

AUSTRALIAN MOBILE TELECOMMUNICATIONS ASSOCIATION

ANNUAL REPORT 2010







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Mobile Carriers Forum

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AMTA Members

Carriage Service Providers

AAPT Limited, Crazy John's, Dodo Australia, Lebara Mobile, gotalk, Optus, Telstra, VHA Pty Ltd, Virgin Mobile

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, Wizard Communications

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, Tel-Pacific, 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.

mobility productivity connectivity

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Chair's Report 2010



Henry Calvert (Chair, AMTA).

This year AMTA has continued to focus on a broad suite of programs targeting economic, social and environmental objectives with a particular emphasis on the building blocks needed to prepare for the next phase of industry growth in response to convergence and strong demand for mobile data services.

There is no doubting the popularity of mobile broadband which is making anytime anywhere internet access a reality and represents the latest extension of utility provided by mobile telecommunications in a converging market place.

AMTA, on behalf of its members, has worked with governments, regulators and other stakeholders to prepare the ground for the industry to meet forecast growth. Research suggests that the total number of mobile broadband subscribers will pass 50% of the population in 2012.

To meet this surging demand for mobile data and consumers' rapid uptake of smartphones, our industry requires certainty and confidence to proceed with major investment commitments. This in turn is predicated on the industry gaining timely access to sufficient new radiofrequency spectrum – the fundamental infrastructure of our industry.

AMTA has worked closely and co-operatively with the Federal Government, the Australian Communications and Media Authority (ACMA) and the Department of Broadband, Communications and the Digital Economy (DBCDE) to identify

new spectrum resources in appropriate bands to support the necessary network development, coverage and capacity to meet market expectations.

To this end, AMTA has led a strong and united industry effort to secure policy outcomes that have confirmed key new spectrum resources to be made available to the mobile sector. For example, the Government's announced policy to realize a digital dividend of 126MHz in the 700MHz band reflects the position recommended by AMTA and the industry. Similarly, AMTA welcomes the Government's intention to re-plan the 2.5GHz band in line with industry's recommended approach.

However, as we near the end of 2010, our industry is approaching a critical juncture when significant investment decisions will have to be made for the future. A sense of urgency is needed in the policy processes to ensure industry has a comprehensive spectrum roadmap to support the role of mobile telecommunications in Australia's domestic productivity and competitive position in an increasingly global digital economy. AMTA looks forward to working closely with the Government on timely spectrum policy outcomes.

As a key enabling technology in our digital economy, mobile telecommunications have become central to Australia's capacity to drive productivity gains and meet the connectivity needs of governments, services, businesses, communities, families and individuals.

Behind the economic success of the industry, innovation and services, there are customers who use mobile telecommunications as an integral part of their lifestyles and the way they interact with family, friends, work and the community.

Our industry is committed to customer service and is participating constructively in the ACMA's Inquiry "Reconnecting the Customer". Ours is a competitive industry that has delivered substantial price reductions over the past 10 years, however, with around 25 million mobile services in operation and a mobile penetration rate in excess of 105%, we acknowledge that at times our customer care performance has fallen short of expectations.

Convergence and technological advancement in the mobile sector, including the shift from traditional voice telephony to the rapid uptake of mobile data, multiple providers and networks, complex supply chains and the sheer number of new applications and services, have presented our industry with technical and customer service challenges. We are

committed to facing those challenges and improving our customer care.

AMTA remains committed to working co-operatively with all stakeholders and agencies to achieve balanced policy outcomes for consumers, industry and government. Our industry wants to ensure that the benefits of proposed policies outweigh the costs and we are not burdened with unnecessary regulatory overlap, duplication or complexity.

Mobile telecommunications is an innovative industry, which has a productivity-enabling role with increasingly diverse and pervasive flow-on benefits to the wider economy. It is important that our industry has practical laws and regulations that do not impose overly prescriptive and unworkable burdens on business in terms of regulatory impact or engagement costs, which impact on industry's efficiency and ultimately on costs to consumers.

AMTA's programs continue to span issues from core infrastructure to customer care. For example, the Mobile Carriers Forum (MCF), a division of AMTA deals with the social, environmental, policy and regulatory issues related to the deployment and operation of mobile telecommunications networks in Australia.

The MCF is working closely with a broad range of stakeholders on the 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 in this case, 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.

In 2010 the MCF welcomed the New South Wales Government's decision to take the lead on reforming its planning laws, which provide for fast-track delivery of telecommunications facilities, including new mobile network towers and antennas, as well as fixed broadband infrastructure associated with the National Broadband Network. The NSW government has acted to ensure these essential facilities can be rolled out efficiently and effectively while ensuring community safety and protection of the local environment.

This was a significant achievement for the MCF, which worked closely with the NSW Government to highlight

over many years the need for consistent planning rules across NSW's 152 councils. The new rules provide for greater investment certainty for the carriers and it is hoped they serve as a blueprint for other States.

On the environmental front, MobileMuster, the mobile telecommunication industry's official not-for-profit recycling scheme, is AMTA's largest single commitment to an environmentally sustainable industry, which minimises the use of resources and maximises their recovery through product stewardship, including recycling. Fully funded by



(L-R): Louise Sexton, Director, AMTA; Minister for Broadband, Communications and the Digital Economy, Senator Stephen Conroy; Henry Calvert, Chair, AMTA



(L-R) Denis Mullane, Telstra; Henry Calvert, Chair, AMTA



(L-R) Kalevi Kostiainen, Director, AMTA; Louise Sexton, Director, AMTA; Belinda Dennett, Minister Conroy's Office; Chris Althaus, CEO, AMTA

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 2010, MobileMuster reached the milestone of recycling its five millionth mobile phone. Since the program started in late 1998 MobileMuster has diverted more than 720 tonnes of mobile phone handsets, batteries, chargers and accessories from potentially being dumped in landfill and recovered the materials in these mobiles to make new items, such as fence posts, jewellery, batteries and stainless steel.

To encourage consumers to round up their old mobiles and "hand 'em in" for recycling, MobileMuster this year again partnered Landcare Australia to run the "Old Phones, More Trees" campaign, where a tree is planted for every kilogram of mobiles sent in for recycling during May and June. Over the four years this campaign has been running about 100,000 kilograms of mobiles and accessories have been recycled and 225,000 trees will have been planted across Australia to restore native vegetation, protect endangered species and help improve the sustainability of two of the nation's key food growing areas – the Murray River and Western Australia's central-eastern wheatbelt.

MobileMuster conducted research earlier this year that found people are still hoarding their old mobiles including unusable analogue phones that were up to 12 years old. The report, *Australia: A Nation of Hoarders*, says that there were between 14-16 million old, broken and unused mobiles stashed away in cupboards and drawers in homes and offices.



(L-R):Adele Beachley, Research In Motion; Kalevi Kostiainen, Director, AMTA; Roger Hawke, Crown Castle

The reports says many people keep their old mobiles believing they are valuable, however, MobileMuster enlisted the assistance of eBay to assess the market value of second-hand mobiles listed on its website. About 40 per cent of the mobiles listed on eBay were more than four years old and their average sale price was little more than \$20, with some struggling to find buyers. It is clear that obsolete and broken mobiles, or mobiles more than four vears old, are best recycled so the materials can be reused. This slows demand for natural resources, reduces energy use and reduces greenhouse gas emissions. If the more than 14 million mobiles stashed away around Australia were recycled the materials recovered could produce 3.2 million aluminium cans, 160,000 plastic fence posts and save enough greenhouse gases equivalent to taking 5,200 cars off the roads.

In closing, I thank the AMTA Board for their engagement and support during the year. In particular, I express the industry's appreciation to Jacqueline Hey (Ericsson) and Ross Fielding (Telstra) who resigned from the Board this year. We welcomed Kalevi Kostiainen (Nokia Siemens Networks) and Sam Saba (Ericsson) to the Board.

Finally, 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 2010



Chris Althaus (CEO, AMTA)

2010 will long be remembered for the dramatic turn of events in Federal politics, which led to Australia's first hung Parliament in 40 years and Australia's first female Prime Minister.

2010 will also be remembered, albeit with less media profile, as the next chapter in the rise and rise of mobile telecommunications as convergence and the influence of broadband, particularly mobile broadband, gained significant momentum.

New Polictical Paradigm

While the nation's political debate centred on the mechanics of the unprecedented 43rd Parliament, Broadband policy emerged from the shadows of a post 'GFC' mining boom to be a pivotal issue in the formation of a minority ALP Government with a margin of one vote in the House of Representatives.

