



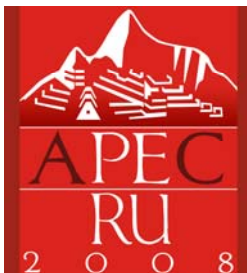
**Asia-Pacific
Economic Cooperation**

2008/TEL38/PLEN/029

Agenda Item: 7

Australian Regulatory Update APEC TEL 38

Purpose: Information
Submitted by: Australia



**38th APEC Telecommunications and Working
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Australia's Regulatory Update

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Plenary

Submitted by:

Australia

Australia's Regulatory Update

**APEC Telecommunications and Information Working Group
38th Meeting | 13 to 18 October 2008| Lima, Peru**

Please note:

This document is not an official APEC document until approved by the Telecommunications and Information Working Group. This version is a draft provided for discussion purposes only.

APEC TEL 38 Working Group

13 to 18 October 2008, Peru

CONTRIBUTION FROM AUSTRALIA

Plenary

Australia's Regulatory Update

Please find attached Australia's Regulatory Update.

Recommendation

It is recommended that the TEL note the Regulatory Update.

Contact: Mr Richard Brown

HIGHLIGHTS

National Broadband Network

The Australian Government has committed up to \$4.7 billion, and will consider necessary regulatory changes, to facilitate the roll-out of a new, high-speed fibre-based broadband network in partnership with the private sector. The National Broadband Network should provide minimum speeds of 12 megabits per second to 98 per cent of Australian homes and businesses. Other measures will provide equitable access to broadband services for the small percentage of customers not covered by the new network.

Telstra's transition from CDMA to Next G™

The Minister notified Telstra on 15 April 2008 that he was satisfied that it had sufficiently rectified the problems the Minister had identified in January relating to equivalence between the Next G and CDMA mobile phone networks. Telstra closed its CDMA mobile phone network on 28 April 2008.

Submarine cable protection

The *Telecommunications and Other Legislation Amendment (Protection of Submarine Cables and Other Measures) Act 2005* sets out a comprehensive regime for the protection of submarine cables in Australian waters.

The legislation provides Australian Communications and Media Authority (ACMA) with the authority to declare protection zones over submarine cables of national significance and to issue permits to install submarine cables in Australian waters (both within and outside protection zones). Activities within the protection zones that are likely to cause damage to cables (such as trawling and anchoring) may be prohibited and/or restricted and are subject to significant criminal and civil penalties.

To date, ACMA has declared three submarine cable protection zones: the Northern Sydney Protection Zone, the Southern Sydney Protection Zone and the Perth Protection Zone.

E-Security National Agenda

The Department of Broadband, Communications and the Digital Economy is currently implementing a package of awareness initiatives to help home users, school students and small businesses strengthen their computer defences and improve their online behaviour.

Australian Internet Security Initiative

ACMA has established the Australian Internet Security Initiative (AISI) to help address the 'botnet menace'. Botnets are large aggregations of individual computers, which are infected by malware (malicious software) that enables them to be remotely controlled to perpetuate fraud and other malicious activities over the internet.

Digital Switchover Project

The Australian Government has set 31 December 2013 for the completion of analog television switch off across the country. Additional funding of \$37.9 million has been announced by the Government to drive digital switchover. ACMA will receive an additional \$8.5 million to undertake necessary technical switchover related projects, such as the evaluation of digital television transmission. The transition to digital-only

television will be a phased, region-by-region process. A comprehensive switchover timetable is being developed. A Digital Switchover Taskforce is working closely with industry to implement the Government's strategy to facilitate switchover by the end of 2013.

International Mobile Phone Roaming

A Parliamentary Inquiry into the high cost of mobile roaming was announced on 19 June 2008 by the House of Representatives Standing Committee on Communications. Expected to continue through November, the hearing has begun to consider the underlying and wholesale costs for mobile operators, the broad options for regulatory action, and the potential for international cooperation. The Hearing also considered some of the substitutes for mobile roaming and possible mechanisms to assist consumers including text messaging of the costs once they arrive at their international destination.

Content services code

On 10 July 2008, ACMA registered a new television industry code, the Content Services Code. This code sets out requirements for content providers in relation to the classification of content and the provision of consumer safeguards with guidance on how to comply with the new rules.

Review of children's television standards

The Children's Television Standards regulate children's television on commercial free-to-air services to ensure that children are protected from the possible harmful effects of television. ACMA is currently undertaking a review of the standards. ACMA invited comments from the public in mid-2007 and has released its draft standards for public and industry comment. The closing date for comments is 17 October 2008 and the new standards are expected to be finalised in early 2009.

Spectrum Management

ACMA has undertaken the following projects in the areas of Spectrum Management:

- Development of Spectrum Management Principles;
- Five Year Spectrum Outlook;
- Independent review of Government spectrum management holdings;
- Future management of the 400 MHz spectrum band discussion paper;
- Establishing the Radiocommunications Consultative Committee; and
- Australian Radiofrequency Spectrum Plan.

DEVELOPMENTS DURING 2008

National Broadband Network

A key element of the Australian Government's telecommunications policy is the roll-out of faster broadband more widely throughout Australia. The Government recognises that such high-speed broadband services are a key part of Australia's future infrastructure and are critical to Australia's future economic prosperity and social wellbeing.

The Australian Government has committed up to \$4.7 billion, and will consider legislative and regulatory changes necessary, to facilitate the roll-out of a new, high-speed fibre-based broadband network in partnership with the private sector. The new network should extend minimum speeds of 12 megabits per second to 98 per cent of Australian homes and businesses and will be rolled-out over a five year period. The new network will facilitate competition through open access arrangements, provide for equivalence of access charges and allow access seekers to differentiate their product offerings in terms of access speeds, quality of service and contention ratios. Other measures will provide enhanced broadband services for the small percentage of Australians in regional and rural Australia not covered by the new network.

