



**Submission by  
Free TV Australia Limited**

Department of Communications, Information  
Technology and the Arts

*Driving Digital*

A Review of the Duration of the  
Analogue/Digital Television Simulcast Period

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## Executive Summary

- Analogue switch-off needs to be comprehensively planned and carefully managed to ensure that the transition is as smooth as possible for Australian viewers, and that they do not lose access to free-to-air services.
- Government decisions on matters such as the triggers for switch-off and/or whether and when a firm switch-off date is appropriate should be informed by the impact of these decisions on Australian viewers, as well as experiences in other countries to the extent that they are applicable to the Australian context.
- Reliance on free-to-air services as the primary means of television reception in Australia is amongst the highest in the world.
- The cost to broadcasters of replacing ageing analogue transmission equipment is another key factor to consider.
- Broadcasters recognise that a date for analogue switch-off may be an effective trigger for digital take-up at the right point, but believe that this should also be preceded and supplemented by a range of strategies designed to encourage consumers to purchase digital television equipment.
- Broadcasters acknowledge that there are benefits to achieving analogue switch-off and are committed to working toward switch-off as a goal of a properly thought through staged process.
- Free TV supports a staged process to achieve switch-off, similar to the process followed in the UK; first involving planning and preparation for switch-off, and secondly implementation of switch-off.
- Free TV is committed to a Digital Action Plan as the most effective process to co-ordinate the stakeholder activities necessary for planning and preparation for switch-off.
- Free TV recommends that switch-off be planned on a licence area-by-licence area basis to ensure switch-off is managed smoothly, cost effectively and disruption to viewers is minimised. Switch-off should be tested in one or more appropriate markets, followed by switch-off in less populated and discrete areas, progressing to metropolitan-regional overlap areas and the most heavily populated metropolitan areas last.
- Free TV recommends that measures to enhance the transition to digital include equipment labelling, that measures be put in place to address reception difficulties in multi-unit dwellings and that the Government investigate digital black-spot solutions.

## Introduction

Free TV Australia (**Free TV**) is the peak body representing all commercial free-to-air television licensees in Australia.

Free TV welcomes the opportunity to make a submission in response to the Department of Communications, Information Technology and the Arts (**the Department**) Issues Paper *Driving Digital: A Review of the Duration of the Analogue/Digital Television Simulcast Period*.

This submission will address:

- Section 1: Timetable for switch-off.** This section outlines broadcasters' contribution to the successful roll-out of digital television to date, the need for comprehensive planning of analogue switch-over, the process for planning and lessons from overseas experience.
- Section 2: Measures to enhance the transition to digital.** This section recommends equipment labelling as a measure for enhancing the transition to digital. It also recommends that the Government address barriers to conversion by residents of multi-unit dwellings and that the Government investigate digital black spot solutions. It also notes the vital importance of ensuring that disadvantaged households are not excluded from television after switch-off.
- Section 3: Preparing for and managing switch-over.** This section outlines the appropriate role of each set of stakeholders in planning for digital switch-over, the function of a Digital Action Plan, and the role of existing organisations in relation to the Plan.

Free TV does not provide any comment on Section 4 (*Conversion of other free-to-air broadcasters and services*) or Section 5 (*Issues for examination closer to the end of the simulcast period*).

## 1 Timetable for switch-off

### 1.1 *Whether there has been sufficient progress in rollout and take-up of digital reception equipment to proceed with current timing arrangements or whether the simulcast period should be extended.*

The move to digital terrestrial television is an evolution from the analogue services that have served the Australian population extremely well for the last fifty years. A successful transition requires a stable and robust delivery platform, universal coverage, digital content and universal availability of digital terrestrial television consumer reception equipment.

While free-to-air broadcasters have worked hard to roll out digital terrestrial television services faster than any other country, we agree with the Government's assessment that it will not be possible to achieve analogue switch-off by 2008.

#### **Delivery platform, content and equipment**

Australia has lead the world in the roll-out of DVB-T based digital terrestrial television broadcasting. The Australian planning model has heavily influenced digital terrestrial broadcasting decisions made globally and Australia has been considered a benchmark for implementation of the DVB-T standard. The DVB-T roll-out by Australian free-to-view broadcasters has been the fastest in the world and covers a geographical area larger than any other DVB-T deployment in the world.

Roll-out has required a significant investment in research, engineering planning, program production, transmission and television studio broadcasting infrastructure. So far it has involved television broadcasters upgrading over 150 different transmission sites and the installation of around 480 new digital transmitters, representing a start up rate of approximately 2 per week since commencement.

To date free to view digital television services have been successfully deployed in all metropolitan areas and the main regional centres of Australia. At least 87% of television households (6.6 million) are capable of receiving all (four or five depending on coverage area) free-to-view digital channels. At least 96% of the population can receive at least one free-to-view digital channel.

