

25 September 2006

Attention:
The Secretary, Senate Environment, Communications
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**Inquiry into the Broadcasting Services Amendment (Media Ownership) Bill 2006 & Related Bills
Response to the Minister's Discussion Paper – “New Services on Digital Spectrum”**

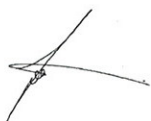
Telstra welcomes the Minister's decision to allocate two currently unassigned channels of broadcasting spectrum in the 700 MHz range for new digital services as part of the Government's media reform package. As advocated in Telstra's previous submission to the Government's Media Reform Options Paper as well as in this submission, the 700 MHz spectrum provides an important additional platform to encourage the development and uptake of new & innovative digital opportunities such as mobile TV.

The extent to which the full benefits of mobile TV will eventuate is dependent on the right regulatory framework. Successful utilisation of the 700 MHz spectrum for mobile TV requires the implementation of a framework that provides:

- **A level playing field** for all market participants, including new participants.
- **Upfront certainty and transparency** regarding any imposts or obligations to be applied to any successful licence bidder. Any such imposts or obligations must be applied uniformly (consistent with a level playing field).
- **Market based licence allocation and use** which provides for: 1) the use of market based mechanisms; 2) a secondary market to permit sub-licensing of channels; and 3) channel differentiation.
- All embodied by a **light touch regulatory framework**, in recognition of the nascent market for converging services, and significant investment required.

We look forward to participating in the forthcoming public hearings.

Yours sincerely,



Tony Warren
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TELSTRA CORPORATION LIMITED

Submission to Senate Environment, Communications,
Information Technology and the Arts Committee

Inquiry into Broadcasting Services Amendment (Media Ownership) Bill
2006 & Related Bills

Response to the Minister's Discussion Paper –
“New Services on Digital Spectrum”

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Executive summary

Telstra welcomes the Minister's decision to allocate two currently unassigned channels of broadcasting spectrum in the 700 MHz range for new digital services as part of the Government's media reform package. As advocated in Telstra's submission to the Government's *Media Reform Options Paper*¹, the 700 MHz spectrum provides an important additional platform to encourage the development and uptake of mobile TV opportunities.

Telstra does not currently envisage having any commercial interest in acquiring the Channel A licence.

Mobile TV services delivered utilising Channel B present significant opportunities, distinct from traditional broadcasting and telecommunications services. The successful proliferation of mobile TV services has the potential to provide the impetus for the development and consumption of new digital technologies, new and compelling digital content, and encourage entrants, investment and competition in Australia's media market. This in turn will facilitate the policy's stated objectives of transitioning to a digital environment, harnessing the opportunities from convergence, and achieving diversity in Australia's media sector.

The extent to which the full benefits of mobile TV will eventuate is dependent on the right regulatory framework. Successful utilisation of the 700 MHz spectrum for mobile TV requires the implementation of a framework that provides:

- **A level playing field** for all market participants, including new participants, especially in light of the fact that "Channel B" apparatus licence will be made available to a wide range of market participants including Free to Air ("FTA") broadcasters, telecommunications, infrastructure and media players.
- **Upfront certainty and transparency** regarding any imposts or obligations (e.g. the nature of any access regime, restrictions on channels, packaging etc) to be applied to any successful licence bidder. Any such imposts or obligations must be applied uniformly (consistent with a level playing field).
- **Market-based licence allocation and use** which provides for: 1) the use of market-based mechanisms; 2) a secondary market to permit sub-licensing of channels; and 3) channel differentiation.
- All embodied by **a light touch regulatory framework**, in recognition of the nascent market for converging services, and significant investment required.

¹ http://www.dcita.gov.au/___data/assets/pdf_file/40022/Telstra_submission.pdf

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1. Mobile TV is an exciting opportunity

Telstra anticipates that the “highest and best use”² of Channel B will be for mobile TV for the following reasons: it satisfies community’s demand; stimulates the development and consumption of new and innovative digital services, technologies and content; encourages new entrants, competition and investment in the media market; and supports the transition to a digital environment.

