Broadcast Australia Submission to the Senate Environment, Communications and the Arts Committee

6 April 2010

Broadcasting Legislation Amendment (Digital Television) Bill 2010

1. Introduction

This Bill outlines the biggest changes to the structure and delivery of regional and remote free to air TV services since the introduction of the Digital Amendments to the Broadcasting Services Act (BSA) in 2000.

The Bill results from detailed and intense discussions that Broadcast Australia understands have been largely held between DBCDE and commercial and National free to air TV broadcasters (ABC and SBS) since the Minister's first announcement of the new digital free to air direct to home (DTH) satellite TV platform on 29 January 2009.

Broadcast Australia has not been formally involved in these detailed discussions but from time to time has made comment to DBCDE, the Minister's office and commercial and National free to air TV broadcasters concerning aspects of the new platform.

Despite Broadcast Australia's primary business interest being the ownership of terrestrial broadcasting sites and towers and the provision of analog and digital transmission services, it understands the reasons why a new DTH free to air TV satellite platform has been developed. While Broadcast Australia maintains that wherever it is cost effective, viewers of free to air TV services are much better served by terrestrial transmission means than by DTH satellite, it understands that in small communities and in various pockets where digital terrestrial TV reception is difficult, it is not economically feasible to provide digital terrestrial transmission facilities to serve all homes.

Broadcast Australia has not seen the final list of current analog terrestrial free to air TV transmission facilities that will be converted to digital by the free to air TV broadcasters, and does not know the final list of new digital terrestrial in fill transmission facilities that will be implemented by the free to air TV broadcasters. As a result it cannot comment on whether the final resulting balance between DTH satellite reception of free to air TV services and terrestrial reception of the same services has been correctly choreographed by the Bill.

As demonstrated in Attachment 1 Broadcast Australia believes it is overwhelmingly in TV viewers' interests that digital free to air TV services potentially available to homes from the satellite are made available through local digital terrestrial transmission facilities - unless it can be demonstrated it is simply not cost effective to provide the full range of terrestrial digital transmission facilities to achieve this.

Broadcast Australia is unaware of:

- exactly what program services will be available from the satellite (and in what State time zone they will be scheduled);

- how popular programs like the AFL coverages can be scheduled on the 7 and 10 Network related core channels to suit viewers as far apart in sporting coverage interests as those in Lismore, Deniliquin, Warrnambool, Burnie and Port Lincoln? EG will AFL coverages be scheduled with NSW or Victorian interests in mind when the same core 7 and 10 Network channels with the one schedule must cover viewers in 4 states; and
- any cost benefit study that has underpinned the decision by government to spend $40 million per annum in 2010 dollar terms for each of the next 4 years (while this is an ongoing commitment the actual future amount has not yet been disclosed) to provide the full range of so called Freeview services from the new satellite platform, compared with rolling out a greater number of digital terrestrial transmission TV facilities.

Given the $40 million per annum price tag placed on the new satellite platform by the Minister in his statement of 5 January 2010, it may well be that over the next 25 years Australian governments will spend as much on the provision of DTH free to air TV satellite services as they may receive from spectrum auctions which follow the cessation of analog terrestrial TV transmissions and the reallocation (restacking) of current frequencies.

Broadcast Australia was not involved in any discussions which have led to the final development of the Bill. It therefore, like some other respondents, has had just 10 business days to examine the lengthy and complex Explanatory Memorandum and Bill before being required to make comments available to the Senate Committee by 6 April.

Rather than make specific comments on particular sections and paragraphs of the Bill and suggest detailed amendments, Broadcast Australia thought it would be more useful to outline a range of comments and questions for the Senate Committee to consider during its deliberations and interaction with the relevant parties that did have a close connection with the final development of the Bill.

The substantive part of this Broadcast Australia submission can be found in Section 3.

