to apply to the Economic Services Bureau for a Certificate of Macao Service Supplier. From 1 January 2004, when CEPA was implemented, to 31 December 2018, the Economic Services Bureau issued 631 Certificates of Macao Service Suppliers.

Export and Import Licences

Licences for Export and Import are regulated by External Trade Law (Law No. 7/2003), as amended by Law No. 3/2016 dated 4 July 2016. Under the law, any natural person or legal person may engage in external trade activities, provided the Government holds evidence that they have fulfilled their tax obligations, particularly those involving business tax and excise duty. Macao exercises minimal controls over import and export activities that are consistent with its international obligations, and considerations of environmental, sanitary, safety and security issues.

The laws and regulations that currently govern imports and exports include:

- Law No. 7/2003 of the External Trade Law amended by Law No. 3/2016 dated 4 July 2016;
- By-law No. 28/2003 on External Trade Operations amended by By-law No.19/2016 dated 18 July 2016 ;
- Executive Order No. 487/2016 (Table of goods for self use or self consumption;

Exportation Table [Table A] and Importation Table [Table B]; and table of goods requiring health quarantine/plant quarantine);

- Law No. 2/2017 on enforcement laws and regulations regarding the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES);
- Law No. 4/99/M of the Excise Duty Regulations amended by Law No. 8/2008 on 25 August, Law No. 7/2009 on 25 May, Law No. 11/2011 on 19 December, and Law No. 9/2015 on 13 July;
- Decree-Law No. 62/95/M about the formulation of policies and measures on the Control and Reduced Use of Ozone-Depleting Substances and its related regulations;
- Executive Order No. 425/2009 setting a limit on the annual import of HCFCs, in Table C of Executive Order No. 78/GM/95, issued on 4 December;
- Decree-Law No. 51/99/M regulating commercial or industrial activities concerning computer programs, audiovisual products; and
- Law No. 17/2009 prohibiting the illegal production, trafficking and consumption of narcotics and psychoactive drugs, and other relevant regulations, amended by Law No. 4/2014 dated 8 April and Law No. 10/2016 dated 28 December.

According to law, licences for commodities that are subject to the special regime, listed in Exportation Table A and Importation Table B (contained in Annex II of Executive Order No. 487/2016), must be applied for in advance, regardless of the type of import or export. These licences are issued by authorised institutions. The Economic Services Bureau is authorised to issue such licences.

Regulated exported goods include:

- Species regulated by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (contained in Chief Executive Notice No. 43/2017) ;
- Ozone-depleting substances;
- CD ROM production facilities;
- Weapons, ammunition and related parts and accessories; and
- Pharmaceutical items and medicines, and certain chemicals.

Regulated imported goods include:

- Drinks with alcohol concentrations of at least 30 percent by volume, and tobacco;
- Motor vehicles;
- Species regulated by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (contained in Chief Executive Notice No. 43/2017);

- Ozone-depleting substances;
- CD ROM production facilities and materials;
- Live animals, meat and seafood, eggs and certain milk products;
- Pharmaceutical products and drugs, and certain chemicals;
- Weapons, ammunition and related parts and accessories;
- Inflammable explosives;
- Certain telecommunication transmitters and receivers; and
- Petroleum products.

Since applications for export licences for textile and garment products were first processed electronically in the fourth quarter of 2000, the Economic Services Bureau has been stepping up its efforts to electronically process applications for import and export licences. Since the introduction of the pilot scheme for electronically processing the import licence applications of some products in 2004, the number of applications for electronic services gradually increased from 2005 to 2018, with product categories expanding to include cigarettes, alcohol, motor vehicles, and air conditioners containing HCFCs.

In 2018, the Economic Services Bureau issued 11,183 import licences and 1,502 export/re-export licences.

Protection of Intellectual Property Rights

The Intellectual Property Department of the Economic Services Bureau is responsible for managing and enforcing laws relating to intellectual property rights; handling registration affairs relating to industrial property rights, including registration of trademarks, business names and logos; patents for inventions; utility patents, designs/ new prototypes, semiconductor product topographies, places of origin / geographical indicators and awards. It is also responsible for updating and recording any remarks, extensions and acts of termination relating to industrial property rights. In addition, the department registers copyright and other related rights collectively managed by relevant organisations.

The Macao Customs Service is responsible for enforcement of legislation regarding intellectual property rights and implementation of punitive measures should they be infringed, to enhance fair competition and combat counterfeiting, thus promoting compliance with intellectual property rights and authorship regulations.

Intellectual Property Rights System

The Copyright and Related Rights Code and the Industrial Property Law are currently the two major pieces of legislation related to intellectual property rights in Macao.

Copyright and Related Rights Code

In Macao, copyright is subject to legal regulation and protection. On 16 August 1999, the Copyright and Related Rights Law (Decree-Law No. 43/99/M) was gazetted; it came into effect on 1 October that year, protecting copyright under clearly defined terms. The regulation provides full protection for works of literature, drama, music and art, movies and television broadcasting, as well as all original productions, and it fulfils the requirements of Trade Related Intellectual Property Rights formulated by the WTO.

To comply with the international protection standards arising from the special features of the modern information society, in 2012 the Government amended the Copyright and Related Rights Law approved by Decree-Law No. 43/99/M to produce Law No. 5/2012, which came into effect on 1 June the same year. The amended law enhances the rights and protection of copyright holders, art workers and producers, providing them with the rights of Internet transmission, distribution and commercial lease. At the same time, the law also adequately modifies the relevant criminal penalty to further protect copyright in a digital environment. Together, these measures more closely aligned Macao's copyright system with the latest international protection standards.

In Macao, copyright is an inherent right. A piece of work, whether issued, published, used or operated, already lends copyright to the author upon completion, allowing the author to enjoy related legal protection, even without registration. In general, copyright in Macao expires 50 years after the death of the author, including for works issued or published after death. However, the period of protection of individual pieces of work varies, depending on their type.

The Industrial Property Rights System

The current Industrial Property Law was promulgated on 13 December 1999 and came into effect on 6 June 2000, replacing the previous rules and regulations. It was only then that Macao had its own industrial property rights laws and was able to completely fulfil its international duties.

The Industrial Property Law offers protection in the following eight areas: patents, including invention patents and utility patents; certificates of complementary protection for drugs and herbal medicines; topology maps of semiconductor products; industrial designs and new industrial products; trademarks; the names and logos of business establishments; places of origin and geographical indications; and awards.

Trademark Registration

Any trademarks that fulfil the requirements of the Industrial Property Law may be registered in Macao, but registration is not compulsory. Trademark registration is geographical: trademark regulations in the Macao SAR protect only trademarks issued locally. Separate applications must be made in other countries and regions for

protection there.

In 2018, the Intellectual Property Department of the Economic Services Bureau accepted 16,474 applications for trademark licences, representing an increase of 25.42 percent on the 13,135 applications processed in 2017. Applications were mainly from mainland China, Macao, the United States, Hong Kong, Japan and British Virgin Islands. As at 31 December 2018, the Economic Services Bureau had received a cumulative total of 163,963 applications.

Patent Registration

From 6 June 2000, all applications for patents – including invention patents and utility patents, designs and new products – may be submitted directly to the Economic Services Bureau.

The Economic Services Bureau and the State Intellectual Property Office (SIPO) signed the Cooperation Agreement on Intellectual Property between the State Intellectual Property Office and the Economic Services Bureau of the Macao SAR on 24 January 2003. They agreed to extend the applicability of SIPO patent approvals to Macao. The effective period of this agreement was five years, and it was extended for five more years in 2008, 2013 and again in 2018.

In 2018, the Economic Services Bureau accepted 611 applications for patent extensions for inventions, 83 patent registration applications, and applications for registration of 208 designs and new products. These applications were mainly from the mainland China, the United States, Japan and Macao. As at 31 December 2018, the Economic Services Bureau had received a cumulative total of 3,510 applications for patent extensions for inventions, 1,844 applications for patents, and applications for the registration of 2,175 designs and new products.

SME Assistance Programme

Supporting the development of small and medium-sized enterprises (SMEs) has always been a focal point for the Government's policy. In 2003, in response to the prevailing socio-economic situation, three enterprise-finance programmes were introduced.

The scheme was revised again in May 2017, to offer secondary aid to enterprises that had already repaid their loans, streamline the application procedures, and refine the details of the scheme.

As at the end of December 2018, a total of 11,249 applications had been received, 9,930 of which were approved, involving financial aid amounting to 2.924 billion patacas. (The statistics include the applications for financial aid to cover losses arising

from the impact Typhoon Hagupit in 2008). Enterprises receiving the loans are primarily engaged in retail, construction and public works, restaurants and hotels, corporate services, and personal services including automobile and motorcycle repair and maintenance, and hair and beauty salons.

The SME Credit Guarantee Scheme was launched in August 2003. The scheme is designed to assist enterprises in obtaining bank loans for business development. The MSAR Government provides eligible enterprises with credit guarantees of up to 50 percent of a bank loan up to 1.5 million patacas. The scheme was revised in June 2009, with the maximum credit guarantee rate raised to 70 percent, and the maximum credit guarantee amount raised to 3.5 million patacas.

In May 2017, the scheme underwent another revision, with the maximum credit guarantee amount raised to 4.9 million patacas. From the scheme's commencement to the end of December 2018, the Government received 740 applications, involving a total loan amount of 1.934 billion patacas; 685 of the applicants obtained government credit guarantees totalling 1.24 billion patacas. Most applicants were from the construction and public works sector, followed by retail, wholesaling, company services, imports and exports, transportation and warehousing, travel agencies, Chinese restaurants, other restaurants and hotels.

The SME Credit Assurance Scheme was launched in August 2003. The scheme is designed to assist SMEs in launching specific projects. On the financing front, the MSAR Government will provide eligible enterprises with credit guarantees of up to 100 percent of a bank loan up to one million patacas.

The scheme was revised in May 2017, to include an additional item for commencement of new businesses. Since the scheme's implementation, as of late December 2018, the Government received 79 applications, involving a total credit guarantee of 65.04 million patacas; 66 of the applicants obtained 100 percent credit guarantees from the Government, with a total value of 55.64 million patacas. Of the approved cases, most were from retailing, followed by wholesaling, paper, printing and publishing, imports and exports, construction and public works, textiles, garments and leather manufacturing, Chinese restaurants, other restaurants and hotels, and personal services including automobile and motorcycle repair, and hair and beauty salons.

Young Entrepreneurs Aid Scheme

To encourage young people in Macao to fulfil their dreams of starting their own businesses, and thereby fostering economic diversification and innovation in Macao, the Government launched an interest-free business start-up loan programme specially designed for young people. Interest-free financial assistance is provided to those who already have conceived the idea of starting a business and have already started the relevant operations, to relieve them of the pressure of funds shortage during the business start-up stage.

The Young Entrepreneurs Aid Scheme was launched in August 2013, with a maximum loan amount of 300,000 patacas and a longest repayment period of eight years. In August 2017, the scheme was revised, primarily to expand coverage to not only include young people who start businesses for the first time, but also provide assistance to enterprises established by young people who have previous experience of entrepreneurship; and enhanced training for youth entrepreneurship by requiring young entrepreneurs to enrol in relevant training programmes. By the end of 2018, a total of 1,854 applications had been received, 1,364 of which were approved, involving a total amount of 318 million patacas. The industries involved were mainly retail, restaurants and hotels, corporate services, automobile and motorcycle repair, and personal services including hair and beauty salons.

Special Assistance for SMEs affected by Typhoon Hato

To provide support for SMEs affected by Typhoon Hato, the Government introduced two short-term relief measures through the Industrial and Commercial Development Fund – the Special Assistance Scheme for SMEs affected by Typhoon Hato and Post-disaster Financial Aid Scheme, to provide an interest-free loan of up to 600,000 patacas and post-disaster financial aid of up to 50,000 patacas to eligible SMEs, hawkers, self-employed individuals and owners of commercial vehicles affected by the typhoon. To expedite the application for and receipt of such aid by affected merchants, the Economic Services Bureau worked in collaboration with various government departments and chambers of commerce to set up application form collection and cheque dispatch stations in various districts. It also worked with banks to expedite the approval of applications under the Special Assistance Scheme for SMEs.

As of the application deadline on 30 September 2017, the Industrial and Commercial Development Fund received a total of 14,536 applications for post-disaster financial aids and 6,640 applications under the Special Assistance Scheme for SMEs. As of 31 December 2018, 13,260 applications for post-disaster financial aids and 5,788 applications under the Special Assistance Scheme for SMEs, involving 572 million patacas and 1.81 billion patacas respectively, were approved.

Monetary Authority of Macao

The Monetary Authority of Macao, formerly known as the Issuing Institute of Macau, functions as a quasi-central bank and has the power to supervise Macao's financial system.

In addition to supervising the monetary and financial markets according to current legislation, the Monetary Authority also actively promotes long-term financial stability and sustained development.

Monetary Policy

Capital flows freely and currencies are freely convertible in Macao. The Government's currency policies are to defend Macao's currency and maintain its foreign exchange stability. The two policy tools used to achieve these objectives are the deposit reserve and monetary bills. The deposit reserve ratio is three percent for current savings, two percent for time deposits of less than three months, and one percent for time deposits of over three months. Monetary bills are a short-term money market tool issued by the Monetary Authority; and they are used to adjust the liquid capital of patacas in the financial system. The interest rate usually remains competitive with interbank offer rates in Hong Kong. In addition, the Monetary Authority of Macao adjusts liquidity in the money market via repurchase agreements and currency exchange contracts with the banks.

The Pataca

The pataca has been the legal tender of Macao for more than a century. As early as 1905, the former Portuguese administration authorised the Banco Nacional Ultramarino (BNU) the monopoly right to issue pataca notes. The first pataca notes were issued on 27 January of the following year. At that time, the Mexican eight reales silver coin, called Pataca Mexicana in Portuguese, was very popular in Asia, and the pataca was named after it.

In 1980, the former Portuguese administration set up the Issuing Institute of Macau (Instituto Emissor de Macau), which was given the monopoly right to issue pataca notes. Since then, the Banco Nacional Ultramarino has continued to issue banknotes, but has acted only as the agent of the Issuing Institute of Macau. On 1 July 1989, the Monetary and Foreign Exchange Authority of Macau was created. The Government redeemed the right to issue patacas, but the Banco Nacional Ultramarino remained the agent bank for issuing notes. In October 1995, the Bank of China (BOC) became the second agent bank for note issuing. Although more than one bank is now authorised to issue notes in Macao, overall power to issue currency is retained by the Government.

Under the currency board system, all the patacas issued must be 100-percent-backed by foreign exchange reserves. As legal backing for the notes they issue, the agent banks for note-issuing are required to pay an equivalent amount in Hong Kong dollars to the Monetary Authority of Macao; in exchange they receive a Zero-Percent Certificate of Indebtedness at a fixed exchange rate of one Hong Kong dollar to 1.03 patacas. The 100-percent reserve backing system enables the Monetary Authority to ensure the full convertibility of the pataca into its reserve currency – the Hong Kong dollar – thus establishing the linked exchange rate relationship between the pataca and the Hong Kong dollar. As the Hong Kong dollar is pegged to the US dollar, the pataca is indirectly pegged to the US dollar at an exchange rate of one US dollar to about eight patacas.

The Government's policy is to support the circulation and use of the pataca without rejecting the circulation and use of other currencies. Decree-Law No. 16/95/M, Circulation of Local Currency – Mandatory Use of the Pataca, requires that any goods

sold and services offered in local business transactions must be clearly priced in patacas; and they can also be simultaneously priced in one or more other currencies. Under the decree-law, regardless of the nature and objectives of the debts and transactions, no reasons or excuses can be used to decline settlement using the pataca.

From September 2002, the Bank of China began to provide deposit, remittance and exchange services in patacas in some major cities in Guangdong. The exchange business network has since been extended to cover nearly all provinces and municipalities in mainland China. This move is certain to increase the usage and circulation of patacas.

Foreign Exchange Reserves

The Government consistently adheres to prudent investment strategies for managing foreign exchange reserves. Provided the balance of international payments remains healthy and the convertibility of the pataca is not compromised, investments in safe yet quality investment products will be made to achieve principal-guaranteed growth. The year-end balance of foreign exchange reserves in 2018 increased by 0.8 percent over 2017, amounting to 163.6 billion patacas.

Fiscal Reserve

A fiscal reserve was established in early 2012, with the Monetary Authority of Macao responsible for its investments and management. Over the years, it has adopted a safe, effective and prudent investment approach. The capital of the fiscal reserve comes from the balance of the MSAR's reserve fund as well as the balance of past annual budgets. Balances amounting to 98.86 billion patacas were transferred to the fiscal reserve as start-up capital, while the remaining 54.2 billion patacas were transferred from the foreign exchange reserve. The MSAR's reserve fund was written off following the above transfers. At the end of 2018, the total asset value of the fiscal reserve, including the central budget balance for 2016 transferred early in the year, was 508.8 billion patacas, representing an increase of 18.8 billion patacas over the same period in 2017.

The fiscal reserve comprises two parts: the basic reserve and the excess reserve. The basic reserve refers to the financial reserves that provide ultimate protection for the Government's ability to cover public finances, at an amount equal to 1.5 times the provisions for expenditures of central departments set out in the latest fiscal budget reviewed and approved by the Legislative Assembly. Meanwhile, the excess reserve is used mainly to facilitate the implementation of the Government's public financial policies as well as to protect the liquidity of public finances, and is the fiscal reserve balance after meeting the basic reserve requirement.

Trade and Investment Promotion Institute

The Macao Trade and Investment Promotion Institute (IPIM) is a MSAR government

department responsible for promoting external cooperation such as external trade, foreign investment, convention and exhibition, and economic and trade cooperation between China and Portuguese-speaking countries.

Expediting Establishment of "Three Centres" as a Trade and Economic Cooperation Services Platform Between China and Portuguese-speaking Countries

To further consolidate Macao's function as the trade and economic cooperation services platform between China and Portuguese-speaking countries, the IPIM has taken an "online and offline" approach to expediting the construction of three centres, which are: a commercial and trade service centre for SMEs in China and Portuguese-speaking countries, a trading hub for food and produce from Portuguese-speaking countries, and a convention and exhibition centre for economic and trade cooperation between China and Portuguese-speaking countries.

Following the commencement of the China and Portuguese-speaking countries' trade and economic cooperation and talent information website on 1 April 2015, there were 24,744 registered accounts by the end of 2018, with 2,346 registered suppliers and agents; 26,214 entries of information on food of Portuguese-speaking countries were published. There were 851 registered talents who are bilingual in Chinese and Portuguese, and 2,365 professional service suppliers.

On 31 March 2016, the Portuguese-speaking Countries Food Products Exhibition Centre, in Tap Seac Square Commercial Centre, officially opened to showcase beverage and food from Portuguese-speaking countries. Each item on display was given a unique QR code so customers could easily access product information. A B2C online transaction service was available for certain products.

From 2016 to 2018, the IPIM cooperated with Macao organisations and commercial associations to set up exhibition venues for food products of Portuguese-speaking countries at six locations in Macao and in various provinces and cities in mainland China. Branches of the Portuguese-speaking Countries Food Products Exhibition Centre have been established at representative offices of the IPIM in mainland China (Fuzhou, Hangzhou, Shenyang, Chengdu, Guangzhou and Wuhan).

In 2018, the IPIM arranged for enterprises from Macao and mainland China to participate in exhibitions and study tours in Portuguese-speaking countries, as follows:

In March, the IPIM organised a delegation consisting of Pan-Pearl River Delta "9+2" provincial and regional representatives for a commercial exchange tour to Germany and Portugal.

In June, the Secretary for Economy and Finance, Leong Vai Tac, led a Macao entrepreneur delegation arranged by the IPIM to Portugal, for the Forum for Economic and Trade Cooperation between China and Portuguese-speaking Countries – Lisbon

2018. During the visit, the delegation visited the local industrial and logistic park and infrastructure. The delegation also visited Brazil to attend the Brazil-China-Macao Economic and Trade Cooperation Seminar, exchange information on economic and trade cooperation between China and Portuguese-speaking countries, and visit the Trade Union of Rio de Janeiro and local enterprises run by young entrepreneurs.

External Cooperation

The Macao Trade and Investment Promotion Institute (IPIM) is a member of World Association of Investment Promotion Agencies (WAIPA) and Asia Trade Promotion Forum (ATPF). In recent years, IPIM has signed cooperation agreements with trading organisations of various Portuguese-speaking countries and many provinces and regions of mainland China as well as the trade and economic authorities of the Korea and Thailand, to help local and overseas travelling merchants to explore business opportunities. Since 2006, IPIM has established representative offices in Hangzho, Zhejiang province; Chengdu, Sichuan province; Shenyang, Liaoning province, Fuzhou, Fujian province; Guangzhou, Guangdong province; and Wuhan, Hubei province.

In March 2018, an MSAR Government delegation and a delegation of Macao entrepreneurs led by the Vice Chairman of the Chinese People's Political Consultative Conference, Edmund Ho Hau Wah, visited Myanmar to strengthen cooperation in commerce and trade, tourism and culture.

In May, a delegation from Macao's economic and trade sector led by Chief Executive Chui Sai On visited Bangkok, Thailand. During the visit, the IPIM organised the Macao-Thailand Investment and Tourism Promotion Seminar, and Macao: Photo Exhibition of "One country, two systems" and the "Belt and Road" Initiative.

In December, the IPIM and the China International Contractors Association co-organised a delegation from mainland China and Macao to Myanmar and Thailand, to promote investment in infrastructure. This was the first time that entrepreneurs and representatives of mainland China and Macao enterprises have jointly participated in infrastructure investment promotional activities, which encourage joint participation in the "Belt and Road" initiative, and leverage Macao's advantages and its role as an economic and trade services platform between China and Portuguese-speaking countries.

Enterprise Expansion Services

The IPIM provides a series of enterprise expansion services for investors, including providing support services necessary for business and market expansion for Macao enterprises; providing promotion incentives for electronic business (B2B), and promotion of B2C application platforms in support of marketing of Macao enterprises through an electronic approach; establishing an online business matching service platform; helping investors find business partners and expand their markets by holding business matching

sessions in trade and investment promotion events organised or co-organised by the IPIM; organising or co-organising workshops and exchange sessions to provide industry information to enterprises and inform them of the situation with business development in Macao, thereby promoting business exchanges; and providing general office support services, including temporary offices, and open office facilities for investors who are planning to establish a company, thereby reducing the startup costs for businesses in Macao.

Macao Ideas

Macao Ideas, established by the Macao Trade and Investment Promotion Institute (IPIM) and launched in May 2011, is a permanent merchandise exhibition centre in Macao dedicated to all things "Macao-manufactured", "Macao-branded" and "Macao designed". Macao Ideas is a procurement venue for overseas buyers, agents and companies who intend to introduce Macao products. It also acts as a bridge between Macao and overseas enterprises through online and offline product displays.

Major Exhibitions and Events Hosted and Organised by IPIM

Events hosted and organised by the IPIM in 2017 included the 2017 Macao InEvents hosted and organised by the IPIM in 2018 included the 2018 Macao International Environmental Co-operation Forum (2018 MIECF), the Ninth International Infrastructure Investment and Construction Forum, 2018 Macao Franchise Expo (2018MFE), 2018 Guangdong and Macao Branded Products Fair, 23rd Macao International Trade and Investment Fair (23rd MIF), and Product and Service Exhibition of Portuguese-speaking Countries (Macao) (2018PLPEX).

The Belt and Road Infrastructure Development Index (2018) and its 2018 Report were introduced during the Ninth International Infrastructure Investment and Construction Forum, serving as a reference for enterprises that intend to invest in countries and regions along the Belt and Road.

To further enhance Macao's function as a cooperation platform between China and Portugal, and to fully showcase products and services of Portuguese-speaking countries, the PLPEX has been organised as an independent exhibition since 2017, during the same period as the MIF. In 2018, the venue area was increased to 6,000 square metres, featuring 251 exhibition booths, representing an increase of over 14 percent over 2017. In all, 258 organisations and enterprises from mainland China, Macao, Hong Kong and Portuguese-speaking countries, registered users for the Portuguese-speaking Countries Food Products Database on the Portal, and professional service providers participated in the exhibition. More events were organised in parallel, to promote the products, services and culture of Portuguese-speaking countries.

One-Stop Service for MICE Bidding and Support

The IPIM provides a one-stop service for convention and exhibition bidding and comprehensive support for event organisers in Macao. To motivate adequate industrial diversification, Macao will foster the development of the convention and exhibition industry through a convention-first approach.

The one-stop service for convention and exhibition bidding and support includes: hosting leading overseas conventions and exhibitions in Macao; providing convention and exhibition information to organisers; appointing designated staff to follow-up on implementation of exhibition projects to be held in Macao; providing assistance on application under project subsidy schemes; assisting with promotion of local and overseas events that the IPIM participate in; and assisting companies established in Macao to launch convention and exhibition projects. It also offers a matching service to parties looking for partners for collaborative conventions and exhibitions.

One-Stop Service for Investors

IPIM's One-Stop Service for Investors provides all-round support and assistance to investors in Macao, throughout the implementation of an investment project. The IPIM contacts potential investors and appoints dedicated staff to support their investments in Macao – all the way from simple consultation, to assisting investors with implementing their investment plans, including by providing information on the business environment, administrative procedures and starting investment plans, assisting investors with establishing communication channels with related public bodies, and arranging technical meetings, to help investors understand the business environment in Macao within a short time.

As for significant investments or investments involving complicated administrative procedures, the Investment Committee comprising IPIM, Lands, Public Works and Transport Bureau, Economic Services Bureau, Labour Affairs Bureau, Macau Productivity and Technology Transfer Centre (CPTTM), Civic and Municipal Affairs Bureau, Financial Services Bureau, Monetary Authority of Macao, Health Bureau, Macao Government Tourist Office, Fire Service, and Environmental Protection Bureau – followed up on all the necessary administrative procedures involved in launching and implementing investment plans in Macao. The Investment Committee also appoints dedicated public notaries to handle procedures involved in company set-up and business registration, providing comprehensive services to investors.

Applications for Temporary Residence Permits

Under the Investors, Managerial Personnel, and Technical and Professional Qualification Holders Residency Scheme (By-law No. 3/2005), natural persons listed below who are not local residents can apply for temporary residency in the Macao SAR:

(1) investors who plan to make significant investments that facilitate Macao's development and whose plans are being considered by the relevant authorities;

(2) investors who have made significant investments that facilitate Macao's development; and

(3) management or technical personnel who have already been hired by Macao employers and whose diplomas, professional qualifications and experience are regarded as conducive to Macao's development.

The By-law No. 7/2007 promulgated by the Government in April 2007 suspended the effect of clauses of the By-law No. 3/2005 concerning applications for property investment residency. The move was part of the Government's initiative to review the long-standing investment residency policy.

Macau Investment and Development Limited

To implement the projects under the Framework Agreement on Cooperation Between Guangdong and Macao, the MSAR Government approved the establishment of Macau Investment and Development Limited on 29 June 2011, pursuant to Chief Executive Notice No. 17/2011 in the *Macao SAR Gazette* and By-law No. 14/2011.

Macau Investment and Development Limited endeavours to contribute to Macao's sustainable economic development and continuous progress in external economic cooperation and trade, through a series of efforts including participating in regional economic and trade cooperation, and launching investment projects.

Among these efforts, on 18 November 2011 Macau Investment and Development Limited jointly set up with Zhuhai Da Hengqin Investment Company Limited the Guangdong-Macao Traditional Chinese Medical Science and Technology Industrial Park Development Company Limited, to follow up on the of the Traditional Chinese Medicine Science and Technology Industrial Park, which is a cooperative project between Guangdong and Macao. The cooperative company acts as the developer and operator of the park, to carry out its projects.

In addition, under the Framework Agreement on Cooperation between Guangdong and Macao, Macao and Zhongshan signed the Framework Agreement on the Joint Construction of Cuiheng New District, to expedite the adequate economic diversification of Macao and transformation and upgrading of Zhongshan's economy. The Macau Investment and Development Limited and Transferência Electrónica de Dados - MACAU EDI VAN S.A. (TEDMEV) established the Parafuturo de Macau Investment and Development Limited on 24 November 2015, with equity shares of 99 percent and one percent, respectively, to lay the foundation for future work in collaboration with Zhongshan.

Macau Productivity and Technology Transfer Centre

The Macau Productivity and Technology Transfer Centre (CPTTM) was established in 1996. It is a non-profit organisation jointly established by the Government and the private sector. The mission of CPTTM is to help enterprises effectively use new approaches, ideas, information and technology to enhance the value of their products or services. Its objectives are to increase productivity and competitiveness, encourage and support the establishment and development of new businesses, and encourage employees to pursue self-development and enhance their vocational skills.

Continuous Professional Training

Ongoing professional training provided by the centre covers the four areas of fashion and innovation, information technology, business language and business administration, which are covered through a series of training programmes that are well-structured and can meet the requirements of professional/public examinations. The courses comprise: Industrial Development Series, Administration and Management Training Series, Business Start-up and Business Administration Training Series, and Business Language Training Series. There are also training programmes for specific groups of people, including a free enrolment scheme for the unemployed, vocational education programmes organised in collaboration with secondary schools and tertiary institutions, youth vocational and creativity training programmes organised in collaboration with schools and youth organisations, and entrepreneurship training programmes under the Innovation Development Scheme for Young Entrepreneurs.

In 2018, the centre held a total of 1,102 training programmes comprising a total of 23,869.75 learning hours. The number of students totalled 21,375. In the second half of the year, the centre became the approved programme provider of Wine & Spirit Education Trust (WSET®) and Chartered Institute of Environmental Health (CIEH), which introduced courses and examinations on wine and food safety qualifications, respectively.

Professional and Open Examinations

The Professional Examination Resources Unit under the centre manages various professional qualification public examinations and provides the public with reference information about these and other local professional examinations. The unit also serves as the Macao Centre for National Vocational Qualification Assessment. In 2018, a total of 6,114 candidates applied for examinations via the Resources Unit.

At present, there are five types of public examinations available at the Professional Examination Resources Unit: information technology, commerce and management, languages, vocational skills and admission examination.

The centre reached a cooperation agreement on "One Examination, Two Accreditations" with the Labour Affairs Bureau in October 2011. All Macao residents

awarded a National Vocational Qualification via the centre will receive the relevant local vocational skill certificates issued by the bureau.

The 2018 Microsoft Office Specialist World Championship and Adobe Certified Associate (ACA) World Championship were held from July to August, in the United States. Three Macao contestants, who had received extensive pre-match training provided by the CPTTM, won second place in the categories of Microsoft Office Word 2013, Word 2016 and Excel 2013.

Technical Training and Support Services

The House of Apparel Technology provides technical training, technological support, fashion and innovation seminars, and organises study tours on sewing equipment to help the garment industry move towards high added value, in-house brands and innovation. There are also fashion information stations and an online fashion information platform, WGSN (Worth Global Style Network), to help Macao factory owners, fashion designers and cultural and creative industry professionals obtain information about fashion, retail trends and analysis. In 2018, a new platform – Fashion Snoops – and digital textile printing machines were introduced, to inspire professionals and students in the fashion design industry in product development.

In 2018, CPTTM continued to hold the Ma Consef fashion training programme and organise various skills competitions. The centre organised participation by Macao fashion brands and designers in various fashion events, including Guangdong Fashion Week (Spring) – First Fashion Show of Guangdong-Hong Kong-Macao Greater Bay Area Fashion Alliance, the 29th China (Dalian) International Garment & Textile Fair, Dynamic Macao Business and Trade Fairs, which were held three times a year, and Hong Kong CENTRESTAGE, to help Macao fashion brands step out of Macao, exchange information and ideas with the fashion industries of other regions and create business opportunities.

The CPTTM also led groups of young Macao fashion designers to join the 26th China International Young Fashion Designers Contest. It also continued cooperating with IPIM to organise the Macao Fashion Festival 2018 during the 23rd Macao International Trade and Investment Fair, with participation by 39 designers and brands from various regions.

At the invitation of the Labour Affairs Bureau, the CPTTM participated in the 2018 (Tenth) Guangzhou/Hong Kong/Macao/Chengdu Youth Skills Competition, held in Macao in October. The CPTTM was responsible for "fashion technology" and "web design" training, screening contestants and venue decoration. It also assisted in setting up the Fashion Design Showcase and Fashion and Innovation Workshop at the Work Experience Booths. Contestants from Macao won the gold prize in Web Design and a merit prize in Fashion Technology.

The CPTTM continued working with the Cultural Affairs Bureau to operate and manage the Macao Fashion Gallery in St. Lazarus Parish. The fashion gallery collects

fashionable and creative products with distinctive Macao characteristics, by hosting various themed fashion shows and activities, to increase sales channels. In 2018, Macao Fashion Gallery hosted five fashion shows with different themes, three pop-up shops, three outdoor fashion shows and two fashion workshops. It also exhibited the creativity and capability of Macao local brands to local residents and tourists.

Management Information and Consulting Services

As a correspondent member of the International Organization for Standardization (ISO), CPPTM is committed to helping local organisations to raise their management and product quality levels to international standards.

In 2018, a total of 62 cases were resolved via management system consulting services. There were 51 applications under the assistance scheme for the International Management System Certification/Laboratory Accreditation. From the commencement of the scheme in October 1996 to the end of 2018, a total of 391 applications were awarded certification. There were 10 test categories under the External Testing Relay Service. A total of 2,140 applications were filed during 2018. In the middle of the year, the CPPTM launched a certification scheme on quality Macao products together with the Industrial Association of Macau; three applications were received by the end of the year.

The CPPTM continued to help local organisations to implement the ISO 14001 environmental management system, as well as realising green purchasing, understanding energy management, referring to the sustainable development report framework promulgated by the Global Reporting Initiative (GRI) and enhancing understanding of corporate social responsibility. The CPPTM continued to hold the 12th Envirokids Program – Children's Environmental Protection Action. The CPTTM also issued the Good Management Series on food safety management, retain shop management and convention management, to support development of the industry.

Information Technology Application and Training

The Cyber-Lab provides Macao students and working adults with the most comprehensive and professional information technology training programmes. In 2018, the Cyber-Lab continued to implement the gifted student training programme, providing information-technology-specific courses targeted at gifted secondary school students. There were 32 participants in the programme. The CPPTM organised six IT-related competitions for 343 secondary students and 48 tertiary students.

The CPPTM is committed to assisting SMEs to adopt information technology, providing information system application support services, and promoting the application of freeware and providing related support services. In 2018, it provided technical support for various enterprises on 113 occasions. In addition, CPTTM helped the Economic Services Bureau to develop the Macao Happy Play and SME360 system to facilitate easier

access to information by the public, tourists and SMEs through the use of information technology. The mobile app launched by the CPPTM, ChoicePro, was integrated into the SME360 system in August 2018, which further facilitated procurement matching between SMEs and large enterprises.

External Interaction and Cooperation and Services for SMEs

One of the long-term functions of CPTTM is to provide SMEs with various support services. In 2018, it handled a total of 105 support cases.

In 2018, the CPTTM continued to join hands with the Science and Technology Development Fund to co-organise exhibitor groups to participate in the China High-Tech Fair, in which 11 Macao enterprises and organisations participated. The CPTTM continued to organise exhibitor groups jointly with the Macao Trade and Investment Promotion Institute and the Science and Technology Development Fund to join the China Cross-Strait Technology and Projects Fair. A total of seven Macao enterprises participated in the fair, which mainly introduced and promoted environmental protection technologies and products of information technology development.

In April and June 2018, the Government launched the SME Subsidy Scheme for Installation of Anti-flood Platforms and the SME Subsidy Scheme for Installation of Anti-flood Gates and Water Pumps, respectively. The CPTTM was commissioned by the Industrial and Commercial Development Fund to handle the applications for subsidies. By 31 December, there were 53 and 1164 applications for the SME Subsidy Scheme for Installation of Anti-flood Platforms and the SME Subsidy Scheme for Installation of Anti-flood Gates and Water Pumps, respectively.

Participating in the Construction of Guangdong-Hong Kong-Macao Greater Bay Area

The Guangdong-Hong Kong-Macao Greater Bay Area Productivity Service Alliance was established on 28 June 2018. As a member of the alliance, the CPTTM participated in two "Productivity Seminar" training and exchange activities, in June and November. In the latter activity, a member of the Committee for Industrial Diversification of the CPTTM gave the keynote speech as a representative of Macao.

In December, the CPTTM arranged for a delegation of 12 Macao entrepreneurs to attend the Guangdong-Hong Kong-Macao Bay Area Gala Dinner.

World Trade Center Macau

The goals of the World Trade Center Macau are to promote and expand trading opportunities beyond Macao, to assist individuals and enterprises in searching for

international business opportunities, and to pioneer the exploration of new markets for Macao business organisations. Through the World Trade Center Macau, members can stay in close touch with nearly 300 world trade centres around the world, building new market networks and researching potential international trading partners.

The World Trade Center Macau and the Arbitration Centre of the China Chamber of International Commerce (CCOIC) have co-established the CCBC-CCPIT Joint Conciliation Centre, for resolving commercial disputes between mainland China and Macao enterprises.

The Business Cooperation Centre of Enterprise Europe Network Central China Macao Office (EENCC Macao Office)

The Business Cooperation Centre of Enterprise Europe Network Central China – Macao Office (EENCC Macao Office) is formerly known as the Euro-Info Centre Macao, which was set up in 1992 upon the recommendations of the Macao Government and under the auspices of the European Commission.

The Enterprise Europe Network is a European Union initiative aimed at providing business and innovation support to small and medium sized enterprises (SMEs) in Europe. As one of the network's partner organisations in China, EENCC Macao Office offers support to SMEs in Macao, mainland China and other Asian countries and regions.

The main missions of EENCC Macao Office are:

- Raising awareness and giving advice on EU legislation, standards and policies;
- Accessing EU programs, projects and funding;
- To find and connect with potential business partners across Europe;
- Facilitating business co-operation among SMEs; and
- To act as interface between SMEs and European institutions.

Macao Industrial Parks Development Company

To attract investment, the Government made the decision in 1993 to set up an industrial park in the Concordia Reclaimed Zone in Coloane to foster industrial diversification. A total of 337,000 square metres of land was reclaimed, of which 160,000 square metres is occupied by the Concordia Industrial Park. In October 1993, Concordia Industrial Park Company (SPIC) was officially set up to take over the management of the industrial park.

On 5 December 2003, the Central People's Government approved the establishment

of Zhuhai-Macao Cross-border Industrial Zone, in which Zhuhai would take up 290,000 square metres of land, and Macao would take up 110,000 square metres of land from reclamation in Ilha Verde.

In June 2004, the Government restructured Concordia Industrial Park Company (SPIC) to form Macao Industrial Parks Development Company, to develop and manage the Concordia Industrial Park, Zhuhai-Macao Cross-border Industrial Zone and other industrial parks. The MSAR and the Trade and Investment Promotion Institute own 60 percent and 40 percent shares of the company, respectively.

Labour Affairs Bureau

The Labour Affairs Bureau is responsible for implementing policies concerning labour, employment, occupational safety and health, and vocational training.

Employment Services

The Employment Department of the Labour Affairs Bureau assists job seekers looking for work in the private sector.

The Employment Department continued offering target-defined employment services. In 2018, to facilitate employment of grassroots workers, the Department referred qualified job seekers to recruitment fairs for major construction projects and sent representatives to the recruitment activities of large enterprises to learn about recruitment needs. During the year, job seekers attended 113 recruitment activities and 2,557 success cases were recorded.

To support youth employment, the department continued to organise various activities, including seminars on career planning, employment information or interview skills, as well as mock interviews. The department also organised the youth career expo to provide a matching platform for young people and enterprises. In 2018, more than 3,400 people attended the expo. More than 70 enterprises offered over 4,000 job vacancies. In addition, to enable more young people in Macao to gain an understanding of the development opportunities and working environment of the Guangdong-Hong Kong-Macao Greater Bay Area, the department organised four visits to the Greater Bay Area in 2018. A total of 102 Macao young people visited renowned enterprises and young entrepreneurs in Zhuhai or Shenzhen.

The Employment Department also provided tailored employment and referral services to the elderly, serving a total of 92 elderly people with employment counselling services. A total of 4,109 referrals were made for 1,074 elderly people. The department also provided one-stop comprehensive services to those who came for help after being dismissed by their former employers. In 2018, the department provided one-stop services to 46 people, of whom 20 have already found a job.

In 2018, the Employment Department recorded 10,787 job-seeking applications, of which 77 were from disabled persons, which were followed up by a dedicated task force under the department. A total of 41,048 referrals and matches were made according to the requirements of employers and the qualifications of job seekers, resulting in 8,961 people attending employment interviews, and 2,113 successful matchings (51 of which involved disabled persons). Successful matchings involved 81 different occupations.

Vocational Training

The Vocational Training Department under the Labour Affairs Bureau provides vocational training to citizens, meeting market needs. In addition, it strives to promote cooperation with other departments in terms of vocational training, and to align the development approaches of training programmes. It has also begun to establish a vocational skill certification system for different industries, to further improve professionals' skills and enhance recognition of their qualifications, supporting the upward or horizontal mobility of the labour force.

In 2018, the Vocational Training Department responded to changes and needs in the economy and the labour market by organising vocational courses that aimed at upgrading skills, certification-linked training, employment-linked training and on-the-job paid training. The department continued reviewing and optimising course design and provision. The courses offered in 2018 were attended by 8,737 persons.

Statistics on Vocational Training Department Students 2018

Training system	Training mode	Target participants	Number of courses	Number of students	Number of courses completed	Number of students who completed the course	Rate of successful employment one month after course completion
Occupational training	Apprentice training (2-year full-time)	F. 3 graduate or above aged 14-24; to foster the skills and knowledge required by various professions among young people	6	63	2	12	100%

Cont.

Statistics on Vocational Training Department Students 2018							
Training system	Training mode	Target participants	Number of courses	Number of students	Number of courses completed	Number of students who completed the course	Rate of successful employment one month after course completion
Continuous training	Industry-specific development training	The currently employed; to raise the professionalism of industry professionals	220	5,917	204	5,203	--
	Facility maintenance skills training (on-the-job paid training)	Lower ranking staff and newly recruited repair workers; the currently employed who wish to change their jobs; to provide multiple-skill training in facility maintenance	28	486	28	460	--
	Hotel and catering chef training (on-the-job paid training)	Lower ranking staff and newly recruited chefs; the currently employed who wish to change their jobs; to provide training in Chinese and Western culinary skills	7	115	7	106	--
	Fishing moratorium training programme	A 96-hour course, mainly to alleviate the financial pressure faced by fishermen during the moratorium, and to provide assistance in developing other occupational skills	29	626	29	598	--

Cont.

Statistics on Vocational Training Department Students 2018							
Training system	Training mode	Target participants	Number of courses	Number of students	Number of courses completed	Number of students who completed the course	Rate of successful employment one month after course completion
Continuous training	Vocational Training Programme for the Elderly	Designed for those aged 55 or above, to help elderly persons who are willing and able to work continue to stay in the workforce or to facilitate their re-employment.	4	74	4	66	
	Youth Vocational Training Programme	Designed for youth, to help young people unlock their potential and plan for their future career paths	8	96	8	39	--
	Employment Enhancement Training Programme	To provide specific training to job seekers registered with the Labour Affairs Bureau, with a view to raising their skill level within a short period of time, thereby increasing their chance of being recruited through job interviews	6	32	6	25	
	Vocational Rehabilitation Programme	Designed for rehabilitating persons, to facilitate their employment and social integration	3	24	1	6	--

Cont.

Statistics on Vocational Training Department Students 2018							
Training system	Training mode	Target participants	Number of courses	Number of students	Number of courses completed	Number of students who completed the course	Rate of successful employment one month after course completion
Continuous training	Skills Competition Enhancement Training Programme	To provide skill enhancement training for shortlisted skills competition contestants, and to identify strong performers to represent Macao at skills competitions	15	118	5	26	--
	Vocational skills pre-examination study course	For those who have signed up for vocational skills assessment; to provide focused revisions and information about examination rules	77	1,186	77	1,186	--
	Total		**403**	**8,737**	**371**	**7,727**	**--**

Skills Evaluation

In 2018, the Labour Affairs Bureau issued a total of 2,624 vocational skill certificates of various kinds. Breaking the figure down by sectors, the certificates mainly involved the real estate industry, the engineering and maintenance industry and hotels and catering industry, accounting for 41.9 percent, 38.4 percent and 10.3 percent, respectively.

The Labour Affairs Bureau continued to actively work with Guangdong province on occupational skills testing, to explore skills testing or training programmes for "One Examination, Two Accreditations" or "One Examination, Multiple Accreditations" for more types of jobs and at various levels, thereby fully realising the advantages of regional cooperation. It continued to organise training and certification courses. In addition, the bureau continued to commission the Macau Productivity and Technology Transfer Centre (CPTTM) to hold "One Examination, Two Accreditations" programmes at various levels.

Vocational Skill Competitions

The Labour Affairs Bureau fosters vocational skills development, broadens horizons and arouses interest in skills training among young people, by participating in or organising vocational skills competitions, to facilitate talent cultivation. Also, it further enhances exchanges and cooperation with vocational training organisations worldwide, thereby learning from advanced training experiences and skills, increasing public awareness of the importance of vocational training, and promoting the development of vocational skills training in Macao.

On 30 and 31 October 2018, the Labour Affairs Bureau organised the 2018 (Tenth) Guangzhou/Hong Kong/Macao/Chengdu Youth Skills Competition. In the five events of the competition, contestants from Macao won two gold prizes in Electrical Installations and Web Design. Five contestants from Macao won merit prizes - one in Fashion Technology, two in Patisserie and Confectionery, one in Restaurant Service and one in Web Design.

Through different events on occupational skills experience, this competition led participating young people and secondary school students into discussions on enhancing the presentation and functions of the competition. The two-day competition attracted an audience of 9,718 people, while 41 guided tours were arranged for 1,063 participants.

Labour Regulations

In the area of labour rights, duties and protection, the Labour Relations Law (Law No. 7/2008), the Law on Employment of Non-Resident Workers (Law No. 21/2009), the Compensation Mechanism for Labour Accidents and Occupational Diseases (Decree-Law No. 40/95/M), and the Law on Minimum Wage for Cleaning and Security Workers of the Property Management Industry (Law No. 7/2015) set out the minimum statutory requirements and protection for employees at work, balancing the legal interests of both employers and employees. In 2018, the Government announced amendments of the Labour Relations Law and the final report of the public consultation on the System of Part-time Work and the bill on Minimum Wage.

The Workers' Credit Rights Protection Scheme (Law No. 10/2015) establishes a protection scheme on credit rights arising from labour relations, to ensure that payments are made in relation to credit rights not fulfilled by debtors. The bureau has consistently implemented the Framework Law on Employment Policy and Workers' Rights (Law No. 4/98/M), ensuring that when employing non-resident workers, the employer must assure employment priority for local employees, and ensue equal rights, working conditions and benefits for local and non-resident workers.

Labour Relations

The Labour Inspection Department under the Labour Affairs Bureau provides free

consultancy services on labour regulations to local citizens, accepts and mediates in labour-relations, and monitors enterprises' compliance with labour regulations. The department is also responsible for handling applications for business licences by employment agencies. To effectively monitor the employment conditions of foreign workers and curb illegal employment, the Labour Inspection Department, the Public Security Police, and the Macao Customs Service jointly or independently carried out regular or non-regular inspections, according to their authority.

In 2018, the Labour Inspection Department provided 4,798 consultations about labour regulations to enquirers visiting the office. Of the individuals who sought assistance, 85.3 percent were employees and 14.7 percent were employers. Most enquiries were from cultural, entertainment, gaming and other service industries, as well as from the construction industry. Consultation topics were mainly related to dismissal compensation, wages and contract termination, which accounted for 15.7 percent, 12.1 percent and 11.7 percent of all enquires, respectively. There were 19,588 enquiries via telephone.

A total of 1,603 complaints from 2,656 employee enquiries were handled, 11.8 percent less than in 2017. Most involved wages (23.5 percent), overtime compensation (11.3 percent) and dismissal compensation (10.4 percent). Categorised by industry, most complainants were from construction (44.7 percent), followed by hotels and catering industry (14.5 percent), and gaming and other service industries (11.9 percent).

In 2018, there were 2,572 complaints related to employment disputes, illegal employment and other cases settled, involving 4,407 employees and 1,914 employer entities. Of the 1,614 cases relating to creditors' rights issues involved in the employment disputes, 70 required transferral to trial by the judiciary, accounting for 4.3 percent of total creditors' rights issues – mainly concerning wages, annual leave and overtime compensation, with the rest being resolved by the department itself. Creditors' rights arising from employment disputes totalled 44.75 million patacas, involving 2,799 employees.

In 2018, the Labour Inspection Department received notifications of 142 cases of agreement on lowering basic remuneration, involving 400 local employees, and 62 non-resident employees. None of the notifications received required filing and follow-up due to alleged breach of reduction of employees' basic compensation.

In the department's efforts to combat illegal employment, 845 cases of illegal employment were filed, in accordance with the Regulation on the Prohibition of Illegal Employment (By-law No. 17/2004) and the Law on Employment of Non-resident Workers (Law No. 21/2009) and its relevant supplementary laws. After investigation, in 2018, 862 offenders were penalised for breaches of the law, with fines imposed totalling 10.56 million patacas. In these cases, 177 non-local residents were found to be working for others in the MSAR without permits. Also, 245 non-local residents were found to be engaged in activities for their own benefit. Individuals in the two groups were fined a total of 5.785 million patacas.

In 2018, 222 applications for business licences by employment agencies were

processed. A total of 28 cases involving alleged breach of law by employment agencies were filed. These cases involved 32 activities, which included seven cases of operating without a licence, registration for employment of non-residents, and collection of agency charges. In 2018, the department revoked the business licence of one employment agency due to professional misconduct.

In 2018, only one enquiry made via telephone was received. Two cases involving four employees were filed in this regard, which were mainly complaints regarding wages and overtime compensation. Investigations of the two cases were completed. No breach of law was found in one of the cases. The remaining case (involving three employees) was confirmed to involve non-compliance with the minimum wage requirement, and the employers involved have already settled the shortfall in wage payment to the employees.

According to the legal regulation of the Workers' Credit Rights Protection Scheme, the administrative and technical support for the Protection Fund for Creditors should be provided by the Labour Affairs Bureau. In 2018, 233 employees applied for protection of workers' credit rights. Advice on all of these applications was provided within 60 days as required by the law.

Regarding labour inspection, the Labour Inspection Department proactively takes preventive inspection measures and promotes the laws; improves the exit mechanism for non-local employees; and establishes a joint exit mechanism for non-local employees, as well as a cross-departmental task force with the Public Security Police. In 2018, 43 inspections were conducted on major construction sites, collecting 1,027 copies of particulars of employees, to monitor employers' compliance with labour laws and protect the legal labour rights of employees. Nine briefing sessions on exit mechanisms were held for contractors of and employees working in construction sites, to explain to them matters that require attention by employers and labour rights of employees upon termination of employment. Compared with 2017, the number of people complaining about labour rights of employees in the construction sector decreased by 15.1 percent in 2018, showing that the measures were effective in reducing the number of labour disputes.

"Services on the Doorstep" are provided by giving legal enquiry services in hotels, construction sites, employment agencies and schools. Guidance is provided to employers on compliance with labour laws, to familiarise employers and employees with the rights, responsibilities and protection. The department also organised various types of presentations on labour laws for our partners and social groups, to promote the laws through case studies, interactive discussion, themed videos and question-and-answer sessions. In all, 98 presentations were conducted in 2018, with more than 11,491 participants.

The Labour Inspection Department continues to promote laws and provide convenient services to the public through various electronic media. There is an online reservation service for enquiries and complaints regarding labour rights. Simulated calculation of labour benefits is provided through a mobile app, to provide online simulated calculation of labour benefits for general employees, as well as minimum-wage-eligible cleaning

and security workers of the property management industry. Such rights include extra remuneration for working during mandatory and weekly leave, overtime compensation, annual leave compensation, and compensation for termination of contract without a specified contract period. The mobile app also provides samples of written documents of labour contracts. Residents can print the labour contract samples for free at service stations in the department's offices. Besides, the department has been enhancing the promotion of laws through various channels and media, including WeChat, Facebook, television and radio advertisements.

Occupational Safety and Health

In 2018, the Occupational Safety and Health Department under the Labour Affairs Bureau conducted the following regular inspections, industrial accident investigations, occupational health medical check-ups and related measures:

Work item	Target	Number of inspections	Number of suggested improvements	Other actions
Routine safety and health inspection	1,321 construction sites	3,197	1,486	Filed disciplinary actions against 136 construction sites involved in minor contraventions, with penalties of 611,000 patacas imposed. It was ordered that work be suspended in 35 cases due to high risk. Filed disciplinary actions against 5 employers and individuals for contraventions of regulations regarding occupational safety cards of the construction industry, with penalties of 6,000 patacas imposed.
	128 food and beverage premises	128	147	--
	20 gaming premises	30	41	--

Cont.

Work item	Target	Number of inspections	Number of suggested improvements	Other actions
Routine safety and health inspection	8 industrial premises	8	14	--
	10 piers	20	79	--
Safety inspection jointly conducted with other departments	198 enterprises	300	164	-
Industrial accident	7,362 victims in industrial accidents	-	-	--

Occupational safety and health training in 2018:

Course/activity	Number of classes	Number of participants	Number and types of certificates awarded
Occupational safety and health seminar	303	19,319	-
Occupational safety and health training module	143	3,334	3,277 (certificate of competency)
Construction industry occupational safety cards training courses and public examinations	552	17,137	16,534 (occupational safety cards)
Construction industry occupational safety cards refresher courses and public examinations	430	8,585	8,325 (occupational safety card renewals)

Cont.

Course/activity	Number of classes	Number of participants	Number and types of certificates awarded
Construction safety designated training courses (offered since June 2018)	37	770	706 (construction safety designated training certificate)
Construction industry occupational safety cards training courses for hotels and catering	111	4,556	4,399 (occupational safety card for hotels and catering)
Assistant construction safety supervisor certificate courses (organised jointly with Macau Construction Safety Association)	6	209	72 (*Examination of classes 4-6 yet to be held)
Assistant construction safety supervisor certificate courses(organised jointly with Macau Construction Safety Association)	4	142	35 (Examination of Classes 2-4 yet to be held) (Construction safety supervisor qualification)
Occupational Safety and Health Officer certificate courses(organised jointly with the University of Macau)	3	102	38 (*Examination of Classes 2-3 yet to be held)
Lifting appliance safety and inspection certificate courses (II)(organised jointly with Macau Construction Safety Association)	5	90	85 (certificate of competency)
Concepts of lifting appliance safety and inspection (organised jointly with Macau Construction Safety Association)	1	29	28 (certificate of competency)

Occupational safety and health promotional activities in 2017:

Activity	Number of participants	Number of participating individuals
Occupational safety and health promotional activities	133 construction sites	10,635
	37 hotels	2,157
	9 schools	1,158
Safety shoes promotion	59 enterprises	411 (provided with safety shoes)
First-aid kit promotion	190 enterprises	-
Temporary anchor devices promotion	39 enterprises	172 (attended the relevant training)
Safety harness, fall-arresting device and independent rescue line (kit) promotion programme	46 enterprises	178 (attended the relevant training)
Construction industry occupational safety and health management – promotion programme on working on mobile platforms	79 enterprises	336 (attended the relevant training)
Portable residual current device promotion programme	37 enterprises	183 (attended the relevant training)
Cut and heat resistant gloves promotion programme (launched in February 2018)	90 enterprises	--
Sun protection clothing and hat promotion programme (launched in May 2018)	95 enterprises	--

Non-resident Workers Employment Department

The Non-resident Workers Employment Department under the Labour Affairs Bureau is mainly responsible for administrative work related to employment of foreign workers. The Government imports non-resident labour on the main premise that the employment and labour rights of local employees are not harmed, whilst ensuring the continuous

and stable development of Macao's economy.

During 2018, the Non-resident Workers Employment Department handled 32,554 applications for work permits for professionals, non-professionals, domestic helpers, importation of non-resident workers and renewal of permits, transfer of professional non-resident employees, and activities for personal interest. Of these applications, 20,593 were for non-professional employees, 3,123 were for professional employees and 8,823 were for domestic helpers. Also, there were 15 applications for work permits to engage in activities for the applicants' personal interest, with follow-up action on statements of objection and petitions.

At the end of 2018, there were 188,480 employees with non-resident ID cards in Macao, including 153,809 non-professional employees, 5,973 professional employees, six persons engaging in activities for the their own benefit, and 28,692 domestic helpers, of whom 421 were from mainland China.

From November 2018, apart from Guangdong and Fujian, the department also issues permits for domestic helpers from seven provinces / autonomous regions in the mainland China, including Guangxi, Hunan, Hubei, Jiangxi, Anhui, Sichuan and Guizhou.

The first phase of the online service system was launched in May 2018. After registering for online services, applicants can read the status of non-resident worker employment licences of foreign workers in enterprises, occupational safety and health scores of contractors, as well as records of arrears, illegal employment, and non-resident employees working for non-authorized entities. Applications for renewal of employment of specialised or non-specialised non-resident workers can also be submitted online.

Consumer Council

The Consumer Council was established and commenced operation in 1990, and is responsible for providing comments on consumer protection policies to be implemented by the Government, and driving various efforts to protect consumers' rights.

Establishment of Cooperative Networks

In 1997, the council became a full member of Consumers International. Regarding international cooperation, it subsequently signed cooperation agreements with consumer rights departments or organisations of Portugal, Spain and Singapore. In 2014, the Consumer Council joined the International Consumer Organization for Portuguese-speaking Countries as an observer. Regarding cooperation within Greater China, it has signed consumer rights protection cooperation agreements with a total of 27 consumer councils of various mainland China provinces and cities, Hong Kong and Taiwan, to exchange relevant information and undertake various cooperation programmes.

In April 2018, consumer councils of nine cities in Guangdong and the two special administrative regions within the Greater Bay Area signed the Cooperation Memorandum on Consumers' Rights Protection in the Guangdong–Hong Kong–Macao Greater Bay Area, which designated the Macao Consumer Council as the intermediary platform of disputes in Greater Bay Area cities and the Portuguese Association for Consumer Protection.

Consumer Arbitration Centre

The Consumer Arbitration Centre was established in 1998 with an aim of resolving minor disputes that occur within the territory, and which do not involve more than 50,000 patacas, through mediation, conciliation and arbitration.

It is the duty of the Consumer Arbitration Centre to provide suitable legal assistance to a concerned party by one person-in-charge and a skilled officer. An arbitral decision shall be made by one judicial officer who acts as an arbitration judge on a part-time basis.

In 2018, the centre launched a cross-border arbitration service. Tourists from mainland China can report consumer disputes to the consumer councils in their home cities, and complete the arbitration procedures across the border.

Businesses that value their reputations and wish to resolve potential customer disputes are invited to apply for membership.

By 2018, 1,493 active companies had joined the Consumer Arbitration Centre. They included Chinese and western pharmaceutical businesses, department stores, supermarkets, catering companies, jewellery and timepiece shops, insurance agencies, laundry and dyeing companies, beauty and fitness centres, mobile telephone companies, computer products companies, travel agencies and real estate agencies.

Consumer Rights

According to Law No. 12/88/M, anyone receiving goods or services for private use from individuals or organisations of occupational nature engaging in economic activities is deemed as a consumer.

Consumers have the right to receive health protection and be safeguarded against dishonest and irregular practices relating to the promotion or provision of goods or services; to receive guidance and be informed; to be safeguarded against risks that could damage their interests; to be protected against any loss and to receive compensation; and to be treated fairly and be able to participate in the legal and administrative defence of their rights and interests.

To promote consumer rights and the relevant law, the Consumer Council published

the first *Consumer Report* in July 1993. In December 2018, the 304th issue was published, with a monthly circulation of 4,600 copies.

Complaints

In 2018, the Consumer Council received 2,290 complaints and 2,753 enquiries. The number of cases handled totalled 5,043. The complaints mainly concerned disputes arising from consumer activities involving jewellery, public transport, food and beverage, personal care products and services, as well as catering services.

In line with the Government's strategy to develop gaming and tourism and the facilitated individual travel (FIT) scheme for mainland residents, the Consumer Council is strengthening its services for tourists, and is dedicated to promoting the development of a sound consumer rights protection mechanism in Macao. Of the 5,000 complaints and enquiries received, about 26 percent were made by tourists.

Research and studies

The Consumer Council works to realise consumer rights, based on information gathered through research, which includes quality spot checks on commercial goods. The research includes collecting and analysing the prices of various goods and services in the market.

To keep pace with the development of the information era, the Consumer Council has launched several mobile phone apps. In 2016, a mobile app known as the *Macau Price Information Platform* was developed to incorporate existing mobile apps including *Macao Supermarket Price Information Platform*, *Macao Fuel Price Information Platform* and *Certified Shop*. It provides information on everyday prices in the markets, and so provide a one-stop information service platform for consumers to check prices and information about certified shops.

Yearly Quality Mark of "Certified Shops"

On 15 March 2001, the Consumer Council introduced the "Certified Shop" quality mark to the general public, which was well recognised by various authorities in Macao and mainland China. Since 2007, the quality mark has been jointly issued by the Consumer Council and the Chamber of Tourism of the All-China Federation of Industry and Commerce (ACFIC), as a way to enhance the protection of consumer rights in Macao and promote "good faith tourism".

To qualify for membership of the Consumer Arbitration Centre and receive a "Certified Shop" emblem, a shop must not have had any complaints filed against it within the previous year. As at the end of 2018, the Consumer Council had issued the "Certified Shop 2019" emblem to a total of 1,131 establishments.

The council has enhanced the regulation of Certified Shops by requesting these shops to abide by the following additional rules:

- To offer consumers after-sales service, and provide accurate information about the products and services they sell;
- To list the specific prices of products and services on their invoices; and
- To settle disputes with consumers within 14 days of receiving complaints, either through refunds, replacement of goods or submission to the Arbitration Centre.

The Consumer Council has also formulated a code of practice for each industry sector in keeping with social developments. At present, 19 industry sectors under the Certified Shops mechanism – covering cleaning and dyeing services, real estate agents, supermarkets, pharmacies, beauty services, souvenirs, photography equipment retail and photo printing services, gold and jewellery, leather garments and shoes, mobile phone retailing, computer products, birds' nest products, electrical appliances, eyewear, furniture retailing, watch and clock retailing, food and beverage services, tourism services (overseas tours), pet product retail and services – have implemented these codes of practice. The Consumer Council has also established a mechanism to assess whether the Certified Shops implement their general pledges and codes of practice.

Statistics and Census Service

The Statistics and Census Service (DSEC) is one of the authorities under Macao's statistical services system, and is responsible for compiling population, social, economic and environmental statistics.

Official Statistics

Under Decree-Law No. 62/96/M promulgated on 14 October 1996, all statistical information compiled by government statistical agencies is regarded as official. Another statistical agency is the Monetary Authority of Macao, which is responsible for information regarding finance, currency, foreign exchange and insurance business.

The Statistics and Census Service compiles a series of official statistics through research and by using administration information, providing the Government and investors with important references for the formulation of policies and business decision-making, respectively, and providing important references for academic studies.

Particularly noteworthy among the DSEC's regular investigations are the Population and Housing Census conducted every 10 years, and the By-Census and Household Expenditure Survey conducted every five years. Industries covered include construction, industrial manufacturing, hotel, food and beverage, service sector, transport, warehousing and communications, and wholesale and retail trade.

The DSEC collects and compiles monthly or quarterly data relating to Macao's economic activity, including external trade in commodities, tourism, convention and exhibition, retail, prices, employment, real estate transactions and construction.

The Gross Domestic Product value, the Gross Domestic Income and Direct Investment Statistics reflecting the macro economic conditions of Macao, are compiled by integrating and analysing Macao's comprehensive economic, social and public financial statistics.

Dissemination of Information

The DSEC publishes essential statistical data that is of public interest via press releases, as well as webpages and publications for detailed information. All official statistical data is provided free of charge. Users may download the data from the website, or obtain the data or make enquiries about it from the Documentation and Information Centre by phone, email, fax, online customer service platform or in person.

Guangdong-Hong Kong-Macao Greater Bay Area Website

The DSEC launched a website for the Guangdong-Hong Kong-Macao Greater Bay Area, to reflect the cultural and economic development of the Greater Bay Area cities. The website gathers principal statistical indicators of the Greater Bay Area cities, and data about cultural and economic exchanges between Macao and the other Greater Bay Area cities for public reference.

The DSEC will continue exploring different ways and channels for the collection, compilation and presentation of statistical data on the Greater Bay Area cities. The DSEC is striving to enrich the statistical indicators on the website, and gathers comments and suggestions from the community about the website, to further improve the content.

Population Statistics Database

DSEC launched the Population Statistics Database to the public in September 2018, providing statistics covering four areas: total population, local population, households and housing. It supports sorting and filtering of data which enable users to search for population data by different demographic or housing characteristics, such as gender, age group, nationality, education attainment, parish and statistical district.

Users can also create and download customised statistical tables and charts. The first phase of the database contains statistics from the 2016 Population By-Census, and population data from the previous reference periods will be gradually added to the database.

Thematic Webpage of Statistical Indicator System for Moderate Economic Diversification of Macao

In 2015, DSEC introduced the Statistical Indicator System for Moderate Economic Diversification of Macao for public reference. In December 2018, DSEC also launched a webpage on the Statistical Indicator System for Moderate Economic Diversification of Macao, providing the latest statistics of the eight sections of the indicator system in the form of charts and tables, using an interactive approach, aiming to provide a reference for members of the community to observe the progress with economic diversification of Macao in a timely manner. At present, the webpage contains relevant statistics for 2017; data of previous years will be added later, while further improvements will be made to the webpage.

Completion of the 2017/2018 Household Expenditure Survey

The collection of household income and consumption expenditure information for 2017/2018 was completed in September 2018. The up-to-date household income and consumption expenditure information is useful for analysing consumption models and structures, income sources and income allocation of Macao households. Moreover, the household consumption structures will be employed for rebasing the Consumer Price Index, and for updating commodity and service items and weights. The results of the survey were published in the first quarter of 2019.

Supporting Office to the Permanent Secretariat to the Forum for Economic and Trade Cooperation between China and Portuguese-speaking Countries

The Supporting Office to the Permanent Secretariat to the Forum for Economic and Trade Cooperation Between China and Portuguese-speaking Countries was established in Macao in accordance with Executive Order No. 33/2004. It focuses on providing administrative and resources support to the secretariat, enhancing economic and trade exchange and cooperation between mainland China, Macao and Portuguese-speaking countries, and give full play to Macao's advantages and its role as an economic and trade services platform between China and Portuguese-speaking countries.

Since its establishment, the supporting office has diligently coordinated with and assisted the Permanent Secretariat in various aspects of implementing the Framework of Economic and Trade Cooperation, particularly in promoting governmental and civil cooperation between China (including Macao) and Portuguese-speaking countries in trade, investment, production capacity, agriculture, infrastructure, energy, natural resources, education and human resources, tourism, transportation and telecommunication, financial system, culture, healthcare, marine, cooperation between provinces and cities, and Macao's function as a cooperation platform.

The year 2018 marked the 15th anniversary of the establishment of the Forum for

Economic and Trade Cooperation between China and Portuguese-speaking Countries. Following the financial directive of the Government, and based on the Five-year Development Plan, the supporting office provided assistance in the development of the Belt and Road, the country's 13th Five-Year Plan and key projects of the Guangdong-Hong Kong-Macao Greater Bay Area, and actively supported the permanent secretariat for the Forum for Economic and Trade Cooperation between China and Portuguese-speaking Countries in the implementation of various tasks set out in its annual plan. The supporting office continued providing assistance with third-party assessments and activities related to the 15th anniversary of the establishment of the forum, and actively implemented the Action Plan for Economic and Trade Cooperation 2017-2019 and the Memorandum of Understanding on Promoting Cooperation in Production Capacity signed during the Fifth Ministerial Conference of the Forum for Economic and Trade Cooperation between China and Portuguese-speaking Countries ("the Forum"), as well as the 18 new measures announced by the Central People's Government.

The office carried out its work through participation in a series of activities:

- The 2018 MIECF;
- The 23rd MIF;
- The Second PLPEX;
- The Sixth Macao International Travel (Industry) Expo;
- The Fifth China (Beijing) International Fair for Trade in Services;
- The First China International Import Expo;
- The 123rd and 124th Canton Fairs and the Dynamic Macao Business and Trade Fairs in Fuzhou, Tianjin and Zhaoqing; and
- Setting up exhibition areas for Portuguese-speaking countries.

During the year, the office organised:

- The Seminar on the 15th Anniversary of Forum for Economic and Trade Cooperation between China and Portuguese-speaking Countries and the positioning of Macao as a Platform;
- The Seminar "15th anniversary of the Establishment of Forum for Economic and Trade Cooperation between China and Portuguese-speaking Countries: Review and Future Development";
- The Seminar on Trade in Services between China and Portuguese-Speaking Countries, Seminar on infrastructure construction ties between China and Portuguese-speaking Countries;
- The third meeting on Cooperation in Capacity Production;
- Workshop on Teaching and Training of Bilingual Professionals for China and Portuguese-speaking Countries;
- The 10th Cultural Fair of China-Portuguese-speaking Countries; and

- Co-organised celebration activities for the Day of Portuguese Language and Culture of the Community of Portuguese-speaking Countries.

Visits organised included:

- Visited Anhui, Jiangsu and Guangxi;
- Visited Portugal for participation in the 13th Forum for Economic and Trade Cooperation Between China and Portuguese-speaking Countries; and
- Visiting Brazil, Cape Verde, Guinea-Bissau, Mozambique, Portugal, Sao Tome and Principe, and Timor-Leste to initiate commercial and trade activities.

Publications and training courses:

- Issued a philatelic collection to celebrate the 15th Anniversary of the Forum for Economic and Trade Cooperation between China and Portuguese-speaking Countries; and
- Five rounds of workshops and three internship programmes for officials from Portuguese-speaking countries, providing training and internship exchanges to more than 130 individuals and 32 officials from Portuguese-speaking countries respectively.

Consultative Bodies

Economic Development Council

Established under By-law No. 1/2007, the Economic Development Council is the Government's consultative department for formulating economic development strategy, especially regarding consultations on and structuring economic diversification, manpower policies, expansion and development of micro, small and medium-sized enterprises, and cultivating nascent industries.

The council comprises the Chief Executive as its chairperson and Secretary for Economy and Finance, together with representatives of organisations with different economic interests, professionals, outstanding and reputable people in relevant fields, and representatives of relevant public organisations and departments.

Standing Council on Social Concerted Action

The Standing Council on Social Concerted Action is an advisory body to the Chief Executive on the formulation of labour policies. It was established in accordance with

the Decree-Law No. 59/97/M. Its objective is to facilitate dialogue and coordination between administrative authorities, employers and employees. This aims to ensure their participation in the formulation of labour policies, and in activities that strengthen social development.

The council consists of the Chief Executive (who presides over its meetings); secretaries with responsibility for the economy, security, and culture; members of the Executive Committee; three representatives from Macao employers' associations (who must be the heads of their associations); and three representatives from Macao labour associations (who must be the heads of their associations).

In accordance with legal requirements, the Secretary for Economy and Finance is authorised to be the council's chairperson.

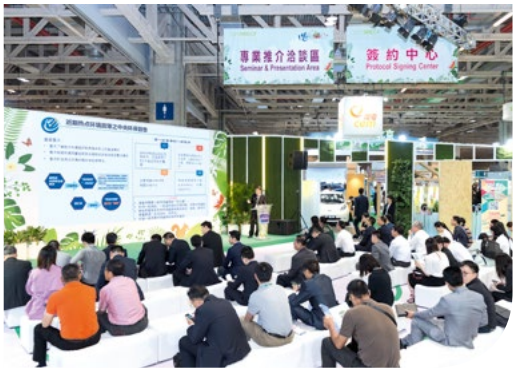
The council holds two plenary meetings each year. Special meetings may be called by the chairman or at the request of one third of the members.

In 2018, the council held 18 meetings: six plenary meetings and 12 executive committee meetings.

INTERNATIONAL ENVIRONMENTAL COOPERATION FORUM AND EXHIBITION

The Macao International Environmental Cooperation Forum (MIECF), an annual international environmental event, was held in 2018 with the theme "Shaping Eco-Cities for an Inclusive Green Economy". Government officials, decision makers and professionals from the environmental protection sector from around the world gathered in Macao for commercial, technological and information exchanges. The MIECF has become an important platform for enhancing cooperation in environmental protection between countries along the Belt and Road, the Pan-Pearl River Delta Region, the Guangdong-Hong Kong-Macao Greater Bay Area, Portuguese-speaking countries and European countries.

2018MIECF
Macao


專業推介洽談區
Seminar & Presentation Area
簽約中心
Protocol Signing Center

中國之信號電動

MACAO YEARBOOK 2019

5

TOURISM

Tourism is the backbone of Macao's economy. With the long-term goal of building Macao as a world tourism and leisure centre, the government department responsible for tourism development - the Macao Government Tourist Office (MGTO) - started adjusting tourism policies and measures in accordance with Macao's new positioning, and promoted sustainable and healthy development of the tourism industry in areas including marketing and promotion, tourism planning, products and events, tourism industry management, and training and quality control.

Overview of Tourism in Macao

Major Markets

According to the Statistics and Census Service, the total number of tourists visiting Macao in 2018 was 35,803,663, representing an increase of 9.8 percent over the 2017 figure. The number of overnight visitors during the year totalled 18,492,951, representing an increase of 7.2 percent, and accounting for 51.7 percent of visitors to Macao. The average length of stay of overnight visitors was 2.2 days, 0.1 days higher than the previous year, while the overall figure remained at 1.2 days.

In 2018, the 10 major source markets of visitors were:

Country/Region	No. of Visitors	Percentage (%)
Mainland China	25,260,556	70.6%
Hong Kong	6,327,925	17.7%
Taiwan	1,060,968	3.0%
South Korea	812,842	2.3%
Japan	325,798	0.9%
Philippines	312,072	0.9%
Malaysia	227,854	0.6%
United States of America	201,810	0.6%
Thailand	181,379	0.5%

In 2018, Greater China (mainland China, Hong Kong and Taiwan) comprised 91.2 percent of the total number of tourists; and the international market comprised 8.8 percent. Mainland China continued to be the largest market for visitors to Macao, accounting for 70.6 percent of the total number of visitors to Macao, and 13.8 percent higher than in 2017. Among the mainland China visitors, 12,267,344 (48.6 percent) travelled to Macao under the Facilitated Individual Travel (FIT) scheme.

Hong Kong and Taiwan were the second and third largest markets for visitors to Macao, respectively; the numbers of visitors from Hong Kong increased by 2.6 percent,

while those from Taiwan increased slightly by 0.1 percent, compared with 2017.

Regarding the international market, South Korea remained at the top of the list of sources of international visitors, with a decrease of seven percent from the figure of 2017.

The Southeast Asia market was relatively weak. The markets of Indonesia, Thailand and Singapore recorded decreases of 11.8 percent, 8.5 percent and 5.8 percent, respectively.

Visitors from Japan also decreased, by one percent. Visitors from the United States, the only long-distance source of visitors on the top ten list, recorded an increase of 8.3 percent.

The Hotel Industry

According to Macau Government Tourist Office (MGTO) statistics, at the end of 2018, Macao had a total of 120 hotel premises, of which 85 were star-rated hotels and 35 were guesthouses, supplying a total of 40,109 guest rooms.

Star Rating	Number of Hotels	Number of Rooms
Five-star Luxury Hotels	11	5,795
Five-star Hotels	26	19,142
Four-star Hotels	17	7,862
Three-star Hotels	15	5, 326
Three-star Apartment Hotels	1	208
Two-star Hotels	15	1,036
Sub-total	85	39,369
Guesthouse	35	740
Total		**40,109**

- *Average room rate of three to five-star member hotels was 1,350.6 patacas in 2018, seven percent higher than in 2017, according to the Macau Hotel Association.*

The total number of guests who stayed at hotel premises in Macao during 2018 was 14,106,700, representing an increase of 7.2 percent over the figure in 2017. The average year-round occupancy rate of hotel premises increased from 87.2 percent in 2017 to 91.1 percent in 2018. The average length of stay was 1.5 nights, the same as the 2017 figure.

Travel Agencies

At the end of 2018, there were 227 licensed travel agencies in Macao, four more than in 2017. A total of 1,913 people held tourist guide licences issued by the MGTO, 33 (1.8 percent) more than in 2017. The language abilities of these tourist guides spanned Cantonese, Putonghua, English, Portuguese, German, Japanese, Korean, Thai, French, Spanish, Russian, Malay, Indonesian, Hokkien and Chaozhouese.

In 2018, 8,717,900 tourists visited Macao on package tours, representing an increase of 10.1 percent from 2017. Most package tourists, totalling 6,799,100, came from mainland China, representing an increase of eight percent. The second and third-largest sources of tourists were Taiwan and South Korea, with 670,000 and 615,000 visitors recorded, respectively.

In 2018, a total of 1,578,700 Macao residents engaged with travel agent services to travel abroad. Of these, 526,700 joined outbound group tours. The most popular destination was mainland China, with 384,900 (73.1 percent) residents visiting. Hong Kong was the second most-popular package tourism destination for Macao residents, attracting 19,900 visitors or 3.8 percent of the total. Thailand ranked third, attracting 19,700 visitors or 3.7 percent of the total. A total of 1,051,900 residents engaged with travel agent services without joining guided tours, 26.7 percent more than in 2017.

Macau Government Tourist Office

The functions of the Macau Government Tourist Office (MGTO) include assisting the formulation and implementation of local tourism policies; enhancing development and diversity of the tourism industry; and monitoring tourism and related business and issuing licences, in order to realise the Government's overall tourism objectives.

The MGTO has set up representative offices in many countries and regions around the world, including the Hong Kong SAR, Japan, South Korea, Thailand, Malaysia, Indonesia, India, the United Kingdom and Ireland, the United States of America, Russia, Australia and New Zealand.

Macao's tourism industry was also actively promoted by three overseas offices: the Tourism Section of the Office of the Macao Special Administrative Region in Beijing, Macau Economic and Cultural Office in Taiwan, and Macau Tourism Promotion and Information Center in Portugal.

In 2018, the overall performance of Macao tourism was satisfactory. To expedite developing Macao as a world tourism and leisure centre, the Government was committed to facilitating implementation of the Macao Tourism Industry Development Master Plan. It also actively took part in the "Belt and Road" initiative and development of tourist destinations in the Guangdong-Hong Kong-Macao Greater Bay Area, improved the tourism environment, and launched the 2018 Macao Year of Gastronomy, to support the mission of promoting Macao as a Creative City of Gastronomy.

Tourism Planning and Study

Along with the completion and announcement of the Macao Tourism Industry Development Master Plan in 2017, through joint efforts of various government departments and industries, the Macao Government Tourist Office (MGTO) commenced and followed up related work on 67 short-term (within one year to five years) action plans, and gradually achieved the key objectives and implemented the recommendations in the plan. The MGTO also participated in cross-departmental government planning, including planning for Coloane waterfront of Lai Chi Vun shipyards and Rua dos Navegantes, revitalisation of Nossa Senhora Village in Ka Ho and feasibility studies regarding reuse of materials, and providing advice to relevant departments to support tourism development.

Also, the MGTO started using scientific research methods to collect data, and using the data as a reference for improving the quality of MGTO's tourism services and products.

Projects that were launched during 2018 included: 2018 Macao Tourism Branding and Media Effectiveness Evaluation of Mega Events, a study of Indonesian visitor profiles, and a satisfaction survey on MGTO's services.

In addition, "Macao Tourism News plus" (https://newsplus.macaotourism.gov.mo/) expanded its service coverage to accept account registration by tourism industry professionals who engage in journalism and communication work.

The MGTO continued optimising "Macao Tourism Data plus" (MTD plus) (http://dataplus.macaotourism.gov.mo) by adding functions, including database enquiry content, multilingual versions and subscription services. Also in 2018, the platform added database enquiry content related to tourists visiting Macao during mainland China's Golden Week holidays.

Smart Tourism

The MGTO commenced the first phase of cooperation in smart tourism with Alibaba Cloud, a subsidiary of the Alibaba Group. The two parties jointly developed three projects: a tourism information interchange platform, an application for visitor insights, and a smart application for visitor flows. Moreover, the MGTO is committed to optimising tourists' travelling experiences, building a foundation for future research on tourism promotion strategies, and monitoring scenic spots and congested locations in order to divert and redirect visitor flows.

Regarding electronic tourism promotion, apart from using the promotion website, online version of "What's On" and online newsletter of "Macao Travel Talk", setting up official accounts on social media including WeChat, Weibo, Facebook, Instagram, Twitter and YouTube, and utilising mobile phone apps and interactive information screens, the MGTO also launched the "Gastronomy Map" website in 2018, for the convenience of users exploring Macao with a focus on gastronomy.

Licensing and Industry Management

In 2018, the MGTO issued four licences for hotels and catering premises, and followed up regarding the applications for various kinds of licence. In 2018, the MGTO conducted 1,877 inspections of licensed premises and activities that were supervised by the MGTO, checkpoints and scenic points. Regarding combating illegal accommodations, 245 units were sealed.

Tourism Products

2018 Macao Year of Gastronomy

To promote Macao as a Creative City of Gastronomy in the UNESCO Creative Cities Network, the MGTO launched the "2018 Macao Year of Gastronomy" to support the organising of food promotion activities, which include the Macao Gastronomy Carnival, the 19th Southeast Asian Food Festival, World Cities of Gastronomy (China) Meet in Macao Activities, the 18th Macau Food Festival, and the eighth Macau Beef Cuisine Festival.

Macao Aquatic Trek

The MGTO supported Reel Fun, which was operated by Macao community organisations during the fishing moratorium, passing through the Doca da Ilha Verde to the sea area in front of Kun Iam Ecumenical Centre, together with maritime tours. Currently, there are two operators of maritime tourism products, which depart from and arrive at the Inner Harbour Ferry Terminal, and head towards the sea area in front of the Zhuhai/Macao border crossing area on the Hong Kong-Zhuhai-Macao Bridge artificial island. Three regular routes are scheduled to depart from Taipa Ferry Terminal and Coloane Pier.

Anim'Arte NAM VAN and Taipa Houses-Museum

The MGTO continued to add tourism elements to the Anim'Arte NAM VAN and Taipa Houses-Museum and support Macao community groups in organising various tourism and cultural activities, including the Fun Easter 2018 at Anim'Arte NAM VAN, the tourism culture promotion carnival, the third Macao Lantern Festival, Gudetama in Macao and Golden Week – A Trip to Macao and Travelling around the Community – A Day in Autumn, held at the Taipa Houses-Museum, facilitating the development of tourism and leisure landmarks.

Community Tourism

In 2018, the MGTO continued implementing its Community Tourism Plan, supporting relevant organisations that held activities in various parishes and along "Step Out, Macao" tour routes. It subsidised a total of 31 activities held by 18 organisations, attracting over 879,000 participants. The MGTO again organised the Tourism Awareness Campaign, promoting the "tourists first" concept and disseminating travel information to residents and the industry, by subsidising eight events held by seven organisations, which were attended by over 16,000 participants.

Cultural Tourism

The MGTO facilitated the development of cultural tourism, and effectively utilised Macao's unique cultural elements to promote local culture. The MGTO subsidised community groups in organising festive cultural activities and Macao intangible cultural heritage activities, including birth anniversaries of gods and immortals in Chinese mythology, festival celebrations, Cantonese opera, art exhibitions and local music.

Grand Prix Museum and Wine Museum

Work on the interior design and renovation of the Grand Prix Museum was commissioned on 3 September 2018. The consultancy, supervision and quality management services commenced simultaneously. The MGTO followed up on the production of the waxwork figures of racers, and procurement of information and multimedia equipment.

The Wine Museum also closed, from 1 July 2017 until further notice.

Business Tourism

In 2018, the Government continued with the Travel Stimulus Programme, which combined elements of incentive travel, wedding travel and student travel facilitation programmes. A total of 89 cases involving 11,886 visitors were supported.

International Gastronomy Forum, Macao 2018

The International Gastronomy Forum, Macao 2018, was held on 18 and 19 January 2018. Representatives of the UNESEO Creative Cities of Gastronomy around the world assembled in Macao, to exchange views and explore ways to promote sustainable development leveraging the potential of gastronomy. The International Gastronomy Forum, Macao, is an annual event, and is one of the important initiatives of developing

Macao as a Creative City of Gastronomy in the coming four years.