1.1 Satisfies community demand

There are strong indicators that mobile TV will be an exciting new digital service. Domestic and international experiences demonstrate that the mobile TV proposition possesses real potential as a viable new service innovation that consumers will demand, and that industry will want to supply. Appendix 1 summarises the international and Australian research which forecasts significant market size and consumer demand.

1.2 Stimulates development and consumption of digital technologies, services and content

Although there are a number of emerging digital technologies and applications that are suitable for the 700 MHz band³, mobile TV has proven to be the most commercially successful and shows potential to encourage take-up of digital broadcasting services via adoption of new technologies, services and creation of new digital content.

Mobile TV can be delivered today via 3G networks.⁴ However, mobile phone networks, whether 2.5G, 3G or 3.5G, have been designed to enable unicast bi-directional voice and data communication, and were not designed to handle continuous high-capacity data transmissions, which broadcast TV requires. In order to broadcast TV signals *efficiently* to mobile devices, new broadcast networks and transmission technologies are required. Already, we are observing competing broadcast mobile TV delivery technologies, e.g. MediaFLO⁵ (USA), DMB⁶ (Korea), ISDB-T⁷ (Japan) and DVB-H⁸. Such digital technologies offer alternative forms of digital broadcasting to the traditional digital terrestrial television broadcasting, and further will be important enablers for next generation services.

² Minister for Communications, Information Technology and the Arts, “New Services on Digital Spectrum Discussion Paper”, September 2006.

³ For example telematics and broadcast IP streaming services.

⁴ Australia's four mobile phone networks already offer some mobile-TV streaming services over 3G.

⁵ MediaFLO is Qualcomm’s proprietary multicast technology for delivery of mobile content. Cellular operators who choose to partner with MediaFLO can use the network as a complement to their CDMA/EV-DO or UMTS/HSDPA networks to offer broadcast services.

⁶ Digital Multimedia Broadcast (“DMB”) is in use in Korea and is being trialed in Europe. Korea awarded six DMB mobile TV licenses in 2005 with services beginning in May 2005. DMB can operate via satellite (S-DMB) or terrestrial (T-DMB) transmission. T-DMB uses MPEG-4 Part 10 to encode and compress the video transmission.

⁷ Integrated Services Digital Broadcasting (“ISDB-T”) is the digital television and digital audio broadcasting (DAB) format that Japan has created to allow radio and television stations there to convert to digital. It operates on unused TV channels.

⁸ Digital Video Broadcast - Handheld (“DVB-H”) is an open standard to transmit video to handheld devices based on the DVB-T standard used for transmission of digital terrestrial television. DVB-H trials are underway or completed in Europe, the United States, Australia, India and Africa. Commercial launches are planned for 2006.

The Minister had made it clear that Channel B services should offer “significant opportunities for new, innovative digital service options of interest and value to consumers”⁹, and should not “replicate traditional television services”¹⁰. The support for digital broadcasting capabilities on mobile terminals will herald a range of differentiated services and applications e.g. mobile “live” TV programs, interactive mobile TV, mobisodes, push and store, local broadcast and location-based services. Mobile TV is a unique proposition that is complementary to, and distinct from traditional FTA broadcasting and telecommunications services¹¹, but also exploits the possibilities that a converged cellular and broadcast solution can offer. Mobile TV provides what traditional broadcast media cannot, that is, a combination of interactivity, mobility and greater personalisation by allowing consumers to access and view the content they want, at any time they want it. Mobile TV also provides what traditional cellular services have not to date by enabling users to access a wider range of media content that will extend the entertainment concept.

The benefit of additional avenues for the consumption of digital content should not be underestimated. Research has shown that access to additional content/channels and variety, especially via new mediums, is the most compelling reason to switch to digital technology.¹² Accordingly, freeing up spectrum for mobile TV could be a central driver for digital penetration and adoption.