2. Background to Broadcast Australia

Broadcast Australia owns and operates a network of 600 sites across Australia and is a leading provider of critical wireless communications solutions across multiple platforms. With robust, well placed infrastructure that maximises coverage potential and a field team on call 24/7 across the country, Broadcast Australia is well placed to develop tailored solutions for any wireless communication requirement for wide coverage.

Broadcast Australia offers an impressive portfolio of products including

- fully managed/portal/site sharing services,
- radio frequency and spectrum planning,
- system design,

- project management and systems integration, and
- network management.

Broadcast Australia also develops network solutions for new and emerging technologies in collaboration with wireless service providers and equipment vendors.

3. Questions and comments in relation to the Bill

The Bill develops the framework for the provision of all Freeview free to air digital TV services on a new satellite platform.

It also provides the framework for extending digital terrestrial transmission facilities in those areas of Australia where currently less than a full range of Freeview digital free to air TV services are available terrestrially. In other words where currently regulation or legislation may have prevented local commercial free to air terrestrial broadcasting entities from transmitting a full range of Freeview services the Bill attempts to remove those restrictions and either makes it mandatory or permissible for the entities involved to match on the ground (terrestrial) what otherwise the Bill would potentially make available from the sky (satellite).

Notwithstanding this 'equalisation' between satellite and terrestrial in the Bill, neither it nor the Explanatory Memorandum outline:

- the number of existing analog terrestrial self help transmission facilities that have been agreed to be converted to digital terrestrial transmission by the commercial and National free to air TV broadcasters; nor
- the number of new in fill digital terrestrial transmission facilities that will be established by the broadcasters to overcome the still unpublished digital terrestrial reception black spots.

Hence, the balance between homes 'forced' to go DTH satellite to receive Freeview digital TV services and those that will be able to receive them 'normally' through terrestrial means is not discernable to Broadcast Australia at the time of making this submission.

Notwithstanding this the Minister in his release of 5 January 2010 indicated that he expected up to 247,000 homes, containing in the order of 700,000 people, to receive their digital free to air commercial and National TV services from the new satellite platform. To put even this preliminary estimate into perspective, it is about 40% greater than the universe of TV homes and viewers in Tasmania.

This estimate, which may need to be altered over time, is significant for the Senate Committee to bear in mind when it considers the inherent lack of viewer functionality afforded, the greater cost imposed on viewers by DTH satellite services compared to homes in areas of adequate digital terrestrial reception (see Attachment 1 for further details).

This lack of functionality includes potentially receiving popular commercial TV programs at very different times to those applying in nearby homes receiving their local digital free to air commercial TV services via terrestrial means.

3.1 Issues which are directly connected to Broadcast Australia's terrestrial transmission and sites and towers business

i) Broadcast Australia believes it is important for the Parliament to have a solid estimate of the number of TV homes in Australia likely to be fully served by digital terrestrial transmission means and the number that are likely to be 'forced' to go to / be served by the new digital satellite platform. Broadcast Australia believes the Senate Committee should request and examine this information during the course of its deliberations.

Essentially, the functionality afforded to viewers of DTH satellite delivered digital free to air TV services, including potentially not getting programs like AFL coverages in anything like their normal local terrestrial TV schedule time slot, falls considerably short of that which is associated with homes viewing the same range of digital free to air TV services via terrestrial means.

Broadcast Australia believes this less than optimal viewer functionality aspect of DTH satellite services extends to the cost to viewers of converting their home to digital in a satellite environment compared with in a digital terrestrial environment.

ATTACHMENT 1 to this submission sets out in tabular form a list of areas where the effectiveness (IE the resultant of viewer functionality and cost issues) of DTH satellite free to air digital TV reception falls short of that which is 'standard' through digital terrestrial transmission means.

ii) Broadcast Australia believes that a full suite of commercial free to air digital terrestrial TV services should be available in all areas where the government has already paid for the rollout of the full suite of ABC or SBS digital terrestrial TV services. This 'equivalent coverage' aspect is not covered by the Bill.