Roll-out is on-going. Regional broadcasters are expected to complete their digital roll-out in both SD and HD formats by 2012. Much work remains to be done to plan for the conversion to digital of broadcasting services in remote areas. Broadcasters also continue to work with the Australian Communications and Media Authority (**ACMA**) to resolve technical digital planning issues to ensure that, as far as possible, viewers receive digital signal coverage equivalent to their analogue coverage.

A stable and robust terrestrial transmission platform is vital to a successful transition to digital services. The Australian community has come to rely upon the free availability of television services which are consistently delivered at a high technical standard and are substantially free of interference.

Production of digital content, installation of production and transmission infrastructure and equipment availability have been essential to digital transition. Broadcasters have invested significantly in upgrading their television production facilities to new digital technology providing support for new digital production formats including widescreen, HD pictures and Dolby surround sound. Broadcasters are providing 24 hour digital transmissions and are all meeting the mandated HD program quota.

The range of available digital consumer equipment has expanded rapidly over the last two years and prices of both Standard Definition (**SD**) and High Definition (**HD**) equipment have been falling rapidly.

Further details on current and future roll-out, availability of digital content and the range of consumer equipment on offer, can be found in Free TV's submission to the House of Representatives Inquiry into the Take-Up of Digital Television in Australia (May 2005).

### **Consumer take-up**

In addition to investing in the technological shift to digital transmission, broadcasters have played a critical role in promoting the transition to digital on and off-air through:

- a digital consumer campaign;
- the establishment of Digital Broadcasting Australia, which provides a forum for broadcasters, manufacturers and retailers to exchange information and assist in the education of retailers and the public; and
- co-ordination and implementation of an Interference Management Scheme, which has ensured that the digital roll-out has taken place with minimal disruption to analogue viewing.

Whilst the foundations of digital terrestrial television have largely been established, Australia is still in the early stages of consumer take-up, with free-to-air digital penetration currently at around 13% of all television households.

Clearly, it is not possible to achieve analogue switch-off until take-up of digital television equipment is significantly higher. Further, as noted in the Discussion Paper, over 70% of Australian households have two or more television sets. Many of these have three or more. In addition, most households have other television reception devices such as VCRs and increasingly, DVD recorders. Current figures show that in addition to the 70,000 analogue TVs sold per month, approximately 20,000 VCRs and 30,000 DVD recorders are sold.<sup>1</sup> It is estimated that there are up to 25 million analogue-tuner television devices in Australia, of which no more than 1.1 million (as at 30 September 2005) or 6% have been converted to date.<sup>2</sup> These devices also need to be converted to digital if consumers are not to be unnecessarily deprived of access to free television services, and the same viewing and recording options they currently enjoy in their homes.

### **Planning for switch-over**

The goal of analogue switch-off offers a range of technical and financial benefits for the community and individual stakeholders. For broadcasters maintaining dual digital and analogue transmissions is expensive, particularly across the large regional licence areas of Australia. Existing analogue transmission equipment is rapidly reaching obsolescence and will be difficult and expensive to replace.

There are also transitional costs associated with switch-off. As such Free TV is committed to working toward switch-off as a goal of a planned switch-over. A considerable proportion of these costs will be borne by Australian viewers and the community generally. As such, the ultimate goal of switch-off needs to be carefully managed to ensure that the transition is as smooth as possible for Australian viewers. Ensuring a "smooth transition from analogue to digital and transmission which avoids

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<sup>1</sup> Figures supplied by GfK, based on the last 12 months.

<sup>2</sup> Figures supplied by Digital Broadcasting Australia.

disruption to consumers” was a key objective of the Government’s digital television legislative framework<sup>3</sup>, and should remain the key objective for Government decisions on switch-off.

While Free TV acknowledges that there are benefits to switch-off, broadcasters submit that switch-over needs to be carefully planned on a comprehensive basis so that, as far as possible:

- digital services are available to all Australians;
- viewers are able to choose to convert at a time that they can afford to do so;
- the cost of conversion is minimised;
- those who can not afford to convert are not deprived of television after switch-off; and
- disruption to Australian viewers and to the consistency and quality of transmission of television services is minimised.

### **The planning process**

Broadcasters support a Digital Action Plan which co-ordinates the activities of existing stakeholder organisations to address the range of technical and policy issues as well as education initiatives necessary to drive take-up, address barriers to digitisation and prepare for smooth switch-off for Australian viewers.

A range of stakeholders – broadcasters (metropolitan and regional commercial broadcasters and national broadcasters), the Government, the communications regulator, manufacturers and retailers – have important roles to play in this process. The role of each set of stakeholders and the function of a Digital Action Plan is considered in more detail in Section 3 below.

