## ${\bf MEDIA, COMMUNICATIONS\ AND\ INFORMATION\ TECHNOLOGY}$



## Media, Communications and Information Technology

Macao enjoys freedom of the press, freedom of speech and freedom of publishing. Despite its relatively small size, 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, assuring 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 four locally based satellite TV stations.

Teledifusao de Macau (Macau Broadcasting Company, TDM) began provision of a public broadcasting service in February 1988. Digital broadcasting commenced in 2008. Currently, both analogue broadcasting and digital broadcasting are available. On top of the two round-the-clock channels (Chinese and Portuguese), there are digital channels including sports, information, high definition (HD), CCTV-13, CCTV news, 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 101 channels (including 20 test channels, and one dedicated hotel channel), all 24 hours.

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 four channels: MSTV's News Channel (launched in January 2009) and Newsky Satellite TV (launched in August 2010) – both on air 24 hours a day; and Kung-fu TV Channel (launched in February 2009) and Zhongbo Satellite TV, which officially began broadcasting in November 2011. The latter two channels broadcast 16 hours a day.

China Satellite TV (Group) Company was licensed in 2000 to provide satellite television broadcasting services. China Satellite TV officially began its broadcasting services on 28 March 2008, via the CSTV-1 24-hour channel on health and lifestyle.

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 10 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* and the free newspaper *Exmoo News*.

The main Chinese weeklies published in Macao include: *Jornal Informação* (Information Journal), *Pulso de Macau* (Macau Pulse), *Semanário Recreativo de Macau* (Macau Entertainment Weekly), *Jornal Si Si* (Current Affairs Journal), *Semanário de Desportivo de Macau* (Macau Sports Weekly), *Observatório de Macau* (Macau Observer), *Agora Macau* (Now Macau), *Macao Commercial Post* and *the Macau Convention and Exhibition Economy Journal*.

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). *O Clarim* (The Bugle) is a Portuguese weekly.

The English daily newspapers in Macao are the Macau Post Daily, the Macao Daily Times and the Macau Business Daily.

Every day, dozens of Hong Kong newspaper and magazine titles are transported to Macao. Some daily newspapers published on the mainland 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**

Macao does not have its own news agency. However, both Xinhua News Agency and Lusa-Portuguese News Agency have branches or representative offices in Macao. Other media organisations with accredited correspondents in the territory include China News Service (CNS);



China Central Television (CCTV); China National Radio (CNR); China Radio International (CRI); the State Administration of Radio, Film and Television; People's Daily; Wen Hui Bao (Shanghai); South China Morning Post (SCMP); Hong Kong Economic Journal (HKEJ); Asia Television (ATV); Hong Kong Cable Television (HKCTV); Radio Television Hong Kong (RTHK); Ta Kung Pao; Wen Wei Po; Hong Kong Daily News; China Economic Weekly; Hong Kong Commercial Daily; Oriental Press Group; EyePress News; and China Trade News.

#### **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, the Macau Press Photographers Association, and the Portuguese and English Speaking Media Association and the Macao Media Workers Welfare 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 six 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 20-year old Press Law, thereby providing local media with a legal environment that is both supportive and conducive to its healthy development. In March 2010, the Government Information Bureau announced that the process would be in three phases: research, consultation, and drafting. In June, the bureau invited local

academic institutions to conduct a study on the direction for amendments to the Press Law and the Broadcasting Law of Macao. The tender for gathering public opinions on the revision was launched in the first quarter of 2011. Deliberative opinion polling was first introduced in Macao to conduct extensive, objective and scientific opinion gathering and analyses. In addition, the GCS actively liaised with the newspaper industry and professional organisations to listen to all opinions.

After gathering and analysing the views of the press industry and the results of the deliberative opinion polling, the Government decided to defer any amendment of the Broadcasting Law while proceeding to amend the Press Law under the principle of "limited to deletion only" any clause to the law. The controversial provisions to be deleted included the one regulating the Press Council, and the other on the Code of Practice for Journalists. Some wording was also amended to align with relevant laws. Another round of public consultation will be launched upon completion of the draft.

