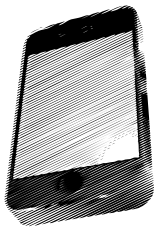
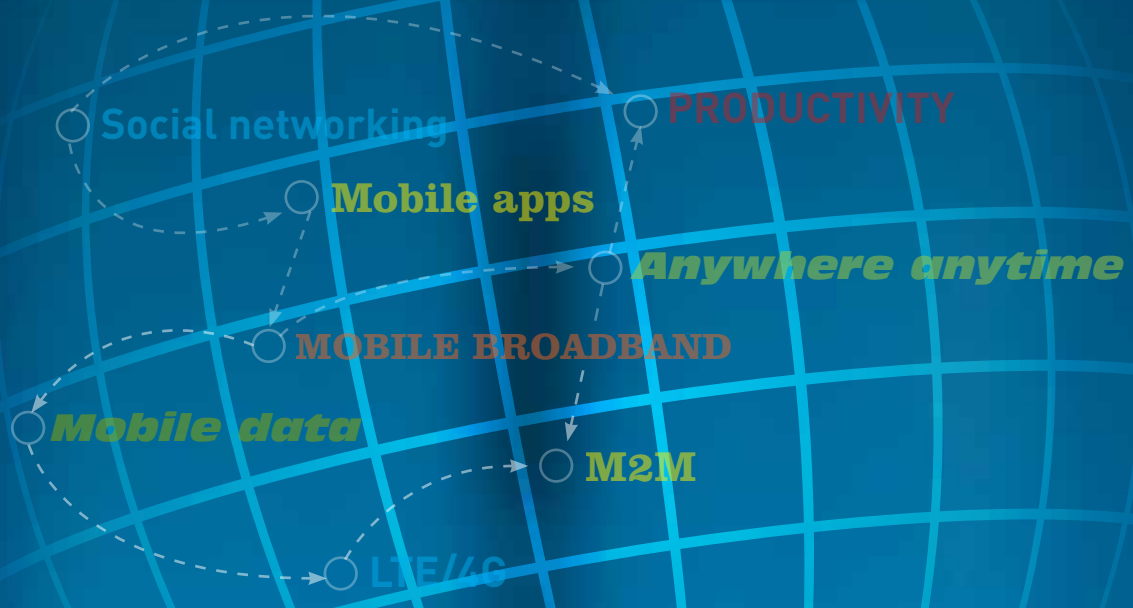


AUSTRALIAN MOBILE TELECOMMUNICATIONS ASSOCIATION

ANNUAL REPORT 2011



AMTA

AMTA Contacts

Membership

For information about AMTA or membership inquiries phone (02) 6239 6555 or see the website: www.amta.org.au

MobileMuster

To contact MobileMuster phone 1300 730 070 or email mobilemuster@amta.org.au. For more information about MobileMuster go to www.mobilemuster.com.au

Mobile Carriers Forum

To contact the Mobile Carriers Forum phone (03) 9684 3419 or see the website: www.mcf.amta.org.au

AMTA Members

Carriage Service Providers

Dodo Australia, gotalk, Lebara Mobile, Lycamobile, Optus, Tel. Pacific, Telstra, VHA Pty Ltd

Handset Manufacturers

LG Electronics Australia, HTC (Aust & NZ), Nokia Australia, Motorola Mobility Australia, Research in Motion, Samsung Australia, Sony Ericsson, ZTE Australia

Retailers

Mobile Network

Infrastructure Suppliers

Alcatel-Lucent Australia, Ericsson Australia, Huawei Technologies, Nokia Siemens Networks, Qualcomm International

Support Industries

Aeromobile, Crown Castle International, KPPR, Paradigm.one, RF Industries, Risk Insure, Urbis Pty Ltd

AMTA Vision

The Australian Mobile Telecommunications Association is the peak national body representing Australia's mobile telecommunications industry.

AMTA's vision is to promote an environmentally, socially and economically responsible, successful and sustainable mobile telecommunications industry in Australia.

AMTA aims to achieve its vision by:

- effective industry representation and leadership
- generating consensus on whole-of-industry issues
- improving the level of trust between the industry, related industries, key stakeholders and the wider community
- promoting an improved understanding of the mobile telecommunications industry and its contribution to the Australian community.

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CHAIR'S REPORT 2011

Henry Calvert (Chair, AMTA).

This year has been marked by the continued rise of mobile broadband and the smartphone in the Australian market, which a media outlet headlined: *"Australia's white hot smartphone revolution"*. This so-called revolution is being driven by new and competitive mobile broadband technologies, applications and services which will in turn drive productivity via the digital economy and meet the connectivity and mobile telecommunication needs of Australians.

Australia is a leading market in smartphone penetration in the world with local smartphone ownership predicted to grow to 60-plus per cent in the next 12 months along with an expected doubling in the volume of mobile data traffic. In particular, growth projections in the order of 280% to 2014 reflect the high demand for mobile broadband throughout the economy, according to Access Economics.

Consumers using their smartphones for mobile broadband access, emails, videos, social networking, online banking and shopping highlight the convergent era, which is not only revolutionising the way Australians go about their daily lives, but bringing about profound changes and challenges to market structures, business models and policy frameworks.

AMTA is strongly engaged on 'new era' challenges, opportunities and expectations arising from convergence and an evolving digital economy as well as maintaining necessary emphasis on 'mature' issues, such as health and safety and infrastructure deployment. For example, AMTA is working with the Federal Government's Convergence Review, which recognises that "regulations designed for an analogue era need review" may no longer be relevant for convergent industries, including mobile telecommunications.

We welcome the opportunity to participate in the Convergence Review which is exploring principles, frameworks and potential regulatory reforms that could be applied in our converging media and telecommunications environment. AMTA is particularly focusing on lifting legacy regulatory burdens and building a regulatory framework that provides encouragement and incentive for investment and innovation in infrastructure deployment and convergent technologies.

AMTA believes that the Review should be guided by some clear principles and policy parameters, which include:

- **Investment opportunity:** Industry investment is crucial in convergent industries and will be the key driver of developments in technologies, innovations, applications and services that will support Australia's access to the economic and social benefits of convergence.
- **Regulatory forbearance:** AMTA strongly prefers a policy framework based on the principle of regulatory forbearance and an evidence-based approach. Unless market failure can be shown to exist no presumptions should be made about the need for new regulation.
- **Removing regulatory burdens:** Identify legacy regulatory burdens that are impeding competition, innovation, efficiency, content diversity, consumer choices and market access.
- **Regulatory parity:** The current regulatory environment was devised when there were clear boundaries between platforms, such as broadcasting and telecommunications services. Regulatory parity should be the principle that underpins a new media and communications framework, while recognising the challenges of implementation and the need for a new regime that is flexible and adaptive to a fast-paced business model and technological changes.

Industry cannot meet the demand of consumers and businesses if the infrastructure that provides these services cannot be put in place to accommodate the growth in demand. For the mobile telecommunications industry this means there is a need for spectrum allocations together with increased deployment of network infrastructure.

This year AMTA welcomed the Australian Communications and Media Authority (ACMA) announcement in September of an auction model for the simultaneous sale of 700 MHz Digital Dividend and 2.5GHz spectrum. This was an important step, however, industry continues to look for timely provision of details given the timelines operators need to plan network and spectrum investments. Details, such as when spectrum will be made available for use and the size of auction lots, are critical for commercial investment decision-making processes.

Industry would benefit from a comprehensive spectrum roadmap and a clear sense of timing and interaction of policy processes, which are so influential on planning the mix of spectrum (new and current), technology and related network investments.

A Network Strategies report commissioned by AMTA last year estimated gross productivity benefits for mobile broadband over the period of 2012 to 2020 to be around $143 billion. Realisation of this potential is dependent on the delivery of new mobile spectrum ie, the entire Digital Dividend – 126MHz of the 700MHz band – as well as the intended re-allocation of the 2.5GHz band.

Members of the Mobile Carriers Forum (MCF), a division of AMTA that deals with the social, environmental, policy and regulatory issues related to the deployment and operation of mobile telecommunications networks, are investing significant resources in new and upgraded sites for mobile network infrastructure to cater for existing and future demand for services and, in particular, mobile broadband.

Projections suggest that by 2020 there will be almost 20 million mobile broadband subscriptions on handsets together with another 6.3 million data cards. The corresponding mobile data traffic volumes are forecast to increase at a compound annual growth rate of 95 per cent to 2014 (Network Strategies 2010).

To cater for this projected demand the mobile carriers are making significant investments in network infrastructure to

(L-R): Josh Delgado, Deputy Chair, AMTA; Senator Stephen Conroy, Minister for Broadband, Communications and the Digital Economy; Henry Calvert, Chair, AMTA.

cater for increased mobile data traffic arising from strong demand for mobile broadband. However, two Private Member Bills have been introduced into the Australian Parliament proposing to alter the regulation of processes necessary to deploy mobile networks (base stations and towers).

AMTA is working to respond to the concerns that have prompted the Bills in order to preserve the current regulatory settings, which have been refined since introduction in 1997 to promote the effective and efficient deployment of mobile network infrastructure. A key aspect of this response is the role and current review of the Deployment of Mobile Phone Network Industry Code, which has guided the carriers over the past five years in their community consultation and working with local councils in the provision of 10,000 upgraded or new network telecommunications facilities.

The Code review is under the guidance of Communications Alliance and is a strong example of co-regulation – a regulatory model that assists our industry to efficiently deploy mobile networks while balancing the needs of local communities and in turn meeting the community's demand for advanced mobile services.

On the environmental front, MobileMuster, the mobile telecommunication industry's official not-for-profit recycling scheme, is AMTA's biggest commitment to an environmentally sustainable industry, which minimises the

(L-R): Chris Chapman, Chairman, Australian Communications and Media Authority (ACMA); Chris Althaus, CEO, AMTA; Richard Bean, Deputy Chairman, ACMA; Josh Delgado, Deputy Chair, AMTA.

use of resources and maximises their recovery through product stewardship, including recycling. Fully funded by manufacturers and carriers, this voluntary scheme leads the way in electronic recycling in Australia and overseas, taking back all mobile phone components, including batteries and chargers.

In 2011, MobileMuster recycled its six millionth mobile phone. Since the program started in late 1998, MobileMuster has diverted nearly 850 tonnes of mobile phone handsets, batteries, chargers and accessories from potentially being dumped in landfill and recovered materials to make new items, such as fence posts, jewellery, batteries and stainless steel.

MobileMuster again partnered Landcare Australia to run the "Old Phones, More Trees" campaign, which plants a tree for every kilogram of mobiles sent in for recycling during defined periods during the year. Since the campaign started in 2007, the program has committed to plant 280,000 trees across Australia to restore native vegetation, protect endangered species and help improve the sustainability of key areas identified at risk.

This year, with the help of former world surfing champion, Layne Beachley, the program aimed to plant up to 25,000 trees to protect coastlines through dune restoration. MobileMuster also joined forces with The Alannah and Madeline Foundation to run the "Old Phones, Safe Kids" campaign to assist raise money for the Foundation's eSmart system in schools to deal with bullying and cybersafety.

2011 also saw the launch of a new environmental initiative from AMTA in the form of an Energy Efficiency Training Program. The online Energy Efficiency Training Program was established by the MCF in partnership with national climate change consultancy Energetics.

An MCF pilot was launched in June 2011 of Australia's first energy efficiency training program , which was specifically designed for employees within the mobile network industry to help reduce emissions and offset the rising costs of electricity and risk to energy supply.

Significant funding support to develop and implement the training program was received via a grant from the NSW Office of Environment and Heritage (OEH) through its Energy Efficiency Training Program. The project is supported by member network carriers: Optus, Telstra and Vodafone Hutchison Australia.

In summary, AMTA will continue to focus on 'new era' challenges, opportunities and expectations arising from convergence and an evolving digital economy as well as maintaining necessary emphasis on 'mature' issues such as health and safety and infrastructure deployment.

AMTA continues to develop strategic alliances in order to enhance influence and expand awareness of mobile telecommunication issues. Alliances will generally be issue specific and will include organisations within the industry, related industries, and key stakeholder groups.

2011 has featured AMTA programs focussing on the key trends and issues impacting on members and the mobile sector. In 2012, AMTA will continue to plan and implement programs addressing key economic, social and environmental issues relevant to mobile telecommunications in Australia.

Finally, I thank the AMTA Board for its engagement and support during the year. On behalf of the Board, I express our appreciation to Louise Sexton (VHA), who has stepped down after seven years of service. The Board welcomed Warwick Bray (Telstra), Chris Carr (Nokia) and Matthew Lobb (VHA) this year.

I acknowledge the professionalism of the AMTA team and thank them on behalf of the membership for their efforts and program results.