The United Kingdom (UK) Communications regulator, Ofcom, has recently applauded the effectiveness of the UK Digital Action Plan in delivering the pre-conditions for a Government decision on switch-over.<sup>4</sup> Free TV is committed to a Digital Action Plan as the most effective process to co-ordinate the activities necessary for planning and preparation for switch-off. Free TV supports a staged process, similar to the process followed in the UK; first involving research, planning and preparation for switch-off, and secondly implementation and management of switch-off.

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<sup>3</sup> The Regulation Impact Statement contained in the Explanatory Memorandum for the *Television Broadcasting Services (Digital Conversion) Bill 1998* noted that the Bill’s objectives included;

*“allow(ing) for a smooth transition from analogue to digital terrestrial television broadcasting and transmission which avoids disruption to consumers”* and;

*“introduc(ing) digital terrestrial television broadcasting services within a timetable to ensure that Australia does not fall significantly behind the rest of the world”*.

To date, both of these objectives have been met

<sup>4</sup> *“Driving Digital Switchover: a report to the Secretary of State”* by Ofcom, 5 April 2004. Para 2.7 states “The Government launched the Digital TV Action Plan two years after the announcement of the long-run objective of switch-over. The plan has successfully carried out a large number of measures in preparation for switchover and has co-ordinated the activities of the various parties involved, including Government departments, regulators, broadcasters, retailers, manufacturers and consumer groups. The objective of the Action Plan was not to implement switchover; instead its aim has always been to make the necessary preparations to allow the Government to make a decision on the exact timing at a later date.”

**1.2 Any triggers or targets that may be more appropriate than or could be combined with a hard deadline for switchover, and how the difficulties with such targets may be overcome.**

Given the importance of free-to-air television to the Australian population, analogue switch-off should not take place until it is clear that the benefits of switch-off for the community generally outweigh the negative impact on the proportion of remaining viewers who rely on analogue signals to receive their free television services.

A further key issue for the Government to consider in setting an appropriate switch-off date is the life-span of existing analogue transmission equipment and the cost and difficulty of replacing such equipment. This impacts most heavily on regional and independent broadcasters.<sup>5</sup> To the extent that switch-off is delayed beyond the useful-life of such equipment, regional and independent broadcasters will seek a review/expansion of the licence fee rebate scheme which the Government made available to assist regional broadcasters with the costs of digital roll-out.

Government decisions on matters such as the triggers for switch-off and/or whether and when a firm switch-off date is appropriate, should be informed by the impact of these decisions on Australian viewers as well as experiences in other countries to the extent that they are applicable to the Australian context. Free TV recognises that at some point during the staged process, a date for analogue switch-off may be an effective trigger for digital take-up.

In particular, it is important to recognise that at least 78% of the Australian public still rely exclusively on free-to-air television services and that over 90% of households rely exclusively on terrestrial transmission to receive their free-to-air television services.<sup>6</sup> This level of reliance on over-the-air transmission for television services is amongst the highest in the world.

It was in recognition of the value that Australians place on free-to-air television services that the Parliament adopted a free-to-air model for the introduction of digital television services in Australia. In most other markets including the UK, the US and Germany many households receive free-to-air television services via cable or satellite. They do not rely on over-the-air delivery to anywhere near the same extent as in Australia. As such, switch-off of analogue terrestrial signals in these countries has a much smaller potential impact on the overall population than in Australia.

Each of the overseas markets reviewed below are characterised by key features and regulatory incentives which have served to drive digital take-up and/or ambitious switch-off timetables. It remains to be seen whether the firm deadlines set in the UK, and likely to soon be set in the US, will be met.

To date Berlin/Brandenburg and the Rhine area of Germany and two small villages in Wales are the only places that have gone digital only. Only a small number of German viewers relied exclusively on terrestrial signals.<sup>7</sup> The villages in Wales are being used as a test for analogue switch-off.

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<sup>5</sup> The largest of the regional commercial television broadcasters operates more than ten times the number of transmitter and translator sites than the largest metropolitan television broadcaster.

<sup>6</sup> Foxtel does not retransmit all digital free-to-view services, and Austar does not re-transmit any regional commercial free-to-view service on its satellite platform. Therefore households receiving pay television require digital terrestrial transmission to receive the digital free-to-view services. Households with pay television also rely on free-to-view services for their secondary television sets, VHS and DVD devices.

<sup>7</sup> Only 7% of German households receive their television signals through terrestrial services.