The Sixth Macao International Travel (Industry) Expo

The Sixth Macao International Travel (Industry) Expo was held from 27 to 29 April 2018. It was hosted by the MGTO, supported by the National Tourism Administration and organised by the Macau Travel Agency Association. The expo venue had an area of 11,000 square metres, with 550 exhibition booths. A total of 50 countries and regions, as well as 420 enterprises and units – including 11 from the Guangdong-Hong Kong-Macao Greater Bay Area, 14 from countries along the Maritime Silk Road, eight from Portuguese-speaking countries, and 23 tourism exhibitors from provinces and cities in mainland China – participated in the expo, which attracted about 40,120 visitors.

Global Tourism Economy Forum – Macao 2018

The Global Tourism Economy Forum – Macao 2018, a recognised partner of the World Tourism Organization of the United Nations (UNWTO), was held from 23 to 24 October 2018. It was hosted by the Secretariat for Social Affairs and Culture, and co-organised by the China Chamber of Tourism and the Global Tourism Economy Research Centre. Partner regions for this year's forum included European Union countries, and Guangdong as the major partner province. The forum, with "Strategic Partnership in a New Era, Rising Momentum for a Shared Future" as the theme, comprehensively discussed the influence of strategic tourism cooperation of in "2018 EU-China Tourism Year", and explored the huge potential of the Greater Bay Area.

Events and Festivals

In 2018, the MGTO continued organising various events and festivals, which included:

Parade for Celebration of Lunar New Year

Organised by the MGTO, the Parade for Celebration of the Year of the Dog included an opening performance, floats parade, performing groups parade, cultural performances, a firework show and floats exhibition. There were 15 floats in the parade, and performances by around 1,008 artistes from 25 Macao troupes plus nine troupes from mainland China, Hong Kong, Japan, Spain, France, Portugal, Germany and Russia.

The 29th Macao International Fireworks Display Contest

The ten teams participating in the 29th Macao International Fireworks Display Contest were from the Philippines, South Korea, Japan, Belgium, France, Portugal, Germany, Austria, Italy and China. The contest sessions were held on 1, 8, 21 and 25 September and 1 October, on the seafront area near the Macau Tower.

Macao Light Festival 2018

From 2 December 2018 to 20 January 2019, the MGTO held the "2018 Macao Light Festival — Time Travel in Macao" from 7 p.m. to 10 p.m. every night. The show was performed along three theme routes with unique characteristics, covering five districts and 11 locations. The festival also added gastronomy elements to the routes to promote the 2018 Macao Year of Gastronomy. In addition to 3D mapping, light installations and interactive games for demonstrating Macao's gastronomy culture, food trucks and a gastronomy night market were held for the first time, to showcase cross-domain creativity of Macao as a Creative City of Gastronomy.

The Third International Film Festival & Awards Macao

The Third International Film Festival & Awards Macao was held from 8 to 14 December 2018 with the theme "A New Avenue to the World of Films". In addition to 54 outstanding international films and 14 local films being screened during the festival, an "Industry Hub" event was held for film industry professionals from around the world, to build an effective platform for exchanges, and create opportunities for cooperation in development, production, distribution and investment.

Tourism Marketing

Organising events in countries along the "Belt and Road" during the MSAR government delegation visits

The MGTO held various events in Myanmar to promote Macao's diverse tourism products and festivals, including a consumer roadshow at Myanmar Plaza in Yangon City; a briefing session on tourism and trade, organised jointly with the Macao Trade and Investment Promotion Institute (IPIM); and a concert by Macao Orchestra held jointly with the Cultural Affairs Bureau.

Promotion events held in Cambodia included a photo exhibition about Macao's implementation of the principle of "One country, two systems" and engagement in the "Belt and Road" initiative; and a briefing session regarding Macao's tourism and

investment environment, held jointly with the IPIM. Plus, Macao youth music groups and cultural and creative organisations were invited to participate in promotional events focusing on tourism, culture and creativity.

Promoting Macao Year of Gastronomy

In 2018, Macao began tourism promotions with two themes – "Macao Year of Gastronomy 2018" and "Experience Macao in Your Own Style". The MGTO participated in major tourism exhibitions in key tourist source markets; organised briefing sessions and meetings on tourism for the industry; participated in and organised various promotional events, including a large-scale food truck promotion, Macao tourism roadshows, and cooking programmes featuring Macao dishes broadcast via the British Broadcasting Corporation (BBC) website, to promote Macao's culture of gastronomy.

The MGTO also cooperated with local food bloggers to introduce restaurants along the walking routes recommended by "Step Out, Macao", to enrich the content of these walking routes, and guide tourists to various districts for gastronomic discoveries and increased consumption.

The MGTO cooperated with video game developers by developing local food cooking games for mobile phones, to promote Macao's image and gastronomy in a fun way.

In 2018, the MGTO also organised 28 gastronomy and culinary exchange tours.

Tourism Promotion

To support the 2018 Macao Year of Gastronomy and Macao Creative City of Gastronomy, the MGTO promoted Macao food through local newspapers, produced brochures, and introduced readers to the process of Macao's application for inclusion on the Creative City of Gastronomy list.

The MGTO made a series of souvenirs with Creative City of Gastronomy as the theme, for distribution in exhibitions and briefing sessions held in different countries and regions. It also produced "Creative City of Gastronomy" promotional videos and commercials for broadcasting through TV channels and social media platforms in Macao, Hong Kong and all over the world. The MGTO also cooperated with Air Macau to apply "Macao - Creative City of Gastronomy" as a decorative theme for aircraft.

Joint Promotions

In accordance with the Government's policy for enhancing regional cooperation and leverage the advantages of Macao as a platform between China and Portuguese-speaking countries, the MGTO strengthened tourism cooperation with neighbouring

provinces and cities, including tourism departments of Guangdong, Fujian, Hong Kong and the China Maritime Silk Road Tourism Promotion Alliance and The Tourism Federation of Cities in Guangdong-Hong Kong-Macao Greater Bay Area, to jointly promote multi-destination tourism. The MGTO also cooperated with the tourism departments of Fujian to launch a series of promotional activities in Sydney and Melbourne in Australia, and invited overseas Chinese leaders, media and industry in Australia to visit Macao, Guangzhou and Xiamen. In addition, the MGTO made use of Fujian's international aviation network, and took the Maritime Silk Road and overseas Chinese cultures into consideration for developing tourism products and jointly exploring the Australian market.

The MGTO cooperated with tourism promotion organisations in Guangdong, Hong Kong and Macao to hold large-scale consumer roadshows and events in Japan with the Greater Bay Area as the theme. It also promoted multi-destination tourism products in Changsha, a city along high speed rail routes in mainland China, and set up joint promotion booths in various important tourism exhibitions, to expand tourist sources. In addition, with Macao as a promotional platform, the MGTO invited mainland China provinces and cities to Macao for large-scale regional tourism activities, such as the Macao International Travel (Industry) Expo and Global Tourism Economic Forum – Macau. The MGTO also studied the tourism resources in the Greater Bay Area multi-destination tours with overseas tourism organisations, and invited the Tourism Office of Guangdong Province and the Portuguese Travel Agency Association to exchange opinions on multi-destination tourism during the Sixth Macao International Tourism (Industry) Expo.

During the year, the Secretary for Social Affairs and Culture, Tam Chon Weng, and leading officials of the MGTO, the Sports Bureau, the Tourism Development Committee and the Macau Grand Prix Organising Committee paid site visits to tourism routes, scenic spots and facilities in Guangzhou and Foshan. The MGTO and members of the Tourism Development Committee then travelled to Nansha, Dongguan, Huizhou and Shenzhen for updates regarding the latest information on tourism, and to strengthen exchanges within the industry.

Information Counters

Seven information counters have been set up by the MGTO in major ports and tourist spots in Macao (the Border Gate, the Outer Harbour Ferry Terminal, Edif Ritz at the Largo do Senado, Macau International Airport and Taipa Temporary Ferry Terminal) and major ports in Hong Kong (Shun Tak Centre and Hong Kong International Airport). The eighth information counter, located inside the Macao Checkpoint Building of the Hong Kong-Zhuhai-Macao Bridge, is scheduled to commence operations in the first quarter of 2019.

In 2018, information counters in Macao and Hong Kong received 857,147 visitors.

Quality Tourism Services Accreditation Scheme

To implement the tourism policy of enhancing service quality and optimising the industry accreditation mechanism, the MGTO continued with the Quality Tourism Services Accreditation Scheme for the fifth consecutive year. In 2018, the scheme still targeted the catering industry and travel agencies, but there was consideration of extending the coverage to other industries. Since its launch, a total of 260 food and beverage merchants and 36 travel agencies have received the "Star Merchant Award" accreditation.

Regional and International Cooperation

Regarding international cooperation, the MGTO actively participated in various conferences, seminars and events organised by international tourism organisations, thereby enhancing Macao's participation in international tourism affairs. As an associate member of the UNWTO, the MGTO delegation attended various events to express opinions and exchange views, thus strengthening Macao's participation in international tourism organisations.

As a member of the governing body of the Pacific Asia Travel Association (PATA), the director of the MGTO attended the PATA Annual Summit 2018, and was elected as Secretary and Treasurer of the PATA during the UNWTO/ PATA Leaders Debate.

Regarding the Asia-Pacific Economic Cooperation (APEC), the MGTO sent its representatives – as a guest economy – to attend the 52nd Meeting of APEC's Tourism Working Group in Papua New Guinea and the 53rd Meeting of APEC's Tourism Working Group in Manila, the Philippines.

The MGTO also attended the WTCF Qingdao Fragrant Hills Tourism Summit 2018, and received a 2013-2017 Industry Contribution Award.

The MGTO signed a memorandum of understanding on tourism cooperation with Sao Tome and Principe.

Regarding regional cooperation, the MGTO attended the first general meeting of Tourism Federation of Cities in Guangdong-Hong Kong-Macao Greater Bay Area, the 2018 annual working meeting of the Joint Working Committee on Tourism to Support the Development of Macao into a World Centre of Tourism and Leisure, and the 2018 Promotion Event of Hong Kong and Macao Youth Study Tour to the Great Wall in Shanxi and Mainland Tourism Alliance Conference.

Tourism Training

Tourism and related industries employ a significant proportion of Macao's total workforce. The Government attaches great importance to training people employed in the tourism sector; it offers training courses for various tourism-related professionals

through the Institute for Tourism Studies.

The Institute of Tourism Studies

Established in 1995, the Institute for Tourism Studies (IFT) is a public tertiary education institute affiliated to the Secretariat for Social Affairs and Culture, and is the first educational institution to be granted the TedQual Certification by the UNWTO. The IFT offers degree and professional programmes in a wide range of tourism-related disciplines, such as hotel services, tourism, cultural heritage, conventions and exhibitions, retail and marketing, leisure and entertainment, sports and recreation, cultural and creativity, and culinary arts. The institute also cooperates with renowned overseas colleges and training institutions to offer advanced management courses. In addition, the IFT has been commissioned by the Government and other institutions to conduct policy research on tourism planning and development.

In 2017, the IFT was the world's first higher education institution that passed the International Quality Review (IQR) from the UK's Quality Assurance Agency for Higher Education (QAA). In 2018, the IFT was ranked by the "QS World University Rankings by Subject 2018" as the fourth best higher education institution in Asia in the field of hospitality and leisure management, and the world's 30th best higher education institution in this field.

To meet the human resources demands of the tourism sector and complement the sector's future development, IFT's diploma and degree programmes admitted 427 students and 57 exchange students during the 2017/2018 academic year. During the academic year, there were 1,600 students enrolled in the following degree programmes:

Daytime Degree Programmes (English as Medium of Instruction)	Evening Diploma and Degree Programmes (Chinese as Medium of Instruction)
(English as medium of instruction)	(Chinese as medium of instruction)
(1) Culinary Arts Management	(1) Hotel Management
(2) Tourism Business Management	(2) Tourism Event Management
(3) Heritage Management	(3) Tourism Retail and Marketing Management
(4) Hotel Management	
(5) Tourism Event Management	
(6) Tourism Retail and Marketing Management	

Regarding non-tertiary education, a total of 19,538 students took various vocational and continued education courses during the 2017/2018 academic year, with 183 of

the students enrolled in two 1.5-year Western Culinary Skills and Pastry and Bakery programmes; 1,781 students enrolled in assessment under the Macao Occupational Skills Recognition System (MORS); and 2,990 enrolled in various free training courses under the Community Education and Development Programme (CEDP). Moreover, the school joined hands with Escola Luso-Chinesa Técnico-Profissional to organise a three-year tourism programme for senior secondary students, and cooperated with several organisations to promote various courses under the Community Education and Development Programme.

Regarding international exchanges and cooperation, as at August 2018, the IFT had built connection with 106 schools, organisations and institutions in 32 countries and regions, including mainland China, Hong Kong, Taiwan, countries in the Asia-Pacific region, Europe, America and Canada, to promote academic and cultural exchanges. During the 2017/2018 academic year, in addition to exchange programmes and international internships, there were over 84 students participating in exchange courses and international conferences in mainland China, Hong Kong, Taiwan, Portugal, the Netherlands, Austria, Thailand, the United Kingdom and Vietnam, with support from the IFT. The IFT also signed an agreement with the Jiangmen Polytechnic in Guangdong province, Universidade de Évora in Portugal, Taylor's University in Malaysia, FERRANDI Paris in France, and the French School of Culinary Arts and Hospitality Management, to widen the scope of international cooperation in the IFT's academic exchanges and student exchange programmes.

In line with Macao's development positioning regarding the establishment of "One Centre, One Platform", as outlined in the 13th National Five-year Plan, the IFT actively deepened cooperation with governments, institutions and organisations of Portuguese-speaking countries; worked hand-in-hand with the Government to participate in the establishment of the "Belt and Road" initiative, made the best use of advantages in tourism education and training, facilitated frequent cultural exchanges between teachers and students in the regions and countries along the Silk Road economic belt, and provided relevant tourism courses for them.

In line with the Memorandum of Cooperation signed by the Government and the UNWTO on 12 October 2015, the Government improved the quality of human resources and strengthened the competitiveness of tourism attractions, to achieve sustainable tourism development by establishing the Global Centre for Tourism Education and Training through the IFT.

From 2016 to 2018, the centre organised six training courses, attended by more than a hundred representatives from government agencies, tourism industry professionals and educators. The attendees came from countries along the "Belt and Road" and mainland China, including the Greater Bay Area and Macao.

In addition, the centre cooperated with the MGTO to provide training for representatives of Portuguese-speaking countries. During the year, trainees from Angola, Cape Verde, Guinea Bissau, Mozambique, Timor-Leste and Sao Tome and Principe completed three training sessions, which were held on 15 and 20 March, 29 May and 5 June, and 18 and 25 July 2018.

Tourism Resources

Boasting a brilliant and fascinating history encompassing 400 years of cultural exchanges between China and the West, Macao has a unique appeal to tourists. Its scenery is embellished with tourist treasures of all types, including picturesque dwellings constructed in traditional styles and ancient temples built during the Ming and Qing dynasties, buildings with Southern European architectural features, baroque-style churches and impressive contemporary structures.

Churches

Ruins of St Paul's

The Ruins of St Paul's, the surviving facade of St Paul's Church, is Macao's landmark. Designed by a Spanish Jesuit, construction of the original church began in 1602, and it was completed between 1637 and 1640.

St Paul's Church has been destroyed by fire three times, but fortunately its original facade remained standing. The facade has since been repaired many times, and is now generally known as the Ruins of St Paul's.

St Paul's Church is a delicate mixture of European Renaissance and Eastern architectural styles. The Museum of Sacred Art and Crypt was built at the location of the church, and houses collections paintings, sculptures and ceremonial decorations from churches and abbeys.

The Chapel of Our Lady of Guia

Originally built in 1622, the Chapel of Our Lady of Guia is the oldest building on Guia Hill. A project to enlarge it was carried out in 1637 and was completed in 1638. The Portuguese dedicated the church to the protector of seafarers. The interior preserves features that were common in 17th century Portuguese abbeys.

In 1996, a mural was discovered inside the church; this is a rarity in the churches of southern China.

St. Anthony's Church

The oldest church in Macao, St Anthony's Church, was built by the Society of Jesus between 1558 and 1560. Catholics regard St Anthony as the patron saint of marriage, so locals also call it the "Wedding Church".

St. Augustine's Church

St Augustine's Church was built in 1591, and is one of the oldest churches in Macao.

The church underwent considerable changes and assumed its present form when it was restored in 1874.

St Dominic's Church

St Dominic's Church stands on part of the former site of St Dominic's Convent. In 1587, Spanish friars built the original church, which was dedicated to Our Lady of the Rosary. It was initially built of camphor wood, and later restructured with stucco bricks and cream-coloured stones. The architecture is in Portuguese style, which was popular in the Orient in the 17th and 18th centuries.

In the main chapel stands a statue of Our Lady of Fatima, from which the Parade of the Virgin commences on 13 May each year. Believers march to Penha Hill to commemorate the Virgin Mary's appearance in Fatima, Portugal. There is a museum of sacred art inside the chapel. The collection includes religious items of artistic value, as well as scriptures and carved wooden representations of saints.

Every year, the Macao Orchestra and guest orchestras from around the world choose St Dominic's Church as a performance venue, for mainly holding vocal and religious music shows.

St Lawrence's Church

St Lawrence's is one of Macao's most famous large churches. Built in the middle of the 16th century, it has undergone several restorations, and its present construction was completed in 1846. The Portuguese, who were great mariners and navigators, believed that St Lawrence offered protection and bestowed the gift of the wind.

Hermitage of Our Lady of Hope

The Hermitage of Our Lady of Hope, also called St Lazarus's Church, is the first cathedral built after the establishment of the Macao Diocese. Before the present cathedral was built, whenever a new bishop arrived in Macao to take up office, he first had to come to St Lazarus's Church to receive his crosier before he could exert his power. Consequently, this church is especially holy among Catholics in Macao. The present structure of St Lazarus's Church remains as it was in 1885.

The Cathedral

The Cathedral was built in 1576 and was originally a simple wooden structure. Between 1844 and 1850, Catholic parishioners collected donations to rebuild the church and enlarge it to its present size. Many major events in the Church's calendar centre on the Cathedral, especially during Easter. In addition to the procession of Our Lord of Passion, a solemn parade takes place on Good Friday and special masses are held on Easter Sunday.

Fortresses

Mount Fortress

Mount Fortress is one of Macao's major tourist attractions. Work on its construction began in 1617, during the reign of Emperor Shenzong of the Ming Dynasty, and it was completed in 1626. Mount Fortress was originally used by the Church to protect the clergymen of St Paul's Church from pirate attacks. It was later turned into a military installation. In the past, the fortress stood high above the city centre of Macao, and it was regarded as an important part of its defensive fortifications. It has now become a heritage site and witness to history.

Mount Fortress occupies about 8,000 square metres. The ancient fortress tower was once an office of the Society of Jesus. It was also used as the office of the Macao Meteorological and Geophysical Bureau, and it has since been rebuilt as the Museum of Macao. At the entrance, a stone carving records the fort's military successes in defending the city against invasions.

Mong Ha Fortress

Construction of Mong Ha Fortress began in 1849. It covers an area of 650 square metres. The fortress was once a barracks for African Portuguese soldiers stationed in Macao, and was called "Black Ghost Fortress". After the former Portuguese administration withdrew its Macao garrison during the 1970s, the barracks were abandoned. In the 1980s, Mong Ha Fortress was renovated and became the Government-owned Tourism School, now known as the Institute for Tourism Studies.

St Francis Fortress

St Francis Fortress was constructed in 1622. In 1584, Spanish clergymen built St Francis Convent on the site behind the fortress; subsequently, the convent was converted into a barracks. In the 20th century, after Portuguese soldiers withdrew from Macao, the barracks became the headquarters of the security forces in charge of the Marine Police, Public Security Police and Fire Service.

Guia Fortress

Guia Fortress occupies about 800 square metres. Its construction began in 1622, and it was expanded from 1637 to 1638. It was formerly valued for military purposes, because of its position overlooking the entire peninsula. It was therefore classified as a restricted military area until 1976, when the Portuguese army left. It was then turned into a tourist spot, and its appearance has been kept intact until now.

The Chapel of Our Lady of Guia was built in the fortress in 1622. Adjacent to the hermitage is the 13-metre-high Guia Lighthouse, which was built in 1864, and is one of the oldest lighthouses in the Far East. It resumed service in 1910 and has been

guiding seamen ever since, with a visibility of 25 nautical miles from Macao.

When a typhoon approaches, typhoon signals are hoisted on the side of the lighthouse to warn nearby residents.

Barra Fortress

Barra Fortress, also called Pousada de S. Tiago Fortress or Sai Van Fortress, was built in 1622. It was an important fortress for protecting Macao's Inner Harbour. Inside the castle is the Chapel of St James. In 1981, the castle was converted into a hotel, while retaining its old characteristics.

Three Ancient Grand Temples

Macao's famous grand temples are the A-Ma Temple, Pou Chai Buddhist Monastery and Temple, and Lin Fong Temple. Many visitors are attracted to these temples, because of the different generations and backgrounds they represent, and because of the gods to whom they are dedicated.

A-Ma Temple

The A-Ma Temple is one of the most famous tourist attractions in Macao and the oldest of Macao's three ancient grand temples.

Built in the Ming Dynasty, the A-Ma Temple was originally called the "A-Ma Pavilion" or "Tin Hau (Heavenly Queen) Temple" by local people. The entire temple consists of four main structures: the Stone Hall, the Main Hall, the Hong Ren Hall and the Kun Iam Pavilion. This ancient structure is distinguished by its traditional Chinese cultural characteristics.

Between Hong Ren Hall and Kun Iam Pavilion, there are many stone inscriptions along the cliff path written by celebrities, statesmen, poets and scholars and engraved in different calligraphic styles.

Pou Chai Buddhist Monastery and Temple

Built in the late Ming Dynasty, Pou Chai Buddhist Monastery and Temple is also called Kun Iam Tong Temple. The Buddhist monastery is built in the ancient Chinese architectural style of Hui Fei, resembling ancient Chinese temples on famous mountains.

The first large hall in the monastery is dedicated to the Three Precious Buddhas, the second to the Buddha of Longevity, and the third to Kun Iam. Besides the large halls, there are also some other buildings, such as the western hall, the eastern hall, the backyard garden, and so forth. Such a large Buddhist temple complex is unusual in Macao and Hong Kong.

Many collections of paintings, items of calligraphy and antiques by famous masters are housed in the temple. They include the works of Gao Jianfu, a famous painter of the Ling Nan (Guangdong and Guangxi areas) school, and his student Guan Shanyue; Chen Gongyin, who ranked among the three great poets in Ling Nan; and the famous scholar Zhang Taiyan; as well as inscriptions by ancient celebrities such as Mi Fu, Dong Qichang, and Liu Yong. The unequal Treaty of Wanghia between the United States of America and the Qing regime of China was signed in the temple garden.

Lin Fong Temple

Built in the Ming Dynasty, Lin Fong Temple is one of the most famous temples in Macao. Formerly named the "Tin Fei Temple", Lin Fong is a comparatively small monastery and temple dedicated to Tin Hau. Since the Qing Dynasty, it has been expanded and renovated from time to time, and has gradually been expanded to its present size.

In the middle of the 19th century, Lin Zexu, a Qing Dynasty imperial commissioner, received Portuguese officials in Lin Fong Temple during his temporary residence in Macao.

As well as the three ancient grand temples, there are many other old temples in Macao, such as the Na Tcha Temple, Hong Kung Temple, Tam Kung Temple, Bhaisajyaraja Bodhisattva Buddhist Monastery (Yeok San), Chu Lam Chi Buddhist Monastery, Sam Po Temple, Po Tai Buddhist Monastery, Lin Kai Temple, Pak Tai Temple and Tin Hau Temple.

Cybernetic Fountains

Macao has a cybernetic fountain at Nam Van Lake. The fountain comprises various spouts and lights for fountain shows. The Civic and Municipal Affairs Bureau schedules two musical fountain shows and laser fountain shows on Saturdays and Sundays. More shows are staged during special festivals, such as New Year's Day, Chinese New Year, the Mid-Autumn Festival and Christmas.

Macau Tower

The Macau Tower Convention and Entertainment Centre, which was funded and constructed by the Sociedade de Turismo e Diversoes de Macau, officially opened on 19 December 2001 as Macao's new signature landmark. Soaring 338 metres high, the Macau Tower was the tenth-highest freestanding tower in the world and the eighth-highest in Asia when it was completed.

The main observation level is 223 metres above the ground, and consists of four floors. Two floors accommodate an indoor viewing deck, cafe, revolving restaurant and outdoor viewing deck. The indoor viewing deck provides visitors with panoramic views of up to 55 kilometres.

The multifunction convention and entertainment centre integrated with the tower

also has four floors containing exhibition and conference facilities.

A-Ma Statue

Located at the top of the Alto de Coloane, the A-Ma Statue is the tallest white marble statue of this goddess in the world. Constructed from 120 white marble boulders and completed on 28 October 1998, it is 19.99 metres in height. The face is carved from a single white marble boulder, and the statue weighs 500 tonnes.

International Sports and Cultural Events

Macao hosts a variety of international sports and cultural events throughout the year. These play an important role in promoting Macao, enhancing its international profile and attracting tourists and visitors.

Macau Grand Prix

The Macau Grand Prix began in 1954, and was originally an amateur sports event for Macao motor racing fans. Today, it has become a major event for the world's leading racing teams.

Every year in late November, world-class drivers and thousands of visitors flock to Macao to join the world's only street track event that includes both a formula touring car race and a motorcycle race.

The Formula Three race of the Macau Grand Prix is the premier event, drawing national championship racers from throughout the world to compete for the honour of first prize. Grand Prix street track riders and motorcycle superstars such as Ayrton Senna, Michael Schumacher, David Coulthard, Jenson Button, Kevin Schwantz, Carl Fogarty, Didier de Radigues and Ron Haslam have competed at the Guia Circuit.

Macao International Marathon

The Macao International Marathon seeks to foster sports development, enhance international friendship and promote Macao's sports and tourism industry to the world.

The Macao International Marathon is held every December and is the largest track-and-field event in Macao. The route circles the Macao peninsula and crosses to Taipa and Coloane islands, and has a total length of 42.195 kilometres. Marathon competitors come from all over the world, and include athletes from Macao and Hong Kong as well as famous international track-and-field stars.

Macao International Fireworks Display Contest

The Macao International Fireworks Display Contest is recognised throughout the world. It attracts numerous prominent fireworks companies and is attended each year

by large numbers of tourists and Macao residents. The contest provides an opportunity for Macao to showcase its tourism industry and reputation.

The first Macao International Fireworks Display Contest was held in 1989, and was contested by just five teams. The contest has gradually become a major annual tourism event, attracting high standard fireworks companies from countries and regions such as mainland China, the Philippines, Thailand, Taiwan, Japan, South Korea, Australia, the United Kingdom, Switzerland, France, Germany, Portugal and Spain. The Macao International Fireworks Display Contest is usually held between September and October each year, on the seafront near the Macau Tower.

Other major sports events and cultural activities held in Macao include the FIVB World Grand Prix, the Macao Open (Golf Tournament), the annual Macao International Dragon Boat Races, the Macao Arts Festival from March to May, the Macao International Music Festival in October, and Macau Food Festival.

Culinary Delights

Since Chinese and Western cultures coexist in Macao, it offers food that blends culinary influences from around the world. Different cuisines can be sampled throughout the area, and tourists may taste the regional dishes of Beijing, Shanghai, Sichuan, Guangdong and Taiwan to their heart's content. They can also enjoy authentic cuisines from Portugal, Italy, France, Japan, India, Vietnam, South Korea, Brazil and Thailand.

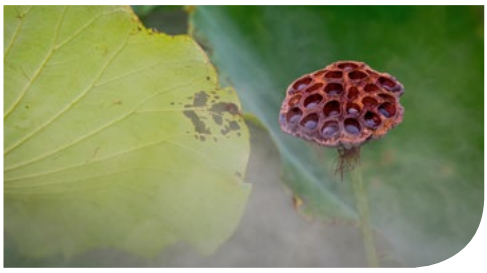
Regarded as one of the world's unique cuisines, Macanese cuisine is actually a distillation of the culinary arts of Portugal, Africa, India, Malaysia and mainland China's Guangdong Province. Bacalao balls, African chicken, spicy prawns, Portuguese chicken, stewed duck with herbs, stewed knuckle with red beans, stuffed crab shells, and grilled sardines are celebrated delicacies in Macao.

Macao specialties also include almond cakes, egg rolls, crackers, peanut candy, chicken-shaped pastries, dried preserved fruits and various dried meats, which are tourists' favourites. Clusters of pastry houses and snack shops are found along Almeida Ribeiro Avenue to the Auto Novo Alley, Sao Paulo Road and around the old district on Taipa island.

PHANTOM OF LOTUS

Sacred Lotus (*Nelumbo nucifera*) was selected as the theme flower of –the 18th Macao Lotus Flower Festival. It is a small-to-medium sized lotus species, with bowl-shaped flowers that have double rows of petals and glow with splendid purple.

The main exhibition, at the Taipa Houses-Museum, was themed "Phantom of Lotus". The site was sprayed with mists of water droplets to create an atmosphere of a lotus water town. Spotlights were also used to show the elegance of lotus flowers by day and night. The lotus pond wetland at the Taipa Houses-Museum has an area of 69,000 square metres. Admirers could walk along the 1,100-metre-long pond-side trail to enjoy the enchanting views.



MACAO YEARBOOK 2019

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PUBLIC ORDER

Macao is a peaceful, safe city with a much lower crime rate than many other cities around the world. Its citizens are well housed and adequately paid for their work. Taking into account the social situation and crime trends, the Government's security authorities adjust, deploy and execute relevant measures to effectively combat and prevent crime, safeguard the security of residents and their property, and maintain social stability and peace in accordance with the policy guidelines.

Unitary Police Service

The Unitary Police Service is responsible for commanding and leading operations by the Public Security Police and the Judiciary Police. It was formed as part of Macao's internal security system following the establishment of the MSAR Government, and became operational in October 2001. The Unitary Police Service plans and advises on operations. It consists of six subsidiary units: the Office of the Commissioner General, the Intelligence Analysis Centre, the Operations Planning Centre, the Administration and Finance Department, the Computer and Information Technology Unit and the Information and Public Relations Office.

In 2018, the Unitary Police Service followed the administrative principles of the MSAR Government and the Secretary for Security, to strengthen public security governance, promote application of high technology, reform traditional policy making and operational models, optimise allocation of resources and police modernisation, and continue working with other international, regional and local departments and the community to realise the aim of building a safe city with regard to public order control, disaster responses and police reform in accordance with the Five-year Development Plan of the Macao Special Administration Region (2016-2020).

Based on information collected and the characteristics of recent crimes in Macao, the Unitary Police Service also comprehensively assesses the modus operandi and trends, to formulate appropriate policing strategies, consolidate resources, and coordinate actions taken by the Public Security Police and the Judiciary Police.

To ensure major festivals, public holidays, and large-scale events are held without incidents, the Unitary Police Service collects advance information from various sources, in order to analyse and evaluate potential risks, and advise relevant police units on implementing effective measures, thus maintaining public order and safety.

To implement the administrative principle of strengthening the police force through technology, the Unitary Police Service and the related department under the Secretary for Security have joined hands with public works departments together with contractors, to launch a project to construct the Macao urban electronic surveillance system (commonly known as "eye in the sky"). A total of 1,620 cameras will be installed throughout Macao in four phases, and the overall deployment will be mostly completed by 2020.

During 2018, the Unitary Police Service coordinated and implemented several joint

operations, including Winter Precaution Operation, Thunderbolt 18 Operation, Anti-crime Operation, and an operation to combat illegal gambling during the FIFA World Cup final. These joint crime fighting operations achieved significant results, delivering the anticipated effect in ensuring public order in Guangdong, Hong Kong and Macao.

In response to the need for managing public order during major ceremonies and events held in Macao, the Unitary Police Service coordinated with Macao Customs Service, Public Security Police, Judiciary Police and Fire Services Bureau to operate the operations command centre, assisting various departments with instantly handling emergencies.

The Unitary Police Service also assigns officers to participate in drills every year, to enhance the abilities of its staff members and those of other public departments and organisations to respond to emergencies and disasters. Drills organised during the year included: "Crystal Fish" typhoon drill, Hong Kong-Zhuhai-Macao Bridge checkpoint building fire evacuation drill, "Wolf Hunting" casino emergency drill, and "Gray Dog" joint anti-terrorism drill.

Regarding civil protection and coordination, the Government learned from experience during the impact of Typhoon Hato in 2017, and proposed 10 major tasks for disaster prevention and mitigation. Three of these are related to public security: amendment of the civil protection legal system; formulation of a general contingency plan, special contingency plans and departmental contingency plans for responding to emergencies; and establishment of an application platform enabling effective overall command during emergencies. Therefore, 2018 was an important milestone for civil protection and coordination work. Besides coordination, the Government also had to implement and optimise relevant policies and facilities, as well as to commence a consultation regarding legislation of the Civil Protection Fundamental Law.

After the impact of Typhoon Hato, the public security forces drew up short-, medium- and long-term plans for tackling typhoon and safety issues in accordance with the Chief Executive's instructions and recommendations from the Expert Group of the China National Commission for Disaster Reduction. All plans were implemented in phases, and the measures are in place, ready to tackle future incidents.

Regarding communications related to policing and reporting information, the Unitary Police Service continued maintaining close connections with neighbouring and overseas police authorities for exchanging information, and organised a wide variety of academic seminars and exchanges. It also strived to establish a positive image by opening an official WeChat account for disseminating the latest information about policing and public security to the public via diverse channels. The Unitary Police Service also engaged in exchanges with young people, and launched a series of initiatives to optimise dissemination of information on civil protection.

To continue implementing the administrative principle of proactive policing, community policing and police public relations, the Unitary Police Service formed a promotional team with various public security departments, to visit local communities, government departments, organisations, schools and neighbourhood associations during the year.

The team held joint publicity activities for deepening citizens' law-abiding awareness, and public awareness of anti-theft, anti-fraud and disaster prevention, especially the evacuation plans for low-lying areas during typhoons and storm surges.

Public Security Police Force

The Public Security Police Force is responsible for maintaining public order and social stability; preventing, investigating and combating crime; protecting public and private property; controlling illegal immigration; handling immigration; as well as controlling and monitoring vehicular and pedestrian traffic.

At the end of 2018, the Public Security Police Force comprised 6,028 staff, with 5,116 personnel in service, 912 vacancies and 475 clerical staff.

Operations and Communication Centre

The Operations and Communication Centre is under the Planning and Operations Department of the Public Security Police Force. All 999 emergency calls from residents are routed to the centre, which classifies them and deploys police officers to the scene and take action. The Operations and Communication Centre received 381,400 emergency calls during 2018.

The centre employs a network of traffic-monitoring systems, which allow officers to monitor traffic through images sent from cameras installed at three cross-harbour bridges in Macao, and implement timely management and regulatory actions.

The city-wide electronic surveillance system, commonly known as "eye in the sky", commenced operations on 15 September 2016. In the first phase, 219 video cameras were installed, while in the second and third phases, a total of 601 video cameras were installed and officially commenced operations on 30 June 2018. The surveillance cameras are distributed to cover the peripheral areas of border-crossing checkpoints, major roads and streets, traffic hubs, and public security black spots. The system enables the Operations and Communication Centre's officers to combat and prevent crime through video patrols, and monitor passenger flows and traffic flows at various control points, in order to promptly deploy police officers if required.

Police Tactical Unit

The Police Tactical Unit was officially established in 1979, and currently has 670 team members. It includes six special units – the anti-riot team, VIP and important facility protection unit, special operations team, bomb-disposal team, police dog team, and inspection and security team. They are responsible for the safety of facilities, combating

criminals – especially those using firearms, and taking action when there is serious violence, including should there be instances of sniper attacks and hostage-taking.

Judiciary Police

The Judiciary Police is a criminal investigation police department specialising in crime prevention and investigation. It also assists the judiciary and other Government departments in investigating criminal activities. In 2018, there were 1,355 permanent staff positions in the Judiciary Police, with 1,258 serving staff.

In 2018, the Judiciary Police received 14,108 criminal cases, of which 5,801 were designated for special investigations, 3,608 were preliminary investigations, 4,502 were investigations that had been requested, and the remaining 197 were indictments. During the year, 14,725 case investigations were completed, of which 5,721 were designated as special investigations, 4,438 were preliminary investigations, 4,369 were investigations that had been requested, and the remaining 197 were indictments.

During 2018, investigations of criminal cases (cases designated as special investigations and indictments) included: two homicides, 61 arson cases, 50 extortion cases, 66 robberies, 1,159 thefts, 92 cases of narcotic drug trafficking, 31 cases of narcotic drug taking, one human trafficking case, seven cases of prostitution exploitation, 20 cases of gang crimes and two cases of domestic violence, and two triad cases. There were 1,884 gambling-related cases, including 554 loan-sharking cases and 308 cases involving infringement of freedom of movement arising from loan-sharking. Additional cases included 231 cases of passing counterfeit currency (including using counterfeit credit cards), 519 fraud cases (of which 128 were phone fraud cases), and 668 cases of cyber crime.

Judiciary Police School

The functions of the Judiciary Police School are to select and train personnel for special duties in the Judiciary Police, supervise trainees, publish promotional materials and organise publicity programmes.

Its training programmes include induction, in-service training and promotional training for inspectors and assistant inspectors, detectives and assistant criminologists handling criminal cases. In 2018, the school provided 130 courses totalling 3,329 teaching hours for 5,942 staff on induction training, in-service training, promotion-related training and joint programmes co-hosted with other institutions.

Macao Sub-Bureau, INTERPOL National Central Bureau, China

The Interpol Macao, China (Sub-bureau of the Chinese National Central Bureau

of ICPO – Interpol) carries out or assists in operations in Macao at the request of overseas Interpol offices. It issues international arrest warrants from Macao to Interpol's headquarters in France, releases relevant crime information, submits executable temporary detention requests in accordance with extradition procedures in other countries, and detains or helps to detain extraditable fugitives subject to Interpol international arrest warrants. Among its other functions are the detention of criminals or suspects repatriated to Macao, and the provision of advice on crime prevention and reduction. In addition, the sub-bureau exchanges materials concerning international crime, releases documents on police matters, and establishes cooperative relations with overseas public security authorities. At the same time, it receives, classifies, handles, issues and files documents concerning international criminals.

Crisis Negotiation Unit

The Crisis Negotiation Unit is designed to alleviate crises and disputes and minimise casualties and property losses by conducting negotiations. Members of the unit were drawn from various investigation departments of the bureau, and all participate on a part-time basis. They become formal members of the unit after strict selection and training procedures. They also need to participate in regular drills and training. The members are called upon to serve as negotiators in emergency situations, such as advising on instances of suicide attempts and hostage taking.

In 2018, the Crisis Negotiation Unit handled 17 requests for crisis negotiations involving suicide attempts, all of which were satisfactorily resolved. The unit also handled 13 cases from other administrative authorities, to assist in clearing or vacating unlawful occupation of government land or structures.

Macao Public Security Forces

The Macao Public Security Forces (FSM) consists of the Public Security Forces Affairs Bureau, Public Security Police Force, Fire Service and Academy of Public Security Forces. The FSM had a total of 7,668 staff members at the end of 2018, with 6,636 disciplined services staff and 1,032 clerical staff.

Public Security Forces Affairs Bureau (DSFSM)

The DSFSM is responsible for providing technical and administrative support concerning the law, human resources, logistics, financial management, communications, infrastructure, organisation and information, for Macao's public security forces. It also provides support in connection with planning, coordination and standardisation of procedures.

Recruitment

Recruitment of police officers and fire service officers is under the central control of the DSFSM. The minimum academic entry requirement for police officers and Fire Service officers is senior high school level. Applicants must pass a full medical examination, a physical fitness test, a general knowledge test and a psychological skill test. After finishing the Training Programme for Public Security Cadets and passing the assessment, an eligible candidate can assume the position of a police officer or a fire service officer.

Details of 2018 public security cadet recruitment are as follows:

Training Programmes for FSM Police Cadets	Number of Applicants	Number of students enrolled for training programme		
		Male	Female	Total
26th	3,035	187	68	255[a)]
27th	3,274	161	55	216[b)]
28th	2,581	-	-	-[c)]

a) *The number of students who assumed office on 6 November 2018, of whom 192 are police officers, and 63 are fire service officers;*

b) *As at the end of 2018, recruitment was still in progress. Students admitted would begin attending the Training Programme for Public Security Cadets on 25 February 2019, and are expected to assume office as police officers or fire service officers on 19 November 2019; and*

c) *As at the end of 2018, recruitment was still in progress. Students admitted will begin attending the Training Programme for Public Security Cadets on 21 October 2019, and are expected to assume office as police officers or fire service officers in July 2020.*

Also, clerical staff are recruited by the Public Security Forces Affairs Bureau (DSFSM). Successful applicants are allocated to various divisions of the Macao Public Security Forces (FSM).

Enquiries and Complaints

In 2018, the DSFSM received 133 cases: eight complaints, 22 suggestions and opinions, 97 enquiries, five crime reports, and one case that was irrelevant to the FSM. Of the eight complaints, four concerned officers and staff, one concerned traffic and transport, two concerned equipment and facilities, and one concerned the promotion system.

Disciplinary Cases

The FSM requires rigorous disciplinary compliance from all its officers. According to information provided by the FSM, during 2018, investigations were completed regarding 285 disciplinary cases involving 357 people, 332 of whom were in the Public Security Police, 20 in the Fire Service, three in the DSFSM and two in the Academy of Macao Public Security Forces. Most disciplinary actions were in response to minor offences. However, 21 Public Security Police officers and one Fire Service officer were disciplined for criminal offences.

Fire Services Bureau

The core functions of the Fire Services Bureau are to assist in cases of fire, flooding, building collapses, and other situations threatening life and property. It takes measures to prevent fires and provides assistance in emergency cases involving illness or danger. The Fire Services Bureau also participates in civil protection and emergency management.

At the end of 2018, the Fire Services Bureau had a staffing level of 1,589 posts, with 1,373 serving personnel and 216 vacancies. It has nine fire stations on the Macao peninsula, Taipa and Coloane islands: the Fire Services Bureau Headquarters and Sai Van Lake Station, Central Station, Areia Preta Station, Hong Kong-Zhuhai-Macao Bridge Station, Taipa Island Station, and Coloane Island Station, Hengqin Island Station, and two stations at Macau International Airport.

The Fire Services Bureau responded to 47,327 incidents during 2018.

Appliances and Equipment

The Fire Services Bureau currently has 234 fire vehicles, including 22 with large water pumps, eight with 18-metre and 20-metre aerial ladder pumps, 10 ladder platforms, 11 rescue units, three tenders equipped for high rescues, four rescue cushion tenders, two foam tenders, one hose foam carrier, 14 fire/ambulance motorcycles, 44 ambulances and 19 motorcycles.

Fire Fighting

In 2018, the Fire Services Bureau handled 26 No. 2 alarm fires, 718 No. 1 alarm fires, and 372 miscellaneous fires. Classified by cause, 238 fire incidents were due to the careless disposal of embers, 88 were the result of electrical short circuits, 149 were accidental false alarms, four were hoax calls, 125 were due to suspected cases of kindling left behind by negligent people, six were due to suspected arson and 506 were due to other causes. During the year, one victim was killed and 169 people were injured in fires.

Other Emergency and Special Services

The Fire Services Bureau provides other accident, emergency and special services, such as handling gas leaks, emergency opening of doors and the rescue of people trapped in malfunctioning lifts, and suicide attempts. It assists the injured in industrial and traffic accidents, removes fallen objects, cleans roads, and deals with collapsed buildings or fallen trees, landslides and flooding. When needed, it also provides emergency and special services to Macau International Airport. In 2018, the Fire Services Bureau handled 6,328 emergency calls concerning such incidents.

Ambulance Service

The Fire Services Bureau is also responsible for all emergency assistance work in Macao. Its emergency ambulance team comprises 1,097 paramedics. In 2018, the Fire Services Bureau responded to 39,883 emergency requests for ambulances, and dispatched ambulances on 53,051 occasions.

Fire Prevention

The design of all new buildings and fire-prevention equipment is regulated by Articles 2 and 3 of Decree-Law No.24/95/M. Advice on improvements to fire-prevention facilities for older buildings is given on a case-by-case basis. In addition, the Fire Services Bureau examines and monitors fire-prevention measures in shopping malls, factories, catering establishments, and various recreational and entertainment venues, and submits the inspection results and proposals to the authorities for follow-up actions. In 2018, the Fire Services Bureau examined 3,879 construction plans, conducted 1,393 site inspections, performed 2,122 fire-fighting-equipment tests and undertook 6,671 fire-prevention and safety patrols. It handled 495 complaints and appeals, and awarded 275 quality certificates for fire-prevention and fire-fighting equipment.

Academy of Macao Public Security Forces

Founded in July 1988, the Academy of Macao Public Security Forces is a training unit under the Secretary for Security, and is one of the tertiary.

After finishing the four-year Police/Fire Service Officers' Training Programme provided by the academy, students have to complete a six-month practical training; an eligible candidate will be conferred a bachelor's degree in "Police Science" or "Protection and Safety Engineering". The Training Programme for Public Security Cadets offers professional technical training for trainees of the public security forces, so that they can meet the requirements on ethics, physical fitness and professional techniques. In addition, the academy also provides on-the-job training for promotion and professional

development of public security officers.

From 1995 to 2018, the academy trained 327 officers in its Police/Fire Service Officers' Training Programme. There are 37 officers taking part in the Police/Fire Service Officers' Training Programme during year 2018/2019. A total of 8,127 cadets have been trained under the District Public Security Services Programme from 1990 to 2002 and the Training Programme for Public Security Cadets from 2003 to 2018. In 2018, 256 cadets attended and completed the Training Programme for Public Security Cadets. Moreover, the academy organised 58 short-term courses, talks and seminars in 2018, with participation by 2,569 people.

Traffic Accidents

According to statistics provided by the Public Security Police, 13,763 traffic accidents occurred in Macao during 2018, resulting in 4,380 injuries and 10 fatalities.

Macao Customs Service

Founded in accordance with the Basic Law of the MSAR, the Macao Customs Service (Macao Customs) is an independently administered public authority. The Director-General is the highest person-in-charge of the Macao Customs, who is nominated by the Chief Executive for the appointment from the Central People's Government. The Director-General of Macao Customs reports directly to the Chief Executive, but this does not affect the supervisory authority of the Secretary for Security empowered by the relevant by-laws.

The Macao Customs was officially inaugurated on 1 November 2001. A ceremony was held on 6 November 2001 to celebrate its establishment, and the formal inauguration of the Macao Customs Service Building. The Founding Day of the Macao Customs Service has been commemorated on 6 November of every year since then.

Macao Customs is responsible for preventing and combating smuggling, customs fraud and intellectual property infringements. During 2018, exchanges of information and coordination with the customs departments of neighbouring regions were strengthened, and cross-border illegal activities such as smuggling and drug trafficking were intercepted and combated. Moreover, Macao Customs worked with related departments on the inspection and quarantine of imported food, to ensure food hygiene and safety.

In 2018, Macao Customs detected and solved 123 cases of illegal border crossings, arresting 257 illegal immigrants and 64 human smuggling ring leaders. It also seized a large quantity of illegal and smuggled contraband imports, including 149.3 kilograms of orchids, 166,787 kilograms of meat and vegetables, 408 litres of alcoholic beverages,

1,193,207 cigarettes, 20,104.4 grams of cigars, and 3.363 kilograms of tobacco.

As regards intellectual property and industrial property protection, items seized included 65 counterfeit jewellery and accessories, seven counterfeit mobile phones, 173 counterfeit leather items, 1,596 bottles of counterfeit health food products, 562 pairs of counterfeit shoes, 428 bottles of counterfeit wine, 4,559 pieces of counterfeit clothing, 390 counterfeit sports items, three counterfeit watches, 527 counterfeit mobile phone accessories, and 81 items of counterfeit daily commodities.

Additionally, 158.27 grams of psychoactive substances were seized at border checkpoints.

Moreover, 4,239 indictments were lodged by Macao Customs, including 3,977 cases involving infringement of the External Trade Law; nine cases involving Marine and Water Bureau regulations; eight cases involving drugs; 82 cases involving illegal immigration; 42 cases involving the Penal Code; 35 cases involving infringement of intellectual property rights; three cases involving non-compliance with the Regulations on the Prohibition of Illegal Employment; 37 cases involving non-compliance with the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and 46 cases referred by other departments.

Marine Supervision

The Marine Enforcement Department of the Macao Customs is responsible for patrolling Macao's waters. With the cooperation of the Frontier Defence Office of the Guangdong Provincial Public Security Department and Guangdong Province Marine Police Corps, it has strengthened its role in handling extradition and tackling illegal immigration and smuggling activities. In 2018, the Macao Customs Fleet and the Frontier Defence Brigade and Marine Police Brigade No.3 of the Zhuhai Public Security Bureau conducted 724 synchronised operations along the coast of Macao, to ensure order and safety at sea. The Macao Customs Fleet also conducted 12 joint sea patrols and 13 search and rescue drills with the Marine and Water Bureau in the Inner Harbour and Outer Harbour, to strengthen order and safety along the two harbour channels.

The Macao Customs Fleet currently has 14 patrol vessels and 44 high-speed boats.

International Cooperation

Macao Customs is a member of the World Customs Organization (WCO) and actively participates in its various international operations. During 2018, it continued participating in an on-going operation to combat cigarette smuggling, which has been organised by the World Customs Organization's Regional Intelligence Liaison Office for Asia and the Pacific (RILO AP) since 1 August 2004.

Macao Customs has also participated in the Drug Seizure Immediate Notification

System For International Airport since 2008, and the Drug Seizure Immediate Notification System For Sea Cargo since 2015, with the aim of notifying all customs authorities regarding information on international air and sea cargo smuggling activities.

From 5 to 23 March 2018 and from 1 June to 31 July 2018, the WCO launched the "Goalkeeper" operation, to combat infringement of intellectual property rights and illegal trafficking activities during the FIFA World Cup 2018, which was held in Russia. From 21 May to 24 June, Macao Customs participated in an operation with the RILO AP to combat smuggling of tobacco products; and from 4 to 29 June 2018 it participated in an operation with the WCO to combat smuggling of illegal hazardous waste.

Handling Enquiries and Complaints

The Internal Affairs Office, which is directly under the Director-General of Macao Customs, is responsible for handling reports, complaints and enquiries. During 2018, the office received 370 reports from the public. The topics included intellectual property infringements, violation of external trade policies, violation of marine safety regulations, illegal immigration, illegal labour, and drug-related activities. In all, there were 99 complaints, concerning the conduct of customs officers, service procedures, equipment and facilities, environment and noise pollution. It also handled 2,486 enquiries.

Financial Intelligence Office

The Financial Intelligence Office is an independent department formed under Executive Order No. 227/2006 on 29 July 2006. It was originally under the Secretariat for Economy and Finance, and responsible for collecting and analysing information regarding money-laundering and terrorist-financing, as well as providing related information to relevant authorities.

In accordance with the MSAR Government's phase-two administrative structure rationalisation plan and the recommendations in the Mutual Evaluation Report (MER) of the Macao SAR issued by the Asia/Pacific Group of Money Laundering (APG) in 2017, the MSAR Government considered strengthening the functions of the Financial Intelligence Office, and enhancing measures for and effectiveness of combating money laundering and terrorism financing. It was decided that the operations of the Financial Intelligence Office should be supervised by the Secretary for Security, to fulfil Macao's pledge to combat money laundering and terrorist financing. This decision came into effect on 16 October 2018, while the functions and organisational structure of the Financial Intelligence Office remained unchanged.

From November 2006, the Financial Intelligence Office has been receiving reports on suspicious transactions. In 2018, it received more than 3,700 reports from financial services, gaming and retail trade industries.

Macao is a member of the Asia-Pacific Group on Money Laundering (APG). All APG members are required to undergo a common assessment to ensure they are in compliance with the requirements recommended by FATF regarding anti-money laundering and combating financing of terrorism.

According to the recommendations in APG's Mutual Evaluation Report, in 2018 all supervisory departments had completed or were implementing the amendments to the guidelines for anti-money laundering / anti-terrorist financing, to satisfy international requirements. Macao submitted its first follow-up report in January 2019, after the publication of the Mutual Evaluation Report.

Locally, the Financial Intelligence Office is responsible for coordinating the efforts of the interdepartmental task force on combating money laundering and terrorism financing. The task force comprises members of judicial affairs, law enforcement, regulatory, and legal affairs departments. They work together to collect data, conduct research and implement recommendations regarding anti-money laundering and anti-terrorism financing, formulate guidelines for industries under their supervision, and conduct statistical and other analyses of information received on suspicious transactions.

In the area of international cooperation, the Financial Intelligence Office joined the Egmont Group in May 2009, and anticipated fostering connections and collaboration with other countries and regions. It also signed memorandums on cooperation with the financial intelligence bodies of 24 countries and regions: mainland China, Portugal, Hong Kong, Korea, Indonesia, the Philippines, Malaysia, Japan, Thailand, Singapore, Fiji, Australia, the United States, the Russian Federation, the United Kingdom, Bangladesh, Canada, Israel, Cambodia, Monaco, Lebanon, Timor-Leste, Estonia and the Kyrgyz Republic.

Civil Protection

Civil protection aims to prevent major loss of life and damage to property in the event of serious accidents, natural disasters and crises. It is jointly conducted by Government departments and public institutions, with the involvement of residents. Civil protection procedures can reduce casualties and save lives in dangerous situations.

The Action Coordination Centre makes suggestions and deploys manpower and material resources to coordinate and supervise a programme of measures to limit or prevent the effects of any serious accident, disaster or other catastrophe that occurs. It takes all necessary precautions to maintain basic services and normal living conditions for residents in the event of tropical storms or other abnormal situations.

Should a disaster occur, civil protection action will be carried out in phases, according to the nature of the disaster and the needs it creates in terms of rescue and other requirements. If necessary, Macao can be divided into two districts: the Macao peninsula and the islands area. Separate district action centres can be set up to carry out or coordinate activities under the overall command of the Action Coordination

Centre headquarters.

The civil protection system was designed by the Unitary Police Services, which is also responsible for coordinating and monitoring the system's functions. The Public Security Forces, other Government departments, non-governmental organisations and private-sector companies jointly participate in civil protection. They include the Civil Protection Action Centre; Islands Area Action Centre; Unitary Police Service; Fire Services Bureau; Public Security Police Force; Public Security Forces Affairs Bureau; Academy of Macao Public Security Forces; Judiciary Police; Macao Customs; Civil Aviation Authority; Marine and Water Bureau; Conde S. Januario Hospital; Education and Youth Affairs Bureau; Lands, Public Works and Transport Bureau; Government Tourist Office; Meteorological and Geophysical Bureau; Government Information Bureau; Social Welfare Bureau; Housing Bureau; Civic and Municipal Affairs Bureau; Health Bureau; Transport Bureau; Office for the Development of the Energy Sector (GDSE); Macao Post and Telecommunications Bureau; Companhia de Electricidade de Macau (CEM); Companhia de Telecomunicacoes de Macau (CTM); Sai Van Bridge Management Company; Macau Red Cross; Kiang Wu Hospital; Macao Water Supply Company (SAAM); and Teledifusao de Macau (TDM).

Correctional Services Bureau

The Correctional Services Bureau is responsible for organising and managing departments of prison affairs and departments that implement juvenile correction and education, as well as supporting their operations. The Coloane Prison and the Youth Correctional Institution are subsidiaries of the Correctional Services Bureau.

Coloane Prison

Coloane Prison is authorised to implement confinement and custodial sentences; it consists of nine buildings, six of which accommodate inmates. One of the buildings, situated next to the Academy of Macao Public Security Forces, is used to house inmates who are under special supervision or isolation in a special detention zone.

The prison has separate male and female sections. Each has its own sub-sections for inmates on remand and convicted inmates. Coloane Prison can also set up special detention zones in other locations, for inmates who must be held under absolute or limited isolation regulations and special isolation security regulations.

With the approval of authorised Government officials and in exceptional situations, Coloane Prison can provide protective custody for certain inmates.

Prison Population

Coloane Prison can accommodate a maximum of 1,630 inmates. As at 31 December 2018, it held 1,458 inmates, of whom 269 were on remand and 1,189 were convicted. There were 1,248 male inmates and 210 female inmates.

Returning to Society

To implement its plan to assist inmates in returning to society, Coloane Prison provides education and occupational training. Inmates can apply to study according to their educational level, interests and needs.

Youth Correctional Institution

The Youth Correctional Institution takes in young people who have violated the law and who have been referred by the courts.

The institution is divided into separate areas for boys and girls, with counsellors working around-the-clock in each. There are also social workers, psychologists, occupational training tutors and teachers, providing academic and vocational training, personal and family counselling, as well as implementing social service schemes.

Inmates

The institution generally only accepts young people aged 12 to 16, but may extend its services to them until they reach 21. There were only 10 boys and no girls in the institution at the end of 2018.

TOURISM POLICE

Established in March 2017, Tourism Police of the Public Security Police stations police officers at busy tourist spots in the Macao peninsula and the Island District, to provide quality professional services to the public and tourists, handle tourists' enquires, assist with reports of lost and found items, and provide guidance to people who are lost. The unit also implements normal police duties related to crime prevention, and deals with crowd control and emergency incidents.

Besides acquiring profound knowledge in policing functions, tourism police also receive specific training in languages, information about tourist attractions and providing quality frontline services.

POLÍCIA

MACAO YEARBOOK 2019

7

EDUCATION

Since its establishment, the Macao SAR Government has actively optimised non-tertiary and tertiary education in Macao, with a view to implementing the administration directions of "developing Macao through education" and "cultivating talents for the development of Macao" in various aspects, including institutions, resource allocation and planning. In addition, in adhering to the principle of diversity in tertiary education, the Government supports the autonomy of tertiary institutions, and coordinates the development of different tertiary institutions, to train talented persons who are internationally competitive.

Non-tertiary Education

Macao is the first region in Greater China to provide 15 years of free education.

Since the promulgation of the Fundamental Law on Non-tertiary Education in 2006, non-tertiary education in Macao has been classified into two types: formal education and continuing education. The former includes kindergartens, primary schooling, secondary schooling, and special education; the latter includes family education, recurrent education, community education, vocational training and other education activities. Vocational and technical educations, which may be implemented as part of formal education or recurrent education, are only offered at senior secondary school level. The Macao school system comprises a free education network of public schools and subsidised private schools, together with private schools.

Private schools in Macao can be classified into two types: those following the local education system and those following a non-local education system. Non-profit private schools that follow the local education system may apply for entry into the free education network. The Government encourages schools to develop their own characteristics and style in terms of mission, curriculum development and teaching mode. The Government also supports the development of a diverse school system, to nurture more talent for society.

According to Education and Youth Affairs Bureau (DSEJ) statistics, there were 77 schools in Macao during the 2018/2019 academic year, of which 10 were public schools, while the remaining 67 were private. Among the 67 private schools, 64 offered formal education, and three offered only recurrent education. Among the 74 schools (including 10 public schools and 64 private schools) that offered formal education, 67 were in the free education network, while the remaining seven were in the paid education network. The number of schools in the free education system was 105, and the coverage rate has reached 94 percent.

During the 2018/2019 academic year, 79,450 students received non-tertiary education, with 77,999 of them receiving formal education. Of these, 18,626 (23.4 percent) attended kindergartens, 32,530 (40.9 percent) attended primary schools, 26,022 (32.8 percent) attended secondary schools, 833 (1.1 percent) received vocational and technical education, and 821 (one percent) were enrolled in institutions for children with special educational needs. Some 1,451 students were receiving

recurrent education, including 80 primary school pupils (0.1 percent) and 1,371 secondary school students (1.7 percent), and 341 (0.4 percent) vocational school students.

During the 2018/2019 academic year, there were 7,131 teaching staff for non-tertiary education, representing an increase of 2.4 percent over the 2017/2018 academic year.

Education and Youth Affairs Bureau

The DSEJ is a government department responsible for developing, directing, coordinating, administering and evaluating non-tertiary education. It is also responsible for issues concerning young people, and for supporting youth associations and similar organisations.

Education Development Fund

The Government established the Education Development Fund in 2007, to support and drive programmes and projects with good development prospects in non-tertiary education. The School Development Scheme is a major subvention scheme launched by the Education Development Fund.

In 2018, the Education Development Fund provided subsidies amounting to about 490 million patacas. There were two categories of the School Development Plan for the 2018/2019 academic year: fixed and variable subsidies. Fixed subsidies covered three areas – school-based training, books and newspapers procurement and professional staff. Variable subsidies covered three application plans: prioritised, school-based and others.

The Education Development Fund has enriched and revised the content of its original constitution, to further encourage schools to provide integrated education training to teaching staff, motivate schools to organise Guangdong-Hong Kong-Macao Bay Area exchange tours, promote establishment of sister school alliances, and organise diverse parent-child reading activities. Other subsidised projects included large-scale campus reconstruction and expansion, and enhancement of learning and teaching facilities of local schools.

Compulsory Education

Compulsory education is defined as universal education that is compulsory for all minors aged from five to 15. It begins in the first academic year when a child turns five years old, and finishes with the end of the academic year in which he or she reaches 15 years of age, or when he or she completes junior secondary education with a pass. The Government and education institutions are obliged to ensure that school-age

children complete such education.

Free Education

Since the 2007/2008 academic year, free education has been extended to cover the entire 15-year period of compulsory education: three years of kindergarten, six years of primary, three years of junior secondary and three years of senior secondary schooling.

To create favourable conditions for small-class teaching, the Government has reduced the number of pupils for each class from 35-45 pupils to 25-35 students. This began in the 2007/2008 academic year, initially covering the first year in preschool education, and was subsequently expanded to cover more senior levels in the following academic years. By the 2017/2018 academic year, the ceiling for pupils per class was applied to all stages of schooling within the formal education curriculum.

In the 2018/2019 academic year, the class-teacher ratios in kindergartens, primary and secondary schools were enhanced to 1:2.0, 1:2.2, and 1:2.7, respectively. Also in the same academic year, the teacher-student ratios in kindergartens, primary and secondary schools were enhanced to 1:14.1, 1:13.5 and 1:9.7, respectively.

Subsidy and Financial Aid Schemes

The Government offered free education subsidies to private schools within the free education network. Students studying in schools that did not provide free education were provided tuition fee subsidies. The amounts of both types of subsidies were continuously increased.

Education Level	2018/2019 Academic Year Free Education Subsidies (patacas)	2018/2019 Academic Year Tuition Fee Subsidies (patacas)
Kindergarten	954,900 per class	19,140 per student
Primary	1,053,400 per class	21,320 per student
Junior Secondary	1,286,500 per class	23,800 per student
Senior Secondary	1,463,400 per class	23,800 per student

In addition, during the 2018/2019 academic year the Government continued offering textbook allowances to students who are Macao residents receiving formal education in Macao. The textbook allowances for each kindergarten pupil, primary school pupil and secondary school student were 2,200 patacas, 2,800 patacas and 3,300 patacas, respectively.

According to the Framework Agreement on Cooperation Between Guangdong and Macao, Macao should gradually offer tuition fee subsidies to Macao pupil and students studying in kindergartens and primary and secondary schools in Guangdong. In light of this, the DSEJ launched a pilot scheme in the 2012/2013 academic year to provide tuition fee subsidies for Macao students who studied in full-time regular senior secondary schools or full-time secondary vocational schools (senior secondary school level) in Zhuhai and Zhongshan, Guangdong Province. In the 2017/2018 academic year, the eligibility for the subsidies was extended to Macao students pursuing non-tertiary studies in 21 cities throughout Guangdong province.

The highest subsidies for each senior secondary school student, junior secondary school student and primary school student were raised to 6,000 patacas per academic year; those for each preschool pupil were raised to 8,000 patacas per academic year. In addition to providing tuition fee subsidies, the scheme organised summer courses, career development seminars and study visits in Macao for senior secondary school students. It also organised visits to Macao tertiary educational institutions so that students could plan for their further education. In 2018, 4,216 students were granted tuition fee subsidies amounting to about 26.9 million patacas.

In the 2012/2013 academic year, the Government launched the Subsidy Scheme for Enrolment of Outstanding Students to Pedagogical Programmes, to subsidise outstanding students to study in bachelor's degree programmes with pedagogical training. The students are required to work as teachers in educational institutions in mainland China or Macao during the academic year immediately after completing the programmes. In the 2018/2019 academic year, it was estimated that 424 students would receive subsidies to study in the programmes, and the subsidies would total over 36 million patacas.

From the 2013/2014 academic year to the 2017/2018 academic year, the Subvention Scheme for Training Portuguese-speaking Teachers and Language Experts was implemented, to subsidise senior secondary school graduates for enrolment to bachelor's degree programmes in Portuguese and Spanish languages, master's degree programmes in education, and bachelor's degree programmes and/or master's programmes in applied foreign languages in Portugal. The Government and the Catholic University of Portugal have also reached a cooperation agreement on organising preparatory courses on Portuguese language and culture for Macao students who will continue their studies in Portugal. Students who pass these courses will be directly enrolled in the above programmes. To date, 81 students have participated in the scheme.

In the 2018/2019 academic year, the Programme for Cultivating Chinese-Portuguese Bilingual Talents in Multiple Disciplines was launched, offering 13 bachelor's degree programmes to senior secondary school graduates who intend to pursue studies in Portugal. Seven senior secondary school graduates were selected during the scheme's first academic year.

Vocational and Technical Education

The Education Development Fund continues to subsidise courses organised by private schools that cover vocational and technical skills with the schools' own characteristics and in accordance with the adequate diversification of Macao's economy. In the 2018/2019 academic year, subsidies for vocational and technical education courses totalling over 16 million patacas were granted to eight schools, which organised 80 classes in 32 programmes. The "Applied Learning – School-based Applied Courses" subsidy programme also supported 12 schools to organise courses on 14 subjects related to applied skills. A total of 49 classes were organised; subsidies totalling over 88 million patacas were granted.

The public consultation on the Vocational and Technical Education System was held from 6 June to 15 July 2018, during which 300 suggestions were collected. The public consultation report was published on 11 January 2019.

Education for Pupils with Special Needs

During the 2018/2019 academic year, there were 2,301 pupils in Macao with special needs; 1,480 of them studied in inclusive classes, and 821 were in small special education classes and special needs classes. In 2018, two parent resource centres were established, to provide training to parents of pupils with special needs, and facilitate parent-child interactions to help the children's learning and growth.

Life-long Learning

To support Macao's adequate economic diversification and development of a knowledge-based society, the Government launched the first and second phases of the Continuing Education Development Plan from 2011 to 2016. Over 140,000 and 160,000 Macao residents participated in the first and second phases, respectively, with participation rates of 36 percent and 41 percent of all eligible residents, respectively. The first and second phases involved subsidies of over 520 million patacas and 740 million patacas, respectively.

The third phase of the Continuing Education Development Plan (2017-2019) was launched in 2017. By 31 December 2018, this phase entailed subsidies totalling around 520 million patacas to more than 130,000 eligible residents. There were also some 22,000 applications for subsidies for participating in local tertiary education and overseas programmes.

During the 2018/2019 academic year, two public schools and six private schools offered recurrent education, to provide education opportunities to residents who have not completed formal education within school age. The DSEJ provides recurrent education subsidies to private schools offering recurrent education. The subsides amounted to a maximum of 817,000 patacas, 989,000 patacas and 1,118,000 patacas per class

for primary, junior secondary and senior secondary schools, respectively.

In October 2018, the DSEJ joined hands with the Cultural Affairs Bureau, Macao Institute of Adult Education, Macao Association for Adult Education and Macao Society of Continuing Education in organising the 2018 Life-long Learning Week, featuring some 120 activities.

In 2018, the Life-long Learning Incentive Award Scheme organised more than 30,000 learning activities of various types, providing more than 320,000 places. With a network of 491 organisations joining the scheme, the cumulative total of participants reached 4,107.

Open Campus Campaign

Through the provision of subsidies by the Education Development Fund, schools cooperating in the Open Campus Campaign are encouraged to open their facilities for public use during non-working hours, so they can be used by students and citizens. In the 2017/2018 academic year, there were 25 participating schools.

Curriculum Reform and Development

In the 2018/2019 academic year, curriculum reform was extended to junior secondary two and senior secondary two. The Framework of Formal Education Curriculum and the Requirements for Basic Academic Aptitude in the Local Education System were implemented, to alleviate unnecessary learning burdens for students, thereby ensuring their basic development in knowledge, skills, ability, emotions, attitude and values, to improve the overall quality of non-tertiary education in Macao.

The Secretary for Social Affairs and Culture issued Order No. 69/2018 to set out the basic academic requirements for Geography and History in junior and senior secondary school education, to further assist teaching staff with effectively organising teaching activities and fostering students' patriotism.

In 2018, teaching resources, including the trial version of History as a compulsory subject for junior secondary one and senior secondary students, the new edition of Moral and Civic Education for junior secondary students, and Supplementary Teaching Materials on Safety Education, were published to continue enriching teaching resources and support teaching staff in organising teaching activities.

Professional Development of Teaching Staff

In the 2017/2018 academic year, 412 teaching staff training activities were organised, providing 17,289 training places.

The Education Development Fund launched the Subvention Scheme for School-based Training, the Subvention Scheme for Off-the-Job Training and the Subvention Scheme for Study Leave. In the 2017/2018 academic year , 22,439 teachers participated in the Subvention Scheme for School-based Training.

In 2018, nine open classes in the teaching design award scheme were organised, and more than 1,150 teaching staff participated. Also, subsidies were given to 289 teaching staff for enrolment in pedagogical training programmes organised by tertiary institutions.

To support the professional development of leaders and management of schools in Macao, one semester of a training programme for potential school leaders and two semesters of a training programme for potential mid-level and senior-level school management were organised in 2018, attracting participation by 29 and 91 teaching staff, respectively.

Programme for International Student Assessment (PISA)

The Programme for International Student Assessment (PISA), drawn up by the Organization for Economic Co-operation and Development (OECD), assesses the performance of 15-year-old school pupils of participating countries/economies in reading, mathematical and scientific literacy once every three years. Since 2003, Macao has participated in six PISA assessments.

The testing of PISA 2018 mainly covered reading ability, supplemented by science and mathematics literacy. The test was completed in digital (computerised) format by 3,778 15-year-old secondary school students from 46 Chinese, Portuguese and English schools in Macao during April and May 2018. Regarding the questionnaire, 46 valid questionnaires were collected from schools, 3,778 from students, 3,760 from parents and 2,817 from teachers, with a submission rate above 99 percent. The OECD will announce the results of the PISA 2018 in December 2019.

Progress in International Reading Literacy Study (PIRLS)

The Progress in International Reading Literacy Study (PIRLS) is organised by the International Association for the Evaluation of Educational Achievement (IEA), and has been administered every five years since 2001. Its aim is to scientifically assess the reading literacy and level of primary-four pupils, and to explore factors that affect students' literacy. Results of the study are used as the basis for improving education policy on reading, teaching methods and reading habit, with an aim to further raise the reading literacy of students.

After the results of PIRLS 2016 were announced on 5 December 2017, the research work mainly focused on following up on PIRLS 2016 research results and promoting education on reading.

National Education

More than 1,700 people from 70 schools and 25 youth organisations participated in the Flag-raising Ceremony for the May Fourth Youth Day for Macao Students in 2018. After the ceremony, book vouchers were presented to winners of the May Fourth Movement Spirit - Life Mottos Collection Campaign, for which more than 1,900 entries were received from 21 participating schools.

The Beijing-Hong Kong-Macao Exchange Summer Camp – Youth Hong Kong and Macao Tour 2018 attracted participation by 67 students and teachers from 29 schools in Macao. The Beijing-Macao Primary School Students Exchange Camp 2018 attracted participation by 50 pupils from 37 primary schools. The National Education Course 2018, which included a study of the situation in Macao and a visit to Fujian, attracted participation by 99 senior secondary students from 32 schools.

To strengthen education on the Constitution and the Basic Law, two academia and youth performances were organised in 2018, to celebrate the 25th anniversary of the promulgation of the Basic Law of the Macao SAR. The events were performed by students from 54 primary and secondary schools and 11 local groups in Macao. More than 500 teenage students jointly performed to encourage youth participation in promoting the Basic Law of Macao. The two-night event attracted more than 3,000 spectators.

To further develop patriotic education, the DSEJ rolled out a wide array of activities, such as the Promotion of Diplomatic Knowledge Campaign, National Education Programme for Teenagers in Macao, Understanding and Loving China Study Tour Subsidy Scheme. In the 2017/2018 academic year, there were more than 14,000 participants.

Also, educational camps of various themes were organised, including an education camp on national defence and a military summer camp for young Macao students, assisting in students' all-round development from experiential learning in three areas - self-care, patriotism and teamwork. In the 2017/2018 academic year, nearly 3,020 students participated in these educational camps.

Arts Education

In 2018, the DSEJ continued implementing the Students Popular Arts Education Scheme, covering primary six students to senior secondary three students. In the 2017/2018 academic year, 22,412 students from 66 schools participated in the scheme. The DSEJ also continued organising various arts education schemes and activities, including the Arts Education Snowball Project and the Macao School Bands Show.

Student Welfare Fund

The Student Welfare Fund aims to subsidise social and educational activities to ensure that all Macao students can enjoy equal opportunities, and create a safe and healthy learning environment for students. At present, student welfare mainly covers tuition fee subsidies, meal allowances, allowances for textbooks and stationery, free insurance, and the milk and soy milk programme.

To encourage students to continue pursuing tertiary education and nurture professionals for the development of Macao, the DSEJ supports students whose families are experiencing financial difficulties and encourages outstanding students through the Tertiary Scholarship Scheme. It was expected that this scheme would benefit about 6,520 students in the 2018/2019 academic year. The DSEJ also joined hands with banks to launch its Interest Subsidies for Student Loans Scheme, which benefited some 850 students in 2018 by subsidising 70 percent of payable loan interest during their studies. The remaining 30 percent of the subsidy will be issued to the students upon completion of their tertiary education courses.

Non-tertiary Education Council

The Non-tertiary Education Council is a consultative body with representatives from many sectors of the community. Through participation, coordination, cooperation and reviews, the members work together to promote the development of education.

Teaching Staff Professional Committee

The Teaching Staff Professional Committee comprises school leaders, representatives of education organisations, representatives of the DSEJ, people with well-recognised education achievements, and experts in the education sector and teachers.

The Teaching Staff Professional Committee discussed the standard of assessment of the professional development activity hours of teaching staff, and provided opinions on verifying teachers' overseas employment, early promotion of teaching staff and statements of objection. Also during the academic year, it set up a dedicated group for the Outstanding Teacher Awards. Reputable education experts and scholars from across the strait, Macao and Hong Kong were invited to form the specialist panel, which was responsible for reviews and judging. Up to 15 teachers approved by the plenary meeting were granted Outstanding Teacher Awards, including secondary, primary, preschool and special education teachers.

Youth Affairs

Youth Affairs Council

The Youth Affairs Council is a consultative body that is responsible for providing professional advice and recommendations on formulating relevant policies, and evaluating the results of their implementation. The 2017 Youth Activity Awards and Civic Education Awards were awarded, in accordance with the Regulations on Presentation of Youth Awards.

Macao Youth Policy

The Macao Youth Policy (2012-2020) is a forward-looking and systematic policy document compiled by the Government to facilitate the all-round development of young people in Macao.

This was the first implementation period, according to the review mechanism of the Macao Youth Policy from 2012 to 2016. The interim review results were completed and published in March 2017. In 2018, the Government continued assessing the interim report on Macao Youth Policy, to conform with the new development trends of the nation and Macao, and to continue promoting youth social work through various channels.

The cross-departmental follow-up group of the Macao Youth Policy continued leveraging synergy of government departments through jointly organising the "Challenge Day for the New Generation" and the "Basic Law for Teens" – law promotion month targeting teenagers. The "Basic Law for Teens" featured 14 events with the Basic Law as the theme, attracting more than 37,000 participants.

In 2018, the "Your Opinions on Government's Administration 2019" youth exchange session was held for the first time, with an innovative format. It was attended by 17 leading officials and representatives from 14 public departments, who interacted with over 130 young participants, and listened to their opinions and suggestions.

Besides, the Government managed to keep a close track of the development needs of young people through regular consultations and monitoring by the Youth Affairs Council.

Youth Indicators and Studies

To understand the situation of young people in Macao and promote the development of youth studies, the DSEJ continuously follows up on research and collection of information related to Macao Youth Indicators. The investigations and studies of the Social Survey on Macao Youth Indicators 2018 were completed during the year.

Youth Activities and Sponsorships

In "The Belt and Road – the Dancing City" - International Youth Dance Festival 2018, more than 550 young dancers from 17 foreign teams and 10 local teams assembled for exchanges in Macao. The six-day event attracted more than 20,000 spectators.

In 2018, the DSEJ organised the Award Presentation Ceremony for Youth Volunteer Award Programme 2017. In addition, the stories about the award winners of the "Touching People, Activating Positive Energy - Youth Incentive Plan 2017" were produced, and featured on framed banners for roadshows in youth centres, education centres and local schools.

The organising committee of the youth activity series in commemoration of the May Fourth Movement, which was formed by various youth organisations in Macao, jointly organised three events attended by a total of 650 participants. Meanwhile, the organising committee also solely organised a series of six activities to commemorate the 98th anniversary of the May Fourth Movement.

To encourage young people in Macao to pass on Chinese culture, and enhance knowledge about the Basic Law and the situation of our nation and the Macao SAR, the DSEJ organised four sharing sessions in 2018, to enrich participants' knowledge of legal affairs and Chinese culture. These sharing sessions attracted 258 young attendees.

In 2018, subsidies totalling around 8.48 million patacas were provided to 87 youth organisations or associations which applied for funding under the Annual Subsidy Scheme for Activities of Youth Groups, to organise 511 projects or activities. The DSEJ continued to run the Caring for Growth of Youngsters subsidy scheme, to support organisations to develop programmes aiming to spread positive energy, and subsidised 79 activities organised by 43 groups. The subsidies totalled about 4.5 million patacas.

School Sports, Cultural, Recreational, Mathematics and Popular Science Activities

The DSEJ arranges various sports, cultural, recreational, mathematics and popular science activities and competitions every year. It also sends school delegations to national and international competitions and achieves excellent results.

Regarding sports in 2018, the DSEJ organised the Schools Interport Sports Competition. It also sent school delegations to seven external inter-school sports competitions. The Macao delegation won various prizes including first place in the boy's shot put event; first runner-up in the girl's high jump event, and second runner-up in the men's 110m hurdles for the teenagers' group at the Youth Olympic Games in Portugal.

Regarding activities related to mathematics and popular science, through arrangements by the DSEJ, Macao school delegations joined 15 regional, national and international competitions in 2018, and won a total of 155 prizes, including nine

champions, three first runners-up and one third runner-up in the International Robotic Olympiad 2018; 11 first-class awards, five second-class awards and one third-class award at the 16th Network Originality Competition (NOC); and a third-class award at the 15th China Southeast Mathematical Olympiad.

Youth Facilities and Services

Under DSEJ's administration, there are two youth hostels and four youth centres. The two youth hostels are Cheok Van Youth Hostel and Hac Sa Youth Hostel; 15,926 people stayed in these hostels in 2018. The four youth centres – Areia Preta Youth Centre, Experiential Centre for Young People, Outer Harbour Youth Centre and Bairro do Hipodromo Youth Centre. The Bairro do Hipodromo Youth Centre and Experiential Centre for Young People continued providing night services till 2 am and 12 am, respectively, to cater for the different needs of young people using the facilities.

Aiming to provide services that support group development, leisure education, arts education, and recreational and sports development, the four centres continued organising a wide variety of activities that help young people to grow and develop, and provided youth counselling services and training for volunteer workers. In 2018, about 750,000 people participated in the activities organised by the four youth centres and used their facilities.

The DSEJ continued to provide more venues for use by youngsters for exhibitions and performances through the Juvenile Arts Exhibition and Performance Hall under its administration. In 2018, the Juvenile Arts Exhibition and Performance Hall held 25 exhibitions and 22 (24 sessions) performances, attended by 20,227 people.

In 2012, the DSEJ began providing subsidies for schools to set up wellness centres. By December 2018, 30 fitness centres had been set up.

Tertiary Education

Macao's modern tertiary education has flourished over the past 30 years. At present, there are 10 tertiary institutions in Macao – four public and six private institutions. There are universities with a mix of comprehensive teaching and research, professional polytechnic institutes that focus on practical teaching and learning, as well as specialist academies that cultivate talents in tourism and convention and exhibition, specialists in the gaming industry, professional nursing personnel, and senior managers.

To keep in line with Macao's rapid social and economic development, tertiary institutions have organised a wider variety of tertiary education programmes with consideration of social and academic development, in order to cultivate talents required by the community.

On 8 August 2018, Macao tertiary education headed towards a new milestone. A series of related laws and regulations, including the Law on the Tertiary Education System, the Tertiary Education Fund, the Tertiary Education Council, the Tertiary Education Regulations, the Academic Credit System in Tertiary Education and the Tertiary Education Quality Assessment System, came into effect. The new systems offer tertiary institutions greater autonomy and flexibility to provide sufficient resources for the overall development of tertiary education.

During the 2018/2019 academic year, there were 2,380 teaching staff and 34,279 registered students in Macao's tertiary education institutions, where 280 programmes – including doctorate, master's and bachelor's degree programmes, postgraduate certificates and higher diploma (including associate degree) programmes – are offered.

In addition, overseas institutions were granted approval to offer a total of 23 tertiary educational programmes in Macao in 2018.

Tertiary Education Bureau

The Tertiary Education Services Office was established in 1992. According to By-law No. 1/2019 "Organisation and Operation of the Higher Education Bureau", which came into effect from 11 February 2019, it was renamed as Higher Education Bureau (DSES). It is a government department that coordinates, follows up on and develops tertiary education in Macao.

Processing Applications to Launch and Revise Programmes

In 2018, the Tertiary Education Services Office processed 91 applications by Macao tertiary educational institutions intending to launch new programmes or revise old ones; 24 of these applications were approved, 17 were rejected, three were withdrawn by the institutions concerned, and 47 were in progress. The office also handled 29 applications from overseas tertiary educational institutions seeking to establish, revise or continue running programmes. A total of 23 such applications were approved, and six were in progress.

Promoting Exchanges and Cooperation in Tertiary Education

The Tertiary Education Services Office continues to facilitate various external cooperation projects within the tertiary education field, including the promotion of cooperation between Macao and mainland China in tertiary education, by coordinating related work with mainland China authorities in accordance with the framework agreement on the joint construction of Cuiheng New District, Zhongshan and the projects on educational exchange and cooperation between Zhongshan and Macao; and the implementation of various agreements entered into with the Ministry of Education,

the State Ethnic Affairs Commission, Guangdong Province and Portugal, to continue expanding the scope of external cooperation regarding Macao's tertiary education.

With approval from the Ministry of Education, from 2018 onwards, 10 tertiary institutions in mainland China have adopted the results of the Joint Admission Examination for Four Higher Education Institutions in Macao. These 10 tertiary institutions are Fudan University, Zhejiang University, Xiamen University, Huaqiao University, Wuhan University, Huazhong University of Science and Technology, Huazhong Normal University, Sun Yat-sen University, and Jinan University and South China Normal University.

In addition, the Tertiary Education Services Office signed a cooperation agreement on accepting the results of the Joint Admission Examination for Four Higher Education Institutions in Macao with the Council of Rectors of Portuguese Universities and the Portuguese Polytechnics Coordinating Council. The Portuguese public universities and polytechnics under the two committees began admitting Macao students by adopting the results of the joint admission examination based on the agreement and the related regulations governing international students in Portugal.

Organised by the Tertiary Education Services Office, the University of Macau and St. Joseph University, and co-organised by the Jiangsu Provincial Department of Education, the First Forum for Heads of Higher Education Institutions of China and Portuguese-Speaking Countries was held in October 2018, with the theme "Tertiary Education under the Belt and Road Initiative". The forum was attended by 140 leaders and representatives from some 80 universities and tertiary education institutions from mainland China, Hong Kong, Macao and Portuguese-speaking countries. They exchanged ideas on related issues and joined the Declaration of Collaboration in Higher Education in Macao during the forum, to strengthen mutual cooperation.

To support the "Belt and Road" initiative and promote Macao tertiary education to Southeast Asian countries, the Tertiary Education Services Office organised delegations of Macao tertiary education institutions in April and November 2018, to participate in the Higher Education Fair 2018 in Malaysia and the OCSC International Education Expo in Thailand, respectively, and paid visits to universities in the two countries.