With the balance of power in their keeping the newly anointed 'king maker', Independent Members of Parliament from regional Australia, defined their own agendas according to the needs of rural and regional communities.

History will show that Broadband policy contributed significantly to the decisions of key 'country' independents to support the formation of a Gillard ALP government.

This is an outcome widely regarded as contrary to their anticipated political allegiance and political heritage of their electorates.

Politics aside, the ability of Broadband access to provide all communities with opportunities to increase productivity and connectivity remains a compelling reality of modern society.

Mobile Data/Broadband Growth

While vigorous political debate focussed on the future design, structure and business plans of the ALP's National Broadband Network (NBN), mobile broadband products have continued to meet the market, providing an increasing range of applications and services which are in high demand Australia wide.

Actual mobile data/broadband statistics and forecasts keep signalling strong growth trends as the mobile sector continues to increase in size and influence, taking a leading role in Australia's evolving digital economy.

In 2009, growth trends were steady despite challenging global financial conditions. In 2010 Mobile Broadband continues to be a standout example of convergence, on track to meet or surpass the plethora of bullish forecasts from analysts, industry commentators, IT media and government agencies. For example, the latest Australian Bureau of Statistics (ABS) figures show that the number of new mobile wireless subscriptions grew by over 13 times the rate of DSL fixed line subscriptions. In the three months to June 30, 2010, the ABS reported growth of 21.7% in mobile wireless internet access while fixed line access grew by 1.6% in the same period.

Analyst group Ovum suggests that mobile broadband connections in Australia grew by over 80% in 2009 while global research shows mobile broadband subscriptions exceeded 400 million in 2010 (see Figure 1) as global mobile subscriptions grew to 5 billion in 2010.

The combination of network developments, the popularity of so-called smartphones and the explosion of mobile applications and services is fuelling amazing growth in mobile data. Add the increasing use of mobile technology in delivery of machine-to-machine (M2M) applications and it's easy to understand the 280% increase in global traffic in 2009 and the suggestion that mobile data traffic is forecast to double annually over the next 5 years (see Figure 2).

Economic Research

During 2010 AMTA commissioned economic modelling analyses to explore the extent of mobile data/broadband growth, the potential impacts on the Australian economy and the key drivers needed to support demand.

Australian Mobile Telecommunications Association

Australian Mobile Telecommunications Association

An AMTA-sponsored Access Economics report, *Economic Contribution of Mobile Telecommunications in Australia* (2010), found that the mobile telecommunications industry contributed \$17.4 billion to the Australian economy in 2008/09 with the rapid uptake of mobile data services, including mobile broadband, delivering productivity gains across the entire economy.

The report says that the key productivity-enabling role of mobile technology had a \$10.7 billion indirect flow-on to the wider economy in 2008-09 compared to the industry's direct economic impact of \$6.7 billion (see Figure 3).

The Access Economics report found the indirect contribution of \$10.7 billion to Gross Domestic Product (GDP) has grown significantly by \$3 billion, or nearly 40%, over the past two years as the result of rapid mobile data uptake driving big productivity gains to the Australian economy. The Access report says:

"Mobile data is an increasingly important component of the industry. Access Economics forecasts suggest that mobile broadband subscribers will grow significantly over the coming years with the total number of mobile broadband subscriptions passing 50% of the population size in 2012."

The smartphone is another key element of the growth trends with estimates that more than 60% of mobile devices sold in Australia will be smartphones by 2015. Given the trends in manufacturing this estimate could be conservative given the strong linkages between smartphone use and increasing data consumption.

Radiofrequency Spectrum

The other critical factor for the future of mobile broadband in Australia is the availability of radio-frequency spectrum – the most fundamental infrastructure of the mobile telecommunications industry.

In 2010 AMTA continued to promote industry's preferred policy outcomes as the Government considered options in three key areas of spectrum policy:

- · Renewal of 15-year spectrum licences
- · Allocation of a Digital Dividend (700MHz)
- Re-planning of 2.5GHz

The policy processes being undertaken in relation to these key issues remain active, however, in all three cases the Government has responded to inputs from AMTA and members in proposing policy approaches which align with industry's needs. For example:

 AMTA advocated the need for certainty and continuity in relation to renewal of 15-year spectrum licences and urged the Government to consider use of public interest criteria in its policy process. At an AMTA function on March 3rd, the Minister for Broaband, Communications and the Digital Economy, Senator Stephen Conroy, said:

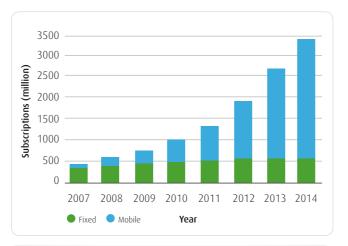


Figure 1: Global Mobile Broadband Subscription Growth.

Mobile BB from10% to 80% of the market. Mobile Broadband includes: CDMA2000 EV-DO, HSPA, LTE, Mobile WiMAX & TDSCDMA. It includes handsets, USB dongles, embedded modules etc.

The vast majority is handsets. Fixed broadband includes:

DSL, FTTX, Cable. Source: Ericsson modem

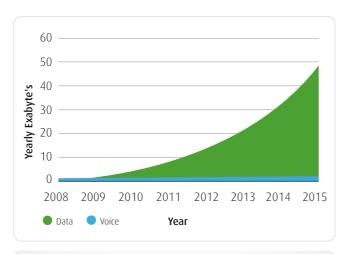


Figure 2: Global Mobile Traffic Projection. 70% of Mobile data traffic to be video related. DVB-H, Mobile WiMax, M2M and WiFi traffic not included. Source: Ericsson.

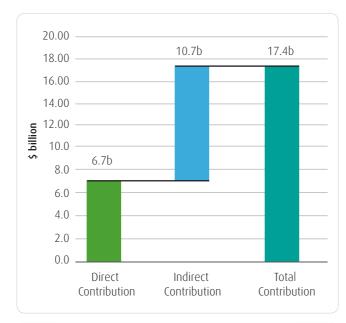


Figure 3: Economic Contribution of Mobile
Telecommunications 2010. Source: Access Economics 2010

"Spectrum licence renewal will be offered to those telecommunications incumbents who are already using their spectrum licences to provide services to significant numbers of Australian consumers, or who have in place networks capable of providing services to significant numbers of consumers, provided they also meet the public interest criteria."

AMTA undertook substantial research into the policy options for maximising the benefit to the Australian economy from the digital dividend. In January 2010 the Government identified an option of a 126MHz digital dividend in its Digital Dividend Green Paper.
 This option was subsequently confirmed as the Government's target dividend, an outcome which AMTA and industry strongly supported. In making this announcement, Senator Conroy, said:

"In its submission to the Digital Dividend green paper, the Australian Mobile Telecommunications Association (AMTA) indicated that Australia's economy could be boosted by up to \$10 billion if at least 120 megahertz of usable spectrum is unlocked from the digital dividend."

The second AMTA-commissioned research report in 2010 was undertaken by Network Strategies and examined the links between mobile broadband, productivity and the role of new spectrum in 700MHz (Digital Dividend) and 2.5GHz bands.

The report estimates gross productivity benefits for mobile broadband in Australia over the period 2013 to 2020 to be around \$143 billion (see Figure 4).

The network Strategies report notes that the realisation of this potential will require the availability of sufficient spectrum in appropriate bands to deliver both coverage and capacity for the addressable market.

It estimated that by 2020 there will be almost 20 million mobile broadband subscriptions on handsets together with another 6.3 million datacards (under a moderate growth scenario). The strong growth in mobile traffic would reach 1360 million Gigabytes by 2014 (see Figure 5).

The Network Strategies report also estimates the gross productivity benefits from the two new spectrum bands – a 700MHz/2.5GHz combination - to be in the region of \$62 billion over the period 2013 to 2020.

The report assumes the commercial launch of latest generation networks using Long-Term Evolution (LTE) technology over 2.5GHz occurs in 2013 with LTE over 700MHz available one year later in 2014.

It says a combination of high frequency (above 2GHz) and low frequency (below 1GHz) bands is viewed as the optimal solution for mobile network deployment with the low-frequency band providing coverage and the high-frequency band providing infill capacity.

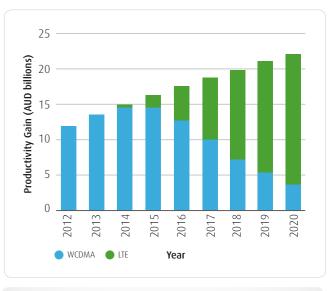


Figure 4: Estimated productivity benefit from mobile broadband Australia. Source: Network Strategies.