## United Kingdom

The UK is one of the few countries that has recently committed to a firm switch-off date of 2012. If this dead-line is met it will have taken 14 years from the commencement of digital terrestrial television to complete switch-off in a country that is widely recognised as the global leader in digital television adoption. The announcement follows an extensive Digital Action Plan which has been progressively developed over a three year period commencing in 2001.<sup>8</sup> Switch-off will occur on a region by region basis starting in 2008, or ten years after the first digital transmissions began.

It remains to be seen whether the 2012 deadline will be met. Previous switch-off dates have been proposed for 2006, 2008 and 2010. A survey published in the UK on 2 November 2005 reported that 63% of 1,421 UK residents surveyed said they had not heard of analogue switch-off. There had been little improvement in viewer awareness since an Ofcom survey six months ago. Then 71% of respondents said that they did not know about analogue switch-off.<sup>9</sup>

Research published by Ofcom on 8 November 2005 estimates that the cost of conversion for the 10% of households who are unlikely to move to digital voluntarily, will be £572 million.<sup>10</sup> Media analysts have questioned this figure, pointing out that it is based on the average purchase price for a set-top box of £26, and £80 for a PVR (current prices are on average 3 and 2.5 times higher respectively). Other estimates are much higher. The UK Department of Trade and Industry and the Department for Culture, Media and Sport has estimated that the non-voluntary costs of consumer equipment to convert to digital may be as high as £2.4 billion.<sup>11</sup>

It is worth noting that the Ofcom figure anticipates a voluntary take-up rate of 90% of homes. Current UK digital take-up is 63% of all households, far higher than the current figure of around 13% in Australia. Digital take-up in the UK is measured as the sum of digital terrestrial television and pay digital services. However this approach cannot be taken in Australia where not all free-to-air television services are retransmitted on the pay digital platform.

Further, the Ofcom cost estimate is only based on conversion of one television per household. Ofcom's April 2004 report to the Secretary of State on Driving Digital Switch-Off identified as a potential barrier to switch-off that although half of all UK households have digital television, only one in five households have completed conversion of all of their sets. Ofcom reported that there were still over 35 million unconverted television sets in the UK.<sup>12</sup> There are many more millions of VHS and DVD devices with analogue tuners, which will also require conversion.

Similar issues arise in Australia, with over 70% of homes having 2 or more television sets plus high penetration of VCRs and growing numbers of DVD recording devices.

Digital take-up in the UK has been driven by a range of incentives. When digital television was introduced in 1998, television licence fees were structured to provide broadcasters with an incentive to drive digital take-up. The licence fee was calculated on the basis attributable to analogue only households. For example when DTT

<sup>8</sup> [http://www.digitaltelevision.gov.uk/dtv\\_project/project\\_details\\_home.html](http://www.digitaltelevision.gov.uk/dtv_project/project_details_home.html)

<sup>9</sup> Plunket, J, "Britain Fails to Wake Up to Switch-Off", MediaGuardian.co.uk, 2 November 2005.

<sup>10</sup> Scientific Generics, "Report to Ofcom: Cost and Power Implications of Digital Switchover", 8 November 2005.

<sup>11</sup> Times Online, "Stand and deliver: £955 please!" 27 February 2005.

<sup>12</sup> Ofcom, "Driving Digital Switchover: a report to the Secretary of State", 5 April 2004, at para 6.11.

penetration reached 10%, broadcasters would only pay 90% of the usual analogue licence fee. The faster digital take-up is achieved, the faster the licence fee reduces. The formula has been designed so that at the point of digital switch-over for each licence, the analogue rights for each licence will cease to have any value.<sup>13</sup>

In addition, in June 2005 Ofcom announced a substantial licence fee reduction for terrestrial broadcasters aimed at providing them with an additional incentive to support the goal of switch-over. Licence payments were set on the basis of the value of access to analogue spectrum. No payment is made on the digital value of the licence (although this is to be calculated at a later time). As a result, licence fee payments were slashed by up to 64%<sup>14</sup> on the basis that as audience share and advertising revenues derived from analogue broadcasting have declined amid the growth of digital, the value to those broadcasters of access to analogue spectrum has declined.

### United States

The current legislated date for switch-off in the US is 31 December 2006, or “when 85% of households in a market are capable of receiving a digital broadcast signal, if that date is later.” In anticipation that this date will not be met, two further dates, 31 December 2008 and 7 April 2009, are proposed in separate Bills which have now been approved by the House of Representatives and the Senate, respectively.

It remains to be seen which dead-line will become law<sup>15</sup>, whether the dead-line will be met, and what conditions will be attached.

Proponents of a hard switch-off date are motivated by a desire to reduce the federal budget deficit by auctioning the freed analogue spectrum (the House of Representatives Bill has been dubbed the “Deficit Reduction Act of 2005”<sup>16</sup>). However, the huge cost of digital conversion is also foremost in legislators’ minds. It seems likely that any hard date will be supported by generous subsidies. The Senate Bill includes a US \$3 billion allocation for subsidies for set top boxes.<sup>17</sup> The House of Representatives Bill allocates \$990 million.