#### 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.

In line with the development of civil society and information technology in mass media, in March the Government promulgated the by-law, Organisation and Operation of the Government Information Bureau (GCS), to enhance the transparency of administration, facilitate communication with citizens and further safeguard the public interests and the right to information.

Under the new framework, the GCS is restructured from one department with three divisions and one team to two departments with five divisions: the Information Department – under which is the Media Relations Division; the Research and Publicity Department – under which are the Publicity and Promotion Division and the Publication Division; the IT and Archive Division; and the Administration and Finance Division.

## **Disseminating Government Information**

The GCS has also established the Information Broadcast System (IBS) for local media and accredited correspondents. The IBS 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 2012, the Information Department wrote and distributed more than 9,996 press releases, interview notices, important notices, and speeches in Chinese, Portuguese and English; and distributed 1,426 photographs on behalf of the MSAR Government and its departments.

## **Registration of Periodical Publications**

The Administration and Accounting Section 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.

Forty-five new publications were registered with the GCS in 2012, including daily, weekly, biweekly, monthly, bimonthly and quarterly publications. Six new publishers were also registered.

#### 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. The portal covers Government information and announcements, fact sheets about Macao, city information, cultural and recreational activities, e-services, legal advice, and comments and complaints from the public.

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 9.00am 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 officials of the Government, 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 members of the Executive Council, the appointment and termination of presidents and judges at all levels of the courts and of public prosecutors, as well as other announcements of appointments and terminations 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 People's Government in accordance with the Basic Law of the MSAR;
- Documents regarding the appointment and termination of the Chief Executive, principal Government officials and the Public Prosecutor-General by the Central People's 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 on the mainland;
- 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. By the end of 2011, the Government Printing Bureau had established an online database containing the full text of 19,800 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 that remain in effect. In 2012, the bureau's official website recorded an average of more than 268,000 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. The bureau also published a CD ROM, The Macao Special Administrative Region Laws, in Chinese and Portuguese, which consolidates all the laws announced between 20 December 1999 and 31 December 2012.

# **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 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 Macao Foundation, the President of the Board of Directors of the Macau Productivity and Technology Transfer Center (CPTTM), the Director of the United Nations University International Institute for Software Technology, and the President of INESC Macau (Macau Institute of System and Computer Engineering), plus 20 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 nine overseas scholars who are renowned in their areas of expertise as advisors to the council. They include Tsung Dao Lee, Lu Yongxiang, Zhu Lilan, Lu Zhonghe, Hui Yongzheng, Zhu Gaofeng, Charles K. Kao, Li Lianhe and Song Yonghua.

## 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. It especially focuses on the following:

- Projects that help to promote and enhance knowledge about science and technology;
- Projects that improve productivity and competitiveness;
- Innovative projects that facilitate the development of the science and technology industry;
- Cultural and environmental projects that benefit scientific and technological innovation and development;

- High-priority technology-transfer projects that enhance socio-economic development; and
- Patent applications.

Groups eligible to receive subsidies include local universities and academies and their affiliated research and development centres; local non-profit private organisations, laboratories and entities; registered entrepreneurs and enterprises; and individuals involved in research and development projects in Macao.

In 2012, the Science and Technology Development Fund spent more than 70.87 million patacas to subsidise 84 science research projects, of which 30 were concluded, yielding a total of 137 theses. The projects also trained 28 master's degree candidates and 18 doctoral candidates. In terms of science popularisation projects, in 2012 the Science and Technology Development Fund received 159 applications for total funding of over 14.12 million patacas. The projects involved 6,808 students.

## **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.

### **Telecommunications Services**

The objective of Macao's telecommunications policy is to liberalise the regulation of the public telecommunications infrastructure and service provision gradually, in order to maximise public benefits, create investment opportunities and enhance the competitiveness and long-term development of the economy and the community. This policy strives to ensure that quality and efficient telecommunications services are always available to the entire community and businesses at reasonable cost and in a non-discriminatory manner. A further goal is network interconnection and number portability.

