



**Australian
Mobile Telecommunications
Association**
ABN 98 065 814 315
First Floor
35 Murray Crescent
Griffith ACT 2603 Australia
PO Box 4309
Manuka ACT 2603 Australia
Ph +61 2 6239 6555
Fax +61 2 6239 6577
Web www.amta.org.au

**Department of Broadband,
Communications and the Digital Economy**

Digital Economy Future Directions

Consultation Paper

Submission by: Australian Mobile Telecommunications Association

18 February 2009

1. Introduction and background

- 1.1 AMTA is the peak industry body representing Australia's mobile telecommunications industry. AMTA's mission is to promote an environmentally, socially and economically responsible and successful mobile telecommunications industry in Australia. AMTA members include mobile Carriage Service Providers (CSPs), handset manufacturers, retail outlets, network equipment suppliers and other suppliers to the industry. For more details about AMTA, see <http://www.amta.org.au>.
- 1.2 The Australian Mobile Telecommunications Association (**AMTA**) welcomes this opportunity to comment on the Department of Broadband, Communications and the Digital Economy (**DBCDE**) Consultation Paper *Digital Economy Future Directions (the Paper)*.
- 1.3 This submission focuses on issues of particular interest to AMTA members. AMTA would be happy to provide further information on these or any other relevant issues, or to meet with the Department or other agencies to discuss issues raised.

2. Key issues

Measuring 'Success'

- 2.1 The influence and contribution of the digital economy continues to grow as technologies, services and applications reach further into all sectors of our economy and society, providing significant - and growing - social and economic benefits for all Australians.
- 2.2 The mobile telecommunications sector delivers a wide variety of mobile telecommunication services to both business and personal users in Australia, including voice services, Short Messaging Service (SMS) and Multimedia Message Service (MMS), mobile broadband, mobile TV and mobile commerce. These services deliver flexibility and convenience to users with 'anywhere, anytime' affordable rich communications capabilities. They are an essential component of the modern digital economy.
- 2.3 As noted in the Paper, there is a steady upward trend in broadband adoption, including in more recent times a very rapid update of wireless broadband. Recent

analysis of the current and future trends in voice and data usage over mobile devices, completed by Access Economics¹ on behalf of AMTA, found that:

- (a) the direct contribution of mobile telecommunications to the Australian economy was \$6.5 billion in 2006-07, or 0.62 percent of Gross Domestic Product (**GDP**), an increase of 4 percent on 2004-05;
 - (b) the indirect, or flow-on benefit from mobile telecommunications to the broader Australian economy was \$7.7 billion in 2007;
 - (c) combining the direct and indirect contributions, the mobile telecommunications industry contributed \$14.2 billion to the Australian economy in 2007;
 - (d) the indirect benefits from mobile voice and data, as measured by impacts on GDP, are estimated to rise to \$8.1 billion in 2008 and \$9.3 billion in 2010; and
 - (e) rising mobile data traffic flowing from the increasing uptake of 3G mobile telecommunications will contribute an additional \$2.1 billion to Australia's economic output in 2010.
- 2.4 Although voice remains the primary use of mobile devices, there is increasing uptake of other services, with recent significant growth in data and mobile broadband services. This trend is set to continue with the continued uptake of 3G technology and, by 2010 it is predicted that globally mobile broadband will comprise two-thirds of all broadband subscription². Analysts further predict that mobile devices will be the primary tool to connect to the Internet by the year 2020³.
- 2.5 In a short timeframe, commonly used mobile data services have advanced from SMS to email, document sharing, web browsing, multi-media messaging and social networking. The advancement of mobile telecommunication services and devices has led to significant indirect economic impacts, including productivity gains for Australian businesses. For example, some firms have reported as much as a 25 percent productivity gain from using applications on 3G phones⁴.
- 2.6 The impact of the latest generation mobile services is also providing numerous social benefits. For example, mobile applications are currently helping to connect

¹ A copy of the Australian Mobile Telecommunications Industry Economic Significance and Contribution 2008 is provided here (click to follow link).