Coordination of Student Enrolments in Programmes of Macao Tertiary Educational Institutions Conducted on the Mainland

During 2018, with approval from the Ministry of Education, the University of Macau, Macao Polytechnic Institute, the Institute for Tourism Studies, Macau University of Science and Technology, City University of Macau and Kiang Wu Nursing College of Macau continued to recruit students from 31 provinces, municipalities and autonomous regions in mainland China.

During the 2018/2019 academic year, 30,497 mainland China students applied to the above-mentioned six tertiary educational institutions in Macao. Of the 5,885

newly registered students, 584 enrolled in doctorate degree programmes, 1,975 in master's degree programmes, 3,066 in bachelor's degree programmes and 260 in university foundation courses.

Coordinating the Admission of Macao Students to Mainland Tertiary Institutions

The Tertiary Education Services Office is one of the bodies that process the admission of Hong Kong, Macao and Taiwan undergraduates and postgraduates to China tertiary educational institutions.

In the 2018/2019 academic year, 306 and 1,077 students sat the Joint Examination for Admission to Mainland China Universities (Macao) and the examinations for admission of students by recommendation to undergraduate programmes, respectively. In all, 105 and 951 students were admitted, respectively. In 2018, 50 students were admitted to mainland China universities, through their results in the Joint Admission Examination for Four Higher Education Institutions in Macao. Also, 368 students sat the examination for admission to postgraduate programmes in tertiary educational institutions in mainland China; 184 of them were admitted.

Tertiary Education Information and Admission Services

The Tertiary Education Services Office has established a tertiary education information website to provide information about tertiary education, public examinations and employment to the public. It also provides telephone and e-mail enquiry services to answer related queries. In 2018, it handled 224 relevant cases. In addition, the Tertiary Education Services Office cooperated with various community groups and organisations in organising diverse activities that provided information about tertiary education and vocational preparation.

In 2013, the Tertiary Education Services Office set up a service centre for university students. It serves as a comprehensive service desk for tertiary students and Macao citizens who intend to pursue tertiary education. Between January and December 2018, there were 11,507 visitors, 61.71 percent of whom were tertiary students.

Tertiary Student Activities

The Tertiary Education Services Office actively establishes exchange platforms for students of tertiary institutions, with a view to developing their worldview, strengthening their general knowledge and language competence, and encouraging them to go abroad for exchanges and learning, to broaden their global vision.

To enrich the extracurricular life of tertiary students and facilitate their all-round

development, the Tertiary Education Services Office organises a wide variety of competitions, activities and exchange tours for them every year. It also works with different community groups and organisations in organising various competitions and activities related to culture, sports and professional skills.

Subsidies for Tertiary Student Activities

Through the Tertiary Student Activity Fund, the Tertiary Education Services Office encourages Macao educational institutions, student organisations and social communities to organise activities that meet students' interests. In 2018, three institutions, 62 organisations (including non-profit tertiary student communities and social communities) and nine tertiary students were subsidised to organise and participate in 432 tertiary student activities. The subsidies amounted to more than 6.7 million patacas.

Disbursing Postgraduate Scholarships

The Tertiary Education Services Office is responsible for supporting the disbursement of postgraduate scholarships provided by the Postgraduate Scholarships Grants Committee to Macao residents.

During the 2018/2019 academic year, there were 137 new recipients of post-graduate scholarships, of which 25 were doctorate scholarships, five were for integrated master's and doctorate programmes, 105 were for master's degree scholarships, and two were for integrated bachelor's and master's programmes. The amounts of these scholarships were 80,000 patacas, 70,000 patacas, 58,000 patacas and 51,000 patacas per year, respectively. In the 2018/2019 academic year, a total of 785 candidates applied to the scheme.

The Social Welfare Bureau again added an extra quota to scholarships, which was granted to the highest-scoring student studying in a master's degree programme related to social work, social security and social welfare in the 2018/2019 academic year.

To implement the initiatives in the Cooperation Agreement on Disbursement of Postgraduate Scholarships, which was entered into by the Government and the Ministry of Education and State Ethnic Affairs Commission, the Government nominates students who come to Macao for postgraduate programmes for scholarships (tuition fees, accommodation fees and living allowances). In the 2018/2019 academic year, 14 students were granted scholarships.

Textbooks and Stationery Allowances for Tertiary Students

In 2018, the Government provided a 3,000-pataca allowance for textbooks and

stationery to each Macao resident studying in tertiary and postgraduate programmes in Macao and overseas. Out of 35,057 applicants, 33,788 satisfied the requirements and were granted the allowance.

Interest Subsidy Scheme for Graduates of Higher Education Institutions Receiving Language Training

To encourage and support residents with bachelor's degrees to study training programmes overseas, in order to enhance their language abilities, the Tertiary Education Services Office optimised the interest subsidy scheme for graduates of higher education institutions receiving language training, and the subsidy coverage was expanded to cover all languages. The period of subsidy was determined according to the duration of the programme, with the longest period being two years. The loan limit with interest subsidy was determined according to the language and duration of the programme.

Setting up CET4 and CET6 English examination centres in Macao

Under the coordination of the Tertiary Education Services Office, during 2018, the University of Macau, Macau University of Science and Technology and City University of Macau set up CET4 and CET6 English examination centres in Macao.

The three educational institutions held CET4 and CET6 written tests in June and December 2018, respectively, with 1,113 candidates sitting for the CET4 test and 1,048 candidates sitting for the CET6 test in June; while 1,689 candidates sat for the CET4 test and 1,334 candidates sat for the CET6 test in December. There were 3,023 candidates in total.

Tertiary Education Quality Assurance

In August 2018, the Tertiary Education Quality Assurance came into effect. It marked the establishment of a system to assure the quality of Macao's tertiary education in Macao, and further motivated continuous quality improvement of tertiary educational institutions.

The Tertiary Education Services Office continued inviting professional institutions to organise quality-assuring training activities for teaching staff. It also continued strengthening connections with quality assurance organisations and assessment institutions around the world, for a better understanding of the latest information and development trends, as well as to enable relevant organisations and institutions to be aware of the development of Macao's tertiary education quality assurance, and create favourable conditions for future collaboration.

Verification of Qualifications

In 2018, the Tertiary Education Services Office handled 25 written queries and 8 telephone queries from government departments. It also handled a total of 199 queries from the public, of which 11 were made in person, 154 by telephone, and 34 by e-mail.

Processing Applications for Subsidies for Macao Tertiary Institutions and Professional Development Subsidies for Teaching and Research Staff

To assist tertiary institutions with improving their teaching equipment and facilities, the Government has begin working on raising education quality, and encouraging the institutions' teaching staff to actively participate in and commence academic and professional activities that are conducive to their personal and professional development. The Tertiary Education Services Office processes applications for subsidies for Macao tertiary institutions and subsidies for professional development of tertiary teaching staff in Macao.

In 2018, subsidies were granted for nine projects on the optimisation of teaching equipment and improvement of teaching and scientific research quality, two projects by Macao Academic Library Alliance for procuring an electronic database, 35 projects on professional development of teaching staff, and seven projects on activities related to tertiary education organised by student organisations. The total subsides were approximately 15.48 million.

Chinese and Portuguese Bilingual Talent Training, Education and Research Cooperation Subsidy Scheme for Macao Tertiary Institutions

To foster the development of cultivation of talents who are bilingual in Chinese and Portuguese, and to facilitate cooperation between Macao, mainland China, other Asia-Pacific regions and Portuguese-speaking countries in tertiary education, the Tertiary Education Services Office continued with the Chinese and Portuguese Bilingual Talent Training, Education and Research Cooperation Subsidy Scheme for Macao Tertiary Institutions, and provided subsidies totalling nearly 2.42 million patacas to 29 eligible projects that applied for funding in 2018.

Macao Academic Library Alliance

Coordinated by the Tertiary Education Services Office, nine tertiary institutions carried on their mission to "Build together, Plan together, Share together and Use together", and jointly established the Macao Academic Library Alliance. The alliance endeavours to allow the use of resources to the fullest through sharing resources and information among the libraries of the tertiary institutions.

In 2018, the Tertiary Education Services Office continued supporting the alliance's procurement of an electronic database, with a subsidy of 9.64 million patacas.

Macao Tertiary Institution Gender Equality Promotion Board

Through coordination by the Tertiary Education Services Office, the 10 tertiary institutions in Macao established the Macao Tertiary Institution Gender Equality Promotion Board in 2015, to provide assistance for Macao tertiary institutions in improving the on-campus mechanisms on gender equality and against sexual harassment. The Board developed the Policy Framework for the Promotion of Gender Equality and the Prevention of Sexual Harassment in Macao Universities and the Procedures Framework of Handling Complaints of Sexual Harassment in Macao Universities. The Board will continue optimising policies to further strengthen prevention of sexual harassment on campus, and consider promoting gender equality in tertiary institutions.

Tertiary Educational Institutions

University of Macau

The University of Macau is an international public integrated university. Its faculties are Arts and Humanities; Business Administration; Education; Health Sciences; Law; Social Sciences; Science and Technology; Institute of Chinese Medical Sciences; Institute of Applied Physics and Materials Engineering; Institute of Collaborative Innovation and Honours College.

Three state key laboratories have been established on the campus of the University of Macau, focusing on microelectronics, Chinese medicine and smart city Internet of Things (IoT). The State Key Laboratory of Internet of Things for Smart City was approved in 2018, to promote developing Macao as a smart city. In 2018, the University of Macau was ranked among the Top 400 World Universities by the Times Higher Education, and ranked 501-550 by the QS World University Rankings.

During the 2018/2019 academic year, the University of Macau offered 101 doctorate programmes, master's degree programmes, bachelor's degree programmes, and postgraduate diploma programmes. In 2018, it had 616 full-time teaching staff and 10,414 registered students.

Macao Polytechnic Institute

Established in 1991, the Macao Polytechnic Institute (MPI) is a public multidisciplinary

tertiary educational institution adopting an applied academic approach. It is the first tertiary institution in Asia that has passed the assessment of the Quality Assurance Agency for Higher Education (QAA).

The Macao Polytechnic Institute has six schools – Languages and Translation; Business; Public Administration; Physical Education and Sports; Arts; and Health Sciences – and various research centres and several training centres.

During the 2018/2019 academic year, the institute offered 23 bachelor's degree programmes (including supplementary programmes). In 2018, it had 402 teaching staff and 3,269 registered students.

Institute for Tourism Studies

The Institute for Tourism Studies (IFT) is a public tertiary education institution established in 1995, with the mission to foster leaders with professional knowledge and technical competence in the tourism industry. It was the first educational institute to obtain the TedQual Certification from the United Nations World Tourism Organization. It currently offers eight bachelor's degree programmes in tourism, the highest number of such programmes worldwide, with accreditation.

In 2017, the IFT became the world's first higher education institution to pass the International Quality Review (IQR) from the UK's Quality Assurance Agency for Higher Education (QAA). In the same year, the QS World University Rankings added a ranking for Hospitality and Leisure Management, and the IFT achieved the "Top 50" worldwide ranking.

During the 2018/2019 academic year, the institute offered 12 bachelor's degree programmes and higher diploma courses. It had 157 teaching staff and 1,635 registered students for its tertiary education programmes.

Academy of Macao Public Security Forces

Established in July 1988, the Academy of Macao Public Security Forces is a training department under the Secretariat for Security, as well as one of the tertiary education institutes in Macao. The Police/Fire Service Officers' Training Programme organised by the academy is a four-year programme, followed by six months of practical training. Students passing the examinations are awarded a Bachelor's degree in Police Sciences or Protection and Safety Engineering.

The Public Security Training Programme provides professional technical training for cadets of the public security forces, so that they can meet the requirements for ethics, physical fitness and professional techniques. Also, the academy provides on-the-job training for promotion and professional development of public security force officers.

In the 2018/2019 academic year, the school offered two bachelor's degree programmes. There were 47 teachers on campus and 46 students enrolled in higher education programmes.

The City University of Macau

The City University of Macau received its name in 2011 after a transfer of ownership in September 2010. It is a non-profit making private comprehensive university providing tertiary education. The university comprises faculties of Business, Humanities and Social Sciences, International Tourism and Management, Innovation and Design, Education, Law, and Finance, as well as the Graduate School, the School of Continuing Studies, and the Open Institute.

The City University of Macau also has 11 research institutions, including the Research Centre for Macau Social and Economic Development, Institute for Research on Portuguese-speaking Countries, Macau One Belt, One Road Research Centre, Institute of Data Science and Institute of Psychoanalysis.

During the 2018/2019 academic year, the university offered 34 doctorate, master's and bachelor's degree programmes. It had 308 teaching staff, and 5,557 registered students.

University of Saint Joseph

The predecessor of the University of Saint Joseph, the Macau Inter-University Institute (IIUM), was established in 1996 and renamed University of Saint Joseph in December 2009. It is a private Catholic University.

The main campus of the university was moved to Ilha Verde in September 2017. It now has three campuses, with Faculty of Religious Studies, Faculty of Humanities, Faculty of Business and Law, Faculty of Social Sciences, Faculty of Creative Industries, Institute of Science and Environment, and Lifelong Learning Office. All bachelor's degree programmes are taught in English, except the Master of Arts in Portuguese Studies programme and the Chinese-Portuguese Translation Studies, which are taught in Chinese and Portuguese.

In the 2018/2019 academic year, the university offered 37 doctorate, master's and bachelor's degrees, as well as postgraduate diploma and higher diploma (associate degree) programmes. It had 145 teaching staff and 1,228 registered students.

Kiang Wu Nursing College of Macau

The Kiang Wu Nursing College of Macau was formerly the Kiang Wu Nursing and

Midwifery School, and it was established in 1923 which then became private institute in November 1999. This college is the oldest nursing institute in Macao. In the institutional quality audit conducted by the Quality Assurance Agency for Higher Education (QAA) from the United Kingdom, the QAA placed confidence in four aspects of good practice. The college provides bachelor's degree, master's degree and postgraduate certificate and diploma programmes in nursing and health sciences.

During the 2018/2019 academic year, the college offered three bachelor's degree (including a supplementary programme) and postgraduate diploma programmes. It had 30 teaching staff and 427 registered students.

Macau University of Science and Technology

The Macau University of Science and Technology (MUST) is a private university established in March 2000. It was the first non-profit integrated university for training gifted students in applied technology established since the founding of the MSAR. The university consists of the Faculty of Information Technology, School of Business, Faculty of Law, Faculty of Chinese Medicine, Faculty of Hospitality and Tourism Management, Faculty of Health Sciences, Faculty of Humanities and Arts, School of Pharmacy, and University International College. It also includes the School of Graduate Studies, School of Continuing Studies and Department of General Education.

The MUST has several research institutes and centres, including the State Key Laboratory of Quality Research of Chinese Medicines and the State Key Laboratory of Lunar and Planetary Sciences. The University Hospital, a subsidiary of the Macau University of Science and Technology Foundation, provides facilities for clinical teaching, scientific research and clinical practice by the Faculty of Chinese Medicine and Faculty of Health Sciences.

During the 2018/2019 academic year, the university offered 60 doctorate, master's and bachelor's degree programmes. It had 611 teaching staff and 11,305 registered students.

Macau Institute of Management

Macau Institute of Management (MIM) was established in 1988. It is the academic arm of the Macau Management Association, specialising in providing education and training services. With Government approval, in July 2000 MIM was upgraded to become a higher education institution nurturing business talents.

The institute offers a four-year Bachelor of Business Administration Degree Programme, a two-year Associate of Business Administration Diploma Programme, and a one-year Professional Diploma Programme adopting the integrative learning approach, integrating electronic learning and face-to-face teaching. Students can

arrange their online class time according to their own schedule. It also works with an overseas university in jointly organising a master's degree programme.

The institute offered six bachelor's degree and higher diploma (including associate degree) programmes during the 2018/2019 academic year. It had 29 teaching staff and 255 registered students.

Macau Millennium College

The Macau Millennium College is a private tertiary education institution established in August 2001. To accommodate the needs of students who are full-time employees or shift workers, the college offers "shift classes for shift workers". The two shift classes have identical lecture content. Students can choose to attend either the morning or evening sessions. Lecturers are mainly internationally renowned professors from the University of Hong Kong and the Chinese Academy of Social Sciences.

During the 2018/2019 academic year, the college offered two bachelor's degree and higher diploma (associate degree) programmes, taught by 36 teaching staff, with 143 registered students.

Note: Except for Macao Polytechnic Institute and Macau University of Science and Technology, the above statistics for teaching and administrative staff, students and programmes of Macao tertiary educational institutions were provided by the Tertiary Education Bureau. Statistics for the 2018/2019 academic year were collected on 31 October 2018.

NURTURING TALENTS IN PERFORMING ARTS

Established in 1989, the Macao Conservatory is a subsidiary of the Cultural Affairs Bureau. The public educational institution adheres to the motto of "Respect and Pursue Art, Beauty, Erudition and Performance". Comprising a School of Dance, a School of Music, and a School of Drama, with the mission of "Emphasising Professionalism and Popularisation; Integrating Arts and Life", it offers both universal and professional arts education.

The Macao Conservatory offers a range of systematic, standardised, and continuous artistic education in dance, music and drama performances, to promote the public's values in the humanities. It also provides full-time courses in music and dance, to nurture knowledgeable and creative talented Macao people in the performing arts.

MACAO YEARBOOK 2019

8

CULTURE AND SPORT

Eastern and western cultures have co-existed in Macao for over 400 years. A wide variety of cultural traditions, languages, values, religious beliefs, and customs have all existed side by side and influenced one another. Out of this melting pot, a regional culture unique to Macao has gradually developed into its present richness. Macao's culture is thus a diverse mixture, with traditional Chinese culture as its heart, and it has assimilated Western, particularly Portuguese, cultural influences in perfect harmony.

Following its policy of promoting Chinese culture while preserving the unique pluralistic cultural heritage of Macao, the Government has hosted various cultural and artistic activities invited art troupes from mainland China and overseas, as well as Macao, to perform. These have created opportunities for audiences to learn more about the history, society, and culture of different regions, as well as enhancing cultural exchange and the quality of cultural life of Macao's residents.

Cultural Affairs Bureau

The Cultural Affairs Bureau is a Government department that sets out the Government's key objectives in cultural matters.

The bureau is responsible for protecting cultural heritage, giving guidance on aesthetic appreciation, supporting community organisations, nurturing talent in arts and culture, developing local cultural industries, as well as organising cultural entertainment programmes, such as concerts, exhibitions, seminars, music classes, dance, drama courses, Macao International Parade, Macao International Music Festival, Macao Arts Festival, Macao City Fringe Festival, China Cultural Heritage Day, Macao Youth Music Competition and Macao Annual Visual Arts Exhibition. It also provides subsidies for different cultural and art programmes as well as scholarships to support the publication of research and advanced studies about arts.

Cultural and Creative Industries

In 2010, the bureau established the Department for the Promotion of Cultural and Creative Industries, to proactively promote cultural and creative industries and so boost their development – including through promoting and exhibiting cultural and creative products; conducting studies of the cultural and creative industries; formulating a policy framework and measures for the development of the cultural and creative industries; and establishing a database on cultural and creative industries. At present, information in the database is used in business matching, and selecting cultural and creative institutions and companies to participate in local and overseas activities and fairs, to enhance the image of Macao's cultural and creative industries.

In 2018, the bureau launched a series of special subsidy programmes on fashion design and sample making, and production of music albums and feature films; officially launched the Coordination Service for Filming Permit Applications; actively participated

in meetings and study tours related to film production; and organised the China and Portuguese-speaking Countries Film Festival.

In addition, four cultural and creative shops were introduced to the Anim'Arte NAM VAN, while Macao Contemporary Art Centre – Navy Yard No.2, which provides a performance venue for the industry, commenced operations. The bureau also organised delegations to participate in local and overseas cultural and museum fairs, and held a series of activities to celebrate the 10th anniversary of the Tap Seac Art Fair.

Cultural Industry Fund

The Cultural Industry Fund was established according to Law No. 26/2013 of the MSAR, and is supervised by the Secretary for Social Affairs and Culture. The aim of the fund is to support cultural industry development projects in Macao and promote adequate economic diversification. The principle for funding approval is to aim for projects supported mainly by investments from enterprises, and supplemented by the fund.

The targets for the subsidy include commercial enterprises established according to law, and registered under the Financial Services Bureau subject to taxation; if the commercial entity is a natural person, then the person shall be a Macao resident; if the commercial entity is a legal person, more than 50 percent of capital of the legal person should be owned by a Macao resident.

The 29th Macao Arts Festival

The 29th Macao Arts Festival was held from 27 April to 31 May 2018, and featured 25 programmes with 108 performances and art activities, including a visual art exhibition. A total of 12,857 tickets were sold, representing a take-up of nearly 90 percent.

More than half of the programmes were locally produced. Non-local programmes were from the Philippines, mainland China, Japan, the United Kingdom, Korea, Taiwan, Portugal, Germany, Belgium and Israel, spanning drama, dance, Cantonese opera, participatory theatre, physical theatre and immersive theatre. The programmes were staged in various venues in Macao.

The festival had the theme "origin", which symbolised "the spring of life" and explored a wide range of topics to broaden audiences' thinking about life. In commemoration of the 200th anniversary of the birth of Karl Marx, Shanghai Dramatic Arts Centre staged a theatre play *Das Kapital* to kick off the festival; while *13 Tongues*, performed by the internationally acclaimed dance troupe 'Cloud Gate 2', brought the festival to a close. The festival also invited Singapore theatre company Nine Years Theatre to jointly produce *Pissed Julie*, which was performed by a team of Macao and Singaporean artists.

Moreover, traditional local programmes included Cantonese operas *Hanjiang Gate*

and *Dream of the Red Chamber*, and Macanese Patuá drama *What's Serving*.

A series of satellite events and free outdoor programmes were also offered in the community, attracting an audience of about 2,600 people.

The 32nd Macao International Music Festival

The 32nd Macao International Music Festival was held from 28 September to 28 October 2018, with a total of 16 programmes and 45 performances including satellite events on the theme of "Enjoy – The Moment in Music". In all, 9,169 tickets were sold – a take-up rate of over 90 percent. Performing groups from Germany, Austria, Switzerland, Italy, Portugal, the United Kingdom, France, the Netherlands, Russia, Korea, the United States, Brazil, Mexico, Argentina, Jamaica, mainland China and Macao staged performances that formed a musical extravaganza of exceptional quality.

The festival began with *L'Elisir d'Amore* produced by Zurich Opera House; and closed with Schumann's romantic works *Christian Thielemann and Staatskapelle Dresden* on two consecutive evenings. Various programmes were staged at World Heritage sites, including performances by Opera de Chambre de Geneve at the Dom Pedro V Theatre and Sangre Ibérico at the Mandarin's House.

Local programmes included Anton Bruckner's Symphony No.8 presented by the Macao Orchestra and the Shanghai Philharmonic Orchestra, *Nostalgic Lane* presented by the Macao Chinese Orchestra together with Guo Yazhi, a legend in China's suona circle, and *Bravo Macao*! presented by young local percussionists Hoi Lei Lei and Raymond Vong.

The 17th Macao City Fringe Festival

The 17th Macao City Fringe Festival was held from 12 to 21 January 2018. Over 70 percent of the tickets for 65 performances were sold, for an audience of nearly 6,000 people. Ten types of satellite events including workshops, seminars, art reviews and sharing sessions on art festivals were also held.

The festival embraced local productions, performances that were jointly produced by local and overseas artists, and outsourced programmes. Overseas artists performing in the festival were from mainland China, Taiwan, the United Kingdom, Australia, Portugal, and Hong Kong. A wide range of performances including drama, dance, physical theatre and live art and an auction were staged.

During the ten-day festival, a series of programmes were staged in various special venues in Macao. These included *My Old Man is a Bus Driver, Always in My Heart, The Auction of Love Stories, and You Can Sleep Here*.

In addition, performing arts curators from mainland China, Thailand, Australia

and Japan were invited to introduce the festivals and cultural environments in their hometowns, in "Art Festivals in the Cities 2.0" Sharing Session on Arts Festivals, which enabled participants to learn about art festivals in different countries, as well as offering useful information to local artists who intend to perform abroad.

2018 Macao International Parade

The 2018 Macao International Parade was held on 16 December. Based on the concept of cultural encounters between China and Portuguese-speaking countries, the parade featured 76 teams of performers with a total of over 1,700 participants, including 57 local groups and 19 visiting groups from mainland China, France, Spain, Russia, Columbia, Italy, Germany, the Netherlands, Argentina, Japan, Malaysia, Korea, Hong Kong and Portuguese-speaking countries such as Portugal, Brazil, Guinea-Bissau and Mozambique. It attracted an audience of 150,000.

Seeking to expand its scale, the parade held a total of 23 extension activities, including community workshops, performances in schools and an art promotion mini parade, to increase the number of foreign artists coming for cultural exchange and create a festive atmosphere in the community. These attracted a total of nearly 30,000 participants.

The First Encounter in Macao – Arts and Cultural Festival between China and Portuguese-speaking Countries

To facilitate the establishment of Macao as a centre for cultural exchanges between China and Portuguese-speaking countries, from 6 to 15 July 2018, the Cultural Affairs Bureau held the first "Encounter in Macao – Arts and Cultural Festival between China and Portuguese-speaking Countries", with the theme "Encounters in Macao". About 150 artists and guests from mainland China, eight Portuguese-speaking countries and Macao participated in the festival.

In addition, the bureau held various related activities from July to December, attracting an audience of nearly 100,000.

The festival comprised five featured activities – the China and Portuguese-speaking Countries Film Festival, the "Chapas Sínicas – Stories of Macao in Torre do Tombo" exhibition, the China and Portuguese-speaking Countries Gala Performance, the Cultural Forum between China and the Portuguese-speaking Countries, and the Annual Arts Exhibition between China and Portuguese-speaking Countries.

Macao Orchestra

Established in 1983, The Macao Orchestra is a professional ensemble under the Cultural Affairs Bureau. It has become an outstanding orchestra in Asia that integrates the cultures of east and west, and performs classics from the past and present. The

orchestra plays an important role in the cultural life of Macao citizens and overseas audiences.

In 2018, the Macao Orchestra held 113 concerts locally and overseas, which were appreciated by audiences totalling around 30,070 persons. The orchestra invited top musicians to perform in schools and arts spaces for the community and the underprivileged.

Macao Chinese Orchestra

The Macao Chinese Orchestra is a professional Chinese orchestra under the Cultural Affairs Bureau. Established in 1987, it has always been dedicated to serving Macao by reaching the general public in communities, social groups and schools. It has a mission as a cultural ambassador of the Government of Macao, and spares no efforts in manifesting Macao's unique mix of Chinese and Western cultures, and promoting traditional Chinese music and arts and culture with distinctive Macao characteristics.

In 2018, the Macao Chinese Orchestra performed with the Cantonese opera training programme for the youth of the Macao General Neighbourhood Associations Union and the Macao Taoist Orchestra, to promote Chinese culture and traditional Chinese art. The orchestra also continued organising arts education, arts promotion and care and concern concerts in schools and communities. It was also invited to perform in the Shenzhen Belt and Road International Music Festival festival, which strengthened the cultural development of and promoted art exchanges between Macao and "Belt and Road" countries. During the year, the orchestra performed a total of 79 local and overseas concerts, for audiences totalling 17,320 persons.

The 36th Macao Young Musicians Competition

The Macao Young Musicians Competition aims to promote classical music development in Macao, providing a valuable performance platform and learning opportunities for young people and raising their performance standards. It has become a tradition that piano competitions are held in odd-numbered years, while Chinese music, Western music and vocal music competitions are held in even-numbered years.

The 36th Macao Young Musicians Competition was held in 2018, and was dedicated to Chinese and Western instruments and to vocal music. In all, 535 young musicians/groups participated in 49 competition categories. Music educators and performers from mainland China, Hong Kong and Taiwan were invited to join the panel of professional judges for the competitions, which were held from 23 June to 11 July at the Institute for Tourism Studies. The competitions were divided into elementary, intermediate, and advanced levels, with 49 competition categories and 51 sessions; there were 402 winners in total. A Special Prize Competition was held on 11 July at the Institute for Tourism Studies, with 10 special awards presented and one contestant receiving the Cultural Affairs Bureau Prize.

"Happy Chinese New Year" Series – Celebration for Chinese New Year

The "Happy Chinese New Year" Series – Celebration for Chinese New Year was held from 15 to 19 February 2018, during which eight performances were staged in Tap Seac Square, the Anim'Arte NAM VAN, Iao Hon Market Square, and Pak Tai Temple Square.

Ethnic song and dance performances and ethnic costumes showcased by the Ulan Muqir troupe from Horqin Right Middle Banner, Inner Mongolia, created a happy and festive atmosphere. In addition, a Mongolian yurt was set up at the Anim'Arte NAM VAN, for visitors to experience the customs and lifestyle of the Mongolians. There was also a cultural and creative fair, where handicrafts, cultural and creative products and specialities by local artists and artists from Inner Mongolia and Yunnan Province were displayed and sold.

"HUSH!! Full Music" Beach Concert

To promote the development of pop music in Macao, the Cultural Affairs Bureau held the "HUSH!! Full Music" Beach Concert on Hac Sa Beach from 29 April to 1 May 2018. Singers and bands from Macao and all over Asia were invited to entertain audiences through a major music event with diverse performances. A wide range of activities included the Music Hot Wave stage on the beach, music workshops, a cultural and creative fair, the "HUSH!!300 Seconds" short video competition, as well as the new Summer Chill Stage and HUSH!! GEG Silent Disco. The three-day concert attracted an audience of about 15,000.

Haojiang Moonlight Night – The Past of Shawan

Two sessions of the dance drama *Haojiang Moonlight Night – The Past of Shawan* were staged at the Venetian Theatre on 20 and 21 September 2018. Set in the ancient town of Shawan in the 1930s, the performance was based on the stories of outstanding contemporary Guangdong musicians, including "the three eminent men of the He family". The work revolved around the story of how the classical song *Dragon Boat Racing* was passed down from generations, and unfolded the legend with contemporary dance elements. The two sessions attracted a total of 1,150 spectators.

In addition, three sharing sessions were held in schools in Macao, during which the performers of the dance drama shared with students their thoughts on the performance, and invited students to learn and experience the typical body movements in Qiangu dance, Yingge dance and the classical song *Raindrops Pattering on Banana Leaves*. A total of about 150 persons participated in the sharing sessions.

Performance to Celebrate the 69th Anniversary of the National Day of the People's Republic of China – Rainbow over the Silk Road

To celebrate the 69th Anniversary of the National Day of the People's Republic of China, the Shaanxi Provincial Acrobatic Art Troupe Co. Ltd was invited to Macao, to perform a large-scale acrobatic show *Rainbow over the Silk Road*. This enabled the public to appreciate traditional Chinese performing arts while celebrating the National Day.

The troupe gave two performances at the Macao Forum, on 30 September and 1 October 2018. With stunning acrobatics, the show introduced the legendary story of Chinese trade caravans which travelled across the Silk Road in the golden era of the Tang dynasty, and presented the diverse and inclusive culture of the dynasty at its prime, and the Silk Road as "a road of commerce and friendship". The show attracted an audience of 1,800.

The 21st Lusofonia Festival

The 21st Lusofonia Festival, an event associated with the culture of the Macao Portuguese-speaking communities, was held from 19 to 21 October at the Taipa Houses-Museum. It enabled participants to gain a better understanding of the cultures of various Portuguese-speaking countries and regions.

Cultural booths were set up by ten Macao Portuguese-speaking communities from Angola, Brazil, Cape Verde, Guinea-Bissau, Goa, Daman and Diu, Mozambique, Portugal, Sao Tome and Principe, Macao and Timor-Leste, while art groups from nine Portuguese-speaking countries and regions and local Portuguese-speaking art groups performed music and dances on two stages. There were also game booths featuring traditional Portuguese games. The three-day festival attracted some 22,000 people.

2018 New Year Countdown Celebrations

On 31 December, the Macau Countdown Concert 2018 and the Taipa Countdown Show 2018 were held in Sai Van Lake Plaza and Taipa Houses-Museum, respectively, featuring amazing performances to celebrate the New Year.

Famous Hong Kong rap duo FAMA and singer-songwriter Phil Lam, together with local band MFM, singers Filipe Tou, Alex Ao Ieong, Kylamary, Adelino da Silva and Elise Lei, were invited to perform in the Macau Countdown Concert 2018, and greet the new year with singing, music and dance performances. The show attracted an audience of about 28,000, with about 20,000 spectators in Sai Van Lake Plaza, and the rest watching the show through live broadcast by TDM or on outdoor screens.

The Taipa Countdown Show 2018 featured several local performing groups, while

Hong Kong singer Christopher Wong was invited as the guest performer for the show's finale. Themed booths for eight regions – Australia, Korea, the Philippines, India, Indonesia, Myanmar, Thailand and Vietnam – were set up at the venue to demonstrate featured arts and skills, games, as well as the unique cuisines of the cultures of foreigners and overseas Chinese residing in Macao. The event attracted 3,700 participants.

Visual Arts Exhibition

The Visual Arts Exhibition organised by the Cultural Affairs Bureau aims to showcase outstanding art from around the world, stimulate creativity among Macao artists, enable public appreciation of various types of visual artworks, and promote arts exchanges.

In 2018, 21 visual arts exhibitions were held in the Exhibitions Gallery and Nostalgic House of the Taipa Houses-Museum, the Tap Seac Gallery, the Macao Contemporary Art Center – Navy Yard No.1, the Temporary Exhibition Gallery of the Civic and Municipal Affairs Bureau, Monte Fort Corridor and Chun Chou Tong Pavilion in Lou Lim Ieoc Garden.

Busking Programme

The Busking Programme allows street art performances by buskers, and so establishes more performance platforms for local arts and culture practitioners, while encouraging the public to appreciate and participate in cultural and arts activities. Three busking spots – the Anim'Arte NAM VAN, Taipa Houses-Museum and Mount Fortress Garden – are made available every Friday to Sunday and Public Holidays under the programme for busking performances.

As at the end of 2018, over 350 busker cards had been issued since the launch of the programme. In 2018, 400 buskers performed at the three busking spots, attracting an audience of 30,000 people.

Cultural Information Platform

The website of the Cultural Affairs Bureau (www.icm.gov.mo) provides cultural services information regarding cultural activities, performances, exhibitions, heritage protection, promotion of arts education, and academic research. There are affiliated websites for cultural facilities including the Macao Central Library, Macao Archives, Macao Conservatory, Museum of Macau, the Tap Seac Gallery, the Macao Museum of Art, and the Macao Cultural Centre. The websites also provide detailed information on cultural events such as the Macao City Fringe Festival, the Macao Arts Festival, the Macao International Music Festival, and the Macao International Parade. In 2018, the website received 6,877,516 visits.

Furthermore, the Cultural Affairs Bureau has established the Cultural Heritage of Macao website (www.culturalheritage.mo) and Macau World Heritage website (www.wh.mo), as well as the Macao Cultural and Creative Industries Website (www.macaucci.gov.mo), which promotes the exchange of information in the cultural and creative industries and deepens the understanding of other sectors regarding development of the cultural and creative industries. In 2018, the three websites received 575,555, 407,288, and 667,227 visits, respectively.

Culture Lectures

Culture Lectures is a series of cultural seminars on different disciplines, which aims at popularising culture and art education, and enhancing participants' creativity and aesthetics. The scheme's major target audience spans primary six to senior secondary school students, and is expanding to cover people in the community.

In 2018, in addition to small class interactive seminars on campus, extended workshops of cultural festivals were organised for students to immerse themselves in arts and culture. Besides, Culture Lectures were again promoted to various institutions and organisations. Public sessions were also held in the community, during which topics related to the art and cultural development of Macao, covering local history, music, drama and art administration, were introduced to the participating students and residents. In all, 186 activities were organised during the year, with over 5,400 participants.

Seeds of Art

The Seeds of Art project targets the teaching staff of primary and secondary schools in Macao. It offers art and cultural activities, and allows teachers to understand a diverse range of cultural issues. In 2018, Seeds of Art organised six activities with 88 participants. These included seminars and guided tours on topics such as cultural heritage, local history and drama.

Macao Conservatory

Established in 1989, the Macao Conservatory is a subsidiary of the Cultural Affairs Bureau. It comprises the Schools of Dance, Music and Theatre, and is a formal public institution that nurtures local performing arts talents. With a motto of "Respect art; adore aesthetics; be learned; and be dedicated" and a mission of "Emphasising professionalism and popularisation; integrating arts and life", the conservatory implements a dual-track policy of providing both professional and general arts education.

By offering the public a range of systematic, regular, and continuous arts education

programmes in dance, music and theatre, the conservatory promotes cultivation of humanity values among the general public; while by establishing a music curriculum for secondary schools, it nurtures knowledgeable and creative performing arts talents.

To realise the vision of integrating classroom learning with real practices, the conservatory regularly organises various dance performances, concerts and drama performances, giving its students the opportunity to display their skills and gain stage experience. At present, it has 2,000 students.

Protection of Cultural Heritage

Protecting the cultural heritage of Macao is a priority of the Government. Decree-Laws Nos. 56/84/M and 83/92/M, passed and gazetted in 1984 and 1992, respectively, specify that all buildings of cultural significance must be protected. In 2005, the Historic Centre of Macao was inscribed on the World Heritage List, further advancing heritage protection work in Macao. In 2006, through Executive Order No. 202/2006, the buffer zone of the heritage sites was further expanded. In 2013, the Cultural Heritage Protection Law was passed and promulgated. It came into effect on 1 March 2014, establishing a protection mechanism for tangible and intangible cultural heritage, including the mechanism for evaluations, the protection type and scope, and the reward and penalty system.

By the end of 2018, Macao had 138 such protected properties, which are classified into four categories: monuments; buildings of architectural and artistic interest, architectural complexes and sites, scattered across the Macao Peninsula, Taipa, and Coloane, while there are 15 items of intangible cultural heritage on the list. The Government formulates protection measures according to the value and characteristics of the heritage, to promote and pass on cultural traditions. The Government actively safeguards Macao and its cultural heritage, which is characterised by unique multicultural diversity and harmony.

Intangible Cultural Heritage of Macao

The conservation of intangible cultural heritage has become a matter of concern. The Convention on Safeguarding Intangible Cultural Heritage passed by the United Nations Educational, Scientific and Cultural Organization came into effect in Macao in September 2006. During the same year, Cantonese Opera and Herbal Tea Brewing were jointly nominated by Guangdong, Hong Kong and Macao, and became the first batch of intangible cultural heritage inscribed on the National List of Intangible Cultural Heritage. (The Chinese name of the list was revised to "National List of Representative Items of Intangible Cultural Heritage" in 2014). In June 2008, "Wood carving – Macao's religious figure carving" was among the second batch added to the National List of Intangible Cultural Heritage, representing the first successful independent application made by Macao for inscription on the national list.

In September 2009, Cantonese Opera was officially inscribed onto the UNESCO Representative List of the Intangible Cultural Heritage of Humanity.

In May 2011, Cantonese Naamyam (Singing and Narrative Songs), Taoist Ritual Music and Festival of the Drunken Dragon, applied for by Macao independently, were among the third batch inscribed on the National List of Intangible Cultural Heritage. In December 2014, Mazu (A Ma) Belief and Customs, and Na Tcha Belief and Customs were inscribed on the fourth batch of the National List of Intangible Cultural Heritage.

In September 2017, the Cultural Affairs Bureau announced the first batch to be inscribed onto the Inventory of Macao's Intangible Cultural Heritage, which included 15 items: Yueju Opera (Cantonese Opera), Herbal Tea Brewing, Woodwork – Religious Figure Carving, Cantonese Naamyam (Narrative Songs), Taoist Ritual Music, Festival of the Drunken Dragon, Belief and Customs of A-Ma, Belief and Customs of Na Tcha, Macanese Gastronomy, Patuá Theatre, Belief and Customs of Tou Tei, Belief and Customs of Chu Tai Sin, Craft of Bamboo Scaffolding, Procession of the Passion of Our Lord, the God Jesus and Procession of Our Lady of Fatima.

Academic Research Scholarships

The new Academic Research Scholarship aims to encourage original research on Macao culture and exchanges between Macao, mainland China and other countries. The scholarship value was 280,000 or 250,000 patacas. Five persons were awarded scholarships in 2018.

Macao Public Library

Founded in 1895, the Macao Public Library is under the Cultural Affairs Bureau. It comprises the Macao Central Library, Sir Robert Ho Tung Library, Library of the Civic and Municipal Affairs Bureau Building, Ilha Verde Library, Mong Ha Library, Red Market Library, Taipa Library, Coloane Library, Wong Ieng Kuan Library in Dr. Sun Yat-Sen Municipal Park, Wong Ieng Kuan Library in Luís de Camões Garden, Wong Ieng Kuan Library in Areia Preta Urban Park, Wong Ieng Kuan Children's Library in Areia Preta Urban Park, Wong Ieng Kuan Library in Taipa, Library in Ho Yin Garden, S. Lourenço Library, and Patane Library.

Currently the largest public library network in Macao, it houses a collection of 947,000 books and multimedia items, including 880,000 books, 49,000 multimedia items, 17,000 electronic books in 13,000 categories, about 1,900 items of 848 types in the microfilm section, about 5,800 latest journal articles of 903 types, about 4,000 magazines of 810 types, and about 1,800 newspapers of 93 types. There are 24 databases for electronic resources.

In 2018, a total of 2,895,000 visitors were received. The lending volume was 522,000 books/items, and electronic resources received about 1,157,000 clicks.

Services provided by the Macao Public Library include the lending of library materials, browsing of current and past newspapers and magazines, references of Macao information, processing of reader's cards, broadband internet and microfilms, browsing of online electronic resources databases, printing and photocopying of information, processing applications for ISBN and ISRC, as well as providing an additional collection point for Legal Deposit according to the Legal Deposit system.

In 2018, there were 601 applications for ISBN and two applications for ISRC.

In 2018, more self-service equipment was installed in the Macao Public Library to facilitate easy access to library services for readers, including self-service check-in and check-out terminals, 24-hour book drops, and self-service photocopying machines. Every year, the Macao Public Library hosts a range of activities to encourage reading and recommend library services. It also receives group visits from schools and different groups.

In 2018, the Macao Public Library organised 655 reading promotion activities, attracting 28,600 participants.

Macao has many other smaller libraries, including the well known octagonal Chinese Library. In addition, various Government departments and tertiary educational institutions have their own libraries. Each contributes to the ever-expanding supply of books and knowledge available to the people of Macao.

Macao Archives

The Macao Archives is the master archive in Macao. The archive is mainly responsible for collecting, organising, safekeeping and protecting Macao documents of historical value and providing access to them for the general public. The archive currently houses more than 50,000 archive files, 70,000 images, 10,000 books and journals. The media are mostly in paper format. Other formats include photographs, slides, sound tapes, discs, and objects. The main language of the files is Portuguese. The earliest file can be traced back to the year 1630.

Tap Seac Gallery

Built in the 1920s, the Tap Seac Gallery is divided into two blocks, this two-storey building was originally a typical residence of one of Macao's elite families. The two blocks were combined into one after reconstruction. The ground floor is currently the 400-square-metre Tap Seac exhibition hall, which is mainly used for holding visual arts exhibitions and a variety of cultural activities.

The gallery and its peripheral buildings were all constructed during the same period. Together, they form a unique cluster of historic monuments in the Tap Seac area, one of Macao's designated heritage sites. The Cultural Affairs Bureau uses the gallery as

a venue for visual arts exhibitions and other cultural activities. In 2018, the gallery received 27,851 visitors.

Old Courthouse

The Old Courthouse currently has a temporary space for exhibitions and performances. The ground floor is an exhibition hall designed for exhibitions and various kinds of arts and cultural events. The black box theatre on the first floor is designed for small-scale drama and dance performances. With basic stage equipment, it can be used with great flexibility, as the seating and stage area can be arranged into various setups to realise creators' ideas. It can accommodate an audience of 50 to 120 persons.

In 2018, a total of 138 performances under 36 programmes and five exhibitions and arts and cultural events were held in the Old Courthouse, with 21,120 audience members and visitors.

Dom Pedro V Theatre

Built in 1860, the Dom Pedro V Theatre was the first Western-style theatre in China. It houses a vestibule and a performance hall, with a capacity of 276 seats arranged in curved rows in the shape of a shell. Having operated for more than 150 years, it remains a popular performance venue in Macao. In 2018, more than 170 performances and activities were held in the theatre; most were musical performances. As this is a UNESCO World Heritage Site, it received 89,504 visitors in 2018.

Macao Contemporary Art Center – Navy Yard No.1

Situated in Zona da Barra, the Macao Contemporary Art Center – Navy Yard No.1 (formerly known as D. Carlos I dock mechanical room) is the former mechanical room of the Government Dockyard, and therefore is of great historical significance. It regularly invites outstanding artists from different places to exhibit their works. In addition, it cooperates with various performing arts groups to hold experimental performing arts programmes. The combination of visual arts and performing arts allows it to demonstrate Macao's cultural creativity in its modernised setting, while promoting the development of local arts and culture. In 2018, it received 700 visitors.

Museums and Exhibition Halls

Handover Gifts Museum of Macau

The Handover Gifts Museum of Macau is situated next to the Macao Museum of Art,

on Xian Xing Hai Avenue in the Outer Harbour Reclamation Area (NAPE). This was the site of the temporary venue where the Macao Handover Ceremony was conducted by the Chinese and Portuguese governments on 20 December 1999. The structure was dismantled afterwards, and its location became the construction site of the Handover Gifts Museum of Macau, in commemoration of the momentous occasion of Macao's return to the motherland.

The Handover Gifts Museum of Macao is managed by the Macao Museum of Art. The museum hosts the Handover Gifts Exhibition as a permanent exhibition. There are also special exhibition rooms for organising various kinds of exhibitions. The museum received a total of 544,772 visitors in 2018.

Museum of Macau

The Museum of Macau is situated on the Mount Fortress heritage site, which is part of the Historic Centre of Macao, while to its immediate west is the Ruins of St Paul's.

The Museum of Macau houses a rich display of Macao's history and diverse culture. With a collection of deep historical and cultural value, the museum highlights the changes to Macao over several hundred years, and tells the story of people from different countries and cultural backgrounds settling in Macao and living in harmony. The Museum of Macau was opened on 18 April 1998.

In 2018, the Museum of Macau held five special exhibitions. During the year, it received 554,265 visitors, and provided 1,493 guided tours to 20,433 people. It also held 131 activities, which attracted 3,303 participants.

Monte Fort Corridor

Located at the foot of Mount Fortress's east, Monte Fort Corridor is a passageway linking the S. Lazaro Area pedestrian zone to Mount Fortress. Thus, it facilitates the robust development of the city's entire historical centre. The public space of the corridor has been fully utilised as it has often been chosen as the venue for various arts exhibitions. In 2018, it received 218,917 visitors.

Maritime Museum

One of the oldest museums in Macao, the Maritime Museum was founded in 1987. The museum reflects the vital role of the sea in Macao's history, systematically portraying the remarkable achievements of China and Portugal in maritime history, and explains the importance of the sea to human culture.

Wine Museum

The Wine Museum was opened in 1995. It introduces the history of wine production from its origin in the Caucasus around 10,000 BC up to the present day, with a special focus on Portuguese winemaking.

(The Wine Museum has been closed temporarily until further notice, due to the Grand Prix Museum expansion project.)

Grand Prix Museum

The Grand Prix Museum was inaugurated in November 1993. Various Government departments and private institutions have donated exhibits, such as racing cars driven on the Guia Circuit over the years, including by the late celebrated Ayrton Senna and motor racing champion Michael Schumacher. Valuable pictures and trophies are also exhibited.

(The Grand Prix Museum has been closed temporarily until further notice, due an expansion project.)

Macao Museum of Art

The Macao Museum of Art is the only museum in Macao dedicated to art and cultural heritage. With an exhibition area of more than 4,000 square metres, it is also the largest visual arts museum in Macao.

In 2018, the Macao Museum of Art received 247,606 visitors. The museum held 19 exhibitions and conducted 567 guided tours, which attracted 16,014 participants. In addition, it organised 158 activities including art courses, lectures, workshops, demonstrations, parades and concerts, and four games with prizes, which attracted 29,793 participants.

Pawnshop Museum

In partnership with a non-governmental organisation, the Government has established the first museum dedicated to the pawnshop industry. The opening of the Pawnshop Museum in March 2003 marked the success of a new mode of heritage protection. Built in 1917 as the Tak Seng On Pawnshop, the museum building consists of a pawnshop and a storage tower. The three-storey pawnshop and its relics offer visitors a clear picture of the pawnshop's layout and operation in its heyday.

In September 2004, the Tak Seng On restoration project was awarded an Honourable Mention in the UNESCO Asia-Pacific Heritage Awards for Culture Heritage Conservation.

The project was awarded the title of Urban Best Practices Area (UBPA) of World Expo Shanghai 2010, demonstrating to the world Macao's fruitful efforts in conserving and recycling historic buildings. The museum received 38,302 visitors during 2018.

Treasury of Sacred Art of St Joseph's Seminary

St Joseph's Seminary was established by the Jesuits in 1728. For nearly three centuries, it has not only made a significant contribution to nurturing prominent Catholic clergymen, but has also been closely related to Macao's social development. It has also actively contributed to local culture, education, arts and charity.

St Joseph's Seminary is home to collections of religious relics, such as ancient books, oil paintings, statues and ritual supplies. In order to allow the public to appreciate these valuable historical collections, the Cultural Affairs Bureau has worked with the St Joseph's Seminary and the Diocese de Macau to establish the "Treasury of Sacred Art of St Joseph's Seminary", which was officially opened in October 2016. In 2018, it received 18,385 visitors.

Crypt and Museum of Sacred Art

Between 1990 and 1995, the former Portuguese administration conducted archaeological excavation and repaired the Ruins of St Paul's (the Church of Mother of God or Mater Dei), and built the Museum of Sacred Art and Crypt on the site of the grave of Father Alexandre Valignano, the founder of St Paul's College, according to the research findings.

Dr Sun Yat Sen Memorial House

Originally built by Dr Sun Yat Sen as a home for his family in the years after 1918, this Islamic style residence was opened as Dr Sun Yat Sen Memorial House in 1958.

Lin Zexu Museum

The Lin Zexu Museum in Lin Fong Temple was completed in November 1997, in memory of Imperial Commissioner Lin Zexu, who defied the powerful and the mighty to institute a ban on opium and the opium trade. On 3 September 1839, Lin Zexu, who was then in charge in Guangdong, and Deng Tingzheng, the Governor of Guangdong and Guangxi, met the Consul of the former Portuguese administration to proclaim the prohibition of opium and China's sovereignty over Macao.

Fire Service Museum

Founded in December 1999, the Fire Service Museum is located inside the central operational fire station on Repouso Road. It is open to the public, and received 51,729 visitors in 2018.

Museum of Nature and Agriculture

The first museum to be built on Coloane island, the Museum of Nature and Agriculture, under the Civic and Municipal Affairs Bureau, is within the Seac Pai Van Country Park. Built by the then Municipal Council of the Islands, the museum was opened on 21 March 1997. It is a cultural amenity with an educational purpose. The museum's five thematic exhibitions are devoted to the Geography of Macao, Farming Tools of the Islands in Olden Days, Specimens of Animals, Specimens of Plants, and a Simulated Mangrove Swamp.

Taipa Houses-Museum

The Taipa Houses-Museum is a collection of residential buildings that form one of Macao's eight most famous landmarks. Constructed in 1921, these five European-style buildings were the official residences of the island's officers and the homes of Macanese families. The former Portuguese administration's Tourist Department bought and redecorated them in the 1980s. In 1992, they were collectively classified as an architecturally important monument. The administration thoroughly refurbished and reconstructed them, and the buildings were officially opened to the public in December 1999. In 2016, the Government joined hands with foreign consulates in Macao in launching the comprehensive Taipa Houses-Museum leisure project, to optimise the Taipa Houses-Museum by maintaining its beautiful and tranquil environment, and demonstrating its unique Portuguese features.

In September 2016, the Taipa Houses-Museum reopened after renovation. The five houses are the Macanese Living Museum, Exhibitions Gallery, Creative Casa, Nostalgic House and House for Receptions from west to east, respectively. The first three are exhibition halls, while the remaining two are leisure facilities. With a combination of featured exhibitions, outdoor performances and festive activities, the Taipa Houses-Museum has become a showcase of the culture of Portuguese-speaking countries and a stage for international exchange. It received 465,975 visitors in 2018.

Communications Museum of Macao

The Communications Museum, under the Macao Post and Telecommunications Bureau (CTT), is an interactive museum that features cultural, scientific and technological elements.

As for exhibitions about postal services, philately and telecommunications, there were 29 related guided tours, seven science demonstration sessions, 24 workshops and nine electronic courses available for advanced registration in 2018. The museum received a total of 26,662 visitors, and provided schools and other groups with visit services by appointment on 425 occasions.

Macao Science Center

The Macao Science Center was inaugurated in December 2009, and opened to the public in January 2010. Designed by Ieoh Ming Pei, the Macao Science Center is a public cultural facility with an educational mission that comprises an exhibition centre, a planetarium and a convention centre. Its exhibits focus on public participation and fun.

Macao Tea Culture House

The Macao Tea Culture House, which is managed by the Civic and Municipal Affairs Bureau, is the first exhibition gallery in Macao devoted to displaying tea-related artefacts. It was opened to the public on 1 June 2005. Through short-term and long-term exhibitions of various formats, as well as various tea culture activities, it is dedicated to demonstrating Macao's tea culture and everything about tea in China and the West. It also hopes to promote worldwide tea culture, knowledge and studies. There were 31,258 visitors in 2018.

Museum of Taipa and Coloane History

Opened on 7 May 2006, the Museum of Taipa and Coloane History consists of nine exhibition rooms and a souvenir shop. Built in 1920, the 638-square-metre, two-storey museum building was formerly the building of the former Island Municipal Council of Taipa. On the first floor are relics such as those unearthed in Coloane, and stone structural elements from the basement. These items provide visitors with an overview of the early history and culture of Coloane and Taipa. The exhibition rooms on the second floor have various themes, including the history of the former Municipal Council of the Islands, a look back at agriculture and handicrafts in the old days, the architectural features of buildings on Coloane and Taipa, religious and cultural transformations of the villages on the two islands and their recent development. There were 91,657 visitors in 2018.

Iong Sam Tong Pavilion in Lou Lim Ieoc Garden

Iong Sam Tong Pavilion was built in the early 20th century as part of Yu Yuen (the former name of Lou Lim Ieoc Garden). The renovation of Iong Sam Tong Pavilion was

completed in 2011, and it was reopened in May that year. It showcases 50 historical items of the Lou family, including photographs, letters, biographical materials, manuscripts and recordings. There were 14,071 visitors in 2018.

Chun Chou Tong Pavilion in Lou Lim Ieoc Garden

Constructed in the early 20th century, this pavilion at the edge of a lake is the main structure of the garden. When Dr. Sun Yat-Sen came to Macao in May 1912, he was invited to stay here, where he met prominent Chinese and Portuguese figures in Macao. Chun Chou Tong is now a venue for visual arts exhibitions. It received 64,666 visitors in 2018.

Lou Kau Mansion

Completed in 1889 (the 15th year of the reign of Emperor Guangxu of the Qing Dynasty), Lou Kau Mansion was formerly the residence of the prominent Macao merchant Lou Kau and his family. It is among the few intact mansions of the wealthy in Macao that dates back to the late Qing Dynasty. Inside, it retains a large number of exquisite carvings in wood, stone and brick; plaster mouldings; pottery decorations; murals; and garden designs, which are typical of the architectural style of traditional Lingnan dwellings. It received 281,267 visitors in 2018.

Mandarin's House

The Mandarin's House is the ancestral family residence of the modern Chinese master Zheng Guanying. Zheng's world-famous book *Shengshi Weiyan* (Words of Warning in Times of Prosperity) was completed here. The construction of the Mandarin's House was initiated by Zheng Wenrui, the father of Zheng Guanying, and the Zheng brothers expanded it. The house was probably built before 1869. In February 2010, the Mandarin's House was opened to the public. During 2018, it received 111,997 visitor

Former Residence of General Ye Ting

A two-storey western style building, the Former Residence of General Ye Ting is the former residence of General Ye Ting, the founder of the Chinese People's Liberation Army and distinguished militarist, and his family. The site has retained more than a dozen invaluable items of furniture of the former residence, along with objects of daily life and home decorations, such as wooden cupboards, a pendulum clock, and a wooden bed. The site opened to the public in May 2014, and received 18,564 visitors during 2018.

Former Chong Sai Pharmacy

Located at No. 80 Rua das Estalagens, this building was a typical shophouse, built before 1892. In 1893, Dr. Sun Yat-sen established the Former Chong Sai Pharmacy here. This was among Macao's first pharmacies and clinics with western medical services provided by a Chinese doctor. The building was subsequently rented out and changed hands several times afterwards, and was once used as a Taoist hall and a fabric shop.

In 2011, the Government acquired the building and carried out restoration and revitalisation work, adding new functions and public service facilities. The conservation work was completed in the second half of 2016, and in December that year, an exhibition space was opened to the public. In 2018, it received 26,727 visitors.

Kun Iam Statue

The Kun Iam Statue is a 32-metre-tall structure on an artificial island in NAPE, which is connected to the land by a 60-metre bridge. Comprising the statue and lotus flower base, the Kun Iam Statue was completed in March 1999. It received 107,032 visitors in 2018.

Jao Tsung-I Academy

Professor Jao Tsung-i, widely honoured as "master of Sinology", has earned worldwide reputation. With remarkable achievements and outstanding contributions in literature, arts, academics, Professor Jao is a rare giant of the century. The connection between Professor Jao and Macao is profound. He has always cared for and supported the local cultural industry. He has donated his painting and calligraphy works to collections in cultural institutions and museums in Macao. The Jao Tsung-I Academy was established by the Government, and opened to the public on 11 August 2015.

The academy's premises were formerly a residence built in 1921. The building was inscribed on the list of protected heritage sites in 1984. The academy mainly introduces the public to the academic achievements of Professor Jao, and promotes Chinese culture and arts. Exhibitions it has held include "Paintings and Calligraphies Donated by Jao Tsung-I", "Affection for Lotus – Exhibition of Painting and Calligraphy for the 100th Birthday of Jao Tsung-I" and "Oneness: Calligraphy by Professor Jao Tsung-I". It received 13,494 visitors in 2018.

Information Centre at Guia Fortress

To further promote the cultural value of Guia Fortress (including Guia Chapel and Lighthouse), the Information Centre at Guia Fortress opened to the public on 30 June 2015. The centre offers enquiry services on culture and tourism. It also houses an

architectural model of the Guia Fortress, an introductory exhibition on the fortress, and an exhibition reviewing the restoration of the mural on Capela de Nossa Senhora da Guia. There is a tourist leisure centre, offering a comfortable environment for many tourists to relax.

Macao Cultural Centre

The Macao Cultural Centre is situated on Xian Xing Hai Avenue in NAPE. Completed and opened in March 1999, the complex comprises the Auditoria Building, the Macao Museum of Art Building, Macao Cultural Centre Square and the Handover Gifts Museum of Macao.

The Auditoria Building contains two performance venues. One is a 1,076-seat multipurpose complex theatre, while the other is a 389-seat mini-theatre.

During 2018, the Macao Cultural Centre organised spectacular performances that included dance, music, drama and multimedia. There were 53 programmes with a total of 571 performances or activities. The centre also continued to offer cultural facilities and professional services to various local groups and organisations. During the year, 224 programmes and 1,139 performances or activities were organised by the centre and its tenants, receiving 161,695 visitors.

Cultural and Recreational Activities

The Government is committed to promoting sport for all, encouraging citizens to participate in all kinds of sport and recreational activities as a way to promote good health. Upholding the values of sport-for-all and life-long fitness spelled out in public slogans, the Government has led citizens towards building healthy lives by enjoying everyday sport. At the same time, the Government emphasises enhancing the standards of sport at the local level, and fully supports and encourages local sports institutions with organising and participating in tournaments in Macao and overseas.

The coordinated development of popular sport and athletics can only be realised through the provision of comprehensive modern sport facilities and sport medicine, thereby allowing citizens to exercise conveniently and scientifically, ultimately enhancing their quality of life.

Sports Bureau

The Sports Bureau is responsible for instructing, encouraging, assisting and promoting sports events, establishing the requisite conditions for the development of sports, and coordinating between sports associations and entities.

Major Sports Events

Major sports events in Macao include the FIVB Women's Volleyball Nations League Macao, the Macao International Dragon Boat Races, Summer Super 8, Wushu Masters Challenge, The Terrific 12, Macau Grand Prix, and Macao International Marathon. These events are organised to jointly promote sports, culture, creative industries and tourism in Macao, and are in accordance with the principle of fostering sports development by organising major sports events.

Four top-class volleyball teams – China, Poland, Serbia and Thailand, were invited to compete in the FIVB Women's Volleyball Nations League Macao 2018.

A total of 160 local and foreign teams participated in the Macao International Dragon Boat Races 2018.

Eight top-class Asian basketball teams, including from China, Korea, the Philippines, Japan and Chinese Taipei, were invited to compete in Summer Super 8.

About 1,700 famous martial artists, athletes and enthusiasts from 29 countries and regions worldwide (including Macao) participated in the Wushu Masters Challenge 2018.

A total of 12 top-class Asian basketball teams, including from mainland China, Japan, Korea, the Philippines and Chinese Taipei, competed in The Terrific 12.

A total of 157 race drivers from 34 countries and regions participated in the 65th Macau Grand Prix, with an audience of 83,000. This year, the Grand Prix was again authorised by the International Automobile Federation to simultaneously hold other major car races, including the FIA F3 World Cup and the FIA GT World Cup.

The 37th Macao International Marathon attracted participation by a total of 12,000 athletes from 50 countries and regions in three categories — Marathon, Half-Marathon and Mini Marathon.

Sport for All

In 2018, a total of 393,040 people took part in the 21 activities organised by the Sports Bureau, with 66,491 of them participating in the 2,781 Sport for All Fitness and Recreational Classes. In 2018, the annual summer activities accommodated a total of 57,234 people, with 24,827 places for sport activities. In all, 130 activities and 830 classes were arranged.

Competitive Sport

During 2018, the Sports Bureau sponsored the organisation of and participation in 413 competitions, 162 training programmes, and 57 international conferences.

In 2018, a total of 65 athletes, coaches, coaches for youth training, and technical

support crew in nine sports were awarded cash prizes for their outstanding performances in nine events, while 249 athletes, coaches and technical support crew from 20 sports associations were awarded certificates of merit.

Sports Medicine

In 2018, the Sports Medical Centre provided medical services to 6,952 people. It provided medical assistance to 50 competitions and activities and offered medical services to 547 people.

In 2018, the centre provided physical fitness testing services to 1,191 people; and 9,596 people participated in the fitness test at the sports health information centre and the health information centre for the elderly.

Furthermore, 5,275 people participated in the Anti-doping Outreach Education Campaign co-organised by the Sports Bureau and the China Anti-doping Agency (CHINADA); and 153 people took part in training and seminars held by the centre.

Sports and Recreation Venues

Public Sports Facility Network

In 2006, the Sports Bureau integrate the sports facilities and resources into a public sports facility network to help members of the public enhance their physical fitness and establish regular exercise regimens. Sports facilities within the network cover different districts in Macao. They are where residents take part in daily physical training, sports associations train elite athletes, and major sports events take place.

At present, major sports facilities in Macao include Tap Seac Multisport Pavilion, Victory Sports Centre, Artur Tamagnini Barbosa Sports Centre, Bosco Sports Complex, Lin Fong Sports Centre, Nam Van Lake Nautical Centre, Macao Forum, water biking at Anim'Arte NAM VAN, Sports Ground on Avenida do Comendador Ho Yin, Sports Ground on Estrada do Canal dos Patos, Sports Ground on Rua Central da Areia Preta, Sports Ground on Rua Central da Areia Preta, Sports Ground on Av. Do Almirante Magalhães Correia, Sports Ground at Veng Neng, Sports Ground at Cheng Choi, Sports Ground at Sai Van, Dr. Sun Yat Sen Swimming Pool, and Estoril Swimming Pool, Mong Ha Sports Pavilion (under reconstruction), the Workers' Soccer Pitch, San Kio Sports Ground, the Integrated Services Building of Women's General Association of Macao, the basketball court of Keang Peng Secondary School, Ginásio Polidesportivo da Escola Primaria Oficial Luso-Chinesa Sir Robert Ho Tung, and the basketball court of Kwong Tai Middle School.

Sports facilities in Taipa include the Olympic Complex, Carmo Swimming Pool, Sports Training Centre, Northeast Taipa Sports Centre, Sports Ground in Lake Building,

Sports Ground in Taipa Central Park, Taipa Central Park Swimming Pool, UM Stadium & Sports Complex, the Taipa Lago Integrated Services Centre of Macao Federation of Trade Unions, and the indoor multi-purpose stadium of Premier School Affiliated to Hou Kong Middle School.

Sports facilities in Cotai comprise the Macao East Asian Games Dome, International Shooting Range, Bowling Centre, Tennis Academy, Cheoc Van Nautical Club, Hac-Sa Nautical Centre, Coloane Karting Track, Hac Sa Park Swimming Pool, Sports Ground at Hac-Sa Beach, Sports Ground at Hác-Sá Village, and Cheoc Van Swimming Pool.

Some of the above-mentioned sports facilities are managed by the Sports Bureau, while the rest join the Public Sports Facility Network through various kinds of collaboration. Sports facilities of different organisations are opened for public use, thus making good use of the facilities and promoting a healthy lifestyle in leisure time by allowing more residents to engage in sports and physical training on a long-term basis.

There are also many other sports venues owned by associations, institutions and individuals, such as the Workers' Soccer Pitch and other golf courses.

Public Swimming Pools and Beaches

Swimming is one of the most popular recreational activities among Macao residents. The public swimming pools in Macao include the Estoril Swimming Pool, Dr Sun Yat Sen Swimming Pool, Cheoc Van Swimming Pool, Hac Sa Park Swimming Pool, Taipa Central Park Swimming Pool, Bosco Sports Complex Swimming Pool, Artur Tamagnini Barbosa Sports Centre Swimming Pool, Olympic Sports Centre - Aquatic Centre Carmo Swimming Pool and the Swimming Pool at UM Sports Complex.

In addition, Hac Sa Beach and Cheoc Van Beach are available for public use. They are managed by the Marine and Water Bureau.

Trails

Topographically, Macao has a lower elevation in the north and a higher elevation in the south. Thirteen trails covering a total length of 33 kilometres are located on Taipa and Coloane islands. These provide access to replanted forest areas where saplings still require care, and serve as firebreaks and access routes for fire fighters. For the vast majority of Macao's residents and visitors, however, the primary function of the trails is to facilitate exploration and enjoyment of the islands' natural attractions.

The 13 trails are Ka Ho Reservoir Trail (1,550 metres), Coloane Fitness Trail (1,225 metres), Taipa Grande Trail (4,000 metres), Taipa Pequena Trail 2000 (2,300 metres), Coloane Trail (8,100 metres), Coloane Northeast Trail (4,290 metres), Hac Sa Reservoir Circuit (2,650 metres), Hac Sa Reservoir Fitness Circuit (1,505 metres), Hac Sa Long

Chao Kok Circuit (2,150 metres), Ka Ho Height Circuit (1,490 metres), Seac Pai Van Park Trail (1,680 metres), Coloane Stone Washbasin Ancient Route (about 1,500 metres), and Long Chao Kok Coastal Trail in Hac Sa (1,200 metres).

Gardens and Parks

Though small in area, Macao is renowned for its many gardens in a variety of scenery and styles, offering a host of attractions. These form one of Macao's unique features as a tourist destination. The gardens are not only tourist attractions, but are also popular spots where local residents relax and exercise.

Guia Hill Municipal Park

Guia Hill Municipal Park is among Macao's major venues to enjoy fresh air. This tourist attraction boasts extensive natural resources. Of all the parks in Macao, it ranks first as a site for Chinese red pines, both in terms of their quantity and age.

Luis de Camoes Garden

Luis de Camoes Garden is one of the oldest gardens in Macao. It was the residence of a rich Portuguese merchant named Lourenco Marques. He loved to feed the pigeons and hundreds of birds nested around his home, creating a spectacular view. From a distance, the garden looked like a giant bird's nest, and the name has been used ever since.

Ho Yin Garden

Ho Yin Garden is situated to the north of Amizade Avenue. It was built to commemorate the late Chinese community leader, Ho Yin, and was opened to the public in 1993.

Carlos d'Assumpcao Park

Carlos d'Assumpcao Park is situated to the south of Amizade Avenue. It commemorates the Macanese community leader and former president of the Legislative Assembly, Carlos d'Assumpcao, and was opened to the public in 1996.

Flora Garden

Flora Garden is located at the foot of Guia hill. At the end of the 19th century, it was bought by the former Portuguese administration to serve as the Governor's summer residence. Sir Robert Ho Tung, a philanthropist, later bought it, but afterwards returned it as a gift to the former Portuguese administration. For this reason, the garden is still called "Ho Tung Garden" in Chinese. It is also known as "I Long Hau Fa Yun", as it is close to a spring.

A cable car was completed and went into service in 1997. The station for the uphill cable car is at the garden entrance. The cable cars can reach Guia Hill, allowing tourists to conveniently travel between the garden and Guia Hill.

Lou Lim Ieoc Garden

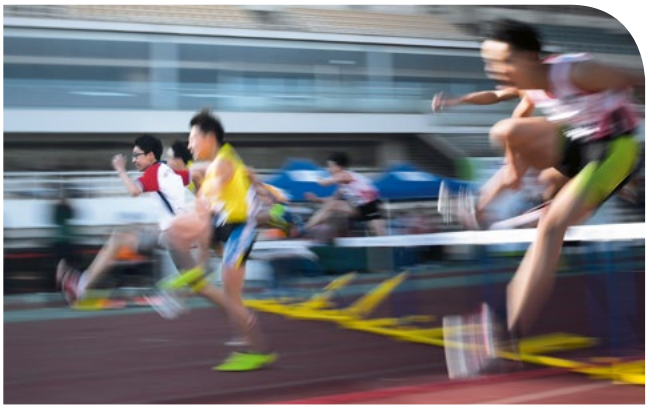
Lou Lim Ieoc Garden is the only garden in Macao with the classic ambiance of those found in Suzhou. It features pavilions, terraces, lakes, zigzag bridges, rocks and cascades, all of which reflect the beautiful scenery of the Jiangnan area on the southern, lower reaches of the Changjiang River.

Dr Sun Yat Sen Municipal Park

Dr Sun Yat Sen Municipal Park is located at Ilha Verde in northern Macao near the Border Gate. At the centre of the park is a 500-metre-long cloister, the longest of any in Macao's parks, linking most of the scenic spots of the park. Other facilities include an open-air theatre, a sport court, other sports facilities, a swimming pool, and a public library.

There are many other gardens and parks in Macao, including Mong Ha Hill Municipal Park, Russa Hill Park, St Francis Garden, Victory Garden, Vasco da Gama Garden and Areia Preta Seaside Park, Iao Hon Market Garden, Art Garden, and Areia Preta Urban Park on the Macao peninsula; Taipa Grande Nature Park, Taipa Central Park, Lakeside Garden, Flower City Garden, Monument Garden, Laurinda Marques Esparteiro Garden and Pier Garden on Taipa island; and Seac Pai Van Park, Hac Sa Sports and Recreation Park, Hac Sa Arboretum and Coloane Height Park on Coloane island.

STRIVING FOR THE BEST



Hosted by the Education and Youth Affairs Bureau and organised by the General Association of Athletics of Macao, the three-day 41st Inter-school Athletics Competition was held in March, with some 2,200 athletes from 50 schools participating in 10 categories of events. Ninety-nine gold medals were awarded and 18 records were broken.

Track-and-field is one of the oldest and most popular sports in the world. For more than 40 years, the Inter-school Athletics Competition has been motivating more students to participate in sporting events, promoting sport culture, and discovering talented athletes, to facilitate track-and-field development in Macao.

MACAO YEARBOOK 2019

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HEALTH AND SOCIAL WELFARE

The Government's long-term policy objectives are to enhance the quality of medical services, and improve medical and health care facilities, thus safeguarding and improving public health. The health departments have been continually accelerating the establishment of different kinds of facilities, improving the medical and health systems, raising the level of medical services, and increasing health care resources at the community level.

In the scope of social service, it is the policy of the Government to strengthen the provision of community services, focus on securing and improving people's standard of living, helping the underprivileged in the community, and ensuring family harmony and social inclusiveness. The Government is committed to helping individuals, families and members of vulnerable groups in distress, enabling them to reassume their social functions, enhance their living skills and acquire a better quality of life.

Public Health

Macao's standard of public health care is comparable to that of developed countries and regions. According to Health Bureau statistics for 2018, the ratio of doctors to residents was 2.6 per thousand residents; that of nurses to residents was 3.7 per thousand residents; and that of hospital beds to residents was 2.4 per thousand residents. The general mortality rate was 3.1 per thousand inhabitants, while the mortality rate for infants under one year old was 3.4 per thousand live births. The average life expectancies for men and women in Macao were 80.6 and 86.6 years (2015-2018), respectively, which are among the highest life expectancies for any country or territory.

According to the ICD-10-CM classification system (International Classification of Disease, Tenth Edition, Clinical Modification), malignant tumours were the main cause of death in Macao, while circulatory diseases and respiratory diseases ranked second and third, respectively. In 2018, these three categories accounted for 39.6 percent, 24.8 percent and 13.2 percent, respectively, of all deaths during the year.

Health Bureau

The main functions of the Health Bureau are to coordinate health-related activities of public and private institutions, and to protect public health through primary and specialist health care services, disease prevention measures and hygiene promotion work.

Medical Benefits

The Government devotes considerable resources to medical and health care to

optimise medical services and various health care facilities. In 2018, total expenditure on medical and health services was about 7.19 billion patacas, representing an increase of 8.45 percent over the 2017 figure.

The Government takes great responsibility for public heath, so Macao residents can enjoy a comprehensive coverage of medical benefits. All legal residents of Macao, regardless of their Health and Social Welfare age or occupation, are entitled to free services at Health Centres and supplementary check ups at Conde S. Januario Hospital by referral from Health Centres, while non-residents are required to pay for such services according to rates established by the Health Bureau. Services provided by the Conde S. Januario Hospital are chargeable except for people specified by the Government, but Macao residents may enjoy a waiver of 30 percent of the charges. Conde S. Januario Hospital also provides assistance to Macao residents who have financial difficulties.

Additionally, there are medical entities subsidised by the Government and other institutions, such as Kiang Wu Hospital, the Workers' Clinic and Tung Sin Tong Clinics, as well as various private clinics and laboratories.

Specialist Medical Services

Conde S. Januario Hospital is a modern medical institution with advanced and comprehensive facilities. The hospital has received international accreditation for its management. Its departments include Inpatient, Outpatient, Emergency, Surgery, Intensive Care, Coronary Intensive Care, Burns Service, Physiotherapy and Rehabilitation Medicine, Haemodialysis and Peritoneal Dialysis, Medical Imaging, Laboratory and Haematological Oncology. The Outpatient Department provides 93 types of services.

According to statistics provided by the Health Bureau, in 2018, Conde S. Januario Hospital had 416 doctors, 997 nurses and 910 beds (803 inpatient beds and 107 outpatient beds). It received 435,727 outpatients and 307,826 emergency cases and 22,237 inpatient cases. The bed occupancy rate was 81.58 percent and patients stayed in the hospital for an average of 10.47 days. The daytime hospital treated 50,307 patients, surgical operations were performed on 8,829 occasions, and 2,796 women gave birth in the hospital. A total of 6,288,283 diagnoses and medical examinations were conducted.

Primary Health Care Services

To realise the objective of "Health for All" advocated by the World Health Organization (WHO), the Health Bureau has established Health Centres throughout the territory. The completion of a primary health care network with health centres as its operational units offers all Macao residents easy access to primary health care services in their own neighbourhoods.

There are eight health centres and three health stations offering adult health care, child health care, oral and dental health care, student health care, pre natal health care, women's health care, Chinese medicine and acupuncture, psychological consultations, tobacco quitting consultations, neonatal hearing screening for newly born babies, and health screening services.

At the end of 2018, there were 183 doctors (including general practitioners, dentists and practitioners of Chinese medicine) and 250 nurses providing primary health care services to 859,654 outpatients. The most sought-after outpatient services were adult health care, non-scheduled consultations, and child health care, which accounted for 36.54 percent, 29.01 percent and 9.46 percent, respectively, of total outpatient visits.

Cooperation with Non-profit-making Medical Institutions

The Government cooperates with many non-profit-making medical institutions to provide various services to residents including specialist health care (inpatient, emergency and cardiac surgery), Chinese medicine and dental care, rehabilitation, home care, cervical cancer screening, psychological therapy, patient transportation, and dental cavity filling service and periodontal cure service. It also provides education programmes on AIDS prevention, mental health and promotion of tobacco-free lifestyles.

Since 2009, the Government has implemented a medical subsidy scheme, distributing health care vouchers to every Macao permanent resident on an annual basis to enhance public health consciousness and subsidise medical expenses, as well as foster development of private medical units. In 2018, the Government issued electronic vouchers. Through application of big data, the Government is able to better analyse and review the usage of healthcare vouchers, thereby enhancing the development of smart healthcare.

Public Hygiene and Disease Prevention

Following World Health Organization guidelines, the Health Bureau continues to conduct regular disease monitoring; enhance prevention of and response to dengue fever, enteroviruses and outbreaks of seasonal influenza; strengthen education on AIDS screening and prevention, and intervention measures for tuberculosis high-risk groups; refine health and disease prevention systems at crossborder checkpoints; maintain cooperation with neighbouring regions; and optimise regional collaboration mechanisms.

Through the Healthy City Committee and the Commission for the Prevention and Control of Chronic Diseases, the Government continues to work on prevention of chronic diseases and advocate healthy lifestyles by organising health promotion activities in

schools, promoting healthy buildings, and implementing tobacco control.

In 2018, there were a total of 12,910 cases of infectious diseases requiring mandatory declaration, the top three of which were influenza (5,984 cases), enteroviruses (4,246 cases) and chickenpox (745 cases). There were 37 cases of human immunodeficiency virus infections, 14 imported cases of dengue fever, five cases of pertussis, five cases of legionnaires disease, four local cases of dengue fever, three local cases of measles, two imported cases of malaria and one case of rubella. There was no Avian influenza A (H7N9), Middle East Respiratory Syndrome coronavirus (MERS) or Ebola virus case.

To ensure public health, the Public Health Laboratory conducts chemical and microorganism tests for food safety, water quality, medicine, and clinical samples, as well as diagnostic services for some infectious diseases. In 2018, it tested 102,574 samples, and conducted a total of 315,990 tests.

Smoking Control

Law No. 5/2011 – Law of Smoking Prevention and Control – came into effect on 1 January 2012. Through various channels, including legislation, law enforcement, education, promotion and encouraging quitting of smoking, the Health Bureau implemented smoking control in phases. In 2018, the law enforcement team patrolled 341,951 establishments, an increase of 14,974 establishments patrolled (+4.6 percent) compared to the figure in 2017; and there were 5,613 prosecutions, including 5,596 cases of violating the smoking ban, 13 cases of illicit labelling of tobacco products and four cases of selling tobacco products on publicly visible shelves. There were 1,141 less penalty tickets (-16.9 percent) issued to violators of the smoking ban than in 2017. In 2018, 9,066 hotline calls were received: 1,647 enquiries, 7,262 complaints and 501 opinions.

Blood Collection

Macao adopts a voluntary, no rewards and anonymous blood donation policy. The Blood Transfusion Centre is responsible for providing adequate amounts of safe blood to patients in need in Macao, and a consultation service for blood composition and immunohaematology. In 2018, a total of 12,909 residents registered as blood donors, and the centre collected 14,867 units of blood and prepared 41,755 units of blood components for 3,226 patients.

Pharmaceutical Affairs

By the end of 2018, a total of 31,785 kinds of western medicine had been approved

by the Health Bureau for sale in the local market; of these, 10,173 were over-the-counter medicines, 19,817 were prescription medicines and 1,795 could only be used by hospitals. A total of 6,675 kinds of Chinese and traditional medicine were licensed for sale in the local market. There were 605 pharmacists and 273 pharmacy technicians registered with the Health Bureau. There were 140 licensed wholesale stores with authorisation from the Health Bureau for conducting pharmaceutical import and export business. There were 272 licensed pharmaceutical stores, 134 Chinese herbal stores, 19 pharmaceutical dealers and seven pharmaceutical factories.

Private Healthcare Services

In 2018, there were 3,445 health care professional licensees, 359 health care establishments and four centres registered under the Health Bureau, constituting a total of 3,808 issuances of private health care licences, an increase of 6.01 percent as compared to the figure in 2017.

The number of health care establishments rose from 346 in 2017 to 359 in 2018, an increase of 3.76 percent. The increases were highest for licences issued for doctors, therapists and dentists, which rose by 155, 34 and 16 licences, respectively.

Kiang Wu Hospital

Kiang Wu Hospital is a non-governmental medical and health institution administered by the Kiang Wu Hospital Charitable Association of Macao. Established in 1871, it has a 148-year history. It is a charitable hospital founded and managed by Chinese people with the principles of running the hospital diligently and frugally, providing treatments with a caring heart, treating people with courtesy and putting patients first. Kiang Wu Hospital has developed into a modern general hospital that integrates treatment, prevention, teaching and research; and it is currently implementing a modern information management system in phases. In 2018, the hospital had 1,946 staff: 363 doctors, 608 nurses, 334 technical professionals and 641 other employees.

Kiang Wu Hospital has the following departments: Emergency, Outpatient, Inpatient, an Intensive Care Unit (ICU/CCU), Neonatal Intensive Care Unit (NICU) and Special Care Baby Unit (SBU), as well as a number of medical centres. The hospital's clinical services also cover medicine, surgery, obstetrics and gynaecology, paediatrics, emergency, otorhinolaryngology, head and neck surgery, ophthalmology, dermatology, stomatology, rehabilitation, Chinese medicine, integrated physical examination, oncology and anaesthesiology. In addition, the hospital has supporting departments dedicated to various areas including medical imaging, pharmacy, pathology and general examination. The Dr Henry Y. T. Fok Specialist Medical Centre was completed and commenced operation in August 2009 to offer various specialty outpatient services to the public.

Kiang Wu Hospital has four outpatient departments and two emergency departments, on the Macao Peninsula and Taipa, respectively. During 2018, its emergency and outpatient departments treated over 1,378,098 patients, an average of 4,230 each day. Its emergency department and outpatient department on the Macao peninsula treated over 1,242,920 patients during 2018, an average of around 3,798 per day; the Taipa Medical Centre received patients seeking emergency and outpatient services on 135,169 occasions, an average of 432 patients per day. A total of 32,825 inpatients were discharged from the hospital during the year.

University Hospital

The University Hospital, an institution under the Macau University of Science and Technology (MUST) Foundation, was formerly the Chinese medicine clinic of the MUST. In March 2006, the University Hospital was formerly established through the approval of the Health Bureau of the MSAR, with western medicine being integrated with the original Chinese medicine service, further enhancing the scope of medical services. Now the University Hospital has developed into a modern integrated hospital incorporating the strengths of both Chinese and western medicines, and serves as the clinical and teaching base for the Faculty of Chinese Medicine, the Faculty of Health Sciences and the School of Pharmacy of the MUST, becoming the only university-supported hospital in Macao.

The hospital comprises various specialties of western and Chinese medicines, providing general outpatient services as well as comprehensive medical services that include integrated tumour treatment, medical beauty and clinical genetics. The hospital also features technology-intensive facilities that include interventional catheterisation and surgery rooms, as well as various service centres including International Medical Service, Specialist Centre of Chinese Medicine Faculty, Executive Health Management Centre, Integrated Rehabilitation Service Centre, Medical Imaging Diagnostic Centre, Clinical Laboratory Diagnostic Centre, Endoscopy Centre, and haemodialysis centre.

In 2016, a haemodialysis centre with 42 beds was established. The Inpatient Department has 60 beds, and there is an Intensive Care Unit (ICU).

Environmental Hygiene

One of the major tasks of the Civic and Municipal Affairs Bureau is to improve the urban environment, maintain a clean and tidy city, as well as refuse collection. The bureau continued to replace street litterbins with compacting bins and closed refuse tips, which greatly reduced environmental hygiene problems arising from litterbins. The bureau also handles complaints about environmental hygiene, inspects urban hygiene, monitors the waste-disposal franchise company, manages landfills, improves the facilities and distribution of refuse stations, organises city cleaning campaigns

to promote awareness of environmental hygiene, maintains and manages public conveniences and prevents rat problems.