If the full suite of commercial digital free to air terrestrially provided TV services are not provided alongside the existing ABC and/or SBS digital terrestrial services, then homes in such environments, which have already purchased digital terrestrial television facilities and perhaps already upgraded their terrestrial TV aerial systems will have to also install satellite reception facilities.

Surprisingly, in some of these areas (where the ABC and/or SBS is/are rolled out but commercials are not), the extent of digital terrestrial uptake / readiness, and even the satisfaction with digital terrestrial television is quite high as reported in the DBCDE Quarterly Digital Tracker Report.

For example in regional / remote WA digital readiness was at 55% and satisfaction 66% and in the remote Central and Eastern remote zone the same figures were 48% and 66% respectively in the 4th quarter of 2009 (one million people are involved in these 2 digital TV markets).

iii) The Bill specifically provides a legislative and regulatory mechanism for those areas of Australia where less than a full range of commercial free to air services are currently delivered terrestrially to receive a full suite of commercial digital terrestrial TV services. Typically, these are defined as the Section 38A and 38B TV market areas which include all South Australian regional areas; Broken Hill and Griffith/MIA in NSW; the regional and remote Western Australia zone; and the remote Central and Eastern zone.

Broadcast Australia supports these aspects of the Bill because they are in line with our central philosophy that, wherever possible and cost effective, homes should have access to a full suite of digital terrestrial free to air TV services rather than having to convert to DTH satellite to access them.

iv) The Bill does not provide for individual TV homes to choose whether they will watch digital free to air TV services from the satellite or terrestrially. To protect the legitimate existing licence area regime and business viability of especially regional and remote commercial free to air TV broadcasters, the Bill establishes a regime to assess TV home's requests to be authorised to receive commercial free to air TV services from the new satellite platform.

The EM and Bill suggest two categories of TV homes that will automatically be authorised to watch commercial free to air TV services from the new satellite platform.

The first of these (Category A) are those homes which currently watch all their free to air TV services DTH from the Aurora satellite platform.

The second category (Category B) is described in the EM as being for "viewers residing in regional licence or metropolitan areas with known levels of signal deficiency". The Bill itself appears to delegate this process to the association charged with managing the conditional access scheme, where the threshold is described as "…areas (category B reception areas) in which people are unable to receive adequate reception of all of the applicable terrestrial digital commercial television broadcasting services."

ACMA is empowered to determine the relevant technical standard to assess "accessibility" to these services.

As these processes are all to occur in the future it is not possible to determine at the present time where are these "known areas of signal deficiency" are nor what will be the technical reception specifications that will guide such determination.

How will the as yet unpublished list of broadcaster analog self help transmission digital conversions and new digital in fill digital transmission facilities affect this determination? What will the review mechanisms be for decisions made by and who is to be responsible authority for determining Category B areas?

Exactly how will the conditional access scheme administrator deal with people in an area where reception characteristics may vary seasonally or daily or there may be variation between reception quality compared to the houses next door or across the road? How will it address households that may find their reception changing over time as a result of natural or manmade obstacles? None of this is clear at present.

v) Section 212 of the BSA allows various entities, such as multi unit dwelling strata managers, subscription television organisations etc, to retransmit local free to air commercial, National, Community and National Indigenous TV services without the permission of the broadcaster of those services provided:

- The entity does no more than retransmit those services; and
- The retransmission occurs within the licence area of the outlined free to air TV service which is being retransmitted (unless ACMA rules otherwise)

Broadcast Australia believes it is in the public interest to know whether the licensing of commercial free to air television services for the new satellite platform pursuant to the Bill will allow, for example, subscription television operators such as Austar and Foxtel to select an appropriate standard definition main channel and retransmit it to satellite subscribers of their services throughout those regional and remote markets where they operate (Foxtel in Canberra, parts of Newcastle, the Central Coast of NSW and Western Australia, and Austar everywhere else).