1.3 Encourages new entrants, competition and investment

Mobile TV is a key driver of digital convergence among networks, devices and content. Digital convergence will have a profound impact on consumer lifestyles, and as such, it carries new business opportunities for a plethora of players in the telecom and media worlds.¹³ The mobile TV value chain presents opportunities for existing and new broadcasters, mobile operators, content providers, content aggregators, and content creators, equipment manufacturers, spectrum managers and broadcast infrastructure operators. Undoubtedly various business models and collaboration will occur between players in this emerging environment. Furthermore, each player will bring with them a level of investment and expertise that will ultimately contribute to diversity in a competitive environment. This is evidenced by the flurry of mobile TV collaborations occurring globally¹⁴.

⁹ Government Media Reforms Paper, “Meeting the Digital Challenge: Reforming Australia’s media in the digital age”, page 23.

¹⁰ Government Media Reforms Paper, “Meeting the Digital Challenge: Reforming Australia’s media in the digital age”, page 22.

¹¹ Results from mobile TV trials conducted globally have demonstrated that demand is high in the morning, and in the early evening, coinciding with daily commutes to and from work. Interestingly, the results also demonstrate a lunchtime viewing peak higher than the normal TV pattern, suggesting that viewers are enjoying news, sports and their favourite daytime soaps while on their lunch break. The overwhelming message from these pilots was that consumers want both a wide range of channels but also content that is suitable for watching on mobile devices.

¹² ACMA, “Digital Media in Australian Homes”, 2005.

¹³ IBM Institute for Business Value, “Primetime for Mobile Television”, April 2006, at page 15.

¹⁴ Refer to appendix.

2. The right regulatory framework

Telecommunications operators have several delivery technology options for satisfying future consumer demand for mobile TV. Use of the Channel B spectrum with DVB-H or MediaFlo technology could be the most attractive of these options, but only with the right regulatory framework.

The potential purchaser of this licence faces the nascent environment characterised by evolving and convergent technologies, services and markets, creating significant market uncertainty for bidders. This is in the context of the significant investment required not only to acquire the licence but also to build the network of transmitters that will be required to supply mobile TV services using this spectrum. Telstra advocates that to ensure the Channel B licence presents a commercially attractive proposition, the regulatory framework to be applied from 1 January 2007 must offer maximum commercial flexibility in relation to the use, technology and manner of supply of services under this licence. Accordingly the Government should respond to this significant opportunity by pursuing a light-touch regulatory framework that encourages investment in new and innovative digital services.

Successful translation of the 700 MHz spectrum to mobile TV requires: a level playing field, upfront certainty and market based spectrum allocation and use.

2.1 Level playing field

With the apparatus licence being made available for a wide range of market players to bid, including FTA broadcasters, telecommunications, infrastructure and media players, the Government should take great care to maintain a level playing field for all market participants, including new participants. This means rules must apply to all participants equally, and that every player faces the prospect of being required to meet the requirements of these rules in equivalent fashion. By ensuring a level playing field and fair competition for all market participants, the best player will manage to succeed in the market and provide the best service offering to consumers, as opposed to promoting the commercial interests of particular parties.

This general principle is particularly important in this instance, as the auction of Channel B is likely to involve the added complexity of a range of players currently operating in different markets, all licensed/operating under different regimes, seeking the opportunity to supply convergent services that also cut across traditional market boundaries. In short, it would be prudent for the Government to ensure that the framework applies equal treatment to all participants.

2.2 Upfront certainty

Telstra commends the Minister's decision to adopt a market-based allocation process (by auction), and a use-it-or-lose-it obligation within 18 months. However, Telstra is of a view that the Government together with the Australian Communications & Media Authority ("ACMA") must afford industry further upfront certainty and clarity regarding any imposts or obligations (e.g. the nature of any access regime, restrictions on channels, packaging etc) that may be applied to the successful licence bidder. Any such imposts or obligations must be applied uniformly (consistent with a level playing field). For example, it is currently unclear whether the exception of broadcasting network operators from the requirement to hold a telecommunications carrier licence, and its consequences (including access and conduct regulation under Parts XIC and XIB of the Trade Practices Act ("TPA")) will continue in relation to the Channel A and Channel B licences. This is an issue which has huge implications for the

level of regulatory risk faced by the successful bidder for the licences, which must be clarified ahead of any auction.