On 11 March 2008, the Australian Government announced the Panel of Experts that will undertake a competitive assessment of private sector proposals for the roll-out of the new network. The Australian Government issued its formal Request for Proposals on 11 April 2008. Prospective proponents must submit their proposals by 26 November 2008.

Wireless Access Services

There is increasing demand from industry, users and government throughout Australia for spectrum to support wireless access to broadband services. Wireless Access Services refers to advanced wireless broadband systems, including fixed and nomadic wireless broadband services and "next generation" mobile telecommunications services.

In 2006, ACMA commenced an extensive public consultation process to gauge the demand for future Wireless Access Services. ACMA has identified a number of frequency bands that it considers as potentially suitable candidates for Wireless Access Services and that could be made available in the short, medium and long term.

ACMA is expected to announce the outcomes of the review and its proposed forward plan by the end of 2008.

Telstra's CDMA to Next GTM transition

In 2006, Telstra announced its intention to switch off its CDMA network on 28 January 2008 and replace it with an alternative network known as Next G. On 18 September 2007, a licence condition took effect that required Telstra to keep the CDMA network open until the Minister was satisfied that the Next GTM network provides equivalent coverage and services.

Following the Minister's decision in January to postpone the CDMA closure, Telstra put in place a rectification plan to address the Minister's concerns.

Telstra reported to the Minister on 20 March 2008 detailing the effectiveness of the measures contained in its rectification plan and also provided supplementary information. The Minister also considered stakeholder submissions, contacts from consumers and responses from state, territory and local governments.

The Minister notified Telstra on 15 April 2008 that he was satisfied that it had sufficiently rectified the problems the Minister had identified in January. Telstra closed its CDMA network on 28 April 2008.

The licence condition now requires Telstra to continue to provide mobile phone coverage in non-metropolitan areas of Australia that is equivalent to the coverage provided by the previous CDMA network. The Australian Communications and Media Authority is responsible for enforcing this obligation.

International Mobile Phone Roaming

Concerns have been expressed by user groups at the high costs to consumers and business-people of mobile phone roaming when travelling overseas. In response to this, the Department of Broadband, Communications and the Digital Economy engaged a consultant to investigate international roaming charges, including the divergences between costs paid by Australian consumers and consumers in other countries, and the reasons for any divergence.

A Parliamentary Inquiry into the high cost of mobile roaming was also announced on 19 June 2008 by the House of Representatives Standing Committee on Communications. The Department appeared at the first Hearing on 24 September which discussed the underlying and wholesale costs for mobile operators, the broad options for regulatory action that could be taken, and the potential for advancing the issue through international cooperation and trade negotiations. The Hearing also considered some of the substitutes for mobile roaming and possible mechanisms to assist consumers including text messaging of the costs once they arrive at their overseas destination. International cooperation is being sought through bilateral contacts and international organisations including APEC and the OECD.

Parliamentary Inquiry into International Mobile Roaming:

<http://www.apf.gov.au/house/committee/coms/mobileroaming/index.htm>

Universal Service Obligation review

On 27 June 2007, the former Minister announced a review of the Universal Service Obligation.

The Australian Universal Service Obligation regime relates to the provision of basic telephone services and payphones. Except in limited circumstances, these services have to date been provided via fixed infrastructure. Increasingly, these services can be delivered through other means, including VOIP, mobile communications networks and broadband networks.

The Department of Broadband, Communications and the Digital Economy (DBCDE) is considering all aspects of service delivery under the universal service regime, including:

- what services should be delivered
- how those services can be delivered effectively and efficiently
- how the cost of delivering universal service should be funded, and
- compliance with enforcement of the universal service regime.

An issues paper calling for public submissions was released on 15 August 2007. A total of 47 stakeholder submissions were received, including submissions from major carriers, Commonwealth and state and territory government agencies and consumer groups. These submissions are available from the Department's website at www.dbcde.gov.au/uso.

The submissions contain a number of key themes including the importance of introducing competition into the delivery of the USO, government funding of the USO and streamlining of government programs.

Outcomes of the USO Review will be considered in conjunction with other activities such as the Regional Telecommunications Independent Review Committee inquiry and the National Broadband Network.

Regional telecommunications research

ACMA has an extensive research and reporting work program to support the information requirements of the authority and its stakeholders in relation to regional telecommunication services. Key areas of focus include:

- The availability of communication services and infrastructure.
 - ACMA produces an annual report on communication infrastructure and services availability in Australia, which presents information on the availability of communication infrastructure relating to fixed and mobile voice and broadband. The report uses data sourced from the telecommunications industry and the Australian Bureau of Statistics, as well as publicly available information. Future reports will make use of Australian Competition and Consumer Commission (ACCC) data in relation to its proposed annual communications infrastructure audit Record Keeping Rule. ACMA will access this data under new data sharing arrangements.
- Remote indigenous communities.
- ACMA is preparing a report on telecommunications in remote Indigenous communities. The report is scheduled for release in the first half of 2008. It will focus on the availability of fixed-line services, payphones, mobiles and internet, and factors affecting availability and take-up.
- Consumer take-up and use of telecommunication services

ACMA has undertaken research that considers residential and business consumer attitudes to choice, preference and use of particular telecommunications services. This research has been published in the Telecommunications Today series reports available on ACMA's webpage.

Voice over Internet Protocol (VOIP)

On 16 April 2008, ACMA released its regulatory approach to VOIP services. ACMA will work with VoIP providers on the following key compliance areas:

- provision of access to the emergency call service (ECS);
- Integrated Public Number Database (IPND) notification;
- Telecommunications Industry Ombudsman (TIO) scheme membership;
- assignment of geographic numbers;
- encouragement of local number portability; and
- Customer Service Guarantee (CSG) requirements.