It is important to note that the percentage of US households which exclusively rely on free-to-air television services is very low compared to Australia. More than 80% of all US households receive all their television services (including the major free-to-air networks) over cable and satellite, so switch-off of analogue terrestrial signals will have a much smaller potential impact on the overall population than in Australia.

Even so, the US will need to overcome considerable barriers to switch-off. As at December 2004 only a very small proportion (approx 2.8 million<sup>18</sup>) of the 45 million television sets contained in the 21 million households<sup>19</sup> which rely exclusively on free-to-air television, had converted their sets to digital. This does not include the estimated 28 million<sup>20</sup> additional television sets in cable and satellite homes which are

<sup>13</sup> Ofcom media release, “*Conclusion of the review of Channel 3 and Channel 5 financial terms*”, 29 June 2005.

<sup>14</sup> Martinson, J; “*ITV gets windfall to face the future*” Guardian, 30 June 2005.

<sup>15</sup> The US legislative procedure requires both Houses (the Senate and the House of Representatives) to agree to identical versions of a Bill before it becomes law.

<sup>16</sup> House Passes DTV Bill Intact, 21 November 2005, [www.telecomweb.com/news/1132600949.htm](http://www.telecomweb.com/news/1132600949.htm).

<sup>17</sup> Gross, G; IDG News Service “*Digital TV Date Pushed to 2009 – Senators consider hastening mandatory transition to digital broadcast signal*”, 21 October 2005.

<sup>18</sup> Screen Digest December 2004.

<sup>19</sup> National Association of Broadcasters, submission to the Federal Communications Commission, 2004.

dependent on free-to-air broadcasts. Nor does it include other analogue tuner television devices, such as VHS and DVD recorders.

### **Germany**

One of the characteristics of the German terrestrial switch-off program is the extremely short simulcast period between the launch of digital terrestrial television and switch-off of the analogue signal. In the case of Berlin/Brandenburg digital services were launched on 31 October 2002 and the terrestrial analogue service was switched off on 4 August 2003. In the Rhine area, digital services were launched in October 2004 and the terrestrial analogue service was switched off in early December 2004, making the simulcast period less than 3 months. The view in Germany has been that the length of the simulcast period is a financial burden on broadcasters, and therefore the shorter the simulcast period the lower the cost. The State governments issued subsidies to the major commercial broadcasters to cover technical costs and the revenue losses resulting from the switch.

Because only 7% of the German population relies exclusively on terrestrial signals, the effect of the transition was not widely felt. It should be noted that there are a large number of terrestrial houses in rural areas which may never be able to access digital terrestrial television due to the economics involved. It is unclear how these will be dealt with at the time of analogue switch-off.

### **Italy**

Italy has announced an intention to complete analogue switch-off by 2010. Italy has probably had one of the most successful digital terrestrial television launches in terms of absolute household take-up growth in the world. Take-up has largely been driven by Government subsidies for set-top boxes. Digital terrestrial television was launched in early 2004, and a 120€ subsidy for MHP set-top boxes came into effect on 24 February 2004. The cheapest MHP set-top box on the market at the time was 199€ so the subsidy effectively reduced the price to 79€. The impact on set-top box sales was remarkable. Prior to the subsidy only 20,000 boxes were sold in 2003. The number increased to 1.1 million by the end of 2004 and 1.6 million by the end of March 2005.

### **1.3 *If take-up rates are to be used as a switch-off trigger, how digital reception take-up by households can be measured more accurately.***

Free TV believes that take-up rates are an essential factor in determining an appropriate switch-off date and that significantly higher household penetration will be required before a date can be set. Take-up rates should take into account the existence of two or more analogue receivers in many households, as well VHS and DVD devices with analogue tuners.

Free TV recommends that the Digital Action Plan Group consider inviting Digital Broadcasting Australia (DBA) to undertake a comprehensive review of current data, to identify gaps and to make recommendations to the Group on further research needed to give an accurate measurement of take-up. DBA's role is discussed in further detail in Section 3.3 below.

The Government may also wish to conduct research to understand household attitudes to conversion of secondary television sets and primary and secondary

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<sup>20</sup> Ibid.

ancillary analogue tuner television devices, such as VCRs and the growing number of DVD recorders.

**1.4 *If a new date is to be set, what should the date be? How should this date related to any trigger mechanisms as described above? Should there be a date at which switchover proceeds regardless of any take-up or availability objectives or should any date be dependent on other objectives first being achieved?***

See 1.2 above.