To date, the vast array of different sub elements and sub markets of regional commercial TV services has made such commercial free to air TV retransmission via Section 212 of the BSA not economically viable for wide area subscription TV entities delivering these regional commercial TV services by satellite.

vi) The Bill only deals with commercial and National free to air digital TV services. However, there are a significant range of other licensed free to air TV services operating in Australia:

- in digital form from the Optus Aurora satellite platform;
- in analog form from literally hundreds of local self help analog terrestrial transmission facilities; and
- even in digital terrestrial form (for example TVS the community television service in Sydney – soon to be joined by its counterparts in Brisbane, Melbourne, Adelaide and Perth and National Indigenous Television on the Broadcast Australia trial datacasting platform in Sydney).

The Bill provides no guidance for how any of these services could become present on the new satellite platform and whether the managing entity for, or 'owners' of, the platform would allow such services to be:

- on the platform;
- received through the set top box (STB) required to watch services on the platform; and
- included in any electronic program guide (EPG) for the platform.

What is the intention of the government in respect of these types of services having access to the new satellite platform and for such access being on fair and equitable terms?

Further, given that by the 3rd quarter of 2010 Community TV services will be broadcasting in digital terrestrial form in all 5 metropolitan TV markets, will failure to be able to receive these services terrestrially be able to trigger a successful application to convert to watching services from the new satellite platform? This question of course is predicated on such Community television entities being allowed on, and the government paying for the relevant satellite capacity for the new satellite platform (Broadcast Australia understands this is what the government is proposing doing for commercial and National free to air TV entities)?

In accordance with its submission in response to the government's Digital Dividend Green Paper, Broadcast Australia believes there is adequate room for 6th and 7th digital terrestrial TV multiplexes to be established in all TV markets of Australia. Broadcast Australia has developed a robust channel plan philosophy that would enable this to occur while still providing the government with 126 MHz of spectrum to auction.

While providing a clear legislative migration path for any commercial or National free to air digital TV services on such multiplexes to the new satellite platform, the Bill provides no guidance as to whether there will be any migration path for non National and commercial free to air digital TV services on such multiplexes to do the same.

Broadcast Australia understands the philosophical commitment that lies behind the government's intention, through the Bill, of 'equalising' free to air TV services available in all markets of Australia through satellite and terrestrial delivery means.

However, this philosophical commitment may not be realised unless it extends to other free to air TV services already in existence terrestrially or likely to come into existence as a result of government policy and/or decisions by ACMA.

3.2 General public policy outcome issues Broadcast Australia wishes to raise

The following issues are not directly tied to Broadcast Australia's business interests. However, the proper functioning of the overall digital terrestrial free to air TV platform is important to Broadcast Australia as is the

successful switching off of analog terrestrial TV transmissions and the comprehensive conversion to digital terrestrial of Australian TV homes.

Accordingly the following issues are general public policy outcome issues that Broadcast Australia believes are valuable to put before the Senate Committee for whatever consideration it deems appropriate.

vii) What will be the method of development, testing and commissioning of new digital terrestrial in fill transmission facilities to be established by the broadcasters? Clearly, as is covered above, the first thing to know is the actual list of such in fill facilities (see 5th paragraph page 1 section 1, paragraph 1 section 3.1.i and section 3.2.viii below).

Such in fill facilities will usually occur in areas where prior analog terrestrial television reception was difficult and where it is expected that digital terrestrial television reception will be problematic. Therefore homes in these areas may have large external terrestrial TV aerial systems with masthead amplifiers to boost what could be current low signal strength analog transmissions. It is almost certain that when new in fill digital transmission facilities are commenced a certain number of homes with such aerial installations will find the extra transmitted power radiating in their area overloads the masthead amplifiers.

Experience indicates that often these amplifiers will need to be removed or de-powered. However, when the amplifiers are removed or de-powered they will no longer be able to pick up the weak analog signals originally serving them. Hence, the sometimes extensive terrestrial aerial systems will need to be simultaneously re-pointed towards the new digital terrestrial infill transmission facility.