The provision of an emergency call service is a vital security and safety service for all Australians. VOIP services that provide both inbound and outbound connection to the Public Switch Telephone Network (PSTN) are obliged to provide free access to emergency call service numbers. ACMA is currently investigating if VOIP services that provide outbound only connections to the PSTN should also be required to provide access to emergency call services.

The provision of accurate name and address information in the IPND supports police, security and other emergency service agencies. ACMA is determining appropriate education, compliance and enforcement strategies for VOIP providers that are required to update the IPND.

Consumer confidence is important for the take-up of new innovative voice services such as VOIP, and this is improved by access to a robust and independent complaints resolution body. The TIO is an industry-funded, independent, complaints handling body for telecommunication users who are unable to resolve complaints with their service provider. ACMA is encouraging eligible VOIP providers to join the TIO.

Australian fixed-line geographic numbers have location information attached to them for the delivery of untime local calls and routing calls correctly to emergency services. VOIP providers maybe in breach of the Australian numbering plan when they allocate numbers from one geographic area to customers residing in another part of the country. ACMA will perform both education and compliance actions to ensure VOIP providers allocate numbers in accordance with the numbering plan.

Local number portability is an important pro-competitive safeguard that allows consumers to retain their local telephone number when changing telephone service providers. ACMA is working with VOIP providers to ensure that number portability enhances consumer choice.

The CSG is a legal requirement that is designed to safeguard residential and small business against poor service from their voice provider. The CSG requires service providers to meet specified time frames to connect services, repair faults and keep appointments, unless they have appropriate customer waivers or exemptions. ACMA will educate the VOIP industry on the appropriate use of customer waivers and exemptions if the VOIP provider does not plan to meet the CSG standard.

E.164 Number Mapping (ENUM)

ENUM (**E.164 Number Mapping**) is a protocol that maps an E.164 (telephone) number to one or more internet services using the Domain Name System. One application of ENUM is to facilitate calls between the traditional public switched telephone network (PSTN) and VOIP services on the internet.

ENUM is not at present commercially deployed in Australia. The Australian ENUM Discussion Group (established by the former Australian Communications Authority, now ACMA) conducted a trial between 6 June 2005 and 6 June 2007. The trial focused on User ENUM and examined issues such as authentication and validation of end users and the privacy implications of ENUM with regard to the National Privacy Principles, specified in the Australian Privacy Act 1988.

The Australian ENUM Trial evaluation report was released on 21 December 2007. The report made several recommendations, including the recommendation not to establish a commercial implementation of ENUM in response to a lack of interest. The report also recommended that the Australian ENUM Discussion Group monitor ENUM and make a reassessment should developments arise.

The ENUM Discussion Group established a working group in March 2007 which is continuing to investigate the technical and implementation issues relating to Infrastructure ENUM. Infrastructure ENUM is able to facilitate service-level interconnection of VOIP providers, effectively bypassing the PSTN. It is consequently expected to attract interest from voice service providers more generally. A small-scale industry-led trial of Infrastructure ENUM is scheduled to run from 1 September 2008 through to 30th November 2008.

Submarine cable protection

The *Telecommunications and Other Legislation Amendment (Protection of Submarine Cables and Other Measures) Act 2005* came into effect in September 2005. It sets out a comprehensive regime for the protection of submarine cables in Australian waters.

The legislation provides ACMA with the authority to declare protection zones over submarine cables of national significance and to issue permits to install submarine cables in Australian waters (both within and outside protection zones). Activities within the protection zones that are likely to cause damage to cables (such as trawling and anchoring) may be prohibited and/or restricted and are subject to significant criminal and civil penalties. These protection zones resulted from an extensive 12-month consultation with all affected and potentially affected stakeholders.

To date, ACMA has declared three submarine cable protection zones. They are the:

- Northern Sydney Protection Zone, extending from Narrabeen beach, New South Wales, to 40 nautical miles offshore, covering the northern branches of the Australia Japan Cable and Southern Cross Cable. The declaration took effect from 1 October 2007.
- Southern Sydney Protection Zone, extending from Tamarama and Clovelly beaches, New South Wales, to 30 nautical miles offshore, covering the southern branches of the Australia Japan Cable and Southern Cross Cable. The declaration took effect from 1 October 2007.
- Perth Protection Zone, extending from City Beach, Western Australia, to 51 nautical miles offshore covering the SEA-ME-WE3 cable. The declaration took effect from 1 February 2008.

Telecommunications Consumer Protection Code

On 18 May 2008, the Australian Communications and Media Authority registered a new Telecommunications Consumer Protections Industry Code, developed by the industry body Communications Alliance, that consolidated consumer protections contained in six previous codes.

The new code (C628:2007) covers the following consumer protection matters previously covered by six separate codes:

- advertising;
- point-of-sale information;
- fair consumer contracts;
- billing;
- credit management;
- customer transfer; and
- complaint handling.

ACMA has deregistered the separate codes that previously covered these matters, and registration of the new consolidated code means it is the single one with which industry has to comply. Consolidating the consumer protection rules into a single document is aimed at enhancing consumer protection by simplifying code compliance and ensuring consistency of interpretation.

Do Not Call Register scheme

In response to community concerns about the growth of unsolicited telemarketing calls, and its associated impact on individuals' privacy, Parliament passed the Do Not Call Register Act 2006 and the Do Not Call Register (Consequential Amendments) Act

2006 on 22 June 2006. ACMA has responsibility for overseeing the Register and a national Standard establishing a minimum level of conduct by telemarketers. The Register and Standard both commenced on 31 May 2007. As at July 2008, over 2.4 million numbers had been registered.