**1.5 *Whether switchover should occur in all markets nationwide at the same time; region by region on the basis of length of time since digitisation (as with the present arrangement); region by region on some other basis, or in some other pattern.***

Free TV recommends that switch-off be planned on a licence area-by-licence area basis. Area-by-area switch-off is important to ensure switch-off is managed smoothly and cost effectively. Careful planning is needed to:

- allow the necessary technical preparations to be undertaken in each area and allow fine-tuning of preparations as switch-off progresses;
- allow interference issues to be managed so to minimise the impact that one area increasing the power of digital signals may have on viewers in an adjacent area<sup>21</sup>;
- allow manufacturers and retailers to ensure sufficient equipment is available for consumers in each area;
- ensure that each area receives specifically tailored information and advice and the need for home visit support is minimised.

Roll-out of digital services on a area-by-area basis allowed broadcasters to minimise disruption to viewers and to ensure that viewers were provided with adequate information and assistance. Roll-out proceeded smoothly as a result of mass information provided via television advertising which was supplemented with specifically tailored advice for each licence area. This minimised the need for home visit support which is difficult to plan, expensive and time-consuming.

Free TV recommends that metropolitan, regional and national broadcasters work in close co-operation with the Department and ACMA to work out a area-by-area plan for switch-off.

Free TV recommends that the plan first identify one or more test areas. Markets such as Tasmania and Mildura have specific characteristics which may make them appropriate test markets. Free TV submits that it is imperative that switch-off policies and processes are tested in appropriate areas to ensure that the switch-off is managed as smoothly as possible and viewer disruption is minimised.

Free TV recommends that switch-off in one or more test markets be followed by switch-off in less populated and discrete areas, progressing to metropolitan-regional overlap areas and the most heavily populated areas last.

The date chosen for completing switch-off in each area needs to be considered in light of cost and difficulty of replacing existing analogue transmission equipment, if switch-off is delayed beyond its useful life. Broadcasters are already replacing ageing

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<sup>21</sup> Broadcasters in metropolitan markets are not yet transmitting digital signals at full power.

analogue equipment, at huge cost. This factor impacts most heavily on regional and independent broadcasters.

Free TV notes that a region-by-region approach has been chosen in the UK, and has been preceded by test switch-offs in two small villages in Wales. Region-by-region switch-off in the UK will commence with discrete areas. The most populated centre of London will be one of the last regions to switch-off in 2012.

**1.6 *Whether there is scope to shorten the simulcast period for regional broadcasters or to allow regional licensees to voluntarily cease analogue broadcasting early.***

Free TV is strongly of the view that switch-off needs to be comprehensively planned and implemented on a area-by-area basis. It needs to be centrally coordinated and supported by a comprehensive information campaign. Switch-off by individual broadcasters at a time of their choosing is likely to be confusing and disruptive to viewers and may cause interference issues.

**1.7 *How consumers would be prepared for a dual system of digital-only/simulcast networks.***

See comments above.

**1.8 *Alternative uses of the spectrum freed up at the end of the simulcast period.***

Free TV submits that it is too early to start planning alternative services in the broadcasting services bands. Further detailed work needs to be completed to understand a range of issues, including:

- the requirement for further spectrum to solve technical congestion and coverage problems associated with existing digital services, particularly in Sydney and Melbourne and overlapping in regional areas;
- the impact of interference on the digital signals, the so-called “cliff effect”. Whereas in analogue, a viewer might suffer a “snowy” picture from interference, the digital “cliff effect means that interference to a digital signal may result in a digital viewer suddenly receiving no service at all. This has huge implications for the Australian community, which has come to rely upon television services which are consistently delivered to a high technical standard and are substantially free of interference;
- the fact that digital television spectrum allocations are interleaved between analogue television spectrum allocations, and the impact of this on suitability of alternative services.

It is not feasible to alter existing digital television spectrum allocations. Any benefit in realising a contiguous block of released spectrum would be overwhelmingly outweighed by the disruption to viewers, the time to convert and the cost of re-allocating existing digital television services.

In its submission to the Department on *Review of the Broadcasting Services Bands – Spectrum: Identification and Structural Efficiency* (February 2005), Free TV considered the impact of changing Channel 10’s frequency in order to make Channel 9A a full 7 MHz channel. The submission identified the enormous cost and disruption that such a change would impose.

The cost and disruption of moving a number of television services would be catastrophic.

## **2 Measures to enhance the transition to digital**

### **2.1 Clear labelling of consumer equipment**

Free TV notes that sales of analogue equipment far surpass sales of digital equipment. As a result, Free TV recommends that the Digital Action Plan include measures to institute a new consumer labelling scheme, so that purchasers are warned that unconverted analogue equipment, including receivers, VCRs and DVD recorders, will not function past switch-off.<sup>22</sup> Digital equipment should also be labelled to assure consumers that it will continue to function after switch-off. A labelling scheme needs to be implemented by Government with the support of manufacturers and retailers.