The new digital terrestrial in fill facility at Ouyen in the Sunraysia is an example. Broadcast Australia believes special test transmission and commissioning techniques may need to be adopted in these areas where pre-existing aerial systems may become immediately overloaded the moment the new in fill facilities commence with the accompanying result that such homes could be involuntary triggered into 'analog switch-off' well before the official date when actual analog transmissions are due to actually cease in that area.

viii) Broadcast Australia understands the Minister has indicated that more than 100 existing analog self help transmission facilities will be converted to digital by the broadcasters. Further, it is expected that a significant number of new in fill digital terrestrial facilities will be established by the broadcasters.

It would be unfortunate if these new facilities have to be given interim frequency allocations which are very likely to be restacked (altered) when the government completes its Digital Dividend considerations.

In its Digital Dividend Green Paper, the government has indicated in principle that it wishes channels 52 to 69 to no longer be available for free to air digital TV broadcasting. Hence, any new digital TV service

facilities that are allocated frequencies 52 to 69 from now on are almost certain to have to be altered at some stage in the future.

Broadcast Australia wishes to emphasise the need for government Digital Dividend decisions to be made as soon as possible and the accompanying new digital free to air TV frequency plan to be developed expeditiously.

Until that final digital terrestrial TV frequency plan is developed, any new digital terrestrial TV transmission facilities established from now on may have to change their frequency allocation at a later date.

This will result in wasted expenditure by broadcasters (and in the case of the ABC and SBS wasted government expenditure). For viewers who have upgraded their aerial systems to cater for interim digital terrestrial frequency allocations it could mean wasted private expenditure as well.

It is also quite possible that prior to the new digital terrestrial television frequency allocation plan being developed that some homes could be given access to the new satellite free to air platform (so-called Category C homes pursuant to the Bill) and subsequent to the new digital frequency plan have that permission revoked (pursuant to the Bill).

This is because under current frequency allocations such homes may be in a difficult reception situation but with new channel allocations and technical operating conditions applying to them, they may no longer fall into a Category C reception black spot. How will viewers in this position be compensated, if at all?

It seems obvious that the quicker this final digital channel plan can be developed and announced publicly the better for broadcasters, government and free to air TV viewers.

ix) Pursuant to the Bill, ACMA is to determine 'technical standards' for assessing adequate reception of commercial terrestrial services for the purposes of identifying individual Category C homes (IE those not deemed to get satisfactory digital terrestrial reception) and perhaps for the determination of Category B areas/homes (IE 'known' digital terrestrial reception black spots).

In other words technical standards shall be developed by ACMA which will be used to determine whether a home applying for access to the new free to air digital terrestrial TV platform will get permission to access the commercial television services on it.

At this stage the technical standards for assessing adequate reception of commercial terrestrial services have not been published. It appears they need to be in existence prior to 1 July, 2010 particularly in relation to the declaration of Category B and Category C homes in the Mildura / Sunraysia TV market.

Under normal frequency planning procedures, ACMA would assume that a home has an adequate:

- external terrestrial TV aerial; and
- cabling system connecting that aerial to the associated TV sets and television recording devices.

It will be important for ACMA to think carefully about what standard of external terrestrial aerial system a home needs to have as part of "the technical standards for assessing commercial television reception" the Bill requires ACMA to develop.

Further, it will be important for ACMA and DBCDE to set up robust education and auditing mechanisms to ensure that homes forced to be in a rush to ready themselves for either terrestrial digital free to air television or DTH reception (because of last minute commissioning of self help digital transmission facility conversions or digital terrestrial in fills) are not misled by any unscrupulous service providers wishing to sell and install extensive terrestrial TV aerial systems or new DTH reception facilities.

x) Under the system of authorisation for some TV homes to access the DTH free to air satellite platform established through the Bill, it is quite likely that some homes (particularly those in areas planned to be served by converted analog self help facilities or new in fill digital terrestrial facilities) will only find out that they cannot receive adequate digital terrestrial reception quite close to the time when analog transmissions in their area will be switched off. It is also likely that many of these homes will be Category C and therefore have to make individual application to the entity established by the commercial broadcasters to assess such applications.