The Do Not Call Register legislation allows individuals to register their fixed line and mobile phone numbers, that are sued exclusively or primarily for private or domestic purposes, in order to 'opt out' from receiving most types of unsolicited telemarketing calls. The legislation applies to all telemarketers calling Australian numbers. ACMA is empowered to investigate alleged contraventions of the legislation, and apply enforcement measures in cases where it finds that contraventions have occurred. Enforcement options available to ACMA include:

- issuing formal warnings;
- issuing infringement notices;
- the acceptance of enforceable undertakings; and
- the commencement of court proceedings for injunctions or the recovery of pecuniary penalties.

ACMA has determined the new fee structure for the Do Not Call Register which came into effect on 1 July 2008. The new fee regime follows the Government's election commitment and a recent Australian Government Budget measure to require industry to fully fund the direct costs of operating the register.

ACMA estimates that it has received \$2.12 million in total revenue from industry accessing the register in its first year of operation.

DBCDE released a Departmental discussion paper on potential changes to the eligibility requirements for registration on the Do Not Call Register on 15 August 2008. The discussion paper sought community views on whether all telephone and fax numbers should be eligible to be registered.

Submissions to the discussion paper closed 12 September 2008. The submissions are providing input to consideration of changes to the Do Not Call scheme.

E-Security National Agenda

The E-Security National Agenda (ESNA) was established in 2001 as the e-security policy framework focused on creating a secure and trusted electronic operating environment for both the public and private sectors. The ESNA was reviewed in 2006 to ensure it continues to take account of the changing e-security environment. This review identified three priorities to provide a more integrated approach to Australia's e-security:

1. Reducing the e-security risk to Australian Government information and communications systems;
2. Reducing the e-security risk to Australia's national critical infrastructure; and
3. Enhancing the protection of home users and SMEs from electronic attacks and fraud.

Australian Government agencies¹ received \$73.6 million over four years in the 2007-08 Budget to implement initiatives under these three priorities.

¹ Defence Signals Directorate, Attorney General's Department, the Australian Federal Police, the then Department of Communications, IT and the Arts, the Australian Communications and Media Authority

The Communications portfolio received \$13.6 million² over four years to address the third priority “enhancing the protection of home users and small businesses from electronic attacks and fraud”. \$8.9 million of this funding was allocated to the Department of Broadband, Communications and the Digital Economy to undertake a number of initiatives and is currently implementing a package of awareness initiatives to help home users, school students and small businesses strengthen their computer defences and improve their online behaviour. The measures include:

- An annual National E-security Awareness Week to be held in collaboration with industry and community organisations which aims to help Australians understand e-security risks, and educate home and small business users about the simple steps they can take to protect themselves, their families and their businesses online.
- The enhancement of the Government’s e-security website Stay Smart Online, www.staysmartonline.gov.au which provides practical, step-by-step information for Australian internet users on how to secure their computers and adopt smart online practices. This includes a Small Business Self-assessment Tool, which provides a guide for small businesses on appropriate measures to improve their online security.
- A Stay Smart Online Alert Service, which is a free subscription-based service that provides information to Australian internet users on the latest e-security threats and vulnerabilities and how to address them and is delivered through the Government’s e-security website (www.staysmartonline.gov.au)
- An Education Package for Australian primary and secondary schools consisting of modules which are focused on raising the e-security awareness of Australian students, and are consistent with the Learning Statements on Information and Communications Technology.
- The expansion of the Australian Internet Security Initiative.

E-security Review

On 3 July 2008, the Attorney-General and the Minister for Broadband, Communications and the Digital Economy announced a whole-of-government review of e-security. A multi-agency team, led by the Attorney-General’s Department, was established to conduct the review.

The review was prompted by Australia’s ever-increasing reliance on information and communications technology and the threat of a hostile online environment. It provided an opportunity to look at what help the Government can provide to develop a more secure and trusted electronic operating environment for both the public and private sectors. It will also assist the development of a national framework for securing Australia’s electronic networks.

Further information about the review can be found at www.ag.gov.au/eseecurityreview.

Australian Internet Security Initiative

The Australian Internet Security Initiative identifies compromised (‘zombie’) home and small business computers and supports ISPs to help their customers restore their

and the Department of Finance and Administration received funding under this package.

² Plus depreciation, resulting in total funding of just over \$14 million)

computer security. It is designed to reduce the amount of spam and associated malware (malicious software).

ACMA has established the Australian Internet Security Initiative (AISI) to help address the 'botnet menace'. Botnets are large aggregations of individual computers, which are infected by malware (malicious software) that enables them to be remotely controlled to perpetuate fraud and other malicious activities over the internet. Botnets activities include distributing the majority of worldwide spam, distributed denial of service (DDOS) attacks on websites and stealing personal identity information from computer users often leading to substantial financial losses. Over the period 1 April to 30 June 2008 the average number of compromises reported by ACMA to internet service providers (ISPs) was 3060. Currently 53 ISPs are participating in this voluntary initiative which represents 90 per cent of Australian internet users.

ACMA staff have commenced the process of increasing data feeds and other means of identifying compromised computer activity into the initiative to improve its reach and effectiveness. This will include integration of some data from ACMA's spam reporting tool SpamMATTERS. ACMA is also promoting the initiative to progressively expand the numbers of participating ISPs. The current focus is on mid-tier ISPs, as the largest ISPs are already participating in the initiative.

