



Australian Mobile Telecommunications Association



Annual Report 2015



AMTA Contacts

Membership

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

MobileMuster

To contact MobileMuster phone 1800 249 113 or email mobilemuster@amta.org.au. For more information about MobileMuster see www.mobilemuster.com.au

Mobile Carriers Forum

To contact the Mobile Carriers Forum (MCF) phone (02) 6295 8191 or view www.mcf.amta.org.au

Carriage Service Providers

Optus, Telstra, Vodafone Hutchison Australia Pty Ltd, Lebara Mobile, Lycamobile

Handset Manufacturers

LG Electronics Australia, HTC (Aust & NZ), Microsoft Mobile Oy (Resigned September 2015), Motorola Mobility Australia, Samsung Australia, Sony Mobile, ZTE Australia

Infrastructure Suppliers

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

Support Industries

Brightstar Logistic, Crown Castle International, Evans Planning, KPPR, ParadigmOne, Risk insure, RF Industries, Urbis Pty Ltd

Retailers

Mobile Network

AMTA's Vision

The Australian Mobile Telecommunications Association (AMTA) 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 its contribution to the Australian Community.

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(L-R): Håkan Eriksson (AMTA, Deputy Chair); Matthew Lobb (AMTA, Chair); Chris Althaus (AMTA, CEO)

Mobile services continue to transform every aspect of our daily lives. The power of the smart device, the convenience of broadband and mobility, the new capabilities of our networks and the opportunities of the Internet of Things (IoT) have made 2015 a transformational year for our industry. They are redefining how business is done, how government services are delivered and how communities and individuals interact personally and professionally. And the best is yet to come.

There can be no doubt we live in exciting times. Consumers, businesses and government all recognise the benefits of the mobile device and it is up to our industry to work with all Australians to make sure that we optimise the opportunities of the mobile revolution.

Political Dynamics

AMTA has continued to tackle those whole-of-industry issues where the members share a vision of the future and how to get there. From a political perspective AMTA takes a collaborative, non-partisan approach working with all political parties and independents at all levels of government.

2015 provided the opportunity for AMTA to promote key policy agendas for the mobile sector, including opportunities for deregulation and regulatory reform in areas such as infrastructure deployment and radio frequency spectrum management. A flexible, pro-innovation policy framework for the telecommunications industry will enable our industry and the general community to benefit from improved services and lower prices.

AMTA acknowledges that recent progress in these areas is due in large part to the engagement and leadership of Malcolm Turnbull and Paul Fletcher during their tenure as Communications Minister and Parliamentary Secretary respectively. We thank them for their strong stewardship.

With recent changes in the nation's leadership, AMTA looks forward to working with the new Communications Minister, Senator the Hon. Mitch Fifield, to build on the reforms initiated by the previous portfolio leadership.

Importantly, as we turn the corner into an election year, AMTA has also continued discussions with the Shadow Minister for Communications, Jason Clare, on policy, industry and regulatory issues of priority for AMTA.



(L-R): Tim Marshall (Alcatel-Lucent); Ray Owen (Director, AMTA); Matthew Lobb (Chair, AMTA); Chris Althaus (CEO, AMTA); Jason Clare (Shadow Minister for Communications)

We look forward to continue working with all Members of Parliament to better deliver for the Australian economy and community.

Policy and Regulation

A standout issue for AMTA in 2015 was the need for regulatory reform of radiofrequency spectrum planning and management.

AMTA began its focus on this issue some years ago and has successfully prosecuted the case for change. The Spectrum Review announced by Minister Turnbull on August 25 will be a most significant policy reform initiative that will have long-term ramifications for the mobile industry, given the fundamental need for spectrum resources to support industry's growth and development.

It is also important in 2015 to acknowledge the contribution of outgoing Australian Communications and Media Authority (ACMA) Chairman and CEO Chris Chapman. AMTA has a close working relationship with the ACMA and has appreciated working with Chris Chapman and his team over the first

decade of the ACMA. Over the past 10 years Chris has presided over a period of unprecedented change in both the telecommunications and media industries. Indeed he recognised that the ACMA needs to continue to evolve as the power of convergence overhauls both sectors. Much has been learned and achieved under his leadership.

Customer Focus

A hallmark of industry's performance in 2015 is an ongoing customer focus to ensure the owners of the more than 31 million mobile services in operation enjoy a superior mobile telecommunications experience.

Indeed, recently released official figures for mobile complaints made to the Telecommunications Industry Ombudsman (TIO) show a fall of 21.1 per cent in the past year to the lowest level in seven years.



(L-R) Dr Ruth Lane, School of Social Sciences, Monash University; Peter Brisbane, Director, Stewardship and Waste, Department of Environment; James Chin Moody, Founder and CEO Sendle; Matthew Lobb, Chair, AMTA

The drop in mobile complaints to the levels of 2007-08 is made all the more significant considering the same period also saw a 42.2 per cent increase in the number of mobile services in operation (21.8 million to 31.01 million), which further amplifies the significance of this year's fall in complaints.

In 2014-15, there were also fewer complaints in important areas such as mobile coverage (down 49%), excess data charges (down 30.4%) and unexpected high bills (down 58%). The TIO noted an increase in complaints about connection delays, fault repairs and third party charges on mobile services.

The latest figures provide important feedback that industry's efforts to improve customer service are heading in the right direction and reinforces our collective commitment to continuous improvement.

MobileMuster

2015 was a year of consolidation for AMTA's flagship environmental initiative – MobileMuster, the mobile industry's official mobile device recycling program.

In challenging market conditions MobileMuster has maintained its focus on product stewardship commitments made as an accredited industry program under the Government's Product Stewardship legislation.

With consumers rapidly transitioning to smartphones in a

market with an increasing volume of trade-in/re-sale activity, "end-of-life" recycling volumes have been down. In response, MobileMuster has used 2015 to review its strategies in the face of change.

2015 also provided MobileMuster the opportunity to document the last decade of research and learnings as a pioneer of e-waste management and recycling in Australia. This knowledge will be the basis of the program's adjustments to embrace a broader product stewardship focus in the future.

Conclusion

As the influence and significance of the mobile sector continues to grow and develop, I thank AMTA's key stakeholders for your active and constructive engagement with the Association and its members. In particular the Department of Communications (DoC) and the Australian Communications and Media Authority (ACMA) have worked closely and co-operatively with AMTA throughout 2015 on priority policy and regulatory issues.

I also extend my thanks to AMTA's members for your support of the Association and, in particular, my fellow directors for your engagement and contribution to AMTA's management.

Lastly, my thanks to the AMTA team for their contribution to the Association and the industry we represent.



The then Minister for Communications, Malcolm Turnbull, with Chris Althaus (CEO, AMTA).

The mobile market trends we have come to expect continued in 2015 with the evolution of the sector moving at speed towards a 5th generation.

During the year global statistics continued to impress with:

- Unique mobile subscribers over 3.7 billion – exceeding 50% global penetration
- 3G and 4G accounting for 40% of global connections with 4G reaching 26% of world population
- Smartphone adoption around 40% globally
- Mobile data traffic forecast to grow at compound annual rate of around 60% to 2019 (GSMA 2015)

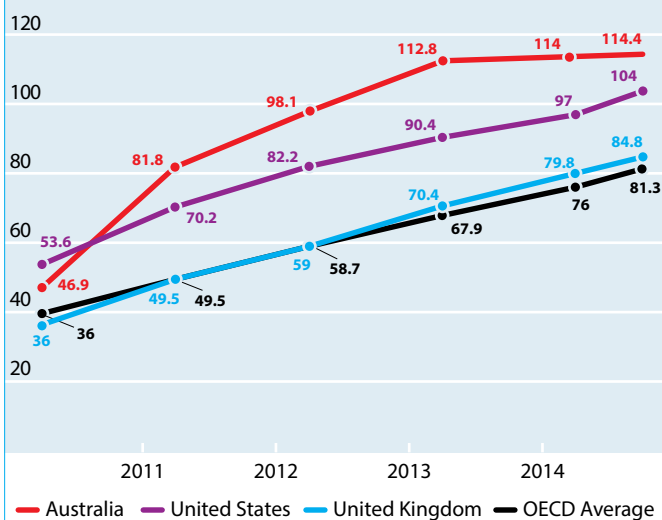
Locally, Australia has one of the highest per capita Mobile Broadband (MBB) subscription rates in the OECD, fuelled by rapid smartphone adoption and access to world-leading deployments of 4G networks.