### **2.2 Barriers to digital reception in multi-unit dwellings (MUDs)**

Lack of adequate antennas and cabling necessary to receive free-to-view digital signals in many MUDs is likely to severely hamper or prevent digital take-up for those households.

Free TV recommends that:

- the Department work with State and local Governments to ensure that all new MUDs are adequately equipped to receive free-to-view digital signals;
- the Digital Action Plan Group co-ordinate research to understand the specific reception barriers confronting residents of MUDs, and recommend measures to alleviate these barriers.

Free TV notes that the UK Government conducted a substantial study into existing MUDs. The study found that conversion barriers had the potential to significantly delay any analogue switch-off. As reported in the Issues Paper, a number of publications have been made available in the UK to assist residents, building owners and aerial installers with the upgrade of MUD antenna systems.

### **2.3 Black spot solutions**

The Government's Black Spots Program has served the community well by providing funding to establish or improve television reception in communities which can not receive analogue television services. However, as the Program largely provides funding for analogue solutions these services will have a limited lifetime. That is, once analogue signals cease, analogue black spot transmitters will also cease operating.

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<sup>22</sup> The need to convert or replace video recorders as well as receivers was one of the issues identified by Ofcom, in its "*Driving Digital Switchover*" report, 5 April 2004. At para 6.16 the report states "each video recorder has its own analogue tuner, separate from that in the TV set, which allows it to receive and record TV programs. In order to record a digital TV channel it is possible to plug in a digital set-top box into the video. But it is not possible to record one digital TV channel and watch a different one unless both the video recorder and the TV are connected to separate set-top boxes. Such an arrangement would be difficult for many consumers to master. This means that, as well as converting their TV sets, people wishing to retain the existing functionality of their video recorders after switch-over will either have to convert their video recorders or purchase new recording devices with integrated digital tuners."

Free TV strongly recommends that where-ever possible digital black spot solutions be investigated and implemented. Before switch-off the Government must consider appropriate planning and assistance for conversion of analogue black spot solutions.

Free TV has welcomed the introduction of the Alternative Technical Solutions (**ATS**) Scheme which provides a model for digital black spot solutions. The scheme was established because analogue solutions were impossible for a number of communities that had applied for funding under the Black Spots program, due to the technical limitations of analogue transmission assignments.

The first facilities to come online under this scheme were digital transmitters at Springbrook covering the southern end of the Gold Coast which commenced earlier this year. In previously poor reception areas where analogue solutions were impossible, this transmitter offers terrestrial broadcasts in digital only and will encourage take-up in this region. Importantly, it has also offered some residents the opportunity to receive good quality television reception for the first time.

#### **2.4 Financial assistance for vulnerable groups**

The cost of conversion to digital may remain a significant barrier for some households. These will likely include low income households and households who face a higher burden if, for example, they need to install a new aerial after switch-off to receive an adequate digital signal. It is vitally important that genuinely disadvantaged households are not excluded from television after switch-off.

Subsidies for vulnerable groups have been proposed in both the US and UK. The UK Government funded social economic research into specific groups such as disabled, older or socially isolated people and low income households.

The Government should consider specific policies in these areas much closer to a switch-off date, and with the benefit of research to understand the depth of the conversion barrier and those groups most likely to be affected.

### **3 Preparing for and managing switchover**

#### **3.1 The appropriate role for each set of stakeholders in driving and providing for switchover. This includes government, broadcasters, equipment manufacturers and retailers, and consumers and consumer support groups.**

The overall role of each set of stakeholders in planning and preparing for switch-off (Phase 1) are set out below.

**Broadcasters** need to complete digital roll-out to remaining areas and to continue work with ACMA to ensure that, as far as possible, viewers receive digital signal coverage equivalent to their analogue coverage. Broadcasters should continue to promote digital content.

**Government** has an important role to play in considering appropriate policy initiatives to assist digital adoption, to encourage switch-over and to address impediments to switch-over. Government also has a role to play in promoting digital take-up via the national broadcasters.

**Manufacturers** have a role in promoting digital equipment, providing conversion options at a range of price-points, implementing specific labelling requirements on analogue and digital consumer equipment and implementing staged phase-out of analogue equipment

**Retailers** need to ensure availability of a range of digital equipment, promotion of digital equipment, and to provide information to the public of the benefits of digital, equipment options and availability, and the need for switch-over.

**Broadcasters and manufacturers** need to continue their cooperative work on technical issues, such as developing a system for delivery of over-the-air software downloads to digital television receivers. This would give consumer electronics manufacturers the ability to ensure that receivers with appropriate download capacity can be upgraded to fix problems or add new functionality while they are located in a viewer's home.