² *Australian Mobile Telecommunications Industry: Economic significance and contribution*, Report by Access Economics for AMTA

³ See: http://www.google.com/hostednews/afp/article/ALeqM5hRqUtLnoHddm5mtz2bnn_aG5j6RA

⁴ *Australian Mobile Telecommunications Industry: Economic significance and contribution*, Report by Access Economics for AMTA

remote communities, enabling remote medical diagnosis, delivering educational benefits, facilitating logistics and personnel planning, financial services and assisting with criminal investigations. Individuals and organisations also enjoy the social and productivity benefits associated with mobile connectivity via voice telephony, data services and internet access. This includes the explosion of Web 2.0 including social networking and user-generated content (being used commercially, socially and potentially also by government), both via fixed and mobile applications.

- 2.7 As the government has identified, access to broadband is critical if Australian businesses and individuals are to reap the full benefits of participation in the global digital economy. The geographic and demographic conditions in Australia are driving very wide economic mobile coverage and capacity and dictate that wireless broadband services are even more important here than in many otherwise comparable nations.
- 2.8 Given future demand projections, there is a critical need to address future mobile growth trends from an infrastructure perspective. Radiofrequency spectrum is the most fundamental infrastructure for the provision of mobile telecommunication services. Without it, mobile service is not possible. Further, the type and amount of radiofrequency spectrum made available for mobile telecommunications will markedly influence performance and service levels.
- 2.9 The mobile industry's significant and growing contribution to productivity, the Australian economy - and therefore Australia's overall participation in the digital economy - will only be maximised if sufficient and appropriate radiofrequency spectrum is made available to it. Spectrum planning is vital if predicted efficiency gains are to be realised.
- 2.10 The recently released British report, *Digital Britain, The Interim Report, January 2009*, illustrates that Government's recognition that spectrum allocation decisions for the mobile industry are critical to the further development of that nation.

Broadband digital communications are today what electricity was a century ago to our Edwardian forebears. And they are at about the same relative state of development: applications for business and industry are relatively well advanced. Use in the workplace [is] increasingly common; basic uses in a significant and growing number of homes. The far sighted Edwardians knew that electricity in the home would soon go beyond just domestic lighting to be a major power source for new devices, applications and services.

*Even so, the extent to which electricity would be ubiquitous today and the revolutionary impact it has had on all aspects of our lives...was unimagined. **But even within a few years, those countries that had adopted early and built national core and access networks led in innovation. They pioneered the new growth sectors that become the motors of economic prosperity.***

Broadband digital networks...will be a major spur to innovation in the economies that adopt it. Available evidence shows that innovation accounts for one third of labour productivity improvements⁵. (emphasis added)

Britain needs to match the development in its fixed infrastructure with its mobile infrastructure. Nationally, our consumer and content demands are increasing for data, pictures and information as well as conversation, on the move. The mobile phone has become the one device no digital citizen wants to leave home without.

In order for the innovation and service development to happen we must have in place the right elements, invisible to the user.

The essential element for any wireless service...is the ability of the network operator to access and use radio spectrum.

The prize is significant. The industry is approaching an unprecedented technology transition. ... We are about to begin a transition to a 4th generation of mobile radio technology, the so-called Long-Term Evolution (LTE) technology, beginning in earnest as early as 2011.

This change will be hugely important for digital Britain because:

- Mobility is now vital to consumers and business alike. This much prized flexibility will apply equally to mobile broadband.
- Mobile broadband has an important role to play in stretching the universal coverage of broadband to the extremities of the UK.

It is vital for the UK to be at the leading edge of this change so that people in this country enjoy cutting edge services on the move. ... The long term goal is any content...over any network...on any handset...anywhere.⁶

- 2.11 Clearly the situation in Australia is no different. Indeed, as noted earlier, our geographic and demographic conditions suggest that mobile broadband is even more important here.
- 2.12 As the *Digital Britain* Report notes, there is a clear wireless technology and services roadmap to deliver the next 4th generation Long Term Evolution (LTE) 100Mbit/s + services. This work is very well advanced down the global standardisation path, with substantial Research and Development resource programs fully committed. The outcomes of these programs are already being applied by the global equipment manufacturing industry to bring the next generation of very high speed broadband

⁵ P14-15, *Digital Britain, The Interim Report*, Department for Culture, Media and Sport and Department for Business, Enterprise and Regulatory Reform. January 2009.