For its part AMTA continues to work with members and key stakeholders in government and regulatory agencies targeting policy and regulations that will maximise the opportunities for mobile and minimise the level of intervention in the market.

In a multi-screen environment it is a “mobile first” world and Australia is without doubt a Mobile Nation. As such our economy and society are reaping the benefits of a dynamic, highly competitive local mobile market and industry.

Wireless mobile broadband subscriptions

Total, Per 100 inhabitants, Q2 2010 – Q4 2014



In 2015, the industry's customers demanded network performance as more and more Australians turned to their smartphones and the myriad of advanced mobile applications and services available to meet their needs at work, home, anytime, anywhere!

Along with the extraordinary growth of video consumption via mobile, the natural relationship between the mobile device, mobile broadband and social networking is also a strong contributor to mobile traffic growth, which is forecast to increase by a factor of 10 by 2020 (CAGR 60%).

The continuing growth in demand for mobile services, the rising expectations of customers and an intensely competitive market are driving a constant industry focus on innovation, investment and infrastructure.

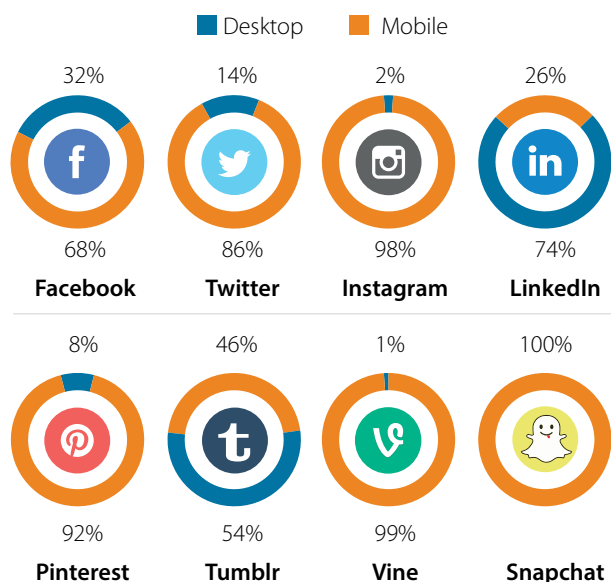
To meet the market, mobile operators have three key options: use the latest generation technologies; deploy denser and more widespread networks; gain access to additional radiofrequency spectrum. In practice, all three elements are constantly in play with increasingly complex interactions.

Australian carriers have invested many billions of dollars introducing 4G networks, devices and services to meet the demand for mobile broadband. Over 6000 mobile network site developments and upgrades have been deployed in the past year. In addition, the introduction of new spectrum assets and advanced spectrum engineering techniques have also added capacity to Australian networks.

Mobile first choice in social media

Most social networks are now mobile-first

% of time spent on social networks in the United States, by platform*



Source: comScore

The impact of mobile innovation, investment and infrastructure has far reaching implications for our economy and society.

Whether it is the productivity benefits to business, the safety impacts during times of emergency, the disruption of services in sectors like retail, health and education, the connection with Government services or the simple personal networks of family and friends, the mobile industry of 2015 is deeply embedded in how we live our lives.

Policy and Regulation – Spectrum reform a key focus

AMTA has worked closely with the Government and regulators in 2015 on reform agendas designed to reduce red tape and improve the effectiveness/efficiency of regulatory settings.

Central to AMTA's agenda has been the need to overhaul Australia's spectrum management and planning system. The Government has listened and the Spectrum Review reflects much of what is needed in a contemporary spectrum management framework.

The Review will recast spectrum policy, planning and management via a comprehensive reform package designed to meet the needs of all spectrum users in an increasingly complex and competitive spectrum marketplace.

This important initiative has the potential to deliver more flexibility and certainty for spectrum licence holders at a time when spectrum resources are under increasing pressure from rapidly expanding mobile markets that continue to grow strongly.

The mobile telecommunications industry strongly supports the three core recommendations of the Spectrum Review to:

- Replace legislative arrangements with new legislation that removes prescriptive process and streamlines licensing for a simpler and more flexible framework
- Better integrate the management of public sector and broadcasting spectrum to improve the consistency and integrity of the framework
- Review spectrum pricing to ensure consistent and transparent arrangements to support the efficient use of spectrum and secondary markets.

In addition, the ACMA has released a draft mobile broadband spectrum management strategy focussed beyond 2020. The ACMA's report identifies the need for co-ordinated short, medium and long-term strategies to identify and plan for the allocation of additional spectrum resources to support latest generation mobile telecommunication services.

AMTA notes that the future demand trend line for mobile broadband is a strong indicator of future spectrum needs and underlines the need to maintain a *sense of urgency* in seeking new spectrum bands, particularly given the long lead times involved both domestically and internationally.

The ACMA is flagging the need to stay on the case and industry strongly supports this call to action. AMTA suggests that we cannot relax when the future of mobile broadband has so much to offer.

Central to the future of mobile broadband and identifying opportunities to meet demand with new spectrum bands is the 2015 World Radio Conference (WRC-15). AMTA is urging the ACMA to take a leadership role in promoting opportunities for mobile broadband, such as the 1.5GHz band, while also taking an active interest in longer-term spectrum band options, such as 600MHz and 2700 – 2900MHz bands.



(L-R) Matthew Lobb (Chairman, AMTA); Paul Fletcher MP (Parliamentary Secretary to the Minister for Communications); Dr Ric Simes (Partner, Deloitte Access Economics); Håkan Eriksson (Deputy Chair, AMTA)

AMTA believes the ACMA should seek to maximise flexibility for future use of spectrum because this provides the most likely path towards maximising the overall public benefit from spectrum allocations.

AMTA supports the ACMA's proposal to move away from identifying a specific spectrum allocation target in favour of a more holistic approach. This is a pragmatic approach that reflects the increasing complexity of estimating future demand for services and translating that to an amount of spectrum.

However, as identified in the recent Spectrum Review, the way forward for efficient and effective spectrum planning must balance flexibility with certainty for all spectrum users to support innovation and the investment needed to meet market demand and expectations.

"The ACMA will....seek to provide the right spectrum at the right time to address the growth in demand for mobile broadband capacity."

"The ACMA will focus on the desired outcome—that is, delivery of mobile broadband services enabled by mobile broadband capacity, with provision of spectrum being one of several inputs to delivering this outcome."

2015 ACMA Beyond 2020 – A spectrum management strategy to address the growth in mobile broadband capacity

Mobile Nation – Retail

In 2015, AMTA continued its partnership with Deloitte Access Economics (DAE) by adding to the Mobile Nation series with a publication: **Mobile Nation: Opportunities and strategies for retail.**

Deloitte Access Economics explored the impacts that mobile technology is having on the retail industry – as a revenue channel, source of productivity growth and a customer engagement opportunity.



Chris Chapman, Chairman and CEO, the Australian Communications and Media Authority (ACMA)

The report includes case studies on the mobile retail experiences of Coles Financial Services and Catch Group, outlining their mobile technology offerings to customers.

The report was commissioned by AMTA to provide specific examples of disruption in the retail sector.

The key report findings are:

- Smartphones are an important and growing channel for retail sales
- The proportion of Australians who have purchased a product on their smartphone has increased from 9.5% in 2012 to 19% in 2013
- Purchases via mobile represent 27% of all online shopping purchases and, significantly, more for some businesses (Catch Group, for example, obtains approximately 70% of its revenue through mobile channels)
- Mobile channels (M-commerce) represents around \$4 billion annually to the Australian economy.