ACMA report on Internet Filtering

In February this year, ACMA released its report to the Minister for Broadband, Communications and the Digital Economy on developments in internet filtering technologies and other measures for promoting online safety. The report drew together current key trends and made observations about content, communication and e-security risks online and identified how users can be empowered to manage them. The report observed that while single measures can be effective in addressing particular risks, certain clusters of measures provide a more holistic approach to online risks. Filtering technologies can be used effectively, for example, to address particular static content risks such as child abuse material. Security software can help address viruses, spam and online identity theft. Education initiatives can raise awareness of issues and develop protective skills and behaviours. ACMA's report includes a study of the European Union's initiatives in mitigating online risks, particularly those deployed in the United Kingdom and Germany.

Safer Internet Day and Cybersmart Detectives

ACMA organised Safer Internet Day which was held on 12 February 2008. As part of this event, Australia joined 50 other countries in activities designed to raise awareness of the safety of children using the Internet. Activities included the Cybersmart detectives program which is a cyber safety role playing game and an online forum in which ACMA staff participated.

The Cybersmart Detectives program aims to reinforce vital internet safety messages by presenting a problem scenario to children in the upper primary school age range—the group identified as most 'at risk'—who have to work out a solution. Children work online using a chat-based interface, and play the role of a deputy principal concerned about the welfare of a new student who may be being bullied by someone she has met in an internet chat room. They are guided by a series of clues which are released online. During the activity, experts and teachers respond to students' questions and guide the teams through each of the clues given from an online control room. As the scenario unfolds, the children discuss the risks of certain online and offline behaviours, and ways of managing those risks.

The key messages of Cybersmart Detectives are:

- Children should never give out personal information when they're chatting online.
- If children want to meet face-to-face someone that they've chatted with, they should always take a parent with them.
- Be aware that in the online environment, people may not be who they say they are.
- Parents should monitor their children's use of the internet, particularly chat rooms.

ACMA is also working with APEC members to develop cross-border approaches to protecting children online including sharing information on cyber safety such as blacklists of child pornography.

Content Services Code

On 10 July 2008, ACMA registered a new television industry code, the Content Services Code. This code sets out requirements for content providers in relation to the classification of content and the provision of consumer safeguards with guidance on how to comply with the new rules.

This is the first industry code under the new Schedule 7 of the Broadcasting Services Act 1992, which commenced in January 2008. The legislation establishes a framework for the regulation of online and mobile content services.

The Content Services Code requires that all content likely to be MA15+ or above must be assessed and classified by trained content assessors, hired by providers of online and mobile content services. By requiring content classification assessment, this code helps both children and their parents to make informed choices about what is or is not suitable for viewing online or on mobile phones.

The code also includes best practice guidance for providers and hosts of content on how to manage and respond to customer complaints, and contains information for consumers about online safety and the risks involved in using chat services.

The code was prepared by a cross industry taskforce including mobile carriers, online content providers, search engine providers, content application developers and industry representative organisations.

Mobile Premium Services Industry Scheme (MPSIS)

Mobile premium services accessed by SMS and via mobile carrier portals include sports scores, music clips and sports highlights, mobile ring tones, mobile wallpaper, games and other downloads, age-restricted content and chat rooms.

The Mobile Premium Services Industry Scheme (MPSIS) is a self-regulatory scheme established under the *Telecommunications Service Provider (Mobile Premium Services) Determination 2005 (No.1)*. The Scheme was established to ensure consumers are protected when it comes to mobile premium services. The Scheme is enforceable by the industry regulator, the Australian Communications and Media Authority (ACMA). It requires premium content service providers to supply consumers with information about the costs, terms and conditions of using a mobile premium service as well as information on how to unsubscribe from a service that is supplied on a subscription basis using the 'STOP' command. This information must be clear and unambiguous, and must be provided in advertising material, before a consumer uses a service, and when a consumer first uses a service. The Scheme also sets out clear complaints handling procedures for mobile premium services.

Following a review of the Scheme in October 2007, the telecommunications industry body, the Communications Alliance, has commenced drafting a new industry code under Part 6 of the *Telecommunications Act 1997* to replace MPSIS. In developing the

new code, the industry is considering a number of improvements to the current arrangements to ensure the interests of consumers are protected.

Digital Switchover

The Australian Government has set 31 December 2013 for the completion of analog television switch off across the country. The Government has announced that switchover will be a phased, region-by-region process. A Digital Switchover Taskforce (the Taskforce), established to drive the work necessary to deliver switchover, will report back to the Government with a comprehensive switchover timetable by the end of this year.

The 2008-09 Budget included \$37.9m in funding to implement the Government's strategy to deliver a switchover by the end of 2013 as announced in March 2008. The Taskforce is working to implement the strategy which includes:

- development of a 'Digital Tracker' to assess issues such as public awareness of digital switchover, intention of households to convert and actual conversion rates;
- research into digital reception problems in multi-dwelling units with a shared TV antenna system; an
- development of a logo and labelling system to clearly indicate which products are digitally ready.

The taskforce in cooperation with the Australian Building Codes Board (ABCB) and television industries has released the Digital Antenna Systems Handbook. This handbook acts as a guide for the installation of digital antennas.

ACMA will receive an additional \$8.5 million to undertake necessary technical switchover related projects, such as the evaluation of digital television transmission. ACMA plays a key role in allocating spectrum for digital television and ensuring television broadcasters roll out digital transmission facilities as soon as practicable. The analogue television switch off associated with the digital switchover could potentially release substantial amounts of spectrum. This is often referred to as the digital dividend. The Australian Government is currently researching digital dividend related issues. No decisions have been taken.

ACMA has conducted research into the take up of Digital Television in Australia. The Digital television in Australian homes 2007 report, released on 9 April 2008, is the third in a series of ACMA studies into household adoption of digital television. There has been a steady increase in the adoption of digital television by Australian households, with 41.8 per cent of homes in December 2007 having at least one television capable of receiving digital terrestrial television broadcasts, up from 30 per cent in 2006 and 13 per cent in 2005. The research also found that digital capable television sets now account for a quarter of overall stock of televisions.