CEO'S REPORT 2011

Chris Althaus (CEO, AMTA).

Increasingly mobile telecommunications are at the centre of people's lives, providing mobility, connectivity and productivity benefits. Reflecting its growing impact and influence, mobile telecommunications is gravitating towards the centre of economic and social policy in Australia.

The profile and pervasive role of mobile telecommunications in Australian society continues to attract attention from governments. In response, and where appropriate, AMTA takes a leadership and/or co-ordinating role in representing the industry's / members' interests.

2011 has been dominated by convergence trends and the implications for industry, governments and consumers. Like all things new and popular there has been much scrutiny, analysis and conjecture on just how "convergence" is going to play out.

For the telecommunications sector, 2011 featured two standout issues:

- the commencement of our nation's largest ever infrastructure project – the National Broadband Network (NBN) – and all that it entails
- the unprecedented growth in mobile broadband, which continues to be the star performer in the sector

In relation to NBN, AMTA has consistently responded to questions of fixed to mobile substitution by emphasising the multi-faceted and complementary relationship envisaged between NBN and mobile networks.

For AMTA, 2011 as you would expect, has been dominated by mobile broadband and data, particularly the **infrastructure, investment and innovation** that is providing the platform for an ever richer mobile experience for the industry's customers.

Everywhere you look mobile networks, devices, applications and services have been evolving very rapidly, presenting new challenges and opportunities for industry, governments and consumers alike.

For example, in line with growth in demand for mobile broadband the uptake of smartphones and the related explosion of applications and services has been a high profile trend .

The global picture shows a strong growth outlook for smartphones and mobile applications as seen below in figures 1 and 2.

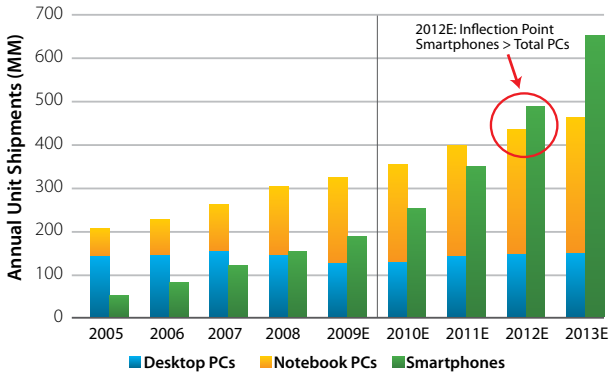


Figure 1: Global smartphone shipments to exceed PCs within 2 years. This implies very rapid evolution of internet access. Global unit shipments of desktop PCs plus Notebook PCs vs Smartphones, 2005–2013E.
Morgan Stanley. Note: Notebook PCs include Netbooks. Source: IDC, Gartner, Morgan Stanley Research estimates

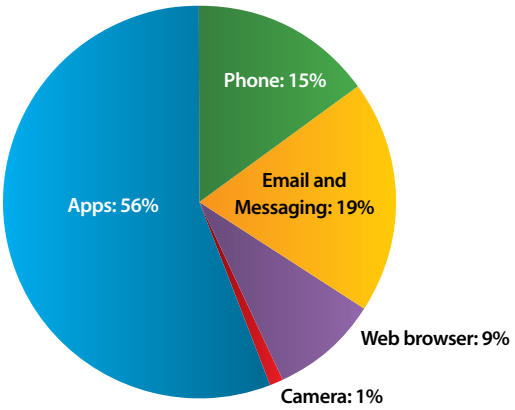


Figure 2: Average daily breakdown of activity on Android smartphones. Games are the most popular app category followed by weather, social networking, maps/navigation/search, music. *Source: Unweighted Metered Data from Smartphone Analytics*

> *Gartner research has forecast that mobile application stores' revenue having exceeded $USD5billion in 2010 will increase by over 1000% by 2014.*

Of course this translates into traffic growth as it is estimated that use of a typical smartphone will generate around 24 times more mobile data traffic than a traditional mobile phone. This reality is reflected in global mobile data traffic which is forecast to follow a similar trend line. See figures 3 and 4.

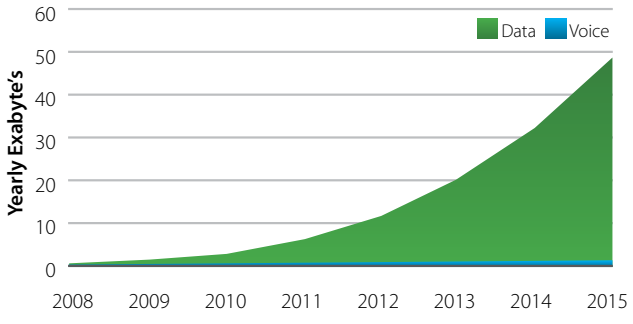


Figure 3: Global Mobile Traffic Projection. 70% of Mobile data traffic to be video related. *Source: Internal Ericsson, DVB-H, Mobile WiMax, M2M and WiFi traffic not included.*

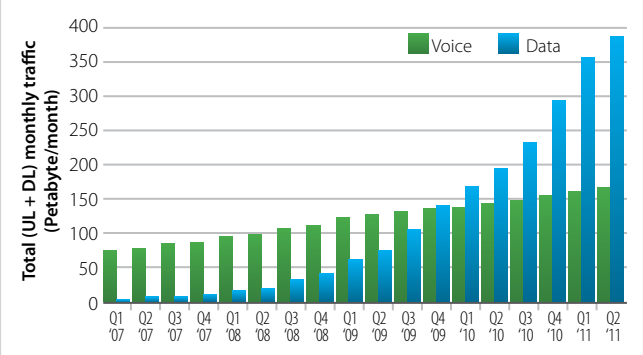


Figure 4: Mobile Data Traffic Growth. *Total monthly mobile voice and data as measured by Ericsson (Source: Ericsson)*

Clearly, mobile telecommunications services (telephony and data) is a significant and increasingly influential Australian industry as our digital economy evolves. For example:

- The industry's annual revenue, which was estimated to be $17.8 billion in 2008-09, represents the largest single share of telecommunications industry revenue at around 40%
- The total number of mobile services in operation (voice and data services) in Australia increased by seven per cent during 2009–10 to reach 25.99 million services at June 2010[1]
- This represents a penetration rate of around 116%, given a population of 22.3 million at the same time
- The net growth in mobile services was fuelled by a very significant surge in the numbers of mobile wireless broadband services (data-card/dongle connected to a computer), which increased by 71 per cent over the period to reach 3.46 million at June 2010[2]

However, it is the flow on impacts on productivity and connectivity throughout the economy and society (see figure 5) that really highlights the central role of the technology and the services it delivers. The ACMA notes:

> ***There is widespread recognition that mobile broadband services are an economic enabler within society and the provision of these services, technologies and applications in the wider community is in the public interest.[3]***

1 2010 Australian Communications and Media Authority's (ACMA) *"Communications Report 2009-10"*

2 2010 Australian Communications and Media Authority's (ACMA) "Communications Report 2009-10"

3 2011 ACMA *"Towards 2020—Future spectrum requirements for mobile broadband"*

There can be a temptation to see such a ubiquitous and pervasive shift in technology and services as threatening, given the rapid formation of a new paradigm. In such a situation the perspective of Government can easily translate into a need for greater control via regulation. The speed of change can also demand support via policy and regulatory reform as old settings lose relevance.

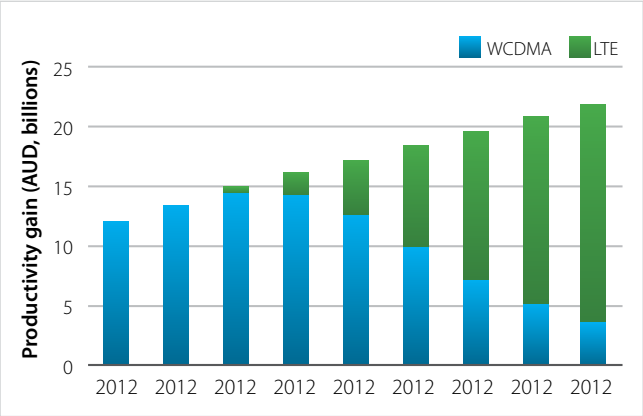


Figure 5: Estimated productivity benefit from mobile broadband Australia 2012–2020. *Source: Network Strategies*

Convergence Review

As the AMTA Chair has noted, AMTA is providing input to the Government's Convergence Review. At the outset the Review's terms of reference and framing discussions had a very strong regulatory theme which caused some concern. AMTA's submission noted the need for the Review to approach regulation by asking:

> "***do we need to regulate in this market?, rather than how should we regulate this market?***

This approach, based on principles of regulatory forbearance, was subsequently reflected in the Review's Emerging Issues Paper with a new principle added suggesting that:

> ***"where regulation is required, it should be the minimum need to advance a clear public purpose".***

The Emerging Issues Paper also amended the 8th principle to read:

> "*Principle 8: Australians should have access to the broadest range of content across platforms, services and* ***devices***".

This amendment to Principle 8 was made in recognition of the growing importance of mobile devices as points of control for content and applications.

Also included in the guiding principles for the Review is the principle that:

The government should seek to maximise the overall public benefit derived from the use of spectrum assigned for the delivery of media content and communications services.

Of course, radio-frequency spectrum is the most fundamental infrastructure for the mobile telecommunications industry and a major focus for AMTA.

New Mobile Spectrum Opportunities – Digital Dividend (700MHz) and 2.5GHz Bands

The demand for mobile broadband and projected growth in mobile data traffic is seeing a strong focus on mobile infrastructure, particularly spectrum and network capacity (see figure 6).

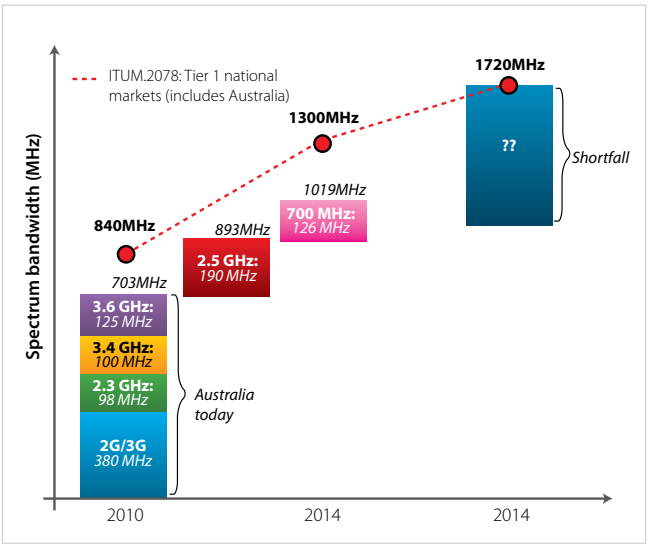


Figure 6: Spectrum demand forecast 2010-2020 - mobile broadband. *Source: ITU-R Report M. 2078 (2007) Demand Forecast 2010-2020*

> ***"Every day we are not freeing up spectrum for mobile broadband is another day we are not fulfilling our potential."*** *USA Federal Communications Commission Chairman, Julius Genachowski, March 16, 2011.*

During 2011, the ACMA released its assessment of the situation in a new paper entitled *"Towards 2020—Future spectrum requirements for mobile broadband"*, which considers a broad range of issues intended to meet the longer-term spectrum needs of the Australian mobile broadband industry and identifies the need for 150MHz of new spectrum for mobile broadband by 2015 and a further 150MHz by 2020 to meet consumer demand projections. The paper notes:

> *The expectation of end users for access to services exhibiting increased speed and data allowance puts pressure on network operators in meeting demand and leads to requests from operators for access to greater amounts of spectrum*[4].

Against this background, the ACMA formally announced plans to re-plan and market 700MHz and 2.5GHz spectrum. In line with AMTA's and members' views, the ACMA has released an Information Paper as the first formal step in preparing to re-allocate spectrum in the 700MHz and 2.5GHz bands. Central to this process is ACMA's intended timing. In short:

> For the specified frequencies in the 700 MHz band, the ACMA proposes to recommend a reallocation commencing on 2 November 2011 and ending on 31 December 2014.
>
> For the specified frequencies in the 2.5 GHz band, the ACMA proposes to recommend a reallocation commencing on 2 November 2011 and ending on:
>
> a) 31 January 2016 for the Perth area
>
> b) 30 September 2014 for the rest of Australia.
>
> The reallocation deadline must be at least 12 months before the end of the reallocation period.
>
> The proposed reallocation deadlines do not limit the ACMA's ability to conduct an auction earlier. If the minister elects to declare the 700 MHz and 2.5 GHz bands for reallocation, the ACMA intends to auction the spectrum as soon as possible.
>
> The ACMA proposes to recommend a reallocation deadline of 31 December 2013 for 700MHz and a single reallocation deadline of 30 September 2013 for 2.5GHz.

