

A Vision for the Community Use of Digital Television Spectrum

Community Spectrum Taskforce
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Summary

Community television **bridges difference**, taking grassroots stories and issues to a **wide audience** and ensuring that our diverse communities are **visible** and **accessible**.

Digital free-to-air television will do more. It will deliver **niche programming, educational resources, local information** and **access to cultural heritage**. For these services to emerge, a full digital channel must be made available for community use.

A full 7MHz digital channel

Australia's commercial and national broadcasters commenced digital television transmission in 2001 using spectrum provided free of charge. Despite a longstanding commitment, the government is yet to allocate a channel for community television services.

A full digital channel for community use will connect Australia's **communities, education sector, cultural institutions** and **independent producers** with new audiences and stimulate programming innovation:

- Dedicated channels for specific communities, for instance an Indigenous channel
- Local programs, entertainment and information
- A space for independent digital media production, both professional and amateur
- On-demand information relating to group activities (membership, donation forms, fact sheets), building a multiplatform presence for civil society organisations
- Educational courseware with related content
- An entry-point to cultural archives and collections
- Access to government information and local issues, including programs that allow for citizen input into national debate.

Innovation

Community broadcasting plays an important role in the Australian creative economy. Community television is already **the major training ground** for the television industry, preparing talent and production crew for the commercial and national broadcasters. Digital community television will provide up-to-date industry experience, boosting Australia's **creative workforce** and encouraging **content innovation**.

Introduction

Digital terrestrial television is set to change. Within the coming decade the conventional analogue signal will be switched-off, freeing the airwaves for more channels and extending interactive programming. This presents an opportunity for new, innovative television services. Digital broadcasting can deliver **niche programming on demand, educational resources, local information/entertainment** and **access to cultural heritage**. Many such possibilities, however, fall outside of the interests and responsibilities of the incumbent commercial and national digital broadcasters and will only emerge if spectrum is accessible to the public at large.

We have the capacity to make that happen. Australia is one of the few countries in the world with a legislatively enshrined 'third tier' of broadcasting dedicated to community use. Community television **bridges difference**, taking grassroots stories and issues to a wide audience and ensuring that our diverse communities are visible and accessible. If effectively implemented, community access to digital spectrum will bring greater **diversity, localism** and **innovation** to the emerging media environment.

The Government is yet to make provision for community television in its digital television plans. The legislation that determines digital broadcasting is currently under review, with ramifications for spectrum use. A comprehensive vision for community use of digital spectrum will help ensure an adequate outcome. This discussion paper arises out of a symposium, held on 13 Dec 2005, organised by C31 Melbourne and the School of Applied Communication at RMIT University, and attended by a range of industry, community, government, academic and technical experts. The symposium generated debate on the use of digital spectrum, encompassing:

- Existing and new content forms
- Emerging media technologies and possible community uses
- Prospects for digital media literacy at the community level
- Digital television policy
- New participants and partners in digital television services
- Potential partnerships with industry for R& D and training (talent/expertise, technology trials and content innovation)
- Implementation options (financial, management and regulatory).

This paper is intended to assist the community in making a strong, well-informed case for adequate digital television spectrum and to envision an inclusive and diverse digital future. We encourage you to submit comments and ideas and to join us in June 2006 at the CTV Digital Television Summit (see page 13 for details).

The starting-point for this discussion is the portion of the broadcasting services bands (BSBs) required to transmit digital services over the air. Spectrum access is determined by government legislation and planning. Each of the national and commercial broadcasters have been allocated a full 7MHz digital channel for the transition period, with capacity to broadcast in high definition (HD) or to multichannel up to four separate standard definition channels (SD) at a time (the equivalent capacity of one analogue channel). Although the Minister has guaranteed that existing community television services will make the transition to digital television, this commitment extends only to one SD channel. Without a **nation-wide** full 7MHz digital channel, community television will become increasingly marginalised:

- It will be unable to meet consumer expectations in both quality of service (HDTV) and new services (such as program extras provided on a separate channel).
- This, in turn, will restrict the training and content innovation capacity of the sector, to the disadvantage of the industry at large.
- There will be no room for new participants in digital community television services.

We support the position of the Community Broadcasting Association of Australia (CBAA), which suggests a carriage arrangement option in the short term (with community television permitted to simulcast in analogue until the switch-off date) and assistance in meeting the costs of digital transmission. However, as the CBAA has stated, this should not preclude the reservation of a full digital channel for community use or prevent those stations with the capacity to make use of a full channel from doing so during the transition period.