The Civic and Municipal Affairs Bureau handled 10,011 complaints in 2018, mainly concerning refuse at vacant construction sites and buildings, water dripping from air conditioners, refuse stations, rat problems, occupation of public space, smoke and exhaust fumes, overflowing sewage and noise pollution.

Cemeteries

Macao has six public cemeteries and 11 private cemeteries. The public cemeteries are Macao St Michael's Cemetery, Macao Our Lady of Piety Cemetery, Sa Kong Cemetery and Carmo Cemetery on Taipa, Municipal Cemetery and Va Ian (Chinese) Cemetery on Coloane. The private cemeteries are the Parsee Cemetery; the Old Protestant Cemetery; Mong Ha New Cemetery; Muslim Cemetery; Kai Fong (Neighbourhood) Cemetery, Pao Choc (Firecrackers) Cemetery, and Hao Si Cemetery on Taipa; and Kok Ip Cemetery, Ha Sac Cemetery, Ka Ho Cemetery and Son I Cemetery on Coloane.

The Civic and Municipal Affairs Bureau is responsible for managing public cemeteries and supervising the operation of private cemeteries. To provide a variety of funeral services to residents, it started to provide bone cremation services and tree burial services in September 2014 and September 2015, respectively. In 2018, the bureau conducted 118 bone cremations and 40 tree burials.

Public Toilets

The Civic and Municipal Affairs Bureau has implemented various measures to optimise the distribution and services of Macao's public toilets. At present, the bureau manages 84 fixed and three portable public toilets, distributed across various districts and open to citizens and tourists free of charge.

Environmental Protection and Clean City Education

Environment Information Centre

Macao currently has two environment information and education centres. These

are the Mong Ha Environment Information Centre and the Flora Garden Environment Information Centre. The environment information centres provide space for interactive exchanges and learning among the general public, fostering public concern regarding and encouraging joint efforts to raising the quality of Macao's urban environment, through education and promotions.

Volunteers for Clean-up Campaign

In November 2012, the volunteer team "Friends of Macao City" was established. Its members are ambassadors for community environmental hygiene, environment protection and food safety. They spread messages about keeping the city clean, reducing waste at source and obeying environmental hygiene laws among Macao residents, tourists and foreigners living in Macao.

The Civic and Municipal Affairs Bureau organised a workshop for volunteers of "Friends of Macao City" on the Bureau's work arrangements before and after the Typhoon Signal No. 8 is hoisted, to inform the volunteers regarding cleaning up rubbish and maintaining environmental hygiene as typhoons impact Macao.

Oscar's Farm

Oscar's Farm opened during Green Week in 2005, having a total area of around 133,868 square meters. The farm is currently the only place in Macao where livestock (pigs, cattle, and sheep) can be seen. It employs organic farming in its operations and management, avoiding the use of pesticides or synthetic fertilisers. It usually collects the faeces of raised livestock and green waste (dead branches and leaves), puts them through multiple grinding in a wood grinder, and then regenerates them into natural organic fertilisers through composting. It is one of few organic farms and education sites in Macao.

It has facilities including leisure huts, camp sites, large arbours, farming plots, a wildlife pond and a natural well.

The Civic and Municipal Affairs Bureau accepts online group applications every year for short-term and two-day-one-night camping activities, tailored to applicants' needs and the four seasons. During harvests, participants can reap the crops themselves and bring them home. Through introductory activities such as guided tours, group activities, parties and workshops, participants can enjoy more fun in organic farming and gain authentic farm experiences by becoming "farm owners" who lead simple lives working from sunrise to sunset, to immerse themselves in nature.

Happy Farm

Happy Farm opened in 2016, and has a total area of 5,972 square metres, half of which is arable land, providing an activity venue for hands-on experience of organic farming. The farm environment is predominantly a green farming area, with an aromatic herb garden and a fruit tree garden with various species of fruit trees, established in the hope of allowing citizens to escape from the hustle and bustle of the city, as if walking into the tranquil and pleasant countryside.

The farming area has a large hut for group activities, where hands-on farming experience, workshops and educational activities with themes of greening and environmental protection are organised. All farming activities accept individual or group applications online. Successful applicants only need to pay a small fee to become "city farmers" for three to six months. They can enter the farm to plant and take care of their crops on weekdays, weekends and public holidays, except Mondays. Participants can enjoy pure organic farming and bring their own harvests home.

Food Hygiene

The relevant laws of Macao stipulate that most imported foods (primarily animal and plant products) are subject to compulsory quarantine and inspection before being placed on the market.

The Civic and Municipal Affairs Bureau's quarantine personnel conduct hygiene inspections of imported foodstuffs, such as livestock, meat, vegetables, fresh fruits and fishery products, food products originating from animals, and fresh but perishable products. These inspections are conducted at the Border Gate and Lotus Flower Bridge Checkpoint, Ilha Verde quarantine station, wholesale markets, the Slaughter House, piers, Ka Ho Harbour, the airport and other quarantine points.

The Civic and Municipal Affairs Bureau has strengthened its product quality inspection and control measures. It has also made sample inspection procedures for imported livestock and foodstuffs more stringent, in order to prevent outbreaks of infectious diseases. All imported foodstuffs – including vegetables, fish, fresh and frozen meat, eggs, fruits and canned goods – must now be inspected, quarantined and tested for residual pesticides. In addition, the bureau is responsible for food hygiene inspection of shops selling meat, vegetables and fish, and issuing licences to them. It carries out regular hygiene blitzes, and it has introduced a grading system to monitor the hygiene and safety of fresh live food.

The Civic and Municipal Affairs Bureau also ensures food safety by monitoring foods sold in local markets, inspections, food testing, publicity and education, as well as establishing food safety standards and guidelines according to the Food Safety Law.

By 2018, the Government had established 10 sets and updated one set of food safety standards: Maximum Residue of Veterinary Medicines in Food, Maximum Levels of Radionuclides in Food, Maximum Levels of Bacterial Pathogens in Infant Formula, Maximum Levels of Pathogenic Micro-organisms in Dairy Products, Maximum Levels of Mycotoxins in Food, Requirements on Nutrition Contents of Infant Formula, Regulatory Standard for the Use of Food Colouring, Standards for Use of Sweeteners in Foods, Maximum Levels of Heavy Metal Contaminants in Food and updated the Maximum Residue of Veterinary Medicines in Food. By 2018, 52 sets of Food Safety Guidelines had been published, to instruct the industry to maintain hygiene and safety during operations.

To enhance food safety, the Civic and Municipal Affairs Bureau regularly monitors foods sold in local markets, to understand the level of food hygiene. In 2018, three sampling tests on seasonal foods – Chinese New Year confectionery, sticky rice dumplings of the Dragon Boat Festival and Mid-Autumn Festival mooncakes – were conducted, and the pass rate was 97 percent. Three sampling tests were also conducted, including an investigation of pesticide residues in fruits and vegetables, an investigation of levels of pathogenic micro-organisms in sandwiches and salads, and a special investigation of food from Portuguese-speaking countries. For each, the pass rate was 100 percent. Routine sampling tests on food sold on the market were conducted throughout the year, with 3,232 samples tested, 99.8 percent of which passed the tests.

The Civic and Municipal Affairs Bureau performs risk monitoring and assessment in response to overseas food safety issues, and alerts the industry about potential risks to Macao resulting from such issues. In 2018, 46 food safety alerts were issued, and an SMS alert service and a food safety information mobile app push notification service were employed on an on-going basis, to enable prompt responses by the industry.

The Civic and Municipal Affairs Bureau continued to educate and communicate with the public about food safety risks. In 2018, 46 talks, seven seminars and visits regarding potential food safety risks, and 10 Food Hygiene Supervisor Courses were organised for the industry; and regular monthly Food Safety and Environmental Hygiene Basic Courses were organised. To educate the public about food safety risks, in 2018, the bureau updated the themes related to food safety education, establishing a total of 21 themes in three categories: risk prevention, risk awareness, and food and nutrition. In all, 450 seminars and activities were organised for the public. The annual Food Safety Day was held, with the theme "Prevent food-borne disease and keep food safety tips in mind", to increase food safety awareness through a series of educational activities on food safety.

The Civic and Municipal Affairs Bureau kept close contact and undertook reciprocal visits with the Macao Customs Service, the Health Bureau, the Economic Services Bureau, Macao Government Tourism Office, Macao Trade and Investment Promotion Institute, the Education and Youth Affairs Bureau, the Social Welfare Bureau and the

Consumer Council; organised the annual Tripartite Conference of Guangdong-Hong Kong-Macao Experts on Food Safety and the Fourth Food Assessment Training Course for the frontline law enforcement team; and actively strengthened technical exchanges with experts in neighbouring regions, to join hands in promoting food safety.

To scientifically assess the health risks for Macao's residents that may arise through food consumption, the Food Consumption Survey on Secondary School Students in Macao was completed in 2018, by collecting data on food consumption of Macao secondary school students aged 11 to 21, to serve as the basic information for assessing exposure to risks through food consumption in Macao.

Veterinary Health

Monitoring animal hygiene is an important integral part of preventing animal epidemics and securing public health. The Inspection and Veterinary Control Division, under the supervision of the Civic and Municipal Affairs Bureau, is mainly responsible for supervising and managing animal hygiene in Macao. Its duties include animal protection, animal management, prevention and control of epidemic animal diseases, quarantine of imported and exported animals and animal food, and publicity, promotion and civic education regarding animal protection and animal hygiene.

To prevent avian flu, the Civic and Municipal Affairs Bureau collects wild bird carcasses from all around Macao on an on-going basis, and in 2018 a total of 302 carcasses were collected. It also collected faecal samples at the habitats of migratory birds and aviaries for avian flu screening, and in 2018 a total of 791 wild bird carcasses and faecal samples were screened. Results of all such screenings were negative and no avian flu virus was found.

There are two dog pounds under the supervision of the Civic and Municipal Affairs Bureau, which are responsible for issuing dog licences, providing rabies vaccinations for dogs and cats, providing diagnoses and treatment for pets, sheltering abandoned and stray animals, providing animal quarantine, handling matters concerning pet adoptions, issuing animal health certificates and providing corpse handling and cremation services.

To prevent rabies, in 2018 the Civic and Municipal Affairs Bureau gave rabies vaccines of three-year efficacy to 4,447 dogs and 179 cats. The bureau issued 2,113 dog licences, and pounded 256 stray dogs and 214 stray cats.

To enhance veterinary health in Macao and support the implementation of Law No. 4/2016 - Animal Protection Law, the Civil and Municipal Affairs Bureau commenced drafting the bill on Animal Immunisation and Veterinarians and the related laws and

regulations, for better protection of public health, and animal welfare and health. Statistics on cases contravening the Animal Protection Law during 2018 are as follows:

Provision breached	Violation	
Article 4	Illegal killing of dogs or cats	1
Article 5	Abandonment of animals	1
Article 7 - Clause 1	Sale of a cat younger than 3 months' old	1
Article 11 - Clause 1	Failure to fulfil pet owner duties	228
Article 16 - Clause 1	Failure to neuter dogs kept on construction sites, car dumps or scrapyards	1
Article 19 - Clause 1	Absence of dog licence	294
Total		**526**

Wet Markets

There are nine wet markets in Macao: seven on the Macao peninsula and one each on the islands of Taipa and Coloane. These house a total of 952 market stalls.

In 2018, some 800 market stalls were rented on a monthly basis, involving a total of 1,854 operators, of whom 790 were stall tenants, 66 temporary mobile stall licensees, 423 were stall assistants and 575 were employees. The Civic and Municipal Affairs Bureau is responsible for wet market management and tenant management.

Hawkers

The Civic and Municipal Affairs Bureau licenses, manages and monitors hawkers. In addition, it manages various large temporary sales activities, such as sales of firecrackers and the Lunar New Year's Eve Market, during major Chinese traditional festivals, as well as special markets like the Taipa Flea Market.

By the end of 2018, the bureau issued 925 hawkers' licences, including 205 cooked food stall licences and 77 special permits to flower hawkers from Wanzai District of Zhuhai, 33 fewer licences or 3.44 percent less than in 2017.

The Slaughter House

In accordance with relevant regulations, livestock such as pigs, cattle and sheep must be slaughtered at the Slaughter House. The Civic and Municipal Affairs Bureau stations veterinarians and quarantine personnel in the slaughterhouse to supervise its operations and hygiene. All slaughtered products must be checked before and after slaughter and certified fit for human consumption before they can be sold. The bureau is also responsible for protecting animal rights, preventing abuse, supervising the transportation of livestock and destroying sub-standard meat. In 2018, the Slaughter House butchered 114,776 head of cattle and pigs.

Social Welfare Services

The Government designs its social welfare policies in conjunction with non-governmental agencies, to deliver practical social services that meet residents' needs, aiming to solve individual, family and social problems, raise the overall quality of life, and jointly build social harmony and love-filled families.

Social Welfare Bureau

The Social Welfare Bureau (IAS) is a government department that helps draft, coordinate, liaise, drive and execute the social work policies and social welfare of the MSAR. It provides individual and family assistance, and services for children and teenagers, and the elderly. It also offers rehabilitation services, anti-drug-dependence services, problem gambling prevention services, and social rehabilitation services. There are 13 social service facilities under its umbrella, providing direct services to citizens, including the Social Services Centres, a casualty centre for victims of disasters, Assessment Centre for Rehabilitation, Drug Treatment Centres (Methadone), Healthy Life Education Centre and Chi Ai Hin (Problem Gambling Prevention and Treatment).

In 2018, the Government continued to give Old Age Allowances to Macao permanent residents aged 65 or above through the Social Welfare Bureau, with each person receiving 9,000 patacas in the year, among a total of 87,463 eligible cases (including 2,471 backdated cases from prior years), amounting to a total of 785 million patacas. The Government also continued giving disability gratuities to Disability Assessment Card holders who are permanent residents, with an ordinary gratuity amount of 8,000 patacas and a special gratuity amount of 16,000 patacas in 2018, for a total of 13,412 eligible cases (including 1,042 backdated cases of prior years), involving a total of 146 million patacas.

In 2018, the Social Welfare Bureau subsidised a total of 254 social service facilities/programmes, involving over 3,900 workers and a total amount of 1.431 billion patacas.

Overall, the Social Welfare Bureau spent over 2.741 billion patacas on social services in 2018, representing an increase of 12.35 percent, including the various subsidies mentioned above, as well as assistances and benefits.

Family and Community Services

The Social Welfare Bureau has established five social services centres in Macao, providing individuals and families in need with general services, including personal and family counselling, financial aid, round-the-clock support, disaster relief, referral and legal consultation services.

The bureau also provides counselling and support for individuals facing domestic violence, and distributes various benefits and allowances including old age allowances and disability gratuities.

To address the development needs of social services in different districts in Macao, in May 2018, the Central District (Lam Mau) Social Service Centre and the Southern District (S. Lourenco) Social Service Centre were merged to form the Central and Southern District (Patane) Social Service Centre.

In 2018, a total of 4,483 cases were handled by five social services centres, and various services were provided on 14,007 occasions, resulting in 3,827 families receiving regular subsidies, involving 6,056 individuals.

In 2018, Macao had one public shelter, 10 integrated family and community service centres, seven community centres, three counselling and resource centres, three community service support centres, eight small-scale service facilities, two private-sector counselling hotlines, two project-based services, and five shelters and temporary shelters, the majority of them being subsidised by the Social Welfare Bureau and operated by non-governmental organisations.

During 2018, 20 people were admitted to the Ilha Verde shelter, 1,057 people used the winter and heat shelter service; and 1,445 people used the typhoon shelter and emergency shelter services. The 10 integrated family and community services centres provided services to 652,928 people; the seven community centres provided services to 435,155 people; the three counselling and resource centres provided services to 33,809 people; the three community service support centres provided services to 260,712 people; the eight small-scale service facilities provided services to 479,627 people; the two counselling hotlines operated by non-governmental organisations provided services for 18,527 people; two project-based services provided services to citizens for 89,991 people, and the five shelters and temporary shelters provided services for 1,308 people.

To enhance welfare recipients' incentives to work and assist them to re-enter the labour market, the IAS and four non-governmental organisations cooperated in implementing the Community Employment Assistance Scheme. By the end of 2018,

the scheme had 577 participants. Additionally, by the end of 2018, the Positive Life Programme, which was launched to encourage employment, attracted participation by 1,068 individuals, 418 of whom had already received employment counselling and accepted job referrals.

In 2018, the IAS received 2,335 cases of enquiry and notification/request for assistance through Family Crisis Hotline. After eliminating duplicate cases, 1,756 cases were identified, including 1,228 cases of family disputes, family conflicts and suspected domestic violence, and 528 other cases. 74 cases of domestic violence were assessed and identified, of which 45 cases involved spouses, 20 involved children and nine involved violence among family members.

Children's and Youth Services

In 2018, Macao had 58 child-care centres, of which 38 received regular subsidies from Social Welfare Bureau. By December 2018, child-care services in Macao offered about 11,000 quotas. The Government launched the Priority Child Care Service for Children from Disadvantaged Families, so that disadvantaged families were given priority in receiving full-day service in subsidised child-care centres.

There are nine homes for children and adolescents in Macao offering short or long-term care and counselling for orphans, as well as children and adolescents who have been abandoned, who lack family care, or who are on the verge of a crisis as a result of family or social conflicts. In 2018, these homes housed 321 children and youngsters.

There are four community youth social work teams in Macao, comprising social workers who conduct outreach work in various places such as amusement game centres, sports grounds and fast food restaurants. They get in touch with youths who are more vulnerable to life crises and provide counselling services, and assist them with facing personal, family and social problems. The teams also provide youth career development services, support services to families with children and youth at risk, community support services and drug abuse prevention services. During 2018, 13,302 people participated in activities and groups organised by the teams.

There are two Youth and Family Integrated Service Centres in Macao to organise youth development activities, provide youth counselling and supporting services, organise family life education and family activities, and provide family counselling and supporting services, as well as school supporting services. In 2018, the centres had 23,240 members enjoying these services.

The Social Welfare Bureau is the only authorised organisation in Macao that deals with adoption services. It handled 29 such cases in 2018. The bureau is responsible for providing assistance to minors who become involved in judicial actions, in accordance with the social protection system. During 2018, the bureau processed 312 such cases. Moreover, the bureau, in conjunction with the community youth social work teams, provides counselling services under the community support scheme to youths between

12 years to 16 years of age who have committed criminal offences or misdemeanours.

Services for the Elderly

For ongoing improvement of living conditions of the elderly, the Social Welfare Bureau continued providing subsidies and technical support to community groups and organisations in 2018, for establishing various social facilities and support services, and promoting the improvement of services. The aim was to provide appropriate services to elderly persons in need, and let them enjoy their remaining years in comfort.

In 2017, the Chief Executive designated the ninth day of the ninth month of the lunar calendar as the Senior Citizen's Day of the Macao SAR, through an executive order.

The short-term measures (2016-2017) under the Plan for the Elderly Services for 2016-2025 were completed, and various mid-phase measures will be gradually implemented. By the end of December 2018, a study group had commenced 106 measures out of the 141 mid-phase measures (2018-2020), 61 of which were completed in 2018.

During the year, the Subsidy for Elderly Employment in Social Enterprises was introduced, to support non-profit social service organisations with establishing elderly social enterprises, thus creating employment opportunities for senior citizens and giving them a sense of worth. The Outdoor-assistance Service of Peng On Tung and the missing person alert system were introduced, to ensure commuting safety and provide emergency assistance service for patients with dementia, people with intellectual disabilities and other people in need. Also, the Ka Ho Nursing Home of the Macao Federation of Trade Unions commenced operation, to further meet the needs of the elderly for nursing homes.

In 2018, Macao had 21 homes for the elderly, providing residential care services for weak elderly persons; 11 of them are subsidised by the Social Welfare Bureau, providing a total of 2,300 hostel places. In addition, there were six elderly service facilities providing day-care services to elderly persons with health problems who are unable to take care of themselves. There were other eight elderly day-care centres, two neighbourhood social centres providing entertaining services for the elderly.

In 2018, 1,627 senior citizens were housed in homes for the elderly, 655 senior citizens enjoyed services at day care centres (beginning from 2018, senior citizens who received lifelong learning service were no longer counted in the statistics of elderly day-care centres, to better reflect the real situation of elderly day-care services), 3,911 senior citizens enjoyed services at elderly day centres, and 6,268 senior citizens used the services provided at social centres.

There are six home care and support service teams in Macao, operating under the three elderly day-care centres, two day care centres and one multi-service centres. The

teams provide household and home care services to elderly persons who are weak and need others to take care of them. There are two types of services: basic and supporting. In 2018, a total of 753 cases were handled, of which 334 involved senior citizens living alone, and 414 in which the senior citizens were not living alone.

In addition, an elderly caring service network and a supporting network for senior citizens living alone are provided for single elderly people and households with two elderly persons. The services include volunteer visits, caring phone calls and social activities, enabling the elderly to feel that they are cared for by society. In 2018, the two services were provided to 3,399 and 827 senior citizens, respectively.

The Tele-Assistant "Peng On Tung" is a round-the-clock support service through home fixed line telephones, providing emotional support, regular greetings, community information service, referral services and regular visits. There is also an elderly hotline service, and during 2018 this provided assistance to 4,583 senior citizens in need, of whom 2,010 were living alone.

The IAS provided an Elderly Home Safety Evaluation and Equipment Subsidy Scheme for low income elderly families, elderly persons living alone or households with two elderly persons. The scheme aims to improve home safety by household safety evaluations, and installation of bathroom equipment and handrails. In 2018, household safety instructions were given to 969 households, and equipment was installed in 968 households.

Senior Citizen's Card

Citizens holding Macao Resident Identity Cards aged 65 or above are eligible to apply for the Senior Citizen's Card. Senior Citizen's Card holders are entitled to the welfare and benefits offered by the public organisations and enterprises that have signed cooperation agreements with the IAS. By the end of 2018, the Social Welfare Bureau had issued a cumulative total of 68,841 Senior Citizen's Cards.

Rehabilitation Services

The short-term measures (2016-2017) under the Ten-year Plan of Rehabilitation Services 2016 – 2025 were completed in 2017. The next mid-term (2018 to 2020) measures will be gradually implemented.

In 2018, Macao had 11 rehabilitation homes, of which nine provide accommodation, training, social and leisure activities to mentally handicapped adults or chronic mental patients, and children aged 15 below with mental or physical disabilities; and two are halfway house and supported hostel for people recovering from mental illness.

Moreover, there are 10 day centres which provide self-training programmes, group studies, rehabilitation treatment, regular activities and individual assistance to the hearing impaired, the mentally handicapped, people recovering from mental illness and the visually impaired.

In 2018, the 11 rehabilitation homes provided services to 618 people, while the 10 day care centres offered services to 2,055 people. One non-subsidised day activity centre provided services to 224 people.

In 2018, there were six sheltered workshops, vocational training centres and supported employment centres in Macao. Services were provided to 346 people. There were also four pre-schools/education centres to provide early special education and training, and assistance for children with development disorders and impaired hearing. In 2018, the three pre-schools/education centres served 360 people.

The rehabilitation bus service in Macao is provided by two agencies. The IAS subsidises the cost of purchasing and operating rehabilitation buses. The service enables people with impaired mobility, the physically disabled and patients requiring haemodialysis to commute between their homes and hospitals.

In 2018, the rehabilitation bus service served 26,654 passengers. During the year, the bus service was reorganised. A no-reservation feeder service was introduced, which ran along two circular routes in the Macao peninsula and Islands District. The bus service allowed people with disabilities to commute to meet their friends and relatives, participate in cultural, recreational and leisure activities, and handle personal affairs. In 2018, the bus service served 5,225 passengers.

Macao has two comprehensive rehabilitation service centres, including one designed for people with intellectual disabilities. Services provided by the centre include: small scale residential services to mildly and moderately mentally handicapped people aged between 16 to 55, which in 2018 served 19 people by providing independent living skills training; and providing family resources services to the mentally handicapped and their families, though which the centre served 10,503 people in 2018.

The other centre is a comprehensive rehabilitation service centre providing vocational training and rehabilitation services which served 113 people in 2018. Multi-disciplinary Assessment Services under the Social Welfare Bureau provide professional assessment services to disabled people who need subsidies for using rehabilitation facilities, so they can find the most appropriate services. There were 125 such cases in 2018.

As at the end of 2018, the Disability Assessment Cards saw 19,834 new applications and 7,574 renewal applications, and 15,844 new cards were issued by IAS.

Prevention of Drug Addiction

The prevention of drug abuse mainly targets school, family and community in

organising anti-drug abuse promotion and education activities. The activities aim at widely spreading and promoting the message of anti-drug abuse through seminars, training programmes, advertisements, games, a website, enquiries hotline, reception service and other cultural and leisure activities. Funding and technical support are also available to assist community groups in organising anti-drug activities.

In 2018, 3,083 people participated in training courses and seminars on anti-drug abuse, organised by the IAS for schools, the community and professionals. Besides providing primary school students with healthy life and anti-drug education programmes, Healthy Life Education Centre also provides teenagers and the public with various cultural, physical and art activities, bringing out the messages of anti-drugs and healthy life. A total of 7,202 people participated in its activities. A total of 19,565 primary school students from 63 schools participated in Healthy Life Education, which was conducted especially for students aged from 5 years to 12 years. A total of 2,350 Form 1 to Form 3 students from 10 secondary schools participated in an education programme targeting junior secondary school students.

The Drug Treatment Complex Centre under the Social Welfare Bureau and two community drug treatment centres provide comprehensive voluntary treatment and rehabilitation services for drug-dependent people. They include outpatient and residential drug addiction treatment, as well as drug counselling services. During 2018, a total of 576 drug addicts sought help. Of these, 115 were seeking help for the first time.

In Macao, there are four drug-treatment community groups, which provide rehabilitation services shelters, one service to families with youth drug addicts, an outreach treatment service for drug-dependent youths, and two outreach treatment services for addicts. In 2018, these four drug-treatment shelters offered services to 14 people; outreach drug addiction treatment services were used by over 12,815 people; and outreach services designed for drug-dependent youngsters and problem juveniles were used by 4,337 people; services designed for the family members of drug addicts were provided for 2,435 people.

The IAS also helped an organisation to launch a free outpatient service to help people quit smoking, which in 2018 helped 132 people on 879 occasions.

Prevention and Treatment of Problem Gambling

The Problem Gambling Prevention and Treatment Division – Chi Ai Hin is a service unit responsible for providing counselling services to problem gamblers and preventing gambling disorders.

In 2018, the Central Registry System of Individuals with Gambling Disorder received 133 new cases seeking assistance. Community organisations were also commissioned to provide round-the-clock gambling counselling and online counselling service, which

received 1,317 and 2,121 requests for assistance through telephone calls and online platforms, respectively.

To strengthen community education, 17 community talks regarding prevention of gambling disorder were organised, and attended by 779 participants.

In response to the World Cup 2018, the Social Welfare Bureau, Education and Youth Affairs Bureau (DSEJ) and gambling disorder prevention and treatment institutions co-organised the "Watch football games without gambling" programme, to raise awareness of teenagers and citizens about the risks of gambling through 14 different kinds of activities. A total of eight social service institutions, 55 schools and over 80,000 people participated in the activities.

The centre collaborated with community organisations in launching the Smart Money Management Programme, and organised 141 talks attended by over 4,000 students.

The year 2018 marked the 10th anniversary of responsible gaming promotion. To promote responsible gaming, the Responsible Gambling Forum 2018 was held, during which 19 experts and scholars from Hong Kong, Macao and other countries shared their experience on promoting responsible gaming. The forum attracted nearly 300 participants from Hong Kong and Macao.

Ten newly added responsible gambling information kiosks and two additional responsible gambling stations with on-site supporting staff were set up at casinos; they provided a total of 3,272 gamblers with information regarding risks of gaming, responsible gaming, ways to seek help, and self-exclusion application services.

The centre also conducted training programmes such as a professional certificate programme for Gambling Counsellors, and a certificate programme for responsible gaming instructors. There were a total of 110 participants. In addition, the third certificate programme for responsible gambling trainers was held to train the trainers in gaming enterprises, for further training on responsible gambling for staff of these enterprises. There were a total of 16 participants.

Social Rehabilitation Services

Social rehabilitation services mainly assist the court to implement non-custodial sentences and measures (such as parole, supervision for probationers, labour in lieu of penalty, suspension of proceedings, judicial restoration) and implement education and supervision orders for youth offenders (such as rehabilitation, community service order, rule abiding order, probation order and half-way home order), aiming to assist offenders with restoring law-abiding lives and reintegrating into society.

To assist offenders and young offenders to correct their misbehaviour, the Social Welfare Bureau provided various correction measures, including programmes for assisting discharged offenders to reintegrate into their families and communities,

supportive measures for discharged offenders and half-way home services. Regarding youth, the Social Welfare Bureau focuses on legal education for juveniles, personal growth and community-based half-way house counselling.

In 2018, in response to the correction needs for offenders who are involved with specific crimes, the Social Rehabilitation Services introduced the Special Correction Service for Offenders, to tailor make correction strategies and counselling groups for offenders involved with special crimes such as sexual crimes, murder, serious traffic violations and domestic violence, and in cases where psychotherapy was needed.

To create more favourable conditions for inmates to return to society, the Social Welfare Bureau continued making use of multi-channel promotions to disseminate the message regarding acceptance of rehabilitated offenders.

In 2018, 759 discharged offenders under counselling and 131 young offenders under counselling were served. In addition, a half-way house for discharged offenders provided services for 29 people, while one half-way house for young offenders provided services for 10 people.

Social Security Fund

The Social Security Fund Authority is under the supervision of the Secretary for Social Affairs and Culture, and is responsible for implementing various policy measures concerning social security and managing relevant resources.

The Social Security Fund was set up on 23 March, 1990, with a primary objective of providing social security to local employees. With the exacerbated social phenomenon of ageing, residents' demand for universal coverage is growing. In November 2008, the Government announced the Social Security and Old-age Pension System Reform Programme. Its core aim is to build a double-tier social security system, founded on the first-tier social security system, so that all Macao residents can have the chance to enjoy basic social protection, particularly old-age protection, to improve their quality of life, with more ample protection for retirement life supported by the second-tier, non-mandatory Central Provident Fund.

Social Security System

Law No. 4/2010 - Social Security System came into effect on 1 January 2011. It is the first tier of the double-tier social security system. This system operates according to the principles of social insurance. Its income derives from the contributions of employees, employers and arbitrary contributors, employment fees for non-resident workers, appropriation from gaming, a one-percent appropriation from the recurrent income of the Government Budget, and income from investments of the Social Security Fund.

Contribution

The Social Security System comprises an obligatory contribution system and an arbitrary contribution system. Employees and their employers are required to make obligatory contributions to the Social Security Fund, at an amount of 90 patacas per month (60 patacas by employers and 30 patacas by employees), and other Macao residents who comply with the relevant legal requirements can make contributions by enrolling in the arbitrary system, with the full amount of contributions – 90 patacas per month, to be paid by the beneficiaries themselves.

In 2018, a total of 364,000 beneficiaries made their contributions. They included around 299,000 employees and 65,000 voluntary contributors (including in-service public servants registered in the retirement and pension system). The contributions totalled around 390 million patacas.

Various Social Security Benefits and Allowances

According to the current social security system, eligible beneficiaries are legally entitled to pensions, disability allowance, unemployment allowance, sickness allowance, funeral allowance, marriage allowance, birth allowance and compensations for respiratory occupational diseases.

In 2018, various benefits and allowances were given to 135,000 people, of whom 110,000 people received pensions. Social security payments totalled about 4.1 billion patacas, including around 3.78 billion patacas for pensions (including the additional payment in January).

Non-mandatory Central Provident Fund System

Law No. 7/2017 - Non-mandatory Central Provident Fund System (or non-mandatory CPF) came into effect on 1 January 2018. It is the second tier in the double-tier social security system, and was established to enhance retirement protection for citizens of the MSAR, and to fill a gap in the existing social security system.

The non-mandatory CPF consists of a contribution scheme and an allocation system. An account holder may make regular contributions via a contribution plan, and seek wealth accumulation through investment, making better preparation for an ample retirement protection in future.

Individual Account of Non-mandatory CPF

MSAR citizens falling into the following categories may become individual account holders of non-mandatory CPF:

1. Aged 18 or above;

2. Under the age of 18, but registered into the social security system in accordance with the law.

An individual account of non-mandatory CPF comprises a sub-account managed by the government, a contribution sub-account, and a preserved sub-account.

Contribution Scheme

There are a joint provident fund scheme and an individual provident fund scheme under the non-mandatory CPF. A joint provident fund scheme is designed for an employee. A participating employee and his or her employer make a contribution equivalent to five percent of the employee's basic salary on a monthly basis, and there is a maximum and minimum cap to the contribution.

Upon termination of employment, the employee may be entitled to the accumulated benefits in the employer's part, according to the length of contribution and the applicable vesting schedule. Since an individual non-mandatory CPF account is portable, the benefits in the contribution scheme will not be cleared and withdrawn due to employment termination, and can maintain the account for continued investment.

On the other hand, an individual provident fund scheme is designed for all account holders, with a monthly minimum contribution amount of 500 patacas, and a maximum amount of 3,100 patacas. In 2018, 128 employers joined the non-mandatory CPF scheme and 36,243 people joined the individual non-mandatory CPF scheme.

Allocation Scheme

All Macao permanent residents aged 22 or above, who are alive on 1 January in the allocation year, and have resided in Macao for at least 183 days within the year prior to the allocation, are eligible for Special Allocation from Budget Surplus. The first-time receiver of this special allocation may at the same time receive a one-off Incentive Basic Fund of 10,000 patacas. Such amounts will be recorded in the sub-accounts managed by the government. The amounts may be kept for accumulation, or transferred to the account holder's contribution sub-account or preserved sub-account for investment through proper transfer application.

In 2018, there were 586,000 Provident Fund Individual Account holders, of whom 373,000 fulfilled the requirements for receiving the fund allocation. The Government paid 7,000 patacas to each of the entitled residents. Those who also received an Incentive Basic Fund of 10,000 patacas totalled about 16,000 people.

Fund Withdrawal

To meet the objective of providing more ample retirement protection, in general an account holder must be aged 65 or above, and must fulfil other withdrawal conditions, before he or she can apply for fund withdrawal from his or her individual account. In 2018, there were 68,000 approved applications for withdrawals, resulting in a disbursement of 1,020 million patacas.

THE SPORT MEDICAL CENTRE

adidas

The Sport Medical Centre, a subsidiary of the Sports Bureau, is committed to providing scientific, professional and diverse services with the aims of promoting local sports development, boosting citizens' physical fitness, and improving standards of competitive sports athletes.

The centre seeks to help people including athletes registered at the Federation of Macao Sport General Association, sport-for-all athletes, athletes with disabilities, athletes from schools and universities, and persons referred by the Health Bureau. It also provides physical fitness testing and assessment services.

The centre's services include sports injury diagnosis, physiotherapy, Chinese medicine, athletic psychology and sport nutrition consultancy.

MACAO YEARBOOK 2019

10

MEDIA, COMMUNICATIONS AND INFORMATION TECHNOLOGY

Macao enjoys freedom of the press, freedom of speech and freedom of publishing. Despite being relatively small, it has a sophisticated and well-developed media industry.

The Government strives to enhance the transparency of its administration and facilitate communication and dialogue with the media. This enables government messages to be delivered to the public promptly and accurately, and provides a wide range of information via the media. Furthermore, the Government expects the media to act as a watchdog, continually prompting every government department to improve its work and provide better-quality services to the community.

Macao's laws protect the rights of journalists to gather and receive news and information, and to report it, ensuring their journalistic independence.

Mass Media

Electronic Media

Macao has one free-to-air TV station, two radio stations and one cable TV station, as well as three locally based satellite TV stations.

Teledifusao de Macau (Macau Broadcasting Company, TDM) began providing a public broadcasting service in February 1988. Digital broadcasting commenced in 2008. Currently, both analogue broadcasting and digital broadcasting are available. The 12 digital channels include the two round-the-clock channels (Chinese and Portuguese), sports, information, high definition (HD), CCTV-13, CCTV-1, CCTV documentaries, Fujian TV Station Haixia Satellite Channel and Hunan TV World.

Radio Macau, a subsidiary of TDM, and the privately owned Radio Vila-Verde (Green Village) are Macao's two radio stations. Both broadcast 24 hours a day.

Macau Cable TV has been broadcasting since July 2000, and offers 98 channels (71 basic channels, 15 premium channels, five test channels, and two dedicated hotel channels); each is aired 24 hours per day.

MSTV Satellite TV Company Limited – originally known as the Cosmos Satellite Television Company, which was the first operator to be granted a licence to provide satellite television services in Macao – now offers the MSTV's News Channel, broadcasting 24 hours a day.

The Chinese channel of the MASTV Company began operations in June 2001. It broadcasts 24 hours a day.

On 2 December 2008, Macau Lotus Satellite TV Media Limited was granted a 15-

year licence to provide satellite television services in Macao. It started its broadcasting service on 1 January 2009, on its Macao Lotus TV 24-hour channel.

Print Media

The history of Macao's newspaper industry can be traced back over 100 years. From 1839 to 1840, while enforcing the opium ban in Guangdong, Lin Zexu commissioned a selective translation of the English *Macao Monthly* and, for administrative purposes, published *Journal News of Macao* in Guangzhou. On 18 July 1893, Dr Sun Yat Sen and a Macanese named Francisco H. Fernandes worked together and founded *Echo Macanese*, which was published in Chinese and Portuguese. On 22 February 1897, Kang Youwei and Liang Qichao founded *The Reformer China*. After the 1911 Revolution in China, Macao's Chinese newspapers began to flourish. Several newspapers, such as *Ao Men Shi Bao* (Macao Times), *Hao Jing Wan Bao* (Oyster Mirror Evening Post), *Ao Men Tong Bao* (Macao Bulletin), and *Hao Jing Ri Bao* (Oyster Mirror Daily), were founded at this time.

Macao has 13 Chinese daily newspapers, which currently print a total of 100,000 copies each day. They are *Ou Mun Iat Pou* (Macao Daily News), *Jornal Va Kio* (Overseas Chinese Journal), *Tai Chung Pou* (The Public), *Si Man Pou* (The Citizen), *Jornal Seng Pou* (Star Journal), *Cheng Pou* (Righteousness), *Today Macau Jornal*, *Jornal San Wa Ou* (New Chinese Macau Journal), *Hou Kong Daily*, *Macao Evening*, *Macau Times*, *Exmoo News* and *Macau Today*.

The Chinese weeklies published in Macao are: *Jornal Informacao* (Information Journal), *Pulso de Macau* (Macau Pulse), *Semanario Recreativo de Macau* (Macau Entertainment Weekly), *Semanario Desportivo de Macau* (Macau Sports Weekly), *Observatorio de Macau* (Macau Observer), *Macau Chinese Journal*, *Macao Commercial Post* and the *Macau Convention and Exhibition Economy Journal*, and *Click2Macau*.

Portuguese daily newspapers have an even longer history than the Chinese dailies. In 1822, *Abelha da China*, the first-ever daily in China, was founded and published in Portuguese. Other early-founded Portuguese papers founded in Macao include *Gazeta de Macau* (Macau Gazette), *Imparcial* (The Impartial), and *Correio de Macau* (Macau Post). Macao currently has three Portuguese dailies primarily intended for a local Portuguese readership. These are *Ponto Final* (Full Stop), *Jornal Tribuna de Macau* (Macau Tribune Journal) and *Hoje Macau* (Today Macau). Weeklies include *O Clarim (The Bugle)* in Chinese, English and Portuguese versions, and *Plataforma Macau (Macau Platform)* which is published bilingually in Chinese and Portuguese.

The English daily newspapers in Macao are the *Macau Post Daily* and the *Macao Daily Times*. The *Macau Business Daily*, founded in 2012, ceased publication in 2017, while the magazine and website bearing the same name continue to operate.

Every day, dozens of Hong Kong newspaper and magazine titles are transported to Macao. Some daily newspapers and magazines published in mainland China are

also available on local newsstands. In addition, Macao residents enjoy access to radio and TV programmes made in Hong Kong and mainland China.

Media Stationed in Macao

Xinhua News Agency and Lusa-Portuguese News Agency have branches or representative offices in Macao. People's Daily and China News Service (CNS) have branches in Macao. Other media organisations with accredited correspondents in the territory include China National Radio (CNR); China Radio International (CRI); the State Administration of Radio, Film and Television; Wen Hui Bao (Shanghai); Hong Kong Economic Journal (HKEJ); EyePress News; Radio Television Hong Kong (RTHK); Wen Wei Po; and Television Broadcasts Limited, Hong Kong (TVB), Hong Kong Cable Television and Phoenix Television.

Press Associations

The press associations in Macao include the Macao Chinese Media Workers Association, the Macao Journalists Club, the Macao Journalists Association, the Macao Media Club, the Macau Sports Press Association, and the Portuguese and English Speaking Media Association.

The Press Law

The Press Law (Law No. 7/90/M), promulgated in August 1990, guarantees the freedom of the press and its right of access to information; and governs activities regarding newspapers and magazines, publishers and news agencies.

Macao's Press Law consists of seven chapters and 61 articles. This law protects the rights of journalists, including those to gather, receive and report information. By law, journalists have the right to access information from government authorities, public administrations, public corporations and joint ventures formed by the Government; private organisations of which the Government or its subsidiaries are major shareholders; corporations that operate public assets; and contractors that provide public works or services. This freedom of access is not applicable to information regarding judicial confidentiality and state secrets, or facts and documentation protected by law as private and confidential information.

Journalists have the right to protect their sources of information and they will not be penalised directly or indirectly while exercising that right. Likewise, there is no obligation for media owners and publishers, individual publications or news agencies to reveal their sources of information. In this way, the law protects journalistic independence. However, in the event of sufficient evidence of criminal involvement, the media's right

to protect its sources of information can be terminated by a court order.

The Press Law allows freedom of discussion and criticism of politics, society, religious views and laws, as well as the acts of the Government itself and its departments and personnel.

Publishers or other entities publishing periodicals, and correspondents of non-local media organisations based in Macao, are legally required to register with the Government Information Bureau (GCS).

In 2010, the Government proposed to review and revise the Press Law and the Audio-Visual Broadcasting Law. The Government Information Bureau (GCS) began to prepare for the revision. Academic institutions were appointed to conduct a study on the direction for amendments to the two laws and an opinion poll at the end of 2010 and in 2011, to realise the objectivity and neutrality of the revision process. The GCS also gave the media regular reports on progress with the work, to inform the public; and communicated with the industry through various channels to collect opinions and suggestions about the revision.

Since the Broadcasting Law encompasses many regulations on technical aspects of broadcasting, and there is a need to align with the telecommunications legislation, the Government deferred any amendment to the Broadcasting Law while proceeding to amend the Press Law under the principle of any clause being "limited to deletion only", after gathering and analysing the views of the media industry and the results of the opinion gathering. The controversial provisions to be deleted included one concerning the Press Council, and another on the Code of Practice for Journalists. Some wording would also be amended, to align with relevant laws.

The Government Information Bureau drafted consultation documents in alignment with the above-mentioned direction for amendment, and conducted a public consultation on the revised draft of the amendment to the Press Law in 2013. The final report on the public consultation on the amendment was announced on 17 April 2014, after consolidating views gathered in six industry and public consultation sessions, as well as written opinions collected via various channels, such as online sources, fax, email and post. In June 2014, after the revised draft of the Press Law and the relevant administrative documents were completed, and submitted to the Chief Executive, they were referred to the administration and justice system for follow-up, and technically analysed and verified by the relevant authorities. The GCS will follow establish procedures in continuing to communicate with the legal departments and follow up the relevant work.

Government Information Bureau

The Government Information Bureau (GCS) is a bureau-level administrative entity under the supervision of the Chief Executive. It assists government departments and the media by coordinating and conducting research regarding public communication,

disseminating government information and arranging media interviews.

The GCS regularly publishes *Macao Magazine*, the *Macao Information* booklet and the *Macao Yearbook* in Chinese, Portuguese and English; and is gradually increasing the release of new information through new media and mobile networks.

In recent years, the GCS utilises the mobile network to offer different kinds of information to the media and the general public. In addition to Macao news applications that distribute the latest government news, the GCS has launched an official WeChat account, a YouTube channel, a Facebook page, a Sina Weibo account and a Toutiao account. *Macao Yearbook* and *Macao Magazine* are published in Chinese, English and Portuguese, and are available through websites and mobile applications allowing readers to browse information.

Disseminating Government Information

In 2018, the GCS established a new information dissemination system (GovInfo Hub), to replace the Information Broadcast System (IBS) for local media and accredited correspondents which had operated for over 10 years. The GovInfo Hub facilitates media access to official information and photographs by distributing them via the Internet. This enables the media to remotely access official information at any time.

During 2018, the Information Department of GCS wrote and distributed 13,032 press releases in Chinese, Portuguese and English, and distributed 2,104 interview notices, 89 important notices and 1,268 photographs on behalf of the Government and its departments. The bureau also produced 235 video clips, and distributed a total of 330 video clips on behalf of other government departments via the Internet and social media channels.

Registration of Periodicals

The Information Department of the GCS is responsible for registering newspapers, publishers and periodicals. Under the Media Registration Regulations, if a daily publication is registered but has not been published for 180 days, or if other registered periodicals have not been published for a period of one year or have been suspended for a period of one year, their registration will be cancelled. Registration of publications is free of charge.

Twelve new publications were registered with the GCS in 2018, including publications appearing weekly, fortnightly, monthly, once every two months, and quarterly. Also, 12 publications cancelled registration.

The Government Portal

The Government portal (www.gov.mo) was officially launched in December 2004. It offers a comprehensive platform for information and e-services provided by all Government departments. The portal gives the public access to information from various public administrative departments, the Legislative Assembly, courts, the Public Prosecutions Office and tertiary education institutions.

Available in both traditional and simplified Chinese, Portuguese and English versions, the Government portal provides general information and updates about Macao to local residents, tourists and the business community, and introduces various public services and their contact details.

The portal's objectives are to announce government policies in a timely manner, enhance communication between the Government and the public, maintain administrative transparency, and collect public opinion.

Government Printing Bureau

The Government Printing Bureau implements the Government's publishing policy. It is responsible for the publication of the *Macao Special Administrative Region Gazette* (the *Macao SAR Gazette*) and its supplements; the laws and regulations of Macao (in both separate and omnibus formats); the general budget of Macao and related budgets of government departments and public bodies; Macao's accounting records; government policy addresses; legally defined official forms; and any official printed matter that uses the emblem of Macao. It also undertakes the layout, proofreading and printing of printed matter that requires special security measures or close supervision.

The Macao SAR Gazette

Sections One and Two of the *Macao SAR Gazette* are published at 9:00 am every Monday and Wednesday, respectively; unless either of these days is a public holiday, in which case the pertinent section is published on the next working day. Announcements of urgent or ad-hoc matters that occur outside this schedule may be issued in a supplement or special section.

Publication of all the following items in Section One of the *Macao SAR Gazette* is mandated by law, and they only come into legal effect thereby: laws, by-laws, Legislative Assembly resolutions, administrative orders and orders approved by the Chief Executive, orders approved by principal government officials, international treaties signed in the name of "Macao, China", Legislative Assembly election results, the appointment of members of the Legislative Assembly, the appointment and termination of appointment of Executive Council members, the appointment and termination of appointment of

presidents and judges at all levels of the courts and of public prosecutors, as well as other announcements of appointments and terminations of appointments under the law and documents whose announcement is required by law.

The following announcements must also be made in Section One of the *Macao SAR Gazette*:

1. Amendments to the Basic Law of the MSAR, proposals to amend the Basic Law, and interpretations of the Basic Law by the authorised entity;

2. National laws that apply to the MSAR, and interpretations of those laws by the Standing Committee of the National People's Congress (NPC);

3. Documents adopted by the NPC and its Standing Committee regarding the MSAR;

4. Regulatory documents adopted by the NPC's Preparatory Committee for the Macao Special Administrative Region, regarding the establishment and operation of the MSAR;

5. Documents authorised by the NPC and its Standing Committee and the central government; and orders, instructions and documents issued by the central government in accordance with the Basic Law of the MSAR;

6. Documents regarding the appointment and termination of the Chief Executive, principal government officials and the Public Prosecutor-General by the central government; and

7. The Chief Executive's annual policy address.

The following announcements must be made in Section Two of the *Macao SAR Gazette*:

1. International treaties applicable to the MSAR;

2. Agreements on judicial mutual assistance, and mutual exemption of visa requirements by the MSAR and other countries or regions with the assistance and authorisation of the central government;

3. Judicial mutual assistance agreements signed with judicial authorities in other areas or regions in mainland China;

4. Statements and announcements made by the Legislative Assembly;

5. Statements and announcements made by the Government; and

6. Other documents that are to be announced in this section by law.

Since 2000, the Government Printing Bureau has posted the complete contents of Sections One and Two of the *Macao SAR Gazette* on its website (www.io.gov.mo) for public access and information. To strengthen the accuracy and integrity of the electronic version of the *Macao SAR Gazette*, the Government Printing Bureau launched an electronic authentication version of the *Macao SAR Gazette* in November 2015.

By 31 December 2018, the Government Printing Bureau had established an online database containing the full text of 27,000 laws and regulations. This includes all the laws and regulations published since the establishment of the MSAR, as well as laws, decree-laws and other regulations gazetted between 1976 and 19 December 1999.

In 2018, the bureau's official website recorded an average of more than 350,000 hits per month.

Laws of the Macao Special Administrative Region

Prior to the establishment of the MSAR, the Government Printing Bureau published *Macau Laws*. Since the establishment of the MSAR, it has published *The Macao Special Administrative Region Laws*, a semi-annual reference document that provides easy access to major laws, by-laws, resolutions of the Legislative Assembly and administrative orders published in the *Macao SAR Gazette*.

External Services

The Government Printing Bureau offers external services including subscription of the *Macao SAR Gazette;* sales of government publications and other printed matter. In addition to the *Macao SAR Gazette*, the Government Printing Bureau sells printed books published by the bureau, books published by other governmental departments, government printed materials and CD-ROM of laws. The bureau also publishes announcements and notices of private institutions in the *Macao SAR Gazette*, and provides printing services to private organisations and individuals.

The Government Printing Bureau launched the Macao SAR Electronic Book Store mobile application in November 2013, offering electronic publications published by the Macao SAR, governmental departments and other institutions, and the *Macao SAR Gazette*. It also distributes promotional materials, and sells miscellaneous printed materials. The electronic authentication version of the *Macao SAR Gazette* was launched in January 2016, for free subscription by government departments and the public.

Information Technology

Science and Technology Committee

The Science and Technology Committee is a consultative body that advises the Government on the formulation of policies to promote technological development and modernisation.

Chaired by the Chief Executive, the Science and Technology Committee was formed with committee members including the Secretary for Transport and Public Works, the Secretary for Economy and Finance, the Secretary for Social Affairs and Culture, the Chairman of the Executive Committee of Macao Foundation, the Chairman of the Executive Committee of the Science and Technology Development Fund, the Rector of the University of Macau, the Rector of the Macao Polytechnic Institute, the Rector of the Macau University of Science and Technology, the President of the Board of Directors of the Macau Productivity and Technology Transfer Center (CPTTM), and the Director of the United Nations University International Institute for Software Technology, plus 18 other members who have excelled in the fields of science, technology and innovation, and who are appointed by the Chief Executive.

The Chief Executive has also appointed 10 internationally renowned experts and scholars as advisors to the council. They are Tsung Dao Lee, Lu Yongxiang, Zhu Lilan, Lu Zhonghe, Hui Yongzheng, Zhu Gaofeng, Li Lianhe, Song Yonghua, Jack Ma and Chan Ching Chuen.

Science and Technology Development Fund

The Science and Technology Development Fund was established under By-law No. 14/2004 of the Macao SAR and is supervised by the Chief Executive.

In line with Macao's policies on science and technology, the fund subsidises the development of educational programmes, research and other related projects.

Eligible categories for subsidies include science research, popular science, patents, joint projects and special subsidies for purchasing science equipment.

Macau New Technologies Incubator Centre

Co-founded by the Government and the private sector, the Macau New Technologies Incubator Centre (Manetic) was established in 2001, marking Macao's first step towards the development of innovative hi-tech industries.

Manetic is an incubator centre for new technology. Its major objective is to help turn business or product ideas into commercial ventures as quickly as possible. Manetic's targets include: to strengthen technological development in Macao and improve career opportunities for the next generation; to effectively utilise Macao's professional resources through cooperation with multinational companies; and to tap international resources through developing Macao as the technological development centre in the Greater China region.

Macao Post and Telecommunications Bureau

Since its foundation on 1 March 1884, the Macao Post Office has operated as a provider of postal services, complying with international conventions. On the same day, the first Macao stamp, titled "Crown", entered into circulation. In fact, Macao Post's history dates back a century earlier, to 1798, when sea mail services began.

Many new services have been introduced since the establishment of Macao Post. Alongside traditional postal services and Macao Postal Savings, established in 1917, Macao Post took over the operation of telephone and wireless telegraph services in 1927. Then, as society developed, these services were conceded to other entities or public departments. In 1981, the Companhia de Telecomunicacoes de Macau (CTM) took over the operation of telecommunications. In 2000, the Post Office's role as the supervisory body for telecommunications services was transferred to the DSRT.

On 19 December 2016, the MSAR Government issued By-law No. 29/2016 Amendment to Regulation of Organisation of Postal Services, to rename Macao Post as the Macao Post and Telecommunications Bureau (CTT) and merge it with DSRT, with effect from 1 January 2017.

As a bureau-level administrative entity with legal personality, the CTT enjoys autonomy over administration, finances and property, and performs the function of a credit institution. It aims to provide postal public services, and regulate, monitor, promote and coordinate any activity related to the telecommunications industry in Macao. It is under the supervision of the Secretary for Transport and Public Works.

Postal Services

In 2018, the local economy remained steady, and the volume of local mail was nearly the same as in 2017. The clients were mainly from the hotel and resort industry, the food and beverage industry and government departments.

Regarding international mail, in 2018 the volume of outbound international surface mail and airmail decreased by four percent and 17 percent, respectively, compared to 2017, while the volume of inbound international surface mail slightly decreased by one percent, with a six percent increase in international airmail. The main destinations of outbound mail were Hong Kong, mainland China, Portugal, the United States, Taiwan,

the United Kingdom, Singapore, Australia, Malaysia, Canada and Germany. The main sources of inbound mail were Hong Kong, mainland China, the United Kingdom, the United States, Taiwan, Portugal, Singapore, Switzerland, Japan, Sweden and Belgium.

Regarding registered mail, in 2018 the volume of local mail was one percent higher than in 2017. The clients were mainly from various government departments and associations. Meanwhile, the volume of outbound international surface mail increased by four percent, while that of international airmail decreased by 10 percent. The volume of inbound international surface mail decreased by 33 percent, while that of international airmail dropped by seven percent.

In 2018, Macao Post recorded 5.01 percent and 2.36 percent decreases in the numbers of outbound Express Mail Service (EMS) items and inbound EMS items, respectively, due to keen market competition. The main destinations of EMS items were the United States, Portugal, the United Kingdom, Hong Kong and mainland China. The main sources of EMS items were Japan, Hong Kong, Germany, the United States and Taiwan. At present, the EMS covers about 200 countries and regions.

The "e-Advice" Service launched by the CTT allows recipients who have registered for the SEPBox Service to choose whether receiving the electronic version of the Delivery Advice of EMS mail or parcels and related information. Users may collect the parcels from designated "elockers" at EMS Mails Collection Centre, Fai Chi Kei Post Office, Nova Taipa Post Office, University of Macau Post Office and Ocean Garden Post Office.

Secure Electronic Postal Services

To promote the development of e-services, Secure Electronic Postal Services has developed a solid platform for electronic deliveries. Services launched include provision of Postal Registered Electronic Mail, Postal Electronic Mail, eDirect Mail, e-bill services and electronic version of Delivery Advice of EMS mail or parcels via SEPBox. It also cooperated with various organisations in promoting electronic deliveries, such as promoting the use of SEPBox to receive e-bills with the Macao Water Supply Company and Companhia de Electricidade de Macau, and putting advertisements in magazines to enable the public to gain a better understanding of Secure Electronic Postal Services

In addition, to enhance the use of SEPBox, the CTT launched the "e-Advice" Service, through which the electronic version of the Delivery Advice for EMS mail or parcels can be received via SEPBox, so that customers can promptly receive accurate mailing information. Moreover, to facilitate registration for SEPBox, this is now possible in various organisations – the Identification Services Bureau, Science and Technology Development Fund, Public Administration and Civil Service Bureau, Financial Services Bureau, the Macao Water Supply Company Limited, Cultural Industries Fund, Companhia de Electricidade de Macau and Social Security Fund; the CTT (Central Post Office); Caixa Economica Postal and various CTT service counters and information kiosks (Fai Chi Kei, Red Market, Mong Ha, Rua do Campo, Nova Taipa, Ocean Garden, Coloane, Seac Pai Van, Carmo, Hac Sa Wan, University of Macau and eSignTrust Registration Authority).

Philately

In 2018, the CTT issued stamps with 12 different themes. As Chinese Zodiac stamps have always been a favourite of stamp collectors and citizens, the CTT issued "Year of the Dog" stamps, thematic pack, teapot gift sets and the "Macao's Lunar Year of the Dog" Lucky Charm.

In tandem with the first international stamp exhibition in Macao – "Macao 2018 – 35th Asian International Stamp Exhibition", three sets of stamps and a thematic pack were issued, featuring Macao's famous gourmet cuisine, local attractions, the CTT Macao Headquarters' Building and festive celebrations. During the exhibition, a postcard DIY printer was introduced, for customers to design their personalised postcards.

Moreover, China Post, Hong Kong Post and Macao Post jointly issued philatelic products to commemorate the opening to traffic of the Hong Kong-Zhuhai-Macao Bridge. Other items included "65th Macao Grand Prix" thematic pack, "Supplements for Philatelic Album of Macao 2018" and "Joy", a new edition of personalised stamps.

The CTT has always aimed to improve philatelic products and provide diverse services. Through various sales channels and payment methods, citizens and stamp collectors can easily enjoy philatelic sale services, latest philatelic items ordering and annual subscription service for collectors and dealers. The CTT also cooperated with overseas agents to provide online shopping services for collectors, and promote a culture of philately in Macao.

Caixa Economica Postal

Caixa Economica Postal (Postal Savings Office or CEP) is a credit institution operated by the CTT that serves as the CTT's cashier. It also provides a wide range of bank related services, such as credit facilities, remittance services, electronic payments and exchange services for the public.

In terms of credit facilities, CEP chiefly provides civil servants and employees of public services and private companies who sign an employee credit service agreement with guaranteed short-term credit. In 2018, CEP approved loans worth nearly 221 million patacas.

CEP and Western Union also jointly provide an express money transfer service. Using its advanced IT, global computerised money transfer system and counter network, customers can transfer money safely to over 200 countries and regions within a few minutes. There are currently 10 outlets for this service, at CEP, Airport Post Office, Ferry Terminal Post Office, Taipa Terminal Post Office, the Communications Museum Shop, Almirante Lacerda Post Office, Ocean Garden Post Office, Coloane Post Office, Seac Pai Van Post Office and UM Post Office.

CEP's electronic payment platform provides an online payment service for the public. The public can also apply for or settle payments of various government services via this platform in real time. In 2018, nearly 370,000 payment transactions were settled.

Furthermore, CEP provides foreign currency exchange services for 16 currencies, including the Hong Kong Dollar, US Dollar, Renminbi, Euro and Japanese Yen.

eSignTrust

As the only authentication entity approved by the Government, eSignTrust has been issuing electronic signature certificates to citizens, corporations and government departments and providing them with online identity authentication services, strengthening the authentication quality of electronic documents. In accordance with Law No. 5/2005 Electronic Documents and Digital Signatures, an electronic document signed with electronic certification is legally binding.

To comply with the Government's administrative policy on smart city development, Electronic Certification Services (eSignTrust) provided the "eSignCloud" service to several government departments during the year, including the Public Administration and Civil Service Bureau, the former Civic and Municipal Affairs Bureau, the Labour Affairs Bureau and the Public Security Police, for relevant smart governance projects. This e-service was applied to civil servant management, licence applications for food and beverage establishments, and applications for hiring non-local employees. Users may submit digital forms with electronic signatures to the Government's e-services platform.

eSignTrust was first recognised by the WebTrust for Certification Authorities in 2018, and received the WebTrust Seal. At the end of 2018, eSignTrust Online Payment Service was introduced, to process payments of annual fees for personal certificates and individual "eSign Cloud" subscriptions.

The recognition reflects the fact that eSignTrust operates in line with international standards and is committed to providing a good certification infrastructure for smart city development. eSign Trust will continue striving for service improvements, while providing a more convenient electronic certification service to users.

Telecommunications Services

Fixed-network and External Telecommunications Services

At the end of 2018, there were 123,469 fixed-network lines in Macao, along with 632 public pay phones offering local call services and IDD access from public locations throughout the Macao peninsula and the two islands. Callers in Macao can currently make IDD calls to 257 countries and regions.

Public Mobile and Wireless Communications Services

As the Government issued public network licences for terrestrial Long-Term Evolution (also known as 4G) mobile telecommunications and provision of relevant public mobile telecommunication services to Macao Telecommunications Limited, China Telecom (Macau) Limited, SmarTone Mobile Communications (Macau) Limited, and Hutchison Telephone (Macau) Company Limited in June 2015, and has issued licences for provision of 2G/3G public mobile telecommunication services, plus the virtual mobile network operator permit issued to Kong Seng Paging Limited, mobile phone services in Macao are now 2G, 3G and 4G compatible. As information and telecommunication technology become more popular, and user demand for mobile data services rises, 4G services have become dominant in the market.

At the end of 2018, there were 2,181,194 mobile telecommunication service users, with the per capita mobile penetration rate at 328.79 percent.

Mobile Communication Service Information

Year	No. of radio paging users	No. of mobile phone users	No. of rechargeable mobile phone cards
2003	3,453	198,696	165,335
2004	2,728	228,296	204,154
2005	2,513	259,336	273,422
2006	1,891	301,512	334,835
2007	2,782	356,117	438,206
2008	2,780	395,943	536,653
2009	3,097	420,098	617,282
2010	3,204	459,330	662,931
2011	3,101	525,209	827,985
2012	1,886	564,576	1,048,881
2013	1,278	597,012	1,125,233
2014	865	638,725	1,217,728
2015	722	677,018	1,219,079
2016	701	700,609	1,269,363
2017	546	743,261	1,505,863
2018	334	764,085	1,417,109

Internet and Broadband Services

At the end of 2018, there were 192,939 registered broadband subscribers, 3.39

percent more than a year earlier. Of these subscribers, 171,488 were residential broadband services subscribers, representing approximately 89.55 percent of all households[1].

Moreover, the urban wireless broadband network project financed by the Government, commenced in 2009, and began providing services to residents and tourists in September 2010. As at the end of 2018, there were 194 WiFi Go service spots, and approximately 74 million successful connections had been recorded.

In 2017, the CTT allowed licensed internet service providers (ISPs) to install outdoor Wi-Fi hotspots and provide services to the public upon application and approval. In December 2017, the CTT encouraged Macao organisations and institutions to provide free Wi-Fi services in various locations, all with the network name "FreeWiFi.MO", to expand coverage of free Wi-Fi services, and enable local residents and tourists to more easily identify the free public Wi-Fi service in Macao. At the end of 2018, there were 438 locations providing the "FreeWiFi.MO" service.

Television Services

To ensure citizens' access to basic television channels, the Government categorises television services into free and pay services. In April 2014, the Government, Teledifusao de Macau (Macau Broadcasting Company, TDM) and the Post Office (now the CTT) co-established the Macau Basic Television Channels Limited. In cooperation with the existing terrestrial broadcasting service providers, the company connects the underground transmission network with the networks of these providers, thereby providing support services enabling the public to receive basic television channels, as a supplementary means for people in Macao to receive free television signals. These support services for the public were renewed for two years starting from 1 April 2018.

Regarding terrestrial pay television services, with the policy objective to liberalise the market for television services, on 22 April 2014 the Government endorsed the renewal of the non-franchised contract for Macau Cable TV, thereby creating the conditions for a fully liberalised market for pay television services.

In addition, the Government issued a new executive order in July 2014, exempting satellite television receivers with diameters of less than three meters from approval by the Government, provided that the receivers are used to receive signals of television programmes for private use. This encourages adoption of diversified modes of reception of television services, by allowing the public to have easy access to television programmes via satellite television signals.

Registration and Management of Internet Domain Names

The University of Macau's previous appointment to manage and register the top-

level domain ".mo" for the Macao SAR ended in 2010. Consequently, in March 2011, the Government launched the Macao Network Information Centre and awarded a service contract to HNET Asia Ltd to administer and operate Macao domain names.

In 2014, the former DSRT liaised with the Macao Network Information Centre to introduce services for Chinese and Portuguese domain names for the Internet country code ".mo", electronic payment, optimisation of the application procedures and amendment of domain names, to provide more diverse, better quality domain name services. The DSRT introduced IPv6 and ".mo" domain name services in 2015 and 2018, respectively, further advancing the development of domain name services in Macao.

IPv6 Network Research Laboratory

To introduce IPv6 and its related setup techniques to the industry and personnel in the relevant fields, and to assure the industry of the application of IPv6, the former DSRT worked with the Macau Polytechnic Institute in setting up the IPv6 Network Research Laboratory. This aimed to demonstrate the application and connection of IPv6, and to conduct related research and development. The laboratory commenced operations on 16 April 2013. The CTT also continued working with Macau Polytechnic Institute in organising IPv6 promotional events.

Development of Terrestrial Digital Broadcasting

Following the global trend of terrestrial digital broadcasting, the number of terrestrial digital broadcasting channels provided by Teledifusao de Macau (Macau Broadcasting Company, TDM) increased to 13. To ensure the availability of quality products that meet residents' needs, and to enable residents to enjoy the programmes aired on Macao's terrestrial digital broadcasting channels, the former Bureau of Telecommunications Regulation built the Digital Terrestrial Television Research and Testing Centre, which commenced operation on 20 September 2010, in partnership with Macao Polytechnic Institute. Following the centre commencing operations, certain integrated television sets and decoders have been tested, and the reports have been completed.

Radio Frequency Allocation and Coordination with Neighbouring Regions

After signing the Mainland China and Macao Frequency Coordination Agreement for Terrestrial, Mobile/Fixed Broadcasting (Audio and Television) in 2002, mainland China and Macao have maintained strong links in the development of wireless communication services.

In conjunction with mobile network operators in Zhuhai and Macao, the CTT and

the radio authority of Zhuhai regularly tests for cross-boundary overspill of signals, and requests operators to introduce improvement measures according to the test results, to reduce the problem of signal overspill.

1: *According to the results of the 2017 population census announced by the Statistics and Census Service, there were 191,500 households at the end of 2017.*

港珠澳大橋

Ponte Hong Kong-Zhuhai-Macau

澳門

澳門郵電 CTT

HONG KONG-ZHUHAI-MACAO BRIDGE

港珠澳大橋
Ponte Hong Kong-Zhuhai-Macau
30.10.2018
港珠澳大橋 Ponte Hong Kong-Zhuhai-Macau
港珠澳大橋
Ponte Hong Kong-Zhuhai-Macau
12.00
澳門
珠海

MACAU, CHINA
中國澳門
港珠澳大橋
PONTE HONG KONG-ZHUHAI-MACAU
HONG KONG-ZHUHAI-MACAO BRIDGE
首日蓋印
澳門郵電 CTT
港珠澳大橋
Ponte Hong Kong-Zhuhai-Macau
12.00
澳門
珠海

港珠澳大橋
Ponte Hong Kong-Zhuhai-Macau
中國澳門
MACAU, CHINA
2.00
3.00
5.50

The Hong Kong-Zhuhai-Macao Bridge (HZMB) is a mega-sized sea crossing project linking the Hong Kong Special Administrative Region to the east and Zhuhai City of Guangdong Province and the Macao Special Administrative Region to the west. It is regarded as an important part of the ever-expanding network of expressways in the Pearl River Delta region. With a total length of 55 kilometres, the HZMB straddles across Lingding Channel of the Pearl River Estuary. The construction works of the Main Bridge started on 15th December 2009 and has passed authorities' evaluation after its completion in February 2018. The Bridge is designed to have a service life of 120 years. With a six-lane long tunnel and the steel bridge structure, it is the longest bridge-cum-tunnel sea-crossing expressway in the world.

The HZMB consists of three main construction projects, including a main construction project of the sea-crossing bridge-cum-tunnel road, cross-border checkpoints of Hong Kong, Zhuhai and Macao, and the cross-boundary land-based connection among Hong Kong, Zhuhai and Macao.The 29.6-kilometer long main body adopts the design of a bridge-island-tunnel combination, which includes a 6-7 kilometer long tunnel running across the Lingding West Channel and the Tonggu Channel; a 22.9-kilometer main bridge connecting an artificial island on both ends of the tunnel,thus providing a seamless connection between the bridge and tunnel.The main part of the sea-crossing bridge-cum-tunnel road was built in accordance with the standard of a dual 3-lane carriageway with a designated speed of 100 km/h. The HZMB is composed of a non-navigable span bridge and a navigable span bridge. The three cable-stayed bridges of the navigable span bridge run east to west across the major navigation channels like the Qingzhou Channel, the Jianghai Channel and the Jiuzhou Channel, which meet the navigation requirement of the passing of 3,000 tons vessels, 5,000 tons vessels and 3,000 tons vessels respectively. It allows 300,000-ton oil tankers to pass above the tunnel.

The Hong Kong-Zhuhai-Macao Bridge Authority, jointly organized by the governments of the People's Government of Guangdong Province, the Hong Kong Special Administrative Region and the Macao Special Administrative Region, is mainly responsible for the construction, operation, maintenance and management of the Bridge. The three regions are responsible for the respective customs inspections, and the construction and administration of the Boundary Crossing Facilities have also been assumed by each of the parties. The Macao and the Zhuhai Boundary Crossing Facilities both locate on the Zhuhai-Macao Boundary Crossing Artificial Island at the Macao New Urban A Zone. The Macao Boundary Crossing Facilities, located on the south of the Zhuhai-Macao Boundary Crossing Artificial Island and covering an area of approximately 71.61 hectares consist of a passenger clearance building, an east parking lot and a west parking lot. The HZMB will drastically slash the travel time among Hong Kong, Zhuhai, and Macao from several hours to 30 minutes that a 'one-hour living circle' will be created.

The Macao Special Administrative Region Government Infrastructure Development Office proactively coordinates the overall infrastructure construction of the Macao's Boundary Crossing Facilities with an aim to ensure that adequate preparations would be made for the opening of the HZMB. The commissioning of the HZMB will promote the growth in economy, trade and tourism of Hong Kong, Zhuhai and Macao. The creation of a 'one-hour living circle' complies with the national policies of building a closer connection among the three places and is thus beneficial to Macao's long-term developments.

MACAO YEARBOOK 2019

11

LAND, INFRASTRUCTURE, HOUSING AND PUBLIC UTILITIES

Lands, Public Works and Transport Bureau

The Lands, Public Works and Transport Bureau (DSSOPT) is a public administrative authority that provides support to other branches of government in matters of land utilisation and management, urban planning, infrastructure, and basic services.

In accordance with the principles and guidelines set out in the Macao Special Administrative Region Urban Development Strategy Study (2016-2030), and following the relevant legal and regulatory requirements set out in the Urban Planning Law, the DSSOPT commenced drafting Macao's urban development master plan in 2018.

The study of the New Urban Zone Area A was carried out as planned, resulting in 27 planning conditions being drafted in 2018. These mainly covered public housing units and areas for public facilities, with a view to providing 32,000 housing units and accommodating 96,000 people to meet the planning objectives, and providing the necessary facilities for supporting people's livelihoods.

New Urban Zone Area B has been designed for implementing the planned development of an administration and judicial zone, including the buildings for the Courts of Final Appeal, Second Instance and First Instance; and offices for the Macao Prosecutions Office, the Commission Against Corruption, the Commission of Audit, and the Unitary Police Services. The Government has been closely following up regarding preparations for building construction, including improvements to road and transportation plans in the vicinity, together with infrastructure and building facility layouts, and assessing the scale of each development, in order to proceed with the public infrastructure projects within the zone.

Regarding the New Urban Zone Area E1, which will feature a combination of residential, public and infrastructure areas, various road networks have been established, and locations of public and infrastructure facilities have been confirmed, based on existing plans. The draft planning conditions were also determined in line with the development of relevant facilities, for better overall development of New Urban Zone Area E1 together with its neighbouring regions.

Regarding the ongoing developments of small zone projects, the final report of the Macao Eastern District Coordinated Development Plan was completed. This contains proposals for practical major development projects involving transportation facilities, public facilities, infrastructure and public open areas, all of which have been compiled on the basis of coordinated development, in addition to following design guidelines and detailed planning.

The final report of the study on the future use and planning of the original site of Macao (Yat Yuen) Canidrome Club was also completed. This includes a set of planning and design guidelines for the future use of the Canidrome land plot, transportation layout guidelines, as well as conceptual planning of the overall landscape, green space and streets.

As regards the planning of the Coloane Lai Chi Vun and Rua dos Navegantes

Promenade, a follow-up study was conducted based on the results of immobile heritage assessments by the cultural authorities.

2018 also saw the commencement of the revised overall planning of the Macao border checkpoints and their neighbouring regions, involving an investigation of the transportation and land use of border checkpoint peripheries.

The DSSOPT also drafted the planning conditions of land zones without detailed planning, adhering to the procedures outlined in the Urban Planning Law and the Rules for the Implementation of the Urban Planning Law. In 2018, the DSSOPT issued 105 draft planning conditions (excluding the 27 planning conditions drafts of New Urban Zone Area A) to support urban development.

Construction Companies and Contractors

According to DSSOPT statistics, a total of 1,383 construction contractors and companies had registered or renewed their registrations by the end of 2018. With Law No.1/2015 – "Qualification System for Urban Construction and Town Planning" – coming into effect, the DSSOPT added data on categories and registrations of urban construction and town-planning companies. Details are as follows:

Category		New registration	Renewed registration	Total
Construction Contractors (urban construction)	Construction	125	842	967
	Fire	3	72	75
	Sub-total	**128**	**914**	**1,042**
Companies (urban construction and urban planning)	Construction	20	91	111
	Fire	2	10	12
	Sub-total	**22**	**101**	**123**
Companies (gas)		3	31	34
Construction contractors (urban construction)		9	175	184
	Total	**162**	**1,221**	**1,383**

Technicians

Technicians, including engineers and architects, are categorised according to their professions in the above-mentioned law. By the end of 2018, over 1,208 technicians in 11 construction related professions had registered or renewed their registrations, with details as follows:

Category		New registration	Renewed registration	Total
Technicians (construction and urban planning)	Architects	6	230	236
	Landscape Architects	1	3	4
	Civil Engineers	20	516	536
	Fire Engineers	2	6	8
	Electrical Engineers	16	89	105
	Electrical and Mechanical Engineers	13	163	176
	Mechanical Engineers	13	106	119
	Chemical Engineers	3	6	9
	Industrial Engineers	1	1	2
	Fuel Engineers	0	2	2
	Engineering Technicians	0	11	11
	Total	**75**	**1, 133**	**1, 208**

Infrastructure Projects

Private Construction Projects

According to statistics from the Lands, Public Works and Transport Bureau, in 2018, 32 building projects providing 4,158 residential flats with a total floor area of 458,996 square metres, 73 commercial units with a total floor area of 71,824 square metres, one industrial/warehouse unit with a total floor area of 10,351 square metres, and 4,429 parking spaces (3,343 for private cars and1,086 for motorcycles) in car parks

with a total area of 151,169 square metres were completed. No office units were completed during the year.

During 2018, construction commenced on 22 private projects providing 1,071 units with a total floor area of 82,518 square metres, 106 commercial units with a total floor area of 12,010 square metres, 19 office units with a total floor area of 5,586 square metres, one industrial/warehouse unit with a total floor area of 16,925 square metres, and 570 parking spaces (442 for private cars and 128 for motorcycles) in car parks with a total area of 13,162 square metres.

By the end of 2018, 8,047 units were under construction, of which 7,659 were residential units with a total floor area of 705,824 square metres, 365 were commercial units with a total floor area of 64,752 square metres, 21 were office units with a total floor area of 6,780 square metres, and two were industrial warehouses with a total floor area of 17,982 square metres; as well as 7,987 parking spaces (4,984 for private cars and 3,003 for motorcycles) in car parks, with a total area of 216,244 square metres.

During the year, a total of 21,869 units were still in the design phase, of which 20,624 were residential units with a total floor area of 2,832,489 square metres, 1,217 were commercial units with a total floor area of 317,081 square metres, 23 were office units with a total floor area of 22,363 square metres, and five were industrial warehouses with a total floor area of 20,463 square metres; as well as 26,935 parking spaces (21,195 for private cars and 5,740 for motorcycles) in car parks, with a total area of 930,949 square metres.

In 2018, 8,512 applications were received for private construction projects, of which 2,286 applications were for demolition / maintenance / renovation, 821 were for simple projects in common parts of buildings, food and beverage establishment integrated construction projects, and construction licences, and 746 were for construction/ expansion. During the year, 9,224 applications from 2018 and the previous year were handled, a majority of which were in the above-mentioned three major categories, including 2,187 applications for construction/expansion projects; 1,697 applications for demolition/maintenance/renovation projects, and 790 applications for simple projects in common parts of buildings, integrated construction projects for food and beverage establishments/construction licences.

Public Construction and Infrastructure Projects

To enhance the quality of various community facilities and government services, the Lands, Public Works and Transport Bureau followed up on a number of public works projects in 2018, with 75 projects commenced and 41 projects completed during the year.

Major projects that require open tendering include: the renovation of the government headquarters at Avenida do Conselheiro Ferreira de Almeida; renovation of the office floors of the Economic Services Bureau and the Legal and Judicial Training Centre, both

of which are in the Luso International Banking Building; renovation of the building façade and waterproof roofing of the Fire Service Sai Van Lake Station; and the maintenance and renovation of the office building of the Marine Enforcement Department of the Macao Customs in Ilha Verde.

There were 65 projects costing less than 2.5 million patacas, including five involving the demolition of dangerous old buildings, and 11 involving the demolition of illegal structures. Ten projects cost more than 2.5 million patacas.

Major projects completed in 2018 included 49 that commenced in previous years: one from 2014, three from 2016, four from 2017, and 41 from 2018. Among them, large-scale projects were the construction of Home for the Elderly and Convalescent Hospital Ka Ho, which commenced in 2014; the Outer Harbour Ferry Terminal boarding bridge replacement project and the reconstruction of the Fire Service Coloane Island Station, which commenced in 2016, and the renovation of a vehicle examination centre in Cotai and the offices on 21st and 22nd floors of Centro Golden Dragon, which commenced in 2017.

In 2018, work commenced on three planned projects: maintenance of the Meteorological and Geophysical Bureau office building, renovation of the office building of the Industrial and Commercial Development Fund of Macao on Rua de S. Domingos, and renovation of the Edificio Sede dos CTT on Estrada de D. Maria II. The public tendering process for each project proceeded smoothly.

On the infrastructure front, the Government continued following up regarding the plan for flood prevention and drainage in the Macao peninsula and the Islands District, road network implementation, sewer improvements, cross-harbour bridges and slope monitoring and maintenance.

In 2018, two studies were completed, three studies commenced, one design project was completed, seven design projects commenced, 44 construction projects were completed, and 41 constructions projects commenced. Five of these projects were relatively large-scale and involved public tendering.

In 2017 and 2018, to eliminate flood and drainage problems of Macao in the long run, the Lands, Public Works and Transport Bureau completed the Masterplan for Flood Prevention and Drainage at the Promenade of Inner Harbour of Macao and consulted relevant national ministries. In 2018, the masterplan was approved by the State Council.

The next-stage Feasibility Study on Sluices at the Inner Harbour of Macao: Engineering Investigations and Focus Study will commence, and will begin with the preliminary design of a tide gate. A Study on Flood Storage Pond for Rainwater at the Inner Harbour and a Study on Improvement of Drainage System cum Soil Investigation Services will also be launched, to explore the feasibility of improving Inner Harbour drainage using a storage pond.

Beside Inner Harbour, other smaller districts also started flood prevention and drainage projects, including Improvement Works for Outer Harbour Dikes – Compilation

of Project Plan, Flood Prevention Work along the Coast from Fai Chi Kei to Ilha Verde – Compilation of Project Plan, and Report on the Overall Plan for Flood Prevention and Drainage at the West Side of Coloane.

The work on sewers, road transport networks, cross-harbour bridges and slopes mainly comprises five parts.

1. Major studies included: Study on Flood Storage Pond for Rainwater at the Inner Harbour, and Improvement of Drainage System cum Soil Investigation Services; Construction of a Pedestrian System Surrounding Guia Hill – Compilation of Environmental Impact Assessment; Nobre de Carvalho Bridge – Preliminary Design, Engineering Investigations and Focus Study on the Construction of Two Cross-harbour Tunnels; and the Construction of a Cross-harbour Tunnel in New Urban Zone Areas A and B – Preliminary Design;

2. Project plans that were being compiled included: Seac Pai Van Reservoir neighbouring road and sewer works; road works at Vala das Borboletas, Coloane; infrastructural works of New Urban Zone Area B East; temporary pillar works at Zone F of the skywalk at Avenida Marginal do Lam Mau; Bridge Connecting New Urban Reclamation Zone A and Macao Peninsula (A2) – Compilation of Project Plan; improvement works of the footbridge at Jardim Triangular da Areia Preta; and the construction of the Pedestrian System Surrounding Guia Hill;

3. Monitoring projects included: Structural Safety Monitoring of Sai Van Bridge and Friendship Bridge; and

4. Construction works mainly included: road and drainage network works near Flor de Lotus Road in Cotai; New Urban Zone Area E2 road and drainage system construction; design and construction of sewage interceptors at rainwater outlets along the coast of Areia Preta; sewer works in the area near the Athletes Training Centre; renovation of the sewer at Praça da Assembleia Legislativa; road and pedestrian walkway improvement work at Governador Nobre de Carvalho Avenue on Taipa island; structural strengthening and maintenance of the flyover near Macau International Airport; maintenance of girders and bolster base of Friendship Bridge; slope strengthening at Governador Nobre de Carvalho Avenue on Taipa island; construction of the Skywalk at Avenida de Guimarães on Taipa; and construction of a footbridge near Macau Fisherman's Wharf on Amizade Avenue.

Infrastructure project	Number of projects commenced	Number of projects completed
Study	3	2
Design	7	1
Construction	41	44

Infrastructure Development Office

The Infrastructure Development Office is responsible for facilitating and coordinating the execution, maintenance, modernisation and development of major construction projects in Macao. It also studies, follows up regarding and develops cooperative construction projects within the Greater Pearl River Delta region, which included:

- The study, coordination and implementation of the plan for constructing complementary facilities of the Macao landing point of Hong Kong–Zhuhai–Macao Bridge, including its links and other auxiliary infrastructures and facilities;
- Provision of technological and administrative support to the Macao representatives in liaison groups concerning the construction of the Hong Kong-Zhuhai-Macao Bridge;
- Planning construction projects designated by the Government within the Guangdong-Macao cooperation areas, in accordance with the needs of the MSAR;
- The study, coordination and implementation of the plan for developing various major infrastructure facilities in the MSAR; implementation of the concession of public works contract, procurement and provision of services; preparation of contracts, coordination of supervision and infrastructure testing and related works; and
- Promotion of direct or indirect participation in the study and implementation of construction works, as well as cooperation among departments and bodies responsible for procuring and providing services; promotion and follow-up work on the implementation of the plans to construct a variety of land, sea and air cross-border infrastructure as well as modernisation studies.

Development of Border Checkpoints

Taipa Ferry Terminal

To meet the demand for the development of maritime passenger transportation services, the Government modified the design of the Taipa Ferry Terminal by increasing the number of berths for ferries with a capacity of 400 passengers from eight to 16, and constructing a helicopter pad on the rooftop. The Taipa Ferry Terminal not only helps divert the saturated flow of passengers and ferries at the Outer Harbour Ferry Terminal, but also serves as a step towards a new maritime network for Macao and cities in the Pearl River Delta region.