According to Deloitte Access Economics partner and report co-author, Dr Ric Simes:

"Mobile technologies continue to change the way the economy, society and business operate and intertwine. And the pace of this change is rapid."

"The retail trade industry epitomises this pace of change, and mobile technologies' disruptive impact, from shifting consumer demands to improved logistics and increased competition."

The report's co-author, John O'Mahony (DAE Partner), said:

"Mobile devices and apps are a revenue channel, source of productivity growth and a real customer engagement opportunity for retailers."

"They are also shaping retailers' internal operations. With a relatively young employee base, there will be increasing demands for employees to use their own devices for work. There will also be a need to up-skill the workforce to meet the increasing digital literacy of customers."

Conclusion

The mobile sector continues to expand its contribution and influence. In representing the industry, AMTA continues to enjoy close and productive relationships with members and key stakeholder organisations. I thank you for your engagement with AMTA in 2015. In particular, I note the very constructive engagement with the Department of Communications, the ACMA and our industry colleagues at Communications Alliance.

In closing, I thank the Chair and Board and all AMTA committee members for their engagement, advice and commitment of time to AMTA in 2015. On behalf of the AMTA team, we look forward to continuing the journey with you in 2016.

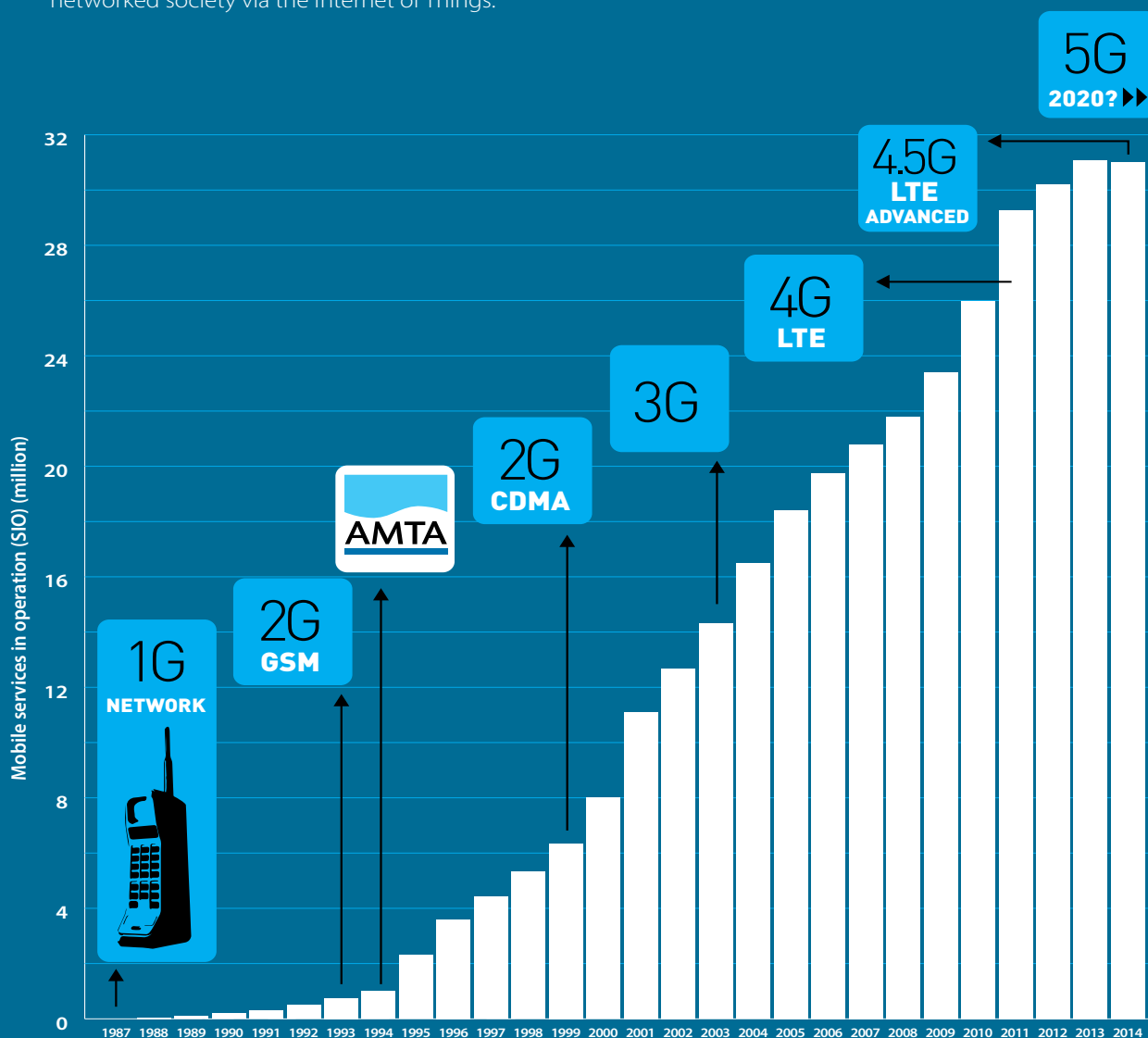
Finally, I acknowledge and sincerely thank the AMTA staff for their hard work and professionalism.

Mobile Nation



Australians have been going mobile for nearly three decades. The Australian Mobile Telecommunications Association (AMTA), the peak industry body, turns 21 on 20 September 2015. We can take stock and see how Australians have embraced mobile technology since 1987 when the first official call was made using an analogue mobile phone.

The relentless growth in mobile services and evolution from bulky voice-only handsets to today's broadband-enabled smartphones has been a global phenomenon. Turning 21 allows AMTA to reflect and, more importantly, look forward to the next generation of mobile telecommunication technologies, which will continue to drive productivity and provide unprecedented connectivity to an emerging networked society via the Internet of Things.





(L-R): Tim Marshall (Alcatel-Lucent) and Michelle Phillips (Optus)

AMTA's Policy Committee is a key forum that engages policy experts from Members to work with governments, regulators and the community to achieve policy settings that:

1. Promote public trust and confidence in mobile services, devices and technology;
2. Build consumer awareness and deliver robust consumer safeguards;
3. Encourage ongoing innovation and continued investment in infrastructure; and
4. Result in a regulatory and legislative framework that is reasonable, flexible and proportionate.

In 2015 the Committee has made more than 20 (formal and informal) submissions to Government and/or regulatory authorities on various policy issues and proposals for regulatory reform.

Regulatory Reform Agenda

Throughout 2015 the Committee has focused on an agenda of regulatory reform in several key policy areas including: radiofrequency spectrum allocation and management, network infrastructure deployment as well as prepaid ID checks and consumer protections for international mobile roaming.

Spectrum Review

AMTA strongly supports the Government's commitment to a fundamental review of Australia's spectrum allocation and management regulatory framework and has actively participated in the Department of Communications' review process. AMTA believes the objective of the reform program should be a 'reset' of how spectrum is managed in Australia. This requires:

- a 'first principles' approach to the spectrum management framework
- a detailed review of whether the existing framework's 'building blocks' remain fit-for-purpose
- careful consideration of the transition arrangements required in moving to the new framework.

Adopting this approach will help ensure Australia has a contemporary spectrum management regime that supports industry in meeting market demand for mobile telecommunications services.

Prepaid ID Checks

AMTA members have invested significant funds in building and implementing IT systems and operational processes to allow compliance with the *Telecommunications (Service Provider – Identity Checks for Pre-paid Public Mobile Telecommunications Services) Determination 2013* (the Determination) using the newly defined activation-based methods.

AMTA members have implemented new activation-based compliance methods that rely to a significant extent on the Government's Document Verification Service (DVS). However, DVS service levels are not meeting industry expectations and AMTA has submitted concerns around implementation issues to the ACMA for consideration in its scheduled two-year review of the regulation.