**Aerial and master antenna designers and installers** will need to provide advice on the extent of potential digital reception difficulties and the availability of equipment and qualified technicians necessary to address those difficulties.

**All stakeholders, including consumer groups** have a role in educating the public of the benefits of digital and of the need for switch-over. The active involvement of all stakeholders will be vital to a smooth transition for Australian viewers.

A number of the preparatory activities outlined above are already being undertaken and/or actively considered by existing stakeholder organisations such as Free TV, DBA, Regional Broadcasters Australia (**RBA**), ACMA and the Department.

Ultimately, broadcasters, Government and ACMA need to work together to formulate a plan and timetable for managing the switch-off process, including identification of appropriate test markets and area-by-area phasing (Phase 2).

### **3.2 *The appropriate preparation for and management of switchover, including the function of a Digital Action Plan and the role of each set of stakeholders in the plan.***

Free TV submits that the central role of the Digital Action Plan should be to co-ordinate the activities of the various stakeholder organisations in their areas of expertise. Free TV envisages that the Digital Action Plan will cover three key areas: technical, policy and marketing (the latter encompassing promotion and education).

The Plan should be supported by a Digital Action Plan Group co-ordinated by the Department. The Group should have high-level representation from key stakeholder groups, such that decision-making is both representative and workable.

The role of the Group would be to provide a forum for formulation of the Digital Action Plan; to co-ordinate various stakeholder activities as part of the overall Plan; to recommend research and discuss and agree further initiatives as the Plan develops; and to provide the Government with information and advice relevant to overall policy matters.

The Group should co-ordinate the activities of stakeholder organisations, rather than attempting to perform the roles best undertaken by those organisations.

The Group should form Working Parties with expertise from appropriate stakeholder groups to deal specifically with detailed technical, policy and marketing issues.

### **3.3 *Whether the right entities or organisations exist to coordinate digital switchover. Do existing organisations' roles need to change and/or is a new organisation required?***

Free TV submits that the current stakeholder organisations are well-placed to plan and prepare for digital switch-off.

Free TV and DBA have gained valuable experience from their participation in managing digital roll-out and ensuring viewers receive appropriate information.

### **Analogue Interference Assistance Scheme**

Free TV established the Analogue Interference Assistance Scheme, a co-operative endeavour on behalf of all commercial and national free-to-air broadcasters. The Scheme has successfully managed and minimised interference to analogue television services caused by roll-out of digital services in nearby coverage areas.

The outstanding success of the Interference Management Scheme in limiting the impact of digital roll-out to analogue viewers was due to close co-operation on the roll-out between the Department, the (then) Australian Broadcasting Authority and broadcasters.

The Scheme also worked very effectively to inform viewers about digital services in each of the areas where roll-out has occurred.

The broadcasters' Analogue Interference Assistance Scheme is regarded as the worlds-best practice model, with the New Zealand Government, SKY Television New Zealand and other overseas broadcasters recently requesting details and mechanics of the scheme.

The benefits of close co-operation and the experience gained by broadcasters, Government and ACMA through the digital planning and roll-out processes will be invaluable for the close management of analogue switch-off.

### **Digital Broadcasting Australia**

DBA is also a unique body with much experience in co-ordinating cross-industry co-operation and providing information to consumers.

DBA has members across four distinct areas of the free-to-view digital television industry: broadcasters; consumer electronic manufacturers and suppliers; antenna installers and consumer electronic retailers.

All the commercial and national broadcasters were foundation members and provide more than 40% of the funding of DBA.

The organisation exists primarily to:

- enable the smoothest possible take-up of free-to-view digital television; and
- encourage the greatest possible take-up of free-to-view digital television.

DBA's core activities include:

- provision of a comprehensive **free-to-view digital website** which attracts a high number of users. The website covers everything from the range of consumer electronic equipment available and its recommended retail price, to how to achieve better reception of free-to-view digital television services.
- publication of **information e-bulletins** on free-to-view digital television. This information bulletin is regarded as the industry bible concerning the latest digital free-to-view related sales, equipment and service matters
- **retailer education** nights which are held in every Coverage Area as soon as at least the ABC and two of the relevant local commercial television stations have begun transmitting digital free-to-view television there. These average 12 per year.
- Publication of **point of sale education and assistance material** which is provided to 1,700 member stores around Australia.

DBA already combines the education and advice roles in respect of retailers and viewers that Digital UK and Freeview provide to the UK market.

DBA has a flexible structure which allows it to form Committees and Working Parties to undertake specific activities that the Board determines. This, combined with its depth of membership, makes it an ideal body to perform a range of switch-off implementation tasks.

**Free TV Australia  
12 December 2005**