Younger generations of Australians already possess significant digital media production skills. There is no doubt that as digital media awareness and literacy increase the demand for community participation in digital television will grow. It is necessary to secure that future now.

Content and new participants

Access to digital broadcasting spectrum means little without content that audiences want to see. A myriad of new programs and applications could result from community use of digital spectrum. These are likely to be very different to those currently available on digital television, connecting associations with their memberships and providing branded, autonomous channels for specific cultural or geographic communities.

Analogue community television stations currently serve a diverse array of groups, including culturally and linguistically diverse communities, Indigenous communities, geographic (local) communities, youth, the disabled and deaf, GLBTI¹ communities and seniors. A full digital television channel will allow such interests to continue to coexist, but with greater autonomy than a single analogue channel can provide. This may mean independence in terms of management and accountability (for instance, an Indigenous channel), or branded, separate channels managed by consortium licence-holders.

Digital community television is both desirable and achievable. Australia's community media sector is the strongest in the world. It has served a diverse array of communities and distributed independent radio and television programming for over 30 years. The sector has long been a content proving ground, nurturing programs and talent, including some of Australia's most recognisable names in entertainment and news (for instance Rove, Peter Hellier, Dave O'Neil, Corrine Grant, Jo Stanley, Hamish and Andy and Deiter Kahsnitz). It is ideally placed to begin to examine how new digital broadcasting technologies can extend digital literacy, innovation and access to public information and debate.

Local Services

Free to air broadcasting in Australia has been characterised by increasing networking and syndication. Community media remains an important bastion of local and niche programming. There are more local programs on a single community television station than on all the other networks combined. Local information and entertainment is

currently missing from digital television services. A nation-wide reservation of digital spectrum for community use would allow regional and rural communities to produce and distribute their own programming. Where there is not enough local programming to fill a full-time channel, local slots could be inserted into a regional and/or national community programming feed. This would result in a seamless community channel providing local news, information (datacasting services) and entertainment, alongside nationally relevant content.

Local content may include local sports programs, live coverage of events and local government segments. Information services such as event listings or news segments could utilise datacasting formats (short video forms and downloadable fact sheets), keeping production costs down.

Indigenous Television

In August 2005, DCITA released a report on the viability of creating a digitally transmitted Indigenous television service. Despite significant support for the establishment of a dedicated Indigenous television channel, the Government decided to allocate funds (\$48.5 million over 5 years) for Indigenous programming only. As a result, programs will be broadcast on an existing station (Imparja in central Australia and community or pay TV in metropolitan areas). A full digital channel for community use could provide an autonomous, branded channel for Indigenous broadcasting nationally, with the capacity for local content. Although Indigenous television currently requires satellite and analogue transmission to reach its audiences, digital terrestrial television is set to take over as the universal free-to-air platform.

Indigenous groups have argued that a dedicated channel will:

- Allow for the expression of a dynamic and evolving Indigenous culture
- Maintain language and culture
- Assist in the development of the Indigenous creative industries
- Provide community education
- Present Indigenous stories to all Australians, thereby promoting a richer understanding of Australian identity and culture.

It is vitally important that Indigenous television be available, free of charge, to all Australian audiences. Nation-wide reservation of digital spectrum for community use is a solid starting point from which to address management, legislative and regulatory issues.

Indigenous producers have been creating television content for over 25 years. This content has been broadcast across Imparja, ABC, SBS, Indigenous community television stations and BRACS stations in the absence of a national, independent Indigenous television service. Self-management is feasible within the context of community allocated spectrum, allowing stations such as Goolarri TV in Broome to continue their current, independent services in the digital environment.

Education sector

The education sector has a long history of community broadcasting involvement. Since the community television trial commenced in the mid-1990s, tertiary institutions in Perth, Brisbane, Melbourne and Sydney have contributed programming, invested in infrastructure and facilities and participated in the governance of the stations. Tertiary institutions continue to utilise community television as a 'real world' training ground and to distribute student-created content. Digital television can potentially assist the education sector with long-distance learning, delivery of courseware via datacasting and communication of research findings to the public at large.

Digital television can take tertiary education beyond the walls of the institution. Popular single modules (such as Continuing Professional Education or bridging courses) could be delivered on an education channel – including courseware, related programs and live discussions. This content would be accessible to the public at large, with certification for enrolled students.