Capital intensive investments in infrastructure and new technologies necessarily involve a high degree of risk, and the Government will need to balance the impact on interest in the licence of upfront clarity regarding the (light-touch) regulatory framework versus the value-diminishing effect, particularly in this market, of regulatory uncertainty. It is well-accepted economic principle that regulatory certainty is a pre-requisite for high risk capital-intensive activities. Clearly articulated 'rules of engagement' will provide greater investor confidence, and allow market participants a chance to clearly assess the investment risks.

Giving industry greater certainty regarding the conditions they will face is even more pertinent in this instance in light of the following factors:

- mobile TV is a new service in a relatively nascent environment;
- the term of the apparatus licence necessitates a return on investment within 10 years;
- there is likely to be some uncertainty as to whether and how the Australian Competition & Consumer Commission may seek to invoke section 50 of the TPA, given that the nature of the licence on offer and the significant investment required to utilise it will necessarily imply that large, experienced players from potentially a range of currently separate but converging markets will bid – upfront clarity of the key rights and obligations of the licensee will assist bidders to understand whether they may face a section 50 issue;
- the significant investment required, both in the licence and the infrastructure; and
- the likelihood that the licensee will need to negotiate tower access arrangements to commence service provision within the 18 month us-it-or-lose-it period.

Uncertainty and unnecessarily restrictive policies could inhibit the development of mobile TV services and the associated benefits to consumers and the economy. Accordingly, the Government should be mindful to implement a framework that affords industry sufficient and necessary certainty and transparency to facilitate investment.

2.3 Market-based spectrum allocation and use

Telstra endorses the use of market-based mechanisms for licence allocation. In addition, Telstra urges the Government to ensure that a secondary market for the use of channels is made available under the Channel B licence, and in particular that this secondary market is capable of driving channel differentiation rather than homogeneous offerings by competing operators.

2.3.1 Market-driven mechanisms

Faced with increasing pressures from unpredictable markets and rapid technological change, Government should let market forces prevail in line with international practice, and also in recognition of the fact that market players have the best knowledge of their own costs and preferences and a strong incentive to respond to market signals and put resources to their best possible use. Practically, what this requires is the use of price-based auctions (as opposed to 'beauty contests') to make primary assignments of the licence, together with the facilitation of secondary trading.

Telstra therefore endorses the Government's proposal that there will be no further control restrictions imposed in relation to the licences. Subject to its comments above in relation to the need for a level playing field and upfront certainty, Telstra is of the view that section 50 TPA processes can address any 'substantially lessening of competition' issues which may arise at the completion of the auction.

Consistent with its view that market forces must be permitted to prevail in such a nascent market, and in the absence of any indication to the contrary, Telstra assumes that there is no proposal to prescribe the technology to be deployed by the Channel B licensee. In the interests of clarity and upfront certainty Telstra recommends this be expressly confirmed.

2.3.2 Secondary market

Consistent with the principles of relying on market forces and liberalisation is the idea of secondary trading. Secondary trading allows spectrum rights to be traded between parties in a secondary market. Trading in spectrum can take several forms that include transfer of licences, reconfiguration, partial trading of spectrum (e.g. selling access to some of the content channel capacity), spectrum leasing and change of spectrum use. Spectrum trading ensures that the auctioned spectrum is used efficiently to deploy services of the greatest benefit to consumers. It promotes competition in the supply of spectrum derived services, differentiation in content services and also removes barriers to market entry.

In the case of the 700 MHz sale, Telstra submits that a secondary market for channels made available under the Channel B licence will drive pro-competitive outcomes. It seems unlikely that a single operator will itself use the up to 30 channels which can be made available for mobile TV, and it is clear that a range of players are interested in the opportunity to use some channels for mobile TV. A secondary market for channels will enable market forces to generate various commercial arrangements between these parties which serve their commercial requirements and enable a wide range of competing services to be provided to consumers. Further the secondary market will permit these arrangements to be adapted as necessary to reflect market conditions. This is particularly desirable when seeking to create a flexible environment for the introduction of new and innovative services. In Telstra's view it will be essential if the 18 month lose-it-or-use rule applies to the entire capacity of the licence.