Currently the Bill would require such homes: to arrange and pay for what could be quite complex signal testing to be undertaken by a private contractor; and then apply to the conditional access association established by broadcasters under the Bill.

The Bill indicates that the 'association' must make a decision within 14 days, but it also accommodates another 28 day period following a complaint from the relevant home (concerning a negative or no actual decision being forthcoming from the association) for ACMA to investigate and then direct the association to declare the home eligible to once again watch free to air television. The general timelines for decisions inherent in the Bill are at **ATTACHMENT 2**.

Hence, even following the relevant home arranging and paying for the required signal testing to take place the Bill provides for this process to take 42 days.

This is a long time for homes to be without free to air TV, particularly if they have only become aware of their inability to adequately receive digital terrestrial TV services from newly established digital television

terrestrial transmission facilities close to analog switch-off (perhaps even simultaneously with it).

xi) According to the Bill any homes which cannot receive ABC and/or SBS digital terrestrial services are able to put in DTH satellite reception equipment to access such ABC and/or SBS services DTH without authorisation.

However, if these homes can receive all their local commercial TV channels terrestrially, they will have to use and reticulate both satellite and terrestrial reception systems through their home. That is, satellite for the ABC and/or SBS and terrestrial for the local commercial television services. Under the Bill the conditional access association set up by the commercial TV broadcasters would not authorise such homes to access their local commercial TV services through DTH means.

Is this an anomaly?

The same situation (as outlined in respect of the ABC and SBS immediately above) is almost certain to apply to current digital terrestrial metropolitan Community TV services and any other future non commercial and National terrestrial free to air TV services on a 6th or 7th multiplex (such as NITV) that were also available on the new satellite platform.

xii) The newly registered commercial TV Codes of Practice effectively allow for PG classified programming to be transmitted at most times of the day on commercial digital TV multichannels (regardless of satellite or terrestrial delivery). Added to that Broadcast Australia understands that because of the suggested 3 time zone only nature of the core standard definition (SD) commercial TV services and 2 time zone only nature of the first SD multichannel and high definition (HD) commercial TV services (available from the new DTH satellite free to air TV platform), there will be overlap in program classification time zones between different geographic time zones when programs are broadcast (EG the HD and SD commercial multichannel TV MA time zone in NSW will start 1.5 hours before that in NT during summer time).

Hence outside of Western Australia (which is a single time zone in itself) the Bill allows commercial satellite platform TV entities to determine the one geographic time zone in which their SD and HD services will meet the commercial TV Codes of Practice.

Already ACMA has reacted to these understandable new program classification developments by conducting an enquiry into mandating parental guidance locks into the technical standards applying to terrestrial digital receivers. In view of the more ubiquitous program classification time zone issues applying to commercial TV services delivered from the new DTH free to air TV satellite platform (outside of Western Australia), Broadcast Australia believes it would be worthwhile extending that enquiry to the new DTH free to air satellite receivers if that is not already contemplated.