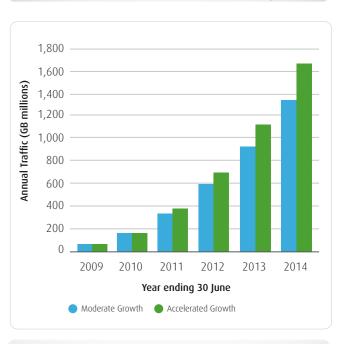


Figure 5: Mobile broadband annual traffic projections Australia 2009 to 2014. Source: Network Strategies.

The report adds that the timetable for the availability of spectrum in both the 2.5GHz and 700MHz bands is still uncertain, which may result in our assumed 2013 deployment for LTE being too optimistic.

However, delays in the commercial launch of LTE will place increasing pressure on capacity and increase costs as operators seek to implement strategies for managing expected traffic loads. This may have the effect of reductions in service quality and higher prices, which may constrain demand and usage and thus also the anticipated economic benefits.

The key conclusion reached by Network Strategies is that without sufficient spectrum in appropriate bands to deliver both coverage and capacity for the addressable market, Australians will not reap the full economic benefits of mobile broadband.



(L-R) Louise Sexton, Director, AMTA; Chris Chapman, Chair, ACMA

Spectrum policy will remain a key focus for AMTA in 2011 and beyond as the planning, allocation and delivery of this critical infrastructure will underpin the future growth of mobile broadband.

Interphone

2010 saw the publication of the long awaited INTERPHONE Report by the World Health Organisation (WHO). This landmark study examined the potential impact of mobile phone use on specific types of brain cancer. The findings of this 13 nation study reflected the overall body of scientific analysis that has accumulated in a range of countries over many years.

AMTA led the industry's response to this important and much anticipated report and reiterated the key findings to relevant Government agencies and media outlets.

In short, INTERPHONE found no increased risk of brain cancer with mobile phone use. The researchers conclude:

"Overall, no increase in risk of glioma or meningioma was observed with use of mobile phones. There were suggestions of an increased risk of glioma at the highest possible exposure levels, but biases and error prevent a causal interpretation. The possible effects of long-term heavy use of mobile phones require further investigation."

Dr Christopher Wild, Director of the International Agency for Research on Cancer (IARC) in announcing the INTERPHONE results said:

"An increased risk of brain cancer is not established from the data from interphone. However, observations at the highest level of cumulative mobile phone use since the period studied by interphone, particularly in young people, mean that further investigation of mobile phone use and brain cancer risk is merited."

AMTA will remain actively engaged on all health and safety issues related to mobile phone use.

Conclusion

Welcome to 2010: spectrum policy, federal election, strong demand and Interphone... it's all happening!

The first 2010 edition of AMTA's weekly e-newsletter "Snapshot" led with the above heading and flagged what was in store, and on reflection, 2010 has certainly delivered... and then some!

The team at AMTA has worked hard throughout 2010 to develop and implement programs in line with the Board's agreed three-year strategic plan. The diversity and complexity of issues facing the mobile sector continues to grow as this unique and pervasive technology embeds further into our lives and lifestyles.

The economic, social and environmental influence of mobile technology supports and is supported by Australia's growing digital economy. Governments recognise the potential of mobile telecommunications and are largely receptive to the policy needs of the industry, including the value of regulatory approaches that foster, not constrain new opportunities.

AMTA continues to enjoy close and productive relationships with key stakeholders in governments and strategically relevant non-government organisations.

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

I extend my thanks to the Board and all committee members for their advice and commitment of time to AMTA in 2010 and we look forward to continuing the journey with you in 2011.

Finally, the staff of AMTA has achieved strong program results in 2010 and I thank them for their hard work and commitment to delivering quality outcomes.

AMTA Policy Program

Policy and Strategy Committee

The guiding principles of the Policy and Strategy Steering Committee (PSSC) are to consolidate and advance AMTA's position as the leading advocate for policy and strategic issues affecting the mobile telecommunications industry.

AMTA, through the PSSC, strives for leadership in promoting policy and regulatory settings that deliver:

- 1. Public trust and confidence in mobile products and services.
- 2. Robust consumer safeguards, particularly to prevent young consumers from accessing inappropriate content, and provide consumers with clear cost information.
- 3. Encouragement and support for the ongoing vitality, growth and development of the mobile telecommunications industry.
- Practical laws and regulations that do not impose overly prescriptive and unworkable burdens on business in terms of regulatory impact or engagement costs, which are reflected in additional costs to consumers.

The PSSC does this by identifying current and expected whole-of-industry issues and developing strategies to enable the industry to proactively manage and respond to those issues.

Over the past year the PSSC has been busy tackling a diverse range of matters, covering three broad areas:

- i) Social responsibility
- ii) Consumer protection, public awareness and education
- iii) Infrastructure and digital economy

Social Responsibility

Law Enforcement and Emergency Services

Industry has a responsibility to work with law enforcement agencies to assist them in pursuing objectives to safeguard our community from security threats and help protect our citizens. It also has a responsibility to work with emergency service organisations to help identify operational improvements through the smart use of mobile technology.

AMTA achieves these objectives by working with key policy makers at various levels throughout Government. For law enforcement issues, this includes representation on the Australian Communication and Media Authority's (ACMA) Experts Group. The Experts Group's focus is to consider high level policy issues in the area of "lawful access and e-security". It comprises senior representatives from the ACMA, Attorney-Generals Department, DBCDE, AMTA, Communications Alliance, Internet Industry Association and industry.

Pre-paid issues

The Telecommunications (Service Provider Identity Checks for Prepaid Mobile Telecommunications Services) Determination 2000 (the Determination) requires the telecommunications industry or its agents to collect and verify identity information about the purchaser and/or user of pre-paid mobile phone services and to store and, on lawful request, retrieve this identity and address information.

In light of considerable concerns from all stakeholders about the effectiveness and cost of the regime, in 2009 the Experts Group agreed to review to:

- Clarify the objectives of the law enforcement agencies
- Identify concerns
- Explore options to meet Law Enforcement Agencies' (LEA) needs in a cost-effective manner.

A Working Group comprising representatives from AMTA, the Carriers, the AFP, ASIO, DBCDE and AGD was created to consider the issues and recommend options for moving forward. AMTA has devoted considerable time and effort to identifying the LEA requirements and considering how they can be reasonably met. It is likely that this work will continue into 2011.

Emergency Triple Zero Calls

Emergency service issues have been high on the AMTA agenda over the past year. AMTA has worked closely with its members, government and emergency service organisations to identify how the smart use of mobile technology can assist with emergency service response.

Measures to reduce non-genuine calls to Triple Zero

Under the auspices of AMTA, the Australian mobile telecommunications industry introduced measures to tackle the high level of non-genuine Triple Zero 000 calls. There are 12 million annual calls to Triple Zero of which 55 percent or 6.5 million are non-genuine or mis-dialled. This risks the lives of genuine callers in urgent need of assistance.

A package of measures was introduced, including the introduction of a short voice announcement at the beginning of every Triple Zero call, which reduced the number of non-genuine and mis-dialled calls by 25 percent or 3 million calls annually.

Other measures, which can involve the police, include procedures to warn repeat offenders who abuse Triple Zero that they face being barred from making calls to non-emergency numbers on all Australian networks.



(L-R) Dr Brendan Jones, Optus; Michelle Phillips, Optus; Sean Alexander, VHA

Exploring mobile location assistance for Triple Zero

In late 2009, after consultation with industry, the ACMA reported to its Authority on whether there was a justifiable, consistent mobile location solution for Australia's Emergency Call Service (ECS). It subsequently released a Consultation Paper (June 2010): Enhanced mobile location information for the Emergency Call Service.

The paper suggested that a 'pull' model for the provision of mobile location information to emergency service organisations; that is, where a caller's location was unclear or unknown - for example when a caller was incapable of informing the operator of their location – a location query would be triggered. Location information – where available - would then be provided to the emergency operators.

Initial discussions indicated that less than one percent of calls to Triple Zero would trigger a location guery and based on this, industry believed that such a solution was justified, with temporary exemptions where technical network limitations made the provision of such location information impossible.

It was clear by June 2010, however, that Emergency Service Organisation (ESO) requirements had changed since the original 2009 study.

AMTA and Communications Alliance therefore put forward a joint submission to the ACMA in July 2010, noting:

- · The ESO's increased desire and intention to use locationbased information in a broader set of scenarios compared to ACMA's original research findings.
- · Concerns that this planned use of location information had not been factored into the ACMA study findings and would have implications in deciding on the preferred solution for meeting ESO location information requirements.