4 2011 ACMA *"Towards 2020—Future spectrum requirements for mobile broadband"*

The ACMA has also announced it will use a Combinatorial Clock Auction (CCA) format for the sale of digital dividend (700MHz) and 2.5GHz bands spectrum. The auction is scheduled for the second half of 2012.

AMTA responded to the announcement indicating publicly that it was a step in the right direction, however, industry had a pressing requirement for more details to gain confidence to start making major investment plans.

Emergency Services Organisations bid for 700MHz spectrum

AMTA this year had to fend off claims from the Police Federation of Australia for 20MHz of the Digital Dividend, which was allocated by the Australian Government last year for new uses such as advanced mobile telecommunications services, including mobile broadband. The Police and Emergency Service Organisations (ESOs) wanted the spectrum, which is being freed from the switch from analogue to digital television, to build a stand-alone ESO network.

The police claim would have destroyed much of the commercial value of the Digital Spectrum, severely limiting carriers' ability to build 4G networks to meet mobile broadband demand and result in slower speeds and reduced coverage, particularly in rural and regional areas. The police bid would have resulted in costly duplication of existing networks and isolated ESOs from the Asia-Pacific region because its emergency services spectrum would have been incompatible with neighbouring countries that use other bands of 806-824MHz and 851-869MHz for public protection and disaster relief.

A longer than expected debate regarding potential allocation of 20MHz of the Digital Dividend to ESOs consumed significant AMTA resources. The Government and the ACMA have now agreed not to consider a Digital Dividend allocation to ESOs, instead focussing on the 800MHz band as a possible ESO option.

In short, AMTA's proposition throughout this debate has been based on three key points:

1. A successful partnership already exists between ESOs and industry and should be further developed instead of building a new stand- alone emergency services network which would cost billions to build, maintain and operate; this is money that should be spent on providing services.

2. The productivity opportunities arising from allocation of the key digital dividend spectrum to commercial uses such as mobile broadband are wide-ranging and significant to the Australian economy and can include enhanced ESO services.

3. If a separate network is agreed to be essential for emergency services, there is ample appropriate spectrum separately identified by the International Telecommunications Union for Public Protection and Disaster Relief within the Asia-Pacific band plan.

Mobile Carriers Forum (MCF)

In 2011 the MCF - a division of AMTA - focussed on mobile network deployment issues in areas such as energy efficiency, planning and regulation, health and safety, design and innovation as well as further developing the national site archive and safety compliance scheme as an AMTA business unit.

Mobile Network Infrastructure Investment

The industry is investing significant resources in new and upgraded mobile network infrastructure to cater for existing and future demand for mobile telecommunication services, in particular mobile broadband (MBB). MBB is in high demand throughout the economy with growth projections in the order of 280% to 2014[5].

With the emergence of 4th Generation (or "LTE") technology, projections suggest that by 2020 there will be almost 20 million mobile broadband subscriptions on handsets, together with another 6.3 million data-cards (under a moderate growth scenario). The corresponding mobile traffic volumes are forecast to increase at a compound annual growth rate of 95% to 2014[6].

Improving Community Consultation

Since 2002, the Carriers have undertaken consultation for low-impact facilities in compliance with the Industry Code for Deployment of Mobile Phone Network Infrastructure (the Code). The Code is managed by Communications Alliance. Consultation for "non-Low Impact Facilities" or facilities requiring "Development Approval" is undertaken in accordance with Council requirements (see MCF page 21 for more details).

AMTA CEO Chris Althaus at this year's GSMA World Congress in Barcelona

The Code is currently being reviewed, as it is every five years, to ensure that it remains relevant and capable of guiding meaningful consultation with communities, stakeholders and local Councils.

Politics versus Policy

After three decades of successful network deployment activity throughout the nation and the last nine years guided by the industry code, two Private Members Bills were introduced separately into the Federal Parliament in mid-September, 2011, to amend Schedule 3 to the *Telecommunications Act 1997*. Schedule 3 sets out carriers' exemptions, powers and immunities in connection with access to land.

The mobile carriers and other providers of telecommunications infrastructure, including the NBN Co, rely on Schedule 3 and the exemptions in the Telecommunications (Low Impact Facilities) Determination to enable effective and efficient network deployment and maintenance.

On 14 September 2011, Tasmanian Senator Bob Brown of the Greens introduced a Private Senator's Bill, *Telecommunications Amendment (Mobile Phone Towers) Bill 2011* (Brown Bill).

On 19 September 2011, Mr Andrew Wilkie, Member for Denison (in Tasmania), introduced the *Telecommunications Amendment (Enhanced Community Consultation) Bill 2011* (Wilkie Bill).

5 Access Economics – 2010 Economic Contribution of Mobile Telecommunications in Australia

6 Network Strategies 2010 – The Future Deployment of Mobile Broadband Services 2.5GHz in Australia

Notably, in the 30 year period leading up to the introduction of these Bills the industry has deployed tens of thousands of sites to create networks that now support over 26 million mobile services in operation representing a market penetration of around 116%.

The mobile telecommunications industry is very concerned that highly prescriptive Private Members Bills will make it impossible to efficiently deploy vital national infrastructure to cater for huge consumer demand for services, such as mobile broadband, and will therefore result in reduced service levels for mobile phone users. If enacted, the Bills would also compromise the value of radio spectrum and future network investments. For more detail see page 21.

IARC Classifies Radio Frequency Electromagnetic Fields

In 2011, the International Agency for Research on Cancer (IARC), a division of the World Health Organisation (WHO), classified radio-frequency electromagnetic fields, including those emitted by mobile telecommunications devices and networks, in terms of the possible cancer risk. See page 30 for more details.

AMTA devoted significant resources to providing industry perspectives in relation to the IARC classification based on the fact that AMTA and its members rely fully on judgements of independent scientific expert organisations, such as the WHO and the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

Following the IARC classification, the WHO updated its fact sheet on mobile phones given the classification of the radio-frequency electromagnetic fields emitted from mobile phones, wireless devices, radio, television and radar as a "possible carcinogen". The fact sheet says:

> *"A large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. To date, no adverse health effects have been established as being caused by mobile phone use."*

AMTA and its members continue to promote the ongoing role for EME research internationally and locally via the National Health and Medical Research Council (NHMRC).

Reconnecting the Customer – an ACMA Inquiry

2011 saw the ACMA finalise a wide ranging inquiry into customer service and complaints handling in the telecommunications industry that commenced in April 2010.

Since the Inquiry began there has been widespread recognition by telecommunications service providers that performance relating to customer service and complaints handling across the sector needs to be improved and industry has taken steps towards ensuring those improvements are made. Indeed, significant investments in network infrastructure, upgraded customer service technology and systems and improved practices have been, and continue to be, made across the industry.

The Inquiry process will now be a significant point of reference for the revised Telecommunications Consumer Protections (TCP) Code being developed by Communications Alliance. For more details see page 16.

MobileMuster

As well as continuing to drive its own collections of mobile devices and accessories for recycling in 2011 (see page 23 for details), MobileMuster, the mobile phone industry's official recycling program, worked closely with the Australian Government on the development of a broader approach to e-waste. AMTA and MobileMuster welcomed the Government's Product Stewardship Act 2011 and associated regulation for the collection and recycling of old televisions and computers.

The legislation allows for three types of product stewardship schemes: voluntary accredited schemes (like MobileMuster); co-regulatory schemes (as proposed by the TV and computer industry); and mandatory schemes completely regulated by government.

Recycling can result in genuine environmental and energy savings. An integrated e-waste collection and recycling scheme, funded by industry, free to consumers and transparent to the community will ensure the objects of the new Product Stewardship Act are achieved. The Act aims to minimise the impact of products and the substances contained in them on the environment and human health throughout the products' lifecycle.

MobileMuster is one of Australia's longest-running, industry-led and funded product stewardship initiatives. It is a not-for-profit program paid for by mobile phone manufacturers and network carriers. It collects and recycles mobile phone handsets, batteries, chargers and accessories for free from a network of over 4,500 public drop off points and via Australia Post.

The creation of an integrated e-waste collection service for the community that is free, accessible and accepts all types of electronic products in addition to mobile phones, TVs and computers can deliver substantial environmental, economic and social benefits for the community, local government and industry.

As a first step to realising these benefits, MobileMuster has advised Government on the new e-waste law and will work closely with the TV and computer schemes to streamline collections and raise community awareness and participation.

Conclusion

AMTA continues to enjoy close and productive relationships with key stakeholders in governments and strategically relevant non-government organisations. My thanks for your engagement with AMTA in 2011.

AMTA has and will continue to be proactive in developing effective programs based on the needs of members. Above all, we will continue to work with members through the AMTA Board and committee structures.

In closing, I thank the Board and all AMTA committee members for their engagement, advice and commitment of time to AMTA in 2011. On behalf of the AMTA team, we look forward to continuing the journey with you in 2012.

Finally, the AMTA staff have achieved strong program outcomes in 2011. I acknowledge and thank them for their hard work and professionalism.

Panel discussion at the GSMA World Congress in Barcelona in March. (L-R): Stefan Zehle, CEO Coleago Ltd; Jasna Matic, Telecommunications Minister, Serbia; Mike Bryne, Commissioner ComReg, Ireland; Mony de Swaan, President Cofetel, Mexico; Hakan Eriksson, CTO Ericsson; Sunil Mittal, Chairman and Group CEO Bharti Enterprises; Chris Althaus, CEO AMTA.

AMTA POLICY PROGRAM

AMTA this year entered into a Memorandum of Understanding with the Korean Telecommunication Operators Association (KTOA) to foster increased co-operation. A signing ceremony was held at the Korea Australia New Zealand Broadband Summit 2011 in Hobart. The ceremony included, (L-R): Mr See Joong Choi, Chairman of the Korean Communications Commission; Mr Jeong Seon Seol, Vice-Chairman (CEO) of the KTOA; Mr Chris Althaus, CEO, AMTA; Senator Stephen Conroy, Minister for Broadband, Communications and the Digital Economy.

AMTA's Policy and Strategy Steering Committee (PSSC) works to identify policy issues affecting the mobile telecommunications industry and develop strategies to enable the industry to effectively respond to those issues.

The PSSC focuses on three broad areas:

- Social Responsibility
- Consumer protection, public awareness and education
- Infrastructure and Australia's digital economy

The PSSC strives for leadership in promoting policy settings that deliver:

1. Public trust and confidence in mobile services and related products
2. Robust consumer safeguards
3. Encouragement and support for ongoing innovation and investment in infrastructure
4. Legislation and regulations that do not impose overly prescriptive or unworkable burdens on industry

This year the PSSC and its various sub-committees have tackled issues relating to spectrum for mobile broadband, convergence, classification of content, cybercrime, cybersafety, regulation of prepaid mobile services and industry preparedness to respond to natural disasters and other emergencies.

Moving into 2012 the PSSC is also pro-actively considering the potential roll-out of mobile payments schemes and possible regulatory, operational and consumer issues that may be involved. Other new items on the PSSC's agenda are how the Government's proposed carbon price policy will impact on the mobile telecommunications industry as well as formulating a strategic response to the Government's newly announced Cyber White Paper.

Convergence Review

The Government announced its Convergence Review in December 2010 with the publication of broad- ranging terms of reference covering telecommunications and media convergence in Australia. The Review includes within its scope consideration of the appropriate processes to manage spectrum allocation.

The stated purpose of the review is to examine the operation of media and communications regulation in Australia and assess its effectiveness in achieving appropriate policy objectives for the convergent era. The review committee anticipates that significant regulatory reform will result.

The Convergence Review has the potential to dramatically impact the legislative and regulatory framework within which the telecommunications industry operates. The PSSC therefore decided to place a strategic response to the review at the top of this year's agenda.

The review process has resulted in the formulation of ten guiding principles by the review committee and the publication of an emerging issues paper and several detailed discussion papers.

The guiding principles are:

1. Citizens and organisations should be able to communicate freely, and where regulation is required, it should be the minimum needed to achieve a clear public purpose.

2. Australians should have access to and opportunities for participation in a diverse mix of services, voices, views and information.

3. The communications and media market should be innovative and competitive, while balancing outcomes in the interest of the Australian public.
4. Australians should have access to Australian content that reflects and contributes to the development of national and cultural identity.
5. Local and Australian content should be sourced from a dynamic domestic content production industry.
6. Australians should have access to news and information of relevance to their local communities, including locally-generated content.
7. Communications and media services available to Australians should reflect community standards and the views and expectations of the Australian public.
8. Australians should have access to the broadest possible range of content across platforms, services and devices.
9. Service providers should provide the maximum transparency for consumers regarding their services and how they are delivered.
10. The government should seek to maximise the overall public benefit derived from the use of spectrum assigned for the delivery of media content and communications services.