The Australian Government has also established an Industry Advisory Group for digital television that brings together broadcasters, retailers, manufacturers, antenna technicians, public and commercial housing agencies and Australian Government Departments. This group will work with the Digital Switchover Taskforce on the provision of reliable information to consumers when purchasing digital television equipment.

Digital Television

Technical standards for digital television

Amendments to the Broadcasting Services Act 1992 introduced new provisions allowing ACMA to determine codes and standards in relation to digital television. While technical standards predominantly specify the technical performance of physical infrastructure at the broadcaster or consumer level, industry codes tend to guide the performance and govern the behaviour of participants in the sector. Examples of some of the matters that may be dealt with by standards and codes include:

- labelling requirements for domestic digital TV reception equipment (standard);
- mandatory requirements for performance of transmitters and receivers for broadcast television operating in the digital mode (standard);
- minimum content requirements for electronic program guides (code); and
- allocation of Logical Channel Numbers of digital television services (code).

ACMA will consider making standards or codes where there is clear evidence that intervention will allow clear benefits to consumers of digital television, drive the take up of digital services or address demonstrated market failure. ACMA promotes industry self regulatory solutions and will act to mandate standards when market forces alone will not resolve the issue subject of the regulation within a reasonable time frame.

In exercising these codes and standards powers, ACMA must be convinced that regulation will not impose unnecessary administration and financial burdens on industry a balance is struck between benefits of the regulation and the costs imposed on industry.

In the current environment it is apparent that there are high levels of conformity to the voluntary Australian Standards for both transmitters and receivers reducing the necessity for the imposition of mandatory standards. These standards are developed by Standards Australia committees that have representation from across the sector and include representatives from both Government and the Community. The Australian Standards for both reception and transmission are based on the DVB Standards and related ETSI, IEC/ISO and ITU-R documents utilising a range of operational choices specific to the Australian environment.

The Australian standard for transmitters and receivers respectively are:

- AS 4599.1-2007-Digital television - Terrestrial broadcasting - Characteristics of digital terrestrial television transmissions: and
- AS 4933.1-2005 _ Digital television - Requirements for receivers - VHF/UHF DVB-T television broadcasts.

The new version of the standard for receivers is about to be released with a number of amendments to suit the Australian environment. ACMA through its strong working relationship with Standards Australia continues to participate in the development of the standard and support industry endeavours to develop an effective robust system for Australia.

Proposals to allot and assign digital channels

In July and August 2008, ACMA sought submissions on its revised proposals to allot and assign digital channels for television repeater services in 94 areas of remote central and eastern Australia. ACMA has also identified as yet unassigned channels that may be used for other purposes, including datacasting in areas where channels for both national and commercial services are identified. The proposals appear in a discussion paper and revised draft variations to the commercial and national digital channel plans.

Schedule 4 of the *Broadcasting Services Act 1992* requires ACMA to formulate legislative schemes for the conversion of commercial and national television broadcasting services from analog to digital mode. Under the *Commercial Television Conversion Scheme* and *National Television Conversion Scheme*, ACMA is empowered to develop and vary digital channel plans for areas throughout Australia. These plans determine which channels are to be allotted to each licensee for the purposes of transmitting services in digital mode and the technical characteristics of these channels.

In developing and varying digital channel plans, ACMA's objective is to create channel allotments that enable broadcasters to plan their digital transmission coverage to achieve the same level as existing analog services, as well as meeting various objectives of the Act. The *Broadcasting Legislation Amendment Act (no.1) 2006* allowed remote television broadcasters, which are allotted a third digital-only service under section 38B of the Act, to multiplex. This facilitates a third commercial television service in areas where only two services currently exist.

Digital Radio

In May 2007, the Australian Parliament passed legislation amending the Broadcasting Services Act 1992 that will facilitate the introduction digital radio in Australia in the first half of 2009.

Digital radio will be launched in capital cities in Australia from January 1 2009. The legislation for digital radio is premised on it being a supplement to existing radio services in Australia, rather than as a replacement technology.

ACMA called for applications for licences to operate digital radio in each state capital city in December 2007 and issued licences for the five mainland state capitals of Adelaide, Brisbane, Melbourne, Perth and Sydney in July 2008. These licences are for the digital transmission of wide-coverage commercial and community radio services. The initial roll-out of digital radio will be based on Digital Audio Broadcasting technology enhanced with Advance Audio Coding (DAB+).

The legislation for digital radio provides for an access regime to ensure operators of licences provide access to transmission capacity on terms that are open, efficient and generally non discriminatory. This is overseen by the Australian Competition and Consumer Commission. Under the legislation, ACMA has the power to determine technical and industry standards for digital radio and restricted datacasting where necessary.

Additional legislation may be required if alternative technologies are identified as being more appropriate for regional Australia. As a result, the legislation provides for a review by 2011 into digital radio technologies most appropriate for regional areas.

Community Broadcasting Guidelines

ACMA has developed two sets of guidelines to assist community broadcasters in Australia to comply with their licence conditions.

Community Broadcasting Sponsorship Guidelines

Under the *Broadcasting Services Act 1992*, all community broadcasting licensees are subject to a licence condition that prevents them from broadcasting advertisements. However, licensees may broadcast a range of announcements as long as they meet requirements for acknowledging financial support and hourly sponsorship limits.

The *Community Broadcasting Sponsorship Guidelines 2008*, released in June 2008, outline the general ban on advertisements and the exceptions to the general ban which include accidental or incidental unpaid advertisements, sponsorship announcements, community information or promotional material and station promotions.