ATTACHMENT 1

Generic Terrestrial versus Satellite domestic home reception functionality and cost issues

Viewer Functionality or Cost Issue	**Terrestrial Viewer/Home**	**Satellite Viewer/Home**
Relative home digital conversion cost		
Set top box	Less cost	More cost
Extra set top boxes for all TV sets and DVD recorders. (generally today all TV sets and DVD recorders sold have digital **terrestrial** tuners in them)	No need to purchase set top boxes for such equipment. Purchasers **use** the digital tuner purchased in all relevant reception equipment	Extra set top boxes will be required to be attached to each such device. The internal digital terrestrial tuner purchased with them is redundant
Range of equipment	Normal multiple suppliers and models (including PVRs and other recording devices) available in a competitive consumer market place	Limited suppliers and models (EG will PVRs be available) in what will be a less competitive consumer market place
Total cost of converting all analog home reception equipment (EG TV sets, VCRs, DVD recorders)	Lower cost	Higher cost
Aerials / dishes	Existing home aerials in most cases will continue to work. Hence generally lower cost	Almost all homes will have to install new satellite dish equipment. Hence generally higher cost

Connection of all TV sets to the external aerial / dish	Indoor or set top aerials can be used. In such areas TV sets do not need to be connected to any external aerial	All TV sets must be connected to the external satellite dish
Total cost of aerials / dishes and cabling systems	Mostly nil cost	Always some cost
Viewer convenience		
Program viewing time	Programs will be available at their normal local state time zone viewing time	Many homes will watch programs at the normal viewing time of another state (EG in Victoria viewers may get AFL programs at a time they are normally scheduled in NSW) and may not get some other programs at all
Moving TV sets around the house	Where internal TV set top aerials are sufficient, TV sets can be moved anywhere around the house or outside buildings (EG shearing sheds)	The set top box for every TV set must be connected directly to the dish. Hence less TV set portability

Renters		
Landlords and ‘fixtures’	Generally existing indoor or external aerials will suffice. Hence no new landlord approvals or ‘fixtures’ generally relevant	Almost all renters will have to install new satellite dish equipment. Hence landlord approval and cost/feasibility issues particularly for short term renters are relevant

ATTACHMENT 1 continued

Generic Terrestrial versus Satellite domestic home reception functionality and cost issues

- The signal is not 'portable' and one can not move a television set from room to room with rabbit ear aerials or say from the house to the shearing shed or 'granny flat' without cabling from the fixed satellite reception facility being extended to all possible outlets or separate satellite dish and ancillary reception facilities being installed in such locations;

- In the DTH satellite world for viewers in one room to watch a different channel from one watched in another each set top box will have to be directly connected via a discrete cable or networked wireless system to the satellite dish. In areas of reasonable terrestrial TV strength signals indoor individual set top aerials can be sufficient which means all TV sets need not be connected to the external terrestrial aerial system.

- In areas where heavy rainfall is experienced rain fade signal loss will occur and the extra diameter of the required dish will cause extra difficulty/cost so far as installation is concerned;

- For some people who rent their premises, it may prove difficult to get the landlord to agree to the installation of a satellite dish. Alternatively short term renters may see payment for such a significant new 'fixture' (and associated satellite STBs) as prohibitive given the temporary nature of their occupancy and potential movement to adequate DTTB reception environments in future;

- The average total cost to homes of satellite digital conversion of all domestic TV reception devices will be higher than the average cost to do the same in a terrestrial delivery environment.

- The unit retail cost of DVB satellite (DVB-S2 standard) compliant set top boxes will be greater than the equivalent commoditised DVB terrestrial (DVB-T) free to air TV range of set top boxes.

- What is the range of DTH free to air satellite platform reception equipment likely to be available in the shops for the Mildura and South Australian regional/Broken Hill analog switch-off dates? For example how many DTH set top boxes are likely to be available in the retail stores? Will there be dual tuner set top boxes with hard drive record and replay functionality the equivalent to the many brands of DTTB PVRs available and Foxtel IQ and Austar MyStar? What will the prices of these pieces of equipment be compared with their digital terrestrial counterparts? Will DTH satellite homes need to purchase DTTB PVRs and then put a DTH decoder in front of them in order to gain hard drive time shift record and replay functionality?

- The almost universal inclusion of DVB-T high definition (HD) tuners in all wide screen TV sets, which is incorporated into the price of such sets, is redundant in a satellite reception environment. In effect satellite homes pay 'twice'. Once for a useless DVB-T HD tuner and second for the required DVB-S set top box.