The topics covered by the detailed discussion papers are:

1. Media diversity, competition and market structure
2. Layering, licensing and regulation
3. Spectrum allocation and management
4. Australian and local content
5. Community standards

AMTA provided a comprehensive response to the discussion papers and the emerging issues paper at the end of October. AMTA's submission emphasised its preference for a single regulatory framework for the management and allocation of spectrum, including broadcasting spectrum.

AMTA has welcomed the opportunity to participate in the Convergence Review and the PSSC's submissions and representations to the review committee have consistently focussed on key issues, such as lifting existing regulatory burdens and building a regulatory framework that provides encouragement and incentive for investment in infrastructure and convergent technologies.

AMTA believes an investment-driven approach will promote an innovative and efficient converged telecommunications market in Australia.

The review committee expects to release its final report containing recommendations for possible regulatory reform in March 2012.

Social Responsibility

Law Enforcement and Emergency Services

Under the *Telecommunications Act 1997* and the *Telecommunications (Interception and Access) Act 1979* mobile telecommunications service providers have certain obligations associated with the provision of assistance to law enforcement and national security agencies. More generally, the industry has a responsibility to work with agencies and also emergency service organisations to assist them in their objective to safeguard and protect the community.

In early 2011, an Inquiry by the Senate Standing Committees on Environment and Communications, which was called in response to the spate of natural disasters experienced in Australia at the beginning of the year, dominated AMTA's focus in the area of emergency services. The Inquiry investigated *"the capacity of communication networks and emergency warning systems to deal with emergencies and natural disasters"*.

AMTA worked with Communications Alliance to respond to the Inquiry and appeared at a public hearing in August. AMTA's evidence emphasised the long-standing partnership that exists between telecommunications service providers and emergency service organisations as well as the capability and preparedness of telecommunications carriers to respond quickly in times of natural disasters or emergencies.

Emergency Triple Zero Calls and the NRS

Emergency service issues have remained high on the AMTA agenda. This year the PSSC has worked with Government and other stakeholders to examine how mobile users who are deaf or hearing impaired may be able to better access emergency services through the proposed trial of a text-based emergency services mobile application. The application would be trialled before being made available to mobile users, who would register with the National Relay Service (NRS).

Prepaid Mobile Services

The *Telecommunications (Service Provider Identity Checks for Prepaid Mobile Telecommunications Services) Determination 2000* (the Determination) requires prepaid mobile service providers (or their agents) to collect and verify identity information about the purchaser and/or user of the service. This information must be stored so that it can be retrieved upon receipt of a lawful request from a law enforcement or national security agency. Mobile service providers currently comply with the Determination by collecting and verifying purchaser identity information face-to-face at the point of sale using a paper-based system. For example, AMTA members use a specifically designed AMTA form.

Throughout 2011, AMTA has continued to participate in a Working Group (comprising representatives from the carriers, law enforcement and national security agencies, DBCDE and AGD) that was established to consider concerns about the effectiveness and cost of the existing regulatory arrangements, explore options and potentially recommend changes.

In June 2011, the Working Group put forward a proposal for change that was endorsed by the DBCDE/AGD/Industry Telecommunications Experts Group (an industry liaison group jointly chaired by AGD and DBCDE). The effect of the proposed changes to the Determination will be that a customer's evidence of identity information will be verified online or over the phone at the time of activation of the prepaid service. This will potentially make retail transactions more straightforward and private as purchasers will no longer have to provide evidence of identity information at the point of sale.

The proposal relies on the Government extending access to its Document Verification Service (DVS) to the mobile telecommunications industry to allow for online, real-time verification of customer identity information against trusted and reliable sources. Up until now, the DVS has only provided services to other Government agencies.

There is still much work to be done both by Government and industry before these proposed changes can be made to the Determination and AMTA will continue to be an active participant in the Working Group as we move into 2012.

Consumer Protection, Public Awareness and Education

Lifeline now a free call from mobiles

AMTA and Communications Alliance again teamed up to work with Government and Lifeline to ensure that all mobile users can call Lifeline's national crisis line (13 11 14) free of charge since July 2011. Lifeline provides telephone-based support for people who are in crisis and may be contemplating suicide.

Cybersafety and Cybercrime

The Joint Select Committee on Cyber-Safety was established in September 2010 and in June 2011 the Committee tabled in interim report entitled *"High-Wire Act: Cyber-Safety and the Young"*.

AMTA has since consulted with DBCDE in relation to several of the Committee's recommendations, including how AMTA can help promote the Government's Cybersafety Help Button.

In August, the Joint Select Committee also tabled a report into the *Cybercrime Legislation Amendment Bill 2011*. With cybercrime now proving to be more lucrative to criminals than the global illicit drug trade, AMTA's members are supportive of the aims of the Bill, which includes amendments to existing legislation that will allow Australia to accede to the Council of Europe Convention on Cybercrime (the Convention). The Convention is an international treaty aimed at fostering international co-operation in the fight against cybercrime, particularly crimes involving children.

AMTA members are generally supportive of the Bill's content, however, industry is very concerned that the implementation period (28 days) for compliance specified in the Bill is insufficient. AMTA and Communications Alliance are making representations for an appropriate amendment to the Bill that will ensure industry is able to meet its obligations under the proposed legislation in a timely fashion.

Classification of Mobile Content

Over the course of 2011, AMTA has participated in the Australian Law Reform Commission's (ALRC) review of Australia's National Classification scheme. With 37% of Australians now owning smartphones (and this predicted to rise beyond 50% in 2012) combined with the proliferation of mobile applications, issues relating to the regulation of content are catching the attention of the mobile telecommunications industry.

AMTA believes that consumer education and empowerment will need to play an important role in the area of content classification because of many practical constraints on regulating in this area.

The ALRC has published a set of draft principles formulated after an extensive public consultation process and published a discussion paper at the end of September that contains 43 proposals for reform on which it is seeking public input.

The PSSC has been pleased with the level of engagement with the ALRC and its responsiveness to industry's views and will make its response to the ALRC's discussion paper via a submission in November.

Accessibility

AMTA is committed to promoting accessibility to mobile services and devices for people living with disability.

AMTA continues to promote the Global Accessibility Reporting Initiative (GARI) database. The GARI database is an initiative of the Mobile Manufacturers Forum (MMF) that allows consumers worldwide to search for a mobile device that meets their accessibility requirements. AMTA has incorporated the GARI database into our website for the convenience of members and consumers. The database is currently undergoing its first revision and an improved version will be available soon on our website.

(L-R): Chris Althaus, CEO, AMTA; Simon Cohen, Telecommunications Industry Ombudsman; Roger Hawke, MD, Crown Castle International

AMTA also participated in the Government's *Review of access to telecommunications by people with disability, older Australians and people experiencing illness*. This review had a strong focus on the National Relay Service (NRS) that is currently provided by ACE and funded by a levy on eligible telecommunications carriers. The NRS is a government initiative that provides services to people who are deaf, hearing or speech impaired, allowing them to make and receive calls by various means.

AMTA and Communications Alliance made a joint submission to the review which advocated closer consultation with industry regarding the management of the NRS to potentially improve the efficiency of its operations. We also suggested that any consideration of expanding NRS services to include video calling should first consider available offerings regarding video calling services as this is an emerging market where technical developments are moving fast. Overall, the AMTA and Communications Alliance submission emphasised the many opportunities for accessibility that exist thanks to exciting new features built-in to many mainstream mobile devices now available and the virtual explosion of mobile applications, which allow for further personal customisation of devices.

AMTA has also worked with Government and other stakeholders in relation to the proposed launch of a text-based smartphone application that will allow smartphone users, who are deaf or hearing impaired, to access emergency services. Currently, NRS users can access text-based

(L-R): Garry Croker, DBCDE; Louise Sexton, Director, AMTA.

emergency services through 106 which is only available to TTY users and cannot be accessed by mobile callers or those using internet relay.

It is anticipated that the emergency smartphone application will initially be trialled on smartphones with android operating systems and users will complete a registration process with the NRS. This initiative stemmed from an investigation into providing text-based access to 106 from mobile phones and the investigation included examination of an option where mobile users would be able to send an SMS to 106. It is expected that following the trial of the smartphone application an SMS to 106 capability may also be trialled and made available for deaf and hearing impaired mobile customers who register with the NRS. In light of the continued trend towards smartphone use by Australians and the fact that SMS is a legacy technology, AMTA considers that it would be preferable to continue with the development and launch of a smartphone application without also implementing an SMS to 106 capability.

ACCAN Review

The Australian Communications Consumer Action Network (ACCAN) was established in 2009 by the Government as a peak body representing the interests of consumers in relation to telecommunications. ACCAN receives $2 million in funding from the Government, which it sources from carriers as part of their licence fees. The Government recently announced a review of ACCAN.

(L-R): Lisa Brown, AMTA; Peppi Wilson, AMTA; Dr Chris Doyle, Apex Economics, UK; Michelle Phillips, Optus.

AMTA believes that regular engagement, collaboration and co-operation between industry and consumers can provide the foundation for a socially and economically responsible mobile telecommunications industry in Australia. AMTA is therefore actively participating in the review process.

Reconnecting the Customer

In early September, the ACMA published the final report in its *Reconnecting the Customer Inquiry*. The Inquiry into customer service and complaints handling in the telecommunications industry commenced in April 2010 in reaction to an increase in complaints to the Telecommunications Industry Ombudsman (TIO). The Inquiry found that although consumers are generally happy with the quality and reliability of their telecommunications services and that industry is satisfactorily meeting consumer demand for faster services with more functionality and greater capacity, the evidence showed that complaint levels were high and seemed to be driven by poor levels of customer care.

AMTA believes that since the Inquiry began there has been widespread recognition by telecommunications service providers that performance relating to customer service and complaints handling across the sector needs to be improved and industry has taken steps towards ensuring those improvements are made. Indeed, significant investments in network infrastructure, upgraded customer service technology and systems and improved practices have been and continue to be made across the industry.

The ACMA's final report sets out five proposals for changes to the way in which telecommunications service providers deal with consumers:

1. Clearer pricing information in advertisements allowing consumers to more easily compare services
2. Improved and more consistent pre-sale information about plans
3. Comparisons between providers based on meaningful performance metrics
4. Tools for consumers to monitor usage and expenditure
5. Better complaints handling and management

The ACMA has also recommended changes be made to the TIO scheme.

Working in parallel to the ACMA's Inquiry, the telecommunications industry has been revising the Telecommunications Consumer Protections (TCP) Code under the auspices of the Communications Alliance and its established co-regulatory framework.

The ACMA has recognised the work already undertaken by industry in revising the TCP Code and has invited industry to incorporate its five proposals in the revised Code. It's anticipated that the revised TCP Code will be finalised by industry at the end of this year. The revised TCP code was released for public comment by Communications Alliance on 25 October. Once the Code is finalised the ACMA will then assess the revised Code and consider whether to make it a registered Code. The ACMA has said that it will carefully monitor industry's compliance with the revised Code (which will include its own compliance framework) and is keeping in reserve the option to regulate by means of industry rules if the Code is perceived to have any shortcomings.

It is AMTA's position that a vibrant and competitive market will be the key driver of new and innovative products and applications that will benefit all users. Delivering those products and applications with good customer service is the key to success in the marketplace and it is often isolated instances of individual poor conduct that generate adverse perceptions of the broader industry.

Infrastructure and digital economy

The PSSC has continued to run an active spectrum policy program throughout 2011, preparing several submissions and lobbying for the preservation of the Digital Dividend for mobile broadband. Details of AMTA's spectrum progam are included in the CEO's report.

The roll-out of the NBN and mobile broadband technologies in 2011 and 2012 will provide the platform for Australia to participate in the global digital economy. Australia has so far avoided the worst of the economic ills affecting Europe and the USA and it is hoped that a regulatory environment that encourages continued investment in infrastructure and innovation will allow the anticipated productivity benefits associated with mobile broadband to be fully realised.

MOBILE CARRIERS FORUM

The Mobile Carriers Forum deals with social, environmental, policy and regulatory issues related to the deployment and operation of mobile telecommunications networks in Australia.

The MCF, on behalf of its member Carriers - Telstra, Optus, and Vodafone Hutchison Australia - strives to create the best regulatory environment for the planning, building and operation of mobile telecommunications networks.

The rate of change in mobile network technology is rapid and these advances have continued to lead to staggering growth in the uptake of mobile broadband. Users accessing the internet via mobile broadband enabled laptops and handsets place enormous additional demand on mobile network infrastructure.

The MCF supports member carriers striving to respond to this demand in smartphone technology and has been involved in strategy planning to assist in the management of the deployment of new 'in-fill' base stations to carry the additional traffic.