The Associations concluded that the proposed 'pull' model may no longer be viable, noting that this option has a limited capacity (and scalability) to handle location requests and that exceeding 'pull' model thresholds would have the effect of delaying data delivery to Emergency Services.

The Associations instead suggested that it would be appropriate to explore the viability of a 'push' model, whereby some location information is provided for every call to Triple Zero.

The industry has invested considerable time and effort in exploring this option, with a view to understanding how location-based information could enhance ESO capabilities in a technically achievable, practical, consistent, reliable and timely fashion that meets both the ESO's immediate needs, and their longer-term requirements.

This scoping work is expected to continue until late 2010.

Jamming

AMTA has been actively engaged in discussions about mobile jamming devices in the past year with a clear focus on safety and technical interference issues.

Jamming prohibition

This has included providing a detailed submission to the ACMA in response to its public discussion paper, Review of the Mobile Phone Jammer Prohibition, in which AMTA expressed support for maintaining the Prohibition but updating it to accommodate frequencies used for other wireless access services. AMTA also stated its continued support for the consideration of any exemptions on a case-by-case basis. Discussions have been constructive and AMTA expects to provide further formal input as a new Prohibition is drafted.

Jamming in correctional institutions

AMTA members are working closely with the relevant authorities on a trial of jamming devices in a correctional institution. Industry's key interest is to ensure that the use of such devices does not adversely impact the general population, preventing, for example, mobile phone calls (including calls to triple zero) in surrounding areas.

In-flight mobiles

The ACMA recently announced its decision to allow jamming devices to be installed in aircraft, paving the way for in-flight mobile use. AMTA supported this decision.

Consumer Protection, Public Awareness and Education

AMTA has maintained an increased focus on consumer issues in 2009-2010. This has included policy input to various government inquiries or reviews and representation on consumer-focused committees.

AMTA also participates in the ACMA's Consumer Consultative Forum. The group, which comprises representatives from Government, industry groups and consumer bodies, considers a range of consumer issues, including mobile telecommunication issues.

Reconnecting the Customer Inquiry

AMTA and Communications Alliance are working together with members to respond to the ACMA's Reconnecting the Customer Inquiry. Industry is keen to improve its service and reputation and AMTA members have – and will continue – to make significant investments in upgraded customer service technology and systems, process improvement and compliance systems.

As part of the engagement with the ACMA on the Inquiry, AMTA and Communications Alliance provided a joint response to the Authority's Reconnecting the Customer Consultation Paper. Key points include:

- · Recognition that a tarnished reputation does not emerge entirely without reason and acknowledgement that, at times, industry's customer care performance has fallen short of expectations.
- · Rapid technological advances, convergence, increasingly complex supply chains and significantly increased customer numbers have presented the telecommunication industry with both technical and consumer management challenges. This has contributed to a rise in complaints in recent years.
- · Assurance that industry is working and will continue to work - to address the issues.
- Caution that responses must be proportionate, evidence-based and efficient.
- · Providing contextual information, noting that there are only a very small number of complaint issues relative to the number of subscribers; and ACMA's own research revealed that more consumers reported that their service provider had exceeded their expectations than had not met their expectations. Notwithstanding this, industry has acknowledged that there are problems in the area of customer management.
- Re-iterating industry's support for the Productivity Commission's 2009 recommendation that the ACMA and DBCDE conduct a comprehensive joint review of all customer information requirements with the aim of streamlining requirements.
- · Observing that current metrics and information available about the root cause of complaints are limited in their usefulness in actually helping industry understand and address the issue. Noting industry's intention to continue discussions with the Telecommunications Industry Ombudsman that aim to identify more relevant metrics that can better assist industry identify and address customer service issues.

- · Requesting discussions with industry, the TIO, the ACMA and other relevant stakeholders to identify individual issues and design effective, efficient and targeted solutions, noting that:
 - · if market failure is identified as the cause of a particular problem, a regulatory solution might be the appropriate outcome.
 - · self or co-regulation can also be considered, with industry, consumers and the regulator working cooperatively and constructively together to address identified issues.
- however, it is not possible to regulate for "good customer care". Prescriptive and poorly targeted "consumer protection" regulation will stifle industry dynamism and competition, reducing the industry's substantial contribution to the Australian economy.
- · Contending that it is inefficient, confusing and undesirable to consider introducing any further telecommunication-specific regulation. The telecommunications industry operates under a complex co-regulatory model with significant use of government delegated legislation, overlap and inconsistency between jurisdictional and agency responsibilities and numerous bodies responsible for developing policy without adequate reference to, or knowledge of, initiatives or regulatory responses being developed by other bodies or agencies. Convergence exacerbates the issues, creating situations where, for example, an application offered on one device is subject to different regulations to the same application offered on a different device.
- · Noting the 2011 Federal Government review of regulation in a Converged Digital Environment and suggesting that the ACMA considers the outcome of that review when analysing the issues raised in its Reconnecting the Customer Inquiry. Similarly, suggesting the ACMA should have regard for both the Communications Alliance Terms Conditions and Prices and Mobile Premium Services Code reviews as these address many of the issues raised by the ACMA in its Consultation Paper.

The Associations and their members intend to work constructively with the ACMA as the Reconnecting the *Customer Inquiry* progresses.

International Mobile Roaming

AMTA provided substantial input into the 2009 House of Representatives Inquiry into International Mobile Roaming (IMR) Services. The review concluded that the (high) price of IMR services reflected international wholesale prices and could not, therefore, be managed by any unilateral action by Australia.

An Australia-New Zealand discussion paper looking into trans-Tasman mobile roaming was jointly launched by the two Governments in 2010. AMTA and Communications Alliance jointly prepared a response, arguing that bilateral regulation was unjustified. The Associations also contended that there is transparency in the market but acknowledged that there is always room for improvement and have held discussions with AMTA's New Zealand equivalent, the Telecommunications Carriers Forum (TCF) to consider improvements. In the first instance, however, international roaming issues are being considered as part of the Communication Alliance's Terms, Prices and Conditions Code review (currently underway).

Location Based Services (LBS)

A number of location-based services (LBS) using mobile technology have been launched in recent years, with a proliferation of services appearing in recent months. These services take advantage of the pervasiveness of mobile devices and their unique ability to add location information to everything we do while mobile.

The accuracy of these location-based services varies considerably depending on the sophistication of the device (anything that is equipped with location abilities: a smartphone, laptop with wireless internet connection, Nintendo DS, etc), and the settings chosen by the user. However, theoretically these services can pinpoint the device's location to an accuracy of a few metres.

These services present exciting opportunities for consumers and business alike. However, while the benefits of LBS are expected to be substantial, the application of such services means that there is some potential for misuse.

AMTA is keen to ensure the potential for misuse is minimised. It has, therefore, developed a two-pronged approach for the responsible delivery of services to help ensure that customer privacy and safety issues are adequately safeguarded and that public trust and confidence in mobile services is maintained in Australia. First, it has developed Guidelines aimed at LBS service providers. Secondly, it has produced etiquette and safety tips for mobile social media and LBS users.

LBS Guidelines

The Guideline's main focus is consumer safety, primarily to minimise the risk of individuals being located either without their knowledge or against their will. The Guidelines are designed to provide advice to Location Service Providers (LSPs) about the consumer protection measures they should implement when offering location-based services and provide a framework to assist LSPs assess and manage the risk that the services will be misused.

The Guidelines are underpinned by the following principles: Passive location-based services:

- must be consent-based
- must conform with all relevant privacy legislation
- must not be used to undermine customer privacy and, in particular, must not be used for any form of unauthorised surveillance
- must allow locatees to maintain full control over who may use their location information and at what times
- must ensure that prospective locators are aware of, and actively accept, any relevant Terms and Conditions
- must be supported by clear advice to consumers to ensure that they are clearly informed about how the LBS operates and how to use it. This includes:
 - key safety messages and privacy information
 - provision of standard and ongoing charge rates for each particular service, as applicable
 - details about customer care/how to obtain further assistance.

Consumer Tips

The consumer tips provide general safety, etiquette and privacy advice for all users of social networking sites. It also includes advice specifically about using location-based services, complete with links to further information. They are available on AMTA's website.

The release of such comprehensive Guidelines represents considerable effort over the course of a few years. It is also significant internationally; AMTA understands that the GSMA¹ has been looking at the issues for some time but has, to date, been unable to agree on principles/guidelines. This illustrates the complexity of the topic. The CTIA² has only very recently released its own guidelines which are less comprehensive than AMTA's, but with similar principles.