⁶ P25-27, *Digital Britain, The Interim Report*, Department for Culture, Media and Sport and Department for Business, Enterprise and Regulatory Reform. January 2009.

networks and services to the world market from 2009/2010. Carriers' service introduction plans are already well advanced.

- 2.13 Identification of the appropriate spectrum bands to provide good coverage and capacity for LTE and other broadband networks has now been undertaken by the International Telecommunications Union (ITU). The key band for wide area coverage is the reallocation of a portion of the UHF TV broadcasting band in the 700MHz range – the so called 'Digital Dividend' which is to be freed up when analogue TV broadcasting is switched over to the more efficient digital broadcasting. The reallocation of the digital dividend is currently progressing worldwide and it is critically important that the process in Australia is progressed in a timely manner and provide sufficient spectrum to keep Australia as a leading nation in the provision of wireless broadband services and a key player in the global digital economy.
- 2.14 In addition to the digital dividend spectrum, the 2.6GHz band is key to providing high service capacity, particularly in urban areas.
- 2.15 AMTA would be pleased to provide further information on any of its views on spectrum allocation and relevant research material to DBCDE on request.
- 2.16 In terms of actually measuring the 'success', AMTA suggests it would be useful to track the actual performance of key indicators – broadband take-up, efficiency gains, contribution to the economy – against the predicted levels of performance. Given the tendency for under estimation when attempting to predict the growth and prevalence of information technology in general (consider predictions about the use of the Internet, for example, or the surprise and accidental success of text messaging on mobile phones), such analyses should prove insightful and could assist with policy development on a number of fronts.
- 2.17 The key indicators need to be carefully agreed, and would need to be flexible to some extent to take into account unexpected or new technologies. They would also need to differentiate between the key technologies; it is AMTA's experience that the Australian Bureau of Statistics (**ABS**) data collections currently tend to 'lump' mobile technology in with all other information communication technology (**ICT**) technologies and are therefore not useful indicators of the 'success' of the mobiles industry.
- 2.18 AMTA notes, however, that in international mobile telecommunications forums, such as the annual GSMA Mobile World Congress, it has been recognised that Australia has in recent years been one of the leading countries in the world in terms of mobile infrastructure and services. Further information about the current congress (at which several Australian speakers were invited to speak) are available at the following [link](#).

- 2.19 To address the information void noted above, AMTA has commissioned regular reports on the economic contribution and significance of the mobile telecommunications industry in Australia. A link to the most recent report is included [here](#).
- 2.20 Outside industry-commissioned research, AMTA suggests that many potentially useful figures for the mobiles industry are already collected by ACMA. To ensure data requirements on the industry are minimised, it would be useful to consider ABS access to this data before the Bureau considers approaching industry for a whole new data set. AMTA is aware that some of these issues have been previously discussed with the ABS, but is unsure on the outcome.
- 2.21 International figures to benchmark Australia's performance will also continue to be useful. Again, however, it is AMTA's experience that ABS figures in this area are difficult to use for international comparisons because they are not sufficiently disaggregated. It is difficult to usefully compare the general Australian data with more specific data produced elsewhere (the US NAICS classification, for example).
- 2.22 AMTA understands that there may be some difficulties faced by the ABS in disaggregating classes, but believes that a breakdown much closer to other developed nations is crucial if the ABS's statistics on telecommunications and information provision are to provide a meaningful and useful picture of the industry and its growth in the coming years.

Public sector information and reporting

- 2.23 DBCDE states in its Paper that open access to public sector information (**PSI**) is a 'whole of government' issue and will necessitate cost-benefit analysis as well as analysis of legal frameworks and implementation processes.
- 2.24 While recognising that there may be beneficial use of certain information (as discussed above in relation to ABS use of statistics, for example), AMTA emphasises the importance of ensuring that due process, as outlined by DBCDE in its Paper, is indeed followed. It has been AMTA's experience that some agencies appear to treat such analyses as an exercise to prove support to decisions already made and developed rather than as opportunities to gain efficiencies and stakeholder support through rigorous and robust cost-benefit analysis. Achieving best practice regulation and consultation requires cultural support at all levels within organisations. Having Regulatory Impact Statements and related procedures in place is insufficient unless they are widely understood, respected and satisfied in spirit.
- 2.25 In addition to the risk of "reporting creep", where industry is required to report on more and more, AMTA cautions that the information collection exercise does not

also lead to “requirement creep”, where data collected is used to justify additional requirements on industry without proper cost-benefit analysis. The telecommunications industry is already subject to numerous reporting obligations that place a considerable burden on the industry without commensurate benefit.