This provides ongoing challenges for the industry. However, it's important to emphasise to the community and policy makers that reliable mobile services can only be maintained where facilities are located in reasonable proximity to the user. As mobile networks evolve and numbers of mobile devices in use increase, the industry needs to continually plan for growth, particularly in major metropolitan and CBD areas.

The MCF is structured to foster positive working relationships with local, state and federal governments along with other key community and industry stakeholders. Regional representatives of the MCF have been active in engaging with local and state government to address local issues throughout 2011.

Working with Government

Last year, the MCF welcomed the NSW Government's new strategic approach to planning for telecommunications facilities with the introduction of a new Telecommunications Code to ensure statewide consistency. Throughout 2011 the industry has continued to work with other state governments in an effort to provide regulatory consistency and certainty in the planning process in line with the MCF's objectives.

Matt Evans MCF and Phil Shorten from Energetics at Smart Power for Smart Telecom Networks Conference, Sydney, September 2011

To this end, the MCF and representatives from Telstra, Optus and VHA met with Paul Lucas, Deputy Premier, Attorney-General, Minister for Local Government and Special Minister of State for Queensland, in July.

The MCF sought a meeting with Mr Lucas to seek the inclusion of a Telecommunications Code within the Queensland Planning Provisions (QPP). Such a Code is of critical importance to the industry as it provides consistency across the State for securing development approval for network infrastructure from local Councils.

The MCF also made representations during 2011 to the newly elected State Government in Victoria to improve planning rules governing telecommunications infrastructure.

The MCF has made representations to the Premier and the Minister for Planning regarding the status of "A Code of Practice for Telecommunications Facilities in Victoria" which is a part of all Council Planning Schemes in Victoria. The Code has remained unchanged since its introduction in 1999 and does not adequately govern modern communications infrastructure required to be deployed by the carriers to meet future demand.

The MCF has highlighted to the State Government that in order to cater for demand for mobile broadband, the three mobile network carriers operate networks comprising telecommunications facilities on more than 3000 sites across Victoria. In addition to their existing networks they deploy and maintain many hundreds of new mobile network facilities across Victoria each year.

Chris Althaus at Smart Power for Smart Telecom Networks Conference, Sydney, September 2011

The MCF has strongly encouraged the Victorian Government to review the State Section of the Planning Scheme and a Code of Practice for Telecommunications Facilities in Victoria to ensure that infrastructure can be deployed to meet the needs of consumers in all parts of the State in a timely manner.

Network Energy Efficiency

In the mobile telecommunications industry, increasing network capacity and improving network coverage have resulted in an increase in energy use in the order of 10% per year.

Not only are Mobile Carriers facing costs associated with increased network energy usage, the cost of electricity is rising steeply. These drivers will ultimately lead to a greater focus on reducing energy consumption.

Although some increases in energy consumption will be unavoidable, by employing energy efficient technology and design, mobile carriers can service more subscribers with less energy, reducing emissions intensity and managing cost risk.

In response to the Industry's search for energy-efficient solutions, the Mobile Carriers Forum launched its pilot in 2011 of an online Energy Efficiency Training Program, which is the product of 12-months research and development.

The pilot is specifically designed for employees within the mobile network industry to help reduce emissions, offset the rising costs of electricity and reduce risk to energy supply.

It explores the key issues affecting energy-related business decisions in the mobile telecommunications industry and the business drivers that telecommunications companies are responding to around the world that demand energy efficiency be integrated into business decisions. Participants learn about the mechanisms that businesses are using in radio networks to measure and manage their energy use.

Although total energy consumption will continue to increase as the industry expands, the training will assist in employing energy-efficient technology and design so mobile carriers can service more subscribers with less energy, improving emissions intensity and managing cost risk.

Significant funding to develop and implement the training program has been granted by the NSW Office of Environment and Heritage (OEH) through its Energy Efficiency Training Program. The project is supported by member network carriers: Optus, Telstra and Vodafone Hutchison Australia.

The content and decision frameworks of the energy training modules are directed at key roles including project managers, design engineers and life-cycle managers to increase their awareness and knowledge around energy use.

The Program was launched at the 'Smart Power for Smart Telecom Networks' Conference in Sydney in September.

The conference, the first of its kind, brought together executives, senior management, and project managers from the telecommunications and infrastructure industries to highlight and discuss cost-effective renewable energy alternatives solutions.

The modules provide opportunities to reduce network energy, which translate into potential savings of millions of dollars a year and hundreds of thousands of tonnes of CO^2.

Working with Safety as a Priority

Safety is the number one priority for the MCF's mobile network carriers.

The MCF's ongoing use of AMTA's RF Safety Compliance Program enables management of health and safety regulations at mobile network facilities. AMTA maintains a database of all active mobile telecommunications facilities operated by Optus, Telstra and VHA. Known as the Radio Frequency National Site Archive (RFNSA), it is a key tool for carriers to manage and demonstrate compliance with Australia's Safety Standards at over 18,000 base station sites in Australia.

Of equal importance, it is an easily accessible resource for the general public that was set up in response to community calls for better information about mobile network facilities. Facilities can be searched by location and information about the specific site operation is available, including a copy of the compliance certificate.

During 2011 the public has downloaded more than 10,000 EME Environmental Reports from the RFNSA. An EME Environmental Report contains information about predicted levels of EME at a particular site and is described as a percentage of the mandatory regulations. In most cases the predicted levels are hundreds of times below the EME safety regulations. The community is also able to download a "Site Compliance Certificate" from the NSA, which is a certification of a mobile network facility's compliance with the safety regulations.

The RFNSA public database demonstrates the industry's commitment to providing easily accessible information about its facilities to the community.

The Industry also welcomes scrutiny from the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) in relation to compliance.

An annual Federal Government rolling audit has shown base station radio frequency (RF) emissions continue to meet Australia's safety standards.

A measurement program undertaken by ARPANSA has delivered results during 2011 that have again shown that Australia's telecommunications carriers are operating their antennas and base stations at levels well below the allowable limit.

This testing managed by the Government continues to show the significant margin of safety between the maximum power of a base station and Australia's safety standards.

ARPANSA Base Station Survey 2007- 2011

Better ways to engage with the community

The MCF continues to support the industry's efforts to execute best practice community consultation at new and upgraded network facilities.

The Code for Deployment of Mobile Phone Infrastructure is pivotal to the industry's engagement with the community. It outlines the steps telecommunications carriers must take when deciding the location and design of new mobile network facilities.

Statistics published in the Australian Communications and Media Authority's annual report 2010/11 show that overall the numbers of complaints about the industry's compliance with the consultation requirements found in the Code for Deployment of Mobile Phone Network Infrastructure remain very low.

Notwithstanding, the industry is continually improving the methods it uses to notify and consult with communities around Australia about new telecommunications base station facilities.

The Code is being reviewed to ensure that it remains relevant and capable of guiding meaningful consultation with communities, stakeholders and local Councils.

After eleven meetings during 2011, the Code Review Working Committee (which includes community representation and the ACMA) agreed through consensus to invite public comments on changes to the Draft Code. The Committee is working through these submissions and making further changes to the Code to improve consultation and community participation.

The Code process has allowed the industry to stay in touch with community attitudes and modify processes to address these where possible.

This process has been undermined by two Private Members Bills (the Brown and Wilkie Bills) introduced into the Federal Parliament. Both Bills would make it harder to deploy vital national infrastructure to cater for huge consumer demand for services, such as mobile broadband, and result in reduced service levels for mobile phone users.

The Brown and Wilkie Bills cut across community consultation on the revised deployment code to help ensure that communities are properly consulted on the placement of mobile base stations in local areas.

Both Bills would make it very difficult to deploy or upgrade networks and AMTA and the MCF are leading an industry response to this threat (see Chair's and CEO's Reports).

Working with Councils

An important part of the MCF stakeholder engagement program is ongoing proactive liaison with local government. With 560 Councils across Australia, the MCF and member carriers are kept busy liaising with this key stakeholder group. This includes: applying for development approval; consultation activities for "low-impact" facilities; securing tenure when carriers locate on Council land; educating the sector about compliance with Australia's safety standards; and responding to draft Council policies.

The key focus for the MCF is to encourage improvements in planning policies and practices in support of carriers' deployment activities.

The Council liaison program is facilitated through the MCF with strong support from its regional MCF carrier representatives in each State and its annual attendance at the Local Government Association Conference.

AMTA CEO Chris Althaus and the MCF Program Manager, Matt Evans, addressed the Municipal Association of Victoria (MAV) Chief Executive Officer Forum Dinner in Melbourne in May. This annual Forum covers important issues for local government and attracts 80% of Victoria's 79 Council Chief Executive Officers.

It provided an opportunity to access Council leaders and AMTA and the MCF spoke of the industry's priorities and the important relationship between the industry and local councils across Victoria. This includes the management of community consultation and the approval process for new mobile network towers and antennas as well as the social and economic benefits of the technology that are becoming increasingly important in local communities.

Chris Althaus provided an overview of the challenges faced by the industry with the rapid uptake in mobile broadband services, which underpins the need for more infrastructure, including towers, poles and antennas. Matt Evans spoke of

the MCF's work in developing processes with these local Councils to improve the siting and design of new mobile network facilities in local communities as well as efforts to speed up development approval.

Councils provide local knowledge which can be critical to the success of achieving development approval for mobile network infrastructure. The MCF and the Carriers rely on Councils to assist in providing feedback on the best locations for new towers in areas where we need to provide coverage.

The MCF also continues to engage directly with councils to improve mutual understanding of industry and council objectives relating to network deployment.

For example, in October, an MCF delegation met with the Mayor and elected representatives from the Burnie City Council. This Council is a major focus for infrastructure investment by the three Carriers with extensive community demand for mobile broadband services delivered over mobile networks.

Telstra, Optus and VHA have nine new facilities in the pipeline at Burnie, including new "greenfield" stand-alone towers and "co-location" of antennas on existing towers with some facilities about to commence construction and some in the early planning stages.

The Council and carriers were keen to work closely on planning and consultation so that the community understands the benefits of the network infrastructure and the community's input can be incorporated into carriers' selection of sites for towers.

Like most providers of essential infrastructure, the mobile network carriers are endeavouring to stay ahead of the population growth curve to meet increasing demand for mobile broadband infrastructure, including poles, towers and antennas.

The carriers have faced recent challenges in Burnie and across Tasmania. The aim of this meeting with Council was for both Council and the carriers to gain a better understanding of how we could work together in the consultation, planning, and assessment processes. It was a great way to improve mutual understanding of the issues.

Networked Australia

Mobile telecommunications continue to make a profoundly positive impact on the day-to-day lives of Australians. Many rely on coverage to be available anytime and anywhere. The Mobile Carriers Forum's "Networked Australia" series of articles, which highlight the importance of Australia's mobile telecommunications networks to the way we live, work and play was launched during 2011.

This series of short articles are aimed at informing the industry's community stakeholders of the essential link between mobile services that impact on daily lives and the physical network infrastructure required, particularly in built up areas including new poles, towers and antennas.

The articles complement the MCF's Fact Sheet series which provides a more detailed explanation of issues, including how mobile networks operate, health and safety, and other matters, including the need for "Infill Sites". Infill sites is a term used to describe areas where the use of mobile-enabled devices is increasing rapidly and where networks must continue to physically consolidate with new antennas to cater for increased network traffic.

The MCF will continue to expand the suite of case studies in Networked Australia during 2012.

MOBILEMUSTER

Australian Olympic champion swimmer, Grant Hackett, with two assistants helps collect old mobiles as part of the "Old Phones, Safe Kids" campaign to raise money for The Alannah and Madeline Foundation's eSmart program for schools to tackle cyberbullying.

MobileMuster is the official recycling program of the mobile phone industry. It is the Australian Mobile Telecommunications Association's primary commitment to an environmentally sustainable industry that minimises the impact of its products, and the substances contained in them, on the environment throughout their lifecycle.

The **primary goals** of MobileMuster are to:

- increase collections
- reduce disposal to landfill
- increase awareness
- offer free recycling to consumers and retailers

These goals are achieved by continually improving the **visibility, accessibility, transparency** and **sustainability** of the program.

The Schools Recycling Challenge, run by MobileMuster, provides schools and students with an opportunity to help the environment and earn some great rewards by simply rounding up, and handing in, old and unused mobile phones, batteries, chargers and accessories.

AMTA's voluntary product stewardship program has achieved many outcomes over the past five years including:

- increasing awareness from 46% to over 84%
- growing the collection rate of available mobiles from 18% to 50%
- decreasing disposal to landfill from 9% to less than 4%
- growing its public collection network to over 4,500 sites across Australia
- offering a free post back service using recycling satchels or postage paid mailing labels available at mobilemuster.com.au.