AMTA continues to work to improve the efficiency of the current system, however, AMTA has also clearly stated to the ACMA and the Department of Communications that its preferred policy position is for the Determination to be removed or considered for regulatory reform so that customers can purchase and activate mobile prepaid services without an obligation to verify their identity under the overly prescriptive methods set out in the regulation. This would enable industry to use a more flexible approach to identifying mobile prepaid customers.



(L-R): Andrew Volard (Telstra); Rose Read (MobileMuster); Helen Jarman (Infoactiv); John Chambers (Director, AMTA)

AMTA notes that a study of OECD countries found that only nine countries out of 24 require registration for prepaid services. Countries that are often used for comparison of best regulatory practice, including the USA, UK and Canada, do not require registration.¹

International Mobile Roaming (IMR) Standard

The *Telecommunications (International Mobile Roaming) Industry Standard 2013* was made on 27 June 2013. The Standard had a staged implementation with obligations taking full effect from September 2014.

Although AMTA supports the objectives of the Standard and members have implemented significant compliance frameworks, AMTA remains concerned that the regulation is overly prescriptive and burdensome on industry.

AMTA worked with Communications Alliance to propose amendments to the Standard in July 2015 that would enable greater flexibility for mobile Carriers and Carriage Service Providers, allowing them to better tailor notifications and spend management tools to customer plans in order to avoid customer confusion and inconvenience. AMTA believes that the proposed amendments would relieve the regulatory burden on industry while still providing important consumer protections for roaming customers. Industry now awaits a decision from policy-makers following the ACMA's consideration of the proposed amendments.

Network Infrastructure Deployment

Throughout 2015, the Policy Committee has continued to work with AMTA's Mobile Carriers Forum (MCF) to propose reforms to Schedule 3 of the *Telecommunications Act 1997* and the *Telecommunications (Low Impact Facilities) Determination 1997*.

In an environment of accelerated network infrastructure roll-out, these reform proposals have the potential to streamline deployment activities for mobile carriers. The proposals are balanced with AMTA's long-standing commitment to address community concerns around deployment activities as well as any perceived health and safety issues.

Economics and Infrastructure

The Policy Committee also submitted comments to the Government's Regional Telecommunications Review Committee on 17 July and highlighted the continuing strong demand for mobile services, which is driving continued investment in infrastructure by mobile carriers. AMTA also noted the outcome of the Government's co-investment approach through the Mobile Blackspots Programme that intends to deliver 499 new or upgraded base stations around Australia under the \$100 million first phase.

'Opportunities and Strategies for Retail' Report

The Parliamentary Secretary to the Minister for Communications, Paul Fletcher MP, launched an AMTA-commissioned Deloitte Access Economic report, "Opportunities and Strategies for Retail", on 2 July.

¹ GSMA White Paper 2013, The Mandatory Registration of Prepaid SIM Card Users

The report includes case studies of Coles Financial Services and Catch Group, which explore their mobile technology offerings to customers and how it is disrupting retail by providing a new platform for sales and customers.

The case studies outlined key behavioural differences between mobile customers and online customers and how mobile technology can integrate shopper loyalty programs, financial services and the shopping experience.

Social Responsibility

The Policy Committee maintains a strong commitment to providing good consumer information on social responsibility issues, including consumer concerns regarding mobile device security, affordability, accessibility, cyber-safety and bullying as well as general health and safety issues.

The MobileTips website is the public face of AMTA's social responsibility program. The website contains consumer-friendly tips as well as links to other AMTA programs, such as MobileMuster and the Lost and Stolen program. MobileTips also provides information for people with accessibility requirements and links to the Global Accessibility Reporting Initiative (GARI) website that allows consumers to easily search for a mobile phone, tablet or app that meets their accessibility needs.

Illegal Devices and Interference

This year the Policy Committee focussed on working with the ACMA on the issue of illegal devices and spectrum interference. One of the outcomes of this engagement was the ACMA's release of a video, *"The Good, the Bad and the Ugly"*, which featured AMTA's Chief Executive Officer, Chris Althaus, and provided consumer advice on the use of repeaters and boosters.

The Policy Committee is following up with the ACMA to ensure that the consumer awareness efforts can be extended to include ISM (Industrial, Scientific and Medical) devices. The Policy Committee has also convened a technical sub-committee to allow mobile carriers to share information about interference issues, which is proving to be very useful.

AMTA also maintains a regular formal engagement with the Australian Communications Consumer Action Network (ACCAN) as well as with other industry organisations. AMTA continues to participate in the ACMA's Consumer Consultative

Forum (CCF) as well as the Government's Consultative Working Group (CWG) on Cybersafety, which welcomed the establishment of the Office of the Children's eSafety Commissioner this year. AMTA believes that such regular engagement, collaboration and co-operation between industry, government, regulators and consumers can provide the foundation for a socially and economically responsible mobile telecommunications industry in Australia.

Law Enforcement and Emergency Services

AMTA is committed to strengthening and facilitating the well-founded partnership that exists between law enforcement and national security agencies, emergency service organisations and the mobile industry.

In 2015 AMTA partnered with Communications Alliance to engage with Government on data retention requirements as well as telecommunications sector security reform proposals. AMTA and Communications Alliance made a joint submission on 27 July on the *Exposure Draft Telecommunications and Other Legislation Amendment Bill 2015 (Telecommunications Sector Security Reform)*. The submission stated that industry believed the draft Bill was a regulatory overreach. AMTA and Communications Alliance then partnered with AIIA (Australian Information Industry Association) and AIG (Australian Industry Group) to express industry-wide concerns to the Government and this has resulted in ongoing consultation between industry members and Government about the legislative reforms.

AMTA's Policy Committee is also engaged in consultation with the ACMA on the use of mobile jamming in prisons and correctional facilities. Although AMTA appreciates the usefulness of mobile jamming to correctional services in certain circumstances, it is imperative that such use does not interfere with surrounding mobile networks or prevent consumer access to emergency services or mobile networks generally.

The Mobile Phone Industry Recycling Program (MPIRP), known as MobileMuster, was established voluntarily in 1998 by AMTA and its members. It aims to keep old mobiles out of landfill and ensure that all components, including batteries, chargers and accessories, are recycled to the highest environmental standards.

In the world of product stewardship, MobileMuster is a unique program. Unlike many schemes across the globe it is not governed by regulation or enforced by mandatory laws. It is a voluntary initiative of manufacturers and carriers who have chosen to work together. In May 2014, MobileMuster was accredited as the first voluntary product stewardship scheme under the Federal Government's Product Stewardship Act 2011.



Product stewardship – those involved in producing, selling, using and disposing of products have a shared responsibility to ensure that those products or materials are managed in a way that reduces their impact, throughout their life cycle, on the environment and on human health and safety.

<http://www.environment.gov.au/protection/national-waste-policy/product-stewardship>

MobileMuster is funded voluntarily by its members and managed by the Australian Mobile Telecommunications Association (AMTA).



MobileMuster aims to:

- keep old mobiles out of landfill
- increase awareness of recycling
- optimise resource recovery, and
- provide a free recycling service to consumers, retailers and workplaces.

The program is committed to improving the **visibility**, **accessibility**, **transparency** and **sustainability** of the service. Nothing is reused or resold; everything is recycled and all data is destroyed.

NOTHING RE-USED OR RE-SOLD, EVERTHING IS RECYCLED, ALL DATA IS DESTROYED

Working Together

Partnerships are a key element to MobileMuster's activities.

From an educational perspective, MobileMuster has worked closely with Planet Ark and Cool Australia in expanding our online educational resources, Musterkids, for students and teachers, including their incorporation into Planet Ark's National Recycling Week's Recycle Right Schools Challenge and Cool Australia's Enviroweek activities.

Bringing some more fun to recycling together with Planet Ark, MobileMuster released its first educational online game/app, *Recycle Rescue*, where students see how many mobile phones and printer cartridges they can rescue from landfill and save the planet by recovering plastics and metals and make new products like pens and rulers.