#### The Telecommunications Law

The Telecommunications Law (Law No. 14/2001) was gazetted on 20 August 2001. The construction, management and operation of a telecommunications network, and its service provision, are legally deemed to be matters of public interest, and they can only be undertaken by a public entity or by a private organisation that complies with applicable regulations and demonstrates its business capability. In 2012, the Government conducted preliminary consultations with the industry regarding amendment of the Telecommunications Law to accommodate the opening up of Macao's



telecommunication market to enable better development of the industry.

## **Bureau of Telecommunications Regulation**

Under the supervision of the Secretary for Transport and Public Works, the Bureau of Telecommunications Regulation (DSRT) oversees telecommunications and information technology in Macao.

#### Fixed-network and External Telecommunications Services

Macao's fixed-network and external telecommunications services are currently operated by Companhia de Telecomunicacoes de Macau (CTM) under a franchise contract. In November 2009, the Government and CTM signed a revised franchise contract on public telecommunications services, regarding the early opening-up of local and international network rental services, and transit services. Other franchise services will be completely liberalised in 2012. In December 2011, the Government formulated the Regulations on the Provision and Operation of Fixed Public Telecommunication Networks (By-law No. 41/2011). In 2012, an open tender for the provision and operation of fixed public telecommunication networks was launched, and the new licences were slated to be issued by the first quarter of 2013.

At the end of 2012, there were 161,752 fixed-network lines in Macao, along with 781 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 246 countries and regions.

#### **Public Mobile and Wireless Communications Services**

The wireless telecommunications market was officially opened up in 2000, advancing the Macao telecommunications and information industry into a new era. In the early 2000s, Companhia de Telecomunicacoes de Macau (CTM), Hutchison Telephone (Macau) Company and SmarTone Mobile Communications (Macau) were awarded eight-year licences to offer public mobile phone services. Kong Seng Paging Ltd. was also granted a virtual mobile operator licence to provide public mobile telecommunication services, despite not having its own public telecommunication network and frequency.

The Regulation on the Interconnection of Public Telecommunication Networks (By-law No. 41/2004), stipulates the establishment of a level playing field for the interconnection of public telecommunications networks, in order to ensure the implementation of interconnection at an opportune time and at a reasonable cost.

In accordance with regulations, in 2005 the Government issued a licence to China Unicom (Macau)1, allowing them to establish a CDMA2000 1X network and provide roaming mobile telecommunications services. After one year of operation, the company successfully applied to the Government for a licence to provide local services.

At the beginning of 2006, China Unicom (Macau), Hutchison Telephone (Macau), Comphania de

Telecomunicacoes de Macau (CTM) and SmarTone Mobile Communications (Macau) were granted licences to provide public networks for terrestrial third-generation (3G) mobile telecommunications and roaming 3G mobile telecommunications services. Citizens could enjoy 3G communication services since the second quarter of 2007. The 2G licence of China Unicom (Macau)<sup>1</sup> was revoked at its own request in April 2010; the other three telecom carriers had their 2G licences renewed to 8 July 2012. In 2012, the Government decided to extend the use of 2G service to June 2015 and made corresponding amendments to the 3G licences of Comphania de Telecomunicacoes de Macau (CTM), Hutchison Telephone (Macau) and SmarTone Mobile Communications (Macau) so as to extend their provision of 2G service to that date.

As at year-end 2012, the five mobile telecommunication providers had 1,613,457 registered users, and per capita cell phone ownership was 279.8 percent.