Road Infrastructure

Coloane Ka-Ho Tunnel

The Coloane Ka-Ho Tunnel project consists of three parts: the tunnel, the exterior south section and the north linkage section. The project will connect Ka Ho and the east of Cotai, for convenient movements of residents and vehicles to and from the port without having to make a detour via Estrada da Barragem de Ka Ho, Estrada de Nossa Senhora de Ka Ho, Estrada do Altinho de Ka Ho, or Taipa-Coloane Causeway. It can also substantially reduce commuting times and ease the long-term traffic burden.

Public Housing Projects

To alleviate the public housing demand, since 2010 the Infrastructure Development Office has commenced several public housing projects, including the public housing estates in Seac Pai Van and Taipa Lot TN27, redevelopment of public housing in Fai Chi Kei, Bairro da Ilha Verde Lot 1, 2 and 3. Construction of public housing that started in 2012 and 2013 at Northeast Road on Taipa, Rua de Choi Long, Fai Chi Kei Lots E, F, L4 and L5 has been completed.

Other projects underway included the second phase of the Mong Ha Public Housing project, Rua Central De T'oi San Public Housing Estate and Avenida de Venceslau of Morais Public Housing project. Also, work commenced on designing the public housing project on Wai Long Avenue, Taipa.

The second phase of Mong Ha Public Housing that is under construction and the sport centre that is under reconstruction occupy about 7,432 square metres. The area they occupy is mainly used for public housing, public parking, commercial and social facilities, a bus interchange station and Mong Ha sport centre. It is expected that the housing project here will provide 768 residential units, and about 700 private car and motorcycle parking spaces.

The Rua Central de T'oi San Public Housing Estate that is under construction occupies about 3,000 square metres, and mainly comprises public housing for the elderly, social facilities and public parking. The 34-storey Housing Estate will provide 510 units. The public car park will provide about 220 spaces for private cars and motorcycles.

The Avenida de Venceslau of Morais Public Housing project that is under construction occupies about 11,443 square metres. The core of the project is public housing, supplemented by a bus station, an underground public carpark and integrated government services. The project is expected to provide 1,590 residential units, as well as nearly 900 parking spaces for light vehicles and motorcycles.

New Urban Reclamation

In line with Macao's future development and to increase land supply, in 2006 the Government reported to the Central People's Government about the land reclamation plan. After the new urban reclamation plan was approved by the Central People's Government in December 2009, the Government stepped up its efforts to carry out the reclamation work. The new urban reclamation area is divided into five areas, with a total area of about 350 hectares. It is expected to provide a land reserve for Macao for the coming 20 to 30 years.

Area A is located to the east of Areia Preta and Friendship Bridge on the Macao peninsula, and north of the Outer Harbour watercourse of Macao, covering an area of approximately 138 hectares. It is planned that the area will be used for commercial and residential areas, infrastructure, public/community facilities, and various industries. The public tendering process for the design of the area's public housing has been conducted.

The 33-hectare Area E1 is at the north-eastern tip of Taipa island, neighbouring Pac On Ferry Terminal, which is under construction, and the international airport. The area will be used for community facilities and transport infrastructure. In-depth planning based on existing plans and the urban development situation is now underway.

The reclaimed land in Area C totals 320,000 square metres and is located to the north of Taipa island in the sea facing Avenida dos Jardins do Oceano. It is mainly earmarked for public community facilities and a residential area. The required reclamation and dyke construction began in November 2018.

The design of the dykes in New Urban Zone Area D was completed in 2018.

Cross-border Cooperation Projects

Hong Kong-Zhuhai-Macao Bridge

Formed in July 2010 by the Hong Kong Special Administrative Region Government, the People's Government of Guangdong Province and the Macao Special Administrative Region Government, and officially launched on 27 September 2010, the Hong Kong-Zhuhai-Macao Bridge Authority is responsible for organising and implementing the construction, operation, maintenance and management work of the main bridge.

The Hong Kong-Zhuhai-Macao Bridge features a 29.6-kilometre, dual 3-lane carriageway. With a bridge-cum-tunnel structure, it includes an immersed tunnel that is about 6.7 kilometres in length, and two artificial islands. It will facilitate economic integration in the Pearl River Delta Region. Synergy of integration arising from construction of the bridge will foster industrial development in the Pearl River Delta region. Construction of the artificial island for the Zhuhai/Macao boundary crossing

facilities commenced in late 2015, and it came into service in parallel with the opening of the Hong Kong-Zhuhai-Macao Bridge on 24 October 2018.

Construction of New Guangdong-Macao Border Crossings – new checkpoint

Construction of New Guangdong-Macao Border Crossings is part of the Guangdong-Macao Cooperation Project, comprising a new checkpoint (Qingmao border control), border crossings and the Canal dos Patos improvement works.

In 2018, work began on structural engineering of the two checkpoint buildings at the Macao side and the Zhuhai side of Qingmao border control, together with the crossings. Design of the Canal dos Patos improvement project also started during the year.

Transportation Infrastructure Office

On 1 November 2007, the Government established the Transportation Infrastructure Office, aiming to foster the modernisation and improvement of transportation infrastructure as well as the construction of the Macao Light Rail Transit (LRT) System, to provide comfortable and highly efficient modern transportation for citizens and tourists.

After years of planning and preparations, the civil construction works for Macao's LRT system began in 2012. In 2018, the 9.3-km-long LRT Taipa line and installation of system facilities were basically completed. A total of 110 carriages arrived in Macao as scheduled, and system testing was conducted. Meanwhile, preparatory works for the LRT system operations were accelerated. The bill for the Law of the Light Rail Transport System was submitted to the Legislative Assembly for deliberation in the fourth quarter of the year.

As regards LRT expansion, the preliminary construction works of Barra Station were basically completed in the latter half of 2018, after which the construction of the main body of the station immediately commenced. There was good progress with preliminary construction Seac Pai Van line. Meanwhile, the study on the LRT east line also began in 2018.

Macao Civil Engineering Laboratory

The Macao Civil Engineering Laboratory was established in 1988, and is a non-profit public legal body engaged in science and technology, which is autonomous in terms of technology, budget and assets. The chairpersons of the Board of the General Assembly and Board of Directors are both appointed by the Government.

The responsibilities of the Macao Civil Engineering Laboratory are to provide civil engineering and related technical support to the Government and relevant industries.

Housing

Housing Bureau

The Housing Bureau will fully implement the Government public housing policy "Public housing as the core, supplemented by the Home Ownership Scheme"; rationally prioritise the allocation of public rental housing resources, with priority to be given to low-income families; provide technical support for strata-title buildings management; monitor the real estate agency business; and issue the related licenses in accordance with the law.

Home-Ownership Scheme Housing

In the early years, Home-Ownership Scheme housing units were sold to families on the Housing Bureau's waiting list on terms and at prices stipulated in the land grant contracts by the bureau in accordance with Decree-Law No. 13/93/M.

Under Law No. 10/2011 - "The Home-Ownership Scheme Housing Law" amended by Law No. 11/2015, the construction of Home-Ownership Scheme Housing is led by the Government and executed by the Housing Bureau or other public authorities appointed by the Chief Executive.

Rationale for Home-Ownership Scheme Housing

Home-Ownership Scheme Housing is intended to assist Macao residents of a particular income level and financial situation to meet their housing needs, and to promote a housing supply that suits the practical needs and purchasing power of Macao residents.

Housing Allocation

The process of allocating 1,900 multiple-room Home-Ownership Scheme housing units to those who submitted general applications at the end of 2013 is still under progress. As at 31 December 2018, a total of 1,606 family applicants were allocated housing units.

The process of allocating 1,544 one-bedroom Home-Ownership Scheme housing units of Ip Heng Building to those who submitted general applications began in early 2013. In 2018, 73 family applicants were allocated Home-Ownership Scheme housing units.

Public Housing

Public housing refers to units leased by the Government to low-income families and those in adverse circumstances. Methods for the allocation and management of public housing are governed by By-law No. 25/2009.

Public housing is distributed to families of weak financial standing in the form of leasing. Families of weak financial standing are defined as those whose household incomes fall beneath the legally stipulated levels.

Granting of Public Housing

The Housing Bureau launched a new round of open applications for public housing in November 2017. By the end of the application period, a total of 9,621 applications were received. The provisional waiting list and delisted names were announced on 5 December 2018, following a review of the applications. A confirmed waiting list will be announced after any statements of objection have been handled, and there will be a final selection and review process, before housing units are allocated.

Building Management

The Housing Bureau exercises its supervisory power under Decree-Law No. 41/95/M dated 21 August to manage the common areas of Home-Ownership Scheme housing, and to require relevant parties to fulfil their duties stipulated in the applicable laws and regulations. The Housing Bureau may impose fines on management entities or strata-title building owners who violate their duties as stipulated in the Decree-Law.

The Housing Bureau also facilitates and helps owners of strata-title buildings under the Home-Ownership Scheme with arrangements for setting up management organs and convening the first meetings, and provides technical assistance to owners, management organs and corporate managers of strata-title buildings. In 2018, the Bureau handled 4,054 cases of Hope-Ownership Scheme management-related affairs, fostered 80 management organs of Home-Ownership Scheme housing that are already in place and operating effectively, and handled 1,973 cases involving convention of owners of strata-title buildings under the Home-Ownership Scheme and affairs regarding the operations of management organs. There were 4,814 cases of assistance provided for the management of private housing common areas.

The Housing Bureau also keeps abreast of all necessary renovation and improvement works for public housing. In addition to public facilities of housing estates, it strives to improve indoor facilities, so as to improve the quality of life of its tenants, particularly for elderly single people.

Strata Title Buildings Management Commercial Operation

In accordance with the Law on the Commercial Management of Strata Title Buildings effective from 22 August 2018, it is mandatory to obtain a valid licence to engage in commercial management of strata-title buildings. As at 31 December 2018, a total of 66 licences and 184 temporary licences for commercial management of strata-title buildings had been issued. Applications for licences of strata-title building management and the related monitoring and supervision are handled by the Housing Bureau.

Seven Schemes Under the Property Maintenance Fund

To encourage and help homeowners to perform their duties regarding maintenance of common building areas, in March 2007 the Housing Bureau established the Property Maintenance Fund to assist them with inspecting, testing and repairing, removing illegal structures within and establishing management organs of the common areas of private housing.

In 2018, 300 applications for the seven schemes under the Property Maintenance Fund were approved, with subsidies totalling over 24 million patacas. A total of 3,499 applications have been approved since the establishment of the fund, granting subsidies totalling 350 million patacas.

Joint Centre for Building Leakage Issues

Through cross-departmental cooperation among the Lands, Public Works and Transport Bureau, Civic and Municipal Affairs Bureau, Health Bureau, Legal Affairs Bureau and Housing Bureau, the Government established the Joint Centre for Building Leakage Issues on 1 February 2009. The centre provides one-stop assistance to owners of flats that are origins of leaks to encourage maintenance. In 2018, 1,655 cases were filed for investigations; and there was follow up work on 3,154 cases*, of which 2,034 were completed**.

** Total number of new and old cases pending processing to date*

*** Total number of cases completed in 2018*

Squatter Area Clearance

To comply with Macao's urban planning policies and the reallocation of land use, the Housing Bureau is committed to clearing squatter camps and relocating affected residents. In 2018, six squatter dwellings were demolished. By the year-end, 447 squatter dwellings remained, of which 192 were on the Macao peninsula and 255 in the Islands District.

Real Estate Agency Business

According to the Real Estate Agency Law, which took effect on 1 July 2013, all real estate agents and brokers are required to obtain a valid licence before engaging in business. The Housing Bureau has also set up a unit to follow up applications for licences for real estate agents and brokers, and be responsible for the relevant monitoring work.

Issuing Relevant Licences

By December 2018, the numbers of licences issued for real estate agents and brokers totalled 1,964 and 6,842, respectively; only 28 valid five-year provisional licences for real estate agents remained.

Supervision

To facilitate the implementation of laws and various tasks, during 2018 about 2,079 inspections were conducted in business premises of real estate agents, to check their compliance with the Real Estate Agency Law and initiate proceedings against alleged administrative irregularities. Complaints about real estate agents and brokers were received and handled in accordance with the relevant laws. During the year, 30 cases involving real estate agents and one case involving real estate brokers resulted in penalties for breaking the law.

Land Management

Lands Committee

The Lands Committee is a consultative body whose work is supervised by the Secretary for Transport and Public Works. The committee is responsible for advising on land use by recipients of land grants, in terms of legal and contractual obligations. It also advises on fines or other penalties for land grant recipients who fail to comply with the laws and terms of their contracts; cases concerning the public use of granted land; and granting, renewing, renouncing or cancelling temporary land-occupation licenses.

Land Concessions

According to the DSSOPT's statistics, 14 land grant contracts were completed and

21 lease and grant contracts were annulled in 2018. These contracts were as follows:

1. Leases and grants: A total of nine newly granted contracts involving a total area of 27,844 square metres of land; and a return of land of 58,738 square metres, involving a total floor area of 92,915 square metres;

2. Long-term leases: There were five contracts in total, no new land was granted, and 41 square metres of land was returned, involving a total floor area of 5,126 square metres;

3. Returned land: 21 contracts in total, including 17 annulled contracts, involving a return of land of 212,382 square metres.

The land granted in 2018 was mainly for residential, commercial, industrial, office, hotel, car parking, social facilities and other development uses. The premiums under land grant contracts in 2018 totalled 237,600,600 patacas. Income from land premiums during the year totalled 164,033,727 patacas, including 3,034,962 patacas from overdue payments.

The Council of Architecture, Engineering and Urbanism

The Council of Architecture, Engineering and Urbanism (CAEU) has been established according to Law No.1/2015 – "Qualification System for Urban Construction and Town Planning", in order to accredit and register holders of professional degrees in 13 subjects: architecture, landscape architecture, urban planning, civil engineering, fire engineering, environmental engineering, electrical engineering, electrical and mechanical engineering, mechanical engineering, chemical engineering, industrial engineering, fuel engineering and transport engineering.

According to the DSSOPT's statistics, during 2018, a total of 16 remaining professionals were accredited and registered in 13 professions, with the total number exceeding 2,500 from the law coming into force to the end of the year. The details are as follows:

Professions	Numbers of registered professionals (2018)	Numbers of registered professionals (2015-2018)
Civil Engineering	1	1,016
Architecture	1	407
Electrical and Mechanical Engineering	1	308

Cont.

Professions	Numbers of registered professionals (2018)	Numbers of registered professionals (2015-2018)
Electrical Engineering	4	309
Mechanical Engineering	3	275
Environmental Engineering	1	90
Urban Planning	4	58
Chemical Engineering	0	22
Traffic Engineering	0	19
Fire Engineering	0	18
Landscape architecture	1	17
Industrial Engineering	0	3
Fuel Engineering	0	2
Total	**16**	**2,544**

According to the DSSOPT's statistics, during 2018, a total of 16 remaining professionals were accredited and registered in 13 professions, with the total number exceeding 2,500 from the law coming into force to the end of the year. The details are as follows:

Professional Discipline	Number of Interns (2018)	Number of Interns (2015-2018)
Civil Engineering	64	164
Architecture	20	48
Electrical and Mechanical Engineering	20	36
Mechanical Engineering	6	9
Electrical Engineering	7	13

Cont.

Professional Discipline	Number of Interns (2018)	Number of Interns (2015-2018)
Environmental Engineering	4	4
Fire Engineering	1	1
Landscape architecture	1	1
Total	**123**	**276**

To start preparations for the accreditation examinations of various professional disciplines, the Council visited the Hong Kong Institute of Architect and Hong Kong Institution of Engineers in March 2018, to learn more about similar professional examination systems and the scope, type and design of examination questions of neighbouring regions. The visits also served to help understand more about the internship system and continuous learning requirements of Hong Kong.

Urban Planning Committee

The Urban Planning Committee, established in accordance with Law No. 12/2013 – Urban Planning Law, serves as the Government's consultation body and is responsible for discussing and providing opinions on compiling, implementing, reviewing and amending urban plans; advising on the scope for issuing urban planning conditions according to the law; initiating discussions and providing suggestions to the Urban Development Strategy Study; by-laws and draft bills related to urban planning; urban planning technical requirements and guidelines; and other matters assigned by the Chief Executive.

Urban Renewal Committee

The Urban Renewal Committee, established in accordance with By-law No. 5/2016 – Urban Renewal Committee, serves as a government advisory body on formulating urban renewal policy, and is responsible for coordinating between urban renewal policy strategies and other sectorial policies; launching policy management measures and urban renewal campaigns; anticipating the effects of implementing urban renewal measures and actions; conducting research and providing solutions and recommendations on urban renewal related by-laws and draft bills and regulations.

Cross-department Committee

The Cross-department Committee was established in accordance with By-law No. 5/2014, to liaise and follow up regarding the compilation, review, revision and assessment of implementation of urban planning. Pursuant to Executive Order No. 234/2018, nine members were appointed to the Committee for tenure of three years.

Water Disposal System

Macao's water disposal system includes the independent networks of the Macao peninsula and Taipa and Coloane islands. Details are as follows:

Water Drainage Systems in 2018

Type / Zone	Public sewer system (metres)				Rainwater drains (units)	Public sewage inspection pit (manhole) system (units)	Public rainwater pipe outlets (units)	Outlet valves (units)	Pumping stations (units)
	Sewage piping	Rainwater piping	Combined piping	Flow interceptors (rainwater and sewage)					
Macao	95,731.24	105,937.63	62,339.65	17,473.25	16,905.79	11,687	182	24	22
Taipa	27,326.67	58,071.55	376.42	25,836.13	5,049.79	3,570	76	1	21
Coloane	11,211.82	28,179.61		15,023.67	624	1,429	63		7
Total	**134,269.73**	**192,188.79**	**62,716.07**	**58,333.05**	**22,578**	**16,686**	**321**	**25**	**50**

The Drainage Division of the Civic and Municipal Affairs Bureau is responsible for cleaning and dredging the drainage systems of Macao, inspecting and monitoring their operations, making improvements, and registering relevant information.

During 2018, the Drainage Division received 28 complaints regarding street flooding caused by rainstorms, along with 272 complaints about silting of main drains. There were 30 prosecutions concerning violation of the General Regulations Governing Public Places, and 76 subpoenas were issued to alleged polluters.

Slopes

According to the Lands, Public Works and Transport Bureau, as of the end of 2018, Macao had 223 hazardous slopes on record. In 2018, 12 slopes were inspected, and the bureau conducted three slope maintenance and improvement projects.

Number of slopes / risk	High	Medium	Low	Total
Macao peninsula	1	28	60	89
Taipa island	0	25	41	66
Coloane island	0	16	52	68
Total	1	69	153	223

The DSSOPT and the Civic and Municipal Affairs Bureau are responsible for the maintenance of roadside slopes and slopes in public parks, respectively.

Surveying and Mapping

Cartography and Cadastre Bureau

The Cartography and Cadastre Bureau is supervised by the Secretary for Transport and Public Works. It specialises in setting up and maintaining the Government's Geodetic Control Network and Geometric Levelling Network. In addition, the bureau supports land-management activities, drafts maps of various types and scales, and maintains the cadastre management.

Cadastre Management

The Cadastre Division of the Cartography and Cadastre Bureau has operated a cadastral database since 1983. The bureau also produces cadastral maps in accordance with the provisions of the Cadastre Law. The division continuously updates related information. The Cartography and Cadastre Bureau launched the Cadastral Information Net in 2008 and an online shop for cadastral maps in 2011.

The Cadastre Division also provides survey information from its database to land owners who need to re-measure land boundaries for valuation, transaction or development purposes.

Land Surveying and Cartography

The Cartography and Cadastre Bureau provides a wide range of land survey and

cartography services. It also provides topographical maps at various scales with Chinese and Portuguese footnotes, digital cartography of Macao, printed aerial survey photos taken in 1941, 1980, 1988, 1993 and 1998, posters, the map of the Macao SAR and its peripheral regions, and thematic maps.

Satellite Positioning Reference Station

The Cartography and Cadastre Bureau opened three Global Positioning System (GPS) reference stations – at Mount Fortress, Alto de Coloane and Taipa Grande on Taipa island in 2002, 2005 and 2008, respectively. The reference stations can receive both GPS signals as well as data from the Russian GLONASS system (Global Navigation Satellite System) and effectively cover the whole of Macao, further enhancing land, cadastral and engineering surveys of Macao, as well as data collection for the Geographic Information System (GIS).

In 2009, the Macao Satellite Positioning Reference Station Service (mosref.dscc.gov.mo) was launched, making satellite reference data officially available to the public, through registration. In addition, an NTRIP (Networked Transport of RTCM via Internet Protocol) service was launched in 2012. Real Time Kinematic (RTK) corrections were provided to professional users through 3G mobile communication and internet technologies, enabling them to use real-time GPS applications that are accurate to within a centimetre.

In 2013, the bureau and Hong Kong's Lands Department shared data from their own satellite positioning reference stations. The bureau also expanded the coverage of real-time dynamic positioning services to the waters between Hong Kong and Macao and the western part of Hong Kong, thereby providing a more stable and reliable satellite positioning service to all users.

Geographic Information System

In response to society's needs, the Cartography and Cadastre Bureau has introduced various kinds of geographic information systems, including the Cadastre Information Web (cadastre.gis.gov.mo), a comprehensive land information platform that combines information from various departments on land and buildings. Users can inquire about land grants, easement and commitment, buildings, locations, drawing easement, plans for urban conditions, prior approval for buildings under construction, maximum altitude for buildings in the neighbouring area of the Guia Lighthouse, lists of historic urban areas and heritage under conservation, boundary of the special administrative region, and other pertinent information. In addition, the website contains statistical data, executive procedures and laws related to land. By the end of 2018, the website had received over 1.7 million visitors since its launch in 2008. The website supports desktop and mobile devices, meeting the needs of different users.

The Macao Online Map (webmap.gis.gov.mo) provides geographical information to meet citizens' everyday needs in traditional Chinese, simplified Chinese, Portuguese and

English. Users can search for 50 kinds of useful information in everyday life, including on buildings, streets, government departments, tourist spots, food and beverage, and emergency shelters in Macao – catering to needs including eating, housing, transportation, sports and recreation.

To accord with the Government's policy to create an accessible environment, nine walking routes were included in the Macao Online Map, providing information on recommended walking routes and time required. Since its launch in 2001 till the end of 2018, the online map has received more than six million visitors.

In line with the development of information technology and in response to public demand, in 2012 the Cartography and Cadastre Bureau introduced the Macao Map iOS/Android (Apps). In addition to searches for buildings, streets and street numbers, the application also allows users to search for nearby points of interest and share information about attractions, and can show aerial photographs and offline maps, providing on-the-go geographic information required by users.

An updated version of the *Macao Map* was published in 2018, with enhanced route planning function integrating all smart footpaths and vehicle road networks throughout Macao, providing the shortest routes of four travel categories – walking, leisure, bus routes and driving.

There is also a personal computer version of *Macao Map*. Apart from viewing a map and searching for locations, users of this version can also search for the shortest route using the electronic road maps, which are free for citizens and tourists to download.

In 2014, the Cartography and Cadastre Bureau introduced the Macao Street Number Inquiry System (webmap.gis.gov.mo/AddressSearch/chn) based on the Macao Online Map, which provides a street number inquiry service with a simple operating interface.

GeoGuide for Emergency is a mobile geographical app launched by the Cartography and Cadastre Bureau with the support of the Meteorological and Geophysical Bureau (SMG). During storm surge alerts, the app provides important public information including all regions that may be affected,, emergency shelter locations and emergency telephone numbers in Macao, via mobile phones.

The Traffic and Geographic Information Web (traffic.gis.gov.mo) is a cooperative project between the Cartography and Cadastre Bureau and the Transport Bureau, providing locations of roadworks in progress or to soon commence, and related traffic diversions in Macao.

The Environmental Geographic Information System (gis.dspa.gov.mo) was jointly created by the Environmental Protection Bureau and the Cartography and Cadastre Bureau for the provision of shared map service. The system publishes environmental data and related processed information through the Internet.

The Cadastral Information Net (intranet version) provides real-time land information for public works, housing, land planning and management, environment supervision

and municipal administration. As well as information available on the Cadastral Information Net, the intranet version provides Government departments with information such as forms of land use, aerial photos and satellite photos over the years, land area and housing record codes.

Office for the Development of the Energy Sector

The Office for the Development of the Energy Sector (GDSE) was established on 1 January 2005 under Executive Order No. 11/2005, and is under the supervision of the Secretary for Transport and Public Works. Its purpose is to promote and coordinate all activities related to the energy sector, and thus help to implement the Government's energy policy. The office's major functions are to assist the Government in formulating policies for the energy sector; formulate development plans and related laws and regulations, and follow up on and monitor their implementation; coordinate, promote the study of and monitor the efficiency, impacts on the environment, prices and services, and technical regulations of energy products.

Electric Power

In 2018, Macao continued to strengthen regional cooperation in the electric power industry, and took the initiative to foster development of power supplies. Regarding the third circuit of the 220kV Macao-Zhuhai electric power transmission channel, installation of cables of the electricity network commenced in 2018, and is targeted for completion as soon as possible, to meet needs until 2025.

2018 saw the basic completion of the tender opening and evaluation for the initiative to generate electricity using natural gas, and it is expected that construction of the new power plant can begin in 2019. The objective is to achieve 30 percent of local electricity generation – and up to 50 percent at times of emergencies - by 2021, upon successful completion and commencement of operation of the plant, in order to ensure electricity supplies at key facilities such as hospitals, communications facilities and water supply systems, as well as most residential areas.

To perfect the local power grids, and to meet the needs of the Conde S. Januario Hospital's expansion, the newly constructed 110kV substation for Conde S. Januario Hospital will become operational in September 2019. Civil engineering works for constructing a 110kV substation in the islands Health Care Complex are already completed and station facilities are being installed, and the whole project is expected to be completed by the middle of 2019. The substation for Hong Kong-Zhuhai-Macao Bridge also came into operation in November 2018.

To support the power demand of residents in old districts, in Macao six outdoor transmission facilities were installed in several of these districts. In future, the Government will continue identifying appropriate locations in old districts for installation of outdoor

transmission facilities. The Government will also join hands with IACM to proceed with the joint construction of landfills and substations, in order to tackle the land space issue.

As regards preventing and responding to disasters, the Government followed up on the comments and recommendations of the National Commission for Disaster Reduction's Expert Group. As a result, to ensure external power supplies, China Southern Power Grid enhanced the wind resistance of its power grid, and engaged the adjacent Hengqin Thermal Power Station as complementary power source for Macao, to further raise the reliability of external power supplies.

Moreover, The Office for the Development of the Energy Sector (GDSE) worked together with the Lands, Public Works and Transport Bureau and the CEM to finish revising the technical specifications of power installations of new constructions in low-lying areas, making it mandatory for newly built buildings to have their electrical installations – including substations, main switchboards and meter boxes – installed at a level above government-specified flood-proof heights, to prevent water damage to electrical installations.

As for existing buildings, Macao people may also hire professionals to move electrical installations to higher locations, making reference to these technical specifications.

In 2018, to lower burdens on residents, the Government continued to offer the electricity fee subsidy of 200 patacas per month per household.

Natural Gas

During 2018, there was further progress with construction of the natural gas pipeline network and services. The pipeline network in Cotai was basically completed. At present, natural gas is available in the hotels at Cotai Strip, Sac Pai Van public housing cluster, commercial and residential real estate units in Cotai, Hengqin campus of the University of Macau, and for use by some buses. To complement the new urban reclamation plan and gas supply plan for Macao, the natural gas pipeline network is being extended to the Macao peninsula.

To facilitate the use of natural gas in public transportation, the Regulations for the Construction and Operation of Fuel Stations were revised in May 2018,, with added provisions regulating the renovation and operations of compressed natural gas stations and making it mandatory for gasoline stations to install vapour recovery systems.

Energy Efficiency and Conservation

Followed by the launch of Electric Vehicle Charging Facilities Safety Guidelines at the end of December 2015, the Government installed light-vehicle charging spaces in several districts in Macao in 2016, and in 2018 also made charging available at

public street parking spaces. By the end of 2018, there were 170 light-vehicle charging spaces in 35 public car parks and five roadside locations in Macao, providing a free charging service for the public.

To promote the use of energy efficient and durable LED lights, the Government plans to change all streetlights to LED lights, to save energy, improve appearance and safety. After completing the installation of LED streetlights in in Seac Pai Van and Outer Harbour Reclamation Area, the Government replaced 2,200 streetlights in various districts in 2018. At present, there are over 6,000 LED streetlights in use on roads in various districts in Macao.

The Office for the Development of the Energy Sector (GDSE) continued to organise large-scale publicity programmes, such as the Macao Energy Saving Week, the Energy Efficiency Educational Programme, and the Campus Energy Conservation Programme, in order to promote energy saving.

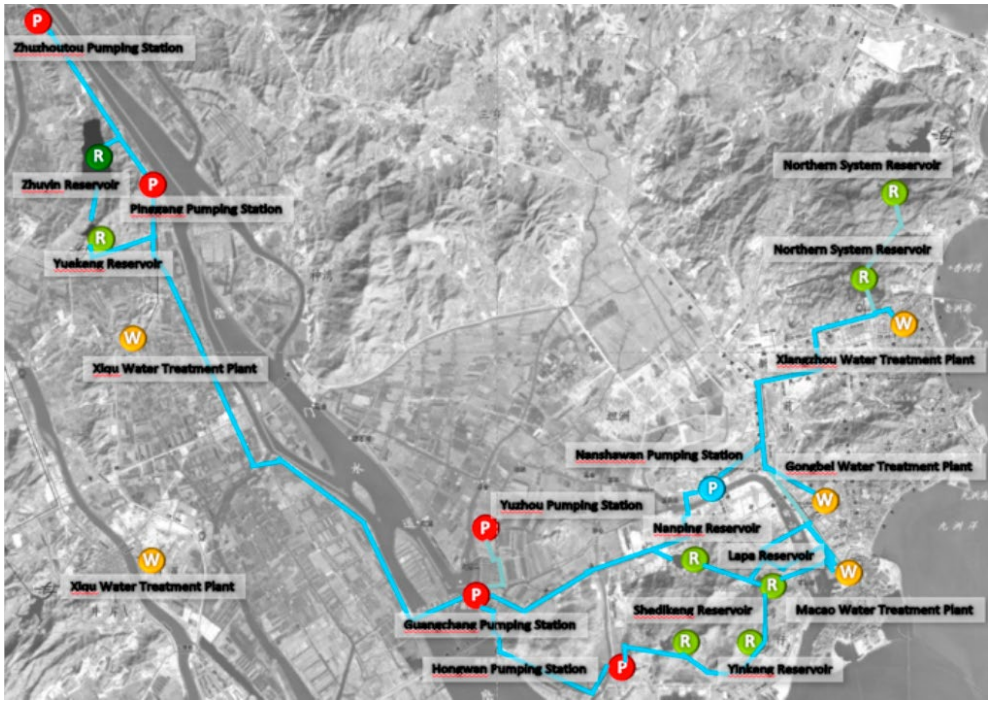
Drinking Water

Macao Water Supply Company (Macao Water)

The Macao Water Supply Company (Macao Water) was established in 1935, and is privately owned. SUEZ NWS Limited, formerly known as Sino-French Holdings (Hong Kong), which is a joint venture between the French-based Suez Lyonnaise des Eaux Group and NWS Holdings, acquired 85 percent of the company's shares in 1985, and signed a 25-year water-supply concession contract with the former Portuguese administration. In 2009, the contract was extended for 20 years to 2030.

Raw Water Supply

Macao's raw water supply from Zhuhai has two main components: the southern pumping station opened in 1988 and part of the Zhuyin Pumping Station opened in 2007. The two stations are connected by the Guangchang Pumping Station. The layout of the whole system is shown in the map below.



On the map, the red labels mark the locations of three major water inlets and two reserve water inlets for Macao's raw water intake. Some 95 percent or more of Macao's raw water comes from Xijiang (West River). In recent decades, to mitigate salinity effects, the raw water intakes located at Modaomen, Zhuhai, have been moved over 20 kilometres upstream.

The green labels identify reservoirs. Recently, to mitigate salinity effects, the Zhuyin Reservoir was built in Pinggang with a total volume of 43 million cubic metres, and became operational in autumn 2011.

Zhuhai currently supplies about 277,000 cubic metres of water to Macao each day. In 2018, it supplied a total of 10.121 million cubic metres of raw water. The water quality was certified as Grade II, according to mainland China's Environmental Quality Standards for Surface Water (GB3838-2002), except during occasional salt tides in winter and spring.

Water Treatment, Storage and Transportation

Macao's water treatment capacity is currently 390,000 cubic metres per day. The combined storage capacity of Macao's reservoirs (including the clean water pond and high pool in the water treatment works) is 76,000 cubic metres. In 2018, the total

length of main pipelines was 609 kilometres.

At the end of 2018, the total volume of raw water stored in Macao's reservoirs (including the Main Storage Reservoir - the Outer Harbour Reservoir and the Seac Pai Van Reservoir) was 1.90 million cubic metres, including 1.67 million cubic metres in the reservoir near the Outer Harbour.

A total of 10,043 million cubic metres of water were supplied in 2018, 3.3 percent more than in 2017. The daily average volume supplied in 2018 was around 275,000 cubic metres, with a maximum of 311,000 cubic metres recorded on 15 September. In 2018, the total capacity of water sales was 90.94 million cubic metres, with a daily average of 249,000 cubic metres.

Testing Water Potability

The Laboratory and Research Centre of Macao Water is responsible for water quality testing, and ensuring the quality of water supplies. The Macao Water Laboratory and Research Centre and the Civic and Municipal Affairs Bureau Laboratory jointly analyse random water samples taken from water processing plants and sampling points of pipelines every day. The quality of water from the water processing plants has always reached the standard specified in the contract signed with the Government and the potable water standard stated in Annex One of the Macao Drainage Regulations. In additional to water quality monitoring and testing of treated water, the Laboratory and Research Centre of Macao Water also monitors the quality of raw water supplies from Zhuhai to Macao and reservoirs in Macao, and issues warnings if pollution is detected; and provides firsthand information on raw water for production purposes, to ensure the water is safe for consumption.

In 2000, the Laboratory and Research Centre was issued a Laboratory Accreditation Certificate of ISO/IEC17025 Standard by the China National Accreditation Service for Conformity Assessment (CNAS).

Over the years, the Laboratory and Research Centre has achieved distinguished results in the inter-laboratory sample checks administered by its parent company - Lyonnaise des Eaux Group, and has been repeatedly regarded as a reference laboratory within the group.

Customer Services

Macao Water promptly and properly handles customer enquiries and provides customer services through a consolidated customer information system. Over the years, it continues to improve its services by providing convenient payment and enquiry

services, exploring communication channels for customers, and actively fulfilling its corporate social responsibility.

Macao Water has continued to develop a variety of payment platforms that allow customers to pay charges flexibly. It has launched several convenient electronic services, including an official mobile site, QR codes in water bills, electronic billing, a safe email box co-established with the Macao Post and Telecommunications Bureau, Little Water Steward mobile app, official WeChat account, and refurbishment of its official website, which allows residents to easily handle water supply services.

Macao Water set up a customer liaison group and a customer service unit in 2000 and 2012, respectively, to facilitate closer liaison with customers, and to better understand customers' views regarding water supply services in Macao.

To raise public awareness about saving water, Macao Water fully supports the Government in the new water charges system, which was introduced on 1 January 2011. This was the first time an itemised and sliding scale of water tariffs was launched, and a waiver of fees was offered for the first five cubic metres of water used by senior citizens with financial difficulties and individuals who receive the Social Welfare Bureau's single-parent or medical subsidies or subsidies for the disabled.

As at the end of 2018, Macao Water had 254,194 customer accounts, including 223,078 households, 28,778 companies and 2,338 Government institutions. According to a customer survey in 2018, more than 80 percent of customers felt satisfied with the performance of Macao Water, representing a 2.4 percent increase compared with 2017.

Supporting Sustainable Development

As a public enterprise, Macao Water has taken up the social responsibility of caring, environment protection and sustainable development. From 2011, Macao Water publishes a sustainable development report that is in line with international standards. The 2017 report was written according to the requirements of G4 Guidelines of the Global Reporting Initiative, and was awarded the "Services Institution with Verified Disclosure" logo.

Starting from 2000, Macao Water was awarded the CNAS-CL01 (in compliance with ISO/IEC 17025) Accreditation Criteria for the Competency of Testing and Calibration Laboratories by Laboratory and Research Centre of Macao Water, ISO 9001 Quality Management System Accreditation, an OHSAS 18001 Occupational Health and Safety Management System certificate, an ISO 14000 Environmental Management certificate, an ISO 22000 Food Safety Management System Certificate, an ISO 50001 Energy Management System certificate, and an ISO 27001 Information Security Management System certificate in 2018.

Power Supply

Companhia de Electricidade de Macau

Companhia de Electricidade de Macau (CEM) is a public utility company with the sole concession to generate, transmit, distribute and sell high, medium and low voltage electricity in Macao. The total capacity of CEM's power generation equipment is 407.84 MW.

From 1906 to 1972, the electricity supply service was managed by the Macau Electric Lighting Company, headquartered in Hong Kong. In 1972, the company was replaced by CEM.

CEM was restructured with the former Portuguese administration's support in 1982. In 1984, CEM was linked to the Guangdong Power Grid through two 110 kV overhead lines. Cables of the power grid were modified, upgraded and added multiple times in 2006, 2007, 2008 and 2015. As a result, there are six 220 kV power cables with a transmission capacity of 2,100 MVA.

In November 2010, the Government and the CEM signed a contract stipulating a 15-year extension to power supply services. The new contract terms came into effect on 1 December 2010.

Since 1987, the Government, which was previously the largest shareholder in CEM, has reduced its holding to just eight percent. Currently, 63 percent of CEM's shares are owned by two major shareholders: Nam Kwong Development (HK) Limited which holds 42 percent, and EDP Asia which holds 21 percent. Moreover, Polytec Industrial Limited and Asiainvest (IP Holding) hold 11 percent and 10 percent, respectively. China Power International Holding holds six percent of the shares, and local shareholders own the remaining two percent.

Electricity consumption in Macao increased rapidly during the 1990s. In 1998, CEM decided to invest in developing Coloane B Power Station, which uses multi-cycle gas turbine technology.

In 2018, CEM's capacity peaked at 971 MW on 30 May, 3.3 percent lower than the peak capacity in 2017.

The Macao electricity transmission network comprises 25 primary substations, eight high-voltage substations and 953 kilometres of 66 kV high-voltage cables, 110 kV cables and 220 kV cables. The Guangdong-Macao electricity network included two 110 kV cables and two 220 kV cables. The 110 kV cables were connected to Gongbei Substation and Nanping Substation, while the 220 kV cables were connected to Zhuhai Substation and Qinyun Substation.

The 11 kV medium-voltage electricity transmission network comprises 1,502 user

transformer rooms (11 kV/400 V) and 41 mid-voltage substations, and is connected by cables with a total length of 2,294 kilometres. The low-voltage transmission network comprises 906 kilometres of cable, while the street lighting network comprises 571 kilometres of cable and 11,105 streetlights.

CEM's power network is almost entirely comprised of underground cables.

Electricity Output and Consumption

CEM generated 474 GWh of electricity during 2018, a decrease of 62 percent over 2017. The amount of electricity imported from mainland China was 4,911 GWh, an increase of 24 percent over 2017, accounting for 88.8 percent of total electricity consumption; and electricity purchased from the Macao Central Incineration Centre totalled 143GWh. CEM's sales for 2018 totalled 5,319 GWh.

Customer Services

CEM established the CEM Customer Liaison Committee in 2000. With its 27 members coming from 25 different community organisations, the committee serves to reflect public views of CEM's services, and to receive and make suggestions for improvement. At the end of 2018, CEM was providing services to 262,724 households. The Macao peninsula accounted for 81.15 percent of the total customer base; Taipa, 13.69 percent; Coloane, 5.10 percent; Cotai, 0.01 percent; and Hengqin, 0.05 percent.

SMOOTH OPERATIONS

The Macao border checkpoint of Hong Kong-Zhuhai-Macao Bridge officially commenced operations at 9 a.m. on 24 October 2018, to provide efficient services to tourists, local residents and cross-boundary vehicles. The Government will continue improving related support systems for the convenience of local residents and travellers.

The border checkpoint adopts a "joint inspections for one-stop border crossing" operation model. Smooth operation was seen on the first day, with an average duration of 20 seconds for completing each border-crossing process. From 9 a.m. to 4 p.m., the Macao border checkpoint of Hong Kong-Zhuhai-Macao Bridge recorded a total of 8,619 border-crossing travellers.

Vehicle traffic flow was also smooth, with an average duration of 10 to 15 seconds per vehicle to complete the clearance process. By 3 p.m., the numbers of inbound and outbound vehicles were 46 and 59, respectively. The Hong Kong-Macao shuttle bus service operated 113 scheduled trips at the border checkpoint, carrying 4,742 passengers; while the intercity bus service ran about 21 scheduled trips, carrying 833 passengers.

往 香港
穿梭巴士
候車區

MAN

MACAO YEARBOOK 2019

12

TRANSPORT

Roads and Bridges

Macao has 336.9 kilometres of roads and highways, including 188.7 kilometres on the Macao peninsula; 84.6 kilometres on Taipa Island and Cotai; 43.1 kilometres on Coloane; 1.9 kilometres in New Urban Zone Area A and the bridge connected with New Urban Zone Area A; 8.7 kilometres in the Zhuhai-Macao border crossing area on the Artificial Island of the Hong Kong-Zhuhai-Macao Bridge; and 4.6 kilometres in the campus of the University of Macau.

Three bridges and a strip of reclaimed land link the Macao peninsula with Taipa island and Coloane island. Opened to traffic in October 1974, the Nobre de Carvalho Bridge (also known as the Macao-Taipa Bridge) is 2.5 kilometres long. The 4.4-kilometre Friendship Bridge was completed in April 1994. The 2.1-kilometre Sai Van (West Bay) Bridge was completed in December 2004 and opened to traffic in January 2005. In addition, the 900-metre Lotus Flower Bridge was completed in December 1999 and opened to traffic in March 2000. Linking the reclaimed area between Taipa and Coloane with Zhuhai City's Hengqin island and connected to the Guangzhou-Zhuhai Expressway, this bridge is the second land route between Macao and its neighbouring cities.

Macao has 448.9 kilometres of roads for motor vehicles. This figure includes 201.5 kilometres on the Macao peninsula; 142.2 kilometres on Taipa island and Cotai; 65 kilometres on Coloane island; five kilometres on Nobre de Carvalho Bridge; 10.2 kilometres on the Friendship Bridge; 4.2 kilometres on the Sai Van Bridge; 1.8 kilometres on the Lotus Flower Bridge; 3.7 kilometres in New Urban Zone Area A and the bridge connected with New Urban Zone Area; and 15.3 kilometres in the Zhuhai-Macao border crossing area on the Artificial Island of the Hong Kong-Zhuhai-Macao Bridge. There are also 14 kilometres of roads of the University of Macau.

Public Transport

Macao has a well-established public transport network connecting the Macao peninsula and the two islands. A variety of vehicles, including buses and taxis, are available for local residents and tourists.

Public Bus Service

Public bus service in Macao is currently operated by two bus companies: Transportes Urbanos de Macau, S.A.R.L. (Transmac) and Sociedade de Transportes Colectivos de Macau, S.A. (TCM).

At the end of 2018, there were 915 buses in service, including 231 minibuses, 136 medium-sized buses and 548 large buses, on 84 routes. In 2018, a total of 214,621,192 passengers were served, an increase of 1.79 percent over the 2017 figure, covering a total distance of 49.17 million kilometres, an increase of 2.33

percent over the 2017 figure.

The Bus Service Notarial Contract signed by the Government with three bus companies expired on 31 July 2018. Since the Government still needed to negotiate with the bus companies regarding details of the provisions, the original notarial contract was temporarily extended for 15 months with effect from 1 August 2018.

The Government has approved the merger of Sociedade de Transportes Colectivos de Macau, S.A (TCM) and Macau Nova Era de Autocarros Públicos, SA. Therefore, the contract renewal only involved Transportes Urbanos de Macau, S.A.R.L. and TCM.

Sociedade de Transportes Colectivos de Macau, S.A.

Sociedade de Transportes Colectivos de Macau, S.A. (TCM) (previously known as Companhia de Transporte de Passageiros entre Macau e as Ilhas) originally provided maritime passenger transportation services between Macao and the two islands. During the 1950s, it acquired several bus companies that served residents of Taipa and Coloane, and began to operate public buses. In 1986, Companhia de Transporte de Passageiros entre Macau e as Ilhas was restructured as TCM and became fully responsible for all public buses serving Macao and its islands.

In September 2012, the TCM took the lead in introducing the first new energy-saving and environmentally friendly CNG natural-gas bus in Macao. Currently, there are 69 natural-gas buses in total, accounting for 14 percent of the company's total fleet. In future, it will continue introducing new models and environmentally friendly buses in accordance with the slogan: "Shaping Eco-Cities for an Inclusive Green Economy"

In August 2018, the TCM merged with the Macau Nova Era de Autocarros Públicos, SA, offering a total of 57 bus routes, accounting for 64.04 percent of all bus routes in Macao. These 57 routes are operated by more than 500 vehicles, serving over 300,000 passengers on average per day, covering an average total distance of 70,000 kilometres daily.

Transportes Urbanos de Macau, S.A.R.L. (Transmac)

Transportes Urbanos de Macau, S.A.R.L. (Transmac) was previously known as Companhia de Autocarros Fok Lei. Founded in 1952, it was restructured and changed its name to Transportes Urbanos de Macau in July 1988. It is the largest bus company in Macao. The company introduced the ISO Quality Management System in 2004 for overall management, making it the first franchised bus company in Macao to pass the ISO 9001:2015 Quality Management System.

Transmac has around 1,000 employees and a fleet of 411 air-conditioned buses that serve 33 bus routes covering Macao, Taipa and Coloane islands. During 2018, about 97 million passengers were carried and 22.89 million kilometres covered.

Taxis

At the end of 2018, Macao had 1,503 licensed black taxis and 100 special taxis. There were 19,016 licensed taxi drivers.

Traffic Management

Transport Bureau

The Transport Bureau was established in May 2008. It is responsible for: studying, planning, promoting and implementing the Government's road transport policies; pursuing road improvements; regulation of vehicles; as well as installing, maintaining and improving transportation and pedestrian infrastructure.

Vehicle Statistics

At the end of 2018, there were 240,443 vehicles on Macao's roads, including 124,078 motorcycles, 108,442 light vehicles and 7,923 heavy vehicles. During the year, 14,512 new vehicles were registered, 13.69 percent less than in 2017. Of these, 7,773 were motorcycles and 6,393 were cars.

Traffic Monitoring

Traffic management and monitoring are essential for ensuring the safe and orderly operation of the transport system. The Government has installed closed circuit TV (CCTV) and radar speed monitoring systems to monitor traffic conditions on the Macao-Taipa Bridge and main roads.

The system includes 48 video cameras and 17 speed monitoring systems on and near the Friendship Bridge, 108 video cameras and 25 speed monitoring systems on and near the Sai Van Bridge and surroundings, and 14 video cameras and four speed monitoring systems on and near the Ponte Governador Nobre de Carvalho. Also, 596 traffic monitoring systems (including on Area A and the Artificial Island of the Hong Kong-Zhuhai-Macao Bridge), 41 speed monitoring systems, 62 red-light violation detection systems, eight road junction comprehensive detection systems and 19 detection locations have been installed in various locations.

According to the Public Security Police, during 2018, the monitoring systems identified 20,230 cases of highway speeding, 933 cases of bridge speeding, 773 cases of jumping red lights, and 18,754 cases of illegal parking identified by the illegal parking monitoring systems.

Parking

As at 31 December 2018, Macao had 53 public car parks, which together provided 22,374 parking spaces for light vehicles, 727 spaces for heavy vehicles, and 14,708 spaces for motorcycles.

Public Car Parks in Macao	
Name of car park	**Available parking spaces**
Pak Lane Car Park	507 light vehicles
Pak Tou Car Park	211 light vehicles
Pak Lai Car Park	355 light vehicles
Pak Lik Car Park	417 light vehicles
Pak Lok Car Park	411 light vehicles, 300 motorcycles
Pak Vai Car Park	502 light vehicles
Pak Kai Car Park	208 light vehicles
Pak Wai Car Park	1,019 light vehicles
Pak Keng Car Park	161 light vehicles
Alameda Dr. Carlos d'Assumpcao Car Park	720 light vehicles
Pak Wu Car Park	644 light vehicles, 196 motorcycles
Pak Kong Car Park	287 light vehicles, 35 heavy vehicles
Sewage Treatment Plant Car Park	276 light vehicles, 452 heavy vehicles
Vasco da Gama Garden Car Park	171 light vehicles, 113 motorcycles
Iao Hon Park Multi-Storey Car Park	406 light vehicles, 404 motorcycles
Art Garden Car Park	351 light vehicles, 446 motorcycles
Ferreira do Amaral Roundabout Car Park	247 light vehicles, 580 motorcycles
Ho Yin Garden Car Park	415 light vehicles, 542 motorcycles
Malaca Street Car Park	215 light vehicles, 563 motorcycles
S. Lourenco Market Car Park	60 light vehicles, 74 motorcycles
Estrada Flor de Lotus Heavy Vehicle Car Park	240 heavy vehicles
Macao Science Center Car Park	415 light vehicles, 413 motorcycles
Lido Car Park	62 light vehicles, 24 motorcycles
Transport Bureau Car Park	148 light vehicles, 178 motorcycles
Cheng Choi Building Car Park	304 light vehicles, 518 motorcycles
Mong Sin Block Car Park	133 light vehicles, 236 motorcycles
Almirante Sergio Road Car Park	155 light vehicles, 106 motorcycles
Fai Fu Building Car Park	215 light vehicles, 194 motorcycles
Flor de Lotus Road Car Park	416 light vehicles, 512 motorcycles

Cont.

Public Car Parks in Macao	
Name of car park	**Available parking spaces**
Tranquilidade Road Car Park	58 light vehicles, 93 motorcycles
Parque Central da Taipa Car Park	1,343 light vehicles (including 10 for disabled), 1,384 motorcycles
The Taipa Temporary Ferry Terminal Car Park	740 light vehicles, 196 motorcycles
Edifício Mong In Car Park	143 light vehicles, 242 motorcycles
Edifício do Lago Car Park	678 light vehicles, 1,132 motorcycles
Edificio Koi Nga Public Car Park	307 light vehicles, 366 motorcycles
Edificio Ip Heng Public Car Park	389 light vehicles, 606 motorcycles
Edificio Cheng Chong Public Car Park	244 light vehicles, 386 motorcycles
Edifício Lok Kuan Public Car Park	362 light vehicles, 550 motorcycles
Rua da Ponte Negra Public Car Park	95 light vehicles, 80 motorcycles
Fai Yat Building Public Car Park	259 light vehicles, 228 motorcycles
Cheng Chun Building Car Park	54 light vehicles, 38 motorcycles
Cheng I Building Car Park	283 light vehicles, 286 motorcycles
Iat Seng Building Car Park	292 light vehicles, 315 motorcycles
Chun Shu Mei Car Park	197 light vehicles, 197 motorcycles
Vala Das Borboletas Car Park	369 light vehicles, 165 motorcycles
Iat Fai Building Car Park	59 light vehicles, 132 motorcycles
Alameda da Harmoniai Car Park	209 light vehicles, 146 motorcycles
Rua da Bacia Sul Car Park	306 light vehicles, 214 motorcycles
Fai Ieng Building Car Park	121 light vehicles, 107 motorcycles
Hong Kong-Zhuhai-Macao Bridge Checkpoint Building (West) Car Park	3,089 light vehicles, 2,054 motorcycles
Hong Kong-Zhuhai-Macao Bridge Checkpoint Building (East) Car Park (beyond Macao border)	3,000 light vehicles
Patane Municipal Market Complex Car Park	116 light vehicles, 194 motorcycles
New Wholesale Market Car Park	230 light vehicles, 198 motorcycles

As at 31 December 2018, there were 8,379 parking meters for light vehicles, of which 176 were one-hour parking meters, 6,402 were two-hour parking meters and 1,801 were four-hour parking meters. There were 2,270 non-metered parking spaces. There were 2,405 parking meters for motorcycles, of which 1,992 were two-hour parking meters and 413 were four-hour parking meters. There were 36,316 non-metered parking spaces for motorcycles.

Road Safety

A Road Safety promotional campaign held in 2018 was jointly organised by the Transport Bureau, Public Security Police, the Legal Affairs Bureau and the Education and Youth Affairs Bureau. It publicised the importance of obeying traffic regulations, to strengthen the understanding of laws and sense of road safety among local residents, and thus reduce the number of traffic accidents.

The Transport Bureau and the Traffic Department of the Public Security Police held workshops and talks related to road safety in schools, community centres, non-governmental organisations and private organisations, with the aim of reinforcing residents' understanding of road safety through long-term education efforts.

During 2018, a total of 113 schools and organisations participated in the road safety seminars and workshops co-organised by the Transport Bureau and Traffic Department with 14,662 participants.

Cross-border Traffic

Cross-border Land Routes

Three land routes link Macao and mainland China: the Border Gate, Lotus Flower Bridge checkpoint (Cotai checkpoint), and the Hong Kong-Zhuhai-Macao Bridge checkpoint, which commenced operations on 24 October 2018.

During 2018, there were 22,152,467 visitor arrivals by land, an increase of 13.2 percent over the previous year's figure. Of these, 18,224,963 entered via the Border Gate; tourists from mainland China and Hong Kong represented 89.6 percent and 6.8 percent of the total, respectively. The number of visitors who arrived via the Cotai checkpoint was 2,858,633. During the year, there were 24,603,356 arrivals of Macao residents via the Border Gate, 1,011,487 via the Cotai checkpoint and 192,827 via Hong Kong-Zhuhai-Macao Bridge checkpoint.

Cross-Border Marine Transportation Services

The Outer Harbour Ferry Terminal and Taipa Ferry Terminal provide cross-border transportation services for passengers travelling between Macao and Hong Kong and mainland China. Scheduled passenger ferries to Hong Kong and mainland China are operated by the Shun Tak China Travel — Companhia de Gestão de Embarcações (Macau), Limitada; Far East Hydrofoil Company; Hong Kong-Macau Hydrofoil Company; Shun Tak – China Travel Macau Ferries Limited; Yuet Tung Shipping Company; and Cotai Waterjets (Macau) Limited.

Outer Harbour Ferry Terminal

The Outer Harbour Ferry Terminal, which commenced operations in 1993, is one of Macao's most important checkpoints. The terminal operates around-the-clock providing maritime passenger transportation services between Macao and various places including Sheung Wan, Tsim Sha Tsui, Tuen Mun and Hong Kong International Airport in Hong Kong, and Fuyong and Shekou in Shenzhen. Moreover, it also provides helicopter transportation services between Macao and Hong Kong or Shenzhen.

The terminal has a total floor area of 65,000 square metres, and provides 14 berths and a helicopter pad on its rooftop. The main building is a three-storey building, with the first floor as arrival floor, the second as departure floor and the third as food and beverage, shopping and passenger waiting area.

Taipa Ferry Terminal

As planned, the Taipa Ferry Terminal commenced operation on 1 June 2017. It occupies 200,000 square metres, with 16 berths, three multi-functional berths for ferries and a helicopter pad on its rooftop. The Terminal provides maritime passenger transportation services between Macao and various places including Sheung Wan, Tsim Sha Tsui, Tuen Mun and Hong Kong International Airport in Hong Kong, Fuyong and Shekou in Shenzhen, to provide leisure cruise services, with the ground floor as the arrival floor, the first as the departure floor and a food square in the west of the ground floor.

Inner Harbour Ferry Terminal

The Inner Harbour Ferry Terminal has two berths, and stopped providing maritime passenger transportation services between Macao and Wanzai in Zhuhai on 17 January 2016.

Maritime Passenger and Cargo Transportation

During 2018, there were 111,186 scheduled ferry sailings between Macao and Hong Kong, and 20,554 scheduled ferry sailings between Macao and mainland China.

During 2018, 10,355,396 passengers arrived in Macao by sea, a decrease of 7.84 percent compared with the 2017 figure. Of these, 6,109,199 entered Macao via the Outer Harbour Ferry Terminal, and 4,246,197 via the Taipa Ferry Terminal.

In 2018, 93,926 containers or 138,639 TEUs (twenty-foot equivalent units) were shipped in and out of Macao by sea, representing increases of 4.13 percent and 6.81 percent, respectively, on the 2017 figures.

Yuet Tung Shipping Co., Ltd commenced operating regular sightseeing maritime routes at the Inner Harbour Ferry Terminal on 25 September 2018. Shun Tak China Travel Ship Management (Macau) Limited commenced operating charter services of Macao Aquatic Trek at Taipa Ferry Terminal and Coloane Pier on 23 October 2018; it also began operating regular sightseeing maritime routes at Taipa Ferry Terminal and Coloane Pier on 8 December 2018.

2018 Sightseeing Maritime Routes		
	No. of Sails	No. of Passengers
September 2019	15	636
October 2019	75	3,615
November 2019	56	1,091
December 2019	83	1,671

Cross-Border Helicopter Services

Helicopters are the most convenient way to travel between Macao and Hong Kong and between Macao and Shenzhen. A Hong Kong-Macao helicopter passenger transportation service was inaugurated in 1990. A Shenzhen-Macao helicopter passenger transportation service was launched in 2002. Operated by East Asia Airlines, the service reduced the travelling time between Hong Kong and Macao to only 15 minutes. There are 40 and six daily helicopter flights between Macao and Hong Kong and between Macao and Shenzhen, respectively. The helicopter service operates from 10 am to 11 pm. In 2018, there were 13,089 helicopter flights, representing an increase of 8.1 percent.

Ports

Outer Harbour

Located on the east coast of the Macao peninsula, the Outer Harbour is designated for scheduled high-speed ferries between Macao and Hong Kong and Shenzhen. Its watercourse is 120 metres wide and 4.4 metres deep.

Inner Harbour

Located on the west coast of the Macao peninsula, the Inner Harbour has many piers for loading and discharging cargo, plus Pier 11A, the ferry terminal, used by

passenger ferries licensed by the Marine and Water Bureau. The South Sampan Pier between Piers 8 and 9 is used by crewmembers of ships berthed in the Inner Harbour who hold Macao SAR Resident Identity Cards, or Portuguese Citizen Cards, or are authorised to land and depart by the relevant government authority. The South Sampan Pier also allows vessels travelling to and from Wanzai, Zhuhai, to berh; these carry flowers and flower farmers, and arrivals are processed through a customs inspection point. The North Sampan Pier between Inner Harbour Ponte 16 and Pier 21 is used by crewmembers of ships berthed in the Inner Harbour who hold Macao SAR Resident Identity Cards, or Portuguese Citizen Cards, or who are authorised to land and depart by the relevant government authority, with prior notice to the Macao Customs inspection point. The Inner Harbour's approach channel is 60 metres wide, and its fairway is 55 metres wide and 3.5 metres deep.

Taipa

The Taipa Ferry Terminal is situated on the north-eastern tip of Taipa island, and is exclusively for scheduled high-speed ferries shuttling between Macao and Hong Kong, and between Macao and the Pearl River Delta area. Its fairway is 120 metres wide and 4.4 metres deep.

Ka Ho Harbour

Located on the northeast shore of Coloane island, Ka Ho Harbour consists of the Fuel Oil Terminal, Cement Terminal, Ka Ho Container Port, and Power Plant Terminal. Its approach channel is 75 metres wide and 4.4 metres deep.

Ka Ho Container Wharf and Fuel Oil Terminal

Phase One of Ka Ho Container Wharf commenced operations in December 1991. With a total construction area of 49,524 square metres, it includes a container wharf, container yard and warehouses. At present, it has two berths, of 135 metres and 171.4 metres in length; a 10,428-square-metre cargo working area; a 23,828-square-metre container yard; and 2,850 square metres of cargo warehousing space. The terminal's annual handling capacity is 100,000 TEUs.

In 2018, Ka Ho Harbour handled 19,234 inbound TEUs (twenty-foot equivalent units) and 20,243 outbound TEUs; both figures include re-exports.

The Fuel Oil Terminal commenced operation in June 1995. It can store a wide variety of fuel oil imported into Macao, and can simultaneously load and unload two fuel-carrying vessels. It has 14 storage tanks with a combined capacity of 86,000 cubic metres.

Marine and Water Bureau

According to By-law No. 14/2013 the Organisation and Operation of the Marine and Water Bureau renewed by By-law No. 23/2015 and No. 30/2018, the Marine and Water Bureau is a department with authorities and duties responsible for exercising maritime authority, promoting the development of maritime activities, and coordinating water resources management and water supply.

To promote and assist economic development of the fishery sector, in 2007 the Government promulgated By-law No. 3/2007 to establish the Fisheries Development and Support Fund. The Fisheries Development and Support Fund started to receive applications on 30 April 2007. The loans approved by the end of 2018 totalled around 69.98 million patacas.

Ships

Maritime Registration

By law, all vessels engaged in economic activities – including freighters, passenger vessels, fishing boats and auxiliary boats – must be registered with the Marine and Water Bureau and the Commercial and Movable Goods Registry. The registration procedures are designed to verify conformity with official requirements concerning technology, safety and environmental protection. Maritime registration is a prerequisite for vessels seeking commercial registration. There were 314 registered vessels at the end of 2018, including five that were newly registered during the year.

In addition, maritime and commercial registration is required for vessels over 2.5 metres in length that are used for non-profit-making purposes, such as water sports, fishing or recreational activities. These include ocean-going, coastal, inshore, channel and river pleasure boats. There were 100 registered vessels in this category at the end of 2018, including eight new registrations.

Seafarer Registration

According to the law, Macao residents aged 18 or above may apply for seafarer registration with the Marine and Water Bureau. All Macao residents who wish to conduct professional maritime activities on commercial vessels, auxiliary boats or fishing boats are required to register with the Marine and Water Bureau beforehand. At the end of 2018, a total of 118 people held seafarer's books issued by the Marine and Water Bureau.

Maritime Training School

The Maritime Training School is Macao's only nautical education institution. Its principal objectives are to provide theoretical and practical training in maritime subjects and harbour management, as well as related scientific knowledge.

Most of the training school's students are staff members from the Marine and Water Bureau, Macao Customs Service, Fire Service and Public Security Police Force, as well as sailors, fishermen and nautical athletes in Macao. The training school also provides after-school and summer vacation activities for youngsters.

Government Dockyard

The Government Dockyard is a department under the Marine and Water Bureau. As well as shipbuilding and ship repairs, it is responsible for maintaining and repairing government vehicles, verifying their status and inspecting them, handling newly purchased vehicles, as well as making and installing vehicle identification plates. At present, most of the vessels built and repaired at the Government Dockyard belong to the Marine and Water Bureau and Macao Customs Service.

In 2018, the Government Dockyard built eight new vessels – a 25-metre rescue ship, two 16-metre steamboats, one 17-metre hydrographic vessel, two 19-metre tugboats, one 11-metre hydrographic vessel and one 38-metre engineering vessel for the Marine and Water Bureau. It also carried out 281 vessel maintenance projects, 171 of which were completed. The shipyard carried out 2,268 projects concerning examination, maintenance and repair of 2,685 vessels.

Safety of Water Supply

To ensure the safety of water supplies in Macao and effectively manage water resources more effectively, the Maritime Administration was renamed the Marine and Water Bureau on 28 July 2013, and established the Water Resources Department for coordinating supplies of drinking water, recycled water and raw water; studying and establishing water resources management policy, system, and measures; and promoting development and reasonable utilisation of water resources. The Marine and Water Bureau also cooperated with various sectors to build a water-saving city through development and application of water technologies, and publication and promotion of water-saving activities.

The bureau also purchases raw water from mainland China and monitors the quality and quantity of the raw water, to ensure the quality in Macao meets the safety standard. The bureau also monitors the operations of the public water supply services company.

Civil Aviation

Civil Aviation Authority

The Civil Aviation Authority was founded on 4 February 1991, in accordance with Decree-Law No. 10/91/M dated 4 February 1991. It is constituted as a public institution under the Secretariat for Transport and Public Works, and it enjoys autonomy over administration, finances and property. It is responsible for directing, controlling and monitoring all civil aviation activities in Macao, and the operations of all aircraft registered in Macao.

Aviation Service

To implement its "Open Skies" policy, the Government has adopted a series of measures to enhance Macao's civil aviation infrastructure network. Every effort has been made to attract additional investment from domestic and foreign airlines, to promote the use of Macau International Airport, and to enhance the development of passenger and cargo transportation.

To increase cooperation with the international aviation community, the Government will continue to forge new air services agreements with countries around the world. By 31 December 2018, Macao had initialled air services agreements with 50 nations and regions, 41 of which had been officially signed.

Signatories of Air Services Agreements with Macao

Nation	Signing date
Brazil	15/07/1994
Finland	09/09/1994
Austria	04/11/1994
Belgium	16/11/1994
The Netherlands	16/11/1994
Luxembourg	14/12/1994
New Zealand	09/03/1995
Portugal	31/08/1995
Switzerland	05/09/1995
Singapore	27/10/1995
Malaysia	31/10/1995
Thailand	01/11/1995
United States	03/07/1996

Cont.

Signatories of Air Services Agreements with Macao	
Nation	**Signing date**
Vietnam	07/08/1996
Germany	05/09/1996
DPR Korea	08/12/1996
Denmark	11/12/1996
Sweden	11/12/1996
Norway	11/12/1996
South Korea	03/04/1997
The Philippines	18/07/1997
India	11/02/1998
Nepal	19/02/1998
South Africa	04/04/1998
Brunei	24/05/1998
United Arab Emirates	06/12/1998
Russia	21/01/1999
Myanmar	12/03/1999
Australia	24/08/1999
Poland	22/10/1999
Pakistan	15/11/2000
Czech Republic	25/09/2001
Cambodia	12/12/2001
United Kingdom	19/01/2004
Iceland	13/07/2004
Maldives	16/01/2006
France	23/05/2006
Sri Lanka	08/06/2006
Mongolia	27/06/2006
Japan	10/02/2010
Laos	25/06/2013
Oman	Initialled
Indonesia	Initialled
Israel	Initialled
Greece	Initialled
Slovakia	Initialled

Cont.

Signatories of Air Services Agreements with Macao	
Nation	**Signing date**
Cape Verde	Initialled
Chile	Initialled
Turkey	Initialled
Qatar	Initialled

As at 31 December 2018, three airlines were registered in Macao and providing flight services: Air Macau, Sky Shuttle and Macau Jet International.

The fleets and scheduled flight services of the three companies were as follows:

Airline	Fleet	Destinations
Air Macau	4 x Airbus A319, 3 x Airbus A320, 10 x Airbus A321	Shanghai (Pudong, Hongqiao), Beijing, Hangzhou, Xiamen, Nanjing, Ningbo, Chengdu, Nanning, Hefei, Chongqing, Taiyuan, Tianjin, Zhengzhou, Guiyang, Changzhou, Taipei, Kaohsiung, Bangkok, Da Nang, Hanoi, Seoul, Jeju, Tokyo, Osaka, Fukuoka, Da Nang, and Hanoi.
Sky Shuttle (Helicopter service)	3 x Agusta AW139	Hong Kong, Shenzhen
Macau Jet International (Commercial Charter Services)	1 x Dassault Falcon 2000LX 1 x Agusta AW139	Global destinations

The numbers of pilots licensed by the Civil Aviation Authority, as at 31 December 2018, were:

Airline	Number of licensed pilots
Civil Aviation Authority	1
Air Macau	201
Sky Shuttle	21
Macau Jet International (Commercial Charter Services)	9
Total	**231**

Macau International Airport is located at the eastern end of Taipa island and neighbouring waters. The terminal building was constructed on a rock-cut platform

at Ponta da Cabrita, while the apron was built on reclaimed land. East of the apron, the air-traffic control building, control tower and ancillary fire station are on Kia Kiong Islet. The runway is on an artificial island linked to the apron by two taxiway bridges.

The main fire station is on the runway island, next to the oblique taxiway. The airport is within easy reach of the Macao peninsula, the Outer Harbour and Zhuhai via motorway, the Friendship Bridge and the Lotus Flower Bridge. Commuting time from each of these points is less than 20 minutes.

The Macau International Airport handled 8,261,412 passengers during 2018, 15.3 percent more than in 2017. Its cargo volume was 41,508 tonnes, representing an increase of 10.7 percent. A total of 65,779 flights took off or landed, representing an increase of 12.4 percent.

The number of private and commercial air charters increased from 2,938 in 2017 to 3,170 in 2018, representing an increase of eight percent.

During 2018, 3,276,220 visitors arrived via the airport.

Air Traffic Control

Since it opened in 1995, the airport's air traffic control system has maintained excellent standards of service efficiency and flight safety. Air traffic control facilities include secondary surveillance radar, ground radar and the Automatic Terminal System. Telecommunications facilities include AMHS, while air-ground communications facilities include a UHF radio station, and navigation facilities include a Doppler VHF omnidirectional radio range (DVOR) apparatus and Instrument Landing System.

The zone with Macao's air traffic control service is classified as Category-C under International Civil Aviation Organization (ICAO) standards. The keyhole-shaped air traffic zone is centred on Macau International Airport. It extends up to an altitude of 3,000 feet and a radius of five nautical miles. The western boundary is a straight line parallel to and three nautical miles from the runway. To the south, the zone forms a rectangle five nautical miles wide and extending southwards for 10 nautical miles.

Macao's air traffic zone lies between the Hong Kong and Guangzhou flight information zones. All aircraft, including helicopters entering Macao airspace, are supervised by the airport control tower. Arriving and departing aircraft can land or take off from both the southern and northern approaches. The mainland China authorities control air traffic to the north of Macao's air zone, while traffic to the south is controlled by the Civil Aviation Department of Hong Kong. Since traffic in the Pearl River Delta airspace is busy and complex, the air-traffic control authorities of Macao, mainland China and Hong Kong must work closely to ensure the safety and efficiency of air traffic control in Macao and the neighbouring air zones.

Aircraft Noise

Macau International Airport was constructed offshore and far from residential communities, avoiding the need to install soundproofing. However, to protect Zhuhai from noise pollution caused by northbound flights taking off from the runway, aircraft are not allowed to pass the 231-degree radial line of Zhuhai's Jiuzhou omni-directional beacon station.

Aviation Security

Under Decree-Law No. 36/94/M issued on 18 July 1994 and ICAO regulations, the security systems of civil aviation are intended to ensure the safety, normal operations and efficiency of international civil aviation activities in Macao. Security measures and procedures are essential to protect passengers, crew, airport staff and the public, as well as ensuring the normal, uninterrupted operations of aircraft, facilities and equipment.

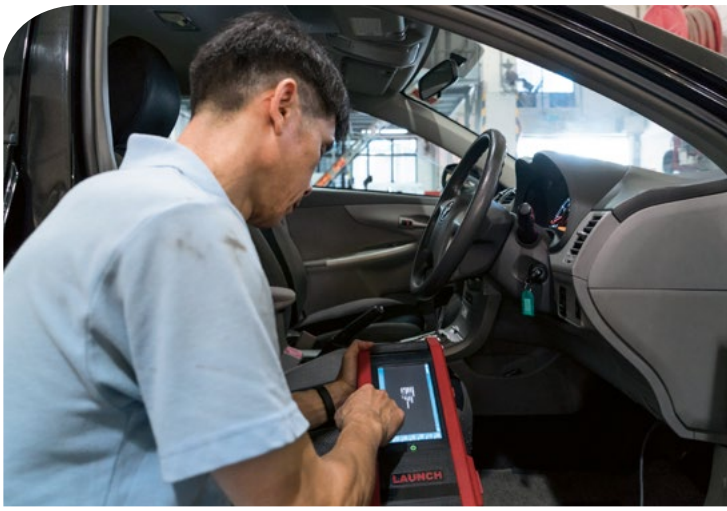
Responsibility for Macao civil aviation security is distributed among the Civil Aviation Authority, the Unitary Police Service, the Macao Customs Service, the Public Security Police, the Judiciary Police, the Marine and Water Bureau, the Macau International Airport, the SEMAC Security Company employed by the Airport, aviation companies and other airport departments.

The airport security company is responsible for implementing the security measures and procedures formulated by the airport operator, and ensuring that the security measures and procedures comply with the security requirements of aviation in Macao and the International Civil Aviation Organization (ICAO) standards and recommendations. Besides, the company provides professional training, certified technicians and advanced security equipment to perform security checks on passengers, baggage and cargo.

Macau International Airport Company

Macau International Airport Company (CAM) has been appointed by the Government to operate Macau International Airport. It was responsible for the airport's construction, and it is now responsible for its operation. The Government approved the company's application in 2001 to extend its franchise by a further 25 years, to 2039.

MAINTENANCE



The Government Dockyard is a department under the Marine and Water Bureau. Besides ship building and repairing, it is also responsible for servicing and repairing government vehicles, verifying their status and inspecting them, handling newly purchased vehicles, and making and installing vehicle identification plates. At present, most of the vessels built and repaired at the Government Dockyard belong to the Marine and Water Bureau and Macao Customs Service.

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MACAO YEARBOOK 2019

13

GEOGRAPHY, ENVIRONMENT AND POPULATION

Location

The Macao Special Administrative Region (MSAR) is an integral part of the People's Republic of China. Situated at the mouth of the Pearl River Delta (PRD) and bordering Guangdong Province, Macao is 60 kilometres from Hong Kong, and located at latitude 22°12'40"N and longitude 113°32'22"E. Macao time is eight hours ahead of Greenwich Mean Time. The MSAR consists of the Macao peninsula and two islands: Taipa and Coloane. Three bridges – Nobre de Carvalho Bridge, Friendship Bridge (Ponte da Amizade) and Sai Van Bridge – link the peninsula to Taipa; while the COTAI Reclamation Area links Taipa and Coloane islands.

According to Chief Executive Notice No.128/2015 dated 20 December 2015: as stipulated in Order No. 665 of the State Council of the People's Republic of China, the Macao Special Administrative Region comprises land and marine areas, with the land area comprising the Border Gate Macao Checkpoint Building section and the Canal dos Patos section, and the marine area comprising six sections: the Inner Harbour section, Cotai channel section, southern Macao waters section, eastern Macao waters section, artificial island section, and northern Macao waters section. The boundary to the west is meridian 113°31'41.4"E, to the east 113°37'48.5"E, to the south parallel 22°04'36"N, and to the north 22°13'01.3"N.

Area

Due to reclamation along its coastline, Macao's total land area has grown from 11.6 square kilometres in 1912, when measurements were first taken, to 32.9 square kilometres in 2018. The Macao peninsula accounts for 9.3 square kilometres (28.3 percent) of the current area; Taipa island for 7.9 square kilometres (24 percent); Coloane island for 7.6 square kilometres (23.1 percent); COTAI Reclamation Area for six square kilometres (18.2 percent); New Urban Zone Area A for 1.4 square kilometres (4.3 percent); Macao border crossing area on Zhuhai-Macao checkpoint on the Artificial Island of the Hong Kong-Zhuhai-Macao Bridge for 0.7 kilometres (2.1%), and the campus of the University of Macau for one square kilometre.

According to Chief Executive Notice No.128/2015 dated 20 December 2015: as stipulated in Order No. 665 of the State Council of the People's Republic of China, the Central People's Government explicitly determines that the area of waters of the Macao Special Administrative Region is 85 square kilometres.

Geology and Topography

Macao mainly comprises flat land, terraces and hills. The area of flat land (including reclaimed land) is 23.8 square kilometres, accounting for 72.3 percent of the total; granite hills cover six square kilometres, or 18.2 percent; and terraces cover 1.2 square kilometres, or 3.7 percent. The terraces are historically areas of denudation, extending

along St Augustine, Luis de Camoes Garden, the hill behind Mong Ha Kun Iam Tong Temple, Russa Hill, and the southern part of Taipa island. Their relatively small area, low elevation (20-25 metres) and gentle slopes mean that most of the terraces are fully utilised. The remaining land – including reserves, monument sites and forests – occupies approximately 1.9 square kilometres, accounting for 5.8 percent of the total land area.

The elevation of Macao increases from the north to the south. Guia Hill, in the north, is the highest point on the Macao peninsula, with an altitude of 90 metres. To the south, Alto de Coloane is the highest hill on Coloane island, as well as the highest point in Macao, with an altitude of 170.6 metres. Taipa Grande, the main peak of Taipa island, has an altitude of 158.2 metres.

Coastline Assessment

According to Executive Order No. 184/2018 enacted on 13 August, the coastline of the Macao SAR was determined by the published Macao Special Administrative Region Coastline Map, dated 1 July 2017. The total length of Macao's coastline is 76.7 kilometres, 18.4 kilometres of which are around the Macao peninsula; 49.9 kilometres are around the two islands (including Taipa Island, Cotai Reclamation Area and Coloane Island); 5.7 kilometres are around New Urban Zone Area A; 2.7 kilometres are around the Macao border crossing area on Zhuhai-Macao Port Artificial Island of the Hong Kong-Zhuhai-Macao Bridge.

There are two types of coastline in the Macao SAR: artificial and natural coastlines. Artificial coastlines predominate, representing 81.5 percent of the total coastline length, and are mainly around the Macao peninsula and fringing eastern and northern Taipa Island. The natural coastlines mainly fringe western Taipa Island and a the southern tip of Coloane Island, representing 18.5 percent of the total coastline length.

Climate

Macao is situated in a subtropical zone, with the Asian continent to the north and a wide tropical sea to the south. In winter, Macao experiences northerly winds, cold and dry weather and low rainfall, due to a cold continental high-pressure system at medium and high latitudes. In summer, Macao is mainly subject to south-westerly winds, hot and wet weather and heavy rainfall, due to the influence of oceanic tropical weather systems. The reverse of wind directions in winter and summer, together with minimal temperature variations during the day, give Macao a marine monsoon climate.

According to the climate normals of the World Meteorological Organization (WMO), calculated with 30 years of data, the average annual precipitation in Macao between 1981 and 2010 was more than 2,000 millimetres, with most rainfall occurring between April and September. June had the most precipitation – an average of 363.8 millimetres; while January had the least – an average of 26.5 millimetres.

Macao has an average annual temperature of 22.6°C. The coolest month is January, when it averages 15.1°C. Most years, Macao has a short cold weather period when temperatures fall below 5°C. The average monthly temperature exceeds 22°C during seven months of the year, indicating that Macao has a short winter but a long summer.

Macao is frequently hit by typhoons. The typhoon season starts in May and ends in October, with July to September as its peak period.

Weather Overview

General Situation

In 2018, Macao's average annual temperature and the relative humidity were slightly higher than the climate normal, while the total rainfall and the total evaporation level were significantly lower than the climate normal, and the total hours of sunshine was slightly below the climate normal.

Seven tropical cyclones affected Macao in 2018. They were: Tropical Storm Ewiniar from 5 June to 8 June, Tropical Storm Son-Tinh from 17 July to 18 July, a tropical depression from 23 July to 24 July, Severe Tropical Storm Bebinca from 9 August to 15 August, Tropical Storm Barijat from 11 September to 13 September, Super Typhoon Mangkhut from 15 September to 17 September, and Super Typhoon Yutu from 31 October to 2 November. Super Typhoon Mangkhut brought severe damage to Macao, resulted in Typhoon Signal No. 10 being issued for the first time since Typhoon Hato in 2017.

During Typhoon Mangkhut, the maximum wind speed was 137 kilometres per hour. Typhoon Signal No. 8 was also issued as strong Tropical Storm Bebinca approached, as a precaution given its erratic movement. The warning signal lasted for 138 hours, which set a new record for the most hours a signal has been issued.

Regarding storm surge warnings, a warning was issued as a result of Tropical Storm Son-Tinh; blue storm surge warnings were issued as a result of Strong Tropical Storm Bebinca and Tropical Storm Barijat, and a black storm warning was issued as a result of Super Typhoon Mangkhut.

Summary of Severe Weather Warnings Issued in 2018			
Warning / Signal Type		**Frequency**	**No. of Warning Reports Issued**
Tropical Cyclone Warning	No. 1 Alert Signal	7	42
	No. 3 Strong Wind Signal	5	69
	No. 8 Northeast Gale Signal	2	10
	No. 8 Southeast Gale Signal	2	10
	No. 8 Southwest Gale Signal	0	0
	No. 8 Northwest Gale Signal	0	0
	No. 9 Increasing Gale Signal	1	2
	No. 10 Typhoon Signal	1	9
	All Signals Lowered	7	7
Strong Monsoon Warning (Black Ball)		22	84
Rainstorm Warning		8	30
Thunderstorm Warning		79	207
Storm Surge Alert		3	9
Storm Surge Warning	Blue Storm Surge Warning	22	48
	Yellow Storm Surge Warning	0	0
	Orange Storm Surge Warning	0	0
	Red Storm Surge Warning	1	17
	Black Storm Surge Warning	1	9
	All Warnings Lowered	3	3

Temperatures

Macao had an average annual temperature of 22.8°C during 2018, which was

0.2°C higher than the climate normal. The highest and the lowest average temperatures were 28.1°C in July and 15°C in January and February, respectively. The hottest day was 29 May, when the temperature rose to 35.8°C; whereas the coldest day was 1 February, when the temperature fell to 4.6°C.

Relative Humidity

The average relative humidity during 2018 was 81 percent, which was two percentage points higher than the climate normal. August saw the highest monthly average relative humidity, at 87 percent; whereas the lowest was 72 percent in February.

Rainfall

Total rainfall during 2018 was 1,795.6 millimetres, which was 262.5 millimetres or about 13 percent less than climate normal. The highest monthly rainfall was 493.6 millimetres, recorded in June, 129.8 millimetres above normal. The lowest monthly rainfall was 8.2 millimetres, recorded in December. The highest daily rainfall was 108.2 millimetres, recorded on 16 September.

Evaporation

The total evaporation level in 2018 was 790.9 millimetres, which was 154.2 millimetres less than the climate normal. The evaporation levels in February and May were slightly higher than the climate normal, while the evaporation levels of other months in the year were all lower than the climate normal.

Sunshine

During 2018, Macao had 1,744.4 hours of sunshine, 29.5 hours less than normal. The most hours of sunshine were recorded in May, totalling 246.4 hours, 110 hours above normal. The least hours of sunshine were recorded in February, amounting to 91.6 hours, which was 12.2 hours more than normal.

Wind

During 2018, Macao was subject to predominantly north-northeasterly winds in January, February and from September to November; easterly winds in March and July; south-southeasterly winds in April; southerly winds in May, June and August; and northerly winds in December. Wind speeds averaged 11.2 kilometres per hour.

Weather Services

Meteorological and Geophysical Bureau

The Meteorological and Geophysical Bureau (SMG) is supervised by the Secretary for Transport and Public Works. It provides weather reports, monitors air quality and radiation, and conducts research into climate, climate change and earthquakes.

Apart from hourly real-time weather information, the SMG issues various types of daily weather forecasts for the public, government departments and private institutions. These include five weather reports and forecasts, two marine and weather forecasts for the Macao coastal area, as well as weather reports on the preceding day, which are broadcast daily for the public. The SMG provided 1,823 weather forecasts and 729 weather forecasts for the Macao coastal area during 2018.

The SMG continued cooperating with the Macau Broadcasting Company's (TDM). Every day, SMG officers explain the day's weather conditions and the forecast for the following day during the Macau Broadcasting Company's morning TV programme. The SMG forecasters also record weather information regularly, or when necessary, and upload it to the Internet for download and use by various media. This information includes a weather review of the day, a two-day weather forecast and air quality report; a weekly weather forecast; special weather information (on typhoons, rainstorms, very hot and cold weather); and a morning-weather recording.

Whenever a tropical cyclone signal is issued, the SMG provides a warning signal forecast for the following one to two days, based on a table with forecast conditions. Citizens can learn about the potential impact of tropical cyclones during particular hours and make necessary preparations as soon as possible. When Typhoon Signal No.3 or above is issued, TDM uses split-screen views to announce the latest tropical cyclone news.

In response to special weather conditions (such as a forecast of a substantial drop in temperature), the SMG sends special weather notifications to registered users, social welfare organisations and schools via WeChat, mobile applications and SMS.

Through the round-the-clock Automatic Air Quality Monitoring Network, the SMG announces real-time concentration of air pollutants and summarises daily air quality on its website every day. In addition, an air quality forecast for the following day is reported to the public.

The SMG Aeronautic Meteorological Center at Macau International Airport provides half-hourly weather observations and special reports to aviation organisations and flight crews.