All of this ensures MobileMuster is well on its way to achieving most of its key performance indicators outlined in its 2008 to 2013 Statement of Commitment to Mobile Phone Recycling as shown in Table 1.

New Recycling Contract for 2011

In an effort to continually improve the collection and recycling processes of mobile phone components, AMTA reviewed and put out to tender its recycling and logistics contracts in late 2010.

As a result of this process, AMTA appointed a new recycler, TES-AMM Australia Pty Ltd replacing MRI and reappointing

Table 1: MobileMuster – Key Performance Indicators to 2013

Collections	Recycling	Consumer Behaviour	Industry Involvement
• Increase the annual collection rate of net imports to more than 20% , up from 5.5% • Increase the annual collection for discarded phones to over 65%, up from 17% • Diversify collection methods to include free postage paid recycling satchels and kerbside recycling	• Maintain diversion from landfill rate greater than 90% • Maintain the estimated recycling rate (i.e. materials recovered) greater than 75%	• Increase awareness to more than 85%, up from 75% • Decrease disposal to landfill to less than 2%, down from 4% • Decrease personal storage rate of 2 or more phones to less than 18%, down from 32%	• Maintain whole- of-industry participation greater than 90%

Infoactiv as logistics provider with a broader scope of responsibilities, including reporting and channel development.

Both contracts took effect from 1st June 2011. With the change in recyclers late in the year it was agreed that only the first 11 months of 2010-11 data i.e. from 1st July 2010 to the 31st May 2011 would be independently audited.

2010-11 Results

In a year where at least four commercially-based recycling/ refurbishment programs were launched and heavily promoted offering either cash for mobiles or raising funds for charities, MobileMuster continued to make steady progress against its key performance indicators as illustrated in Table 2.

Table 2: 2010-2011 MobileMuster Key Performance Indicators
(Definitions of Key Performance Indicators available at: www.mobilemuster.com.au/annual_collection_figures)

Key Performance Indicators	2010/11 Actual***	2010/11 Actual* (11 mths)	2009/10 Actual	2008/09 Actual	2007/08 Actual	2006/07 Actual	2005/06 Actual
Collections							
Mobile Phone Collections (tonnes)	*106*	*100 ✓*	*103 ✓*	*122 ✓*	*97 ✓*	*78*	*42*
*Annual Collection Rate, Discarded Phones***	*48%*	*52.3% ✓*	*50.6% ✓*	*35% ✓ (37.4%)*	*18.9% ✓ (24.1%)*	*18%*	*15%*
Annual Collection Rate, Net imports	*8.6%*	*8.9% ✓*	*7.9% ✓*	*7.8% ✓*	*5.5% ✓*	*5.3%*	*3%*
Estimated Number Handsets & Batteries	797,105	744,816	845,919	806,812	755,196	576,640	391,074
Reported Shipments	8.70 M	7.95 M	8.66 M	9.02 M	9.77 M	8.63 M	8.41 M
Exports (adjusted)	1.45 M	1.34 M	1.41 M	1.43 M	1.05 M	1.24 M	1.18 M
Net Imports (units)	7.25 M	6.61 M	7.63 M	7.90 M	8.87 M	7.39 M	7.23 M
Net Imports (estimated tonnes)	1,232	1,123	1,297	1,581	1,775	1,478	1,446
Recycling							
Diversion from Landfill	*100%*	*100%*	*100% ✓*	*> 90% ✓*	*> 90% ✓*	*> 90%*	*> 90%*
Recycling Rate (estimated material recovered)	*>75%*	*>75%*	*>75%*	*> 75%*	*> 75%*	*> 75%*	*> 75%*
Consumer Behaviour							
Personal Storage Rate (% users with 2 or more handsets at home)	*40%*	*40% ✓*	*38% ✓*	*32% ✓*	*32% ✓*	*36%*	*38%*
Disposal to Landfill Rate	*4%*	*4% ✓*	*3% ✓*	*2% ✓*	*4% ✓*	*5%*	*9%*
Awareness of Mobile Phone Recycling	*84%*	*84% ✓*	*79% ✓*	*79% ✓*	*75% ✓*	*69%*	*46%*
Industry Participation							
Manufacturers	*64%*	*63% ✓*	*72% ✓*	*78% ✓*	*85% ✓*	*> 90%*	*> 90%*
Mobile Network Carriers	*97%*	*97% ✓*	*100% ✓*	*> 95% ✓*	*> 95%# ✓*	*> 95%*	*> 95%*

* As at 31 May 2011 , *** Full 12 months 1 July 2010 to 30 June 2011, ✓ Externally audited, **The formula to calculate the annual collection rate of discarded phones was modified in 2009/10. The formula no longer includes an estimate of mobile phones discarded from storage due to the uncertainty in estimating this figure. The revised formula is described in the definitions section of the MobileMuster Annual Report 2010-11 at http://www.mobilemuster.com.au/annual_collection_figures. The updated formula has also been applied to the two previous year's results and the outcomes are shown in brackets below the original figure.

a) Indicates KPMG has provided limited assurance on the figures, go to MobileMuster Annual Report 2007-08 including KPMG Assurance Report at http://www.mobilemuster.com.au/annual_collection_figures

b) Indicates PwC has provided limited assurance on the figures, go to MobileMuster Annual Report 2008-09 including PwC Assurance Report and 2008-09 definitions http://www.mobilemuster.com.au/annual_collection_figures

c) Indicates PwC has provided limited assurance on the figures, go to MobileMuster Annual Report 2009-10 including PwC Assurance Report and 2009-10 definitions http://www.mobilemuster.com.au/annual_collection_figures

MobileMuster donated 1,000 ducks to families in Mozambique during the "old phones, more ducks" campaign last Christmas.

Collections and awareness increased from 79% to 84% as a result of MobileMuster's year round, cause-related marketing campaigns and the increased availability of recycling satchels in new mobile phone packs and satchels in national consumer magazines.

Collection rates of discarded mobiles dropped slightly from 50.6% to 48% and the disposal to landfill increased marginally from 3% to 4%.

The main challenge, however, continues to be peoples' desire to keep their old mobile phones with the percentage of people having two or more unused mobiles in storage growing from 38% to 40%. This represents an increase of around 3 million handsets in storage up from an estimated 16 million to 19 million unused mobiles stored in homes.

Collections

Consumers have two simple ways to recycle their unused mobiles and accessories.

They can either drop them off at any one of the 4,500 public collection points located around Australia, including mobile phone retailers: Telstra, Optus, Vodafone, Allphones, Fone Zone, Crazy Johns, Dick Smith, Network Communications and Leading Edge. Other participating retailers include Officeworks, Battery World, Cartridge World and Salvo stores as well as hundreds of local council libraries, administrative centres and transfer stations/recycling centres.

Or they can post them in using either a free postage paid recycling satchels, which are made available to consumers either via Australia Post outlets or in most new mobile phone packs. They are also included in major consumer magazines or consumers can download a postage-paid mailing label from mobilemuster.com.au.

Many people can also recycle their old mobiles and accessories at work, school or university thanks to more than 3,000 schools, businesses, state and federal government agencies and various other organisations hosting internal musters for their staff, students and clients.

Collections are also received from service centres and commercial refurbishment programs.

Collections by weight and by number increased in 2010-11 as illustrated in the bar charts below.

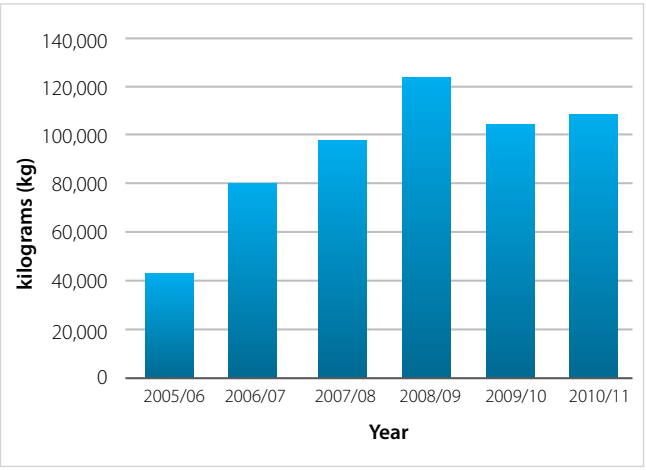


Figure 1: Total annual collections by weight (kg) - all mobile phone components

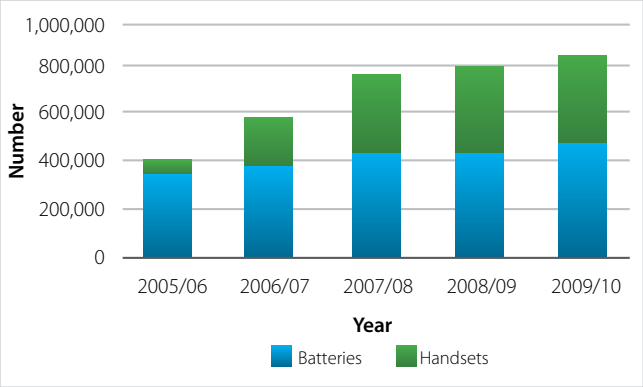


Figure 2: Total number of handsets and batteries collected

Other recycling and refurbishment programs operating in Australia have advised that 590 kg of mobile phone components have been recycled and 28 tonnes of mobile phones (i.e. over 220,000 handsets) have been sold offshore for reuse.

Recycling

Mobile phone components collected by MobileMuster are recycled to the highest environmental standards. No mobile phone is refurbished or sold for reuse, all components are recycled and the material recovered and used to make new products.

Up until the 31 May, MRI was contracted to undertake all mobile phone recycling. On June 1, TES-AMM Australia Pty Ltd took over the recycling contract.

The majority of the recycling process remains the same with all mobiles being sorted and dismantled into their component parts locally in Australia at the recycler's facilities in Melbourne or Sydney. Up until the 31 May 2011, all mobile phone batteries collected (i.e. Lithium Ion, NiCad and NiMH) had been sent to Kobar in South Korea for processing where nickel, cadmium, cobalt and lithum are recovered.

All Lithium Ion batteries received after June 1 are being sent to TES-AMM's recycling faclities in Singapore where nickel, cobalt and lithium will be recovered. NiCad and NiMH batteries continue to go to Kobar in South Korea for processing.

Circuit boards from the handsets, chargers and SIM cards up until late May were sent to Reco Metal in South Korea for precious metal recovery using a pyrometallurgical process (i.e smelting). Now they are being shipped to TES-AMM's recycling facility in Singapore where they will be processed using a hyrometallurgical process (i.e. chemical).

Accessories are now also being processed in Singapore, while any plastics or ferrous metals continue to be recycled locally in Australia with the plastics being used to make fence posts.

All mobile phone materials handled by MRI were diverted from landfill and it is estimated that over 90% of the materials in these mobiles has been recovered for reuse by third party recyclers like Reco Metal and Kobar in South Korea.

With over 106 tonnes of mobile phone components diverted from landfill, including 220 kgs of cadmium and 240kgs of lead from batteries, it is esimtated that over 6 tonnes of plastic, 2kgs of gold, 62kgs of silver, 1.3 tonnes of aluminium, 20 tonnes of steel, 4 tonnes of copper and over a half a tonne of cobalt have been recovered as raw materials to make new products. This is enough raw materials to make the equivalent of about 90,000 aluminium cans, 2,000 plus fence posts and more than 600 gold wedding rings, as well as batteries and stainless steel.

Consumer Behaviour

General consumer awareness of mobile phone recycling jumped to 84%[1]. However, many people are still hanging on to their old mobile phones. The most recent independent research on mobile phone behaviours[2] found that 83% of mobile phone users either keep or pass on their previous mobile phone with 40% of people having two or more unused mobile phones stored at home (up from 38%).

The desire to keep old mobile phones is a major barrier to increasing collection/recycling rates. The research findings suggest that most people keep their previous mobile phone as a spare or back up with more and more people saying it has information on it. This in part reflects the growing take up of smartphones.

To encourage consumers to recycle more, MobileMuster introduced two additional incentive-based marketing camipaigns this year: *"Old phones, more ducks"* in parthership

1 Independent online survey conducted in February 2011 by IPSOS on behalf of AMTA of 650 mobile phone users, aged between 16 and 64 years old randomly selected across Sydney, Melbourne, Adelaide and Perth.

with the Oxfam Unwrapped program to help people living in poverty; and *"Old phones, safe kids"* in partnership with The Alannah and Madeline Foundation to help keep kids safe from cyberbullying and to teach them to be eSmart.