Infrastructure and digital economy

The latest generation of fixed and mobile broadband technologies provide the platform for Australia to participate in the global digital economy. Fixed and mobile broadband are complementary services and both require critical infrastructure to meet the nation's demand for broadband services. For mobile broadband fundamental infrastructure is radio-frequency spectrum, for fixed broadband the future is optical fibre.

The PSSC has continued to run an active spectrum policy program, preparing numerous submissions, policy positions and reports. For further details of AMTA's spectrum program, see page 6.

- 1 http://www.gsmworld.com/about-us/index.htm
- 2 http://www.ctia.org/



Mobile Carriers Forum Annual Report

The Mobile Carriers Forum (MCF), a division of AMTA, 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.

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 rate of change in mobile network technology is rapid and these advances have led 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 networks. The MCF supports carriers striving to respond to this demand in smart phone 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 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 are active in engaging with local and state government to address local issues and work together within local and state planning frameworks. Opportunities for improvements in those frameworks have been identified and progressed during 2010.

Working with NSW Government

The delivery of mobile telecommunications networks and services in NSW will be more effective following the recent introduction of amendments to the State's planning system. The MCF played a key role in the development of the amendments. Previously NSW's 152 Councils operated under varying policies and regulations, some Councils effectively had no planning rules for mobile networks at all.

For the past three years the MCF and its members have urged the NSW Government to introduce consistency across NSW's local government areas. The new rules provide much greater investment certainty for Telstra, Optus and VHA, and it is expected that other Australian states will follow NSW's lead. The rules apply to mobile network infrastructure as well as fixed broadband infrastructure.

The MCF believes that NSW now has the leading approach to policy framework surrounding the deployment of mobile telecommunications infrastructure in Australia.

The major component of the framework is that all new telecommunications facilities in NSW must be consistent with a set of principles covering site selection, design, construction and operation. This new approach removes the need to lodge a potentially time consuming and costly development application for certain types of facilities, provided that they comply with the principles outlined in the policy. However, even though the requirement for formal approval through Council is not required, community consultation is still an important part of the process.



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Other key changes include:

- Stronger incentives for the co-location of telecommunication towers or extension of existing facilities rather than building a new tower;
- · Ensuring consultation is compliant with the legallyenforceable industry code requiring carriers to adequately consult local communities when new infrastructure is being planned and installed;
- Expanding the range of facilities to which visual impact restrictions apply in heritage areas;
- Emphasising health and safety requirements with all types of exempt or complying development to meet national exposure standards as published by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA); and
- · A requirement that land associated with all underground telecommunications facilities be restored to a standard comparable to its condition prior to installation.

The MCF welcomed the NSW Government's strategic approach to planning for telecommunications facilities and will continue 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.

Working with the Tasmanian Government

In a November 2009 submission to the Tasmanian Planning Commission, a number of improvements to the Tasmanian Government's Draft Planning Directive were suggested by the MCF, which would allow for more timely deployment of telecommunications infrastructure within the state.

The MCF recommended changes to the planning policy, which would allow for a similar approach to that already adopted in Victoria and New South Wales, where some facilities become exempt from formal planning controls, subject to the satisfaction of certain criteria.

The Planning Commission subsequently delivered a report to the Tasmanian Planning Minister, Bryan Green, advising the Minister that a number of the MCF's recommendations had merit. The report stated: "In particular the representation by the Mobile Carriers Forum alerted the Panel to the exponential expansion of wireless and optical fibre technologies and the desirability of creating a planning directive that would facilitate the growth of telecommunications networks, including broadband, throughout the State".

The Planning Commission recommended that their preferred approach would be to redraft an updated Telecommunications Schedule for insertion into planning schemes, in the form of qualified or conditional exemptions, supported by clear definitions and design codes. The MCF has urged the Minister for Planning to adopt the changes recommended by the Tasmanian Planning Commission.

From past experience, the MCF recognises that planning reform takes time to achieve and will continue to work closely with the Tasmanian Government to achieve clear and concise planning regulations for the benefit of Carriers and local Councils alike.

Working towards sustainable infrastructure

The MCF commenced work on Australia's first energy efficiency training program in June 2010. The program is the result of a successful application by the MCF for a \$96,000 grant through the NSW Government's Energy Efficiency Training Program.

Working with national climate change consultancy Energetics and the Department of Environment, Climate Change and Water NSW (DECCW), the MCF program will increase awareness of energy efficiency and will include practical opportunities for consideration during the design phase of network infrastructure.

The training program will support a fundamental change in approach to network deployment, with a focus on a reduction of energy usage and carbon pollution. Mobile network infrastructure can contribute up to 93 percent of some mobile carriers' total energy consumption.

Around 250 Optus, Telstra and VHA employees in NSW will be the first to benefit from the online training resource, due to be piloted in Sydney in early 2011. The training program will then be rolled out to the carriers' deployment teams in other states.

The MCF will introduce a best practice guide to energy efficiency to accompany the online training program. The guide will be developed to encourage energy efficiency in design, procurement and maintenance activities, such as free cooling capabilities in base stations, efficiency improvements of air-conditioning systems, hardware and planning options and alternative energy sources.

THE MCF carriers continue to work closely together to promote an environmentally responsible and sustainable mobile telecommunications industry.

Working with safety as a priority

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

The MCF's RF Safety Compliance Program enables management of health and safety regulations at mobile network facilities. The MCF 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 17,000 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.

Recently, the MCF launched the Compliance and Reporting System (CARS) which greatly improves the Industry's ability to manage compliance data utilising the RFNSA.

In the 12 months to June 30, 2010, an EME Environmental Report has been accessed and downloaded 12,053 times from the NSA. 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.

During the same period, 5,244 people have accessed and downloaded 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.



Finally, recognising its potential importance to the wider telecommunications industry, the MCF National Council and AMTA Board agreed to migrate the Program from the MCF across to AMTA in 2010/11 as a dedicated AMTA program managed by an Industry Forum Committee. This follows the recommendations of a review in 2009 by Price Waterhouse Coopers on the future of the program and benefits to AMTA.

MCF's industry representation for the ACIF **Consultation Code review**

The ACIF Code outlines the steps telecommunications carriers must take when deciding the location and design of new mobile network facilities. Formally known as the ACIF Industry Code C564:2004 Deployment of Mobile Phone Network Infrastructure, the Code was introduced in 2004 and is scheduled for a review by Communications Alliance.

The Code is designed to complement the existing regulatory and legislative requirements for telecommunications deployment. It ensures greater community consultation and participation in the installation of mobile network base stations.

The MCF has undertaken a review of the operational practices required in the ACIF Code and has concluded in its submission to Communications Alliance that the Code continues to meet the expectations of the industry and the community.

The MCF submission argues for the maintenance of the current code with some amendments. In support of this argument, the MCF found that:

- The 2004 Code (registered 2005) has been in force for five years. It continues to meet its objectives and remains relevant.
- Statistics from calendar year 2009 show that the Code is achieving what it is meant to achieve.
 - i) Carriers' deployment processes remain sound and provide for significant notification and consultation and the provision of further information to the public.
 - ii) Deployment processes are not rushed, they in fact take longer as a result of more comprehensive requirements that are more responsive to stakeholder views.
 - iii) Where appropriate, carriers are altering their siting decisions based on council and community feedback.
- iv) There is a proper mechanism for complaint handling, which has resulted in the rectification of a number of Code issues.
- v) Carriers deployment processes continue to ensure that the precautionary behaviors specified in the Code are adopted in day-to-day operations.
- vi) The Code's requirements are resulting in better considered sites being built.

MCF data shows more than 10,000 sites have been deployed subject to the ACIF Code processes since it was implemented in April 2005. Over the past five years the MCF has observed a continuing decline in "Complaints" to the ACMA regarding the Industry's consultation practices when establishing telecommunications facilities.

The MCF has identified some areas where clarification or further information may improve day-to-day operations of the Code and noted these in its submission to CA.

The MCF will be actively involved in the Code review process which is expected to conclude with the publication of a revised consultation code in late 2011.

Engaging with the community

Some form of consultation is required for every new mobile base station facility. The base level of consultation is determined by local government regulations or in the case of low-impact facilities, by the obligations outlined in the ACIF Code for Deployment of Mobile Phone Network Infrastructure.

In many instances, carriers conduct more extensive consultation than required by the regulations.

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

Statistics published in the Australian Communications and Media Authority's annual report 2009/10 show that overall the numbers of complaints about mobile network deployment remain very low.