In an effort to make recycling even more convenient for consumers, MobileMuster has been working closely with its suppliers Infoactiv, the City of Sydney and storage specialists

Storage King in providing two new one-stop collection services—the E-waste Recycling Box and multi-item collection units—in libraries as well as offering E-waste Free Workshops for workplaces.

Engaging the community on the importance of mobile phone recycling has always been a priority with MobileMuster and in October and November 2014 we recreated the largest e-waste artwork from mobile phones at the Sustainable Living Tasmania Festival in Hobart and in Sydney to celebrate Planet Ark's National Recycling Week. We also created a mosaic of the Sydney Opera House at the University of Technology in Sydney to celebrate World Environment Day on 5 June 2015.



To help drive collections over the peak retail period (Christmas/ New Year) MobileMuster in partnership with the Salvo Stores (southern territory) and The Salvation Army ran the Recycle Your Mobile and Help the Salvos campaign. For every kilogram of mobiles and accessories recycled at a MobileMuster collection point between 1 December 2014 and 31 January 2015, MobileMuster gave \$2 to the Salvation Army's Christmas Appeal. The campaign collected just over 13,400 kilograms of phones and accessories and MobileMuster donated \$26,800 to the Salvation Army's Christmas Appeal to help people in need.

With so many mobiles laying idle in homes, many of which still work, MobileMuster took on the challenge to find unwanted smart phones that could be redeployed by Able Australia to help Deafblind people communicate more easily with friends and families. With some help from our recycler TES-AMM, which ensured all handsets were working and any data left on the handsets was wiped, MobileMuster collected over 40 suitable phones that are being used by deafblind people in Victoria.



(L-R): AMTA's Spyro Kalos and Scott Darkin, Able Australia

Recognising Councils and Workplaces

Along with our network of over 1900 mobile phone retailers, councils and workplaces play an important role in promoting and collecting mobile phones for recycling. This year we were pleased to have the Minister for the Environment, the Hon. Greg Hunt MP, present the 9th MobileMuster Local Government Awards at the ALGA National General Assembly in Canberra. Over the past 10 years councils have collected more than 25 tonnes of mobiles and accessories for recycling.



Håkan Eriksson (AMTA, Deputy Chair, second from left) presents cheque to Paul Hateley from The Salvation Army (Southern Territory) with representatives of The Salvo Stores (Southern Territory)



The Hon. Greg Hunt MP, Minister for the Environment, with MobileMuster's Local Government Award Winners in Canberra



Gai Carman, Global Care Dubbo accepting the Top Collector in NSW Award from Rose Read, MobileMuster.

MobileMuster also presented the MobileMuster Workplace Recycling Awards in Melbourne at the Australian Waste and Recycling Expo in August to the top state and national collectors. In the 12 months to 30 June 2015, workplaces diverted over 4,945 kgs of mobiles, batteries, chargers and accessories from landfill.

MobileMuster saving resources and protecting our environment

As a result of our activities since the program started in late 1998, MobileMuster has reduced the need to mine 29,000 tonnes of precious metal ore, which provides environmental benefits that are equivalent to keeping 2,600 cars off the road, planting 57,000 trees, preventing 9,400 tonnes of CO₂ greenhouse gas emissions, and diverting tonnes of potentially harmful substances from landfill.



IN 2014-2015
74 TONNES*
OF MOBILE PHONE COMPONENTS
COLLECTED



6.7 TONNES
PLASTIC

71.4 KG
PRECIOUS METALS
(gold & silver)

1.5 TONNES
ALUMINIUM

10.7 TONNES
STEEL

4.2 TONNES
COPPER

79 KG
CADMIUM

293 KG
LEAD

731 KG
COBALT

BY RECOVERING & REUSING THESE RESOURCES

APPROX.
2,450 LESS TONNES
OF PRECIOUS METALS ORES
(GOLD, SILVER, COPPER)
WILL NEED TO BE MINED



OVER
590 TONNES
OF CO₂ EQUIVALENTS IN
GREEN HOUSE GASES
WILL BE AVOIDED



THIS CO₂ EQUIVALENT IS COMPARABLE TO

TAKING
170 CARS
PERMANENTLY OFF
THE ROAD



OR PLANTING
3,600 TREES



*73.862 tonnes

Australia's Mobile Decade

Since 2005 AMTA has commissioned independent market research into mobile phone ownership, use and recycling. In October AMTA compiled the results of this research into a report, "10 years of Consumer Insights into Mobile Use and Recycling 2005-2015", to review changes in mobile phone use and recycling behaviour over the past decade and assess the impact of MobileMuster and the rapid evolution of mobile telecommunications on consumer behaviours in Australia.

The report found that there have been some significant shifts in behaviour over the past ten years. More people are aware of mobile phone recycling, up from 46% to 78%. More people are either recycling or selling their phones with collections up from 42 tonne per annum to 74 tonne in 2014-15, peaking at 122 tonne in 2008/09, and 6% selling or trading their phones. Fewer people are disposing of their phones into landfill, down from 9% to 2%.

Consumer desire to keep old phones remains unchanged (60% even if handsets do not work). As a result, the number of unused phones stored away in homes has grown from

12 million to over 22.5 million, which is nearly one phone for every person in Australia. Storing phones represents a significant loss of resources, creating an unsustainable imbalance between the rate of consumption and the rate of reuse and recycling, with substantially more mobiles sitting dormant in homes instead of being reused or responsibly recycled.

Technological advancements have had both a positive and negative impact on the sustainability of mobile phones. Designing for the environment means hazardous materials have been removed, fewer materials are used and more recycled content is used. However, Australians love their new technology and with each new model the desire to upgrade is very strong.

Financial incentives, awareness and **access** continue to be the three main drivers that encourage people to recycle. Personal financial rewards are the primary motivator. Although MobileMuster has raised awareness and made recycling widespread and accessible, altruistic incentives appear to be less of a motivator to recycle in recent years.



The research also suggests there are essentially four recycling personality types:



The future of mobile phone stewardship in Australia

The storage of old mobile phones is still a significant issue, representing a lost opportunity for reuse and recycling. The industry recognises there is a need to look more closely into how consumers' desire to keep a phone as a back-up can be altered by:

- Improving the product's durability and upgradability
- Streamlining repair and replacement of damaged phones
- Making data management and security a simple yet robust process
- Offering innovative and attractive contracts that encourage the return of mobiles (i.e. one in one out, trade-in, leasing, product-service ownership initiatives).

AMTA also recognises there is a need for greater engagement and co-ordination of activities and reporting from all players in the mobile phone lifecycle from manufacturers, network carriers, retailers and service centres/repairers, through to second-hand traders and recyclers. AMTA is committed to working closely over the next few years with other players in the industry to create a more sustainable mobile telecommunications industry.

MobileMuster performance 2014-15

The performance of MobileMuster is measured against nine key indicators that look at changes in consumer behaviour; collection and recycling rates; diversion from landfill and industry involvement (see Table 1, Figure 1 and Figure 2). Each of these is assured independently by PriceWaterhouseCoopers. For further details on the program's assurance and performance please refer to the MobileMuster Annual Report 2014-15.