MobileMuster's *"Old phones more trees"* campaigns in partnership with Landcare Australia (where a tree is planted for every kilogram of mobiles sent in for recycling MobileMuster) has recycled over 106 tonnes of mobile phone components and also planted 25,000 trees through Landcare and Coastcare groups. MobileMuster has given 1,000 ducks to families living in poverty in Mozambique through the Oxfam Unwrapped program and provided $20,000 to help disadvantaged schools across Australia become eSmart through the Alannah and Madeline Foundation.

Very few people dumped their mobiles in the rubbish, with fewer than 4% saying they threw out their previous mobile phone in the past 12 months[2].

Educating Youth

MobileMuster continues to engage and educate Australia's youth through its National Schools Recycling Challenge which now runs across the school year. The 2010 National Schools Recycling Challenge had 540 schools participate and they collected more than 2,300kgs of mobile phones for recycling. More than 220,000 students are estimated to have contributed to their schools' muster.

The challenge provides schools and students with an opportunity to help the environment, learn about the importance of recycling and also be rewarded for their efforts.

Top honours nationally went to Fulham North Primary School from Henley Beach in South Australia for the highest weight (kilograms) of mobiles collected in 2010. Mary Brooksbank School from Rosemeadow in New South Wales won the highest average weight (kilograms) of mobiles collected per student.

Each school received an environmental prize pack valued at $1,500 as well as a $750 tree and stationery pack courtesy of MobileMuster and Officeworks.

2 Independent online survey conducted in February 2011 by IPSOS on behalf of AMTA of 650 mobile phone users, aged between 16 and 64 years old randomly selected across Sydney, Melbourne, Adelaide and Perth.

Former world surfing champion Layne Beachley shows how many old mobiles are stored away in Australians' cupboards and drawers – 19 million. Ms Beachley was an ambassador for the "Old Phones, More Trees" campaign to assist restoring degraded coastline.

Daniel Coote from Fulham North Primary School was awarded the National Student Champion for round two and received a $250 family experience voucher for his fantastic efforts in collecting 435 handsets, the highest number of handsets collected by a student.

Working with Local Councils

Local councils are an important partner, working with MobileMuster to educate and encourage residents to recycle their old mobiles. To support councils further in this role and encourage the establishment of free e-waste collections for residents, MobileMuster launched its E-Waste Collection Grants for local councils in late 2010.

A total of $15,000 was given in grants to 17 councils to trial and run e-waste collections. Councils which received grants included: Knox City Council (VIC); Kiama Municipal Council (NSW); Ashfield Council (NSW); Mildura Rural City Council (VIC); Nillumbik Shire Council (VIC); Shire of Pingelly (WA); District Council of Grant (SA); City of Albany (WA); Boulia Shire Council; Shire of Murray (WA); Bayside City Council (VIC); Balonne Shire Council (QLD); South Gippsland Shire Council (VIC); Shire of Donnybrook-Balingup (SA); Hunters Hill Council (NSW); Serpentine-Jarrahdale Shire (WA).

MobileMuster also pays Councils (or their recycling contractor) $2.20 per kilogram for mobile phone components collected through a council e-waste collection service, as well as picking up and recycling all mobile phone components for free.

(L-R) Mayor Alison Pockley of the Indigo Shire in Victoria receives an award for tackling mobile phone e-waste from Harinder Sidhu at the MobileMuster Local Government Awards in Canberra.

In recent years several councils have developed innovative approaches to this issue (e.g. e-waste drop off days, providing households with free recycling satchels, using kerbside recycling bins).

In recognition of the ongoing efforts of over 300 local Councils across Australia in tackling mobile phone e-waste, MobileMuster presented five awards at the Australian Local Government Associations National General Assembly in June this year. The awards were initiated in 2007 to recognise the outstanding efforts by local councils in promoting and collecting mobile phones, batteries and accessories for recycling.

Over the past 12 months, local councils have helped MobileMuster to collect and recycle over 3,500 kilograms of mobile phones and accessories, including 28,000 handsets and batteries and over 1,800 kilograms of accessories.

The award winners in 2011 were:

- National Excellence – Indigo Council (VIC)
- Working With Schools – Lismore City Council (NSW)
- Best Promoter – Nillumbik Shire Council (VIC)
- Top Collector Per Capita – Shire of Bridgetown-Greenbushes (WA)
- Top Collector – Brisbane City Council (QLD)

Industry Involvement[3]

The majority of members of the mobile phone industry continue to actively support MobileMuster both financially and in-kind by promoting the program to their customers and staff online through sales material and in-store.

Handset manufacturers participating in the program are: Nokia, Samsung, LG Electronics, Sony Ericsson, Motorola Mobility Australia, HTC, Huawei and ZTE. Each of these manufacturers voluntarily pays an advance recycling levy of 30 cents per new handset shipped into Australia to fund MobileMuster.

Together they represent 64% of the mobile phone handset market in Australia, down from 73% in the previous year. This drop in market share can be attributed to the ongoing growth in smartphones.

Australia's three network carriers, Telstra, Optus, Vodafone Hutchison Australia, and reseller Virgin Mobile also continue to actively support the program, along with battery importer Force Technology.

Each of the carriers pays 12 cents per handset of their share of new handsets shipped into the country to fund MobileMuster. After-market battery importer Force Technology also contributes 10 cents per new mobile phone battery imported into Australia.

Mobile phone refurbishing

The profile of commercially-based mobile phone reuse programs in Australia, offering either cash or donations to charities as incentives to consumers to recycle their mobiles, continued to grow in 2010-11. These programs are funded by the resale of mobiles for reuse into secondary markets in Europe, Asia and Africa and some are also sold locally via e-bay.

MobileMuster does not refurbish and resell mobile phones as it considers the environmental, human health and quality control risks are greater than the potential environment and social benefits through reuse.

3 Industry participation is defined as the proportion of shipments for mobile phone handset manufacturers and revenue of mobile network carriers operating in the Australian mobile telecommunications market that contribute financially to the industry's mobile phone industry recycling program.

By recycling all mobiles collected through the program, MobileMuster tracks and traces the product through the recycling chain. This ensures all mobiles are processed to the highest environmental standards and that over 90% of the materials are recovered as raw materials to make new products in a safe and responsible manner. Similarly, it can ensure that any information on mobiles collected is destroyed through the recycling process.

AMTA recognises that refurbishment and reselling of used mobile phones is a legitimate global commercial activity that can extend the useful life of mobile phones, improving access to communications and providing social and economic benefits.

AMTA considers that refurbishment and reselling is only appropriate when it is conducted in a manner consistent with the UNEP Basel Convention Guideline[4] on the Refurbishment of Used Mobile Phones.

That is the repair and reconditioning of used mobile phones is done in an environmentally sound manner that will protect human health and where the mobile phones re-entering the market comply with applicable original equipment manufacturer technical performance standards and regulatory requirements.

To ensure the scrap from these reuse programs does not end up in Australian or overseas landfills, MobileMuster has established agreements with a number of the refurbishers to recycle their mobile phone scrap for free. In return, MobileMuster is encouraging each program to report annually on the number and weight of mobile phone units exported for resale so that a more complete picture of mobile phone reuse and recycling can be included in future AMTA annual reports.

4 UNEP Basel Convention, (2006) Guideline on the refurbishment of used mobile phones. Mobile Phone Partnership Initiative Project 1.1 – www.basel.int

HEALTH AND SAFETY

2011 has been a busy year for AMTA's Health and Safety Committee with major international and national reviews into key safety aspects of mobile telecommunications. The Committee planned and prepared for the major announcements to ensure that consumers had access to the scientific consensus, allowing them to make informed choices in their use of technology.

World Health Organisation/International Agency for Research on Cancer

The Health and Safety Committee engaged in year-long preparation for the release of the International Agency for Research on Cancer (IARC) classification of radio frequency electromagnetic fields, which are emitted by mobile phones, wireless devices, radio, television and radar.

IARC, which is part of the World Health Organisation (WHO), on May 31 released its classification of radio waves emitted from wireless devices as "possibly carcinogenic to humans (Group 2B)" based on an increased risk of glioma, a malignant type of brain cancer.

This was a challenging finding for our industry because of its potential to cause widespread concern and confusion among millions of users in Australia. AMTA provided briefing materials and worked with a range of stakeholders, including governments, regulatory agencies and community health groups, before and after the release to try and ensure the classification was placed in context and people did not jump to wrong conclusions that were not justified by IARC's finding.

AMTA responded on behalf of industry to the IARC classification with more than 20 media interviews in the 24-hour period following the release. AMTA emphasised that wireless equipment was designed, built and tested to comply with strict science-based safety standards that protected all users and IARC's finding was based on limited evidence of an association with cancer in humans.

The IARC classification of a "possible carcinogen" was based on an assessment of a possible cancer hazard or potential to cause cancer, however, it did not quantify the risk or likelihood of cancer. Importantly, risk may not be present at everyday levels of exposure to the agent being assessed.

AMTA also reiterated the fact that IARC found only the possibility of a link, not a proven one, between wireless devices and some forms of cancer.

L-R Dr Tom Dingus, a leading US driver safety expert, who was sponsored by AMTA to be the keynote speaker at the Australasian College of Road Safety conference in Melbourne with ACRS President, Lauchlan McIntosh

AMTA's approach included the production of materials showing how IARC's work fitted in to the overall research effort and timeline, the basis for the classifications and access to lists of the more than 900 agents that had been already evaluated. IARC has only ever classified one agent it has reviewed as a non-carcinogen.

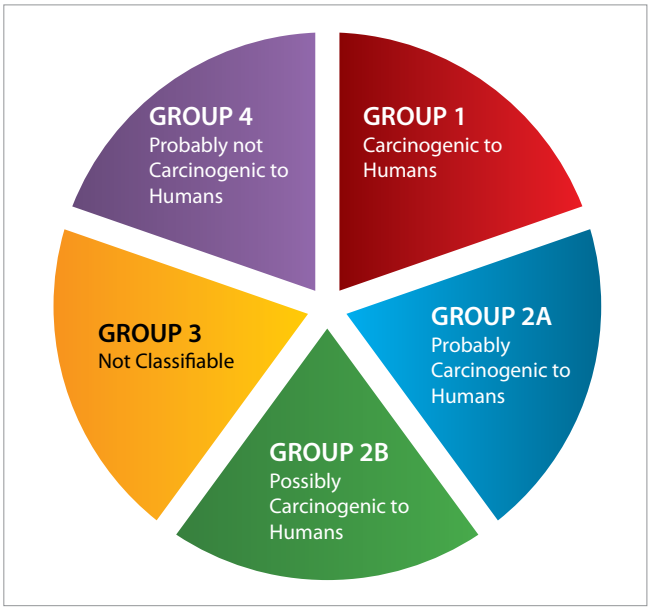
It was widely reported in the media that other agents classified in Group 2B (possibly carcinogenic) included coffee, occupational exposure to dry cleaning, pickled vegetables and diesel fuel.

AMTA does not claim to be a scientific expert and relies on judgements of independent bodies, such as the WHO and the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA). ARPANSA said the IARC classification "should not give rise to any alarm" and provided practical advice on how people could reduce their exposure to electromagnetic fields if they were concerned.

Following the IARC classification, WHO updated its fact sheet on mobile phones following this year's classification of EME emitted from mobile phones, wireless devices, radio, television and radar as a "possible carcinogen". The fact sheet says:

"A large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. To date, no adverse health effects have been established as being caused by mobile phone use."

AMTA is updating its public information on health and safety issues following the IARC and WHO announcements and stresses its support for ongoing well-conducted independent research to help clarify any uncertainty identified by the IARC evaluation.



The AMTA Health and Safety Committee produced this graphic to help explain the five groups used by the International Agency for Research on Cancer (IARC) to assess the strength of scientific evidence of a potential association with cancer in humans for a range of agents, mixtures and exposures.

Driving and mobile phones safety

AMTA provided a comprehensive submission to an Australian Transport Council (ATC) inquiry on road safety earlier this year. The *National Road Safety Strategy 2011-2020 sets* out an ambitious path for national action to reduce fatal and serious injury from road crashes.

The ATC, which is made up of road safety and police ministers from all states and territories, considered a wide range of road safety issues, including the risks associated with driving and mobile phone use. In a draft report issued late last year, the ATC called for consideration of bans on novice drivers, fleet drivers, truck and taxi drivers as a precursor to a "progressive ban" prohibiting all drivers from using mobile phones.

AMTA's submission made the following key points:

- a ban on mobiles runs the risk of being counterproductive because some drivers would continue to use mobiles by hiding them on their lap to flout the ban, making it more dangerous than drivers using a cradle as required under current laws.
- the latest scientific evidence from so-called "naturalistic" studies using sophisticated in-car cameras has found that listening and talking on a mobile is less risky than a range of other driving practices, such as handling a CD, eating or applying make-up.
- A more effective approach would be to target the clearly dangerous and illegal practice of texting and tell drivers how they can use their mobiles safely by delivering consistent messages, making them aware of what they can and cannot do. There is little official information to assist drivers, particularly about the use of cradles.