The ACIF Code continues to work well as a formal process to engage with the community and other stakeholders during the deployment process. The Code's in-built complaints handling process is designed to address issues directly between stakeholders and carriers and in most instances issues can be resolved through effective communication and sharing of information.

The MCF is committed to ongoing improvements in community engagement and regularly produces information targeted at its key stakeholders. Communications tools include fact sheets, electronic newsletters for local government and other key regulatory stakeholders, and operational bulletins for carrier staff and contractors.

Council Liaison Program

An important part of the MCF stakeholder engagement program is ongoing proactive liaison with local government. The key focus of the program 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.

The MCF and its regional committees regularly work with or make representations to Australia's 562 Councils to achieve a balanced regulatory environment within which to secure approval for network infrastructure. For example, the MCF recently provided comment on Byron Shire's proposed Development Control Plan for Telecommunications, to ensure that it contained adequate guidelines for protection of visual amenity without duplicating the new NSW State planning controls.

MCF representatives have also met with the Tweed Shire to gain a better understanding of how both parties could work together in the consultation, planning, and assessment processes for telecommunications facilities. Tourism has emerged as a major industry in this coastal shire, which together with an expanding permanent population has created extensive demand for services delivered over mobile networks. The MCF remains committed to working with Councils such as Tweed Shire in order to deliver telecommunications services in a responsible and effective manner.



Round 'em up and hand 'em in

MobileMuster, the official recycling program of the mobile phone industry, is AMTA's primary commitment to an environmentally sustainable industry that minimises the use of resources through product stewardship, including the environmentally sound disposal of all mobile phones at the end of their useful life.

The primary goals of MobileMuster are to:

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

 Table 1: MobileMuster – Key Performance Indicators to 2013



Students from Forest Hill Primary School, Wagga Wagga, NSW celebrate with Milton MobileMuster winning the national school champion award for the 2009 MobileMuster I Can Do That National Schools Recycling Challenge

Collections

- 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

Recycling

- Maintain diversion from landfill rate greater than 90%
- · Maintain the estimated recycling rate (i.e. materials recovered) greater than 75%

Consumer Behaviour

- Increase awareness to more than 85%. up from 75%
- · Decrease disposal to landfill to less than 2%, down from 4%
- rate of 2 or more phones to less than 18%, down from 32%

Industry Involvement

- · Maintain whole of industry participation greater than 90%
- Decrease personal storage



Australian Mobile Telecommunications Association Australian Mobile Telecommunications Association 17 MobileMuster continues to make good progress across all its key performance indicators as illustrated in Table 2.

 Table 2: 2009-2010 MobileMuster Key Performance Indicators

(A definition of each Key Performance Indicator is provided in the MobileMuster Annual Report 2009-10 including PwC Assurance Report available at http://www.mobilemuster.com.au/annual collection figures)

| Key Performance Indicators | 2009/10 Actual | 2008/09 Actual | 2007/08 Actual | 2006/07 Actual | 2005/06 Actual |
|---|-------------------|--------------------------|----------------------|-------------------|-------------------|
| Collections | | | | | |
| Annual Collection (tonnes) | 103 (c) | 122 (b) | 97 (a) | 78 | 42 |
| Annual Collection Rate (Discarded Mobiles)** | 50.6% (c) | 38.2% (b) (37.4%) | 18.9% (a) (24.1%) | 18% | 15% |
| Annual Collection Rate (Net imports) | 7.9% (c) | 7.8% (b) | 5.5% (a) | 5.3% | 3% |
| Estimated Number Handsets & Batteries | 845,919 | 806,812 | 755,196 | 576,640 | 391,074 |
| Reported Shipments | 8.66 M | 9.03 M | 9.77 M | 8.63 M | 8.41 M |
| Exports | 1.41 M | 1.43 M | 1.05 M | 1.24 M | 1.18 M |
| Net Imports (units) | 7.63M | 7.86 M | 8.87 M | 7.39 M | 7.23 M |
| Net Imports (estimated tonnes) | 1,297 | 1,572 | 1,775 | 1,478 | 1,446 |
| Recycling | | | | | |
| Diversion from Landfill | 100% (c) | > 90%(b) | > 90% (a) | > 90% | > 90% |
| Estimated Recycling Rate (materials recovered) | >75% | > 75% | > 75% | > 75% | > 75% |
| Consumer Behaviour | | | | | |
| Storage Rate of Mobiles at home and work (% users with 2 or more handsets) | 38% (c) | 31%(b) | 32% (a) | 36% | 38% |
| Disposal to Landfill Rate | 3% (c) | 2%(b) | 4% (0) | 5% | 9% |
| Awareness Rate of Mobile Phone Recycling | 79% (c) | 79%(b) | 75% (a) | 69% | 46% |
| Industry Participation Rate | | | | | |
| Manufacturers | 72% (c) | 81% (b) | 85% (a) | > 90% | > 90% |
| Mobile Network Carriers | 100% (c) | 100% (b) | > 95% (a) | > 95% | > 95% |

^{**} The formula to calculate the annual collection rate of discarded phones has been modified. The formula no longer includes an estimate of mobile phones discarded from storage due to the uncertainty in estimating this figure. If the original formula was applied to the 2009-10 figures the result would be a negative number as the storage rate in homes went up. This does not reflect what is actually happening as the IPSOS market research indicates that mobiles were discarded during 2009-10. The revised formula is described in the definitions section of the MobileMuster Annual Report 2009-10 at http://www.mobilemuster.com.au/annual_collection_figures. The updated formula has 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

Collections

Total collections while down in weight (Figure 1) continue to grow in terms of the number of handsets and batteries received for recycling (Figure 2). Likewise the collection rates have improved with the net import collection rate increasing slightly to 7.9%, but more importantly the net collection rate of estimated discarded mobiles increased to 50.6%.

The drop in total collection weight can largely be attributed to a drop in the average unit weight of a charger from 100 grams to 70 grams. Accessories, including chargers, normally make up 50% of the overall collections.

Access and ease of recycling continues to improve with more than 3,500 plus public drop off points across the country, including mobile phone retail outlets: Telstra, Optus, Vodafone, 3 Mobile, Allphones, Fone Zone, Crazy Johns and Dick Smith stores; Nokia Care and Motorola One Service Centres as well as various independent mobile phone retailers, participating local councils, other retail outlets such as Cartridge World and Battery World and more recently Officeworks.

Many businesses, educational institutions, state and federal government agencies, recyclers, MPs and community based organisations continue to join MobileMuster to help their staff, students and customers recycle their mobiles.

The use of reply paid recycling satchels and mailing labels continues to be a popular alternative for people to recycle. Satchels are now included in many of the new mobile phone packs purchased, including Samsung, LG Electronics, Motorola, Optus, Boost, Sony Ericsson and ZTE packs, with Nokia planning to introduce the satchels in their packs in the second half of 2010.

Australia Post continues to support MobileMuster by making the recycling satchels available from their outlets across Australia.

To further simplify and make mobile phone recycling more accessible, MobileMuster continues to work locally with councils and waste organisations to collect mobile phones and accessories using existing kerbside recycling collections and e-waste collection days.

At a national level, AMTA continues to advocate and contribute to the development of a national systematic, regular collection of all e-waste, including mobile phones.

AMTA's submissions to the Federal Government Draft National Waste Policy and Consultation Regulatory Impact Statement for Computer and TVs in late 2009 called for:

- · Commonwealth not state-based regulation
- Broad protection from free riders
- Industry not government managed and funded schemes

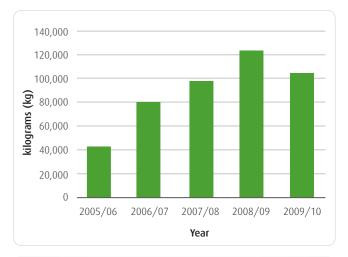


Figure 1: Total annual collections by weight (kg) - all mobile phone components

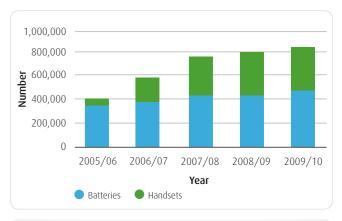


Figure 2: Total number of handsets and batteries collected

- Industry specific not single/combined Producer Responsibility Organisations
- · Industry developed and government-endorsed targets
- Recycling free to consumers at point of disposal
- · National, systematic and regular collection of e-waste

As a result of AMTA's input to the national waste policy, AMTA now participates in the Federal Government's Stakeholder Reference Group for National Television and Computer Product Stewardship Scheme and contributes to the development of the Product Stewardship Framework legislation.