Community Broadcasting Representation Guidelines

The *Community Broadcasting Representation Guidelines*, released in July 2008, outline the necessary level of performance broadcasters must meet to comply with their licence conditions.

The guidelines will help community broadcasters understand and comply with the requirements to encourage community participation and continue representing their community interest, raise community awareness about the ways in which individuals and community groups can enable community broadcasting services to continue to represent their community interests.

ACMA's analysis of 121 community broadcasting investigations between 2002-03 and 2006-07 revealed that over 20 per cent were for breaches of these licence conditions.

Internet Television and Video

IPTV (Internet Protocol Television) is the delivery of multimedia services over a managed IP network. In the communications industry, IPTV is often seen as 'Telco TV', a subscription television service offered by DSL-based telecommunication carriers.

In April 2008, ACMA released IPTV and Internet video services, which is the first in a series of reports on emerging business models.

The report focuses on:

- A discussion of IPTV and internet video services;
- drivers and barriers to IPTV and internet video services deployment and adoption;
- IPTV and internet video service providers' business models; and
- future directions of the IPTV and internet video industries.

Industry participants interviewed for the study believed that IPTV and internet video will become more common in Australia in the future. However, they disagree over the actual time frames for increased usage of this technology, with estimates ranging from 18 months to three years.

Internet video providers believed that capped plans for broadband access and the cost of downloads were important barriers to take-up and deployments. Providers also believed that the roll out of the National Broadband Network would be important to IPTV and internet video development.

The Internet Industry Association (IAA) has released a draft code of practice to provide community safeguards for content on converged devices. ACMA believes that the new IIA code reflects an emerging trend of international portability for content assessment systems and classification markings, which may have particular use in countries with similar classification schemes to Australia such as the United States, United Kingdom and New Zealand.

Review of children's television standards

The Children's Television Standards regulate children's television on commercial free-to-air services. ACMA is reviewing the Children's Television Standards (CTS) to ensure that children continue to be protected from the possible harmful effects of television and are specifically catered for in programming.

The CTS require commercial television licensees to broadcast a minimum number of hours of children's (C) and pre-school (P) classified programs each year. In order for programs to count towards these quotas, they must meet certain provisions outlined in the CTS, including the requirement for the programs to be classified by ACMA before

being broadcast and the requirement for programs to be shown within specified time bands. In addition, to requirements about programming, the CTS contain provisions relating to the broadcasting of advertisements during C and P broadcast times.

ACMA invited comments from the public in mid-2007 and released draft standards for public comment in August 2008, which were informed by the high number of submissions received, for public and industry comment. The proposed amendments seek to appropriately balance the needs of the child audience, the broader community and licensees. The issue of food advertising is particularly sensitive and has attracted a lot of public interest. The main issue of concern raised has been whether food advertising should be banned during children's programming on Australian free-to-air commercial television. In its draft Children's Television Standards, ACMA recommended (amongst other things): a restriction on the use of licensed characters, popular personalities and celebrities to promote and endorse food and other products in C periods; and that no general restrictions be imposed in relation to food and beverage advertising at this time. The closing date for comments is 17 October 2008. ACMA expects to finalise the new standards by early 2009.

Fixed-mobile convergence

In July 2008, ACMA released *Fixed-Mobile Convergence and Fixed-Mobile Substitution in Australia*. This report is part of its ongoing research into emerging technologies and services and follows the previous body of work on *IPTV and Internet Video in Australia*. This report provides an overview of the development of Fixed-Mobile Convergence (FMC) and Fixed-Mobile Substitution (FMS) in Australia and the implications of the emergence of these new types of services. It focuses on:

- an overview of FMC and FMS;
- FMC and FMS trends in Australia;
- influences on FMC and FMS development in Australia; and
- implications of these developments for Australia.

The report found that substitution of mobile services for fixed line is established and growing in Australia. However the prospects for convergence of fixed-line and mobile services into a single seamless service - apparent in some overseas markets - are low in the short term.

The development of fixed-mobile convergence and fixed-mobile substitution is being influenced by a variety of factors, including the increasing rate of fixed-line access decline, the mobile price premium, consumer attitudes to fixed and mobile services and the structure of the mobile industry.

Fixed-mobile convergence and fixed-mobile substitution development have a number of implications for the Australian communications environment. Most importantly for ACMA, as the technological and commercial boundaries between fixed and mobile services become more fluid over time, the regulatory delineations between the two will become increasingly problematic.

In addition, as more traffic moves onto mobile networks, new operators and services will emerge, more operators will be able to offer full voice and data services and products and services offered by operators are likely to become increasingly complex.

Spectrum Management

ACMA released two papers on the future of spectrum management in Australia, (*Spectrum Management Principles* and *Five year Spectrum Outlook*) at the *Radcomms*

08 conference which was held in Melbourne between 30 April and 2 May 2008. ACMA is currently analysing submissions in response to these papers.

Spectrum management principles

The spectrum management principles are intended to guide ACMA's management of spectrum within its existing legislative responsibilities and government policy settings. The principles outlined in the paper are as follows:

1. Allocate spectrum to the highest value use or uses;
2. enable and encourage users to move spectrum to its highest value use or uses;
3. use the least cost and least restrictive approach to achieving policy objectives;
4. balance certainty and flexibility; and
5. balance the cost of interference and the benefits of greater spectrum utilisation.

Five year Spectrum Outlook

In April 2008, ACMA released its draft five year plan on identifying and managing the increasing demands on spectrum in Australia from 2009 to 2014. This paper consolidates the fundamental issues affecting key radiocommunications services over the next five years, and outlines ACMA's preliminary thoughts on how to address the issues. It also includes ACMA's draft indicative spectrum management work programs.