Digital confidence

- 2.26 DBCDE states in its Paper that Government “can help promote digital confidence by setting a regulatory framework that encourages businesses to adopt practices that respect user privacy and security⁷”. The Paper goes on to note the importance of comparing Australia’s laws with international counterparts to ensue that Australia represents an “attractive value proposition for digital economy companies”.

AMTA makes the following points in relation to these issues:

- 2.27 The stated objectives and rhetoric is sound. However, it is AMTA’s experience that international precedents are not always considered or respected.
- 2.28 The mobile telecommunications industry faces a raft of overlapping and duplicative regulations and requirements that provide little value to consumers, Government or regulators. It operates in an environment that is subject to both generic business regulation and industry-specific regulation. Industry-specific regulation is administered through both government legislation and regulations and self-regulatory processes.
- 2.29 The stated aim of the *Telecommunications Act 1997* is to establish a telecommunications regulatory regime that *promotes the greatest practicable use of industry self-regulation*⁸. The reality is a complex co-regulatory model with overlap and inconsistency between jurisdictional and agency responsibilities and numerous bodies developing policy without adequate reference to other agencies or industry.
- 2.30 Such duplication and complexity results in sub-optimal policy processes and outcomes. Even where a good outcome is eventually achieved, poor process increases the cost of development and compliance. These costs are inevitably passed on to consumers.
- 2.31 For example, under the Telecommunications (Service Provider Identity Checks for Prepaid Mobile Telecommunications Services) Determination 2000 (the **Prepaid Determination**), the telecommunication industry is required to collect, verify, store and, on lawful request, retrieve identity and address information about the purchaser and/or user of prepaid mobile phone services. Carriage Service Providers (**CSPs**) must rely on retailers to collect this information. AMTA

⁷ Page 6

⁸ Section 4a, Telecommunications Act 1997

understands the Determination’s primary objective was related to security priorities: to eliminate “anonymous” pre-paid services.

- 2.32 AMTA is keen to work cooperatively with Government and other stakeholders to help the Government meet its law enforcement objectives and recognises the challenges for Government in developing and implementing effective legislation. In considering the Prepaid regime, however, AMTA contends that Government ignored its own advice and made no effort to cost, assess or justify its legislation (or any proposed or actual changes to it) to ensure that the regulatory intervention was effective or proportional to the issues that it seeks to address. Indeed, AMTA is concerned that not only does the current regime not provide a balanced and cost-effective policy outcome for Australian consumers, the industry or the Law Enforcement Agencies, but it suffers from limited effectiveness and is costing industry millions of dollars to run.
- 2.33 AMTA further notes that internationally, six countries actively considered and rejected proposals for a prepaid registration policy following a consultation process⁹. Opposition to the requirements included cost, practicality, privacy rights and effectiveness.
- 2.34 Returning specifically to the issue in question, AMTA cautions that the regulatory framework encouraging digital confidence must be very high-level, allowing different sectors of the industry the flexibility to meet the legislation in the most appropriate manner for them (including through Industry Codes and Guidelines, as noted below).
- 2.35 Further, it must be clear that any new legislation or regulation is only introduced if existing legislation has been clearly shown to be inadequate – and the new legislation has been shown to be better than any alternative. Failure to do this will result in increased costs, less innovation and fewer benefits for consumers.
- 2.36 Industry’s own initiatives to identify potential issues and write Guidelines setting industry benchmarks are important in ensuring consumer confidence. For example, through AMTA, the mobiles industry has been working for some time on an industry guideline for Location Based Services (**LBS**). These Guidelines recognise that new content and mobile services must be responsibly delivered to ensure that customer privacy and safety issues are adequately safeguarded and that public trust and confidence in mobile services is maintained. The Guidelines seek to ensure that LBS are made available to consumers in a responsible and accountable manner.
- 2.37 Digital confidence must also be addressed through education – further comments are provided below.