2.3.3 Channel differentiation

The benefits of the above-mentioned principles are premised on the condition of "channel differentiation", i.e. the assignment of exclusive privileges to the licensee, to decide the service, content, technology or use of the spectrum. One of the tenets of spectrum licensing in Australia is the concept of exclusive privileges to the owner. This should equally apply to Channel B and should be expressed upfront – not doing so will affect the value of the spectrum.

The secondary market should also operate on a presumption of exclusive rights to the acquirer of a channel. There should be no presumption or obligations to share content or channels – such obligations merely drive the provision of homogeneous services by competing operators, depriving consumers of choice from a diverse range of services and channels, and of the benefits of competition between differentiated offerings. Telstra is not suggesting that the licensee would not seek to share common channels on a commercial basis where this is efficient, merely that there should be no presumption or obligation to do so.

Consistent with market-based spectrum management, channel differentiation along with flexibility and transferability creates a strong incentive to allocate and assign spectrum to its highest valued use. Channel differentiation provides appropriate incentives to invest in costly infrastructure, facilitates long-term planning, and importantly encourages licensees to innovate, differentiate and compete – a cited objective for the 700 MHz spectrum.

Appendix 1

A sample of market research and forecasts

A wide range of research forecasts the mobile TV market to grow to between US\$5 and 27 billion worldwide by 2010¹⁵.

For instance, Datamonitor has created a conservative forecast for the take-up of Mobile TV and is expecting 69 million global subscribers in 2009, generating revenues of around US\$5.5 billion.¹⁶ More recently, research by Informa Telecoms & Media predicts that by 2011, there will be 210 million mobile TV subscribers worldwide. Asia-Pacific will lead the way with 95.1 million anticipated subscribers by 2011, as innovative services from Korean operators continue to gain traction in that market and China and Japan follow suit. Europe, with its relatively advanced infrastructure will see 68.7 million subscribers by 2011, with spikes as operators launch services to coincide with the 2006 FIFA World Cup¹⁷ and again in 2009 when a more complete infrastructure base is likely to be achieved. Middle East and Africa will follow with 9.5 million subscribers in 2011 and The Americas with 9.1 million.¹⁸

There have been trials conducted nationally¹⁹ and internationally²⁰ that confirm the popularity and viability of mobile TV services. For example, interim results from the pilot in Oxford, UK, revealed that 83% of participants were satisfied with the service and over three quarters (76%) said they would take up the service within 12 months. In France, 68% said they would pay for mobile TV services while over half (55%) in Spain were willing to do so. Nearly 75% of Spanish participants would recommend the service to friends and family.²¹ In the Australian DVB-H trial, 50% of trial participants said they would spend at least \$10 per month on mobile TV.

¹⁵ IBM Institute for Business Value, "Primetime for Mobile Television", April 2006

¹⁶ Datamonitor, "Broadcast TV to Mobile", December 2005

¹⁷ For example: 3 Italia showed all 64 games World Cup games via its DVB-H broadcast network; in Germany, all 4 mobile networks – E-Plus, O2, T-Mobile and Vodafone have launched DVB-H trials around the World Cup, providing users with some 14 different football-themed video packages and 6 radio feeds; and in the UK, 3UK streaming daily world cup program & game highlights available 5 minutes after full-time.

¹⁸ Informa Telecoms & Media, "Mobile TV: Broadcast and Mobile Multimedia", 2nd edition Strategic Report, July 2006

¹⁹ The Bridge Networks Pty Limited (a subsidiary of Broadcast Australia) launched a DVB-H trial, branded "movemedia", on 19 July 2005.

²⁰ Oxford UK Pilot (O2, Arqiva & Nokia, Sep 2005), Helsinki Finland Pilot (Nokia, Digita, Elia, Nelonen, Sonera, YLE & MTV, Mar-Jun 2005), Spanish Pilot (Abertis Telecom, Nokia & Telefonica, Sep 2005), and French Pilot (CANA + Group, Nokia, SFR & towerCast, Sep 05 – Jun 06).

²¹ http://press.nokia.com/PR/200603/1038209_5.html