AMTA also continues to meets regularly with the television and computer industries to develop joint collection facilities and promotions.

Recycling

The recycling of mobile phone components is performed to the highest environmental standards and none are refurbished or sold. Currently all mobile phones are dismantled and sorted into their various components by AMTA's recycling partner MRI in Sydney or Melbourne,

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then they are either processed locally by third parties in Australia or in Korea. All mobile phone materials handled by MRI are diverted from landfill and it is estimated that over 90% is recovered for reuse by third party recyclers.

MobileMuster's recent report "A nation of mobile phone hoarders", released in February 2010, estimates that if the 16 million old and unused mobiles in homes around Australia were recycled the materials recovered could produce 3.2 million aluminium cans, 160,000 plastic fence posts and save greenhouse gases equivalent to taking 5,200 cars off the roads.

Consumer Behaviour

General consumer awareness of mobile phone recycling has remained steady at 79%¹. However, many people still hang on to their old mobile phones. The most recent independent research on mobile phone behaviours found that 83% of mobile phone users either keep or pass on their previous mobile phone and that a greater proportion of people now have four or more phones.

People's desire to keep their old mobile phones is a major barrier to increasing collection 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 smart phones.

To counter this desire MobileMuster invests in short-term campaigns, such as the Old Phones, More Trees, where in partnership with Landcare Australia, a tree is planted for every kilogram of mobiles sent in for recycling. Incentives such as these have been effective in reminding people to recycle and provide an extra reason to recycle their old mobiles. Since 2007, 225,000 trees will have been planted as a result of this campaign with around 100,000 kilograms of mobile phone components diverted from landfill.

For Christmas last year, MobileMuster partnered with Oxfam where for every handset sent in for recycling MobileMuster would give a chicken through Oxfam's Unwrapped program to a family in need. After a two week online campaign enough handsets were sent in for recycling for MobileMuster to give 1000 chickens to families from Laos living in poverty.

Very few people throw their mobiles out in the rubbish, with less than 3% saying they threw their previous mobile phone out in the last 12 months².

MobileMuster continues to engage and educate Australia's youth through its National Schools Recycling Challenges. Two challenges were held in 2009-10 with more than 600 schools across Australia sending in more than 1,400 kg of mobile phones for recycling. Over 280,000 students are estimated to have contributed to their school's muster.

In recognition of the ongoing participation and contribution of local councils to MobileMuster, five awards were presented at the Australian Local Government Associations National General Assembly in June this year.

This year's winners were:

- National Excellence Hunter Resource Recovery NSW (representing Cessnock, Newcastle, Lake Macquarie, Maitland and Port Stephens Councils)
- Top Collector Overall (by weight) Brisbane City Council (Qld)
- Top Collector per Capita Shire Of Trayning (WA)
- **Best Promoter** Alice Springs Town Council (NT)
- Working with School The Hills Shire Council (NSW)

Industry Involvement³

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.

Over the past 12 months three new manufacturers have joined the program: HTC from Taiwan; and ZTE and Huawei from China. Together, with current members Nokia, Motorola, Samsung Electronics, Sony Ericsson and LG Electronics, they represent 72% of the mobile phone handset market.

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

To assist retailers maintain MobileMuster presence in store, over 1000 mobile phone retail outlets were visited up to three times this year to ensure recycling units were on display and staff were well versed on the program.

The Changing Face of Mobile Phone **Recycling in Australia**

Over the past 12 months there have been a number of significant changes in the mobile phone industry that have influenced the dynamics of mobile phone use and recycling of old and unwanted mobiles.

- 1 Independent online survey conducted in February 2010 by IPSOS on behalf of AMTA of 650 mobile phone users, aged between 16 and 64 years old randomly selected across
- for mobile phone handset manufacturers and revenue of the industry's mobile phone industry recycling program.



(L-R) Councillor Bruce Mackenzie (Mayor of Port Stephens Council), Ian Carruthers, First Assistant Secretary, Department of Climate Change; Councillor James Ryan (Cessnock City Council) receive the MobileMuster Local Government National Excellence Award on behalf of Hunter Resource Recovery (NSW)

Changing Member Participation Mix

The number of handsets shipped to Australia by MobileMuster members in 2009-10 fell to 8.66 million from 9.66 million in the previous year.

This was the result of strong growth in segments of the smartphone market, which was represented by nonmembers of the mobile telecommunication's official recycling scheme.

Mobile Phone Refurbishing

In early 2010, a number of new commercially-based mobile phone reuse/recycling programs entered the Australian market offering either cash or profit sharing with charities as incentives to consumers. These programs are funded by the resale of these collected mobiles into secondary markets in Europe, Asia and Africa for reuse.

While not a new concept in Australia, these refurbishment programs are investing substantially to promote and encourage people to send in their old mobiles.

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

By recycling all mobiles collected through the program, MobileMuster tracks and traces the product through the recycling chain, ensuring all mobiles are processed to the highest environmental standards and that over 90% of the materials are recovered and reused 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 supports the principles of product stewardship and its members are committed to continually reducing the environmental impact of telecommunications products through out their life cycle from design, manufacture, handling to use and disposal by:

- improving the efficiency of resource use in products
- increasing resource recovery
- · minimising the generation of waste (including hazardous substances)
- · improving the management of post-consumer waste
- · reducing the risks to human health from poor management of products

AMTA is also committed to ensuring consumers are informed about what they can do to reduce the environmental burden of mobile phone products by:

- · encouraging people to extend the useful life of their mobile phone by repairing it at any handset manufacturer certified service centre
- promoting its mobile phone recycling program MobileMuster

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 Guideline⁴ 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 recently introduced 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.

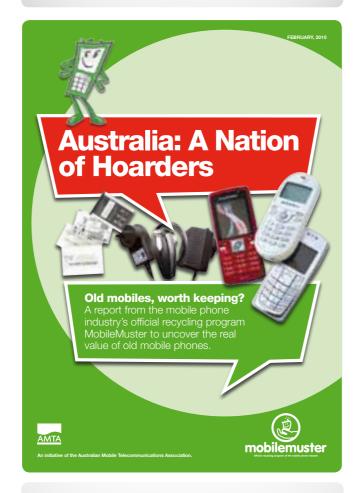
The impact of these mobile phone reuse programs on MobileMuster's collections in the past has been minimal, however, given their increasing investment and incentives it is likely these programs will impact MobileMuster's future collections.

Despite these changes over the past 12 months, MobileMuster has continued to make good progress towards its objectives of increasing collections, reducing disposal to landfill, increasing awareness, and offering free recycling to mobile phone users.

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



Superb Parrot, an endangered species to benefit from 5,000 river red gums to be planted by Landcare Australia groups near the Murray River as a result of the 2010 Old Phones More Trees Campaign.



MobileMuster commissioned a report that found between 14-16 million old mobiles are stashed away in cupboard and drawers. People believe they are valuable, however, most are worth little more than \$20.

Health and Safety

The mobile telecommunications industry complies with strict safety standards, monitors global research and informs the public of health information related to electromagnetic energy (EME) and the use of mobile phones and the deployment of mobile network infrastructure.

Interphone

The long-awaited Interphone study into alleged links between mobile phone use and cancer was released earlier this year.

Interphone, a 13-nation study, is the biggest study undertaken of its kind into potential health impacts of mobile phones. It was co-ordinated by the International Agency for Research on Cancer (IARC), which is part of the World Health Organization (WHO), and adds to the large body of existing research into health effects of radiofrequency emissions.

AMTA's Health and Safety Committee, which prepared for the study for many years, welcomed the study's release on May 16 and its finding that there is no increased risk of brain cancer from mobile phone use.

Interphone's overall finding is in line with the weight of scientific opinion, which has found no substantiated scientific evidence of any adverse health effects. Over the past 20 years, more than 30 authoritative expert scientific reviews have evaluated the evidence of the potential health and biological effects of radiofrequency fields and have consistently concluded that there are no established health risks.

The study's release was controversial because media outlets in the United Kingdom broke IARC's strict embargo and AMTA was forced to respond to intense media interest prior to the official release of Interphone. The breaking of the embargo resulted in Australia being the first country to respond publically to the study because of our time zone.

Some media outlets incorrectly claimed that Interphone had found people who used mobile phones for at least 30 minutes a day had a 40 per cent increased risk of cancer. However, leading scientists dismissed the media claims, saying they had selectively quoted the study and ignored the Interphone researchers' warnings that such conclusions could not be drawn because biases and errors limited the strength of such conclusions and prevented the drawing of a link between mobiles and cancer.