E-government

Governments and local authorities are increasingly using digital technology to provide public access to information, delivery of services, community consultation and policy deliberation. Although the Internet has made it easier to organise personal affairs – from online forms and payments to genealogy – it has failed to stimulate public debate. The broadcast media and the press have traditionally been the means by which governments communicate with the public. A portion of community spectrum could be used for communication between government and citizens, allowing for deliberation, campaigns and polling on specific issues at local, state or federal levels.

The BBC's Action Network (<http://www.bbc.co.uk/dna/actionnetwork/>) is a good example of citizen deliberation in a media space. Articles can be posted on the site, informing citizens of events in their local area. Forums encourage citizens participate in debate and create networks. This kind of initiative would reach a broader audience via digital television, with content ranging from short video campaigns, interviews and soap box commentary to full documentaries and live broadcasts.

Civil society organisations

There are approximately 700,000 community organisations in Australia, employing 650,000 people and making up 4% of Australia's GDP. Although media communication is essential to the community sector (extending networks and publicising issues), the complexity and expense of television production can deter community groups from participating in community television. However, digital television opens up new possibilities, such as short form programming and data delivery. Community television has a role to play in teaching and assisting civil society organisations to use digital media technology to their advantage.

New content forms, such as digital storytelling (which uses still images and voice-overs in the construction of elegant 2 minute films), or data delivery (fact sheets or web-page style content), can allow civil society groups to participate in television broadcasting. These services may be offered either as added features to a standard broadcast stream (CTV1) or as searchable content on a separate, devoted channel (CTV2).

Cultural Institutions

There is a great deal of potential to unite cultural institutions with media distribution. Visitors already encounter storytelling and local knowledge within the museum environment and, in some instances, are encouraged to participate in the production of audio-visual content (such as ACMI's digital storytelling project). Cultural institutions are increasingly looking to extend their community outreach programs via communication technologies, taking collections to a broader public base.

Digital television can provide the cultural sector with a broadcast platform for media content generated by institutions and their visitors, extending the recent cultural broadband network initiative to a television audience. This might include compilations of archived material such as that in the National Screen and Sound Archive, releasing it into

the public domain for re-use (downloadable content with creative commons licences, for instance).

Youth

The success of recent youth community radio will be extended in the digital television realm. Young people have a high level of digital media literacy and an experimental approach to programming. SYN FM in Melbourne already provides cross-platform content via radio, television and print. Community use of digital spectrum would allow content that is made *by* (not just *for*) youth at all levels of production and management.

What would a youth channel look like? A good example is Current TV – ‘a TV network created by the people who watch it’. One third of Current TV programming is viewer-created content (VC2). Contributors upload video stories to the web where an online community votes for the stories they wish to see broadcast. According to its co-founder, former US Vice President Al Gore, Current TV intends to give ‘those who crave the empowerment of the Web the same opportunity for expression on television. We want to transform the television medium itself, giving a national platform to those who are hungry to help create the TV they want to watch’ⁱⁱⁱ. Current TV reaches nearly 20 million Americans via subscriber networks.

Innovation

Community media has long been an innovator of low-cost programming forms. It is collaborative and participative by nature, making it conducive to experimentation. The community broadcasting sector is the major training ground for radio and television in Australia, teaching and nurturing new talent and production crew both informally and via its partners in the education sector.

A full digital channel would allow the innovative aspects of community television to be recognised and perhaps formalised, with segments for experimental programming and pilots. Furthermore, by leasing out part of their spectrum, community stations could be a cost-effective means for industry and manufacturers to test new technologies.

Emerging Technology and Applications

Any discussion of future community television services must take into account the evolving nature of digital television. The technologies and applications discussed below signify important opportunities for community media in terms of:

- New production and viewing standards
- Increasingly personalised and portable television consumption
- Participation and interactivity

Quality and High Definition Television

High definition (HD) television means superior quality when viewed on an appropriate, high-end set. Australia’s digital television transition regime placed a strong emphasis on picture quality, mandating 20 hours per week of HD television. As HD content is currently expensive to produce, non-profit community stations are unlikely to meet current HD quotas in the immediate future. However, this should not rule out future HD programming from community licensees. Broadcast Australia believes that HD ‘will, over time, become the new baseline in home television viewing’, pointing out that Foxtel has recently announced that they will begin HD services. HDTV requires more

bandwidth than standard definition (SD). The community requires a full digital channel if it is to provide HD services in the future. Anything less than a full channel will see community television disadvantaged and marginalised.