The aeronautical meteorological documents include meteorological maps for every route, as well as upper wind and temperature charts, aviation weather reports and forecasts, and volcanic ash and tropical cyclone advisory information. All international

flights departing Macao can receive the most update aeronautical meteorological documents of international standards via the Aviation Weather Information System (AWIS). In 2018, a total of 34,481 aeronautical meteorological documents were downloaded from the system, which typically operated at 99.9 percent efficiency.

In recent years, the SMG has introduced the Mobile WebWeather Service, Macao SMG mobile app and the official WeChat account, "Macao SMG". An SMS service and the 1311 Telephone Voice Response Weather Information Enquiry Service provide a wide array of weather information and air quality indices. The SMG also cooperates with relevant departments to display up-to-date tropical cyclone and rainstorm warnings on the electronic monitors in the Border Gate checkpoint building and the Outer Harbour Ferry Terminal, in order to help border-crossing commuters to promptly respond to changes in weather. In addition, the Weather Service Centre was established at the Outer Harbour Ferry Terminal, to provide travellers with the latest weather advice and information.

The SMG also offered the 48-hour Automatic Weather Forecast and Real-time Air Quality Index services, providing the public with temperature, humidity, wind speed and direction, and weather forecasts for the following two days and more timely air quality index on the website.

The SMG further enriched the website content in 2018. Information on sky views and wind were included in the Automatic Weather Forecast. The air quality index calculation and display were also optimised. Daily maximum and minimum temperatures and other monitoring data, presented in time series charts, were added to the real-time weather information, so that citizens could more conveniently learn about the weather.

After Typhoon Hato in 2017, the SMG carried out a series of refinements and promotions to educate citizens about adverse weather conditions.

The SMG amended the administrative orders regarding tropical cyclones and storm surges. Regarding the Executive Order No. 16/2018 about tropical cyclones, Strong Typhoon and Super Typhoon were added to the levels of tropical cyclone, deepening citizens' understanding regarding the potential level of destruction by a typhoon. As to the Executive Order No. 76/2018 regarding storm surges, the SMG added a Storm Surge Warning, to strengthen storm surge alerts to the public. The number of levels of Storm Surge Warning was increased from three to five, expanding the scope of flood warnings during a storm surge. The rankings are blue, yellow, orange, red and black, in order of severity.

The SMG also strived to educate the public about weather and disaster relief, and cooperated with other organisations in organising talks to introduce common adverse weather conditions and corresponding safety measures.

In 2018, the SMG also redesigned the webpage on Weather Forecasts for Holidays. Many images were used to present detailed weather information to the public. The forecasts now provide various information, depending on the holiday. For example, special notice of rain and humidity would be given during the Dragon Boat Festival,

to alert dragon boat race competitors regarding changes in the weather; notifications are given on the time for enjoying the moon and night time weather during the Mid-Autumn Festival, to help citizens enjoy the celebration.

During 2018, the SMG posted the Storm Surge Alert labels onto the Civil Protection CCTV rods in low-lying areas, to more clearly inform citizens regarding the potentially affected areas and the severity of flooding, enabling prompt response measures when storm surge alerts are issued. Labels were also posted in car parks, to alert car owners and drivers about the potential for storm surges.

Monitoring Network

The SMG collects weather data 24 hours a day via its Automatic Weather Station Network of 15 weather-observation stations in key locations around Macao. Three of these automatically send information every 15 minutes to destinations worldwide, using the international SYNOP code and the Global Telecommunications System (GTS). This forms part of the Pearl River Delta Real-time Automatic Weather Station Network, which was jointly established to exchange meteorological data by the Guangdong Provincial Meteorological Bureau, the Hong Kong Observatory and the Macao SMG.

The SMG also teamed up with the Hong Kong Observatory to establish a substation of the Pearl River Delta Lightning Location Network in Macao. The system operates around the clock, and provides real-time lightning information for the Pearl River Delta. Two lightning systems with real-time monitor interface were also established in 2018.

Regarding meteorological telemetry, the SMG has two ground meteorological reception and processing systems to receive Japanese Himawari-8 satellite information and Chinese FY-2E and FY-2G satellite information, respectively; two dual-polarisation Doppler weather radars; three low-level wind profilers; two microwave radiometers; a cloud height meter; three visibility measuring devices; and two lightning sensors to monitor lightning in the skies over Macao and the vicinity.

The SMG cooperates with related departments to establish the Water Level and Tide Monitoring Network, to provide round-the-clock real time data on flooding and tides in flooding black spots and coastal area. The network includes 17 land water level monitoring stations set up at flooding black spots in various districts of Macao, two tide monitoring stations set up along the coast, and two inshore wave monitoring stations.

In addition, the SMG cooperated with the Pearl River Water Conservancy Science Academe to commence work on marine meteorological observations. By the end of 2018, real-time monitoring data was received from the marine buoy stations in the Macao and Pearl River Water regions set up by the academe, expanding monitoring from land-based meteorology to include nearby sea areas, including hydrology, and providing real-time data as a reference for storm surge monitoring and issuing alerts.

Air quality monitoring: The SMG established the Air Quality Monitoring Project in

partnership with Companhia de Electricidade de Macau (CEM). The SMG employs a fully automated air monitoring network to measure major pollutants that jeopardise Macao's air quality. Macao has six automatic air quality monitoring stations, a light detection and ranging (LIDAR) system for monitoring suspended particulates and boundary layers above Macao and two mobile air monitors to monitor air quality of different districts in Macao. Moreover, in July 2012 the SMG adopted a new air quality standard, raising the air quality standard to WHO interim target-1(IT-1).

Seismological monitoring: The SMG has a seismological monitoring station in its Taipa Grande headquarters on Taipa, equipped with a digital seismograph and a deep shaft (30 metres from ground level) digital seismograph. In 2014, the deep shaft digital seismograph was upgraded and became a monitoring station of the Pearl River Delta Earthquake Early Warning Network. In addition, a seismic information sharing portal was introduced, to receive earthquake information for the entire country.

Environmental radiation monitoring: The SMG's headquarters is equipped with an environmental radiation monitoring station, mainly for detecting Gamma radiation dose rates in the atmosphere and announcing the results on the website. A baseline survey on Macao's atmospheric radiation began in 2013. Regular monitoring of Macao's atmospheric radiation is conducted every year in different districts.

Regional and International Cooperation

The SMG is a member of the WMO. It actively participates in promoting technology, research, training and applications relating to meteorology. Every year, it sends delegations to meetings, seminars, workshops and training programmes arranged by the WMO, mainland China and overseas meteorological agencies and academic organisations.

The SMG is also a member of the ESCAP/WMO Typhoon Committee. The committee secretariat moved to Macao in 2007.

The SMG keenly takes part in meteorological science meetings and exchange activities conducted by its mainland China and overseas counterparts. Every year, it participates in the Guangdong-Hong Kong-Macau Seminar on Meteorological Science and Technology and the Guangdong - Hong Kong - Macao Meeting on Cooperation in Meteorological Operations organised alternately by the three parties, with the 2018 meeting hosted by the SMG; and the Eighth Guangdong - Hong Kong - Macao Seminar on Earthquake Science and Technology, and the Meeting of the Third Assessment Report on the Influence of Climate Change on Tropical Cyclones in the Typhoon Committee Region.

The SMG also attended:

- The 50th Session of the ESCAP/WMO Typhoon Committee;
- The 22nd Meeting of the Meteorology Sub-group of the Asia Pacific Air Navigation Planning and Implementation Regional Group;

- The 16th Session of Commission for Aeronautical Meteorology of World Meteorological Organization;
- The Second China-ASEAN Meteorological Forum;
- The 13th ICAO Air Navigation Conference;
- The 17th WMO/CIMO Technical Conference on Meteorological and Environmental Instruments and Methods of Observation;
- The 13th Typhoon Committee Integrated Workshop;
- The 24th Conference of the Parties to the United Nations Framework Convention on Climate Change;
- The 14th Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol and the third Session of the 1st Conference of the Parties serving as the meeting of the Parties to the Paris Agreement;
- The Academic Advisory Committee of the Regional Key Laboratory for Numerical Weather Prediction (NWP) of Guangdong Province;
- The South China Sea Fengyun Forum;
- The Guangdong-Hong Kong-Macao Greater Bay Area Seminar on Meteorological Development Planning;
- Meeting on Hong Kong-Zhuhai-Macao Bridge Meteorological Services;
- Workshop on Typhoon Defence and Forecast Techniques in Pearl River Delta Cities;
- The Guangdong-Hong Kong-Macao Joint Regional $PM_{2.5}$ Study;
- The National Meteorological Departments Director Conference;
- 2018 Typhoon Committee Roving Seminar; and
- The Guangdong-Hong Kong-Macao Air Quality Monitoring and Forecasting Techniques Seminar.

Air

Population density, scarcity of land, narrow streets and busy traffic all affect Macao's air quality. However, this is offset to some extent by the low discharge of industrial pollutants. The air quality is therefore generally quite good. Every winter, a comparatively high level of airborne pollutants raises the air pollution index; while in summer the air quality improves, with lower pollution index readings, as the convective precipitation of the tropical climate dispels pollutants.

During 2018, roadside monitoring stations in Macao recorded "good" air quality on 66 percent of days, "acceptable" air quality on 33.1 percent of days, and "poor" air quality on 0.8 percent (three days). In the high-density residential area of the Macao peninsula, the air quality was "good" on 64.7 percent of days, "acceptable" on 33.9

percent of days, and "poor" on 1.4 percent (five days).

In the high-density residential area on Taipa, the air quality was "good" on 61.91 percent of days, and "acceptable" on 38.9 percent of days. Ambient monitoring stations on Taipa recorded "good" air quality on 52.1 percent of days, "acceptable" air quality on 40 percent of days, and "poor" air quality on 7.9 percent of days (29 days). Ambient monitoring stations on Coloane recorded "good" air quality on 53.6 percent of days, "acceptable" air quality on 42.5 percent of days, and "poor" air quality on 3.9 percent of days (14 days). The Ka Ho roadside monitoring station recorded "good" air quality on 52.2 percent of days, "acceptable" air quality on 44.4 percent of days, and "poor" air quality on 3.3 percent of days (12 days).

In 2018, fine suspended particulates ($PM_{2.5}$) and ozone (O_3) were the main pollutants that led to "poor" air quality in Macao, with the former primarily affecting Macao in winter while the latter mainly affected Macao in summer and autumn. The ambient monitoring stations on Taipa recorded most of the "poor" and "bad" air quality, on 7.9 percent of days (29 days). Overall, over 92.1 percent of days met the air quality standards ("good" to "acceptable") in 2018. As compared to 2017, concentrations of respirable suspended particulates and ozone showed a slightly increase, while concentrations of other pollutants were largely unchanged.

Average Pollutant Concentrations in 2018

Monitoring Station	Respirable suspended particulates ($\mu g/m^3$)	Fine suspended particulates* ($\mu g/m^3$)	Sulphur dioxide ($\mu g/m^3$)	Nitrogen dioxide ($\mu g/m^3$)	Ozone ($\mu g/m^3$)	Carbon monoxide (mg/m^3)
Roadside	50.4	25.8	---	52.6	---	0.9
High-density residential area of Macao peninsula	48.9	22.7	5.3	47.9	32.3	0.7
High-density residential area of Taipa island	38.1	18.6	4.0	27.6	59.8	0.6
Taipa ambient	41.2	24.2	7.2	39.5	59.1	0.6
Coloane ambient (i)	42.4	30.3[b]	0.8	26.3	60.0	0.6
Ka Ho roadside [a]	38.1	18.6	4.0	27.6	59.8	0.6

a. *The monitoring station in a high-density residential area of Taipa island resumed service on 8 August 2018.*

b. *The $PM_{2.5}$ monitoring station of Ka Ho roadside was suspended from 4 May to September 24 2018, due to a technical failure and construction.*

Comparisons between Pollutant Concentrations and the Daily Air Pollution Index						
Air quality Index	Respirable suspended particulates 24-hour average ($\mu g/m^3$)	Fine suspended particulates 24-hour Average ($\mu g/m^3$)	Sulphur dioxide 24-hour average ($\mu g/m^3$)	Nitrogen dioxide 1-hour average ($\mu g/m^3$)	Ozone 8-hour average ($\mu g/m^3$)	Carbon monoxide 8-hour average (mg/m^3)
0	0	0	0	0	0	0
50	100	35	40	100	80	5
100	150	75	125	200	160	10
200	350	150	660	750	350	17
300	420	250	1,300	1,500	600	34
400	500	350	1,700	2,000	800	46
500	600	500	2,120	2,500	1,000	57

Air Pollution Index						
Air quality Index	0~50	51~100	101~200	201~300	301~400	401~500
Air quality level	Good	Acceptable	Poor	Bad	Severe	Harmful
Symbol						

Noise

There are many reasons for noise pollution in Macao. Urban characteristics – such as population density, busy traffic, narrow streets and the large number of high-rise buildings – create conditions for noise transmission.

In 2018, the Environmental Protection Bureau and the Public Security Police received 8,873 complaints about ambient noise, about 0.05 percent more than the 2017 figure. The Environmental Protection Bureau received 1,367 of these complaints, representing an increase of 4.83 percent compared with 2017; whereas the Public Security Police received the remaining 7,506 cases, a figure that was 0.78 percent less than in 2017.

Complaints received by the Environmental Protection Bureau and the Public Security Police were primarily related to "Activities of daily life and pets in residential buildings" (31.1 percent or 2,757 cases), public areas (34.7 percent or 3,077 cases), and industry, commerce and services (14.7 percent or 1,304 cases).

Environmental Noise Monitoring Network

Currently, Macao has six environmental noise monitoring stations – three on the Macao peninsula, one on Taipa island, one in the COTAI Reclamation Area and one in Coloane. These monitoring stations conduct round-the-clock monitoring of ambient noise; road traffic noise; and noise from the residential zones, by means of an automated network. Data on such noise readings are published monthly in the Environmental Geographic Information System on the Environmental Protection Bureau's website. The 2017 Annual Report of the Data Collected by Environmental Noise Monitoring Stations of Macao and the 2017 Environmental Noise Census were also published in 2018.

Water Quality and Wastewater Treatment

Water Quality

Situated at the mouth of the Pearl River, Macao occupies a peninsula and nearby islands facing Lingdingyang to the east and the South China Sea to the south; there is a wide expanse of water. Water exchanges resulting from tidal flows dilute pollutants entering the area. The Inner Harbour to the west of Macao is a favourite berthing place for Zhuhai and Macao fishing boats. The sluice of the Zhuhai Qianshan River lies upstream of the Inner Harbour channel, and when this is closed the area is partially blocked off. The poor exchange of its waters with the sea results in conditions in which pollutants can accumulate. When the sluice is open, Macao's water quality is determined by the quality of the water in the Qianshan River. Pollutants that have accumulated will then flow to neighbouring waters.

Based on the geographic features of Macao, the Public Health Laboratory of the Health Bureau adopts Category 3 Water Quality Standard of the Sea Water Quality Standard of China (GB3097-97), to assess individual indicators, nutrition indicators and comprehensive indicators of the water quality at each monitoring station.

Water Quality Monitoring Network

Three automatic water quality monitoring stations are under the management of

the Environmental Protection Bureau at Ilha Verde Dockyard, Inner Harbour and Cotai Nature Reserves. Round-the-clock monitoring of water quality is conducted through an automated network. Data on the water quality readings are published monthly in the Environmental Geographic Information System on the Environmental Protection Bureau's website. The 2017 Annual Report on the Data Collected by Automatic Water Quality Monitoring Stations of Macao was also published in 2018. The bureau also continued monitoring coastal water quality in 2018.

Monitoring Drinking Water Quality

The Civic and Municipal Affairs Bureau Laboratory is responsible for the public water supply network; inspecting the water quality of public water sources and wells; and – if necessary – recommending the closure of these facilities in the public interest. It regularly monitors the quality of water processed by the water supply company, and other water supply networks and reservoirs in the territory, to verify whether the quality complies with the requirements stipulated in the Rules and Regulations on Water Supply and Drainage in Macao (Decree-Law No. 46/96/M).

Since being awarded the ISO/IEC 17025 Certificate of Laboratory Accreditation by the China National Accreditation Committee for Laboratories (CNAL; now China National Accreditation Service for Conformity Assessment) in 2003, the laboratory has enhanced its analytical performance and its quality management system. The laboratory also continued to participate in proficiency tests held by renowned organisations in mainland China and countries including the United States, the United Kingdom and Australia. The laboratory's inspection technology has fulfilled international requirements. Currently, it possesses 91 and 205 accreditations on water quality certificates and various food certificates, respectively.

Wastewater Management

The five sewage treatment facilities in Macao – the Macao Peninsula Sewage Treatment Plant, Taipa Sewage Treatment Plant, Coloane Sewage Treatment Plant, Macau International Airport Sewage Treatment Plant, and Crossborder Industrial Zone Sewage Treatment Plant – can handle 356,000 cubic metres of sewage per day.

In 2018, the Macao Peninsula Sewage Treatment Plant handled 54,095,990 cubic metres of sewage; Taipa Sewage Treatment Plant handled 9,069,467 cubic metres; Coloane Sewage Treatment Plant handled 17,807,153 cubic metres; the sewage treatment plant at Macau International Airport processed 31,489 cubic metres; and the Crossborder Industrial Zone Sewage Treatment Plant handled 668,885 cubic metres.

The open tenders for optimisation, operation and maintenance of sewage treatment plants in Macao Peninsula commenced in 2018. The optimisation work commenced. Meanwhile, the construction of pretreatment facilities at the Cross-border Industrial

Zone Sewage Treatment Plant for handling waste water from Ilha Verde Water Supply Treatment Plant was completed in 2018, further improving the marine environment in Canal dos Patos. The Macao Sewage Treatment Facilities Master Plan was completed in 2018, after which work began on the preliminary design of Coloane Sewage Treatment Plant Upgrade.

To align with the planning and development of Macao's New Urban Area, the preliminary design and environmental impact assessment of the sewage treatment plant construction in Zhuhai-Macao Port Artificial Island of Hong Kong-Zhuhai-Macao Bridge were completed in 2018. Afterwards, a geological survey was conducted in preparation for constructing and installing the sewage treatment plant and pipes, and tender documents were drafted. The remaining tender procedure would commence upon the completion of various preliminary works.

Waste Management

Companhia de Sistemas de Residuos, Lda. (CSR) has been contracted to undertake Macao's household waste collection and conveyance, urban cleaning operations and the cleaning and maintenance of public waste containers, under the Government's supervision. According to statistics provided by the Civic and Municipal Affairs Bureau in 2018, the CSR collected about 300,000 tonnes of household waste in Macao during 2018, an average of about 822 tonnes a day.

Work continued on introducing the policy of "waste reduction at source, sorting and recycling" according to the Macao Solid Waste Resources Management Programme (2017-2026), which was introduced in 2017. The Recycling Industry Equipment and Vehicles Subsidy Scheme was introduced in 2018, to help the recycling industry purchase about 20 items of equipment for dismantling, sorting, compressing, transporting and weighing waste, and light vehicles, in order to improve techniques and foster development of the industry. The draft law on Macao Construction Waste Management System was submitted to the legislature by the end of 2018.

Waste Classification

The Civic and Municipal Affairs Bureau continued to optimise public sorting and recycling facilities in the community. The number of public collection points in Macao was increased to 356. The bureau also invited schools, government departments, associations, private organisations and buildings to participate in the reusable waste sorting and recycling programme, aiming to provide the public with convenient ways to recycle waste. During 2018, 2,503.1 tonnes of waste paper, 240.5 tonnes of metals and 190.4 tonnes of plastic were recycled through various reusable waste sorting and recycling programmes.

The Civic and Municipal Affairs Bureau continued its glass bottle recycling programme. Participants include hotels, schools, and shopping malls. Public collection points for glass bottles have been set up throughout Macao. A total of 417.5 tonnes of waste glass were recycled during 2018. To reduce the volume of organic waste, a wet market food waste recycling programme, a school food waste recycling programme and a community food waste recycling (pilot) programme were launched; they processed a total of 15 tonnes of food waste during the year. Also, a programme for reusing clothes was jointly launched with the Macau Salvation Army, to improve the system for reusing clothes in Macao; about 635.9 tonnes of used clothes were collected during the year.

The Environment Protection Bureau again organised the "Recycling Red Packets is Very Easy" event during Chinese New Year, attracting widespread participation. Over 600 collection points were set up, and about 2.1 million red packets were collected (about 6,200 kilograms). After sorting, about 1.05 million red packets could be reused (over 3,100 kilograms).

The Environment Protection Bureau organised the first "Recycling Mooncake Boxes is Very Easy" event, and cooperated with government departments, communities, hotels, banks, tertiary institutions and estates to set up over 800 mooncake box collection points, encouraging citizens to follow the principle of "Reuse before recycle", and reuse clean mooncake boxes before recycling. During the event, a total of 7,000 kilograms of used mooncake boxes was recycled for reuse.

Macao Waste Incineration Centre

Macao Incineration Centre is responsible for processing all Macao's solid waste, together with some solid waste collected from the sea by the Marine and Water Bureau. It comprises two plants, with a total processing capacity of 1,728 tonnes of waste per day. During 2018, the centre collected 538,944 tonnes of municipal solid waste, an average of 1,477 tonnes a day.

The waste heat produced by the round-the-clock incineration centre during the treatment of the municipal solid waste can be recovered and used for power generation. The power generated by the centre can supply up to 21MW per hour of electricity at full load to the public grid – sufficient to meet the needs of over 33,000 households in Macao. During 2018, the incineration centre supplied 17,889 units (16,570 kWh) of electricity to the public grid.

During 2018, the preliminary work on the third-phase expansion of the incineration centre continued. The design and environmental impact assessment were completed. The open tender process was carried out in phases.

The Environmental Protection Bureau strived to promote food waste recycling. During 2018, the Restaurants Food Waste Recycling Pilot Project commenced, to further expand the food waste recycling network, handling more food waste from small to medium-size restaurants. The project was also promoted in Macao Food Festival.

Special and Hazardous Waste Treatment

The Macao Special and Hazardous Waste Treatment Centre, adjacent to the Taipa Incineration Centre, commenced operation in 2007. It handles special waste according to the latest European Union incineration standards, including medical waste, slaughterhouse waste, discarded tyres, carcasses of animals such as horses and dogs, oil residue, and other solid and liquid special wastes.

In 2018, the waste treatment centre's total treatment capacity (including medical waste) was 3,510 tonnes, with discarded tyres comprising 43 percent of the treatment capacity.

Since the Environmental Protection Bureau introduced the Used Battery Collection Scheme, over 1,100 collection points have been set up in schools, merchants, shops, residential and commercial zones, public departments and public refuse tips in various districts of Macao. Over 17,000 used batteries were collected, over 14,500 of which were pretreated primary batteries and exported to Japan via Hong Kong in December 2018, for reuse and recycling treatment, following procedures according to the Basel Convention.

The Computer and Communication Products Recycling Programme donated used newer models of computers, which met the bureau's donation requirements and had received some maintenance, to charities. The remaining computers were collected by the programme contractors for dismantling. The reusable components and materials would be transferred to other regions for recycling treatment, accounting for a total recycling rate of 90 percent. The progress was implemented according to the Basel Convention cross-border transfer procedures.

Treatment of Construction Waste

The construction waste landfill is located on Avenida do Aeroporto in Taipa. Since it commenced operations in March 2006, it has been mainly used for the disposal of non-combustible inert solid waste produced through excavation, demolition, and construction. The solid waste includes debris, cement blocks, soft soil and marine clay. In 2018, about 2.10 million cubic metres of construction waste were disposed of in the landfill.

Automatic Solid Waste Collection System

The pilot scheme for automatic solid waste collection in the Areia Preta New Reclamation Zone (NATAP) was established in 2006. The system comprises a number of inlet valves connecting with a network of underground tubes. The solid waste is transported by means of air suction to a collection station between Ponte da Amizade Avenue and Macao Wastewater Treatment Plant, from where it is taken by trucks to the incineration centre. During 2018, open tenders were conducted for the hydrogen

sulphide monitoring, and maintenance of the automatic solid waste collection.

Legislation and Pollution Control

Legislation enacted in 2018 covering environmental issues includes:

1. By-law No. 32/2018 Recycling Industry Equipment and Vehicles Subsidy Scheme enacted;

2. Amendment to Schedule of By-law No.30/2016 Tailpipe Emission Limits and Measurement of Exhaust Pollutants by Vehicles in-use (Executive Order No. 130/2018);

3. Amendment to Environmental Emission Standards for New Light Vehicles (Executive Order No. 256/2018);

4. Approval of the Table of Parameters of Emissions of Exhaust Pollutants for Vehicles with Four-stroke Engines, to Supersede amendment to Schedule 1 and 2 of Annex 1 of Executive Order No.1/2008 approved by Executive Order No. 356/2010 (Executive Order No. 257/2018);

5. Approval of the Tailpipe Emissions Standard and On Board Diagnostics Specification, to Supersede Schedule 1 and 2 of By-law No. 1/2012 (Executive Order 258/2018);

6. Air Pollutant Emission Standards for Sewage Treatment Plants (By-law No. 37/2018); and

7. Air Pollutant Emission Standards for Pharmaceutical, Copper Clad Laminate Manufacturing and Plastic Processing Factories (By-law No.37/2018).

International Treaties

Several international agreements and treaties to address global environmental problems have been made applicable to Macao, including:	
1	Vienna Convention for the Protection of the Ozone Layer Montreal Protocol on Substances that Deplete the Ozone Layer Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer London Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer

Cont.

Several international agreements and treaties to address global environmental problems have been made applicable to Macao, including:	
1	Copenhagen Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer Montreal Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer Beijing Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer
2	United Nations Framework Convention on Climate Change Kyoto Protocol to the United Nations Framework Convention on Climate Change
3	Paris Agreement
4	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (with amendments made in 1995, 1998, 2002, 2004 and 2013)
5	Stockholm Convention on Persistent Organic Pollutants (POPs) (with amendments made in 2009, 2011 and 2013)
6	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the Appendix III amendment to the Rotterdam Convention adopted in the 8th Conference of the Contracting Parties from 24 April to 5 May 2017
7	The Minamata Convention on Mercury
8	Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques
9	Plant Protection Agreement for the Asia and Pacific Region (with amendments made in 1967, 1979 and 1983)
10	International Plant Protection Convention
11	Convention on Biological Diversity
12	Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
13	Protocol on Environmental Protection to the Antarctic Treaty

International treaties on maritime safety related to marine environment protection applicable to Macao include:	
1	International Convention on Oil Pollution Preparedness, Response and Co-operation 1990
2	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL)
3	Amendment to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1980
4	International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001
5	Convention on the Conservation of Antarctic Marine Living Resources

Environmental Protection Bureau

The Environmental Protection Bureau (DSPA) is charged with studying, planning, executing, coordinating and promoting environment policies.

Advisory Council on the Environment

The Advisory Council on the Environment is chaired by the Director of Environmental Protection Bureau. Members include a maximum of seven representatives of other entities or government departments, and a maximum of 20 other prominent social figures in the environmental protection field.

The major responsibility of the Advisory Council on the Environment is consulting opinions from different social sectors regarding Macao's environmental protection, and providing recommendations on the study, formulation, implementation, coordination and promotion of environmental policies.

Environmental Protection and Energy Conservation Fund

The Government established the Environmental Protection and Energy Conservation Fund through By-law No. 21/2011, and established the Environmental Protection, Energy-saving Products and Equipment Subsidy Scheme through By-law No. 22/2011, to subsidise enterprises and community groups in Macao to increase their capability for protecting the environment; and to introduce environmental protection techniques and devices for further facilitating the development of environmental protection and its industry.

The Environmental Protection, Energy-saving Products and Equipment Subsidy Scheme was the first subsidy scheme since the establishment of the Environmental Protection and Energy Conservation Fund. It targets commercial enterprises and community organisations. According to Order No. 63/2014 of the Secretary for Transport and Public Works, the application deadline for the Environmental Protection, Energy-saving Products and Equipment Subsidy Scheme was extended to 31 December 2015, receiving over 7,600 applications for subsidies. As at the end of 2018, over 99.8 percentage of applications were handled, of which over 5,000 were approved, involving subsidies of more than 410 million patacas.

The Government established a scheme to subsidise equipment and vehicles for the recycling industry, according to By-law No. 32/2018 Promulgated in November 2018. The application period is from 26 November 2018 to 25 November 2019.

Promotion of Environmental Protection Education

With the theme "Building a Low Carbon Macao and Embracing a Green Life", the Environmental Protection Bureau organised 286 events in 2018, with a total of 263,263 participants.

The Macao Green Hotel Award has been held for 11 years, with a marked increase in green hotels from 8 in the first year to 51 in 2018. Green hotels actively adopt environmental-friendly management. The average waste produced per room decreased by more than 30 percent; the total weight of recycled waste is more than 200,000 tonnes; and more than 3,400 tonnes of food waste has been recycled. Significant improvements were also seen in water and energy saving, as well as training for environment protection.

To encourage residents to reduce plastic bag use, the Environment Protection Bureau has jointly organised "Use Fewer Plastic Bags" with various departments, communities and organisations for six consecutive years. More than 300 stores participated in 2018. Over six years, more than 260,000 people participated in this campaign, which saved 260,000 plastic bags.

The Green School Award Project 2018 had the theme "Waste Reduction in Campus", and gave 25 green school awards, with 17 schools receiving the Green School Honour Award; and 8 receiving the Outstanding Green School Award. In all, 24 teams of teachers and tertiary institution students received the Environment Education Pedagogical Project Award, while 38 schools received Green Campus Fun Awards.

The Environment Protection Bureau launched "Reducing Plastic is Very Easy" with communities, delivery platforms, local restaurants and beverage companies, to encourage citizens not to use disposable utensils when buying take-away food.

To promote "reduce waste at source" and encourage citizens to bring their own water bottles, the Environment Protection Bureau initiated the installation of 13 machines

supplying drinks without cans or bottles [[drinking water dispensers; wonder if anything other than water provide, I rather doubit]] in government departments; introduced three user guides regarding drinking water dispensers, and encouraged people to bring their own water bottles to large public events. This was the first year for drinking water dispensers to be installed for a food festival.

The Environmental Protection Bureau continued implementing the Environmental Protection Fun Bonus Point Scheme. By the end of December 2018, there were more than 9,200 members in the first phase of Environmental Protection Fun – waste reduction and recycling. The second phase of the scheme – moving towards being environmentally-friendly – encouraged people from all walks of life to join the scheme's frontline team (Environmental Protection Fans). They assisted with providing a guided tour service in Cotai Nature Reserve, to leverage the synergy between teaching and learning.

In addition, they promoted environmental messages to the public during environmental festivals such as Wetland Day, Earth Day and World Environment Day, and traditional festivals such as Lunar New Year, the Mid-Autumn Festival and Christmas, and encouraged the public to participate in environmental activities and put environmental protection into practice.

Regional Cooperation on Environmental Protection

The 2018 Macao International Environmental Co-operation Forum (2018 MIECF) was held from 12 April to 14 April. The theme was "Innovative Green Development for a Sustainable Future".

MIECF has comprehensive functions as a global environmental platform to enhance exchanges and cooperation between green enterprises in countries along the "Belt and Road", and within the Pan-Pearl River Delta Region, the Guangdong-Hong Kong-Macao Greater Bay Area, and Portuguese-speaking and European countries, bringing together high-level representatives from government, industry and the academic sector. Regarding green forums, six green forums and one special event were held in 2018, inviting more than 50 pioneers, multinational enterprises' senior executives and government officials as guest speakers.

Regarding environmental cooperation in the Pan-Pearl River Delta Region, the Environment Protection Bureau attended the 14th Coordinator Working Meeting of the Joint Conference on Pan-Pearl River Delta Regional Environmental Protection Cooperation, and the 14th meeting of the Joint Conference on Pan-Pearl River Delta Regional Environmental Protection Cooperation.

In June 2018, Guangdong, Hong Kong and Macao jointly announced the 2017 Report of the Guangdong-Hong Kong-Macao Pearl River Delta Regional Air Quality Monitoring Network. The parties will continue to manage and maintain the regional air quality monitoring network.

Under the Framework Agreement on Cooperation Between Guangdong and Macao in Environmental Protection, the cross-border transfer of scrap motorcycles was trialled in 2018. In September, the two sides held the Guangdong-Macao Environmental Protection Cooperation Task Force Meeting, to enhance cooperation in air quality monitoring, marine environmental protection, dredging Canal dos Patos in tandem, scrap vehicle treatment, environmental protection industry exchanges and environmental publicity and education, striving to build a better living environment.

Regarding Hong Kong-Macao environmental cooperation, the two sides attended the 10th Meeting on Environmental Protection Cooperation between Hong Kong and Macao. Representatives discussed the plans for cooperation and exchanged experience and views on several environmental issues, with the aim of jointly together regional environment quality. The Environment Protection Bureau also organised a delegation of 22 members to attend the 13th Eco Expo Asia in Hong Kong.

Under the framework of the Zhuhai-Macao Environmental Protection Cooperation Agreement, the Zhuhai-Macao Environmental Cooperation Working Group Meeting 2018 was held in May 2018. The two sides cooperated and exchanged views on several environmental issues.

Environmental Protection Planning in Macao

In 2018, the Environmental Protection Bureau continued implementing the long-term tasks in the Environmental Protection Plan of Macao (2010-2020), and commenced a study on the Environmental Protection Plan of Macao (2021-2025).

Examination of Environmental Data

Complaints received by the Environmental Protection Bureau in 2018:

Category	Number of cases
Noise	1,249
Air pollution	394
Noise and air	90
Noise and other	29
Air and other	26
Environmental hygiene	55
Other	105
Total	**1,948**

Technical advice provided at the request of other departments in 2018:

Department	Premises and projects	Nos.
Tourist Office	Premises including karaoke bars, bars, hotels, restaurants, sauna and massage establishments, dance halls and health clubs.	296
	Inspections before issuance or renewal of licences	121
Economic Services Bureau	Technical advice	8
	Inspection of industrial sites	6
	Technical advice on applications for import of HCFCs defined as controlled substances under Decree-Law No. 62/95/M	107
Lands, Public Works and Transport Bureau	Projects including piling foundations, environmental protection projects and applications for extension of construction time, construction plans, expansion plans, modification of / legalisation on construction projects	189
Civic and Municipal Affairs Bureau	Technical advice on licensed premises	296
	Site inspections	160

Moreover, the Environment Protection Bureau received 18 environmental impact assessment reports on new projects and related information in 2018.

Flora

Macao abounds in plant species. More than 1,500 species of vascular plants have been identified in Macao. These are mainly found in woodlands, parks and leisure grounds. Most of Macao's vegetation belongs to the evergreen broad-leaf woodland, tree, shrub and coastal bush groups, including such species as Rose Myrtle (*Rhodomyrtus tomentosa*), Blood-red Melastoma (*Melastoma sanguineum*), Oblong leaved Litsea (*Litsea rotundifolia var. oblongifolia*), Pop-gun Seed (*Bridelia tomentosa*), Hong Kong Hawthorn (Rhaphiolepis indica) and Linear Forked Fern (*Dicranopteris pedata*). The most common species of cultivated plants are the Chinese Hibiscus (*Hibiscus rosa-sinensis*), Hong Kong Orchid Tree (*Bauhinia blakeana*), Sunshine Tree (*Cassia surattensis*) and False Groundnut (*Desmodium heterocarpon*). Also, according to research conducted until 2010 by the Civic and Municipal Affairs Bureau and researchers from the Shenzhen Fairylake Botanical Garden, Macao has 104 species of bryophytes which belong to 34 genera and 63 families. Rare species include *Fissidens macaoensis, Kurzia sinensis, Phaeoceroa laevis, Notothylas japonica horik, Micromitrium* and *Vesicularia*. *Fissidens*

macaoensis is a new species to science which was officially announced in 2011. As it was discovered in Macao, its Latin name includes "Macao".

The terrestrial vegetation in Macao has a relatively diverse plant community. Types of vegetation can be identified: coniferous forests, mixed conifer–broadleaf forests, evergreen broadleaf forests. Forest areas on Taipa and Coloane have undergone a compositional transformation. A firebreak was set up, and many indigenous tree species were introduced, including Melia-leaved Evodia (*Tetradium glabrifolium*), Hong Kong Gordonia (*Gordonia axillaris*), Acronychia (*Acronychia pedunculata*), Morris's Persimmon (*Diospyros morrisiana*), India Carallia (*Carallia brachiata*), Yanmin (*Dracontomelon duperreanum*), Persimmon-leaved Litsea (*Litsea monopetala*), *Michelia chapensis*, Burmese Rosewood (*Pterocarpus indicus*), Heterophyllous Winged-seed Tree (*Pterospermum heterophyllum*), Silver-back Artocarpus (*Artocarpus hypargyreus*), *Pinus elliottii*×*Pinus oaribaea*, Common Fig (*Ficus carica*), Horse-tail Pine (*Casuarina equisetifolia*), Chinese Holly (Ilex rotunda), *Michelia macclurel* and Chinese Guger Tree (*Schima superba*).

In addition to leafy plants that were commonly used in the past – namely the Dwarf Yellow (*Duranta repens*), Golden Leaves (*Ficus microcarpa*), Golden Dewdrops (*Duranta repens 'variegata'*), Purple Knight (*Alternanthera dentata*), *Fagraea ceilanica* and Painted Copper Leaf (*Acalypha wilkesiana*) – colours were added to the green belts to improve greening of streets in Macao and create a better view by growing colourful flowering shrubs, such as Indian Azalea (*Rhododendron simsii*), *Cordyline fruticosa*, Small Allamanda, *Lantana montevidensis* and *Ruellia brittoniana* in recent years. The view looks more layered with the addition of these flowers, accompanied by other trees such as Golden Trumpet Trees, *Terminalia mantaly*, Camel's Foot Tree (*Bauhinia variegata*) and Chinese Banyan (*Ficus microcarpa*).

Green Week

Green Week in Macao is an annual event organised by the Civic and Municipal Affairs Bureau with the assistance from various organisations in the community. The 37th Green Week in Macao was held from 17 March to 25 March 2018, with the theme "Love the Green City, Plant an Ideal Home". The event featured over 30 activities, and was attended by some 30,000 participants.

During the event, 1,225 seedlings were planted on land, thousands pots of plants were given away, and a series of educational activities were held to encourage public participation in greening Macao.

Fauna

Macao is small. The development of land and expansion of urbanisation affect and damage the survival and scope of activities of wild animals. The numbers of species and populations of wild animals in Macao are decreasing.

The scarcity of unpolluted waters in Macao leads to a decrease in the diversity and numbers of amphibians. The five commonest species are Asian Common Toad (*Bufo melanostictus*), Gunther's Frog (*Rana guentheri*), Brown Tree Frog (*Rhacophorus megacephalus*), Paddy Frog (*Fejervarya limnocharis*) and Asian Painted Frog (*Kaloula pulchra*). In the hilly forest area of Coloane, the Civic and Municipal Affairs Bureau has constructed artificial freshwater wetlands as better habitats for amphibians.

The commonest wild mammals are bats, rats and Red-bellied Tree Squirrels. Bats mainly inhabit Coloane and Taipa. In 2013, Chinese Rufous Horseshoe Bat (*Rhinolophus sinicus*) was newly recorded. The Japanese House Bat (*Pipistrellus abramus*) and Short-nosed Indian Fruit Bat (*Cynopterus sphinx*) can be found on the Macao peninsula. The former frequents gaps between buildings and lives on mosquitoes and flies, helping to limit populations of harmful insects. The latter eat fruits in parks or woods, and may help spread their seeds, contributing to the city environment and natural environment of the woods. The Red-bellied Tree Squirrel is an exotic species, formerly imported as a pet. It is now wild in Macao. Its lack of natural enemies poses a threat to other animal species, especially birds, as the squirrels eat their eggs.

Reptiles, especially snakes, play an important ecological role in controlling the number of rats. Large-spotted Cat Snake (*Boiga multimaculata*) and Many-banded krait (*Bungarus multicinctus*), which are relatively rare, were recorded in Coloane in 2013. However, Macao's dense population poses an enormous threat to their dwelling and foraging areas. In addition, some people's misunderstanding and fear about snakebites have caused the number of snakes to decrease most significantly among all wild animals in Macao.

Previous studies recorded over 300 species of birds in Macao. Dominant species were Chinese bulbul (*Pycnonotus sinensis,* terrestrial) and Little Egret (*Egretta garzetta,* waterbirds). There were nine common species, of which terrestrial birds outnumbered waterbirds. Among these, five common species were terrestrial birds – Japanese White-eye (*Zosterops japonicus*), Crested Myna (*Acridotheres cristatellus*), Common Tailorbird (*Orthotomus sutorius*), Eurasian Tree Sparrow (*Passer montanus*) and Chinese Hwamei (*Garrulax canorus*); and four were waterbirds: Kentish Plover (*Charadrius alexandrinus*), Black-crowned Night Heron (*Nycticorax nycticorax*), Grey Heron (*Ardea cinerea*), and Chinese Pond Heron (*Ardeola bacchus*). Square-tailed drongo-cuckoo (*Surniculus lugubris*) and Tufted Duck (*Aythya fuligula*) were newly recorded in 2018. Since 2006, over 263 species of birds from 16 orders and 60 families have been recorded.

There are abundant fish stocks in Macao, which can be categorised into saltwater fish, brackish fish and freshwater fish. Saltwater fish and brackish water fish mainly refer to the fish off the coast of Macao. There are approximately 200 species of these fish. Freshwater fish most need protection in the natural environment. Although the habitats of freshwater fish and amphibians are similar to each other, the former have a narrower sphere of activities. Whenever the environment is destroyed or altered by human activities, they are often affected most directly.

There are over 600 species of insects, which are widely distributed in Macao, including 119 butterfly species.

Laws Governing Nature Conservation

Macao began to enact laws and regulations on nature conservation – including the establishment of nature reserves and the protection of flora and fauna of special interest – more than 30 years ago. New by-laws were promulgated in 2004 to replace older ones. They are as follows:

1. Decree-Law No. 33/81/M, gazetted on 19 September 1981; Decree-Law No. 30/84/M, amended on 28 April 1984; and Decree-Law No. 3/99/M, revised on 25 January 1999, which designated a 196,225-square-metre area of Seac Pai Van Country Park as a conservation area of outstanding educational, ecological, scenic and scientific value;

2. Law No. 11/2013, approved by the Legislative Assembly on 13 August 2013, and By-law No. 31/2018 and enacted on 4 May 2018, which designated part of Coloane island with an altitude of 80 metres or above as a buffer zone;

3. The Environmental Law, approved by the Legislative Assembly on 31 January 1991 and gazetted by Law No. 2/91/M on 11 March 1991, which set out general guidelines and basic principles for the formulation of environmental policies;

4. General Regulations Governing Public Places (By-law No. 28/2004) enacted on 28 July 2004, which established general principles for behaviour to be observed when using and enjoying public places; and

5. By-law No. 40/2004 on Sanitary and Phytosanitary Control enacted on 14 December 2004, which regulates the sanitary and phytosanitary control of merchandise, and implements Chief Executive Order No. 245/2014 on the List of Plant Pests for Regulation as Quarantine Pest Organisms of the Macao SAR.

6. The Animal Protection Law (Law No. 4/2016) came into effect on 1 September 2016, with regulations on keeping, managing and selling animals, and the use of animals in public exhibitions and scientific applications. In addition, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Biological Diversity, and the International Plant Protection Convention have been made applicable to Macao, thus ensuring that Macao's nature conservation policies conform to international practices.

Nature Reserve

The Taipa-Coloane Wetland Reserve managed by the Environmental Protection Bureau is situated adjacent to the Lotus Flower Bridge in Taipa and Coloane. It has a total area of 55 hectares, including a 40-hectare bird foraging area that is regarded as zone two of the reserve, on the west coast of reclaimed area between Taipa and Coloane. Next to this zone is a 15-hectare bird habitat, regarded as zone one of the reserve, which provides different bird species (including the rare Black-faced Spoonbill) with suitable habitats.

As at the end of December 2018, the Cotai Nature Reserve's known biodiversity included 217 species of planktonic algae, 381 species land plants (embryophytes), 134 plankton species, 131 zoobenthos species, 484 species of insects, 70 species of fish, five species of amphibians, 20 species of reptiles and 10 species mammals. This diversity helped attract 177 species of birds to the nature reserve, including the Black-faced Spoonbill (Platalea minor).

To enrich education on ecology, apart from Cotai Nature Reserves Open Day and the "Nature School" family workshop, bird watching in nature reserves was organised for the first time in 2018, to raise awareness of environment protection.

Country Parks

There are four country parks in Macao: Seac Pai Van Country Park, Taipa Grande Nature Park, Hac Sa Reservoir Country Park, and Ka Ho Reservoir Country Park.

Seac Pai Van Country Park

Adjacent to Seac Pai Van Road in western Alto de Coloane, Seac Pai Van Country Park covers an area of about 198,000 square metres, and provides a wide range of facilities. Its animal facilities comprise the Giant Panda Pavilion, a zoo, and an aviary. Its exhibitions facilities feature the Giant Panda Information Centre and the Museum of Nature and Agriculture. Other leisure facilities include a children's playground, a large picnic area and a snack bar.

Giant Panda Pavilion

Set against a hill side in Seac Pai Van Park of Coloane, with a fan-shaped layout and an area of about 3,000 square metres, Macao Giant Panda Pavilion is designed to combine the terrain's natural undulations with the architectural characteristics. The pavilion comprises two 330-square metre indoor activity quarters and a 600-square metre outdoor yard. The appearance of the Macao Giant Panda Pavilion is designed to mimic nature, and it features green elements with leisure facilities such as pools and wooden climbing frames for the pandas.

Taipa Grande Nature Park

Taipa Grande Nature Park is on the east of Taipa island, and covers a wooded and hilly area of 13,000 square metres between Ponta da Cabrita Road, Governador Nobre de Carvalho Avenue and Padre Estevao Eusebio Situ Road. The park houses a native fish breeding zone, 56 sculptures representing the 56 Chinese ethnicities, Taipa Grande exhibition hall, barbecue area, grass skiing slope, children's playground and a

memorial pavilion for Mr. Henry Fok. It is a multifunctional park for relaxation, exercise, environmental protection, education and retreat. It is also an ideal destination for Macao residents to enjoy forest scenery to the full, embrace nature and enrich their leisure time.

Chinese Ethnics Sculpture Park

Located within Taipa Grande Nature Park, the Chinese Ethnics Sculpture Park is Macao's first ethnic-themed sculpture park. It is divided into a sculpture gallery and an exhibition hall.

Hac Sa Reservoir Country Park

Hac Sa Reservoir Country Park is situated in a hilly forest area on the southeastern slopes of the central mountain of Coloane. The park occupies 371,000 square metres between the entrance of the Westin Resort Macau on Hac Sa Road to the east, and Chu Ku Tong pond, in front of Man Hong Un, to the south. The Hac Sa aquatic plant zone and aquatic plant watching zone are for nature protection and education.

Ka Ho Reservoir Country Park

Ka Ho Reservoir Country Park is situated on the northeast of Coloane island. The park faces Ka Ho Village to the east, separated by Barragem de Ka Ho Road. Seac Pai Van Reservoir lies to its west; and the golf course and Alto de Coloane Road lie to its south. It is bordered by a road that leads to the youth challenge centre in the north; and it stretches all the way down to a wooded and hilly area by the shoreline. Ka Ho Reservoir Country Park has an area of 81.8 hectares.

With Ka Ho Reservoir as its central point, the park boasts various facilities, including the Ka Ho Reservoir Trail, Northeast Trail, Dam Mural, Waiting Square, and Little Spring; as well as barbecue, and picnic areas; the Blossom Bridge; diversity games zone; Ka Ho Reservoir Outdoor Experimental Camp; and the Freshwater-Wetland Ecological Zone. With its educational and recreational features, Ka Ho Reservoir Country Park is an ideal place to spend leisure time.

Population

Macao's resident population was estimated to be 667,400 as at the end of 2018, representing an increase of 14,300 or 2.2 percent over the previous year. On the same date, an estimated 46.9 percent of Macao's population were males, and 53.1 percent were females.

Natural factors are among the reasons for the increase in population. In 2018, there were 5,925 newborn babies, 2.2 percent fewer than in 2017, and 2,069 deaths, representing a decrease of 6.6 percent. Hence, the natural population growth rate was 0.59 percent.

On top of this increase, there was a change in immigration, another factor influencing population. The net number of immigrants was 10,500 in 2018, 6,700 more than in the previous year due to an increase in foreign employees residing in Macao.

Most residents lived in Our Lady of Fatima Parish, with 254,000 residents, comprising 38.1 percent of the total population.

Birth and Death Rates

In 2018, the birth rate and death rate were 0.9 percent and 0.31 percent, respectively.

Population Ageing

Macao's population is ageing because of the increasing life expectancy. Senior citizens (aged 65 or above) made up 11.1 percent of the population, 0.6 percent more than in 2017; the number of other adults (aged 15-64) dropped by one percentage point, representing 75.7 percent of the population. The ageing index increased by 1.1 percentage points to 84.1 percent of the population, over the previous year, marking the 22nd consecutive year this index has increased.

The ageing in the population of Macao people is more significant, with 74,100 senior citizens (aged 65 or above), 7.5 percent more than in the previous year; the number of other adults (aged 15-64) dropped by 0.5 percent to 386,000. The elderly dependency ratio of the population of Macao people was 19.2 percent, which means there was one senior citizen for every five adults.

Identification Bureau

Under the Basic Law of the Macao SAR, the Macao Special Administrative Region Government is authorised by the central government to issue MSAR Passports to Chinese citizens who hold MSAR Permanent Resident ID cards, and to issue other types of MSAR travel permits to other legal residents of Macao. MSAR Passports and travel permits are valid for worldwide travel, and entitle their holders to return to Macao.

The Identification Bureau is under the administration of the Secretariat for Administration and Justice, and is responsible for the overall planning and work relating to the civil and criminal identification of Macao residents. It issues ID cards and certificates of criminal record, certificates to substantiate the facts stated in official

record, MSAR Passports, and other travel permits to Macao residents. It also responsible for handling nationality applications from MSAR residents, receiving and handling applications for Certificate of Entitlement to Right of Abode and issuing the related certificates, arranging the registration of associations and syndicates qualified as juridical persons and issuing the related certificates, as well as other duties as vested by law.

Personal Identity Cards

Only Chinese citizens who are permanent residents in Macao with a Macao Resident ID card are eligible to apply for an MSAR Passport. A Chinese citizen who is a Macao Resident ID cardholder, but not a permanent resident of Macao and not eligible for other travel permits, may apply for an MSAR travel permit.

By 31 December 2018, the Identification Bureau had issued 686,787 MSAR Passports and 49,493 travel permits.

Under the Nationality Law of the People's Republic of China and the Interpretation by the Standing Committee of the National People's Congress on Several Questions Relating to the Application of the Nationality Law of the People's Republic of China in the Macao Special Administrative Region, any permanent resident of Macao with Chinese nationality and a Portuguese travel document may travel to other countries or regions with the Portuguese travel document as before. Therefore, such people may hold both a Macao SAR Passport and a Portuguese travel document at the same time.

The Identification Bureau is responsible for issuing Visit Permits for Residents of the Macao SAR to the Hong Kong SAR (also known as "Visit Permits to the HKSAR"). Residents of the MSAR who are either Chinese or Portuguese citizens and who hold a Macao Resident ID card or an MSAR Resident ID card may apply for Visit Permits to the HKSAR. The bureau had issued 441,470 such permits as at 31 December 2018.

The Identification Bureau is also responsible for issuing Macao SAR Resident ID cards. As at 31 December 2018, there were 719,634 Macao SAR Resident ID card cardholders. Between 1 January and 31 December 2018, 13,217 residents received Macao SAR Resident ID cards for the first time.

Nationality

Under Law No. 7/1999, the Identification Bureau is responsible for handling nationality applications from MSAR residents, including applications by foreign nationals or stateless persons for naturalisation; applications by Chinese citizens to renounce Chinese nationality; applications by foreigners who previously had Chinese nationality to restore Chinese nationality; applications by MSAR residents of both Chinese and Portuguese descent to choose either Chinese or Portuguese nationality; and applications

by original Macao residents who are Chinese citizens with other nationalities to adopt Chinese nationality.

Between 20 December 1999 and 31 December 2018, 1,137 applications for naturalisation were approved; 543 people restored their Chinese nationality; 90 renounced their Chinese nationality; 3,054 successfully applied to adopt Chinese nationality; 66 opted for Portuguese nationality; and there were five applications for change of nationality.

Certificate of Entitlement to Right of Abode

A certificate of entitlement to right of abode confirms the status of a permanent resident of the MSAR. Any person who claims to have right of abode in the MSAR but does not hold a valid Macao Resident ID card or MSAR Resident ID card and who does not live in any other region of the People's Republic of China (except the Hong Kong SAR and Taiwan) must apply for a certificate of entitlement to right of abode.

Such people include Chinese citizens who have ordinarily resided in Macao for seven consecutive years before or after the establishment of the Macao SAR; children of Chinese nationality born outside Macao whose parents are Chinese nationals and permanent residents of Macao; people of both Chinese and Portuguese descent who have ordinarily resided in Macao for seven consecutive years before or after the establishment of the MSAR; and children of Chinese nationality or children born outside Macao who have not selected a nationality but intend to reside in Macao permanently and whose parents are permanent Macao residents of either Chinese citizenship or Portuguese descent. The certificate of entitlement to right of abode indicates its date of effectiveness, prior to which holders of the certificate have no right to enter or reside in Macao.

Between 20 December 1999 and 31 December 2018, the Identification Bureau issued 80,478 certificates of entitlement to right of abode.

Certificate of Criminal Record

In August 1996, the Identification Bureau started to issue certificates of criminal record and certificates of special record for minors. The former is the sole and sufficient document to prove whether an applicant has any criminal record; while the latter is applicable to those under 16.

Between 1 January and 31 December 2018, the bureau issued a total of 99,191 certificates of criminal record. Of these, 78,560 were public applications, and 20,631 were agency applications. Among the 93 certificates of special record for minors that were issued, 82 were to applicants through agency, and 11 to public bodies.

Immigration Controls

According to the Basic Law of the Macao SAR, the Government may impose restrictions on people from other countries or regions entering, staying in, and leaving Macao. The Immigration Department of the Public Security Police is responsible for entry and exit in Macao.

The MSAR Immigrant Department records the entry and exit of non-residents, as well as their passport, visa, or other relevant documents for reference. The period of stay is granted according to stipulations in By-law No. 5/2003.

By 31 December 2018, citizens of 79 countries enjoyed visa-free access to Macao. Valid passport holders of these countries and regions may enter and stay in Macao for 14 to 90 days, while those from the United Kingdom may stay for up to six months. PRC passport or travel permit holders who have a valid air ticket and visa issued by the country or region of destination may stay for a maximum of seven days in Macao.

Legal Immigration

A decrease in mainland China immigrants has been recorded for three consecutive years. During 2018, the number of mainland China immigrants dropped by 674, totalling 3,532. Of these, immigrants from Guangdong Province decreased by 604 to 2,262, with females comprising 65.1 percent of the total.

Overstaying and Illegal Entry

In 2018, 27,609 overstayers were repatriated. They included 25,876 mainland Chinese, 80 Taiwan (China) residents, 72 Hong Kong residents, 1,581 foreign nationals, and 21,777 voluntarily repatriated mainland Chinese.

Civil Registration

The Civil Registry is responsible for implementing regulations relating to the civil registration of births, parentage, adoption and child custody, marriage agreements, deaths, legal certification of the deaths of missing persons, and issuing relevant certified documents.

Birth Registration

The Birth Registry is responsible for the registration of births in Macao, as well as the re-registration of births of people aged 14 or over. The Civil Registry should be

verbally notified of any birth in Macao by the parents or guardians within 30 days. The registry registered 5,983 births during 2018.

Marriage Registration

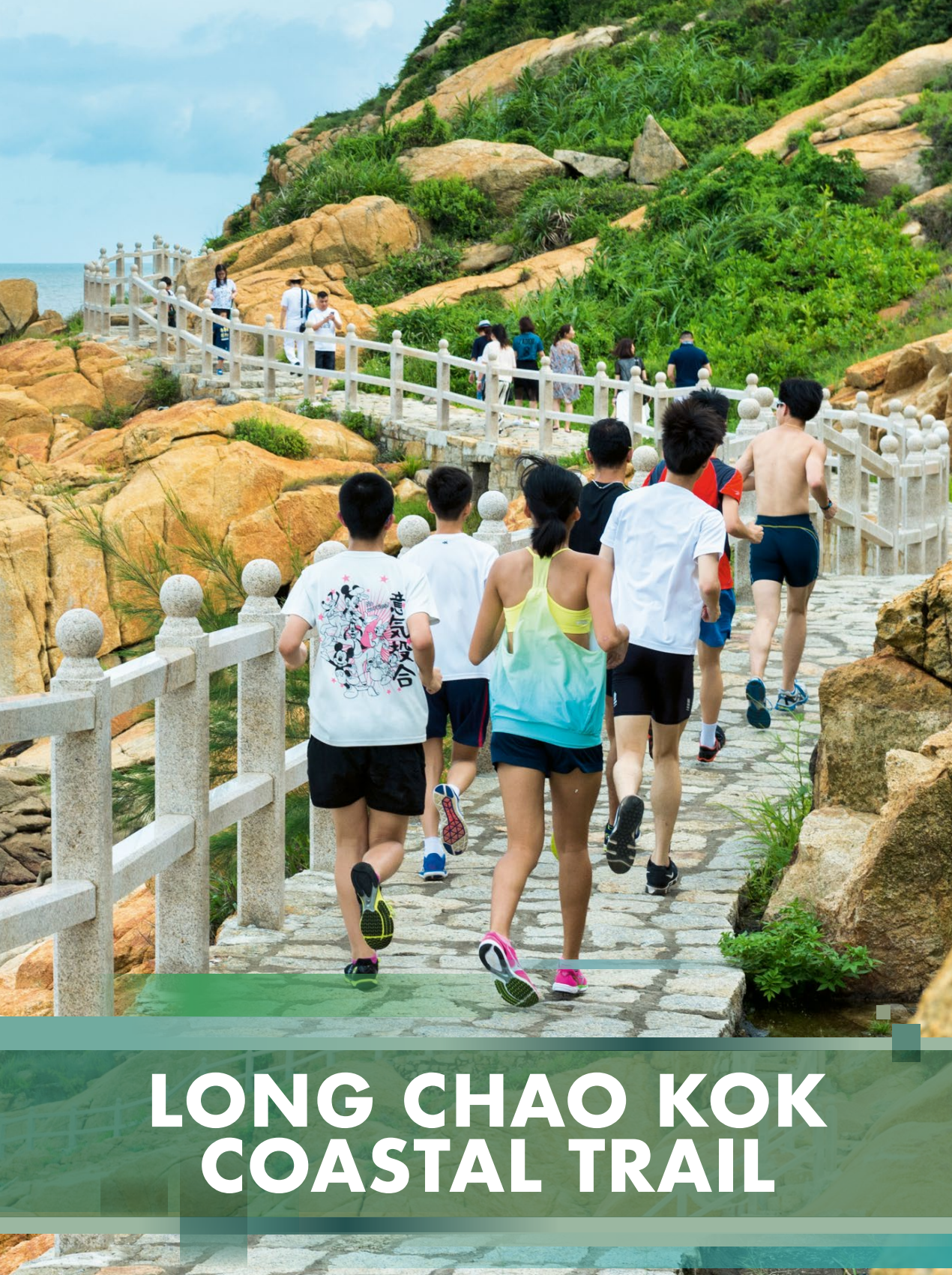
The Civil Registry is responsible for handling applications for marriages, approving marriage registrations, hosting ceremonies for the signing of marriage certificates and registering marriages. A total of 3,842 marriages were registered during 2018.

Death Registration

Family dependents or other relatives of a deceased person may register his or her death with the Civil Registry or its staff assigned to the registry's branches at Conde S. Januario Hospital and Kiang Wu Hospital. There were 2,187 death registrations during 2018.

Divorce by Mutual Consent

The Civil Registry has the authority to process divorce by mutual consent. Applicants who have been married for over one year, have no children aged under 18, and have reached agreement on maintenance payments and ownership of their residences may submit applications to the Civil Registry. There were 675 divorce applications during 2018.

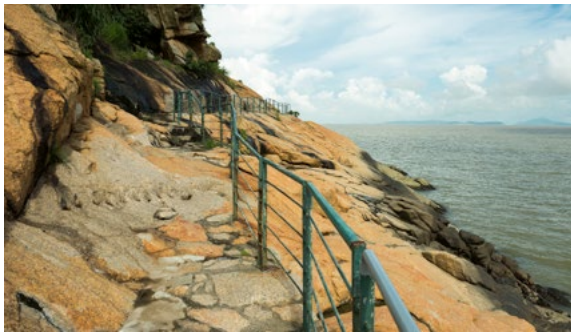


LONG CHAO KOK COASTAL TRAIL

The Long Chao Kok Coastal Trail in Hac Sa is a mostly level trail, running from Rua de Hac Sá Long Chao Kok to the Cheok Van villa cluster. The route passes jagged stones, creating beautiful scenery with high biodiversity.

To bring local residents and tourists into close contact with Long Chao Kok, the Government started conducting research on local natural landscapes in 2000, including the topography and habitats, for planning construction of the trail. This 1,200 metre-long seaside trail of medium difficulty was completed in 2003.

Walking along the coast, where sea breezes whisper with seabirds soaring high, is the best leisure activity for families and friends to get close to nature in Macao.



MACAO YEARBOOK 2019

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RELIGION AND CUSTOMS

The Basic Law of the Macao SAR states: "Macao residents shall have freedom of religious belief, and freedom to preach and to conduct and participate in religious activities in public." The Government, consistent with the principle of religious freedom, shall not interfere in the internal affairs of religious organisations or in the efforts of religious organisations and their believers in Macao to maintain and develop relations with their counterparts outside Macao, or restrict religious activities which do not contravene the laws of the SAR.

The Macao SAR protects the freedom of religion, worship and belief in general denominations through the Freedom of Religion and Worship Law (Law No. 5/98/M). It states that the Macao SAR does not recognise a state religion. Its relationships with all denominations are founded on the principles of separation and neutrality. The law further stipulates that all religious denominations are equal before the law.

Coexistence of Different Religions

Macao fully realises the diversity of religions. In addition to Buddhism, Taoism and Confucianism – the main belief systems of the local community – later arrivals such as Catholicism, Protestantism and Islam coexist in Macao.

Adherents of various beliefs participate in religious anniversaries and celebrate their traditional festivals in their own distinctive ways. For instance, the Macao Catholic Diocese conducts traditional religious processions associated with the Catholic calendar, including the processions of Our Lady of Fatima, Our Lord of Passion, and Corpus Christi. During Buddhist festivals, crowds of followers worship and burn incense sticks, and recite sutras for the enlightenment of all beings. In addition, during traditional Chinese religious festivals, such as the birthday celebrations for Tin Hau (the Heavenly Queen and Protector of Seafarers), the God of the Land, the Taoist god Tam Kung and Na Tcha, temples are crowded with faithful devotees worshipping the gods and offering sacrifices as a sign of respect. Theatrical troupes also stage performances at temples to amuse the gods and provide entertainment for onlookers

Buddhism

Buddhism plays a significant role in Chinese community life. But it is acknowledged that Buddhism is a very general concept in the minds of many Macao residents. It may be mixed with some other traditional beliefs and customs, such as Confucianism and Taoism. The ongoing construction of new temples and renovation of existing ones over the years – such as the A-Ma Temple, Pou Chai Buddhist Monastery and Temple, and Lin Fong Temple – as well as the constant crowds of worshippers, all bear testimony to the faith's importance.

Most Macao residents are ethnic Chinese who are profoundly influenced by their own tradition and culture, of which Buddhism forms an integral part. Its roots extend deeply and widely into their daily lives and customs. There are many Buddhists and

Buddhist communities in Macao. The most important of these is the Buddhist Association of Macau, which was established in 1997.

There are more than 40 Buddhist temples in Macao, as well as scores of village temples and houses dedicated to Buddhist deities. The majority of the temples, both large and small, are dedicated to Kun Iam (the Goddess of Mercy), Tin Hau or Kwan Tai (the God of War and source of righteousness).

Following the establishment of the Macao SAR Government, Buddha's Birthday, which falls on the eighth day of the Fourth Moon, was declared a public holiday.

Catholicism

The Macao Catholic Diocese was founded by decree of Pope Gregory XIII on 23 January 1576. As the first Catholic missionary centre in the Far East, it was originally responsible for many regions, including China, Japan, Vietnam and the Southeast Asian coastal islands.

The first bishop appointed to the Macao Catholic Diocese was the Jesuit Melchior Carneiro. Members of the Society of Jesus (Jesuits) had established a mission and a college in Macao by 1565. In the late 16th century, the standards of the latter's tertiary education were high enough to be recognised by European universities. Church of the Mother of God (commonly known as St Paul's Church), the Church of the Society of Jesus, was thrice destroyed by fire; the Ruins of St Paul's are the remnants of the blaze that occurred in 1835.

Franciscans, Augustinians, Dominicans, and Sisters of St Clare (who vowed to lead a hermetic life) all established missions in Macao during the 16th and 17th centuries.

Nowadays, the Macao Catholic Diocese is limited to the SAR itself. It has six parishes and three quasi-parishes. There are also 18 freestanding churches of various sizes and 55 chapels within diocesan buildings.

According to figures supplied by the Macao Catholic Diocese, Macao had 16,357 Catholic residents at the end of 2018. In addition, around 15,324 temporary residents of Macao were adherents, including Portuguese-speaking expatriates and their families, English-speaking people and their families from all over the world, Filipino domestic helpers and their families, and non-resident workers from the mainland and other Asian countries. Altogether, there are around 31,681 Catholics in Macao.

The clerics registered in the Macao Catholic Diocese include one diocesan bishop, one bishop emeritus, 14 priests and 17 contributing priests. In addition, two priests from the Macao Catholic Diocese currently work in other dioceses.

There are also 74 priests and 22 brothers in male religious congregations that serve the community in Macao. In addition, there are 176 sisters and 193 dedicated voluntary workers.

Macao Catholic Diocesan statistics show that, in the 2017-2018 school year, it managed and maintained 31 educational institutions with 29,900 students, 1,329 of whom were in tertiary education, 9,251 in secondary schools, 12,857 in primary schools and 6,463 in kindergartens.

The Catholic Church also operates 20 social service agencies, including five child-care centres, six convalescent homes for the elderly and sick, four rehabilitation homes for the physically and mentally handicapped, and five residential homes for students from single-parent families and/or who are experiencing personal problems. During the year, 1,606 people – 969 residents and 637 non-residents – benefited from the wide range of services provided by these institutions.

The Catholic Church is also engaged in other activities. It operates a bookshop, libraries, cultural and media affairs centres, a conference centre, social service centres, social welfare organisations, summer camps and retreats. It also publishes a few religious periodicals.

Protestantism

Macao is considered an important base for the introduction of Christianity to China in modern Protestant history. The religion was introduced to China during the Tang Dynasty, Yuan Dynasty and Ming Dynasty, a total of four times. Macao was involved in the last two introductions.

Robert Morrison was the first missionary from the London Missionary Society to arrive in Macao, in 1807. He then opened the fourth chapter in the history of pioneering Christianity in China. He baptised Choi Kou in 1814, and made him the first Chinese protestant. He led services in Macao and Guangzhou for 27 years, serving as a bridge for cultural exchanges between the West and China. In the 19th century, Protestant missionaries came mainly from Britain and America, and were engaged in local cultural and religious activities, becoming driving forces in modern China's healthcare, education, printing and publishing. In 1834, Robert Morrison died; his body lies in the Old Protestant Cemetery, beside the Luis de Camoes Garden.

After the Opium War, the missionary base in Macao was moved to Hong Kong and Shanghai. But Macao still played an active role in the development of Protestant churches in the Pearl River Delta area.

Entering the 20th century, a succession of Chinese Protestant churches were established, through the efforts of missionaries and returning Chinese believers. The Macau Baptist Church was established in 1904; the Chi Tou Church of the Church of Christ in China was established in 1906 at Hac Sa Beach; and Sheng Kung Hui (the Anglican Church) began their missionary activities in Macao in 1938. In the early 1950s, there were about five Protestant churches. By the 1980s, the number of Protestant churches had increased to 20. During the 1990s, missionary organisations from Hong Kong and overseas arrived to establish branches, and further increased the number of Protestant churches to over 50 throughout Macao.

Today, major Protestant denominations in Macao include the Church of Christ in

China, Baptist Church, Sheng Kung Hui (the Anglican Church), Sheun Tao Church, Christian and Missionary Alliance, Conservative Baptist Church, Assemblies of God, Church of the United Brethren in Christ, and the Evangelical Free Church. There are nearly 80 Protestant churches, with about 150 pastors and more than 8,000 believers. Some 4,400 believers currently attend Sunday worship each week.

Of the schools established by Protestants, four are secondary schools with primary and kindergarten sections; three are primary schools with kindergarten sections; one is a special education school; and there is one biblical institute. There are also several training centres and two bookshops operated by Protestant groups.

The Union of Evangelical Christian Churches and Associations in Macau was established in 1990, and comprises the Protestant churches and organisations. Its objectives are to strengthen links between Protestant organisations and enhance their development; and promote and organise local evangelising activities.

Around 60 Protestant organisations are involved in social services covering underprivileged groups, young people, families, workers, charity, counselling services and education. They also serve other people in need, including prisoners, patients, drug addicts and street sleepers.

Islam

The Islamic Association of Macau was established in 1935. It has long planned to build a mosque and Islamic centre; and a blueprint for the Islamic centre was approved by the former Portuguese administration. According to the plan, the mosque will have a total area of 1,250 square metres and will be able to accommodate a congregation of 600.

Baha'i

The Baha'i Faith was introduced to Macao in 1953. Its administrative body – the Local Spiritual Assembly of the Baha'is of Macao – was established in 1958. Later, a local Baha'i Centre was set up in Taipa in 1984, and another local centre was set up in Coloane in 1988. An administrative body covering the entire territory – the National Spiritual Assembly of the Baha'is of Macao – was established in 1989, which also oversees the three local bodies of the Baha'is in Macao.

The National Spiritual Assembly of the Baha'is of Macao established a school in Macao, which includes a kindergarten, a primary school and a secondary school. It received a land grant from the Government in 2008 for campus expansion. Thus far, it has provided education to several thousand students from many countries.

Traditional Festivals

Macao is a city where Chinese and Western cultures coexist. Local Chinese, Portuguese and Macanese residents and other ethical minorities in Macao respect and usually celebrate each other's festivals. Macao's festivals are so colourful and cheerful that some are designated statutory and general holidays. Traditional Chinese celebrations include the Lunar New Year (also known as Chinese New Year or the Spring Festival), Qing Ming Festival, Buddha's Birthday, the Mid-Autumn Festival and Winter Solstice; while Easter, the Feast of the Immaculate Conception and Christmas are important local festivals derived from Western traditions.

Lunar New Year

The Lunar New Year is the most important festival for Chinese people. Macao residents usually perform religious ceremonies at home or in temples on the first two days of the Lunar New Year. They visit friends and relatives, let off firecrackers and join in various celebrations. Civil servants, who are normally forbidden to enter casinos, are granted special permission to do so during the first three days of the New Year. The incessant, ear-splitting noise of firecrackers and the red shreds of their wrappers last a whole week, creating a vibrant, joyful scene. These are the sights and sounds of Macao during Lunar New Year. In recent years, it has become increasingly popular for Macao residents to take family vacations during the Lunar New Year public holidays.

Qing Ming, Chong Yang Festivals and All Souls' Day

The Qing Ming and Chong Yang (Double Nine) festivals are occasions for people to commemorate their ancestors and visit their graves. They pay homage to the deceased, strengthen bonds with their relatives and perform filial duties. All Souls' Day, the traditional Christian festival to remember the deceased, is also a public holiday in Macao.

Buddha's Birthday

Buddha's Birthday is a special local festival in Macao. During the festival, Buddhist organisations in Macao usually organise many celebrations, including sutra recitations and "Bathing the Buddha" ceremonies to celebrate the birth of the Buddha. Some non-religious organisations, such as fishmongers' associations, also celebrate the festival. Drunken Dragon Dance performances and the distribution of "Dragon Boat Rice" are among the traditional activities staged at this time.

The Drunken Dragon Dance is an ancient custom that originated in neighbouring Zhongshan Municipality in Guangdong province, and has become a tradition among Macao's fishmongers. Through the dance, they show their team spirit and commitment to society. After much modification through the years, the Drunken Dragon Dance nowadays features only the head and tail of the Dragon. The performers are expected to drink as they dance; and people believe they can only perform well if they are drunk.

The Macao Drunken Dragon Dance was included in the Intangible Cultural Heritage List of Macao in 2009 and successfully inscribed on the List of National Intangible Cultural Heritage in 2011.

Dragon Boat Festival

The Dragon Boat Festival falls on the fifth day of the Fifth Moon. It is a time for eating special dumplings and Dragon Boat Racing. Macao's Dragon Boat Races have a unique local flavour, and have developed into an international competition. Many Westerners also participate, displaying their prowess.

Feast of the Immaculate Conception

Macao is the only place in Asia where the Feast of the Immaculate Conception is a public holiday. Since 8 December 1854, Catholics in Macao have held celebrations on this day, seeking forgiveness of all their sins, and for their hearts to be cleansed.

Christmas

Christmas is the time when Christians all over the world celebrate the birth of Jesus. Macao is filled with a vibrant festive atmosphere at Christmas with its unique, European-style streets festooned with colourful lights and decorations, and Christmas carols wafting from its churches.

WELCOMING GOOD FORTUNE

Setting off firecrackers, eating rice cakes and putting up red banners (Fai Chun) are Chinese New Year traditions. As a unique cultural practice, Fai Chun has been preserved from generation to generation. Today, people's New Year wishes are expressed through parallel and neat wordings, for example: "As seasons progress, your longevity increases; as springs come around, good fortune abounds".

To welcome the Chinese New Year with the public, departments of the MSAR Government organised Fai Chun writing activities by inviting calligraphers and winners of the Youth Calligraphy Competition to write Fai Chun as warm regards to local households.

狗年大吉
吉祥
康健

MACAO YEARBOOK 2019

15

HISTORY

Macao Has Been Part of China Since Ancient Times

Historical records show that Macao has been Chinese territory since long ago. When Qinshihuang (the first emperor of the Qin Dynasty) unified China in 221BC, Macao came under the jurisdiction of Panyu County, Nanhai Prefecture. Administratively, it was part of Dongguan Prefecture in the Jin Dynasty (AD265-420), then Nanhai County during the Sui Dynasty (AD581-618), and Dongguan County in the Tang Dynasty (AD618-907). In 1152, during the Southern Song Dynasty, the Guangdong administration joined the coastal areas of Nanhai, Panyu, Xinhui and Dongguan Counties to establish Xiangshan County, thus bringing Macao under its jurisdiction.

Macao has been given a variety of names. Besides Macao ("Aomen" in Chinese), it has also been called Haojing (Oyster Mirror), Jinghai (Mirror Sea), Haojiang, Haijing, Jinghu (Mirror Lake), Haojingao and Majiao. Haojing is the earliest name recorded in written documents.

The name "Aomen" first appeared in 1564, in the following passage in Pang Shangpeng's Memorandum to the Throne Concerning Long-Term Coastal Security, which was presented to the Ming Emperor: "Xiangshan County in the south of Guangdong Province is a coastal area. It takes one day to travel from Yongmai to Haojingao. In Haojingao there are Nantai (South Tower) and Beitai (North Tower), two hills facing each other like two towers of a city gate. People call the place where the two hills stand Aomen (Gate to Ao). Aomen is surrounded by sea, and is only connected to the mainland at Zangge. It is a trading port where foreign ships and merchants anchor."

Aomen Jilue (Chronicles of Macao) by Yin Guangren and Zhang Rulin – the first and second Qing officials appointed to the place – which was published during the reign of Emperor Qianlong, records: "The name 'Haojingao' can be found in the documents of the Ming Dynasty. To the south of Haojingao lies Shizimen (Cross-Gate), where the sea runs both north-south and east-west between four island hills. Combining 'ao' from Haojingao and 'men' from Shizimen, people call the place 'Aomen'."

The earliest written record of the name "Macau" in a foreign language discovered so far is in a letter dated 20 November 1555.

In the 15th century, the Portuguese began expanding their trade to the Far East, and they conquered several places in Africa and Asia. In 1553, claiming that they needed some land to air their soaked goods, the Portuguese gained permission from local Chinese officials to stay temporarily on the Macao peninsula to carry out commercial activities. Around 1573, the Portuguese began paying land rent to the Chinese government. From then till the Opium War, for nearly 300 years, the Ming and subsequent Qing governments exercised sovereignty over Macao, levying taxes and implementing various controls.

The Ming and Qing Governments' Exercise of Sovereignty Over Macao

The Ming and Qing governments maintained irrefutable sovereignty over Macao, and under the principle of sovereignty exercised strict and comprehensive land, military, administrative, judicial and customs controls.

While exercising sovereignty over Macao in all aspects, the Ming and Qing governments used the strategy "let foreigners take charge of foreigners" to control the Portuguese in Macao. They did not directly interfere with the internal affairs of the Portuguese community, but allowed the Portuguese to exercise self-administration to keep their social and economic affairs in order. In 1583, the Portuguese in Macao were permitted to form a Senate to handle various issues concerning their community, on the understanding that they recognised overall Chinese sovereignty and that this autonomous organ was not politically independent.

The Portuguese Occupation of Macao and the Sino-Portuguese Treaty of Amity and Commerce

After the Opium War, the Chinese and British signed the Treaty of Nanking, stipulating the cession of Hong Kong to Britain. The Portuguese seized the opportunity to put forward various requests – including exemption from the annual land rent – and gradually occupied Macao. In 1887, the Qing government was forced to sign the Sino-Portuguese Treaty of Amity and Commerce, under which the Portuguese obtained the right to permanently settle in Macao as well as control over the region. In 1928, the foreign affairs ministry of the then Kuomintang government officially notified the Portuguese side that it was abrogating the treaty.

The Signing of the Sino-Portuguese Joint Declaration

After the founding of the People's Republic of China in 1949, the Chinese government declared the abolition of all unequal treaties. In March 1972, China's Permanent Representative to the United Nations sent a letter to the UN Special Committee on Decolonization, stating the country's principled stand on the issues of Hong Kong and Macao. On 8 February 1979, when China and Portugal established diplomatic relations, the two governments reached the following agreement on the issue of Macao: Macao is a Chinese territory currently under Portuguese administration; the issue of Macao is a question left over from history, which will be settled through friendly consultation between the two governments when appropriate.

In 1984, as soon as the question of Hong Kong was solved, the issue of Macao was put on the agenda. June 1986 saw China and Portugal begin negotiations concerning the issue of Macao. After four rounds of talks, on 23 March 1987 the two governments reached a consensus on the entire text of the agreement and memorandum, thus bringing to a satisfactory conclusion of the Sino-Portuguese negotiations, which lasted eight months and 14 days. On the morning of 26 March 1987, the Joint Declaration of the Government of the People's Republic of China and the Government of the Portuguese Republic on the Question of Macao was initialled in the Great Hall of the People in Beijing, by Deputy Foreign Minister Zhou Nan, head of the Chinese government delegation, and his Portuguese counterpart, Ambassador Rui Medina.

The Sino-Portuguese Joint Declaration was officially signed on 13 April 1987 in Beijing. A grand ceremony for the occasion was held in the Great Hall of the People. On behalf of their respective governments, the Premier of the State Council of the People's Republic of China, Zhao Ziyang, and the Prime Minister of the Portuguese Republic, Anibal Antonio Cavaco Silva, signed the Joint Declaration, which stated that China would resume the exercise of sovereignty over Macao from 20 December 1999 onwards. Deng Xiaoping attended the ceremony in person. The National People's Congress (NPC) of the People's Republic of China and the Portuguese parliament, the Assembly of the Republic, ratified the Joint Declaration in June and December, respectively. On 15 January 1988, the Sino-Portuguese Joint Declaration came into effect, and Macao thus entered a transition period leading to the Handover.

The Enactment of the Basic Law and the Transition Period

In order to specify and legalise the basic principles and policies of the central government concerning Macao that were set forth in the Joint Declaration, the First Session of the Seventh NPC decided on 13 April 1988 to establish the Drafting Committee of the Basic Law of the Macao Special Administrative Region. On 5 September 1988, the list of members of the committee was approved at the Third Session of the Seventh NPC. It comprised experts and representatives from all walks of life, from both the mainland and Macao. For more than four years, the committee carried out extensive and painstaking investigations, consultations, democratic discussions and revisions, and finally in January 1993, the Drafting Committee approved the draft of the Basic Law and the designs of the flag and emblem of the Macao Special Administrative Region.

On 31 March 1993, the First Session of the Eighth NPC passed the Basic Law of the Macao Special Administrative Region of the People's Republic of China, its annexes, and the designs of the flag and emblem of the Macao SAR. On the same day, President Jiang Zemin signed Presidential Decree No. 3, promulgating the Basic Law of the Macao Special Administrative Region, which was to come into effect when the Chinese government resumed the exercise of sovereignty over Macao on 20 December 1999.

The nearly 12-year period from 15 January 1988, when the Sino-Portuguese Joint Declaration came into effect, to 20 December 1999, when the central government resumed the exercise of sovereignty over Macao, was called the transition period. The Portuguese government prepared, in this period, for the handover of the government in 1999. Maintaining Macao's social stability, boosting economic development and creating favourable conditions for a smooth handover were the main tasks at that stage.

The Sino-Portuguese Joint Liaison Group and the Sino-Portuguese Land Group, founded under the Sino-Portuguese Joint Declaration, resolved issues that arose during the transition period through negotiation. The two governments also reached agreement on the establishment of the Macau International Airport, the Bank of China becoming a Macao currency-issuing bank, and the amendment and renewal of the casino gaming franchise. Three key issues that had attracted much attention – the localisation of the civil service, the localisation of the law and the official status of the Chinese language – were also settled satisfactorily.

On 29 April 1998, the Second Session of the Ninth Conference of the Standing Committee of the NPC passed the list of members of the Preparatory Committee of the Macao Special Administrative Region. The Preparatory Committee was established in Beijing on 5 May 1998. One of its chief missions was to establish, in accordance with the NPC decision, a highly representative Selection Committee comprising 200 members, who are all permanent residents of Macao, to select the first Chief Executive of the Macao SAR. On 15 May 1999, in a secret ballot at the third plenary session of the Selection Committee for the First Government of the Macao SAR, Edmund Ho Hau Wah was elected the first Chief Executive of the Macao Special Administrative Region of the People's Republic of China. On 20 May 1999, Zhu Rongji, Premier of the State Council, issued State Council Decree No. 264, appointing Edmund Ho Hau Wah as the first Chief Executive of the Macao Special Administrative Region of the People's Republic of China, to assume office on 20 December 1999.

ROAMING THROUGH PATIOS AND LANES

A relatively distinctive patio (wai) and lane (lei) in Macao is Beco da Felicidade, at the boundary of Rua da Felicidade and Travessa do Aterro Novo. Along the lane are traditional Chinese houses; it is paved with long slates, showing unique features of streets and alleys of Guangdong.

Patio da Eterna Felicidade, which carries a meaning of Eternal Happiness, is the home of some intact Chinese residences and some rare arcades in Macao, showcasing unique structures, space and culture. Patio do Espinho is the only remaining walled village in Macao; inside it are several alleys and small temples.

Macao people used to live in patios and lanes, where close neighbourhood relationships were maintained.

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APPENDICES

Appendix 1
Principal Officials of the Macao SAR

Chief Executive	Chui Sai On
President of the Legislative Assembly	Ho Iat Seng
President of the Court of Final Appeal	Sam Hou Fai
Secretary for Administration and Justice	Chan Hoi Fan
Secretary for Economy and Finance	Leong Vai Tac
Secretary for Security	Wong Sio Chak
Secretary for Social Affairs and Culture	Tam Chon Weng
Secretary for Transport and Public Works	Raimundo Arrais do Rosario
Commissioner Against Corruption	Cheong Weng Chon
Commissioner of Audit	Ho Veng On
Commissioner-General of the Unitary Police Service	Ma Io Kun
Director-General of the Macao Customs Service	Vong Iao Lek
Public Prosecutor-General	Ip Son Sang

Appendix 2
Members of the Executive Council of the Macao SAR Government

The Executive Council is presided over by the Chief Executive.