Table 1 - MobileMuster Key Performance Indicators				
Key Performance Indicators	2012/13	2013/14	2014/15	
Consumer Behaviour	Actual	Actual	Est'd	Actual
Personal Storage Rate (% users with 2 or more handsets at home)*	37%	37%	37%	36%
Disposal to Landfill Rate*	3%	3%	2%	2%
Awareness of Mobile Phone Recycling*	83%	80%	>80%	78%
Collections				
Annual Collection Rate, Available Phones (%)*	53.1%	50.6%	51%	54.7%
Annual Collection Rate, Net imports (%)*	9%	9.1%	10.2%	9.3%
Mobile Phone Collections (weight - tonnes)*	87	80	100	74
Member Shipments (units - millions)	6.67	6.20	6.80	5.56
Net Imports (units - millions)	5.67	5.16	5.78	4.87
Net Imports (weight - estimated tonnes)	964	877	983	794
Adjusted Exports (units - millions)	1.00	1.04	1.02	0.70
Estimated Available Phones (weight - tonnes)		158	197	135
Estimated Number Handsets & Batteries (units - millions)	0.99	1.00	1.11	0.95
Recycling				
Diversion from Landfill*	99%	98.3%	97%	98.7%
Recycling Rate (estimated material recovered)*	96%	94%	96%	98.4%
Industry Participation				
Manufacturers*	56%	55%	56%	45%
Mobile Network Carriers*	91%	86%	91%	91%

* Independently assured key performance indicators

Figure 1: Total annual collections by weight (tonnes) – all mobile phone components

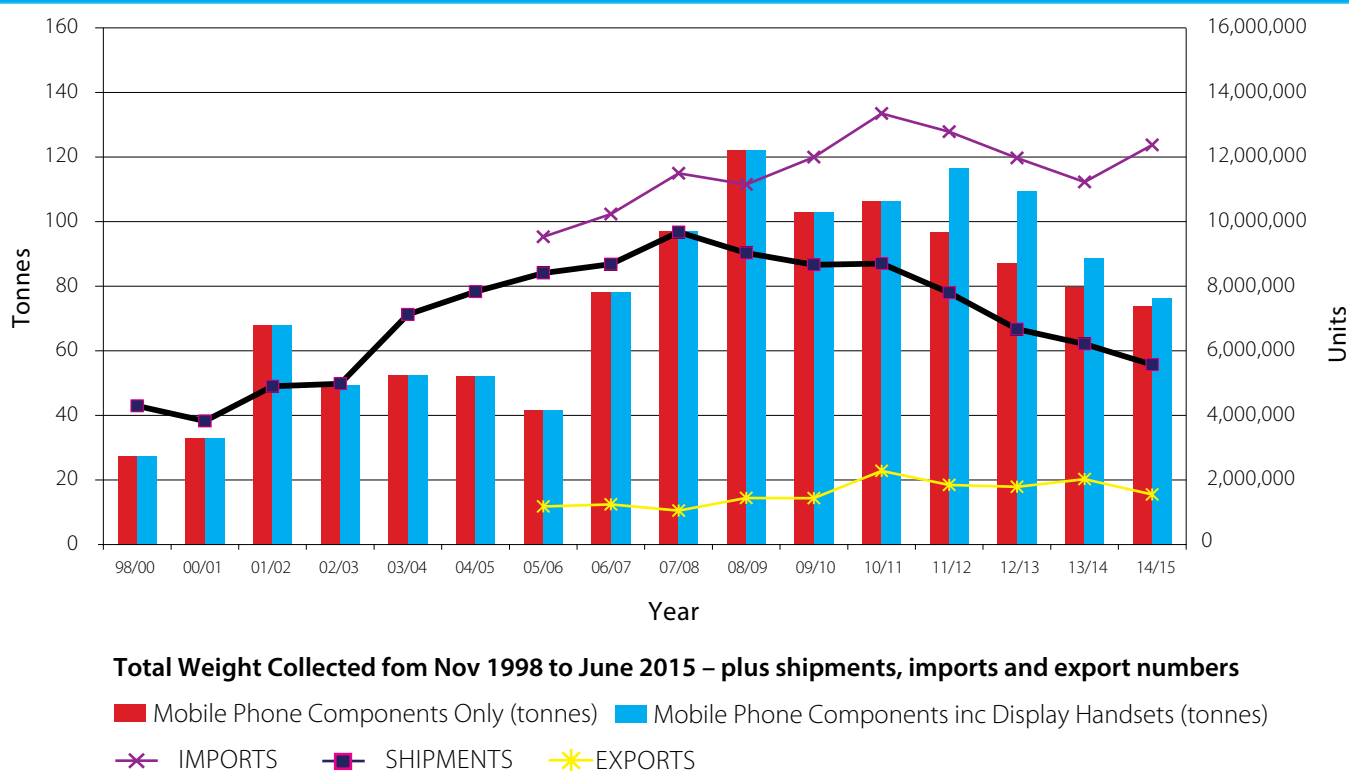
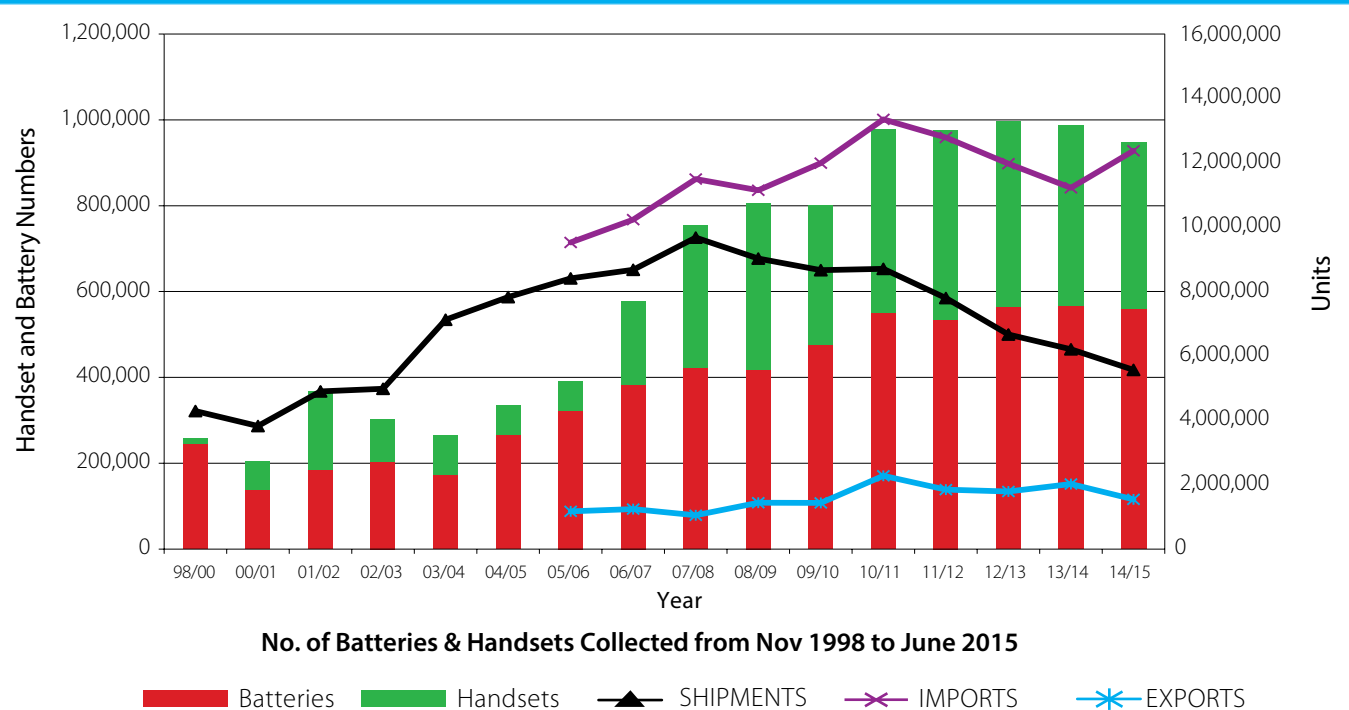


Figure 2: Total number of handsets and batteries collected





(L-R): The Minister for the Environment, Greg Hunt; Edwina Morgan, Regional Manager Salvo Stores, Victoria and Tasmania; John Chambers (AMTA, Director) launch the Recycle Your Mobiles and Help the Salvos Campaign at Telstra in Bourke Street, Melbourne

Throughout 2015, the MCF has assisted industry to address community expectations about the way mobile telecommunications networks are deployed and balance these expectations with users of Australia's nearly 32 million mobile phone services. The MCF has also sought to achieve the best regulatory environment for planning, building and operating mobile telecommunications networks at federal, state and local government levels.