Mobile Communication Service Information										
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
No. of radio paging users	3,453	2,728	2,513	1,891	2,782	2,780	3,097	3,204	3,101	1,886
No. of mobile phone users	198,696	228,296	259,336	301,512	356,117	395,943	420,098	459,330	525,209	564,576
No. of rechargeable mobile phone cards	165,335	204,154	273,422	334,835	438,206	536,653	617,282	662,931	827,985	1,048,881

#### Internet and Broadband Services

Macao's internet-enabled population continued to increase at a stable pace. At the end of 2012, there were 145,120<sup>2</sup> internet subscribers. In accordance with the regulations of By-law No. 24/2002, in November 2002 internet service providers (ISPs) were formally included in the licensing mechanism. Currently, 21 companies have been granted ISP licences.

CTM began offering internet broadband services in July 2000. By the end of 2012, there were 144,297 registered broadband subscribers, an increase of 7,038 or 5.1 percent over the figure of 137,259 a year earlier. The Macao peninsula, Taipa and Coloane islands have 100 percent broadband coverage.

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. At the end of 2012, there were 132 WiFi Go service spots, and approximately five million successful connection instances were recorded

## Registration and Management of Internet Domain Names

The University of Macau's 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 2012, the DSRT liaised with relevant service operators regarding necessary preparation and publicity work to introduce registration services for Chinese and Portuguese domain names.

## **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 11. 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 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.

## 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, the two regions have been maintaining strong linkages in the development of wireless communication services.

In November 2012, the State Radio Regulation Bureau of the Ministry of Industry and Information Technology and related authorities met to consider coordination of radio communication frequencies in mainland China and Macao. The parties discussed the cross-border public land mobile network signal coverage and related measures, mobile network coverage at the new University of Macau campus in Hengqin and nearby areas, coordination of 3G networks and frequencies, and new developments in telecommunication services and technology.

## **Authentication of Electronic Documents and Digital Signatures**

Law No. 5/2005, which was passed by the Legislative Assembly in August 2005, forms the key legal basis for regulating and authenticating electronic documents and digital signatures. This law is essential for the long-term development of e-government and e-commerce. Executive Order No. 376/2005 designated the Bureau of Telecommunications Regulation (DSRT) as the authority responsible for authenticating electronic documents and signatures.

#### Postal Services

## The Development of Macao's Postal Services over Three Centuries

Since it 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, in

1798, when sea mail services began.

Many new services have been introduced since the establishment of Macao Post. Alongside traditional postal services and the Macao Postal Savings, established in 1917, Macao Post took over the operation of telephone services in 1927. Then, as society developed, these services were conceded to other entities or public sector bodies. 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.

#### The Post Office

To respond to rapid technological developments, the Post Office is committed to providing modern, diversified services. In 2006, the Post Office introduced Electronic Certification Services (eSignTrust), becoming the only certification service provider accredited by the Government. In the same year, the Communications Museum of Macao was inaugurated, focused on postal services and telecommunications. The museum seeks primarily to serve young people, to satisfy their thirst for knowledge. In 2008, Secure Electronic Postal Services were introduced. The Electronic Postal Certification Mark is a trusted time stamp service issued on electronic documents to certify the integrity of document content and its creation time.

In 2012, the volume of local mail was three percent lower than that in 2011, mainly because the Government delivered mail relating to the Wealth Partaking Scheme only once in 2012 instead of twice in 2011.

As the global economic recovery remains sluggish, the volume of outbound surface mail dropped by four percent while the volume of air mail remained the same as the previous year. As for the volumes of inbound surface mail and air mail, there was a decrease of three percent and an increase of four percent, respectively. The main sources and destinations of mail were mainland China, Hong Kong, Taiwan, Singapore, Malaysia, Australia, Canada, Portugal, Belgium, the United Kingdom and the United States.

Regarding registered mail, in 2012 the volume of local mail was three percent higher than in 2011. The volumes of outbound international surface mail and air mail increased by 25 percent and two percent, respectively, while the volume of inbound international surface mail remained the same. There was a rise of four percent in inbound international air mail.

Regarding Express Mail Service (EMS), in comparison with 2011, Macao Post recorded a 10 percent increase in the number of outbound EMS items and a 10 percent increase in inbound EMS items. The chief sources and destinations of EMS items were mainland China, Hong Kong, the United States, Taiwan, Japan and Portugal.