Secretary for Administration and Justice:	Chan Hoi Fan
Spokesperson:	Leong Heng Teng
Member of the Legislative Assembly:	Chan Chak Mo
Public Figures:	Liu Chak Wan
	Ma Iao Lai
	Leonel Alberto Alves
	Cheang Chi Keong
	Chan Meng Kam
	Ho Sut Heng
	Wong Yue Kai
	Lam Kam Seng

Appendix 3
Members of the Legislative Assembly of the Macao SAR

Members (by Indirect Vote)

Ho Iat Seng (President)
Chui Sai Cheong (Vice-President)
Kou Hoi In (First Secretary)
Chan Hong (Second Secretary)
Cheung Lup Kwan
Chan Chak Mo
Vong Hin Fai
Chui Sai Peng
Chan Iek Lap
Ip Sio Kai
Lei Chan U
Lam Lon Wai

Members (by Direct Vote)

Ng Kuok Cheong
Au Kam San
Jose Maria Pereira Coutinho
Leong On Kei
Mak Soi Kun
Ho Ion Sang
Zheng Anting
Si Ka Lon
Lei Cheng I
Wong Kit Cheng
Song Pek Kei
Lam Iok Fong
Leong Sun Iok
Sou Ka Hou

Members (Appointed by the Chief Executive)

Ma Chi Seng
Iau Teng Pio
Wu Chou Kit
Fong Ka Chio
Pang Chuan
Lao Chi Ngai
Chan Wa Keong

Committee Members of the First Session of the Sixth Term Legislative Assembly

(From 16 October 2017 to 15 October 2018)

Executive Board

President:	Ho Iat Seng
Vice-President:	Chui Sai Cheong
First Secretary:	Kou Hoi In
Second Secretary:	Chan Hong

Committee on Rules and Statutes

President:	Kou Hoi In
Secretary:	Vong Hin Fai
Members:	Au Kam San
	Chui Sai Peng
	Leong On Kei
	Wong Kit Cheng
	Lao Chi Ngai

First Standing Committee

President:	Ho Ion Sang
Secretary:	Ma Chi Seng
Members:	Kou Hoi In

Au Kam San
Lei Cheng I
Song Pek Kei
Ip Sio Kai
Iau Teng Pio
Fong Ka Chio
Lam Lon Wai

Second Standing Committee

President:	Chan Chak Mo
Secretary:	Wong Kit Cheng
Members:	Ng Kuok Cheong
	Mak Soi Kun
	Chan Iek Lap
	Chan Hong
	Wu Chou Kit
	Lam Iok Fong
	Chan Wa Keong
	Leong Sun Iok

Third Standing Committee

President:	Vong Hin Fai
Secretary:	Chui Sai Peng
Members:	Cheung Lup Kwan
	Jose Maria Pereira Coutinho
	Leong On Kei
	Zheng Anting
	Si Ka Lon
	Pang Chuan
	Lao Chi Ngai
	Lei Chan U
	Sou Ka Hou

Follow-up Committee for Land and Public Concession Affairs

President:	Lei Cheng I
Secretary:	Song Pek Kei
Members:	Kou Hoi In
	Au Kam San
	Ho Ion Sang
	Ma Chi Seng
	Ip Sio Kai
	Iau Teng Pio
	Fong Ka Chio
	Lam Lon Wai

Follow-up Committee for Public Finance Affairs

President:	Mak Soi Kun
Secretary:	Leong Sun Iok
Members:	Ng Kuok Cheong
	Chan Chak Mo
	Chan Iek Lap
	Chan Hong
	Wong Kit Cheng
	Wu Chou Kit
	Lam Iok Fong
	Chan Wa Keong

Follow-up Committee for Public Administration Affairs

President:	Si Ka Lon
Secretary:	Zheng Anting
Members:	Cheung Lup Kwan
	Vong Hin Fai
	Jose Maria Pereira Coutinho
	Chui Sai Peng
	Leong On Kei
	Pang Chuan
	Lao Chi Ngai

Lei Chan U
Sou Ka Hou

Administrative Committee

President: Leong On Kei

Committee Members of the Second Session of the Sixth Term Legislative Assembly

(From 16 October 2018 to 15 October 2019)

Executive Board

President: Ho Iat Seng
Vice-President: Chui Sai Cheong
First Secretary: Kou Hoi In
Second Secretary: Chan Hong

Committee on Rules and Statutes

President: Kou Hoi In
Secretary: Vong Hin Fai
Members: Au Kam San
Chui Sai Peng
Leong On Kei
Wong Kit Cheng
Lao Chi Ngai

First Standing Committee

President: Ho Ion Sang
Secretary: Ma Chi Seng
Members: Kou Hoi In
Au Kam San
Lei Cheng I
Song Pek Kei

Ip Sio Kai
Iau Teng Pio
Fong Ka Chio
Lam Lon Wai

Second Standing Committee

President:	Chan Chak Mo
Secretary:	Wong Kit Cheng
Members:	Ng Kuok Cheong
	Mak Soi Kun
	Chan Iek Lap
	Chan Hong
	Wu Chou Kit
	Lam Iok Fong
	Chan Wa Keong
	Leong Sun Iok

Third Standing Committee

President:	Vong Hin Fai
Secretary:	Chui Sai Peng
Members:	Cheung Lup Kwan
	Jose Maria Pereira Coutinho
	Leong On Kei
	Zheng Anting
	Si Ka Lon
	Pang Chuan
	Lao Chi Ngai
	Lei Chan U
	Sou Ka Hou

Follow-up Committee for Land and Public Concession Affairs

President:	Lei Cheng I
Secretary:	Song Pek Kei
Members:	Kou Hoi In

Au Kam San
Ho Ion Sang
Ma Chi Seng
Ip Sio Kai
Iau Teng Pio
Fong Ka Chio
Lam Lon Wai

Follow-up Committee for Public Finance Affairs

President:	Mak Soi Kun
Secretary:	Leong Sun Iok
Members:	Ng Kuok Cheong
	Chan Chak Mo
	Chan Iek Lap
	Chan Hong
	Wong Kit Cheng
	Wu Chou Kit
	Lam Iok Fong
	Chan Wa Keong

Follow-up Committee for Public Administration Affairs

President:	Si Ka Lon
Secretary:	Zheng Anting
Members:	Cheung Lup Kwan
	Vong Hin Fai
	Jose Maria Pereira Coutinho
	Chui Sai Peng
	Leong On Kei
	Pang Chuan
	Lao Chi Ngai
	Lei Chan U
	Sou Ka Hou

Administrative Committee

President:	Leong On Kei

Appendix 4
Judges of the Courts of the Macao SAR

Court of Final Appeal

President:	Sam Hou Fai
Judges:	Viriato Manuel Pinheiro de Lima
	Song Man Lei

Court of Second Instance

President:	Lai Kin Hong
Judges:	Choi Mou Pan
	Jose Maria Dias Azedo
	Chan Kuong Seng
	Fong Man Chong
	Tam Hio Wa
	Ho Wai Neng
	Jose Candido de Pinho
	Tong Hio Fong

Court of First Instance

President:	Io Weng San

Lower Court

Presidents of the Collegial Panels:	Chao Im Peng
	Teresa Leong
	Lam Peng Fai
	Cheong Un Mei
	Rui Carlos dos Santos Pereira Ribeiro
	Kan Cheng Ha
	Lou Ieng Ha
	Leong Fong Meng
Judges of the Sole-judge Bench:	Sam Keng Tan

Ip Sio Fan
Jeronimo Alberto Goncalves Santos
Paulo Chan
Carlos Armando da Cunha Rodrigues de Carvalho
Cheong Weng Tong
Chan Io Chao
Lap Hong Lou Silva
Chiang I Man
Seng Ioi Man
Chan Chi Weng
Shen Li
Chan Kam Tim
Lok Si Mei
Leong Mei Ian
Tang Chi Lai
Lao Choi San
Lei Wai Seng
Ho Chong In
Chong Chi Wai
Chu Ka Sin
Chan Ka Man
Xu Teng

Examining Magistracy

Judges:

Io Weng San
Lam Ka Heng
Chang Sin I

Administrative Court

Judges:

Leong Sio Kun
Rong Qi

Appendix 5
Magistrates of the Public Prosecutions Office of the Macao SAR

Prosecutor-General:	Ip Son Sang
Assistant Prosecutors-General*:	Ma Iek
	Chan Tsz King
	Vong Vai Va
	Kuok Un Man
	Mai Man Ieng
	Kok Sio Peng
	Kong Chi
	Choi Keng Fai
	Cheng Lap Fok
Public Prosecutors:	Antonio Augusto Archer Leite de Queiros
	Antonio Jose de Sousa Ferreira Vidigal
	Joaquim Teixeira de Sousa
	Mei Fan Chan da Costa Roque
	Lai U Hou
	Leong Man Ieng
	Chan Seak Hou
	Lao Ian Chi
	Wu Hio
	Kuok Kin Hong
	Tam I Kuan
	Leong Vai Cheng
	Chong Lao Sin
	Ho Man
	Leong Weng Si
	Cheong Kuok Chi
	Sio In Ha
	Cheang Weng In
	Sam Kim Kuong
	Ao Ieong Seong
	Lei Sut Man
	Lao Oi Si
	Pak Wa Ngai
	Chao Chi Peng

Cheng Hoi Fung
Ho I Sut
Mui Cheng Fei
Chong Sio U
Pao In Hang
Lei Un San

Notes:

With two other Assistant Prosecutors-General under the following conditions:

(1) Wong Sio Chak was appointed as Secretary for Security on 20 December 2014

(2) Paulo Martins Chan was appointed as Director of Gaming Inspection and Coordination Bureau, by regular appointment on 1 December 2015

Appendix 6
Government Departments and Agencies of the Macao SAR

Office of the Chief Executive

Chief of Office: O Lam
Address: Headquarters of the Macao SAR Government, Avenida da Praia Grande, Macao
Tel: (853) 2872 6886 / 2856 5555
Fax: (853) 2872 6168
Website: http://www.gce.gov.mo

Office of the Secretary for Administration and Justice

Chief of Office: Iao Man Leng
Address: Rua de S. Lourenco, No. 28, Headquarters of the Macao SAR Government, 4° andar, Macao
Tel: (853) 2872 6886
Fax: (853) 2872 6880
Website: http://www.gsaj.gov.mo

Office of the Secretary for Economy and Finance

Chief of Office: Teng Nga Kan
Address: Avenida Dr Mario Soares, Nos. 307-323, Edf. Banco da China, 23° andar, Macao
Tel: (853) 2878 7350
Fax: (853) 2872 6302
Website: http://www.gsef.gov.mo

Office of the Secretary for Security

Chief of Office: Cheong Ioc Ieng
Address: Calcada dos Quarteis, Macao
Tel: (853) 8799 7511
Fax: (853) 2871 5008
Website: http://www.gss.gov.mo

Office of the Secretary for Social Affairs and Culture

Chief of Office: Ip Peng Kin

Address: Rua de S. Lourenco, No. 28, Headquarters of the Macao SAR Government, 2° andar, Macao

Tel: (853) 2872 6886

Fax: (853) 2872 7594

Website: http://www.gsasc.gov.mo

Office of the Secretary for Transport and Public Works

Chief of Office: Cheong Chui Ling

Address: Avenida Dr Mario Soares, Nos. 307-323, Edf. Banco da China, 26° andar, Macao

Tel: (853) 2878 6919

Fax: (853) 2872 7714

Executive Council

Secretary-General: O Lam

Address: Headquarters of the Macao SAR Government, Avenida da Praia Grande, Macao

Tel: (853) 2872 6886

Fax: (853) 8989 5704

Legislative Assembly

President: Ho Iat Seng

Vice President: Mr Chui Sai Cheong

Technical Support Offices of the Legislative Assembly

Secretary-General: Ieong Soi U

Deputy Secretary-General: Pun Kam Peng

Address: Praca da Assembleia Legislativa, Edf. da AL, Aterros da Baia da Praia Grande, Macao

Tel: (853) 2872 8377 / 2872 8379

Fax: (853) 2897 3753

Website: http://www.al.gov.mo

E-mail: info@al.gov.mo

Courts

Court of Final Appeal

President: Sam Hou Fai

Chief of Office: Chan Iok Lin

Address: Praceta 25 de Abril, Edf. dos Tribunais de Segunda e Ultima Instancias, Macao

Tel: (853) 8398 4117

Fax: (853) 2832 6744

Website: http://www.court.gov.mo

Court of Second Instance

President: Lai Kin Hong

Address: Praceta 25 de Abril, Edf. dos Tribunais de Segunda e Ultima Instancias, Macao

Tel: (853) 8398 4100

Fax: (853) 2832 6747

Website: http://www.court.gov.mo

Court of First Instance

President: Io Weng San

Website: http://www.court.gov.mo

Office of the Civil Courts at the Lower Court

Address: Avenida do Infante D. Henrique, Nos. 47-53A, Edf. The Macau Square, 12° andar, Macao

Tel: (853) 8597 0278

Fax: (853) 2833 6506

Office of the Court for Minor Civil Cases at the Lower Court

Address: Avenida da Praia Grande, No. 517, Edf. Comercial de Nam Tung, 21° andar A-C, Macao

Tel: (853) 8398 8444

Fax: (853) 2871 5825

Office of the Labour Tribunal at the Lower Court

Address: Avenida do Infante D. Henrique, Nos. 47-53A, Edf. The Macau Square, 17°, andar, Macao

Tel: (853) 8597 0278

Fax: (853) 2833 6506

Office of the Family and Juvenile Court at the Lower Court

Address: Avenida do Infante D. Henrique, Nos. 47-53A, Edf. The Macau Square, 17°, andar, Macao

Tel: (853) 8597 0278

Fax: (853) 2833 6506

Office of the Criminal Courts at the Lower Court

Address: Avenida Doutor Stanley Ho, No. 347, Edf. dos Juizos Criminais do Tribunal Judicial de Base, 2°-3° andares, Macao

Tel: (853) 8597 0278

Fax: (853) 2897 3013

Administrative Court

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Public Prosecutions Office

Prosecutor-General: Ip Son Sang

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Commission Against Corruption

Commissioner: Cheong Weng Chon

Deputy Commissioner: Hoi Lai Fong

Deputy Commissioner: Lam Chi Long

Chief of Cabinet: Sam Vai Keong

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Commission of Audit

Audit Commissioner: Ho Veng On

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Under the Supervision of the Secretary for Administration and Justice

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Financial Services Bureau

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Statistics and Census Service

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Under the Supervision of the Secretary for Security

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Academy of Public Security Forces

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Under the Supervision of the Secretary for Social Affairs and Culture

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Social Security Fund

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Under the Supervision of the Secretary for Transport and Public Works

Land, Public Works and Transport Bureau

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Fax: (853) 2833 6603 / 8396 8603
Website: http://www.ctt.gov.mo
E-mail: cttgeral@ctt.gov.mo

Meteorological and Geophysical Bureau

Acting Director: Leong Weng Kun
Acting Deputy Director: Tang Iu Man
Address: Rampa do Observatorio, Taipa, Macao
Tel: (853) 2885 0522
Fax: (853) 2885 0557
Website: http://www.smg.gov.mo
E-mail: meteo@smg.gov.mo

Housing Bureau

President: Arnaldo Ernesto dos Santos
Vice President: Kuoc Vai Han
Vice President: Ieong Kam Wa
Address: Estrada do Canal dos Patos, No. 220, Edf. Cheng Chong, r/c Loja L, Macao
Tel: (853) 2859 4875
Fax: (853) 2830 5909
Website: http://www.ihm.gov.mo
E-mail: info@ihm.gov.mo

Infrastructure Development Office

Director: Lam Wai Hou
Acting Deputy Director: Sam Weng Chon
Acting Deputy Director: Luis Manuel Madeira De Carvalho
Address: Avenida do Dr Rodrigo Rodrigues, Edf. Nam Kwong, 10° andar F, Macao
Tel: (853) 2871 3724 / 2871 3725 / 2871 3726
Fax: (853) 2871 3728
Website: http://www.gdi.gov.mo
E-mail: info@gdi.gov.mo

Environmental Protection Bureau

Director: Tam Vai Man
Deputy Director: Vong Man Hung
Deputy Director: Ip Kuong Lam
Address: Estrada de D. Maria II, Nos. 32-36, Edf. CEM, 1° andar, Macao
Tel: (853) 2872 5134
Fax: (853) 2872 5129
Website: http://www.dspa.gov.mo
E-mail: info@dspa.gov.mo

Civil Aviation Authority

President: Chan Weng Hong
Deputy Director: Pun Wa Kin
Address: Alameda Dr Carlos d'Assumpcao, Nos. 336-342, Edf. Centro Comercial Cheng Fung, 18° andar, Macao
Tel: (853) 2851 1213
Fax: (853) 2833 8089
Website: http://www.aacm.gov.mo
E-mail: aacm@aacm.gov.mo

Transport Bureau

Director: Lam Hin San
Deputy Director: Chiang Ngoc Vai
Deputy Director: Lo Seng Chi
Address: Estrada de D. Maria II, No. 33, r/c, Macao
Tel: (853) 8866 6666
Fax: (853) 2875 0626
Website: http://www.dsat.gov.mo
E-mail: info@dsat.gov.mo

Office for the Development of the Energy Sector

Director: Hoi Chi Leong
Deputy Director: Lou Sam Cheong
Address: Alameda Dr Carlos d'Assumpcao, No. 398, Edf. CNAC, 7° andar, Macao
Tel: (853) 2896 8838
Fax: (853) 2896 8138
Website: http://www.gdse.gov.mo
E-mail: info@gdse.gov.mo

Transportation Infrastructure Office

Coordinator: Ho Cheong Kei
Assistant Coordinator: Ng Keng Chung
Assistant Coordinator: Chow Wai Tak
Address: Rua Dr Pedro Jose Lobo, Nos. 1-3, Edf. Luso Internacional, 26° andar, Macao
Tel: (853) 2881 3721 / 2881 3722
Fax: (853) 2881 3260
Website: http://www.git.gov.mo
E-mail: info@git.gov.mo

Appendix 7
Representative Offices of the Macao SAR Government Tourist Office

Asia/Pacific

Mainland China

Tourism Sector of Office of the Macao Special Administrative Region in Beijing

Address: 16/F, Macau Center, No. 8 Wangfujing East Street, Dongcheng District, Beijing 100006, China

Tel: (86) 10 5813 8000

Fax: (86) 10 5813 8999

E-mail: beijing@macaotourism.gov.mo

Hong Kong

Address: Flat 3, 7/F, Charm Centre, No. 700 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong

Tel: (852) 2838 8680

Fax: (852) 2838 8032 / 3118 2993

E-mail: mgto@macaotourism.com.hk

Taiwan

Macao Government Tourism Office PR Consultant in Taiwan

Address: 10/F-C, No.167, Tun Hwa North Road, Taipei 105, Taiwan

Tel: (886) 2 2546 6086

Fax: (886) 2 2546 6087

E-mail: mgtottwn@ms27.hinet.net

India

New Delhi

Address: 707, 7th Floor, Prakash Deep Building, 7 Tolstoy Marg, Connaught Place, New Delhi 110001, India

Tel: (91) 11 3352 6519 / 11 3352 6520

E-mail: delhi@macaotourism.in

Mumbai

Address: 20th Floor, Tower A, Urmi Estate, 95, Ganpatrao Kadam Marg, Lower Parel (W), Mumbai 400013, India

Tel: (91) 22 6718 9674

E-mail: mumbai@macaotourism.in

Indonesia

Address: Kuningan City, 2nd floor, No. L2-19, Jalan Prof. Dr. Satrio Kav. 18, Setiabudi, Kuningan, Jakarta – 12940, Indonesia

Tel: (62) 21 3041 8713

Fax: (62) 21 3048 0751

Website: http://id.macaotourism.gov.mo

E-mail: inquiries@macaotourism.id

Japan

Address: Nagatacho Grass Gate 7F, 2-16-9 Hirakawacho, Chiyoda-ku, Tokyo 102-0093, Japan

Tel: (81) 3 5275 2537

Fax: (81) 3 5275 2535

Website: http://jp.macaotourism.gov.mo

E-mail: macao@milepost.co.jp

South Korea

Address: Suite 908, 16, Euljiro, Jung-gu, Seoul, South Korea

Tel: (82) 2 778 4402

Fax: (82) 2 778 4404

Website: http://kr.macaotourism.gov.mo

E-mail: korea@macaotourism.kr

Malaysia

Address: Level 6, Lion Office Tower, No. 1 Jalan Nagasari (Off Jalan Raja Chulan), 50200 Kuala Lumpur, Malaysia

Tel: (60) 3 2144 2500

Fax: (60) 3 2148 1357

Website: http://my.macaotourism.gov.mo

E-mail: mgto@pacificworld.travel

Thailand

Address: 888/202, Mahatun Plaza Building, 3rd Floor, Ploenchit Road, Lumpini, Pathumwan, BKK 10330, Thailand

Tel: (66) 2 650 9336

Fax: (66) 2 650 9336

Website: http://th.macaotourism.gov.mo

E-mail: infos@macaotourism.in.th

Australia/New Zealand

Australia

Address: Level 17, Town Hall House, 456 Kent Street, Sydney, NSW 2000, Australia

Tel: (61) 2 9264 1488

Fax: (61) 2 9267 7717

E-mail: macao@worldtradetravel.com

New Zealand

Address: 7 Centennial Place, Campbells Bay, Auckland 0630, New Zealand

Tel: (64) 21 026 43100

E-mail: macao@regencytourism.com

USA

California

Address: 6033 W. Century Blvd., #900, Los Angeles, CA 90045, USA
Tel: (1) 310 545 3464
Fax: (1) 310 545 4221
Toll free: 866 OK-MACAU
E-mail: macao@myriadmarketing.com

New York

Address: 360 Lexington Ave., 10th floor, New York, NY 10017, USA
Tel: (1) 646 589 0182
Fax: (1) 646 366 8170
E-mail: macao@myriadmarketing.com

Europe

Portugal

Macao Tourism Promotion and Information Centre in Portugal

Address: Avenida 5 de Outubro, No. 115, R/C, 1069-204 Lisboa, Portugal
Tel: (351) 21 793 6542
Fax: (351) 21 796 0956
Email: geral@turismodemacau.com.pt

United Kingdom and Ireland

London

Address: 45-51 Whitfield Street, London, W1T 4HD, United Kingdom
Tel: (44) 020 3375 4058
E-mail: macao@humewhitehead.co.uk

Oxford

Address: 1st Floor, Chester House, 21-27 George Street, Oxford, OX1 2AU, United Kingdom

Tel: (44) 020 3375 4058

E-mail: macao@humewhitehead.co.uk

Russia

Address: Business Center "Monetny Dvor", 46 Mytnaya Street, Building 5, 115162 Moscow, Russia

Tel: (7) 495 981 5188

Fax: (7) 495 981 5188

Website: http://ru.macaotourism.gov.mo

E-mail: info@macao-tourism.ru

Appendix 8

Countries Exercising Consular Jurisdiction in the Macao SAR

By the end of December 2018, consular services had been established in the Macao SAR by 90 countries, including several that extended the services of their consulates-general in Hong Kong to Macao, as well as those that may execute consular duties in the Macao SAR. Details of countries are as follows (in alphabetical order):

1. Four countries have set up consulates-general in the Macao SAR:

   Angola, Mozambique, the Philippines and Portugal

2. Fifty-seven consulates-general accredited to Hong Kong have also covered the Macao SAR, including several that may execute consular duties in the Macao SAR. In alphabetical order, they are:

   Argentina, Australia, Austria, Bangladesh, Belgium, Brazil, Brunei, Cambodia, Canada, Chile, Columbia, the Czech Republic, Egypt, European Union, Finland, France, Germany, Greece, Hungary, India, Indonesia, Iran, Ireland, Israel, Italy, Japan, Kazakhstan, South Korea, Kuwait, Laos, Malaysia, Mexico, Mongolia, Myanmar, Nepal, the Netherlands, New Zealand, Nigeria, Pakistan, Peru, Poland, Qatar, Romania, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Thailand, Turkey, United Kingdom, the United States of America, Venezuela, Vietnam and Zimbabwe.

* *China has reached agreement on the establishment of the Consulates-General of Antigua and Barbuda, Samoa, the Bahamas and Denmark in Hong Kong (which have not yet opened); however the relevant agreements on the establishments and expansion of consulates are still valid.*

3. Nine countries have appointed honorary consuls to the Macao SAR. In alphabetical order, they are:

   Cape Verde, Estonia, Grenada, Guinea, Guinea Bissau, Mali, Niger, Peru and United Kingdom.

4. Twenty countries with honorary consuls in Hong Kong cover or extend services to the Macao SAR. In alphabetical order, they are:

   Cote d'Ivoire, Cyprus, Eritrea, Ethiopia, Iceland, Kenya, Lithuania, Maldives, Morocco, Namibia, Norway, Rwanda, San Marino, Seychelles, Slovak Republic, Slovenia, Sri Lanka, Sudan, Tanzania and Uruguay.

Appendix 9
Visa-free Access for Holders of Macao SAR Passports and Travel Permits

The following countries/territories had granted visa-free access to Macao SAR passport and travel permit holders (listed by continental regions):

Asia

Country	Macao SAR Passport Maximum Period of Stay	Macao SAR Travel Permit Maximum Period of Stay
Armenia	90 days Agreement*	90 days Agreement*
Bahrain	2 weeks to 90 days l)	---
Brunei	14 days	---
Cambodia	30 days c)	---
Indonesia	28 days	---
Iran	30 days r)	---
Israel	3 months	---
Japan	90 days	---
Jordan	c)	---
Laos	30 days e)	---
Lebanon	1 month q)	---
Malaysia	30 days	14 days
Maldives	30 days c)	30 days c)
Mongolia	90 days Agreement*	---
Myanmar	30 days z)	---
Nepal	e)	---
Oman	30 days c)	---
Philippines	14 days	---
Qatar	30 days w)	---
Singapore	30 days	---
South Korea	90 days	---
Thailand	30 days Agreement*	---

Cont.

Country	Macao SAR Passport Maximum Period of Stay	Macao SAR Travel Permit Maximum Period of Stay
Timor-Leste	30 days [u)]	---
Turkey	30 days	---

Europe

Country	Macao SAR Passport Maximum Period of Stay	Macao SAR Travel Permit Maximum Period of Stay
Albania	90 days	---
Andorra	90 days	---
Austria	90 days [a)]	---
Belarus	30 days [Agreement*]	30 days [Agreement*]
Belgium	90 days [a)]	---
Bosnia and Herzegovina	90 days	---
Bulgaria	90 days [Agreement*]	---
Croatia	90 days	90 days
Cyprus	3 months	---
Czech Republic	90 days	---
Denmark	90 days [a)]	---
Estonia	90 days [Agreement*]	---
Faroe Islands	3 months	---
Finland	90 days [a)]	---
France	90 days [a)]	---
Germany	90 days [a)]	---
Gibraltar	---	---
Greece	90 days [a)]	---
Hungary	90 days [Agreement*]	---
Iceland	90 days [a)]	---
Ireland	90 days	---
Italy	90 days [a) g)]	---
Latvia	90 days [Agreement*]	---
Liechtenstein	90 days [Agreement*]	---
Lithuania	90 days [Agreement*]	---

Cont.

Country	Macao SAR Passport Maximum Period of Stay	Macao SAR Travel Permit Maximum Period of Stay
Luxembourg	90 days [a)]	---
North Macedonia	90 days	---
Malta	90 days	---
Moldova	90 days	---
Monaco	90 days	---
Montenegro	90 days	---
Norway	90 days [a)]	---
Poland	90 days [Agreement*]	---
Portugal	90 days [a)]	---
Romania	90 days	---
Russia	30 days [Agreement*]	---
San Marino	20 days	---
Serbia	90 days [Agreement*]	---
Slovak Republic	90 days [Agreement*]	---
Slovenia	90 days	---
Spain	90 days [a)]	---
Sweden	90 days [a)]	---
Switzerland	90 days [Agreement*]	---
The Netherlands	90 days [a)]	---
Ukraine	15 days [p)]	---
United Kingdom	6 months	---

Africa

Country	Macao SAR Passport Maximum Period of Stay	Macao SAR Travel Permit Maximum Period of Stay
Burundi	[f)]	---
Cape Verde	90 days	90 days
Comoros	45 days [c)]	---
Djibouti	30 days [o)]	---
Egypt	90 days	---
Ethiopia	30 days [x)]	---

Cont.

Country	Macao SAR Passport Maximum Period of Stay	Macao SAR Travel Permit Maximum Period of Stay
Guinea-Bissau	90 days [s)]	---
Kenya	3 months [c)]	---
La Reunion	3 months [b)]	---
Madagascar	90 days [c)]	---
Malawi	30 days [c)]	---
Mali	90 days Agreement*	90 days Agreement*
Mauritania	1 month [i)]	---
Mauritius	90 days	---
Mayotte	3 months [b)]	---
Morocco	90 days Agreement*	---
Mozambique	30 days [c)]	---
Namibia	30 days Agreement*	30 days Agreement*
Seychelles	30 days	30 days
South Africa	30 days [k)]	---
St. Helena	4-9 days	---
Tanzania	90 days	---
Tunisia	30 days [m)]	---
Togo	7 days [a) b)]	---
Uganda	[c)]	---
Zimbabwe	30 days to 3 months [n)]	---

America

Country	Macao SAR Passport Maximum Period of Stay	Macao SAR Travel Permit Maximum Period of Stay
Anguilla	3 months	---
Aruba	3 months	---
Bermuda	90 days [d)]	---
Bolivia	90 days [y)]	---
Brazil	90 days	---
British Virgin Islands	6 months	---
Caribbean Netherlands	90 days	---

Cont.

Country	Macao SAR Passport Maximum Period of Stay	Macao SAR Travel Permit Maximum Period of Stay
Chile	30 days	---
Curacao	3 months	---
Dominica	90 days Agreement*	90 days Agreement*
Dominican Republic	30 days c)	---
Greenland	3 months	---
Grenada	90 days Agreement*	90 days Agreement*)
Guyana	30 days i)	---
Mexico	90 days Agreement*	---
French Guiana	3 months b)	---
Guadeloupe	3 months b)	---
Martinique	3 months b)	---
Montserrat	6 months	---
Saint-Barthelemy	3 months	---
Saint-Martin	3 months	---
Saint-Pierre and Miquelon	3 months b)	---
Saint Lucia	c)	---
St. Maarten	3 months	---
St. Vincent and the Grenadines	1 month	---
Uruguay	90 days	90 days
Ecuador	90 days	---
St. Kitts and Nevis	1 month	---

Oceania

Country	Macao SAR Passport Maximum Period of Stay	Macao SAR Travel Permit Maximum Period of Stay
Cooks Islands	31 days	---
Fiji	4 months	---
French Polynesia	3 months b)	---
Kiribati	30 days	30 days
Micronesia	30 days	---
New Caledonia	3 months	---

Cont.

Country	Macao SAR Passport Maximum Period of Stay	Macao SAR Travel Permit Maximum Period of Stay
New Zealand	3 months	---
Niue	30 days	---
Palau	---	30 days [f]
Papua New Guinea	60 days [h]	---
Samoa	30 days Agreement*	30 days Agreement*
Tonga	31 days [c]	---
Vanuatu	30 days	---
Wallis and Futuna	3 months [b]	---

Indian Ocean

Country	Macao SAR Passport Maximum Period of Stay	Macao SAR Travel Permit Maximum Period of Stay
French Southern Hemisphere and Antarctic Lands	3 months [b]	---

Remark:

* *Visa-Waiver Program between Macao SAR Government and related countries or regions.*

a) *According to the Regulation of the Council of the European Union No. 539/2001 of 15 March 2001, published in the Gazette of European Union of 21 March 2001, the above European countries have granted Visa-free access to Macao SAR passport holders. This privilege is only applicable within the local territories in Europe.*

b) *Effective from 1 January 2002, holders of the Macao Special Administrative Region Passports would be granted visa-free access to the Overseas Departments of the French Republic (Guadeloupe, Martinique, French Guiana, La Reunion), the Territory of Mayotte, the Territory of Saint-Pierre et Miquelon, French Polynesia, the Territory of the Wallis and Futuna Islands as well as French Southern Hemisphere and Antarctic Lands.*

c) *Visa-on-arrival*

d) *If visitors are required to have a visa to travel through America, Canada or the United Kingdom, the visas should be valid at least 45 days after their departure date.*

e) *Visa granted upon arrival and 2 recent photos are required.*

f) *Visitors should be holding a return/onward ticket to apply for a visa on arrival at the International Bujumbura Airport.*

g) *The immigration regulations of Italy are applicable to Vatican City, so it is visa-free to enter Vatican City.*

h) *Visitors should apply visa upon arrival at Port Moresby and Port Rabaul.*

i) Visitors should apply visa upon arrival at the Nouakchott International Airport.

j) Tourists can obtain a visa on arrival provided:

- holding a letter of invitation from sponsor or host; and

- contact details of sponsor, host or hotel; and

- 2 photos; and

- evidence of finances to cover expenses for 30 days.

k) The Department of Home Affairs of the Republic of South Africa has announced a new immigration policy for minors who arrived from visa exempted countries/territories. The new requirements, effective from 1 June 2015, requested that minors aged less than 18 years need to present their birth certificates in English with parent(s) particulars when enter and depart from South Africa. A consent letter is required if parent(s) not accompany with the minors (Please refer to the article for further details).

l) Visa obtain upon arrival or apply e-visa online. Staying period is as follows:

(i). Single entry visa

- maximum 2 weeks

(ii). 3-months multi-entry visa

- maximum 1 month and an extension of 2 weeks.

(iii). 1-year multi-entry visa (e-visa only)

- maximum 90 days

m) Visa exempted for tourist group of 5 people or above, and possess valid travel documents as well as coupon voucher (prepaid hotel accommodation and round trip air tickets).

n) Travelling for business purpose:

- maximum 30 days

Travelling as tourist:

- maximum 3 months

o) Travellers can obtain visa upon arrival at Djibouti Airport when fulfilling one of the requirements below:

(i). Possess invitation letter

(ii). Hotel booking voucher

(iii). Round trip air ticket

p) From 1 January 2019, visitors may apply electronic visas at http://visa.mfa.gov.ua.

q) Visitors should apply visa upon arrival at the Beirut International Airport.

r) Visitors can obtain visa upon arrival at Gheshm Island, Kish Island, Mashhad, Esfahan, Shiraz, Tabriz and Tehran Imam Khomeini International Airport.

s) Visitors can obtain visa upon arrival at Osvaldo International Airport.

t) Visitors can obtain visa upon arrival with a staying period of 30 days, and can be extended to a maximum of 90 days.

u) Visitors can obtain visa upon arrival at Dili Presidente Nicolau Lobato International Airport. Visa can extend to a maximum of 90 days.

v) There are unpredictable factors on the approval of visa -on -arrival at the airport. In addition, the fees required are much higher than obtaining an ETA. As a result, it is recommended to obtain an ETA online in advance.

w) *Travellers can obtain visa upon arrival when fulfilling the requirements below:*

   (i). A passport valid for at least 6 months

   (ii). Round trip air ticket

   (iii). Hotel booking voucher

   (iv). Possess credit card or fulfill minimum cash requirement defined by the Qatar authorities.

x) *Visa granted upon arrival. Applicants have to provide 2 photos and pay for the visa fee.*

y) *Visa granted upon arrival. Applicants have to fill in the visa application form online, print it, sign it, and submit it in original when applying for visa on arrival at Bolivia 's airport or land immigration ports.*

z) *Visa exemption for tourists enter through Yangon International Airport, Mandalay International Airport, Nay Pyi Taw International Airport and Yangon International Seaport as well as at Myanmar - Thailand Land Border Checkpoints and Myanmar India Land Border Checkpoints.*

aa) *Effective from 1 January 2018, visitors can obtain visa upon arrival at Kigali International Airport and all land ports.*

ab) *Visitors can obtain visa upon arrival at Gnassingbe Eyadema International Airport.*

Notes:

1. *The decision to approve or refuse a passenger's entry to a country or region and the duration of stay given are usually determined on individual merits by the immigration authorities on arrival.*

2. *Visa policy of each country or region may vary. Please enquire the latest visa information at the nearby embassy or consulate of the relevant country or region before departure.*

3. *Some countries require passports or travel permits to be valid for 6 months beyond the date of entry into such a country.*

4. *The following country does not issue visa for holders of Macao SAR Travel Permit: Morocco.*

For more information, please visit the website of the Identification Services Bureau of the Macao SAR Government.

Appendix 10

Countries/Territories Granted Visa-free Access by the Macao SAR

Passport holders of the following countries and territories had been granted visa-free access by the Macao SAR (listed by continental regions):

Asia

Country	Maximum Period of Stay
Brunei	14 days
India	30 days
Indonesia	30 days
Israel	3 months
Japan	90 days
Lebanon	3 months
Malaysia	30 days
Mongolia	90 days
Philippines	30 days
Singapore	30 days
South Korea	90 days
Thailand	30 days
Turkey	30 days
Turkey	30 days

Europe

Country	Maximum Period of Stay
Albania	90 days
Andorra	90 days
Austria	90 days
Belgium	90 days
Bosnia and Herzegovina	90 days

Cont.

Country	Maximum Period of Stay
Bulgaria	90 days
Croatia	90 days
Cyprus	3 months
Czech Republic	90 days
Denmark	90 days
Estonia	90 days
Finland	90 days
France	90 days
Germany	90 days
Greece	90 days
Hungary	90 days
Iceland	90 days
Ireland	90 days
Italy	90 days
Latvia	90 days
Liechtenstein	90 days
Lithuania	90 days
Luxembourg	90 days
Macedonia	90 days
Malta	90 days
Moldova	90 days
Monaco	30 days
Montenegro	90 days
Norway	90 days
Poland	90 days
Portugal	90 days
Romania	90 days
Russia	30 days
San Marino	30 days
Serbia	90 days
Slovak Republic	90 days

Cont.

Country	Maximum Period of Stay
Slovenia	90 days
Spain	90 days
Sweden	90 days
Switzerland	90 days
The Netherlands	90 days
United Kingdom	6 months

America

Country	Maximum Period of Stay
Brazil	90 days
Canada	30 days
Chile	30 days
Dominica	90 days
Grenada	90 days
Mexico	90 days
The United States of America	30 days
Uruguay	90 days

Africa

Country	Maximum Period of Stay
Cape Verde	90 days
Egypt	90 days
Mali	90 days
Mauritius	90 days
Morocco	90 days
Namibia	30 days
Seychelles	30 days
South Africa	30 days
Tanzania	90 days

Oceania

Country	Maximum Period of Stay
Australia	30 days
Kiribati	30 days
New Zealand	3 months
Samoa	30 days

For more information, please visit the website of the Immigration Department of the Public Security Police of the Macao SAR Government at http://www.fsm.gov.mo/psp/eng/EDoN.html#EDoN_VII

Appendix 11

List of Multilateral Treaties Applicable to the Macao SAR

(by Subject – last updated on 31 December 2018)

I – Civil Aviation

1. Convention for the Unification of Certain Rules Relating to International Carriage by Air, done at Warsaw on 12 October 1929 (Warsaw Convention)

2. Protocol to Amend the Convention for the Unification of Certain Rules Relating to International Carriage by Air, done at The Hague on 28 September 1955 (Hague Protocol)

3. Convention on International Civil Aviation, signed at Chicago on 7 December 1944 (Chicago Convention)

4. Protocol relating to an Amendment to the Convention on International Civil Aviation (Article 45 – Permanent Seat of the International Civil Aviation Organization), signed at Montreal on 14 June 1954

5. Protocol relating to certain Amendments to the Convention on International Civil Aviation (Articles 48(a), 49(e) and 61), done at Montreal on 14 June 1954

6. Protocol relating to an Amendment to the Convention on International Civil Aviation (Article 48(a)), signed at Rome on 15 September 1962

7. Protocol relating to an Amendment to the Convention on International Civil Aviation (Article 50(a)), done at New York on 12 March 1971

8. Protocol on the Authentic Quadrilingual Text of the Convention on International Civil Aviation, done at Montreal on 30 September 1977

9. Protocol relating to an Amendment to the Convention on International Civil Aviation (Article 83-bis), adopted at Montreal on 6 October 1980

10. Protocol relating to an Amendment to the Convention on International Civil Aviation (new Article 3-bis), adopted at Montreal on 10 May 1984

11. Protocol relating to an Amendment to the Convention on International Civil Aviation (Article 56), done at Montreal on 6 October 1989

12. Protocol relating to an Amendment to the Convention on International Civil Aviation (Article 50 (a)), done at Montreal on 26 October 1990

13. International Air Services Transit Agreement, done at Chicago on 7 December 1944

14. Convention on the International Recognition of Rights in Aircraft, signed at Geneva on 19 June 1948

15. Convention for the Unification of Certain Rules for International Carriage by Air, done at Montreal on 28 May 1999

II – Customs

16. Convention relating to International Exhibitions, signed at Paris on 22 November 1928, amended and supplemented by the Protocols of 10 May 1948, 16 November 1966 and 30 November 1972 and the amendments of 24 June 1982 and 31 May 1988

17. Convention concerning Customs Facilities for Touring, signed at New York on 4 June 1954

18. Additional Protocol to the Convention concerning Customs Facilities for Touring, relating to the Importation of Tourist Publicity Documents and Material, signed at New York on 4 June 1954

19. Customs Convention concerning the Facilities for the Importation of Goods for Display or Use at Exhibitions, Fairs, Meetings or Similar Events, done at Brussels on 8 June 1961

20. Customs Convention on the A.T.A. Carnet for the Temporary Admission of Goods, done at Brussels on 6 December 1961

21. Amendment to the Annex to the Convention on the A.T.A. Carnet for the Temporary Admission of Goods (New Model of A.T.A. Carnet), done at Brussels on 18 June 2002

22. Customs Convention concerning Welfare Material for Seafarers, done at Brussels on 1 December 1964

23. Customs Convention on the Temporary Importation of Scientific Equipment, done at Brussels on 11 June 1968

24. International Convention on the Harmonized Commodity Description and Coding System, done at Brussels on 14 June 1983 (4th Revision of the Harmonized Commodity Description and Coding System, approved by Resolution of the World Customs Organization of 26 de June de 2004 (2007 Amendments to the HS)

25. Protocol of Amendment to the International Convention on the Harmonized Commodity Description and Coding System, done at Brussels on 24 June 1986

III – Drugs

26. Single Convention on Narcotic Drugs, 1961, done at New York on 30 March 1961

27. Protocol amending the Single Convention on Narcotic Drugs, 1961, concluded at Geneva on 25 March 1972
28. Decisions of the Commission on Narcotic Drugs regarding the update of the Schedules of the 1961 Convention as amended by the 1972 Protocol (on 18 March 2016)
29. Decisions of the Commission on Narcotic Drugs regarding the update of the Schedules of the 1961 Convention as amended by the 1972 Protocol (on 16 March 2017)
30. Decisions of the Commission on Narcotic Drugs regarding the update of the Schedules of the 1961 Convention as amended by the 1972 Protocol (on 14 March 2018)
31. Convention on Psychotropic Substances, concluded at Vienna on 21 February 1971
32. Decisions of the Commission on Narcotic Drugs regarding the update of the Schedules of the Convention on Psychotropic Substances of 1971 (on 18 March 2016)
33. Decisions of the Commission on Narcotic Drugs regarding the update of the Schedules of the Convention on Psychotropic Substances of 1971 (on 16 March 2017)
34. Decisions of the Commission on Narcotic Drugs regarding the update of the Schedules of the Convention on Psychotropic Substances of 1971 (on 14 March 2018)
35. United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, concluded at Vienna on 20 December 1988
36. Updated tables of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988, as at 6 October 2014
37. Decisions of the Commission on Narcotic Drugs regarding the update of the tables of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988 (on 16 March 2017)

IV – Economic and Financial

38. Convention Providing a Uniform Law for Bills of Exchange and Promissory Notes (with Annexes and Protocol), done at Geneva on 7 June 1930
39. Convention for the Settlement of Certain Conflicts of Laws in Connection with Bills of Exchange and Promissory Notes (and Protocol), done at Geneva on 7 June 1930
40. Convention on the Stamp Laws in Connection with Bills of Exchange and Promissory Notes (and Protocol), done at Geneva on 7 June 1930
41. Convention Providing a Uniform Law for Cheques (Annexes and Protocol), done at Geneva on 19 March 1931

42. Convention for the Settlement of Certain Conflicts of Laws in Connection with Cheques (and Protocol), done at Geneva on 19 March 1931

43. Convention on the Stamp Laws in Connection with Cheques (and Protocol), done at Geneva on 19 March 1931

44. Convention on the Settlement of Investment Disputes between States and Nationals of Other States, done at Washington on 18 March 1965

45. The Multilateral Convention on Mutual Administrative Assistance in Tax Matters, as amended by the 2010 Protocol (at Paris, on 27 May 2010)

V – Education, Science, Technology, Culture and Sport

46. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, done in triplicate at London, Moscow and Washington on 27 January 1967

47. Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, done in triplicate at London, Moscow and Washington on 22 April 1968

48. Convention concerning the Protection of the World Cultural and Natural Heritage, done at Paris on 23 November 1972

49. Convention for the Safeguarding of the Intangible Cultural Heritage, done at Paris on 17 October 2003

50. International Convention Against Doping in Sport, done at Paris on 19 October 2005

51. Convention on the Protection and Promotion of the Diversity of Cultural Expressions, done at Paris on 20 October 2005

52. Intergovernmental Educational Cooperation Agreement of Shanghai Cooperation Organization Member States, signed at Shanghai on 15 June 2006

VI – Environment and Conservation

53. International Plant Protection Convention, done at Rome on 6 December 1951, as amended by Resolution 12/97 of the 29th Session of the FAO Conference, adopted at Rome on 17 November 1997 (New Revised Text of the International Plant Protection Convention)

54. Plant Protection Agreement for the Asia and Pacific Region, adopted at Rome on 27 February 1956 as amended in 1967, 1979 and 1983

55. Convention on International Trade in Endangered Species of Wild Fauna and Flora, done at Washington on 3 March 1973 (CITES)

56. Convention on the Conservation of Antarctic Marine Living Resources (with Annex), concluded at Canberra on 20 May 1980

57. Vienna Convention for the Protection of the Ozone Layer, concluded at Vienna on 22 March 1985

58. Montreal Protocol on Substances that Deplete the Ozone Layer, concluded at Montreal on 16 September 1987

59. Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted at London on 29 June 1990 (London Amendment)

60. Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted at Copenhagen on 25 November 1992 (Copenhagen Amendment)

61. Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted at Montreal on 17 September 1997 (Montreal Amendment)

62. Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted at Beijing on 3 December 1999 (Beijing Amendment)

63. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, concluded at Basel on 22 March 1989 (Basel Convention)

64. 1998 Amendments to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal

65. 2003 Amendments to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal

66. 2005 Amendments to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal

67. 2013 Amendments to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal

68. United Nations Framework Convention on Climate Change, concluded at New York on 9 May 1992

69. Kyoto Protocol to the United Nations Framework Convention on Climate Change, done at Kyoto on 11 December 1997

70. Convention on Biological Diversity, done at Nairobi on 22 May 1992

71. Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, done at Rotterdam on 10 September 1998 (Rotterdam Convention)

72. Amendment to Annex III to the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, approved by the Conference of the Parties at its eighth meeting, held in Geneva from 24 April to 5 May 2017

73. Stockholm Convention on Persistent Organic Pollutants, adopted at Stockholm on 22 May 2001 (Stockholm Convention)
74. Amendments to the Stockholm Convention on Persistent Organic Pollutants, adopted on 8 May 2009
75. Amendments to the Stockholm Convention on Persistent Organic Pollutants, adopted on 29 April 2011
76. Amendments to the Stockholm Convention on Persistent Organic Pollutants, adopted on 13 May 2013
77. Paris Agreement, done at Paris on 12 December 2015
78. Minamata Convention on Mercury, done at Kumamoto, Japan on 10 October 2013

VII – Foreign Affairs and Defence

79. Convention for the Pacific Settlement of International Disputes, done at The Hague on 29 July 1899
80. Convention for the Pacific Settlement of International Disputes, done at The Hague on 18 October 1907
81. Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, done at Geneva on 17 June 1925
82. Protocol regarding the Immunities of the Bank for International Settlements, done at Brussels on 30 July 1936)
83. Charter of the United Nations, done at San Francisco on 26 June 1945, as amended on 20 December 1971
84. Statute of the International Court Of Justice, signed at San Francisco on 26 June 1945
85. Convention on the Privileges and Immunities of the United Nations, adopted at London on 13 February 1946
86. Convention on the Privileges and Immunities of the Specialised Agencies, adopted at New York on 21 November 1947
87. Geneva Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, done at Geneva on 12 August 1949
88. Geneva Convention (II) for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea, done at Geneva on 12 August 1949
89. Geneva Convention (III) relative to the Treatment of Prisoners of War, done at Geneva on 12 August 1949

90. Geneva Convention (IV) relative to the Protection of Civilian Persons in Time of War, done at Geneva on 12 August 1949

91. Additional Protocol to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), done at Geneva on 8 June 1977

92. Additional Protocol to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), done at Geneva on 8 June 1977

93. Convention for the Protection of Cultural Property in the Event of Armed Conflict (and Regulations for its Execution), done at The Hague on 14 May 1954

94. Protocol to the Convention for the Protection of Cultural Property in the Event of Armed Conflict, done at The Hague on 14 May 1954 (First Protocol)

95. Agreement on the Privileges and Immunities of the International Atomic Energy Agency, done at Vienna on 1 July 1959

96. The Antarctic Treaty, done at Washington on 1 December 1959

97. Protocol on Environment Protection to the Antarctic Treaty (and its Annexes I, II, III, IV and V), done at Madrid on 4 October 1991

98. Vienna Convention on Diplomatic Relations, done at Vienna on 18 April 1961

99. Vienna Convention on Consular Relations, done at Vienna on 24 April 1963

100. Additional Protocol II to the Treaty for the Prohibition of Nuclear Weapons in Latin America and Caribbean, done at Mexico City on 14 February 1967

101. Treaty on the Non-Proliferation of Nuclear Weapons, done in triplicate, at London, Moscow and Washington on 1 July 1968

102. Convention on the Law of Treaties, done at Vienna on 23 May 1969

103. Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof, done in triplicate, at London, Moscow and Washington on 11 February 1971

104. Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, done in triplicate, at London, Moscow and Washington on 10 April 1972

105. Convention on the Prevention and Punishment of Crimes Against Internationally Protected Persons, Including Diplomatic Agents, adopted at New York on 14 December 1973

106. Convention on the Prohibition of Military or any Other Hostile Use of Environmental Modification Techniques (with Annex), adopted at New York on 10 December 1976

107. Protocol relating to the International Telecommunications Satellite Organization Privileges, Exemptions and Immunities, done at Washington on 19 May 1978

108. Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, done at Geneva on 10 October 1980

109. Amendment to the Article 1 of Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, on 21 December 2001

110. Protocol on Non-Detectable Fragments, done at Geneva on 10 October 1980 (Protocol I)

111. Protocol on Prohibitions or Restrictions on the Use of Mines, Booby Traps and Other Devices, done at Geneva on 10 October 1980 and as amended on 3 May 1996 (Protocol II)

112. Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons, done at Geneva on 10 October 1980 (Protocol III)

113. Additional Protocol to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, done at Vienna on 13 October 1995 (Protocol IV on Blinding Laser Weapons)

114. Protocol on Explosive Remnants of War, done at Geneva on 28 November 2003 (Protocol V)

115. Protocol on the Privileges and Immunities of the International Maritime Satellite Organization, done at London on 1 December 1981

116. United Nations Convention on the Law of the Sea, done at Montego Bay, Jamaica, on 10 December 1982

117. Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea, adopted at New York on 28 July 1994

118. Additional Protocols II and III to the South Pacific Nuclear Free Zone Treaty, done at Suva on 8 August 1986

119. Convention on the Prohibition of the Development, Production and Stockpiling and Use of Chemical Weapons and on Their Destruction, done at Paris on 13 January 1993 and as amended in 1999

120. Change to Section B of Part VI of the Annex on Implementation and Verification of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, on 13 March 2000.

121. Change to Part V of the Annex on Implementation and Verification of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, on 25 July 2005

122. Convention on the Safety of the United Nations and Associated Personnel, adopted at New York on 9 December 1994

123. Protocols I and II to the African Nuclear-Weapon-Free Zone Treaty, opened for signature in Cairo on 11 April 1996 (Protocols I and II to the Pelindaba Treaty)

124. Agreement on Regional Anti-Terrorism Structure between the Member States of the Shanghai Cooperation Organisation, done at St. Petersburg on 7 June 2002

125. Protocol Amending the Agreement on Regional Anti-Terrorism Structure between the Member States of the Shanghai Cooperation Organisation, done at Tashkent, on 5 September 2003

126. Protocol Amending the Agreement on Regional Anti-Terrorism Structure between the Member States of the Shanghai Cooperation Organisation, done at Bishkek, on 16 August 2007

127. Convention on the Privileges and Immunities of the Shanghai Cooperation Organization, adopted at Tashkent on 17 June 2004

128. Agreement on the Host Country of the Secretariat between the People's Republic of China and the Shanghai Cooperation Organization (concluded at Tashkent on 17 June 2004)

129. Agreement on the Procedure for Organizing and Conducting Joint Anti-terrorism Actions in the Territories of Member States of the Shanghai Cooperation Organization, done at Shanghai on 15 June 2006

130. Agreement among the Member States of the Shanghai Cooperation Organisation on Conducting Joint Military Exercises, done at Bishkek on 27 June 2007

131. Treaty among the member States of the Shanghai Cooperation Organization on Long-term Good-neighborliness, Friendship and Cooperation, signed at Bishkek on 16 August 2007

132. Agreement on the Procedure for Organizing and Conducting Joint Anti-terrorism Exercises by Member States of the Shanghai Cooperation Organization, done at Dushanbe on 28 August 2008

133. Agreement among the Member States of the Shanghai Cooperation Organisation on Inter-governmental Co-operation in the Field of Ensuring International Information Security, done at Yekaterinburg on 16 June 2009

134. Framework Agreement for International Collaboration on Research and Development of Generation IV Nuclear Energy Systems, done at Washington on 28 February 2005

135. Agreement on the Privileges and Immunities of the ITER International Fusion Energy Organization for the Joint Implementation of the ITER Project, done at Paris on 21 November 2006

136. Host Country Agreement between the Government of the People's Republic of China and the Typhoon Committee regarding the Typhoon Committee Secretariat, done at Manila on 7 December 2006

137. Asean Plus Three Emergency Rice Reserve Agreement, done at Jakarta, Indonesia, on 7 October 2011

138. Protocol to the Central Asian Nuclear-Weapon-Free-Zone (CANWFZ) Treaty, done at New York, on 6 May 2014

VIII – Health

139. World Health Organization Regulations regarding Nomenclature (including the Compilation and Publication of Statistics) with Respect to Diseases and Causes of Death, adopted at Geneva on 22 May 1967

140. International Classification of Diseases, 9th Revision, (ICD-9), of 1 May 1976

141. International Classification of Diseases, 10th Revision, (ICD-10), of 17 May 1990

142. International Health Regulations, adopted at Boston on 25 July 1969 as amended by the Twenty-Sixth World Health Assembly in 1973 and the Thirty-Fourth World Health Assembly in 1981

143. International Health Regulations, revised by the 58th World Health Assembly on 23 May 2005 (IHR (2005))

144. World Health Organization Framework Convention on Tobacco Control, done at Geneva on 21 May 2003

IX – Human Rights

145. Slavery Convention, signed at Geneva on 25 September 1926

146. Convention on the Prevention and Punishment of the Crime of Genocide, adopted at Paris on 9 December 1948

147. Convention for the Suppression of the Traffic in Persons and of the Exploitation of the Prostitution of Others, adopted at Lake Success, New York on 2 December 1949

148. Convention relating to the Status of Refugees, signed at Geneva on 28 July 1951

149. Protocol relating to the Status of Refugees, done at New York on 31 January 1967

150. Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery, signed at Geneva on 7 September 1956

151. Convention Against Discrimination in Education, adopted at Paris on 14 December 1960

152. International Convention on the Elimination of All Forms of Racial Discrimination, adopted at New York on 21 December 1965

153. International Covenant on Civil and Political Rights, adopted at New York on 16 December 1966

154. International Covenant on Economic, Social and Cultural Rights, adopted at New York on 16 December 1966

155. Convention on the Elimination of All Forms of Discrimination Against Women, adopted at New York on 18 December 1979

156. Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, adopted at New York on 10 December 1984

157. Convention on the Rights of the Child, adopted at New York on 20 November 1989

158. Amendment to Article 43(2) of the Convention on the Rights of the Child, adopted at New York on 12 December 1995

159. Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography, adopted at New York on 25 May 2000

160. Optional Protocol to the Convention on the Rights of the Child on the Involvement of Children in Armed Conflicts, adopted at New York on 25 May 2000

161. Convention on the Rights of Persons with Disabilities, adopted at New York on 13 December 2006

X – Intellectual Property

162. Paris Convention for the Protection of Industrial Property, done at Paris on 20 March 1883 as last revised at Stockholm on 14 July 1967 and as amended on 2 October 1979 (Paris Convention)

163. Berne Convention for the Protection of Literary and Artistic Works, done at Berne on 9 September 1886, as last revised at Paris on 24 July 1971 and as amended on 28 September 1979 (Berne Convention)

164. Universal Copyright Convention, done at Geneva on 6 September 1952 and as revised at Paris on 24 July 1971

165. Nice Agreement concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks, done at Nice on 15 June 1957, as revised at Stockholm on 14 July 1967 and at Geneva on 13 May 1977, and as amended on 28 September 1979 (Nice Agreement)

166. Amendments to the Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks, on 11 July 1983

167. International Classification of Goods and Services for the Purposes of the Registration of Marks, Eighth Edition, adopted on October 2000

168. nternational Classification of Goods and Services for the Purposes of the Registration of Marks, Ninth Edition (adopted by the Committee of Experts of the Nice Union, at its 19th and 20th Sessions, held respectively 2-10 October 2003 and 10-14 October 2005)

169. WIPO Copyright Treaty (WCT), adopted in Geneva on 20 December 1996

170. WIPO Performances and Phonograms Treaty (WPPT), adopted in Geneva on 20 December 1996

XI – International Crime

171. Convention on Offences and Certain Other Acts Committed on Board Aircraft, signed at Tokyo on 14 September 1963 (Tokyo Convention)

172. Convention for the Suppression of Unlawful Seizure of Aircraft, done at The Hague on 16 December 1970 (Hague Convention)

173. Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation, done at Montreal on 23 September 1971 (Montreal Convention)

174. Protocol for the Suppression of Unlawful Acts of Violence at Airports Serving International Civil Aviation, complementary to the Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation, done at Montreal on 24 February 1988

175. International Convention Against the Taking of Hostages, adopted at New York on 17 December 1979

176. International Convention for the Suppression of Terrorist Bombings, adopted at New York on 15 December 1997

177. International Convention for the Suppression of the Financing of Terrorism, adopted at New York on 9 December 1999

178. United Nations Convention Against Transnational Organized Crime, adopted at New York on 15 November 2000 (Palermo Convention)

179. Additional Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, Supplementing the United Nations Convention Against Transnational Organized Crime, adopted at New York on 15 November 2000

180. Shanghai Convention on Combating Terrorism, Separatism and Extremism, done at Shanghai on 15 June 2001

181. United Nations Convention Against Corruption, adopted at New York on 31 October 2003

182. Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia, done at Tokyo on 11 November 2004

183. Convention on the Physical Protection of Nuclear Material, adopted on 26 October 1979, Vienna

184. Amendment to the Convention on the Physical Protection of Nuclear Material, adopted on 8 July 2005, Vienna

XII – International Trade

185. Agreement on Trade in Civil Aircraft, done at Geneva on 12 April 1979

186. Agreement on Trade Facilitation (Adopted at the Ninth Ministerial Conference held in Geneva in December 2013; which is included in the Marrakesh Agreement Establishing the World Trade Organization by the Protocol to Amend the Marrakesh Agreement Establishing the World Trade Organization, adopted by the WTO General Council on 27 November 2014)

XIII – Labour

187. Convention Limiting the Hours of Work in Industrial Undertakings to Eight in the Day and Forty-Eight in the Week, as modified by the Final Articles Revision Convention, 1946, Washington, 29 October 1919 (ILO No. 1)

188. Convention concerning the Night Work of Young Persons Employed in Industry, as modified by the Final Articles Revision Convention, 1946, Washington, 29 October 1919 (ILO No. 6)

189. Convention concerning the Application of the Weekly Rest in Industrial Undertakings, as modified by the Final Articles Revision Convention, 1946, Geneva, 25 October 1921 (ILO No. 14)

190. Convention concerning Workmen's Compensation for Accidents, as modified by the Final Articles Revision Convention, 1946, Geneva, 10 June 1925 (ILO No. 17)

191. Convention concerning Workmen's Compensation for Occupational Diseases, as modified by the Final Articles Revision Convention, 1946, Geneva, 10 June 1925 (ILO No. 18)

192. Convention concerning Equality of Treatment for National and Foreign Workers as regards Workmen's Compensation for Accidents, as modified by the Final Articles Revision Convention, 1946, Geneva, 5 June 1925 (ILO No. 19)

193. Convention concerning Seamen's Articles of Agreement, 1926, as modified by the Final Articles Revision Convention, 1946, Geneva, 24 June 1926 (ILO No. 22)

194. Convention concerning the Repatriation of Seamen, 1926, as modified by the Final Articles Revision Convention, 1946, Geneva, 23 June 1926 (ILO No. 23)

195. Convention concerning the Creation of Minimum Wage-Fixing Machinery, as modified by the Final Articles Revision Convention, 1946, Geneva, 16 June 1928 (ILO No. 26)

196. Convention concerning the Marking of the Weight on Heavy Packages Transported by Vessels, as modified by the Final Articles Revision Convention, 1946, Geneva, 21 June 1929 (ILO No. 27)

197. Convention concerning Forced or Compulsory Labour, as modified by the Final Articles Revision Convention, 1946, Geneva, 28 June 1930 (ILO No. 29)

198. Convention concerning Food and Catering for Crews on Board Ship, as modified by the Final Articles Revision Convention, 1946, Seattle, 27 June 1946 (ILO No. 68)

199. Convention concerning the Certification of Ships' Cooks, as modified by the Final Articles Revision Convention, 1946, Seattle, 27 June 1946 (ILO No. 69)

200. Convention concerning the Medical Examination of Seafarers, as modified by the Final Articles Revision Convention, 1946, Seattle, 29 June 1946 (ILO No. 73)

201. Convention concerning the Certification of Able Seamen, as modified by the Final Articles Revision Convention, 1946, Seattle, 29 June 1946 (ILO No. 74)

202. Final Articles Revision Convention, Montreal, 9 October 1946 (ILO No. 80)

203. Convention concerning Labour Inspection in Industry and Commerce, Geneva, 11 July 1947 (ILO No. 81)

204. Convention concerning Freedom of Association and Protection of the Right to Organise, San Francisco, 9 July 1948 (ILO No. 87)

205. Convention concerning the Organisation of the Employment Service, San Francisco, 9 July 1948 (ILO No. 88)

206. Convention concerning Crew Accommodation on Board Ship (Revised 1949), Geneva, 18 June 1949 (ILO No. 92)

207. Convention concerning the Application of the Principles of the Right to Organise and to Bargain Collectively, Geneva, 1 July 1949 (ILO No. 98)

208. Convention concerning Equal Remuneration for Men and Women Workers for Work of Equal Value, Geneva, 29 June 1951 (ILO No. 100)

209. Convention concerning the Abolition of Forced Labour, Geneva, 25 June 1957 (ILO No. 105)

210. Convention concerning Weekly Rest in Commerce and Offices, Geneva, 26 June 1957 (ILO No. 106)

211. Convention concerning Seafarers' National Identity Documents, Geneva, 13 May 1958 (ILO No. 108)

212. Convention concerning Discrimination in Respect of Employment and Occupation, Geneva, 25 June 1958 (ILO No. 111)

213. Convention concerning the Protection of Workers Against Ionising Radiations, Geneva, 22 June 1960 (ILO No. 115)

214. Convention concerning Hygiene in Commerce and Offices, Geneva, 8 July 1964 (ILO No. 120)

215. Convention concerning Employment Policy, Geneva, 9 July 1964 (ILO No. 122)

216. Convention concerning Minimum Age for Admission to Employment, Geneva, 26 June 1973 (ILO No. 138)

217. Convention concerning Tripartite Consultations to Promote the Implementation of International Labour Standards, Geneva, 21 June 1976 (ILO No. 144)

218. Convention concerning the Protection of Workers Against Occupational Hazards in the Working Environment Due to Air Pollution, Noise and Vibration, Geneva, 20 June 1977 (ILO No. 148)

219. Convention concerning Labour Administration: Role, Functions and Organisation, Geneva, 26 June 1978 (ILO No. 150)

220. Convention concerning Occupational Safety and Health and the Working Environment, Geneva, 22 June 1981 (ILO No. 155)

221. Convention concerning Safety and Health in Construction, Geneva, 20 June 1988 (ILO No. 167)

222. Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour, Geneva, 17 June 1999 (ILO No. 182)

XIV – Maritime

223. International Convention for the Unification of Certain Rules of Law with Respect to Collision between Vessels, done at Brussels on 23 September 1910

224. Convention for the Unification of Certain Rules of Law Relating to Assistance and Salvage at Sea, done at Brussels on 23 September 1910

225. International Convention for the Unification of Certain Rules of Law Relating to Bills of Lading, done at Brussels on 25 August 1924

226. International Convention for the Unification of Certain Rules Concerning Civil Jurisdiction in Matters of Collision, done at Brussels on 10 May 1952

227. International Convention for the Unification of Certain Rules Relating to Penal Jurisdiction in Matters of Collision or Other Incidents of Navigation, signed at Brussels on 10 May 1952

228. International Convention for the Unification of Certain Rules Relating to the Arrest of Sea-Going Ships, signed at Brussels on 10 May 1952

229. International Convention Relating to the Limitation of the Liability of Owners of Sea-Going Ships, done at Brussels on 10 October 1957

230. Convention on Facilitation of International Maritime Traffic, done at London on 9 April 1965 (FAL (amended) 1965); as amended

231. 2005 Amendments to the Convention on Facilitation of International Maritime Traffic, 1965, done at London, on 7 July 2005 – FAL.8(32)

232. 2009 Amendments to the Convention on Facilitation of International Maritime Traffic, 1965, done at London, on 16 January 2009 – FAL.10(35)

233. International Convention on Load Lines, done at London on 5 April 1966 (LL 1966)

234. 2005 Amendments to the International Convention on Load Lines, 1966, adopted on 1 December 2005

235. Protocol of 1988 relating to the International Convention on Load Lines, done at London on 11 November 1988

236. 2003 Amendments to the Protocol of 1988 Relating to the International Convention on Load Lines, 1966, adopted on 5 June 2003

237. 2004 Amendments to the Protocol of 1988 Relating to the International Convention on Load Lines, 1966, adopted on 9 December 2004

238. 2006 Amendments to the Protocol of 1988 Relating to the International Convention on Load Lines, 1966, adopted on 8 December 2006

239. 2008 Amendments to the Protocol of 1988 Relating to the International Convention on Load Lines, 1966, adopted on 4 December 2008

240. Amendments to the Protocol of 1988 Relating to the International Convention on Load Lines, 1966, as amended, done at London, on 24 May 2012

241. Amendments to the Protocol of 1988 Relating to the International Convention on Load Lines, 1966, as amended, done at London, on 30 November 2012

242. Amendments to the Protocol of 1988 Relating to the International Convention on Load Lines, 1966, as amended, done at London, on 21 June 2013

243. Amendments to the Protocol of 1988 Relating to the International Convention on Load Lines, 1966, as amended, done at London, on 22 May 2014

244. International Convention on Tonnage Measurements of Ships, 1969, done at London on 23 June 1969 (TONNAGE 1969)

245. International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, done at Brussels on 29 November 1969 (INTERVENTION 1969)

246. Convention on the International Regulations for Preventing Collisions at Sea, 1972, done at London on 20 October 1972 (COLREG 1972)

247. Amendment to the Convention on the International Regulations for Preventing Collisions at Sea, 1972, (COLREG 72), adopted at London on 19 November 1981

248. Amendments to the Convention on the International Regulations for Preventing Collisions at Sea, 1972, adopted at London on November of 1987

249. Amendments to the Convention on the International Regulations for Preventing Collisions at Sea (Rule 10), 1972 (COLREG 72), adopted at London on 19 October 1989

250. Amendments to the Convention on the International Regulations for Preventing Collisions at Sea, 1972, adopted on 4 November 1993

251. Amendments to the Convention on the International Regulations for Preventing Collisions at Sea, 1972, adopted on 29 November 2001

252. Amendments to the Convention on the International Regulations for Preventing Collisions at Sea, 1972, adopted on 29 November 2007

253. Amendments to the Convention on the International Regulations for Preventing Collisions at Sea, 1972, adopted on 4 December 2013

254. International Convention for Safe Containers, 1972, as amended, adopted at Geneva on 2 December 1972 (CSC 1972)

255. Amendments to the International Convention for Safe Containers (1972), as amended, on 3 December 2010

256. 2013 Amendments to the International Convention for Safe Containers (1972), as amended, on 21 June 2013

257. Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, done in quadruplicate at London, Mexico City, Moscow and Washington on 29 December 1972 (LDC 1972)

258. Amendments to the Annexes to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, adopted by Resolution LDC. 5 (III) (concerning the prevention and control of pollution by incineration of wastes and other matter at sea) of the Third Consultative Meeting of the Contracting Parties on 12 October 1978 (1978 (Incineration) Amendments)

259. Amendments to the Annexes to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, adopted by Resolution LDC 12 (V) (concerning the amendment of the lists of substances contained in Annexes I and II to the Convention) of the Fifth Consultative Meeting of the Contracting Parties on 24 September 1980 (1980 List of Substances Amendments)

260. Protocol relating to Intervention on the High Seas in Cases of Pollution by Substances other than Oil, done at London on 2 November 1973, as amended (INTERVENTION PROT 1973 amended)

261. International Convention for the Safety of Life at Sea, 1974, as amended, done at London on 1 November 1974 (SOLAS 1974)

262. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 20 November 1981 - MSC.1(XLV)

263. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 17 June 1983 - MSC.6(48)

264. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 21 April 1988 - MSC.11(55)

265. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 28 October 1988 - MSC.12(56)

266. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 11 April 1989 - MSC.13(57)

267. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 25 May 1990 - MSC.19(58)

268. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 23 May 1991 - MSC.22(59)

269. Amendments to Chapter II-2 of the International Convention for the Safety of Life at Sea, 1974, adopted at London on 10 April 1992 - MSC.24(60)

270. Amendments to Chapter II-1 of the International Convention for the Safety of Life at Sea, 1974, adopted at London on 10 April 1992 - MSC.26(60)

271. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 11 December 1992 - MSC.27(61)

272. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 23 May 1994 - MSC.31(63)

273. Amendments to the Annex to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 24 May 1994 - CCG to SOLAS Res.1

274. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 9 December 1994 - MSC.42(64)

275. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 16 May 1995 - MSC.46(65)

276. Amendments to Annex to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 29 November 1995 - CCG to SOLAS Res.1

277. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 4 June 1996 - MSC.47(66)

278. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 5 December 1996 - MSC.57(67)

279. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 4 June 1997 - MSC.65(68)

280. Amendments to Annex to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 27 November 1997 - CCG to SOLAS Res.1

281. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 18 May 1998, as amended - MSC.69(69)

282. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 27 May 1999, as amended - MSC.87(71)

283. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 26 May 2000, as amended - MSC.91(72)

284. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 5 December 2000, as amended - MSC.99(73)

285. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 6 June 2001, as amended - MSC.117(74)

286. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 24 May 2002, as amended - MSC.123(75)

287. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 12 December 2002, as amended - MSC.134(76)

288. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 12 December 2002 - CCG to SOLAS Res.1

289. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 5 June 2003, as amended - MSC.142(77)

290. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 20 May 2004, as amended - MSC.151(78)

291. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 20 May 2004, as amended - MSC.152(78)

292. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 20 May 2004, as amended - MSC.153(78)

293. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 9 December 2004, as amended - MSC.170(79)

294. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 20 May 2005, as amended - MSC.194(80), Annex 1

295. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 20 May 2005, as amended - MSC.194(80), Annex 2

296. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 18 May 2006, as amended - MSC.201(81)

297. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 19 May 2006, as amended - MSC.202(81)

298. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 8 December 2006, as amended - MSC.216(82), Annex 1

299. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 8 December 2006, as amended - MSC.216(82), Annex 2

300. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 8 December 2006, as amended - MSC.216(82), Annex 3

301. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 12 October 2007, as amended - MSC.239(83)

302. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 16 May 2008, as amended - MSC.256(84)

303. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 16 May 2008, as amended - MSC.257(84)

304. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 4 December 2008, as amended - MSC.269(85), Annex 1

305. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 4 December 2008, as amended - MSC.269(85), Annex 2

306. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 5 June 2009, as amended - MSC.282(86)

307. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 21 May 2010, as amended - MSC.290(87)

308. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 21 May 2010, as amended - MSC.291(87)

309. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 3 December 2004, as amended - MSC.308(88)

310. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 20 May 2011, as amended - MSC.317(89)

311. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 24 May 2012, as amended - MSC.325(90)

312. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 30 November 2012, as amended - MSC.338(91)

313. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 21 June 2013, as amended - MSC.350(92)

314. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 22 May 2014, as amended - MSC.365(93)

315. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 22 May 2014, as amended - MSC.366(93)

316. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 21 November 2014, as amended - MSC.380(94)

317. Amendments to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 21 November 2014, as amended - MSC.386(94)

318. International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted at London on 17 June 1983 - MSC.4(48)

319. Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted at London on 29 April 1987 - MSC.10(54)

320. Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted at London on 11 April 1989 - MSC.14(57)

321. Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted at London on 24 May 1990 - MSC.16(58)

322. Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted at London on 11 December 1992 - MSC.28(61)

323. Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted at London on 4 June 1996 - MSC.50(66)

324. Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted at London on 5 December 1996 - MSC.58(67)

325. Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted at London on 5 December 2000 - MSC.102(73)

326. Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted at London on 10 December 2004 - MSC.176(79)

327. Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted at London on 8 December 2006 - MSC.219(82)

328. Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted at London on 30 November 2012 - MSC.340(91)

329. Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted at London on 22 May 2014 - MSC.369(93)

330. Amendments to the Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (GC Code), on 22 May 2014 - MSC.377(93)

331. International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), adopted at London on 17 June 1983 - MSC.5(48)

332. Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), adopted at London on 24 May 1990 - MSC.17(58)

333. Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), adopted at London on 11 December 1992 - MSC.30(61)

334. Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), adopted at London on 23 May 1994 - MSC.32(63)

335. Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), adopted at London on 5 December 1996 - MSC.59(67)

336. Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), adopted at London on 5 December 2000 - MSC.103(73)

337. Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), adopted at London on 10 December 2004 - MSC.177(79)

338. Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), adopted at London on 8 December 2006 - MSC.220(82)

339. Amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), adopted at London on 22 May 2014 - MSC.370(93)

340. Amendments to the International Convention for the Safety of Life at Sea, 1974 Concerning Radiocommunications for the Global Maritime Distress and Safety System, adopted at London on 9 November 1988 - CCG to SOLAS Res.1

341. Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code), done at London on 12 October 1971 – A.212(VII)

342. Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code), on 22 May 2014 –MSC.376(93)

343. International Code for the Safe Carriage of Grain in Bulk, adopted at London on 23 May 1991 - MSC.23(59)

344. Code of Safe Practice for Cargo Stowage and Securing, adopted at London on 6 November 1991 - A.714(17)

345. Guidelines for the Authorization of Organizations Acting on Behalf of the Administration, adopted at London on 4 November 1993 - A.739(18)

346. Amendments to the Guidelines for the Authorization of Organizations Acting on Behalf of the Administration, adopted at London on 18 May 2006 - MSC.208(81)

347. International Management Code for the Safe Operation of Ships and for Pollution Prevention (International Safety Management (ISM) Code), adopted at London on 4 November 1993 - A.741(18)

348. Amendments to the International Safety Management (ISM) Code, adopted at London on 5 December 2000 - MSC.104(73)

349. Amendments to the International Safety Management (ISM) Code, adopted at London on 10 December 2004 - MSC.179(79)

350. Amendments to the International Safety Management (ISM) Code, adopted at London on 20 May 2005 - MSC.195(80)

351. Amendments to the International Safety Management (ISM) Code, adopted at London on 4 December 2008 - MSC.273(85)

352. Amendments to the International Safety Management (ISM) Code, adopted at London on 21 June 2013 - MSC.353(92)

353. Guidelines on the Enhanced Programme of Inspections During Surveys of Bulk Carriers and Oil Tankers, adopted at London on 4 November 1993 - A.744(18)

354. Amendments to the Guidelines on the Enhanced Programme of Inspections During Surveys of Bulk Carriers and Oil Tankers, adopted at London on 4 June 1996 - MSC.49(66)

355. Amendments to the Guidelines on the Enhanced Programme of Inspections During Surveys of Bulk Carriers and Oil Tankers, adopted at London on 27 November 1997 - CCG to SOLAS Res.2

356. Amendments to the Guidelines on the Enhanced Programme of Inspections During Surveys of Bulk Carriers and Oil Tankers, adopted at London on 5 December 2000 - MSC.105(73)

357. Amendments to the Guidelines on the Enhanced Programme of Inspections During Surveys of Bulk Carriers and Oil Tankers, adopted at London on 24 May 2002 - MSC.125(75)

358. Amendments to the Guidelines on the Enhanced Programme of Inspections During Surveys of Bulk Carriers and Oil Tankers, adopted at London on 5 June 2003 - MSC.144(77)

359. Amendments to the Guidelines on the Enhanced Programme of Inspections During Surveys of Bulk Carriers and Oil Tankers, adopted at London on 5 June 2003 - MSC.197(80)

360. Amendments to the Guidelines on the Enhanced Programme of Inspections During Surveys of Bulk Carriers and Oil Tankers, adopted at London on 18 May 2008 - MSC.261(84)

361. International Code of Safety for High Speed Craft (1994 HSC Code), adopted at London on 20 May 1994 - MSC.36(63)

362. Amendments to the International Code of Safety for High Speed Craft (1994 HSC Code), adopted at London on 6 June 2001 - MSC.119(74)

363. Amendments to the International Code of Safety for High Speed Craft (1994 HSC Code), adopted at London on 10 December 2004 - MSC.174(79)

364. Amendments to the International Code of Safety for High Speed Craft (1994 HSC Code), adopted at London on 8 December 2006 - MSC.221(82)

365. Amendments to the International Code of Safety for High Speed Craft (1994 HSC Code), adopted at London on 16 May 2008 - MSC.259(84)

366. Amendments to the International Code of Safety for High Speed Craft (1994 HSC Code), adopted at London on 21 June 2013 - MSC.351(92)

367. International Life-Saving Appliance (LSA) Code, adopted at London on 4 June 1996 - MSC.48(66)

368. Amendments to the International Life-Saving Appliance (LSA) Code, adopted at London on 18 May 2006 - MSC.207(81)

369. Amendments to the International Life-Saving Appliance (LSA) Code, adopted at London on 8 December 2006 - MSC.218(82)

370. Amendments to the International Life-Saving Appliance (LSA) Code, adopted at London on 4 December 2008 - MSC.272(85)

371. Amendments to the International Life-Saving Appliance (LSA) Code, adopted at London on 21 May 2010 - MSC.293(87)

372. Amendments to the International Life-Saving Appliance (LSA) Code, adopted at London on 20 May 2011 - MSC.320(89)

373. Amendments to the International Life-Saving Appliance (LSA) Code, on 22 May 2014 - MSC.368(93)

374. International Code for Application of Fire Test Procedures (FTP Code), adopted at London on 5 December 1996 - MSC.61(67)

375. Amendments to the International Code for Application of Fire Test Procedures (FTP Code), adopted at London on 5 December 2000 - MSC.101(73)

376. Amendments to the International Code for Application of Fire Test Procedures (FTP Code), adopted at London on 10 December 2004 - MSC.173(79)

377. International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships (INF Code), adopted at London on 25 May 1999 - MSC.88(71)

378. Amendments to the International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships (INF Code), adopted at London on 6 June 2001 - MSC.118(74)

379. Amendments to the International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships (INF Code), adopted at London on 12 December 2002 - MSC.135(76)

380. Amendments to the International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships (INF Code), adopted at London on 10 December 2004 - MSC.178(79)

381. Amendments to the International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships (INF Code), adopted at London on 12 October 2007 - MSC.241(83)

382. International Code of Safety for High-Speed Craft, 2000 (2000 HSC Code), adopted at London on 5 December 2000 - MSC.97(73)

383. Amendments to the International Code of Safety for High-Speed Craft, 2000 (2000 HSC Code), adopted at London on 10 December 2004 - MSC.175(79)

384. Amendments to the International Code of Safety for High-Speed Craft, 2000 (2000 HSC Code), adopted at London on 8 December 2006 - MSC.222(82)

385. Amendments to the International Code of Safety for High-Speed Craft, 2000 (2000 HSC Code), adopted at London on 16 May 2008 - MSC.260(84)

386. Amendments to the International Code of Safety for High-Speed Craft, 2000 (2000 HSC Code), adopted at London on 4 December 2008 - MSC.271(85)

387. Amendments to the International Code of Safety for High-Speed Craft, 2000 (2000 HSC Code), adopted at London on 24 May 2012 - MSC.326(90)

388. Amendments to the International Code of Safety for High-Speed Craft, 2000 (2000 HSC Code), adopted at London on 21 June 2013 - MSC.352(92)

389. International Code for Fire Safety Systems (FSS Code), adopted at London on 5 December 2000 - MSC.98(73)

390. Amendments to the International Code for Fire Safety Systems (FSS Code), adopted at London on 18 May 2006 - MSC.206(81)

391. Amendments to the International Code for Fire Safety Systems (FSS Code), adopted at London on 8 December 2006 - MSC.217(82), Annex 1

392. Amendments to the International Code for Fire Safety Systems (FSS Code), adopted at London on 8 December 2006 - MSC.217(82), Annex 2

393. Amendments to the International Code for Fire Safety Systems (FSS Code), adopted at London on 21 May 2010 - MSC.292(87)

394. Amendments to the International Code for Fire Safety Systems (FSS Code), adopted at London on 3 December 2010 - MSC.311(88)

395. Amendments to the International Code for Fire Safety Systems (FSS Code), adopted at London on 25 May 2012 - MSC.327(90)

396. Amendments to the International Code for Fire Safety Systems (FSS Code), adopted at London on 30 November 2012 - MSC.339(91)

397. Amendments to the International Code for Fire Safety Systems (FSS Code), adopted at London on 22 May 2014 - MSC.367(93)

398. International Maritime Dangerous Goods Code (IMDG Code), adopted at London on 24 May 2002 - MSC.122(75)

399. Amendments to the International Maritime Dangerous Goods Code (IMDG Code), adopted at London on 20 May 2004 - MSC.157(78)

400. Amendments to the International Maritime Dangerous Goods Code (IMDG Code), adopted at London on 18 May 2006 - MSC.205(81)

401. Amendments to the International Maritime Dangerous Goods Code (IMDG Code), adopted at London on 16 May 2008 - MSC.262(84)

402. Amendments to the International Maritime Dangerous Goods Code (IMDG Code), adopted at London on 21 May 2010 - MSC.294(87)

403. Amendments to the International Maritime Dangerous Goods Code (IMDG Code), adopted at London on 24 May 2012 - MSC.328(90)

404. Amendments to the International Maritime Dangerous Goods Code (IMDG Code), adopted at London on 22 May 2014 - MSC.372(93)

405. International Code for the Security of Ships and of Port Facilities (International Ship and Port Facility Security - ISPS Code), adopted at London on 12 December 2002 - CCG to SOLAS Res.2

406. Amendments to the International Code for the Security of Ships and of Port Facilities (ISPS Code), adopted at London on 20 May 2005 - MSC.196(80)

407. Technical Provisions for Means of Access for Inspections, adopted at London on 12 December 2002 - MSC.133(76)

408. Amendments to the Technical Provisions for Means of Access for Inspections, adopted at London on 20 May 2004 - MSC.158(78)

409. Standards and Criteria for Side Structures of Bulk Carriers of Single-Side Skin Construction, adopted at London on 9 December 2004 - MSC.168(79)