ACMA has received 51 submissions from industry in response to the draft Five-year Spectrum Outlook. This feedback is hoped to facilitate dialogue between ACMA and key radiocommunications industry stakeholders, and the Outlook is expected to act as a tool through which ACMA provides transparency to its strategic thinking and policy formulation. ACMA expects to update the Outlook on an annual basis.

Independent review of Government spectrum holdings

ACMA commissioned this review which identified 30 recommendations for consideration. Three major areas identified in the review relate to:

1. increased transparency in the use of spectrum by government bodies;
2. the need for increased sharing of government spectrum; and
3. increased use of market approaches to improve the management of government spectrum.

These recommendations are consistent with ACMA's broader approach to spectrum management.

Future management of the 400 MHz spectrum band discussion paper

ACMA is seeking input on this discussion paper from stakeholders to assist in the development of future arrangements for the radiofrequency spectrum in the range of 403-520 MHz. The discussion paper seeks comment on the following areas:

- Options for improving technical efficiency in the use of the 400MHz band such as reducing channel bandwidths, reviewing preferred transmit/receive frequency separations increasing use of digital technologies and trunking systems and exploring opportunities for channel loading and sharing.
- Consideration of the allocation and licensing mechanisms used in the 400MHz band with the goal of improving allocative efficiency. This includes the possibility of increased use of market mechanisms to facilitate greater efficiencies in the 400 MHz band and class licensing or spectrum licensing arrangements in various part of the band.
- Consideration of new technologies and complementary uses of the band such as public cellular mobile telephone services particularly suited for deployment in regional and rural areas.

- Opportunities for the harmonisation of spectrum use by certain government agencies.

The discussion paper represents the initial public consultation what is likely to be an extended review process.

Radiocommunications Consultative Committee

As part of its ongoing work on spectrum management, ACMA has formed a Radiocommunications Consultative Committee. An early issue for consideration for the committee is a variation to Australia's Radiofrequency Spectrum Plan.

Australian Radiofrequency Spectrum Plan

ACMA is updating the Australian Radiofrequency Spectrum Plan to take account of the decisions agreed internationally at the International Telecommunication Union (ITU) World Radiocommunication Conference in 2007. The draft Spectrum Plan is intended to:

- Provide a basis for management of the radiofrequency spectrum in Australia;
- Inform radiocommunication users about the services allocated to each frequency band, and of any conditions attached to those allocations;
- Reflect Australia's treaty obligations as a member of the ITU;
- Provide details of international frequency allocations agreed by the ITU for the three world regions as contained in the ITU Radio Regulations.
- The changes made to the draft Spectrum Plan provide new spectrum opportunities for a number of operators, including international mobile telecommunication, space research activities and harmonisation between space and future terrestrial services.

New Amateur Radio Services Arrangements

ACMA has introduced several important reforms to the regulation of amateur radio services. These include a series of changes to amateur licence conditions and the introduction of a class licence to authorise amateurs visiting from overseas. ACMA will also delegate certain statutory functions and administrative services associated with amateur licensing to the Wireless Institute of Australia (WIA).

Amateur Radio Services

The changes to the amateur licence conditions will lift some restrictions on third-party communications and amateur access to public telecommunications networks. Amateurs will also be allowed greater freedom to operate during disasters in recognition of the valuable contribution amateurs make to the community during these times. Changes to the amateur licence conditions are provided for by the *Radiocommunications Licence Conditions (Amateur Licence) Amendment Determination 2008 (No.1)* and the *Radiocommunications (Qualified Operators) Amendment Determination 2008 (No.1)*. These instruments came into affect on 19 February 2008.

New class licence for overseas amateurs visiting Australia

ACMA has issued the *Radiocommunications (Overseas Amateurs Visiting Australia) Class Licence 2008* to authorise the operation of visiting amateur stations. This class licence came into affect on 14 February 2008. The Visiting Amateur Class Licence will substantially reflect the apparatus licensing arrangements currently applicable to visiting amateurs without the need to issue individual licences. The introduction of the class licence for visiting amateurs also forms the basis for Australia to participate in the European Conference of Postal and Telecommunications Administrations (CEPT) Recommendation T/R 61-01. Under this recommendation, Australian Advanced

amateurs can operate in CEPT countries for short periods of time without having to obtain a licence from a CEPT country.

Delegation and outsourcing arrangements

ACMA will delegate the issue of *Amateur Operator Certificates of Proficiency* to the WIA in addition to the examination services currently provided by the WIA. ACMA will also ask the WIA to make recommendations on the allocation of two-letter call signs. As the WIA is a not for profit organisation, it will be able to provide these services to the amateur radio community at a low cost.

RELEVANT WEBSITES

Department of Broadband, Communications and the Digital Economy (DBCDE):

www.dbcde.gov.au

Attorney-General's Department: *www.ag.gov.au/www/agd/agd.nsf/Page/e-commerce*

Australian Communications and Media Authority (ACMA): *www.acma.gov.au*

Australian Competition and Consumer Commission (ACCC): *www.accc.gov.au*

Australian Government Information Management Office (AGIMO): *www.agimo.gov.au*

Office of the Privacy Commissioner: *www.privacy.gov.au*

Do Not Call Register: *www.donotcall.gov.au*

Stay Smart Online: *www.staysmartonline.gov.au*

Telecommunications today: research report series:
www.acma.gov.au/WEB/STANDARD/pc=PC_9058

Tel: Info: *www.telinfo.gov.au* (includes specific information about telecommunications services and entitlements for people in regional Australia).

Universal Service Obligation: *www.dbcde.gov.au/uso*

Parliamentary Inquiry into International Mobile Roaming:
http://www.aph.gov.au/house/committee/coms/mobileroaming/index.htm