More efficient and effective regulation

The MCF in 2015 provided several submissions to the Department of Communications in response to the Federal Government's red-tape reduction program.

The MCF's submissions focussed on the planning exemptions provided to the industry by the Low Impact Facilities Determination. This regulation permits deployment of mobile network infrastructure without undergoing full local or state planning processes where the infrastructure meets the definitions of 'Low Impact' in the Determination. The definitions are based on infrastructure having minimal impact on visual or other amenity in the community where it is deployed, and balances these with the benefits of mobile communications to the community concerned.

The Determination is more than a decade old and its definitions are out of date with modern deployment practices. The MCF has, therefore, proposed a range of amendments to the Determination, which bring the regulations up to date, permitting modern technologies associated with 4G (such as 'small cells') to be included in the Determination, and to more readily allow deployments in areas of the community, such as commercial and industrial zones.

The MCF is assisting the Department of Communications interpret the proposed amendments before seeking the advice of the Minister and engaging in a public consultation process, expected to commence early in 2016.

Better deployment outcomes for the community

Where Carriers utilise the exemptions provided by Federal legislation, they are bound by the Industry Code for Mobile Phone Base Station Deployment (C564:2011). The Code outlines processes for the selection, design and operation of new mobile base station deployments and procedures for carriers to consult with the community and other stakeholders.

The Code has proved very successful in dealing with community concerns, as evidenced by statistics from the Australian Communications and Media Authority (ACMA). The figures show that complaints against Carriers regarding the deployment of mobile network infrastructure continue to fall from a high of 137 complaints in 2002-2003 to no complaints reported for the 2014-2015 financial year. At the same time, the number of sites built or upgraded each year has increased several-fold with the mobile carriers consulting with communities over an estimated 6000 new or upgraded sites during 2014-2015.

Complaints against Deployment Code – Official ACMA Figures

Year	No. of Complaints	Related No. of Sites	No. of Sites Deployed
02 - 03	137	31	Not known
03 - 04	48	28	1300
04 - 05	42	25	1100
05 - 06	27	20	3639
06 - 07	31	21	1292
07 - 08	6	5	2587
08 - 09	8	6	1159
09 - 10	11	8	1580
10 - 11	7	5	4432
11 - 12	6	Not known	3580
12 - 13	3	3	4109
13 - 14	2	1	3347
14 - 15	0	0	5867

Providing confidence in the safety of mobile network infrastructure

The mobile carriers must comply with strict science-based safety standards limiting exposure of the public to radiofrequency fields from their equipment. The industry complies with all limits and is audited to ensure its processes meet the requirements of regulators.

To provide confidence to the community that the industry's infrastructure produces fields far below the limits specified, every mobile base station site is provided with an Environmental EME Report, produced following a protocol

specified by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA). The report shows the RF fields in the vicinity surrounding a site and is available to the general public via the industry's Radio Frequency National Site Archive (RFNSA) website at www.rfnsa.com.au

In 2015 the MCF instituted a measurement program, which seeks to determine the fields actually measured at selected points near the base station site and to compare these with the maximum field calculated in the Environmental EME Report. An independent and accredited RF measurement expert undertakes measurements using calibrated equipment to provide confidence in the results from the measurement program.

So far, more than 40 sites have been measured, with an additional eight sites undergoing further measurements of RF fields present from all sources, including broadcast radio and TV and other common sources, not just mobile networks. These measurements allow fields produced by mobile networks to be compared to all RF fields in the community. A typical example of the overall fields is shown in the diagram on this page. Mobile networks produce about 40% of the fields, while broadcast radio and TV produce more than half of the fields present (as related to the overall limits in the Australian safety standards specified by ARPANSA).

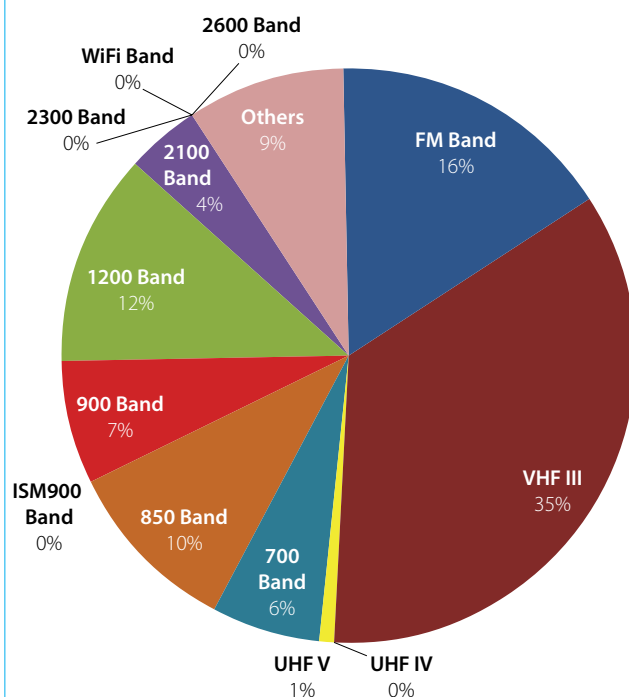
The actual fields measured for mobile networks show that they are only about 1/7th of the maximum shown in the Environmental EME Report when averaged over all sites.

This is expected because the ARPANSA protocol takes no account of system power losses or reflections and shielding from objects in the environment such as trees and buildings. Overall, the MCF considers the measurement program is providing results within expectations and which can provide the public with even more confidence that RF fields from mobile networks remain far below the safety limits in places where they are typically exposed.

The MCF will publish all results from the measurement program along with supporting explanatory information on a new website page to be launched late in 2015. The measurement program will continue in 2016 with the website to be updated with new information and analyses as the results become available.

Typical example of RF fields produced in a suburban location by all sources including mobile networks. Jells Park Victoria

Percentage of Measured Background RF EME Level
(27MHz to 3 GHz)



Improved state and local planning arrangements

A key objective of the MCF is to provide regulatory consistency and certainty in the planning process and, in particular, encourage the adoption of state-wide telecommunications infrastructure planning policies and codes.

In 2015, the MCF has enjoyed particular success in Western Australia, where, responding to key inputs from the MCF over the course of the year, the WA Department of Planning has adopted a new State Planning Policy (SPP) 5.2 – “*Guideline for the Location, Siting and Design of Telecommunications Infrastructure*”.

The new code acknowledges that EME exposure from mobile base stations is unlikely to cause any adverse health effects. Therefore, EME and health are no longer allowable matters which may be considered by local planning authorities in WA when processing development applications. This includes advising local planning authorities to remove additional setback distances (‘buffer zones’) based on health and safety standards from their planning schemes.



MCF answers questions about regional mobile coverage at WA Local Government Conference

Another key reform in the new policy is that it will prevail over local planning schemes whenever there are contradictory requirements between the two. With a much reduced list of matters to be dealt with by local governments and specific guidelines regarding the siting of mobile infrastructure, the precedence of SPP 5.2 will greatly improve the industry's ability to undertake deployments according to uniform planning requirements across the state.

The MCF also seeks to continue its dialogue directly with local governments around Australia. As part of this initiative, it attended both the Australian Local Government Association (ALGA) national conference in Canberra in June and the Western Australia Local Government Association conference (WALGA 2015) in Perth in August.

The growing demand for mobile broadband to service smartphones and other mobile devices and the need for new and upgraded mobile network infrastructure dominated the comments from visitors attending the MCF stand at both conferences.

Along with the Federal Government's Mobile Coverage and Blackspot funding program which will realise nearly 500 new base stations in the coming year, the ongoing appetite of Australians for the services enabled by our members promises another busy year ahead for the MCF in 2016.



Participants at annual ARPANSA-AMTA Liaison Forum. Dr Rick Tinker (ARPANSA); Lydiawati Tjong (ARPANSA), Chris Althaus (CEO, AMTA), Dr Carl-Magnus Larsson (CEO, ARPANSA); Ray McKenzie (MCF); Debbie Wills (Telstra); Des Ward (Vodafone).