The office of the Federal Parliamentary Secretary for Infrastructure and Transport, Catherine King, asked AMTA what its members' views would be on a limited ban for some groups of drivers, such as truck drivers. AMTA lobbied key politicians, including state road safety ministers and their federal counterparts, to try and ensure a policy approach based on evidence and not driven by assertions unsupported by facts or a political imperative to be seen to be doing something about the road toll and unfairly targeting mobiles.

AMTA was concerned that calls for a so-called limited ban for some classes of drivers would be the thin edge of the wedge and could lead to a de facto ban on drivers' use of mobiles under the guise of occupational health and safety guidelines.

In the ATC's final report, State and Federal Ministers set an objective to eliminate illegal mobile phone use while driving by 2020. They pulled back from the draft Road Safety Strategy's consideration of a ban on fleet drivers, truck drivers and taxi drivers from using hands-free mobiles as part of a "progressive ban" whereby all drivers would be prohibited from using mobile phones.

Ministers identified the following actions related to drivers and mobile phone use over the next three years:

- Strengthen education and enforcement measures to improve compliance with current laws
- Promote the safety benefits of phone-off policies (including hands-free) with all fleet operators
- Examine the case for extending the coverage of novice driver prohibitions on mobile phone use (including hands-free) to include, for example, all P2 drivers or all young drivers under 26 years of age.

- Monitoring and assessing the evidence of driver distraction associated with mobile phones and other communication devices for identification of potential countermeasures (including for professional drivers).

Promoting informed discussion

AMTA hosted an international expert on driving distractions, Dr Tom Dingus, to Australia to be keynote speaker at the Australasian College of Road Safety conference in Melbourne on September 1-2.

Dr Dingus, Director of the Virginia Tech Transportation Institute, has pioneered a new way of studying driving distractions using in-car camera technology to give a more accurate assessment of risks involved in various driving tasks, such as mobile phone use. This contrasts with traditional methods of using driving simulators in laboratories, which do not replicate real-world driving conditions and can give misleading results.

Dr Dingus addressed senior traffic policemen, road traffic experts, academics, ministerial staffers, government regulatory officials and motoring organisations at the conference. He also met with the Federal Parliamentary Secretary for Transport, Catherine King, who has delegated authority to deal with road safety issues, and the Victorian Minister for Transport, Terry Mulder.

Dr Dingus also spoke at an AMTA Members Forum in Melbourne where he debunked some driving myths, including the oft-repeated police claim in Australia that talking on a mobile while driving is worse than drunk driving. He said his so-called "naturalistic" research using in-car cameras had shown that claims that talking on a mobile behind the wheel was substantially more dangerous than talking to a passenger were not true.

Dr Dingus' visit was organised by AMTA as part of its driving strategy to inform Australian traffic authorities, law makers and policy experts of his new research methodology to promote debate and assist regulators and governments to build a firm foundation for evidence-based policy approaches.

Monash University and the University of New South Wales are considering undertaking naturalistic studies in Australia, which we believe have the potential to inject more accurate information into the debate on mobile phones and driving in Australia.

Some of Dr Dingus' key findings include:

- Voice activated or single button push Bluetooth hands-free systems, which do not require drivers to take their eyes off the road, are the key to safer mobile phone use
- 10% of drivers create roughly 50% of the crash risk.
- Distraction and inattention are greatly underestimated as a cause of crashes.
- However, if you are awake and looking at something you almost never hit it.
- Teens are involved in crashes or near crashes while distracted four times more often than adults and this could lead to an epidemic if not addressed.

Research

AMTA met with the responsible Federal Minister, Mark Butler, and senior Government officials to restore industry-funded research on potential health impacts of electromagnetic energy (EME) from mobiles handsets and base stations. The research, administered by the National Health and Medical Research Council, lapsed because the research was not given sufficient weighting among competing bids for funds.

The NHMRC, the Federal Government's premier health body, allocates research funding derived from a research levy on annual licence fees paid by industry to the Australian Communications and Media Authority (ACMA). Over the past decade, the industry levy has delivered about $10 million for research and public awareness on EME issues.

The lower priority given to EME research resulted in no allocation of funding for ongoing research despite the industry levy being hypothecated and unable to be spent on anything else. Several million dollars of levy money accumulated in the NHMRC's account because of no allocations over the past two years.

AMTA engaged with Mr Butler, and the head of the NHMRC, Professor Warwick Anderson, to get the funding flowing for its designated research purpose.

The NHMRC has undertaken to ensure funds flow to research in the EME area and a new funding round was announced last month with the successful applicants to be announced in mid-2012.

AMTA Information Sheet

AMTA
Australian Mobile Telecommunications Association

International Agency for Research on Cancer (IARC) Classifications

Assessing Scientific Evidence

IARC uses five classifications to assess the strength of scientific evidence of a potential association with cancer in humans.

For each agent, specialist IARC working groups form an opinion by consensus on whether the scientific evidence is strong, sufficient or limited in any way. They also consider whether the evidence is adequate to come to a conclusion.

IARC does not consider 'risk' or likelihood of harm to humans. It only considers the strength of the scientific evidence for a cancer association. Importantly, risk may not be present at everyday levels of exposure to the agent being assessed.

Group 1 Carcinogenic to Humans	Group 2A Probably Carcinogenic to Humans	Group 2B Possibly Carcinogenic to Humans	Group 3 Not Classifiable	Group 4 Probably not Carcinogenic to Humans
Evidence that an agent is "proven" to be associated with human cancer	Limited evidence of an association with cancer in humans, but sufficient evidence of cancer in experimental animals	Limited evidence of an association with cancer in humans, but insufficient evidence of cancer in experimental animals	Evidence indicates that it is not possible to classify an agent based on the available information	Evidence to prove agent is "not associated" with human cancer
Examples **107 Agents including:** > Alcoholic Beverages > Asbestos (all forms) > Arsenic > Benzene > Formaldehyde > Ionizing Radiation (all types) > Painter (occupational exposure) > Sunlight (solar radiation) > Tobacco smoking, smoke and smokeless CLICK FOR FULL LIST	**Examples** **59 Agents including:** > Hairdresser or barber (occupational exposure) > Petroleum refining (occupational exposure) > Shiftwork that involves circadian disruption (disruption to normal sleep patterns) CLICK FOR FULL LIST	**Examples** **266 Agents including:** > Coffee (urinary bladder) > Diesel fuel, marine > Dry cleaning (occupational exposure) > Firefighter (occupational exposure) > Magnetic Fields (ELF) > Pickled vegetables > Styrene > Textile manufacturing industry (work in) CLICK FOR FULL LIST	**Examples** **508 Agents including:** > Acrylic acid > Chlorinated drinking water > Electric Fields (ELF) > Fluorescent lighting > Hair colouring products (personal use of) CLICK FOR FULL LIST	**Examples** **1 Agent:** > Caprolactam **Note** that Caprolactam is toxic and should not be considered as "safe" given this classification CLICK FOR FULL LIST

References:

Full list of agents classified by IARC - http://monographs.iarc.fr/ENG/Classification/index.php
IARC Information, Terms & Definitions - http://monographs.iarc.fr/ENG/Preamble/index.php
EMF Explained - http://www.emfexplained.info
Australian Mobile Telecommunications Association (AMTA) - http://www.amta.org.au

LOST AND STOLEN

AMTA's Lost and Stolen program highlighted during the year the need for mobile phone users to use their handsets' security features to protect personal information and data on their smartphones.

AMTA, on behalf of the industry, runs a world-leading program that protects mobile phone users by blocking their handsets across all Australian networks if they are reported lost or stolen. When blocked a handset is inoperable, preventing its misuse and minimising call costs to the owner.

The industry's anti-theft program works by detecting a mobile phone's electronic serial number, known as the International Mobile Equipment Identity (IMEI) number, then sharing this information with carriers to block handsets across all networks. This safeguard service is free to consumers.

The Lost and Stolen program has this year highlighted in the media and Snapshot the importance of consumers activating the PINs on their handsets to ensure they protect themselves against hackers and protect their confidential and personal data.

Smartphones contain huge amounts of personal information, including financial, contacts, video, confidential work-related information and social networking through web access. AMTA stressed the importance of setting a PIN, which must be entered before anyone can use it.

Mobile security issues gained prominent media attention this year following the United Kingdom hacking scandal and underscored the importance of consumers using PINs to protect their services allowing access to remote voice messages. AMTA told media organisations that leaving PINs on default settings left handsets vulnerable to hackers who could gain access to voice messages by using trial and error to guess the default PIN.

In the 12-month period from July 2010 until June 2011 there were 171,000 IMEI numbers blocked across all networks with 43,250 subsequently unblocked at the request of owners.

The net result of 127,750 is a 0.5 percentage point decrease in blocking activity compared to the same period in 2010-11.

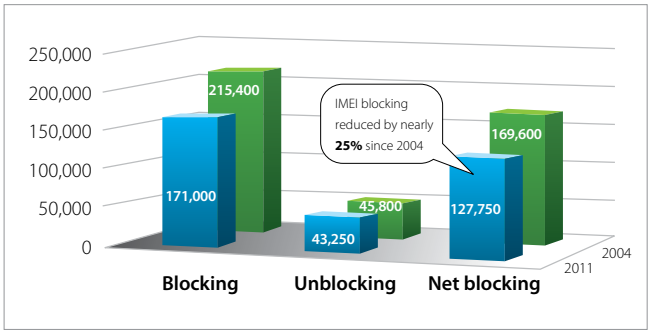
The Lost and Stolen program also warned buyers of second-hand smartphones to be aware of the risk of buying a handset that was inoperable because it had been reported lost or stolen by its original owner and had been blocked.

People buying handsets through second-hand channels, whether it be the internet, newspapers or second-hand shops, must be very careful they do not, unwittingly, end up with a mobile that does not work because it has had its IMEI number blocked.

Lost and Stolen advised buyers of second-hand mobiles to check their status at **www.lost.amta.org.au** by entering the mobile's IMEI number. It only provides details of phones reported lost or stolen at the time of the inquiry.

There can be a 72-hour lag between when a mobile is reported lost or stolen to the carrier and showing "blocked" on the website. All buyers of second-hand mobile phones should request proof of ownership at the time of purchase.

AMTA warns people that IMEI checks only provide details of those phones reported and blocked at the time of the inquiry.



Are thieves getting the message? AMTA's mobile phone statistics show a marked decline in net blocking activity over the past seven years despite a huge increase in the services in operation.

AMTA BOARD AND STAFF

AMTA Board of Directors

Chair Henry Calvert - Optus

Deputy Chair Josh Delgado - Samsung

Louise Sexton – VHA Pty Ltd *(Retired September, 2011)*

Matthew Lobb – VHA Pty Ltd *(Appointed September 2011)*

Richard Fink – Telstra *(Appointed November 2010, Retired March, 2011)*

Warwick Bray – Telstra *(Appointed March 2011)*

Brendan Park – Alcatel-Lucent

Emile Baak – Nokia *(Retired November, 2010)*

Chris Carr – Nokia *(Appointed March 2011)*

Sam Saba – Ericsson Australia

Timo Brouwer – Motorola Mobility Australia

Kalevi Kostiainen – Nokia Siemens Networks

Finance & Audit Committee

Louise Sexton *(Chair, retired September 2011)*

Sam Saba *(Chair from September 2011)*

Warwick Bray

Matthew Lobb *(appointed September 2011)*

Remuneration & Appointments Committee

Henry Calvert *(Chair)*

Josh Delgado

Brendan Park

AMTA Staff

Chief Executive Officer Chris Althaus

Manager, Business Development Glenn Brown

Manager, Communications Randal Markey

Manager, Office and Member Services Ann Wellsmore

Manager, Policy Lisa Brown

MobileMuster

Manager, Recycling Rose Read

Manager, Channel Operations Spyro Kolofotias

Channel Marketing Co-ordinator John Bain

Office/Program Co-ordinator Sophie Geraghty

Mobile Carriers Forum

Program Manager Matt Evans

Office Manager Helen Greenwood

Executive Assistant Rachel Mason

AMTA BOARD

(L-R): Sam Saba (Ericsson); Emile Baak (Nokia); Richard Fink (Telstra); Josh Delgado, Deputy Chair (Samsung); Kalevi Kostiainen (Nokia Siemens Networks); Timo Brouwer (Motorola Mobility Australia); Louise Sexton (VHA); Brendan Park (Alcatel-Lucent); Chris Althaus (AMTA).

Henry Calvert, Chair (Optus)

Chris Carr (Nokia)

Matthew Lobb (VHA)

Warwick Bray (Telstra)