- Even when relevant TV homes have good quality terrestrial TV aerials and associated aerial cabling systems throughout their house, they would require a satellite antenna (dish) and cabling to be installed. This would represent extra cost for satellite homes that have previously been terrestrial. (This particularly applies for areas which were previously provided through a self help retransmission facility but not converted to digital terrestrial.)

- In a significant number of situations (particularly in South West WA) the satellite look angle may be obstructed and hence satellite can not provide any level of practical service. An indication of the number of unserviceable homes in respect of satellite may be gained from the rule of thumb that Foxtel uses for the universe of TV homes within its territories. According to the 2010 OzTAM and RegTAM estimates this universe is about 5.75 million (Foxtel territories include the overlap area – with Austar – of the Gold Coast and include the ACT, all of regional Western Australia and significant parts of Newcastle and hence extend into the RegTAM domain).

  As a rule of thumb Foxtel regards 7% of this universe as being unserviceable or 400,000 homes.

It is unknown how much of this unserviceability is reflected by homes in multi-dwelling unit buildings which do not have Foxtel compatible internal distribution systems and what percentage comprises those with obstructed satellite antenna look angles.

Does the government have any knowledge of the number of homes for which DTH satellite reception will be impossible and that will not receive digital terrestrial TV signals?

- Will landlords be likely to put satellite dishes in for renters who are in areas where digital terrestrial free to air TV services are not able to be received?

Have ACMA or DBCDE undertaken any surveys regarding how many homes Austar and Foxtel have found are unable to be accessed by satellite because of look angle issues or because of renting and landlord MDU related attitudes? How are people in these situations who currently receive analog free to air terrestrial TV services going to receive digital free to air TV services if they cannot obtain adequate reception of digital terrestrial TV services?

- In the case of the proposed new satellite platform BA understands only 3 versions of core SD commercial TV services will be transmitted (NT/Qld; NSW/Vic/SA and Tas; and WA) and only 2 versions of SD multichannels and HD services (WA; and NT/Qld/NSW/Vic/SA and Tas). Hence it is impossible for commercial TV DTH satellite services to be in the right geographic time zone for all states outside of WA. There is no published information regarding what the source of all these channels will be and how they will be scheduled, in particular for the most popular AFL and NRL coverages when viewers in up to 4 states may be watching the same channel.

In the terrestrial environment all commercial channels can be delivered in the correct geographic time zone at be scheduled according to local viewers' interests (except for border regions when for example viewers in Northern NSW might watch services transmitted from Qld in Eastern standard Time during daylight saving periods).

ATTACHMENT 2

The general timelines for decisions inherent in the Bill (for South East Australia Licence area)

Preparation and Planning

Minister announcement of satellite safety net 29 January 2009

Bill introduced 18 March 2010

Senate Committee referral 18 March

Committee report 12 May

Bill passed

Act proclaimed

< 28 days Imparja and Seven Central must notify ACMA of JV formation

< 28 days of above JV to apply for licence

< 28 days of above ACMA to award licence

Licence awarded

< 90 days ACMA to declare commencement of new satellite service

Commercial broadcasters to set up an association to manage conditional access

<45 days association to provide ACMA with conditional access scheme

<28 days of above if satisfied ACMA to register conditional access scheme

Conditional access scheme registered

ACMA to determine technical standards for assessing adequate reception of commercial terrestrial reception for homes – no time line or method of development indicated

< 14 days of application from viewer in Category C areas (IE not existing out of area or known and accepted black spot areas) association must determine access

< 28 days of complaint from viewer re a negative or no actual decision from above ACMA must provide review of such a negative or no actual decision

Technical Standards

ACMA to determine transmission and domestic receiver standards for new satellite service – no time line or method of development indicated

Minister start date

23 March 2010 Minister says NSW/Vic/SA/Tas satellite service will be operational around 1 June