The AMTA Health and Safety Committee, under the chairmanship of Mike Wood (Telstra), met monthly during 2015 to consider issues related to industry compliance with scientific safety standards and consumer access to independent expert information allowing them to make informed choices about their use of mobile telecommunications technology.

EME safety standards review

The H&S Committee has monitored the review of safety standards for radio frequency electromagnetic energy (RF EME) emissions from mobile telecommunications devices, television, and radio, which is being undertaken by the international body responsible for setting standards, the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

AMTA supports independent reviews of safety standards to ensure the maintenance of robust safety standards based on the latest scientific evidence. Industry is required to comply with official safety standards that protect the community from EME or radio waves emitted by mobiles, base stations, radio and television.

ARPANSA-AMTA Liaison Forum

AMTA met with the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) in Melbourne on 28 July for the annual formal meeting with the Federal Government's safety watchdog, which is responsible for setting safety standards for RF EME.

It was the second year of the meetings, which are co-chaired by AMTA's CEO and ARPANSA's Chief Executive, Carl-Magnus Larsson.

The agenda and minutes can be viewed at: <http://www.arpansa.gov.au/AboutUs/collaboration/amta.cfm>

Workshop on radiofrequency field health effects and standards

AMTA's Health and Safety Committee members attended an ICNIRP/ARPANSA workshop at the University of Wollongong to listen to discussion on the latest evidence of possible health effects of radio frequency fields and the update of ICNIRP's safety standards.

Dr Maria Feychting, Vice-Chairman of ICNIRP, told the workshop that it was unlikely that mobile phones caused brain cancer. She said the stable trend in brain cancer rates did not indicate a possible link between mobile use and brain cancers.

“Shielding” devices

The Committee responded to public claims that so-called shielding devices attached to mobile handsets would reduce EME emissions from phones. A prominent promoter of such a device was a high-profile Melbourne medico, who linked his cancer with use of a mobile phone, and gained media coverage.

AMTA responded publicly to such claims by saying that it sympathises with anyone who has cancer, however, there is no accepted scientific basis to equate such a medical condition with mobile phones.

The WHO says that use of commercial devices to reduce radiofrequency field exposure have not been shown to be effective. ARPANSA says such claims are inconsistent with scientific knowledge and recommends use of hands-free devices to reduce emissions if people are concerned.

Driver safety

AMTA's driver safety sub-committee was reconstituted this year and bolstered by high-level support from Telstra, Optus and Vodafone.

AMTA became a program partner with the National Road Safety Partnership Program (NRSP), which aims to help Australian businesses develop a positive road safety culture through building and sharing strategies to reduce the road toll.

The NRSP promoted AMTA's Mobile Phone Use policy under its “thought leadership” program to promote road safety in the workplace. The NRSP's members include: Rio Tinto, Zurich, Holden, IAG, Toll and the National Transport Commission.

AMTA was invited to participate as a panellist at the 4th International Conference on Driver Distraction and Inattention in Sydney in November. The Conference is considered one of the world's premier conferences on driver distraction and it was the first time it had been held outside Europe.

AMTA was also invited to address a symposium organised by the Royal Australasian College of Surgeons on driver distractions.

AMTA's website, Keep Your Eyes on the Road, provides practical information on how drivers can comply with the law and reduce risks by:

- Never text
- Always keep your eyes on the road
- Buy, install and use a cradle
- Use your smartphone's features
- Don't always answer your phone

See www.keepyoureyesontheroad.org.au

KEEPYOUREYESONTHEROAD.ORG.AU



Mobile Device Security

AMTA has revised and updated its Mobile Device Security (MDS) program, also known as the Lost & Stolen program or Mind your Mobile, this year to ensure that it remains effective with the rapid growth of smartphones and tablets.

Smartphones are more valuable and also contain more personal and confidential information than earlier generation mobile devices.

In 2014-15, AMTA revised the Business Rules governing the IMEI blocking program to allow blocking for reasons other than loss or theft reported by customers. These revised Business Rules allow mobile devices to be blocked for the following reasons:

- Fraudulently obtained
- By authorised request from Law Enforcement Agencies
- Compliance under the Handling of Life Threatening and Unwelcome Communications Code
- Rogue devices causing network interference.

AMTA believes these enhancements will provide better protection for mobile customers as well as assist the mobile industry to combat fraud and the re-sale of stolen mobile devices.

Mobile device security continues to be a high priority for the mobile telecommunications industry. The IMEI blocking

arrangements introduced by AMTA in 2003 have been very successful in establishing Australia as a world leader in the prevention of mobile handset theft. Consumers are able to report their lost or stolen mobile phone and have it blocked from accessing all mobile networks in Australia.

This system has proved to be a strong deterrent to theft of mobiles, particularly when compared to other countries that do not have an arrangement in place, such as the USA, which is investigating software alternatives, such as 'kill switch' applications.

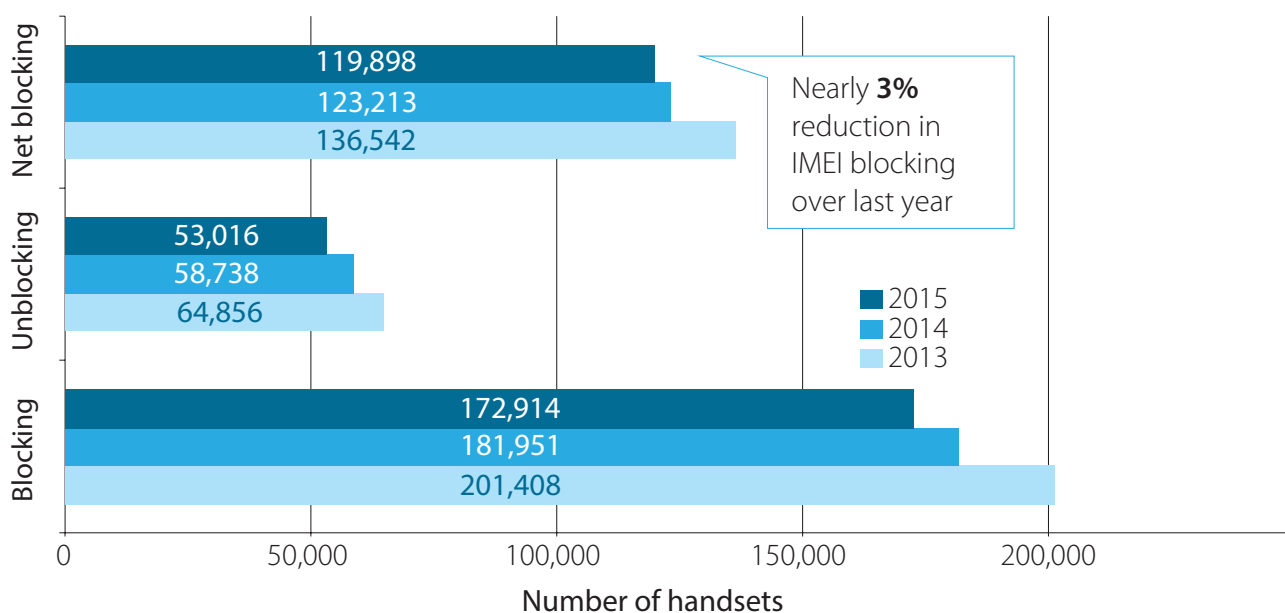
In the first full year of the program's operation in 2003-4, there were 170,000 net blocks. For the corresponding period 2014-15, there have been 119,898 blocks – a 29.5 per cent fall.

Our aim is to ensure the program continues to offer community benefits such as:

- Prevention of theft and assaults related to thefts
- Prevention of fraud
- Prevention of a black market in smartphones and tablets (the program partners with dealers of second-hand goods to provide an access point for them to check if a device is blocked before they sell it to a third-party).

To find more about Mobile Device security see www.lost.amta.org.au

Comparison IMEI Blocking Activity



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Deputy Chair: Håkan Eriksson

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