AMTA has been vigilant in the post-Interphone period to ensure that misreporting of such incorrect claims was drawn to the attention of the media outlets and the issue clarified. AMTA has supported an ongoing research agenda to consider if children are more susceptible to electromagnetic emissions and potential impacts of longer-term mobile use.

Despite the large body of research into the health effects of radiofrequency emissions available to health and regulatory bodies around the world, which is being continually reviewed, AMTA understands that some people will be concerned about their health. To meet such community concerns, AMTA advises people of practical steps they can take to reduce their exposure if they are concerned:

- · Use a hands-free kit or loudspeaker so the mobile is away from the head and body
- Use text messages when practical
- · Limit the length or number of calls

Interphone is expected to release a paper on acoustic neuroma – tumours of the acoustic nerve - in coming months as part of its focus on head and neck cancers. IARC next year will review mobile phone use and consider if there is any evidence of an association with cancer to classify mobiles as either: a proven human carcinogen; uncertain human carcinogen; not a human carcinogen.

Research

AMTA and the GSM Association have entered a partnership to conduct research into the radiofrequency levels in schools in Australia. There has been public and media commentary that exposure to WiFi, wireless LAN and an array of wireless products, including laptops, in the school setting could cumulatively produce exposure that is hazardous to health.

Swinburne University of Technology's Australian Centre for Radiofrequency Bioeffects Research, which will conduct the \$76,500 project in at least 15 schools. The project will also conduct tutorials for students and teachers to explain the science behind such devices.

Driving continues to be the biggest media issue faced by AMTA and the Health and Safety Committee.

The Committee has endeavoured this year to ensure a balanced public debate on driving and misuse of mobile phones based on the latest scientific research. We believe



it is important for policies, rules and regulations to be based on sound evidence to ensure the interests of road safety are served.

The public debate on this issue over the past 12 months has been characterised by claims likening driving and mobile phone use to driving while under the influence of alcohol. Senior police claim that using mobile phones is as dangerous as drink driving. This claim appears to be based on a partial reading of the scientific facts or misunderstanding the research.

Research from the United States undertaken by Dr Tom Dingus of the Virginia Tech Transportation Institute, using the so-called "naturalistic" studies with in-car cameras, has found that the most dangerous practice undertaken by drivers is text messaging, which has an increased risk of a crash or near crash of 23 times higher than non-distracted driving. Australian studies on the effects of alcohol have found that driving with a blood alcohol level of 0.08 per cent has a 25 times greater risk of having an accident.

Although text messaging while driving is comparable to the dangers of driving while under the influence of alcohol, other practices, such as talking and listening to

a mobile (1.3 times) and dialling a mobile (2.8 times), have much lower risk factors that are commensurate with other car-related activities such as handling a CD, eating and drinking.

AMTA this year met with a wide range of stakeholders on driving safety issues, including the South Australian Minister for Road Safety, NRMA, the Australian Automobile Association, the Australasian College of Road Safety and the New South Wales Police's Chief of Traffic, Assistant Commissioner John Hartley to discuss ways of more effectively getting safe driving and mobiles messages to drivers.

Mr Hartley invited AMTA Chief Executive Officer, Chris Althaus, to address a meeting of the Australian New Zealand Policing Advisory Agency (ANZPAA), the peak policing body that provides strategic policy and research advice and secretariat services on cross-jurisdictional policing initiatives to help achieve policing excellence and enhance community safety throughout Australia and New Zealand.

Mr Althaus told the chief traffic police officers from all States, Territories and New Zealand that there is a need for more information telling motorists the do's and don'ts of driving and legal mobile phone use and not discouraging them from legally using their mobiles and advising motorists to pull over to the side of the road to make a call, which can pose its own dangers.

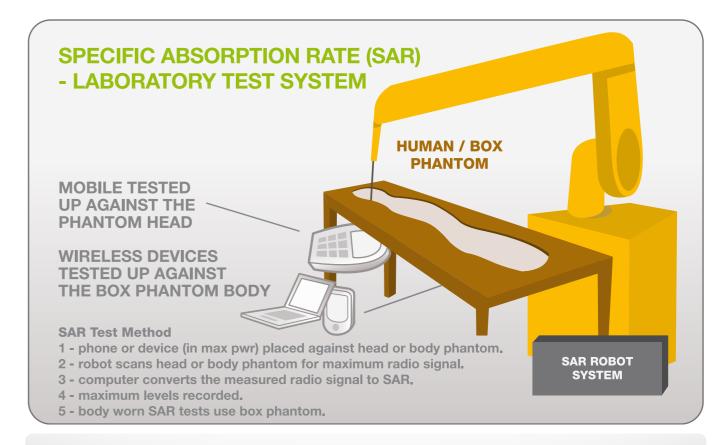
AMTA offered to partner with police in making drivers aware of the dangers of the illegal practice of texting and driving and inform drivers how to manage the risks involved in using legal hands-free mobiles.

Technology-neutral approach

AMTA this year met road traffic authorities and Road Safety Ministers asking them to take a consistent and rational stance on the use of GPS-enabled phones, which have been banned in some States while allowing the use of navigation aids, which perform the same function and often use the same software

AMTA communicated with Ministers in South Australia and Tasmania asking them to review their ban on GPS-enabled mobile phone use in cars because there are no safety differences between a portable navigation device and use of a phone-based GPS, which give drivers directions via turn-by-turn voice instructions. Victoria has allowed its drivers to use such devices, provided they are in a cradle.

AMTA believes having various approaches in different States is confusing for drivers and makes it very difficult for the mobile telecommunications industry marketing mobiles in a national market.



How is SAR measured for mobile phones? Specialised laboratory test equipment is used for conducting SAR measurements. The equipment consists of a 'phantom' (human or box), precision robot, RF field sensors, and mobile phone holder. The phantom is filled with a liquid that represents the electrical properties of human tissue.

EMF Explained

AMTA has worked with the GSM Association (GSMA) and the Mobile Manufacturers Forum (MMF) on the EMF Explained Series, which is an information resource for people interested in a better understanding of radiofrequency electromagnetic fields (EMF) and wireless issues. EMF Explained gives reliable information on mobile health and communications that is easy to understand and access.

This year EMF Explained was extensively revised following the release of the Interphone study. Regular updates on new scientific studies and statements were posted to the website, including SAR and mobiles, the COSMOS study and the 2010 update of the WHO research agenda. The site can be viewed at: www.emfexplained.info

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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 minimizing 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 in Australia. This safeguard service is free to consumers.

AMTA this year has worked on updating the Lost & Stolen website to make people aware of the importance of taking care of their mobile phones, which contain valuable and personal information. The new tips advise people to use their mobiles' security features, such as Personal Identification Numbers (PINs), for handsets and SIM cards.

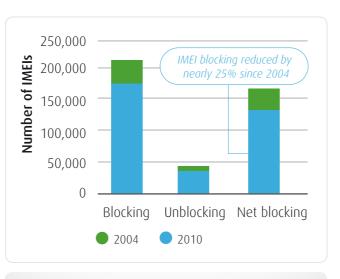
In the twelve-month period from July 2009 until June 2010 there were 168,500 IMEI numbers blocked across all networks with 40,100 subsequently unblocked at the request of the owners because they had been returned.

The net result of 128,400 IMEI blocks represents a 1.3% rise in blocking activity compared to the same period in 2008-09. This equates to an average daily blocking rate of 352 handsets compared to 345 handsets in 2008-09.

IMEI numbers are independent of the phone number and are usually written underneath the battery or on the back of the handset. Mobile phone users can also check their 15-digit IMEI number by dialing *#06# on their mobile handset. Mobile phone owners should make a note of their IMEI number and keep the details in a safe place.

For tips on how to keep your mobile phone safe and what to do if it is lost or stolen see Consumer Tips at www.amta.orq.au

Consumers also benefit from AMTA's web-based IMEI inquiry feature. This unique feature was developed to allow consumers to inquire on the status of any IMEI by entering the 15-digit IMEI number in the search engine. This is particularly useful when purchasing second-hand mobiles. It can be accessed at www.mindyourmobile.com



% share of Net Blocking Activity - June May

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Sam Saba – Ericsson Australia (Appointed April, 2010)

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Office Manager Helen Greenwood

Executive Assistant Rachel Mason





L-R: Sam Saba (Ericsson); Josh Delgado (Samsung); Ross Fielding (Telstra); Henry Calvert (Optus); Emile Baak (Nokia); Chris Althaus (AMTA)



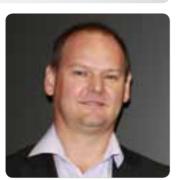
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