⁹ Canada, Czech Republic, Greece, Ireland, the Netherlands and Poland.

Addressing skills, knowledge, safety and privacy issues

- 2.38 AMTA strongly agrees that government and industry have a role to play in ensuring that Australians are technology and media literate. This includes ensuring privacy and security issues are adequately addressed.
- 2.39 As acknowledged in the Paper, AMTA has been active in this area by producing a range of plain-English information sheets¹⁰ and creating a website to assist young people on a range of mobile-related issues, covering subjects such as bullying, money, safety, recycling, technology and culture¹¹.
- 2.40 It is perhaps more difficult to ensure that adults are technologically literate. AMTA has addressed this in some areas, with some of its material written especially for adults, most notably in its award-winning information about mobile bullying. AMTA has produced one information sheet for children, with another directed at parents and carers¹².
- 2.41 AMTA has also produced material about spam and scams to help Australians understand the issues and protect themselves and to direct them to further information where relevant. The industry also shares information, through AMTA, about new scams to allow each carrier to take early action to protect their customers from problems. AMTA has also provided detailed submissions to government as it has reviewed its regulation, enforcement activities and international collaboration, and is encouraged that the regulator has recently been demonstrating its willingness and ability to enforce its regulation.
- 2.42 AMTA is a supporter of Scam Watch and works with ACMA on cyber-safety issues and is always keen to work with its members to explore further opportunities for assisting Government and other relevant organisations to act holistically to further educate and inform the Australian community, as appropriate.

Environmental issues

- 2.43 A recent study, Towards a High-Bandwidth, Low-Carbon Future: Telecommunications-based Opportunities to Reduce Greenhouse Gas Emissions¹³, found that telecommunications networks can help reduce Australia's greenhouse gas emissions by almost five per cent by 2015 and deliver up to \$6.6 billion a year in financial savings for Australian businesses and households.

The study, commissioned by Telstra, prepared by climate change experts Climate Risk and peer-reviewed by independent experts Greg Bourne (CEO, World Wildlife

¹⁰ See AMTA's website at: <http://www.amta.org.au/default.asp?id=367>

¹¹ See: <http://www.str8tlk.amta.org.au/>

¹² See: <http://www.str8tlk.amta.org.au/default.asp?id=635>

¹³ http://www.telstra.com.au/abouttelstra/csr/climate_change.cfm

Fund Australia) and leading Australian energy and environmental authority, Dr Hugh Saddler, identifies seven major opportunities for Australian consumers and businesses to reduce or avoid the release of carbon emissions into the atmosphere. If implemented by 2015, these opportunities could assist reduce Australia's greenhouse gas emissions by around 27 million carbon tonnes per year. Individually, each opportunity could deliver per annum carbon emission savings of:

- 1.8 million tonnes (Mt) by using broadband to remotely manage power for appliances not in use or on "stand-by";
- 2.4Mt by improving business productivity with "in-person" high-definition videoconferencing;
- 2.9Mt with broadband based, real-time freight allocation systems to fill empty freight vehicles;
- 3.0Mt with presence-detecting services that turn off devices that are "on" but not being used;
- 3.1Mt with teleworking and working in regional centres by reducing commuter car traffic;
- 3.9Mt by bringing integrated personalised public transport to your door with a phone call; and
- 10.1Mt by increasing renewable energy use with networked demand side management.

The industry is also working to reduce its own carbon footprint, with new technology offering power saving benefits.

2.44 AMTA notes that in its discussions on product stewardship, DBCDE states in its paper that 'mobile telephones have an average life of between six months and two years. In Australia, most of these discarded devices currently end up in landfill'¹⁴. The Paper then goes on to discuss the need for national action on this issue.

2.45 AMTA makes the following points in relation to this:

- (a) The mobile industry is a standout performer in the area of recycling, with AMTA running a world-leading scheme on industry's behalf: "MobileMuster". MobileMuster is the only industry-wide program for electronic waste offering free recycling for all mobile phone brands in Australia. It is believed to be the only such scheme in the world.
- (b) The mobile telecommunications industry voluntarily initiated the program, which collects mobile phone handsets, batteries, chargers and accessories from a network of over 3000 public collection points, in 1999.