#### **Secure Electronic Postal Services**

During 2011, Macao Post employed electronic registered mail technology to build up a secure electronic mailbox system. In addition, it completed its study and examination of integrating electronic postal certification, image scanning technology and fax server technology.



The electronic postal certification mark has many applications for services such as e-payroll advice, e-bidding and e-report filing.

In the legal sphere, Macao Post is drafting the Electronic Registered Mail Postal Services bylaw and provisions to regulate public electronic registered mail services. Regarding international cooperation, the Council of Administration (CA) of the Universal Postal Union passed Macao Post's proposal to add new provisions on definitions of electronic registered mail postal services and electronic mailboxes to the Universal Postal Convention, which became effective on 1 January 2012.

To promote electronic postal services, Macao Post participated in IT Week 2012 exhibitions, which showcased the electronic document filing system and electronic bidding system developed from electronic postal certification technology.

#### **Philately**

Thematic philatelic products issued in 2012 included two thematic packs of I ching, Pa Kua, an album of Literature and its Characters – A Journey to the West, and a philatelic collection of Collect Stamps, Learning with Idioms jointly compiled by Macao Post, Guangdong Philatelic Corporation and Hongkong Post. Showcasing valuable Chinese culture, these three philatelic products are ideal for stamp collectors and Chinese culture lovers.

Macao Post provides different channels for overseas collectors to purchase philatelic products. Collectors around the world can enter Macao Post's website (www.macaupost.gov.mo) to obtain the most recent philatelic information and enrol in the Collector's Plan Subscription. They can also purchase philatelic products directly from local postal organisations or through authorised dealers in Macao philatelic products.

#### Caixa Economica Postal

Caixa Economica Postal (Postal Savings Office or CEP) is a credit institution operated by the Macao Post Office that serves as the post office's cashier. It also provides a wide range of bank related services, such as credit facilities, remittance services for the public and electronic payments.

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 2012, CEP approved loans worth nearly 194 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 were over 30,000 transactions in 2012. There are currently nine outlets for this service, at CEP, Central Post Office, Airport Post Branch, Ferry Terminal Post Branch, eSignTrust Registration Authority, the Communications Museum Shop, the Almirante Lacerda Post Branch, the Ocean Garden Post Branch, and the Coloane Post Office.

Furthermore, CEP also established an electronic payment platform in 2006. The public can also apply for or settle payments of various Government services online in real time. By the end of

2012, more than 73,000 people had settled payments via the platform.

#### eSignTrust

As the only authentication entity approved by the Government, eSignTrust has been providing citizens, corporations and Government departments with online identity authentication services since it commenced operation in 2006. An electronic document signed by the user, and with qualified electronic certification provided by eSignTrust services, will have legal effect.

In 2012, to achieve the objectives of the Eighth Supplementary Protocol to the Mainland and Macao Closer Economic Partnership Arrangement on the development of pilot applications of mutual recognition of electronic signature certificates in Macao and Guangdong, Macao Post, the Department of Information Security Coordination of the Ministry of Industry and Information Technology, the Economic and Information Commission of Guangdong Province and the Bureau of Telecommunications Regulation established a working group to provide suggestions on the framework for the mutual recognition of certificates issued by Guangdong and Macao to facilitate future planning and implementation.



<sup>&</sup>lt;sup>1</sup> In line with the reconstruction of mainland China's telecommunications industry, China Telecom has officially acquired the CDMA mobile telephone network and business of China Unicom. China Unicom (Macao) Limited was officially renamed China Telecom (Macau) Co Ltd on 27 November 2008, when the legal procedures involved in the changes were completed.

<sup>&</sup>lt;sup>2</sup> According to the results of the 2011 population census, the number of households at year-end was 172,600 (excluding collective households in hotel and hostel services).

## **Communications Museum of Macao**

Opened on 1 March 2006, the Communications Museum of Macao promotes philately and Macao stamps to local residents and visitors.