410. Standards for Owners' Inspection and Maintenance of Bulk Carrier Hatch Covers, adopted at London on 9 December 2004 - MSC.169(79)

411. Performance Standard for Protective Coatings for Dedicated Seawater Ballast Tanks in all Types of Ships and Double-Side Skin Spaces of Bulk Carriers, adopted at London on 8 December 2006 - MSC.215(82)

412. Amendments to the Performance Standard for Protective Coatings for Dedicated Seawater Ballast Tanks in All Types of Ships and Double-Side Skin Spaces of Bulk Carriers, adopted at London on 30 November 2012 - MSC.341(91)

413. Code of the International Standards and Recommended Practices for a Safety investigation into a Marine Casualty or Marine Incident (Casualty Investigation Code), adopted at London on 16 May 2008 - MSC.255(84)

414. International Code on Intact Stability, 2008 (2008 IS Code), adopted at London on 4 December 2008 - MSC.267(85)

415. International Maritime Solid Bulk Cargoes Code (IMSBC Code), adopted at London on 4 December 2008 - MSC.268(85)

416. Amendments to the International Maritime Solid Bulk Cargoes Code (IMSBC Code), adopted at London on 20 May 2011 - MSC.318(89)

417. Amendments to the International Maritime Solid Bulk Cargoes Code (IMSBC Code), adopted at London on 21 June 2013 - MSC.354(92)

418. International Goal-Based Ship Construction Standards for Bulk Carriers and Oil Tankers, adopted at London on 20 May 2010 - MSC.287(87)

419. Performance Standard for Protective Coatings for Cargo Oil Tanks of Crude Oil Tankers, 2010, adopted at London on 14 May 2010 - MSC.288(87)

420. Amendments to the Performance Standard for Protective Coatings for Cargo Oil Tanks of Crude Oil Tankers, adopted at London on 30 November 2012 - MSC.342(91)

421. Performance Standard for Alternative Means of Corrosion Protection for Cargo Oil Tanks of Crude Oil Tankers, 2010, adopted at London on 14 May 2010 - MSC.289(87)

422. International Code for Application of Fire Test Procedures, 2010, adopted at London on 3 December 2010 - MSC.307(88)

423. Amendments to the International Code on the Enhanced Programme of Bulk Cargo and Oil Tanker (2011 ESP CODE), adopted at London on 22 May 2014 - MSC.371(93)

424. Amendments to the International Code on the Enhanced Programme of Bulk Cargo and Oil Tanker (2011 ESP CODE), adopted at London on 21 November 2014 - MSC.381(94)

425. Code on Noise Levels on Board Ships, adopted at London on 30 November 2012 - MSC.337(91)

426. Code for Recognized Organizations (RO Code), adopted at London on 21 June 2013 - MSC.349(92)

427. Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 17 February 1978 (SOLAS PROT 1978), as amended

428. 1981 Amendments to the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea 1974, adopted at London 20 November 1981 - MSC.2(XLV)

429. Amendment to the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea 1974, adopted at London on 11 November 1988

430. Amendments to the Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 30 November 2012 - MSC.343(91)

431. Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974, done at London on 11 November 1988, as amended (SOLAS PROT (HSSC) 1988)

432. Amendments to the Protocol of 1988 Relating to the International Convention for the Safety of Life at Sea, 1974, adopted on 26 May 2000 - MSC.92(72)

433. Amendments to the Protocol of 1988 Relating to the International Convention for the Safety of Life at Sea, 1974, adopted on 5 December 2000 - MSC.100(73)

434. Amendments to the Protocol of 1988 Relating to the International Convention for the Safety of Life at Sea, 1974, adopted on 24 May 2002 - MSC.124(75)

435. Amendments to the Protocol of 1988 Relating to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 20 May 2004 - MSC.154(78)

436. Amendments to the Protocol of 1988 Relating to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 9 December 2004 - MSC.171(79)

437. Amendments to the Protocol of 1988 Relating to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 8 December 2006 - MSC.227(82)

438. Amendments to the Protocol of 1988 Relating to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 12 October 2007 - MSC.240(83)

439. Amendments to the Protocol of 1988 Relating to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 16 May 2008 - MSC.258(84)

440. Amendments to the Protocol of 1988 Relating to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 5 June 2009 - MSC.283(86)

441. Amendments to the Protocol of 1988 Relating to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 3 December 2010 - MSC.309(88)

442. Amendments to the Protocol of 1988 Relating to the International Convention for the Safety of Life at Sea, 1974, adopted at London on 30 November 2012 - MSC.344(91)

443. International Convention for the Prevention of Pollution from Ships, adopted at London on 2 November 1973

444. Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, done at London on 17 February 1978 (MARPOL 73/78)

445. International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, Annex I - Regulations for the Prevention of Pollution by Oil, adopted on 17 February 1978 (Annex of Protocol of 1978)

446. International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, Annex II - Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk, adopted on 17 February 1978 (Annex of Protocol of 1978)

447. International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, Annex III - Regulations for the Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Forms, or in Freight Containers, Portable Tanks or Road and Road Tank Wagons, adopted on 17 February 1978 (Annex of Protocol of 1978)

448. International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, Annex IV - Regulations for the Prevention of Pollution by Sewage from Ships, adopted on 17 February 1978 (Annex of Protocol of 1978)

449. International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, Annex V - Regulations for the Prevention of Pollution by Garbage from Ships, adopted on 17 February 1978 (Annex of Protocol of 1978)

450. 1984 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I), adopted on 7 September 1984 – MEPC.14(20)

451. 1985 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex II), adopted on 5 December 1985 – MEPC.16(22)

452. 1985 Amendments to the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, adopted on 5 December 1985 – MEPC.21(22)

453. 1987 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I), adopted on 1 December 1987 - MEPC.29(25)

454. 1989 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex II), adopted on 17 March 1989 - MEPC.34(27)

455. 1989 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex V), adopted on 17 October 1989 - MEPC.36(28)

456. 1990 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I and II), adopted on 16 March 1990 - MEPC.39(29)

457. 1990 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I and V), adopted on 16 November 1990 - MEPC.42(30)

458. 1991 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I), adopted on 4 July 1991 - MEPC.47(31)

459. 1991 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex V), adopted on 4 July 1991 - MEPC.48(31)

460. 1992 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I), adopted on 6 March 1992 - MEPC.51(32)

461. 1992 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I), adopted on 6 March 1992 - MEPC.52(32)

462. 1992 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex II), adopted on 30 October 1992 - MEPC.57(33)

463. 1992 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex III), adopted on 30 October 1992 - MEPC.58(33)

464. 1994 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annexes I, II, III and V through Resolutions 1, 2 and 3 of the Conference of the Parties), adopted on 2 November 1994

465. 1995 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex V), adopted on 14 September 1995 - MEPC.65(37)

466. 1996 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Amendments to Protocol I), adopted on 10 July 1996 - MEPC.68(38)

467. 1997 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I), adopted on 25 September 1997 - MEPC.75(40)

468. 1999 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I and Annex II), adopted on 1 July 1999 - MEPC.78(43)

469. 2000 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Marine Pollution from Ships, 1973 (Annex III), adopted on 13 March 2000 - MEPC.84(44)

470. 2000 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex V), adopted on 5 October 2000 - MEPC.89(45)

471. 2001 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I), adopted on 27 April 2001 - MEPC.95(46)

472. 2003 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I), adopted on 4 December 2003 - MEPC.111(50)

473. 2004 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex IV), adopted on 1 April 2004 - MEPC.115(51)

474. 2004 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex V), adopted on 1 April 2004 - MEPC.116(51)

475. 2004 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I), adopted on 15 October 2004 - MEPC.117(52)

476. 2004 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex III), adopted on 15 October 2004 - MEPC.118(52)

477. 2006 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I), adopted on 24 March 2006 - MEPC.141(54)

478. 2006 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex IV), adopted on 24 March 2006 - MEPC.143(54)

479. 2006 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I), adopted on 13 October 2006 - MEPC.154(55)

480. 2006 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex III), adopted on 13 October 2006 - MEPC.156(55)

481. 2007 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I and IV), adopted on 13 July 2007 - MEPC.164(56)

482. 2009 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973(Annex I), adopted on 17 July 2009 - MEPC.186(59)

483. 2009 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I), adopted on 17 July 2009 - MEPC.187(59)

484. 2010 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I), adopted on 26 March 2010 - MEPC.189(60)

485. 2010 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex III), adopted on 1 October 2010 - MEPC.193(61)

486. 2011 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex IV), adopted on 15 July 2011 - MEPC.200(62)

487. 2011 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex V), adopted on 15 July 2011 - MEPC.201(62)

488. 2012 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annexes I, II, IV and V), adopted on 2 March 2012 - MEPC.216(63)

489. 2013 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annex I), adopted on 17 May 2013 - MEPC.235(65)

490. 2013 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annexes I and II), adopted on 17 May 2013 - MEPC.238(65)

491. 2013 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annexes I, II, III, IV and V), adopted on 4 April 2014 - MEPC.246(66)

492. 2013 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annexes I), adopted on 4 April 2014 - MEPC.248(66)

493. 2013 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annexes I), adopted on 17 October 2014 - MEPC.256(67)

494. 2013 Amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Annexes III), adopted on 17 October 2014 - MEPC.257(67)

495. Amendments to the Annex of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (Amendments to MARPOL Annex I), Adopted on 28 October 2016 - MEPC.276(70)

496. Amendments to the Annex of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (Amendments to MARPOL Annex V), Adopted on 28 October 2016 - MEPC.277(70)

497. Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL PROT 1997), adopted on 26 September 1997

498. International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978, Annex VI - Regulations for Prevention of Air Pollution from Ships, adopted on 26 September 1997 (Annex to the Protocol of 1997)

499. 2005 Amendments to the Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (Amendments to Annex VI and the NOx Technical Code), adopted on 22 July 2005 - MEPC.132(53)

500. 2008 Amendments to the Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (Annex VI), adopted on 10 October 2008 - MEPC.176(58)

501. 2008 Amendments to the Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines (NOx Technical Code 2008)), adopted on 10 October 2008 - MEPC.177(58)

502. 2010 Amendments to the Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (Annex VI), adopted on 26 March 2010 - MEPC.190(60)

503. 2010 Amendments to the Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, adopted on 1 October 2010 - MEPC.194(61)

504. 2011 Amendments to Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (Annex VI), adopted on 15 July 2011 - MEPC.202(62)

505. 2011 Amendments to Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (Annex VI), adopted on 15 July 2011 - MEPC.203(62)

506. 2012 Amendments to Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (Annex VI and the NOx Technical Code 2008), done on 6 March 2012 - MEPC.217(63)

507. 2014 Amendments to Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, done on 4 April 2014 - MEPC.247(66)

508. 2014 Amendments to Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, done on 4 April 2014 - MEPC.251(66)

509. 2014 Amendments to Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, done on 17 October 2014 - MEPC.258(67)

510. Amendments to the Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Potocol of 1978 relating thereto, adopted on 28 October 2016 - MEPC.278(70)

511. International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted on 5 December 1985 - MEPC.19(22)

512. 1989 Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted on 17 March 1989 - MEPC.32(27)

513. 1990 Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted on 16 March 1990 - MEPC.40(29)

514. 1992 Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted on 30 October 1992 - MEPC.55(33)

515. 1996 Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted on 10 July 1996 - MEPC.69(38)

516. 1997 Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted on 10 March 1997 - MEPC.73(39)

517. 1999 Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted on 1 July 1999 - MEPC.79(43)

518. 2000 Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted on 5 October 2000 - MEPC.90(45)

519. 2004 Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted on 15 October 2004 - MEPC.119(52)

520. 2007 Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted on 15 October 2004 - MEPC.166(56)

521. 2012 Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted on 5 October 2012 - MEPC.225(64)

522. 2014 Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), adopted on 4 April 2014 - MEPC.250(66)

523. Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code), adopted on 5 December 1985 - MEPC.20(22)

524. 1989 Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code), adopted on 17 March 1989 - MEPC.33(27)

525. 1990 Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code), adopted on 16 March 1990 - MEPC.41(29)

526. 1992 Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code), adopted on 30 October 1992 - MEPC.56(33)

527. . 1996 Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code), adopted on 10 July 1996 - MEPC.70(38)

528. . 1999 Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code), adopted on 1 July 1999 - MEPC.80(43)

529. 2000 Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code), adopted on 5 October 2000 - MEPC.91(45)

530. 2006 Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code), adopted on 24 March 2006 - MEPC.144(54)

531. . 2014 Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code), adopted on 4 April 2014 - MEPC.249(66)

532. Condition Assessment Scheme (CAS)(as stated in Annex I of the MARPOL 73/78, adopted on 27 April 2001 - MEPC.94(46)

533. Amendments to the Condition Assessment Scheme (CAS) (as stated in Annex I of the MARPOL 73/78), adopted on 11 October 2002 - MEPC.99(48)

534. Amendments to the Condition Assessment Scheme (CAS) (as stated in Annex I of the MARPOL 73/78), adopted on 4 December 2003 - MEPC.112(50)

535. Amendments to the Condition Assessment Scheme (CAS) (as stated in Annex I of the MARPOL 73/78), adopted on 22 July 2005 - MEPC.131(53)

536. Amendments to the Condition Assessment Scheme (CAS) (as stated in Annex I of the MARPOL 73/78), adopted on 13 October 2006 - MEPC.155(55)

537. Amendments to the Condition Assessment Scheme (CAS)(as stated in Annex I of the MARPOL 73/78), adopted on 17 May 2013 - MEPC.236(65)

538. Code for Recognized Organizations (RO Code) (as stated in Annexes I and II of the MARPOL 73/78), adopted on 17 May 2013 - MEPC.237(65), see also MSC.349(92)

539. Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, adopted at London on 7 July 1978 (STCW 1978)

540. 1991 Amendments to the Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, adopted at London on 22 May 1991

541. 1994 Amendments to the Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, adopted at London on 23 May 1994

542. 1995 Amendments to the Annex to the Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, adopted at London on 7 July 1995

543. 1997 Amendments to the Annex to the Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, adopted at London on 4 June 1997

544. The Manila Amendments to the Annex to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, adopted at Manila on 25 June 2010

545. 2014 Amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, adopted on 22 May 2014

546. Seafarers' Training, Certification and Watchkeeping (STCW) Code, adopted at London on 7 July 1995

547. 1997 Amendments to the Seafarers' Training, Certification and Watchkeeping (STCW) Code, adopted at London on 4 June 1997

548. 1998 Amendments to the Seafarers' Training, Certification and Watchkeeping (STCW) Code, adopted at London on 9 December 1998

549. The Manila Amendments to the Seafarers' Training, Certification and Watchkeeping (STCW) Code, adopted at London on 25 June 2010

550. The Amendments to the Seafarers' Training, Certification and Watchkeeping (STCW) Code, adopted on 22 May 2014

551. Athens Convention relating to the Carriage of Passengers and their Luggage by Sea (PAL CONVENTION 1974), done at Athens on 13 December 1974

552. 1976 Protocol to the Athens Convention relating to the Carriage of Passengers and their Luggage by Sea, 1974, done at Athens on 19 November 1976

553. International Convention on Maritime Search and Rescue, 1979, adopted at Hamburg on 27 April 1979 (SAR 1979)

554. 1998 Amendments to the International Convention on Maritime Search and Rescue, 1979, adopted at London on 18 May 1998

555. International Convention on Salvage, 1989, done at London on 28 April 1989 (SALVAGE 1989)

556. International Convention on Oil Pollution Preparedness, Response and Co-operation, done at London on 30 November 1990 (OPRC 1990)

557. Protocol of 1992 to Amend the International Convention on Civil Liability for Oil Pollution Damage, 1969, done at London on 27 November 1992 (CLC PROT 1992)

558. Amendments of the Limitation Amounts in the Protocol of 1992 to Amend the International Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC PROT 1992), done at London on 18 October 2000

559. Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances, 2000, done at London on 15 March 2000

560. International Convention on Civil Liability for Bunker Oil Pollution Damage (Bunker Convention), adopted at London on 23 March 2001

561. International Convention on the Control of Harmful Anti-fouling Systems on Ships, done at London on 5 October 2001

XV – Private International Law

562. Convention relating to Civil Procedure, done at The Hague on 1 March 1954

563. Convention on the Law Applicable to Maintenance Obligations Towards Children, done at The Hague on 24 October 1956

564. Convention on the Recognition and Enforcement of the Decisions Relating to Maintenance Obligations Towards Children, done at The Hague on 15 April 1958

565. Convention on the Recognition and Enforcement of Foreign Arbitral Awards, done at New York on 10 June 1958

566. Convention concerning the Powers of Authorities and the Law Applicable in Respect of the Protection of Minors, done at The Hague on 5 October 1961

567. Convention Abolishing the Requirement of Legalisation for Foreign Public Documents, done at The Hague on 5 October 1961

568. Convention on the Service Abroad of Judicial and Extrajudicial Documents in Civil or Commercial Matters, done at The Hague on 15 November 1965

569. Convention on the Taking of Evidence Abroad in Civil or Commercial Matters, done at The Hague on 18 March 1970

570. Convention on the Civil Aspects of International Child Abduction, done at The Hague on 25 October 1980

571. Convention on Protection of Children and Co-operation in respect of Intercountry Adoption, done at The Hague on 29 May 1993

XVI – Road Traffic

572. Convention on Road Traffic, done at Geneva on 19 September 1949

573. Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can Be Fitted and/or Be Used on Wheeled Vehicles, done at Geneva on 25 June 1998

574. Intergovernmental Agreement on the Trans-Asian Railway Network, done at Jakarta on 12 April 2006

XVII – Telecommunications and Postal

575. Convention for the Protection of Submarine Telegraph Cables, done at Paris on 14 March 1884, as amended by the Declaration of 1 December 1886 and the Protocol of 7 July 1887

576. Radio Regulations and Final Protocol, incorporated in the Final Acts of the World Administrative Radio Conference, done at Geneva on 6 December 1979 and as revised on 4 July 2003 (WRC-03)

577. International Agreement on the Use of INMARSAT Ship Earth Stations within the Territorial Sea and Ports, adopted at London on 16 October 1985

578. International Telecommunications Regulations, signed at Melbourne on 9 December 1988 (WATTC-88)

579. Universal Postal Union General Regulations, adopted respectively in Beijing on 15 September 1999 and in Bucharest on 5 October 2004

580. First Additional Protocol to the Universal Postal Union General Regulations, done at Geneva, 12 August 2008

581. Universal Postal Convention and the Final Protocol, adopted respectively in Beijing on 15 September 1999 and in Bucharest on 5 October 2004

582. Agreement concerning the Postal Payment Services, launched respectively in Beijing on 15 September 1999 and in Bucharest on 5 October 2004

583. Operating Agreement relating to the International Telecommunications Satellite Organization, done at Washington on 20 August 1971

XVIII - Treaties Establishing International Organizations

584. (ILO) Constitution of the International Labour Organisation, done at Versailles on 29 June 1919, as amended

585. (IMF) Articles of Agreement of the International Monetary Fund (Annex A to the Final Act of the United Nations Monetary and Financial Conference), done at Bretton Woods, New Hampshire, on 22 July 1944 and signed at Washington on 27 December 1945 as amended

586. (IBRD) Articles of Agreement of the International Bank for Reconstruction and Development (Annex B to the Final Act of the United Nations Monetary and Financial Conference), done at Bretton Woods, New Hampshire, on 22 July 1944 and signed at Washington on 27 December 1945 as amended

587. (UNESCO) Constitution of the United Nations Educational, Scientific and Cultural Organization, signed at London on 16 November 1945 as amended

588. (WHO) Constitution of the World Health Organization, done at New York on 22 July 1946 as amended

589. (WMO) Convention of the World Meteorological Organisation (with Annexes and Protocol concerning Spain), done at Washington on 11 October 1947 as amended

590. (IMO) Convention on the International Maritime Organization, done at Geneva on 6 March 1948 as amended

591. (CCC/WCO) International Convention Establishing a Customs Co-operation Council, done at Brussels on 15 December 1950

592. (HCCH/HAGUE CONFERENCE) Statue of The Hague Conference on Private International Law, done at The Hague on 31 October 1951

593. Amendments to the Statue of The Hague Conference on Private International Law, on 30 June 2005

594. (INTERPOL) Constitution and General Regulations of the International Criminal Police Organization, adopted at Vienna on 13 June 1956 as amended

595. (UPU) Constitution of the Universal Postal Union, signed at Vienna on 10 July 1964

596. First Additional Protocol to the Constitution of the Universal Postal Union, signed at Tokyo, 14 November 1969

597. Second Additional Protocol to the Constitution of the Universal Postal Union, done at Lausanne, 5 July 1974

598. Third Additional Protocol to the Constitution of the Universal Postal Union, done at Hamburg, 27 July 1984

599. Fourth Additional Protocol to the Constitution of the Universal Postal Union, done at Washington, 14 December 1989

600. Fifth Additional Protocol to the Constitution of the Universal Postal Union, done at Seoul, 14 September 1994

601. Sixth Additional Protocol to the Constitution of the Universal Postal Union, done at Beijing, 15 September 1999

602. Seventh Additional Protocol to the Constitution of the Universal Postal Union, done at Bucharest, 5 October 2004

603. Eighth Additional Protocol to the Constitution of the Universal Postal Union, done at Geneva, 12 August 2008

604. (WIPO) Convention Establishing the World Intellectual Property Organization, done at Stockholm on 14 July 1967 as amended

605. (WTO) Statutes of the World Tourism Organization (with Annex), done at Mexico City on 27 September 1970 as amended

606. (Former INTELSAT, at present ITSO) Agreement relating to the International Telecommunications Satellite Organization, done at Washington on 20 August 1971 as amended

607. (APT) Constitution of the Asia-Pacific Telecommunity, adopted at Bangkok on 27 March 1976 as amended

608. (Former INMARSAT at present IMSO) Convention on the International Mobile Satellite Organization, done at London on 3 September 1976

609. 1985 Amendments to the Convention on the International Mobile Satellite Organization, done at London on 16 October 1985

610. 1989 Amendments to the Convention on the International Mobile Satellite Organization, done at London on 19 January 1989

611. 1998 Amendments to the Convention on the International Mobile Satellite Organization, done at London on 24 April 1998

612. (AIBD) Agreement Establishing the Asia-Pacific Institute for Broadcasting Development, adopted at Kuala Lumpur on 12 August 1977 as amended on 21 July 1999

613. (APDC) Charter of the Asian and Pacific Development Centre, adopted on 1 April 1982 and opened for signature at Bangkok from 1 September 1982 to 30 April 1983 as amended

614. (ICGEB) Statutes of the International Centre for Genetic Engineering and Biotechnology, done at Madrid on 13 September 1983

615. (ITCB) Arrangement Establishing the International Textiles and Clothing Bureau, done at Geneva on 21 May 1984

616. (APPU) Constitution and Convention of the Asia-Pacific Postal Union and Final Protocol, done at Bangkok on 4 December 1985 as amended

617. (ITU) Constitution and Convention of the International Telecommunication Union, adopted at Geneva on 22 December 1992 as amended

618. (SCO) Charter of the Shanghai Cooperation Organization, done at St. Petersburg on 7 June 2002

619. Protocol Amending the Charter of the Shanghai Cooperation Organization, done at Tashkent on 5 September 2003

620. Protocol Amending the Charter of the Shanghai Cooperation Organization, done at Shanghai on 15 June 2006

621. Protocol to the Statutes of the International Centre for Genetic Engineering and Biotechnology on the Seat of the Centre, done at Trieste on 24 October 2007

622. (WTO) Marrakech Agreement Establishing the World Trade Organization and Final Act, done at Marrakech on 15 April 1994

623. Protocol Amending the Marrakesh Agreement Establishing the World Trade Organization, which contains the Trade Facilitation Agreement

624. Protocol Amending the TRIPS Agreement

625. (APSCO) Convention of the Asia-Pacific Space Cooperation Organization, done at Beijing on 28 October 2005

626. (ITER) Agreement on the Establishment of the ITER International Fusion Energy Organization for the Joint Implementation of the ITER Project, done at Paris on 21 November 2006

627. Agreement for the Establishment of the International Anti-Corruption Academy as an International Organization, done at Vienna on 2 September 2010

628. Agreement Establishing the Central Asia Regional Economic Cooperation Institute, done in Islamabad, Pakistan on 26 October 2016

Appendix 12
Decorations, Medals and Certificates of Merit Conferred by the Macao SAR in 2018

The Macao SAR Government held the "2018 Decorations, Medals and Certificates of Merit Awards Ceremony of the Macao SAR of the People's Republic of China" on 9 January 2019 Chief Executive Chui Sai On conferred a number of decorations, medals and certificates of merit on 46 individuals and entities in recognition of their outstanding achievements, contributions and distinguished services rendered to the Macao SAR.

Decoration of Honour – Golden Lotus

Chan Meng Kam

Decoration of Honour – Silver Lotus

Fong Chi Keong
Ho Hao Tong
Kwan Tsui Hang
Huang Junhua

Medal of Merit

Medal of Merit – Professions

Xu Aoao
Kuok Cheong U
Maria Paula de Matos Pimenta Simoes
Mak Seng Hin

Medal of Merit – Industry and Commerce

Mok Chi Wai
Ip Sio Man
Wong Kin Chong

Medal of Merit – Tourism

Sai Nam Restaurant
Kapok Cantonense Restaurant

Medal of Merit – Education

Choi Kun Sam
Sou Chio Fai
Santa Madalena School
Tang Siu Lan

Medal of Merit – Culture

Macao Daily News

Medal of Merit – Philanthropy

Bishop Stephen Lee Bun Sang
Macao Federation of Trade Unions
The Women's General Association of Macau
Association of Returned Overseas Chinese Macau

Medal of Merit – Sport

Iao Chon In
Li Yi
Sou Soi Lam
Hoi Long
Wong Sok I

Medal for Distinguished Service

Medal for Bravery

Civil Protection Operations Centre
Emergency Department of the Conde S. Januario Hospital
Chao Ka Cheong

Medal for Dedication

Chio U Lok
Vong Se Peng
Ngou Kuok Lim
Tang Kwong Yui

Medal for Community Service

Lam Wai Wa
Chan Ioi Kong
Marjory Rangel de Faria Vendramini
Richmond Fellowship of Macau

Certificate of Merit

Honorific Title – Prestige

Ma Hok Cheung
Vitor Paulo da Costa Sereno
Liu Liang

Honorific Title – Merit

Lam Oi Man
U Choi Hong
Pui Ching Middle School team, which took part in the "International Science and Engineering Fair 2018"
Leong Ieng Wai

Appendix 13
General Integrated Budget of Public Expenditure for 2019

Revenue items	MSAR budget for 2019
RECURRING REVENUE	**116,559,658,000.00**
01 Direct tax	8,312,918,900.00
02 Indirect tax	5,476,292,900.00
03 Fees, fine and other monetary penalties	1,923,065,200.00
04 Asset revenue	711,096,800.00
05 Franchise and concession revenue	98,566,365,000.00
06 Financial revenue	416,321,900.00
07 Sale of items and labour services	836,016,600.00
08 Transfer	195,291,300.00
09 Contribution to Social Security System	74,329,600.00
19 Other recurring revenue	47,959,800.00
CAPITAL REVENUE	**5,825,530,000.00**
21 Sale of facilities and equipment	2,217,719,900.00
22 Financial assets	581,153,000.00
24 Sale of stocks and other equities	2,000.00
29 Other capital revenue	3,026,655,100.00
General integrated budget of revenue	**122,385,188,000.00**
Turn overleaf	122,385,188,000.00

Expenses items	MSAR budget for 2019
101 Macao SAR Government	24,080,800.00
102 Office of the Chief Executive	346,302,400.00
103 Executive Council	34,432,700.00
104 Office of the Secretary for Administration and Justice	46,816,100.00
105 Office of the Secretary for Economy and Finance	56,247,500.00
106 Office of the Secretary for Security	40,886,700.00
107 Office of the Secretary for Social Affairs and Culture	85,975,400.00
108 Office of the Secretary for Transport and Public Works	28,796,300.00
201 Judiciary Police	1,089,940,300.00
202 Finance Services Bureau	563,762,500.00
203 Macao Economic Services Bureau	250,322,800.00
204 Identification Bureau	342,358,700.00
205 Statistics and Census Service	203,887,300.00
206 Cartography and Cadastre Bureau	92,775,000.00
207 Gaming Inspection and Coordination Bureau	303,674,200.00
208 Macao Government Tourism Office	343,616,800.00
209 Labour Affairs Bureau	515,519,800.00
210 Lands, Public Works and Transport Bureau	504,875,400.00
211 Public Administration and Civil Service Bureau	562,211,700.00
212 Government Information Bureau	169,669,000.00
213 Meteorological and Geophysical Bureau	173,133,600.00
214 Tertiary Education Services Office	121,556,000.00
215 Judicial Council	618,100.00
216 Legal Affairs Bureau	291,942,000.00
217 Unitary Police Service	56,310,700.00
219 Transport Bureau	1,849,193,900.00
220 Environmental Protection Bureau	893,182,300.00
222 Talents Development Committee	16,485,600.00
223 Medical Incident Assessment Committee	11,604,200.00
224 Medical Dispute Arbitration Centre	3,208,100.00
225 Policy Research and Regional Development Bureau	81,961,800.00
301 Infrastructure Development Office	69,569,400.00
302 The Supporting Office to the Permanent Secretariat to the Forum for Economic and Trade Cooperation between China and Portuguese-speaking Countries	133,405,900.00
303 Office for Development of the Energy Sector	40,830,500.00
304 Financial Intelligence Office	40,490,700.00
305 Office for Personal Data Protection	56,581,600.00
307 Transportation Infrastructure Office	971,896,200.00
309 Protocol, Public Relations and External Affairs Office	176,534,800.00
501 Cultural Affairs Bureau	1,023,656,100.00
502 Sports Bureau	232,096,400.00
503 Macao Economic and Trade Office in Lisbon	13,713,100.00
504 Public Security Forces Affairs Bureau	5,606,735,000.00
505 Education and Youth Affairs Bureau	7,057,031,900.00
506 Marine and Water Bureau	1,058,207,900.00
507 Macao Economic and Trade Office to the European Union in Brussels	5,015,200.00
508 Correctional Service Bureau	696,333,100.00
509 Office of the Macao SAR in Beijing	33,991,000.00
510 Macao Customs Service	1,007,285,200.00
511 Macao Economic and Trade Office to the World Trade Organization	13,295,100.00
512 Macao Economic and Cultural Office in Taiwan	18,001,700.00
Turn overleaf	27,360,018,500.00

General Integrated Budget of Public Expenditure for 2019

Cont.

Revenue items	MSAR budget for 2019
Cont	122,385,188,000.00
Gross revenue	**122,385,188,000.00**

Expenses items	MSAR budget for 2019
601 Investments and Development Expenses of the Administration	16,634,939,900.00
611 Pension and retirement compensation	10,880,300.00
612 General expenses	23,906,462,900.00
613 Designated appropriations, shared allocations and transfer budget	5,370,865,300.00
701 Health Bureau	8,395,150,400.00
702 Social Welfare Bureau	3,882,103,500.00
703 Government Printing Bureau	135,220,300.00
704 Housing Bureau	507,080,300.00
705 Macao Trade and Investment Promotion Institute	785,941,200.00
706 Civil Aviation Authority	98,098,400.00
707 Macao Polytechnic Institute	913,598,500.00
708 University of Macau	2,737,881,500.00
709 Coffer of Legal Affairs	235,828,500.00
710 Consumer Council	50,928,000.00
711 Institute for Tourism Studies	449,205,900.00
712 Public Security Police Force Welfare Association	55,119,400.00
713 Fire Services Welfare Association	9,397,000.00
714 Commission of Audit	174,302,800.00
715 Office of the Public Prosecutor General	459,859,200.00
716 Office of the President of the Court of Final Appeal	652,806,300.00
717 Commission Against Corruption	390,624,500.00
718 Legislative Assembly	194,366,500.00
720 Customs Welfare Association	3,706,600.00
721 Marine and Water Bureau Welfare Association	2,452,500.00
722 Judiciary Police Welfare Association	7,109,300.00
723 Municipal Affairs Bureau	2,892,281,700.00
801 Industrial and Commercial Development Fund	2,348,869,400.00
802 Fund for Home Ownership Scheme Housing Loans	2,178,300.00
803 Student Welfare Fund	408,275,700.00
804 Sports Fund	930,728,500.00
805 Culture Fund	546,964,600.00
806 Tourism Fund	869,586,400.00
807 Macao Public Administration Welfare Fund	51,149,500.00
808 Correctional Service Fund	6,457,400.00
809 Science and Technology Development Fund	413,624,500.00
810 Education Development Fund	815,316,200.00
811 Fisheries Development and Support Fund	12,022,000.00
812 Property Maintenance Fund	49,097,200.00
813 Giant Panda Foundation	6,389,200.00
814 Environmental Protection and Energy Conservation Fund	24,563,400.00
815 Cultural Industry Fund	256,559,000.00
816 Labour Creditor's Rights Protection Fund	27,060,000.00
817 Tertiary Education Foundation	258,882,400.00
General integrated budget of public expenditure	**103,343,952,900.00**
General integrated budget balance	
Central budget balance	18,061,421,800.00
Autonomous institution executive budget balance	979,813,300.00
General integrated budget balance	**19,041,235,100.00**
General integrated budget of public expenditure and budget balance	**122,385,188,000.00**

Appendix 14
Summarised Budget and Investment Budget of Special Organisations for 2019

Revenue items	MSAR budget for 2019
RECURRING REVENUE	**18,697,751,200.00**
03 Fees, fine and other monetary penalties	666,598,100.00
04 Asset revenue	86,344,000.00
05 Franchise and concession revenue	3,133,204,000.00
06 Financial revenue	7,030,635,800.00
07 Sale of items and labour services	551,960,800.00
08 Transfer	5,377,877,300.00
09 Contributions to Social Security System	1,837,870,200.00
19 Other recurring revenue	13,261,000.00
Summarised budget revenue of special organisations	**18,697,751,200.00**

Expenses items	MSAR budget for 2019
901 Macao Post and Telecommunications Bureau	630,372,000.00
902 Postal Savings Office	58,956,900.00
903 Macao Pension Fund	2,684,296,000.00
904 Monetary Authority of Macao	3,320,511,900.00
905 Social Security Fund	5,134,061,800.00
906 Automobile and Maritime Security Fund	9,153,000.00
907 Macao Foundation	2,990,641,400.00
908 Deposit Protection Fund	3,230,100.00
Summarised budget expenditure of special organisations	**14,831,223,100.00**
Net operational profit/loss of special organisations	3,866,528,100.00
Summarised budget expenditure and net operational profit/loss of special organisations	**18,697,751,200.00**
Investment budget of special organisations	
901 Macao Post and Telecommunications Bureau	146,662,000.00
902 Postal Savings Office	-
903 Macao Pension Fund	1,159,000.00
904 Monetary Authority of Macao	125,988,400.00
905 Social Security Fund	45,150,000.00
906 Automobile and Maritime Security Fund	-
907 Macao Foundation	57,000,000.00
908 Deposit Protection Fund	-
Summarised investment budget expenditure of special organisations	**375,959,400.00**

Appendix 15
External Trade Statistics

MOP thousand

	2014	2015	2016	2017	2018
Imports	89 952 161	84 663 232	71 351 640	75 851 109	90 102 580
Exports	9 914 763	10 692 051	10 046 624	11 283 145	12 192 556
Balance of trade (Exp.-Imp.)	-80 037 398	-73 971 180	-61 305 016	-64 567 965	-77 910 024
Coverage rate (%)	11	13	14	15	14
Temporary exports	1 512 607	1 119 697	1 014 478	1 110 227	812 075
Re-imports	1 165 022	1 114 929	596 713	721 381	676 758
Direct transhipment	10 395 828	11 371 504	11 252 963	13 006 674	13 667 101

Appendix 16
Imports from Major Countries and Territories

MOP thousand

	2014	2015	2016	2017	2018
Total	**89 952 161**	**84 663 232**	**71 351 640**	**75 851 109**	**90 102 580**
European Union	**21 851 690**	**18 837 999**	**17 033 844**	**19 085 075**	**22 532 728**
of which: Italy	6 205 491	5 678 431	5 589 621	7 082 468	7 790 097
France	7 571 704	5 684 938	5 625 509	5 656 819	7 539 731
Germany	2 762 985	2 047 603	1 560 436	1 657 598	1 835 189
The Netherlands	1 386 710	1 850 286	1 349 074	1 872 145	1 664 254
United Kingdom	1 870 551	1 496 652	975 614	919 242	1 587 067
Spain	469 757	403 929	370 759	534 982	547 869
Ireland	544 031	595 523	632 952	402 837	398 242
Portugal	247 614	278 261	276 147	267 130	329 131
EFTA	**8 260 780**	**6 586 932**	**5 411 500**	**5 675 038**	**7 044 735**
Other European countries	**245 196**	**277 537**	**144 436**	**120 457**	**162 229**
Africa	**312 487**	**215 465**	**319 233**	**195 838**	**171 751**
America	**6 680 275**	**5 745 881**	**4 273 176**	**4 263 974**	**4 707 510**
of which: USA	5 855 977	4 797 828	3 430 780	3 318 672	3 671 528
Canada	233 858	400 158	296 101	312 283	297 974
Asia	**51 710 182**	**51 832 375**	**43 124 509**	**45 366 244**	**54 056 358**
of which: The mainland	29 836 845	31 852 692	25 844 286	25 696 125	31 518 492
Hong Kong	9 234 462	7 534 853	6 211 422	6 799 063	7 042 533
Taiwan	1 346 257	1 373 310	1 254 105	1 473 093	1 454 758
Japan	5 024 981	5 166 480	4 517 760	5 451 182	7 304 879
Republic of Korea	1 760 150	1 380 855	1 470 364	1 951 750	2 034 290
Singapore	1 644 636	1 581 104	1 066 878	1 010 938	868 339
Australia, Oceania and other territories	**988 573**	**1 063 275**	**1 168 337**	**1 168 570**	**1 315 686**
of which: Australia	700 280	752 860	871 739	884 431	957 595

Appendix 17
Exports to Major Countries and Territories

MOP thousand

	2014	2015	2016	2017	2018
Total	**9 914 763**	**10 692 051**	**10 046 624**	**11 283 145**	**12 192 556**
European Union	**309 553**	**225 845**	**174 553**	**189 640**	**208 541**
of which: France	71 765	44 517	32 406	63 352	54 098
Germany	56 933	50 489	49 165	38 970	47 349
The Netherlands	46 451	40 769	34 403	31 401	30 545
Belgium	17 172	18 106	11 675	20 227	27 899
Portugal	2 376	818	5 615	413	24 245
United Kingdom	27 368	22 657	10 594	19 548	11 065
Italy	31 350	14 294	5 011	4 698	5 431
Hungary	2 655	718	10 839	9 722	2 259
Spain	186	3 426	659	622	234
EFTA	**13 742**	**7 073**	**5 120**	**4 420**	**6 907**
Other European countries	**86**	**-**	**164**	**-**	**1 508**
Africa	**18 129**	**11 538**	**7 189**	**5 873**	**5 989**
America	**356 795**	**225 304**	**182 159**	**206 394**	**167 676**
of which: USA	293 238	196 572	156 115	185 626	129 224
Canada	22 022	11 066	11 602	16 033	21 781
Asia	**7 821 416**	**8 791 800**	**8 247 172**	**9 272 489**	**9 992 121**
of which: The mainland	1 554 064	1 836 801	1 751 113	2 121 403	2 012 821
Hong Kong	5 812 251	6 326 292	5 559 003	6 598 563	7 569 837
Taiwan	70 341	61 074	47 392	37 123	21 575
Vietnam	8 848	31 705	30 152	36 316	115 326
Singapore	66 907	77 340	80 345	55 103	75 182
Japan	168 522	236 095	310 984	173 090	53 486
Australia, Oceania and other territories	**27 110**	**24 399**	**27 023**	**21 261**	**28 337**
of which: Australia	25 449	22 545	22 390	13 485	21 028

- Absolute value = 0

Appendix 18
Domestic Exports to Major Countries and Territories

MOP thousand

	2014	2015	2016	2017	2018
Total	**2 022 747**	**1 820 834**	**1 962 856**	**1 785 557**	**1 530 620**
European Union	**275 107**	**191 484**	**147 914**	**155 725**	**164 256**
of which: Germany	53 577	35 965	44 891	38 786	37 484
France	66 410	38 904	25 126	42 611	31 625
The Netherlands	45 868	40 680	33 505	31 296	27 170
Belgium	17 172	18 106	11 675	19 169	26 842
Portugal	39	138	4 711	272	23 764
United Kingdom	25 912	19 547	7 906	12 100	10 811
Hungary	2 648	718	10 839	9 722	2 259
Italy	11 036	6 328	2 591	1 367	1 789
Ireland	44 142	27 061	5 805	-	1 189
EFTA	**6 901**	**6 129**	**4 919**	**3 145**	**1 791**
Other European countries	**76**	**-**	**-**	**-**	**36**
Africa	**14 410**	**11 481**	**7 189**	**5 813**	**5 893**
America	**322 816**	**205 090**	**165 312**	**193 166**	**134 300**
of which: USA	259 851	177 206	139 869	172 466	108 835
Canada	21 601	10 218	11 001	15 965	21 200
Asia	**1 388 412**	**1 384 551**	**1 613 487**	**1 408 743**	**1 203 849**
of which: The mainland	293 064	341 151	351 386	337 247	338 579
Hong Kong	793 846	726 105	675 893	814 603	747 396
Taiwan	7 736	4 661	5 070	8 228	1 632
India	20 274	36 206	33 588	75 989	54 228
Vietnam	1 863	7 749	12 266	12 526	10 723
Japan	147 212	131 396	144 577	95 358	6 488
Australia, Oceania and other territories	**15 025**	**22 100**	**24 036**	**18 964**	**20 495**
of which: Australia	13 365	20 246	19 477	11 291	13 326

- Absolute value = 0

Appendix 19
Tourism

	2014	2015	2016	2017	2018
Visitor arrivals	**31 525 632**	**30 714 628**	**30 950 336**	**32 610 506**	**35 803 663**
By sea	12 080 543	11 413 908	10 777 447	11 236 083	10 355 396
By land	17 389 890	17 210 946	17 759 572	18 629 788	22 152 467
By air	2 055 199	2 089 774	2 413 317	2 744 635	3 295 800
Visitor departures	**31 408 378**	**30 623 265**	**30 858 442**	**32 528 051**	**35 708 935**
By sea	9 159 608	8 827 245	8 715 855	8 666 480	8 480 226
By land	20 075 802	19 622 679	19 739 752	21 149 708	24 067 955
By air	2 172 968	2 173 341	2 402 835	2 711 863	3 160 754
Average length of stay of visitors (day)	**1.0**	**1.1**	**1.2**	**1.2**	**1.2**
Visitor arrivals in package tours	**11 141 880**	**9 844 166**	**7 552 148**	**8 622 769**	**9 130 432**
Outbound travel in package tour by Macao residents	**586 078**	**610 469**	**496 343**	**561 227**	**526 805**
Hotel occupancy rate (%)	**86.46**	**81.54**	**83.31**	**87.17[r]**	**91.06**
5-star hotels	87.49	83.38	83.69	87.79	92.39
4-star hotels	87.75	80.58	86.27	89.39	91.34
3-star hotels	85.55	79.69	82.27	86.20[r]	91.55
2-star hotels	75.39	67.42	68.38	75.08	73.15
Guesthouses	62.95	59.82	56.55	59.48	62.12
Available guest rooms	**27 904**	**32 300**	**36 278**	**36 682[r]**	**38 809**
Total overnight guests	**10 712 999**	**10 568 869**	**11 999 734**	**13 155 173**	**14 106 751**
Average length of stay (night)	**1.44**	**1.48**	**1.43**	**1.48**	**1.53**
Total spending of visitors[a] (MOP million)	**61 749**	**51 128**	**52 662**	**61 324**	**69 687**
Visitors' expenditure survey per-capita spending[a] (MOP)	**1 959**	**1 665**	**1 701**	**1 880**	**1 946**
Overnight Visitors	3 493	2 807	2 681	2 883	3 041
Same-day Visitors	641	668	693	754	777

[a] *Excluding gaming expenses*
[r] *Revised figures*

Appendix 20
Visitor Arrivals by Place of Residence

	2014	2015	2016	2017	2018
Total	**31 525 632**	**30 714 628**	**30 950 336**	**32 610 506**	**35 803 663**
The mainland	21 252 410	20 410 615	20 454 104	22 196 203	25 260 556
Hong Kong	6 426 608	6 534 543	6 419 839	6 165 129	6 327 925
Taiwan	953 753	988 059	1 074 525	1 060 107	1 060 968
India	167 216	167 578	165 278	148 121	147 870
Indonesia	189 189	163 353	182 467	197 139	173 836
Japan	299 849	282 217	300 613	328 990	325 798
Malaysia	250 046	229 102	222 809	218 301	227 854
The Philippines	262 853	276 806	287 025	307 139	312 072
Republic of Korea	554 521	554 177	662 321	874 253	812 842
Singapore	196 491	158 814	155 763	143 068	134 840
Thailand	175 906	180 836	236 169	198 222	181 379
Vietnam	14 223	16 120	11 103	6 895	6 846
Other Asian countries	70 235	70 187	70 551	73 620	106 171
Brazil	9 674	9 471	9 974	11 012	11 629
Canada	70 601	70 973	75 173	74 287	74 268
USA	181 457	182 532	190 885	186 378	201 810
Other American countries	23 929	23 351	23 817	24 422	27 222
France	39 976	40 955	42 650	40 374	38 910
Germany	28 191	27 601	29 977	28 719	29 469
The Netherlands	12 157	10 954	11 395	10 854	11 686
Italy	13 758	13 686	13 802	13 861	14 625
Portugal	15 868	15 166	15 624	16 259	15 594
Russia	31 908	22 844	25 147	27 037	30 784
Spain	9 208	9 002	9 659	9 303	10 578
Switzerland	7 230	7 377	7 719	7 445	6 817
United Kingdom	60 756	59 985	61 301	57 121	58 319
Other European countries	50 767	50 114	55 159	57 078	60 649
Australia	105 914	92 404	93 286	88 988	90 914
New Zealand	14 565	13 572	13 731	13 707	14 381
Other Oceanian countries	1 386	1 337	1 372	1 388	1 566
South Africa	5 678	5 528	5 218	5 416	6 359
Others	29 309	25 369	21 880	19 670	19 126

Appendix 21

Restaurants, Hotels, Travel Agencies and Service Sector Establishments

	2014	2015	2016	2017	2018
Restaurants and similar establishments	**2 117**	**2 252**	**2 254**	**2 332**	**2 364**
Restaurants	187	211	217	229	239
Eating places	1 722	1 829	1 835	1 891	1 927
Drinking places	208	212	202	212	198
Hotels	**67**	**74**	**76**	**80**	**83**
5-star hotels	28	32	32	33	36
4-star hotels	14	17	17	17	17
3-star hotels	13	13	15	16	16
2-star hotels	12	12	12	14	14
Guesthouses	**32**	**33**	**33**	**34**	**35**
Travel agencies	**265**	**279**	**273**	**284**	**294**
Advertising businesses	**709**	**759**	**782**	**823**	**865**
Conference and exhibition organising services	**143**	**164**	**188**	**206**	**230**
Real estate agencies	**1 877**	**1 813**	**1 773**	**1 863**	**1 901**
Real estate management	**294**	**313**	**324**	**322**	**343**

Note: Data on establishments derived from administrative records.

Appendix 22
Consumer Price Index (Including Rent)

(from October 2013 to Sepetember 2014 = 100)

	2014	2015	2016	2017	2018
CPI (Composite)	**101.11**	**105.72**	**108.23**	**109.56**	**112.85**
Foodstuffs and non-alcoholic beverages	101.16	106.09	109.14	110.82	113.88
Alcoholic beverages and tobacco	100.56	117.99	143.62	147.93	147.80
Clothing and footwear	100.55	100.47	98.13	99.13	105.64
Housing and fuels	101.95	110.17	110.85	109.98	112.33
Household goods and furnishings	100.53	105.56	108.24	110.55	113.62
Health	101.03	106.75	111.17	116.08	121.66
Transport	100.75	101.58	108.68	112.76	118.76
Communications	99.76	99.50	98.61	94.00	86.03
Recreation and culture	100.98	102.21	102.74	104.01	106.66
Education	98.51	103.33	112.00	119.08	124.75
Other goods and services	100.72	103.13	104.19	105.75	109.35
CPI - (A)[a]	**100.99**	**105.92**	**108.35**	**109.66**	**112.97**
CPI - (B)[b]	**100.42**	**104.10**	**107.20**	**108.73**	**111.87**
Inflation rate					
CPI (Composite)	6.05	4.56	2.37	1.23	3.01
CPI - (A)[a]	6.58	4.88	2.30	1.20	3.02
CPI - (B)[b]	5.89	3.67	2.98	1.43	2.89

[a] *The CPI - (A) reflects the impact of price changes on about 50% of households, which had an average monthly expenditure of MOP10 000 to MOP29 999.*

[b] *The CPI - (B) reflects the impact of price changes on about 30% of households, which had an average monthly expenditure of MOP30 000 to MOP54 999.*

Appendix 23
Money and Finance

MOP million

	2014	2015	2016	2017[r]	2018[p]
Money supply					
M1	**61 863.3**	**61 661.3**	**63 674.3**	**72 392.9**	**80 757.9**
MOP	30 042.9	33 594.6	36 756.1	42 132.1	45 236.1
HKD	30 328.4	26 702.5	25 503.9	28 784.3	34 181.6
RMB	40.4	25.3	73.7	17.2	22.3
USD	1 240.5	1 060.9	1 029.6	1 155.7	929.5
Other currencies	211.1	278.0	311.0	303.7	388.5
M2	**487 471.8**	**472 829.0**	**532 475.3**	**591 465.6**	**651 438.0**
MOP	124 548.3	141 335.3	163 022.5	182 789.4	198 505.7
HKD	247 205.6	243 506.4	289 233.5	320 296.7	341 954.2
RMB	68 707.9	31 880.4	22 469.4	24 001.8	27 559.7
USD	36 905.4	45 591.6	45 694.9	52 951.1	70 295.5
Other currencies	10 104.6	10 515.3	12 055.0	11 426.6	13 123.0
Resident deposits					
Total	**476 610.8**	**460 788.8**	**518 919.5**	**576 557.2**	**635 431.0**
Time deposits	292 036.8	265 301.0	299 096.7	326 216.8	378 074.1
MOP	43 120.7	48 119.2	56 963.4	60 336.8	71 424.6
HKD	151 753.7	150 690.0	185 196.9	201 053.5	218 897.2
RMB	64 326.9	27 542.3	18 416.1	20 041.2	22 751.0
USD	26 475.4	33 072.5	32 986.9	39 136.1	58 376.1
Other currencies	6 360.1	5 876.9	5 533.2	5 649.3	6 625.3
Non-resident deposits	**219 389.3**	**267 997.1**	**248 080.5**	**254 210.9**	**240 618.3**
Credit by domestic companies and individuals					
Total	**339 352.0**	**389 393.7**	**423 033.9**	**458 700.5**	**506 129.1**
Loans and advances	334 564.7	384 373.5	418 071.2	451 688.5	501 051.9
MOP	93 960.6	107 123.0	123 842.4	136 949.2	157 093.6
HKD	217 961.9	257 464.9	276 866.2	295 406.3	327 729.1
RMB	797.9	2 495.3	2 716.2	266.1	289.3
USD	21 433.9	13 993.3	13 824.2	16 089.2	13 082.9
Other currencies	410.4	3 297.0	822.1	2 977.7	2 856.9
Distribution of domestic credit (MOP thousand)	**339 057 034**	**389 078 936**	**422 691 120**	**458 367 078**	**505 004 828**
of which:					
Manufacturing industry	8 755 972	9 863 370	11 600 840	13 359 821	10 550 993
Electricity, gas and water	1 138 939	1 194 659	1 144 935	1 419 356	2 225 835
Construction and public works	36 760 138	46 213 057	47 468 752	54 692 224	44 903 136
Trade (wholesale and retail)	31 641 426	28 079 113	29 326 277	30 927 271	31 723 043
Hotels and restaurants	19 351 404	31 106 322	33 473 139	35 793 835	50 097 476
Transport, warehousing and communications	1 389 155	1 565 184	1 327 449	984 039	1 113 873
Personal housing loans	115 772 867	127 504 863	138 565 145	148 156 901	166 716 470

End-year figures
[r] *Revised figures*
[p] *Provisional figures*

Appendix 24
Gross Domestic Product and Main Expenditure Components

At Current Prices - MOP Million

	2014	2015[r]	2016[r]	2017[r]	2018[P]
Gross domestic product	442 070.0	362 213.4	362 355.8	405 789.9	440 316.2
Growth rate (%)	7.3	-18.1	0.0	12.0	8.5
Private consumption expenditure	88 560.6	94 526.9	95 773.7	98 725.4	105 964.7
Government final consumption expenditure	31 131.6	34 780.3	37 769.5	39 605.6	42 512.5
Gross fixed capital formation	83 098.8	89 077.8	78 485.8	78 321.1	70 638.3
Changes in inventories	3 612.6	1 926.6	-153.6	-1 354.0	-1 109.9
Exports of goods and services	375 478.4	282 210.6	276 102.2	325 713.5	367 348.3
Imports of goods and services (-)	139 812.2	140 308.8	125 621.7	135 221.7	145 037.7

Chain volume measures of GDP at chained (2016) dollars - MOP Million

	2014	2015[r]	2016[r]	2017[r]	2018[P]
Gross domestic product	466 155.7	365 491.8	362 355.8	397 519.4	416 235.1
Growth rate (%)	-1.2	-21.6	-0.9	9.7	4.7
Private consumption expenditure	94 561.7	96 564.2	95 773.7	97 859.0	102 283.4
Government final consumption expenditure	34 678.8	36 129.0	37 769.5	37 984.8	39 438.4
Gross fixed capital formation	84 558.6	89 124.3	78 485.8	74 810.6	65 422.8
Changes in inventories	3 527.1	1 898.9	-153.6	- 1 366.1	-1 114.6
Exports of goods and services	383 379.2	281 401.9	276 102.2	322 663.1	353 352.7
Imports of goods and services (-)	138 110.8	139 675.0	125 621.7	134 432.0	142 658.5

	2014	2015[r]	2016[r]	2017[r]	2018[P]
GDP per capita (MOP – current prices)	710 895	564 635	561 053	625 254	666 893
GDP per capita (USD – current prices)	89 005	70 712	70 177	77 902	82 609

[P] *Provisional figures*
[r] *Revised figures*

Appendix 25
Public Finances

MOP million

	2014	2015	2016	2017[r]	2018[P]
Total public revenue	**161 861.0**	**116 111.5**	**110 501.9**	**126 366.7**	**134 204.6**
of which: direct taxes	136 016.7	93 417.9	88 456.7	103 263.4	115 963.6
indirect taxes	5 665.5	4 221.1	4 076.2	5 119.3	5 693.2
Total public expenditure	**67 078.3**	**80 753.8**	**82 629.1**	**81 303.5**	**80 331.9**

[P] *Provisional figures*
[r] *Revised figures*

Appendix 26
Stock, Flows and Income of Inward Direct Investment By Industry

MOP million

		2013	2014	2015	2016[r]	2017
Total	**Stock**	**189 472**	**220 772**	**232 447**	**245 330**	**227 422**
	Flow	**36 169**	**27 321**	**8 950**	**15 001**	**3 013**
	Income	**78 993**	**85 516**	**51 734**	**48 726**	**58 646**
Industrial manufacturing	Stock	3 453	3 595	3 918	4 995	5 233
	Flow	257	35	329	771	225
	Income	734	745	772	868	851
Construction	Stock	4 325	4 855	9 173	11 382	11 864
	Flow	921	986	2 765	2 636	1 130
	Income	1 278	1 577	2 415	3 275	3 012
Wholesale and retail	Stock	16 677	22 421	26 189	28 325	28 726
	Flow	1 348	3 911	3 355	1 801	-768
	Income	8 374	9 136	6 379	4 443	4 372
Hotels and restaurants	Stock	216	605	-199	-1 239	-3 013
	Flow	128	457	-754	-814	-373
	Income	417	546	-1 356	-1 186	-996

Stock, Flows and Income of Inward Direct Investment by Industry

MOP million

		2013	2014	2015	2016[r]	2017
Transport, storage and communications	Stock	200	84	974	1 773	1 927
	Flow	97	140	800	342	33
	Income	1 347	1 540	1 430	1 312	987
Gaming	Stock	115 055	129 567	123 314	124 338	97 638
	Flow	27 809	12 594	-6 023	2 818	-3 052
	Income	55 609	57 253	30 080	28 153	37 852
Banks and securities	Stock	31 968	37 845	46 510	50 930	56 506
	Flow	3 722	4 959	7 795	4 914	4 018
	Income	7 207	9 181	10 813	11 520	11 457
Insurance	Stock	4 039	4 450	5 240	8 699	11 703
	Flow	992	445	877	3 586	1 353
	Income	709	496	394	1 173	469
Other services	Stock	13 539	17 350	17 326	16 126	16 838
	Flow	895	3 796	-194	-1 053	447
	Income	3 317	5 041	807	-833	641

[r] *Revised figures*

Appendix 27
Stock, Flows and Income of Inward Direct Investment by Usual Residence of Direct Investors

MOP million

Usual residence of direct investors		2013	2014	2015	2016[r]	2017
Total	**Stock**	**189 472**	**220 772**	**232 447**	**245 330**	**227 422**
	Flow	**36 169**	**27 321**	**8 950**	**15 001**	**3 013**
	Income	**78 993**	**85 516**	**51 734**	**48 726**	**58 646**
Hong Kong	Stock	47 711	54 744	60 250	69 556	73 146
	Flow	7 410	5 992	3 233	9 833	3 327
	Income	23 348	23 043	14 760	14 010	13 872
Cayman Islands	Stock	65 969	72 336	65 781	56 036	24 041
	Flow	13 352	5 750	-6 458	-8 280	-8 640
	Income	28 378	30 466	17 482	15 122	18 171
The mainland	Stock	21 288	26 315	34 530	39 145	45 716
	Flow	2 915	4 529	7 219	5 115	3 556
	Income	5 972	7 642	9 582	10 299	9 555
Portugal	Stock	7 363	8 198	8 680	9 052	8 898
	Flow	516	318	523	265	-26
	Income	941	955	1 125	1 053	1 085
United Kingdom	Stock	3 457	3 155	2 727	4 022	4 066
	Flow	501	-313	-444	1 485	73
	Income	4 151	3 939	1 840	1 300	2 488
USA	Stock	-699	2 325	2 736	5 401	2 978
	Flow	-1 276	3 080	512	2 389	-2 420
	Income	129	126	142	164	127

Stock, Flows and Income of Inward Direct Investment by Usual Residence of Direct Investors

MOP million

Usual residence of direct investors		2013	2014	2015	2016[r]	2017
British Virgin Islands	Stock	41 811	51 876	54 399	56 986	61 739
	Flow	11 424	8 661	2 795	2 863	6 112
	Income	14 471	17 660	5 574	5 564	11 901
Others	Stock	2 572	1 823	3 344	5 132	6 838
	Flow	1 327	- 696	1 570	1 331	1 031
	Income	1 603	1 685	1 229	1 214	1 447

[r] *Revised figures*

Appendix 28
Demography

	2014	2015	2016	2017	2018
Estimate of population (at year-end)	**636 200**	**646 800**	**644 900**	**653 100**	**667 400**
Male	314 000	317 000	305 500	307 000	312 800
Female	322 200	329 800	339 400	346 100	354 600
Growth Rate (%)	**4.6**	**1.6**	**-0.3**	**1.3**	**2.2**
Age Structure					
0-14	72 600	76 900	80 400	83 000	88 100
15-64	510 000	511 800	501 100	501 200	505 200
65 and over	53 600	58 100	63 400	68 900	74 100
Live-births	**7 360**	**7 055**	**7 146**	**6 529**	**5 925**
Male	3 850	3 682	3 733	3 382	3 197
Female	3 510	3 373	3 413	3 147	2 728
Deaths	**1 939**	**2 002**	**2 248**	**2 120**	**2 069**
Male	1 086	1 119	1 274	1 252	1 172
Female	853	883	974	868	897
Marriage (cases)	**4 085**	**3 719**	**3 891**	**3 883**	**3 842**
Divorce (cases)	**1 308**	**1 168**	**1 245**	**1 479**	**1 544**
Foreigners granted legal residency in Macao SAR	**2 278**	**1 784**	**1 447**	**1 527**	**1 074**
Non-resident workers granted legal admission into Macao SAR	**96 450**	**92 533**	**78 413**	**74 965**	**81 595**
Total non-resident workers residing in Macao SAR (at year-end)	**170 346**	**181 646**	**177 638**	**179 456**	**188 480**
Legal immigrants from the mainland	**5 889**	**8 468**	**6 327**	**4 206**	**3 532**

Due to rounding, total may not correspond to the sum of partial figures.

Appendix 29
Law and Order

No.

	2014	2015	2016	2017	2018
Crimes registered	**14 016**	**13 653**	**14 387**	**14 293**	**14 365**
Property infringements	7 843	7 584	7 658	8 087	8 763
Personal violations	2 718	2 721	2 909	2 919	2 672
Against the territory	903	1 136	1 585	1 227	841
Social disturbance	896	813	989	1 013	965
Others	1 656	1 399	1 246	1 047	1 124
Prisoners (at year-end)	**1 205**	**1 280**	**1 271**	**1 284**	**1 458**
Male	994	1 068	1 085	1 105	1 248
Female	211	212	186	179	210

Appendix 30
Labour Force

	2014	2015	2016	2017	2018
Labour Force participation rate (%)	**73.8**	**73.7**	**72.3**	**70.8**	**70.9**
Male	79.9	79.6	77.8	76.0	75.6
Female	68.1	68.0	67.2	66.3	67.0
Unemployment rate (%)	**1.7**	**1.8**	**1.9**	**2.0**	**1.8**
Male	1.9	2.0	2.3	2.4	2.3
Female	1.4	1.6	1.5	1.6	1.3
Underemployment rate (%)	**0.4**	**0.4**	**0.5**	**0.4**	**0.5**
Active population ('000)	**394.7**	**403.8**	**397.2**	**387.4**	**392.5**
Male	207.4	212.8	205.8	192.9	191.9
Female	187.3	191.0	191.4	194.5	200.6
By age group and gender					
≦ 24	**35.6**	**31.4**	**29.2**	**26.4**	**26.1**
Male	17.7	15.8	15.4	12.4	11.3
Female	17.9	15.5	13.8	14.1	14.9
25-34	**119.6**	**125.0**	**123.8**	**119.5**	**118.9**
Male	60.8	65.0	63.6	59.9	57.5
Female	58.8	60.0	60.2	59.6	61.4
35-44	**91.2**	**94.5**	**93.9**	**92.3**	**94.8**
Male	45.7	48.4	47.6	43.5	46.0
Female	45.5	46.0	46.2	48.8	48.8
45-54	**91.4**	**93.7**	**90.3**	**86.8**	**85.1**
Male	46.2	46.5	43.7	39.3	37.6
Female	45.2	47.2	46.6	47.5	47.5
55-64	**49.9**	**51.4**	**51.7**	**53.3**	**58.3**
Male	31.5	31.4	29.7	31.4	33.1
Female	18.4	20.1	22.0	21.9	25.2
65 and over	**7.0**	**7.8**	**8.4**	**9.1**	**9.2**
Male	5.4	5.6	5.8	6.5	6.4
Female	1.6	2.2	2.6	2.6	2.8

Labour Force

Cont.

	2014	2015	2016	2017	2018
Employed population ('000)	**388.1**	**396.5**	**389.7**	**379.8**	**385.4**
Male	203.4	208.5	201.1	188.4	187.5
Female	184.7	188.0	188.5	191.4	197.9
By age group and gender					
≦ 24	**33.7**	**30.0**	**27.8**	**25.0**	**24.8**
Male	16.7	15.0	14.5	11.6	10.6
Female	17.0	15.0	13.3	13.5	14.2
25-34	**117.5**	**122.6**	**121.1**	**117.0**	**116.8**
Male	59.5	63.7	62.0	58.5	56.2
Female	58.0	58.9	59.1	58.5	60.6
35-44	**90.6**	**93.3**	**92.7**	**91.0**	**93.7**
Male	45.4	47.8	47.0	42.9	45.3
Female	45.2	45.6	45.7	48.1	48.3
45-54	**90.3**	**92.2**	**89.1**	**85.6**	**83.9**
Male	45.5	45.7	43.0	38.5	36.9
Female	44.8	46.5	46.1	47.1	47.0
55-64	**49.1**	**50.7**	**50.6**	**52.1**	**57.2**
Male	31.0	30.7	28.9	30.4	32.2
Female	18.1	19.9	21.7	21.7	25.0
65 and over	**6.9**	**7.7**	**8.3**	**9.0**	**9.1**
Male	5.4	5.6	5.8	6.5	6.4
Female	1.6	2.1	2.6	2.6	2.8
Unemployed population ('000)	**6.6**	**7.3**	**7.6**	**7.6**	**7.1**
Male	4.0	4.3	4.7	4.6	4.4
Female	2.6	3.0	2.9	3.1	2.7
By age group and gender					
≦ 24	**1.9**	**1.4**	**1.4**	**1.4**	**1.4**
Male	1.1	0.8	1.0	0.8	0.7
Female	0.8	0.6	0.5	0.6	0.7
25-34	**2.1**	**2.5**	**2.7**	**2.6**	**2.1**
Male	1.3	1.3	1.6	1.4	1.3
Female	0.8	1.1	1.1	1.2	0.8

Labour Force

Cont.

	2014	2015	2016	2017	2018
35-44	**0.6**	**1.1**	**1.2**	**1.3**	**1.1**
Male	0.4	0.7	0.7	0.6	0.7
Female	0.3	0.5	0.5	0.7	0.5
45-54	**1.1**	**1.5**	**1.2**	**1.2**	**1.2**
Male	0.7	0.8	0.6	0.8	0.7
Female	0.4	0.7	0.6	0.4	0.6
55-64	**0.8**	**0.8**	**1.0**	**1.2**	**1.2**
Male	0.5	0.6	0.7	1.0	1.0
Female	0.3	0.1	0.3	0.2	0.2
65 and over	**0.1**	**0.1**	**0.1**	**0#**	**0#**
Male	0#	0#	0.1	-	0#
Female	0#	0#	0#	0#	-

Due to rounding, total may not correspond to the sum of partial figures.
0# Less than half of the unit employed
- Absolute value = 0

Appendix 31
Industrial and Commercial Establishments

	2014	2015	2016	2017	2018
Manufacturing	**996**	**977**	**1 012**	**1 012**	**1 014**
Textiles	17	14	13	13	12
Garments	148	138	125	125	118
Foods and beverages	358	372	399	399	420
Construction	**3 572**	**3 792**	**3 869**	**3 869**	**4 129**
Site preparation	76	73	60	60	55
Construction of buildings (whole or part) and civil engineering	507	502	544	544	550
Special installation	948	991	1 013	1 013	1 090
Completion of buildings	2 033	2215	2 242	2 242	2 424
Hiring of construction and demolition equipment with operator	8	11	10	10	10
Wholesale and retail; repair of motor vehicles, motorcycles, personal and household goods	**16 249**	**16 681**	**17 686**	**17 686**	**18 255**
Sales, maintenance and repair of motor vehicles and motorcycles; retail sales of automotive fuel	1 131	1 152	1 173	1 173	1 193
Wholesale trade	5 823	6075	6 388	6 388	6 629
Retail trade	9 295	9634	10 125	10 125	10 433
Transport, warehousing and communications	**3 018**	**3 262**	**3 343**	**3 343**	**3 503**
Transport and warehousing	2 937	3 179	3 261	3 261	3 420
Land transport	2 248	2 445	2 433	2 433	2 516
Sea transport	20	21	24	24	25
Air transport	20	18	20	20	21
Supporting and auxiliary transport activities	650	695	784	784	858
Communications	80	83	82	82	83
Financial activities					
Total number of banks	28	28	28	28	27
Number of branches	199	200	201	201	204
Total number of insurance companies	22	23	23	23	24

Notes: Data on establishments are derived from administrative records.

Construction - From 2013 onwards, data includes establishments operating in construction projects with permits and simple renovation projects. Figures prior to 2013 only cover establishments operating in construction projects with permits.

Land Transport - Including taxis, school bus and truck registered under sole proprietorship.

Branches - Including main office and branch offices in Macao.

Appendix 32
Employed Population by Industry

('000)

	2014	2015	2016	2017	2018
Total	**388.1**	**396.5**	**389.7**	**379.8**	**385.4**
Manufacturing	7.4	6.9	7.9	6.5	6.4
Electricity, gas and water	1.1	1.2	1.2	1.1	1.1
Construction	52.5	54.8	44.4	32.7	31.1
Wholesale and retail trade	45.2	45.0	44.1	45.8	43.7
Hotels, restaurants and similar establishments	54.8	55.0	57.2	54.6	56.1
Transport, warehousing and communications	19.2	17.5	19.3	19.1	19.2
Financial activities	10.7	10.8	10.4	11.3	10.8
Real estate and business services	30.4	29.8	30.4	30.2	31.9
Public administration and social security	25.5	29.4	28.3	28.7	29.8
Education	14.8	16.6	15.9	17.0	17.5
Health and social work	10.1	11.3	12.1	12.9	12.4
Recreational, cultural, gaming and other services	94.0	94.2	92.7	92.3	96.4
Private households with employed persons (domestic servants)	21.9	23.6	25.3	26.8	28.5
Others and unknown	0.7	0.5	0.5	0.6	0.6

Due to rounding, total may not correspond to the sum of partial figures.

Appendix 33
Health

	2014	2015	2016	2017	2018
Doctor per 1,000 population	2.5	2.6	2.7	2.6	2.6
Nurse per 1,000 population	3.1	3.5	3.6	3.7	3.7
Hospital bed per 1,000 population	2.2	2.3	2.5	2.4	2.4
Clinics[1]					
Medical clinic	190	175	164	152	141
Chinese medicine clinic	143	135	120	118	109
Dental clinic	73	65	61	58	50
Comprehensive clinic	287	308	319	346	359
Registered health personnel[1]					
Doctors	1 592	1 674	1 726	1 730	1 754
Doctors of Chinese medicine	411	468	512	526	534
Chinese medicine practitioners	196	191	187	172	162
Dentists	174	184	193	207	223
Odontologists	57	53	49	48	43
Nurses	1 990	2 279	2 342	2 397	2 464
Therapists	197	246	257	292	341
Masseurs	13	13	12	12	13
Acupuncturists	6	7	7	6	5
Main causes of death (%)					
Neoplasms	36.6	36.7	36.6	34.8	39.6
Diseases of the circulatory system	23.8	25.2	24.4	24.7	24.8
Diseases of the respiratory system	16.6	16.0	17.0	19.2	13.2
Diseases of the digestive system	2.0	3.1	3.0	3.1	3.1
Diseases of the genitourinary system	2.9	3.2	3.7	2.7	3.1
Endocrine, nutritional and metabolic diseases	4.4	2.9	2.2	2.4	4.2

[1] *Source: Administrative data from the Health Bureau*

Appendix 34
Education

	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Students per 1,000 inhabitants	**158**	**162**	**166**	**168**	**168**
Establishments					
Tertiary education	10	10	10	10	10
Pre-primary, primary and secondary education	70	70	70	70	70
Kindergarten	5	5	5	5	5
Primary education	2	1	1	1	1
Secondary education	5	5	5	5	5
Kindergarten and primary	20	20	20	21	21
Secondary and kindergarten	-	-	-	1	1
Secondary and primary	7	7	7	7	7
Secondary, primary and kindergarten	31	32	32	30	30
Students enrolled					
Tertiary education	30 771	31 970	32 750	33 098	34 279
Secondary education	30 088	28 745	27 473	26 608	26 022
Primary education	24 252	26 436	28 438	30 169	32 530
Pre-primary education	14 552	16 789	17 757	18 802	18 626
Teachers					
Tertiary education	1 993	2 015	2 265	2 303	2 453
Secondary education	2 629	2 696	2 710	2 727	2 684
Primary education	1 722	1 908	2 105	2 235	2 402
Pre-primary education	916	1 038	1 212	1 297	1 320
Students per teacher					
Secondary education	11.4	10.7	10.1	9.8	9.7
Primary education	14.1	13.9	13.5	13.5	13.5
Pre-primary education	15.9	16.2	14.7	14.5	14.1
Special education	5.6	5.2	5.3	5.6	5.8

- *Absolute value=0*

Appendix 35
Construction

	2014	2015	2016	2017	2018
Buildings with licence of use issued (completion of buildings) in Private Sector					
Buildings	49	98	60	69	66
Units	3 001	4 364	498	4 511	4 259
Gross floor area (m^2)	439 809	2 577 817	192 191	839 517	1 293 667
No. of parking spaces for cars	1 939	8 232	551	2 839	5 281
No. of parking spaces for motorcycles	706	2 433	143	1 557	1 879
Buildings with construction permit issued (construction of new buildings) in Private Sector					
Buildings	80	82	81	47	68
Units	1 810	3 688	5 372	3 223	1 670
Gross floor area (m^2)	2 233 095	1 694 829	868 827	410 902	575 816
No. of parking spaces for cars	6 497	4 400	3 891	1 797	2 105
No. of parking spaces for motorcycles		2 020	1 100	2 014	699
Building units and parking spaces transacted as per record of stamp duty	**13 230**	**9 771**	**14 108**	**13 985**	**15 073**
Residential	7 625	5 976	10 170	10 581	10 822
Commercial and office	1 508	889	752	873	894
Industrial	299	74	84	117	235
Parking spaces	3 662	2 752	3 013	2 284	3 084
Others	136	80	89	130	38
Value of building units and parking spaces transacted as per record of stamp duty (MOP million)	**83 690**	**51 660**	**74 129**	**85 228**	**89 604**
Residential	49 795	33 449	58 755	69 442	69 426
Commercial and office	19 176	11 025	9 136	9 739	13 503
Industrial	4 705	1 008	1 068	1 543	1 963
Parking spaces	5 949	4 687	4 194	3 498	4 104
Others	4 065	1 492	975	1 006	608

"Licence of use issued" refers to projects that were issued the licence of use (also known as occupation permit) during the reference period. It was referred to as "Completion of buildings" prior to 2017.

"Construction permit issued" refers to projects that were issued the construction permit to start construction, expansion and superstructure works during the reference period. It was referred to as "Construction of new buildings" prior to 2017.

Appendix 36
Transport

	2014	2015	2016	2017	2018
Vehicles in circulation (No.)					
Cars	114 479	118 984	118 900	114 927[r]	115 659
Industrial vehicle	410	412	411	410	408
Motorcycles	124 906	129 644	131 139	126 274	124 078
Density of vehicles in circulation					
No. of vehicles per km	270	279	278	269[r]	258
No. of motorbikes per km	295	304	307	295	276
Traffic accidents					
No. of accidents	16 029	15 804	15 342	14 717	13 764
Persons injured and/or dead	5 424	5 306	4 622	4 714	4 390
Total cross-border vehicle traffic (No.)					
In	2 459 067	2 564 804	2 529 495	2 413 017	2 463 860
Out	2 481 171	2 567 193	2 541 379	2 405 777	2 463 508
Vehicle traffic through the Border Gate (No.)					
In	1 991 460	2 018 774	1 942 755	1 770 291	1 700 433
Out	1 947 273	1 960 772	1 894 411	1 713 676	1 658 702
Vehicles traffic through the COTAI Checkpoint (No.)					
In	451 160	527 569	567 486	622 315	732 842
Out	516 461	586 719	626 264	669 523	772 349
Vehicles traffic through the Crossborder Industrial Zone (No.)					
In	16 447	18 461	19 254	20 411	18 951
Out	17 437	19 702	20 704	22 578	20 517
Vehicles traffic through the Hong Kong-Zhuhai-Macao Bridge Checkpoint (No.) [a]					
In	..	..	..	..	11 634
Out	..	..	..	..	11 940
Ferry trips (No.) [b]					
In	69 518	72 105	69 684[r]	69 446[r]	65 866
Out	71 423	73 280	69 686[r]	69 440[r]	65 874

Transport

Cont.

	2014	2015	2016	2017	2018
Commercial flights at the Macau International Airport (No.)					
Arrival	24 100	26 092	26 809	27 415	31 016
Departure	24 093	26 090	26 808	27 427	31 032
Container flow by sea [c] (No.)					
In	60 336	61 877	54 884	56 064	57 859
Out	35 982	38 885	34 106	34 131	36 067
Transit	49	165	46	123	328
Seaborne containerised cargo (Tonne)					
In	226 654	228 556	156 588	137 440	134 875
Out	13 552	15 980	18 766	20 270	31 398
Transit	6 218	7 624	4 203	2 774	4 753
Seaborne containerised throughput (TEU)					
In	87 545	91 932	80 922	81 958	86 943
Out	51 925	57 508	48 413	47 631	51 119
Transit	69	287	82	209	577
Container flow by land [c] (No.)					
In	2 371	1 538	2 070	1 717	1 670
Out	1 973	1 062	800	454	402
Transit	1 110	1 571	961	558	429
Gross weight of containerised land cargo (Tonne)					
In	19 565	14 183	14 204	8 077	9 688
Out	1 382	2 534	2 343	2 642	1 860
Transit	7 772	9 323	4 202	3 173	4 495
Gross weight of cargo at the Macau International Airport (Tonne)					
In	6 672	7 410	6 427	6 643	7 083
Out	16 343	16 278	19 622	23 356	27 521
Transit	5 754	6 370	6 842	7 494	6 877

[a] *The Hong Kong-Zhuhai-Macao Bridge Checkpoint started operation on 24 October 2018.*
[b] *Data have been provided by the Marine and Water Bureau since 2016 while those for and prior to 2015 were obtained from the Macao Customs Service.*
[c] *Refers to the total number of laden and empty container trips entering and exiting Macao*
[r] *Revised figures*
.. *Not applicable*

Appendix 37
Communications

	2014	2015	2016	2017	2018
Telephone lines at year-end	153 732	147 074	139 154	131 076[r]	124 101
Mobile telephone users at year-end (Prepaid cards included)	1 856 453	1 896 097	1 969 972	2 249 124	2 181 194
Telephone fixed lines per 1,000 inhabitants	242	227	216	201[r]	186
Mobile telephone users per 1,000 inhabitants	2 918	2 932	3 055	3 444	3 268
Internet subscribers	305 394	338 899	363 372	396 596	423 507
Hours of Internet usage ('000 hours)	952 549	1 063 685	1 166 937	1 241 939	1 268 795
Postal services ('000 units)					
Ordinary mail	32 724	32 308	31 970	31 072	31 907
Registered mail	1 062	1 119	1 188	1 113	1 120

[r] *Revised figures*

Appendix 38
Consumption of Energy and Construction Materials, and Liquid and Gas Fuel

Consumption of Energy and Construction Materials

	2014	2015	2016	2017	2018
Water ('000 m^3)	83 486	84 939	86 703	88 436	90 944
Electricity (million kWh)	4 739.9	5 016.6	5 293.7	5 416.6	5 567.2
L.P. gas (tonnes)	44 686	44 374	44 607	41 936	42 297
Natural gas ('000 m^3)	57 905	1 931	10 050	178 251	94 595
Liquid fuel ('000 litres)*	284 047	389 002	386 546	347 353	269 390
Cement (tonnes)	873 399	686 800	573 953	371 744	362 808

Liquid and Gaseous Fuel Statistics

	2014	2015	2016	2017	2018
Petrol ('000 litres)					
Imports	95 443	100 224	102 026	103 885	112 688
Consumption	99 592	100 198	102 311	104 132	109 049
Kerosene ('000 litres)					
Imports	4 292	3 057	2 801	2 472	2 256
Consumption	4 144	3 181	2 777	2 466	2 245
Gas oil and diesel ('000 litres)					
Imports	197 635	220 385	209 539	198 187	183 867
Consumption	122 715	135 039	122 429	117 863	114 127

Liquid and Gaseous Fuel Statistics

Cont.

	2014	2015	2016	2017	2018
Fuel oil ('000 litres)					
Imports	55 770	159 108	155 536	134 930	38 500
Consumption	57 597	150 584	159 030	122 893	43 970
L.P. gas (tonnes)					
Imports	43 606	44 916	42 954	41 511	41 353
Consumption	44 686	44 374	44 607	41 936	42 297
Natural gas ('000 m^3)					
Imports	58 370	2 124	9 492	175 480	93 126
Consumption	57 905	1 931	10 050	178 251	94 595

Starting from the 2014, consumption of Gas Oil and Diesel excludes international transport.
** The amount of aviation kerosene is not included.*

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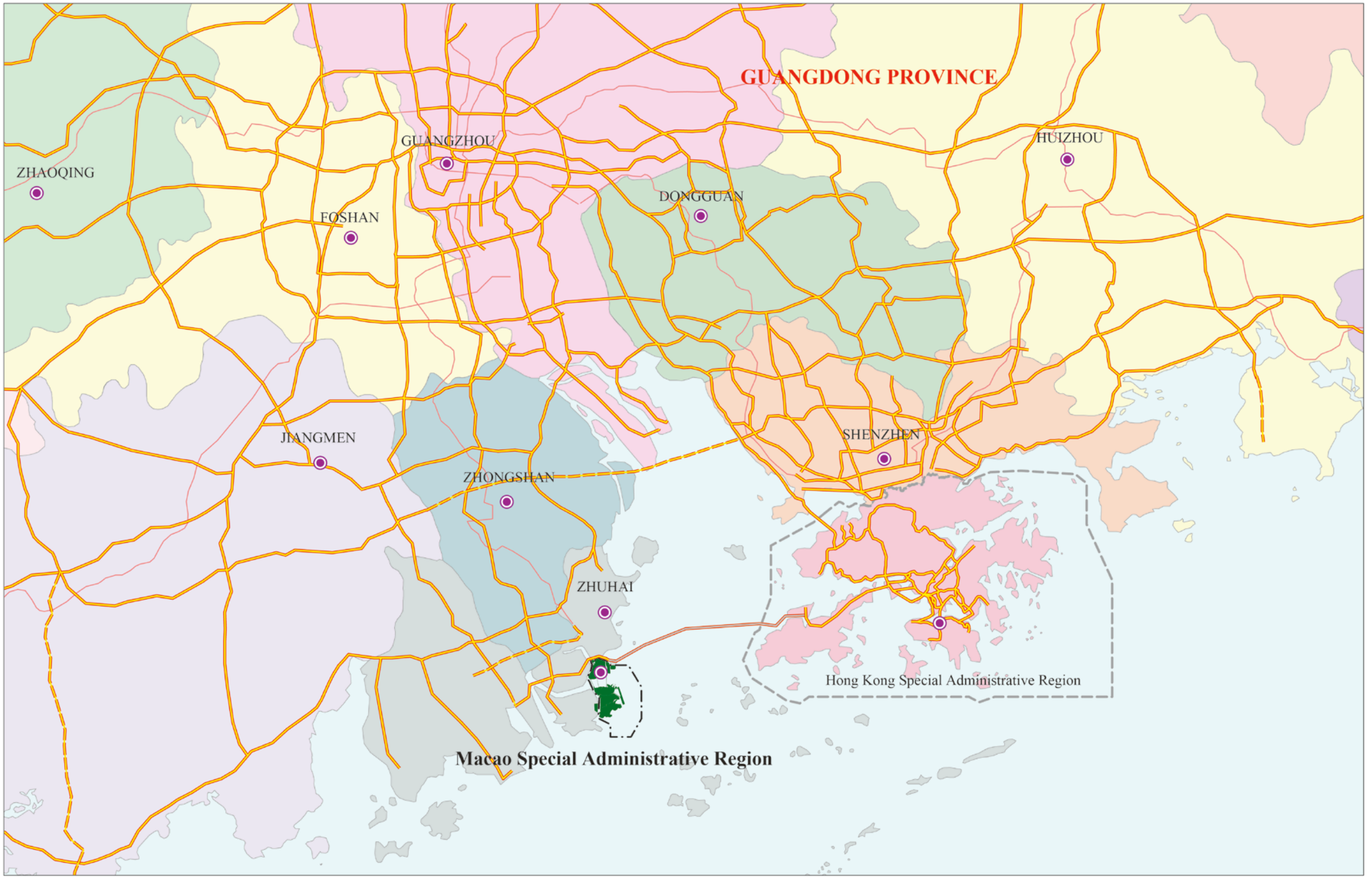

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