¹⁴ P20

- (c) More than 90 percent of the materials in mobile phones, batteries, accessories and chargers can be recovered. These materials are then turned into useful products. Recycling mobile phone materials avoids between 60 to 90 percent of the greenhouse gases that would normally be emitted when making these products from new materials.
- (d) The program also allows the small amount of potentially harmful substances within mobile phones to be safely disposed of.
- (e) Contrary to the figures stated in the Paper, MobileMuster's figures indicate that Australians upgrade or exchange their mobile phones every 18 to 24 months.
- (f) AMTA also contests the statement that "most" mobile phones end up in landfill. AMTA's research reveals that 8 out of 10 people choose to keep or give away their old mobile phones, with about 16 million old mobile phones cluttering people's homes and offices across Australia. Less than four percent throw them out. MobileMuster encourages householders to retrieve their old phones and recycle them, but it is important to understand that while they are in people's homes or offices, they do not pose a risk to the environment.

2.46 AMTA also notes that at its November 2008 meeting the Environmental Protection and Heritage Council (**EPHC**)

"welcomed the Australian Mobile Telecommunications Association Statement of Commitment and acknowledged the work by the Association to improve mobile phone recovery to date and their commitment to achieve ambitious performance targets over the next five years. Ministers also welcomed the Association's commitment to greater transparency, particularly noting the Association's commitment to publish annual public reports on the performance of the MobileMuster scheme in achieving the targets¹⁵."

2.47 AMTA is a member of the Restriction of Hazardous Substances (**RoHS**) Industry/Non-Government Organisations/Government Steering Group. The purpose of the steering group is to examine the feasibility of establishing a self-managed Code of Practice to govern industry practices in relation to the implementation of RoHS in the manufacturing and production cycle, for both imported and exported goods.

2.48 On a broader level, while AMTA acknowledges that it is important to address the wider product stewardship issues and ensure national consistency in outcomes, it is vital that any industry-wide initiatives on e-waste do not undermine or penalise those sections of the industry, like the mobiles industry, that have demonstrated their commitment to 'doing the right thing' and are already running world-class programs. Rather, the legislation should look to provide a 'safety net' to force those

¹⁵ See: [EPHC FINALCommunique_7NOV08.pdf](#)

who are not acting responsibly to do so, and to support the efforts of those already acting.

- 2.49 Support could include investing in broad educational initiatives to educate the community about e-waste, toxic materials, the importance of recycling and how and where they can recycle.

3. Conclusions

- 3.1 The mobile industry is a significant - and growing - contributor to Australia's productivity and its economy. It is a key plank in enabling Australians to participate in the digital economy.
- 3.2 As the government has identified, access to broadband is critical if Australian businesses and individuals are to reap the full benefits of participation in the global digital economy. The geographic and demographic conditions in Australia dictate that wireless broadband service is even more important here than in many otherwise comparable nations.
- 3.3 Given future demand projections, there is a critical need to address future mobile growth trends from an infrastructure perspective. Radiofrequency spectrum is fundamental infrastructure for the provision of mobile telecommunication services. Without it, mobile service is not possible. Further, the type and amount of radiofrequency spectrum made available for mobile telecommunications will influence performance and service levels.
- 3.4 If Australia is to enjoy full participation in the digital economy, government must ensure that sufficient and appropriate radiofrequency spectrum is made available to the mobile telecommunications industry to allow it to meet future mobile growth demand. This includes spectrum from the digital dividend as well as spectrum in the 2.6Ghz band.
- 3.1 The government must also work to minimise unnecessary regulatory burden on the industry. The regulatory framework must be very high-level, allowing different sectors of the industry the flexibility to meet the legislation in the most appropriate manner for them (including through Industry Codes and Guidelines, or in the case of e-waste initiatives, programs like MobileMuster). Further, it must be clear that any new legislation or regulation is only introduced if existing legislation has been clearly shown to be inadequate – and the new legislation has been shown to be better than any alternative. Failure to do this will result in increased costs, less innovation and fewer benefits for consumers.

3.2 AMTA thanks DBCDE for the opportunity to comment and would be happy to provide further information on these or any other relevant issues, or to meet with the Department or other agencies to discuss issues raised.