Personalised media and DVB-H transmission

The television industry that we are familiar with involves delivery of mass media news and entertainment. In its next phase, digital television will begin to meet the demands of increasingly personalised media consumption. Viewers are already searching, organising and selecting content via personalised video recorder technology and near-video-on-demand satellite services. The free-to-air television industry is taking steps to ensure that they are not left behind. Media consumption is likely to become increasingly personalised and itinerant: television sets will evolve into handheld, portable receivers and audiences will 'time-shift' programming to suit their needs.

DVB-H (Digital Video Broadcasting – Handheld) allows viewers to watch television programming on handheld devices. These are small-screen, mobile televisions capable of receiving the same content that we view at home. Broadcast Australia is currently testing DVB-H in Sydney, broadcasting 18 channels to trial participants (including ABC2, a selection of Foxtel channels and FM radio). This trial has shown that the reception and data speed of DVB-H is likely to be superior to 3G or wireless broadband. DVB-H will essentially be a one-to-many technology, but with backchannels for interactivity. Although it will not provide the depth of content of the Internet, it will have the benefit of fast, smooth delivery. Partnerships between broadcasters and telephone companies may see broadcast television services integrated into mobile telephones and PDAs. Broadcasters will need to transmit a separate signal to participate in DVB-H. One SD channel would effectively lock the community sector out of this platform.

Vodcasting

Vodcasting (video podcasting) occurs when video files are automatically delivered to subscribers. Traditionally, broadcasters have controlled the times at which content is made available to their audiences. DVB-H technology may see the advent of downloadable content to media players such as iPods via the broadcasting service bands. Community content is ideally suited to podcast/vodcast audiences: the best niche, experimental or 'cult' viewing often originates from the community/amateur sphere.

MPEG-4

MPEG-4 is a multimedia standard for coding audio and video that may one day replace the current MPEG-2 digital television standard. MPEG-4 will mean up to six or seven standard definition channels in a full 7MHz digital channel. This will provide broadcasters with the capacity to simultaneously multichannel and provide HD services. The government's guarantee of 'one standard definition channel' would seriously confine the community sector in what looks set to be an increasingly dynamic environment.

Multiplatform distribution and Interactivity

Interactivity in digital television broadcasting means that viewers can download information, and thereby interact with information in the set-top box. However, this provides only limited interactivity. Wireless broadband backchannels may one day bring improvements in this area. For the time being, if broadcasters are to succeed they will need to see themselves as content providers, willing to work across multiple platforms. Unless this occurs, digital Pay TV and satellite industries may overtake broadcasters as the preferred distributor.

Even though interactivity with digital television is limited, community media allows for **deeper participation** via **media creation**. True interactivity involves more than voting or downloading added features – it allows for creative engagement and expression. Community media will extend citizen-made media into the digital television realm.

A comprehensive strategy for digital television should take into account the opportunities of cross-platform distribution, including:

- Digital television broadcasting
- Pay TV retransmission
- IPTV (Internet Protocol Television is digital television provided to subscribers via a broadband connection)
- Podcasting
- DVB-H (mobile television)
- Digital radio
- Web delivery

Immediate Issues

The introduction of digital television signified a momentous shift in media distribution and consumption, with consequences for the free-to-air television industry, its competitors and the community at large. However, the Australian Government took a cautious approach, limiting the services that commercial and national broadcasters can provide and prohibiting the entry of new broadcasters. Existing broadcasters were given time to adapt to digital transmission and to test interest in the digital television market. Five years later, it seems that at least some aspects of the digital television regime will need adapting.

Decisions made in the coming year will have a substantial and lasting impact on the community broadcasting sector and the media industries at large. We need to secure a commitment to community television delivery that encompasses digital television and retransmission on pay TV services. Without this, community television will effectively be condemned to a marginal position in the digital broadcasting landscape.

Spectrum

Although digital transmission increases the number of television channels that a viewer can receive, spectrum will remain scarce until the analogue switch-off date. The defining feature of the transition phase has been the triplecast obligation imposed upon national and commercial broadcasters. In return for 7MHz of digital spectrum, broadcasters are required to transmit their signals in HD for at least 20 hours a week, as well as full time SD and analogue services.

The triplecast obligation was designed to minimise disruption by ensuring that early adopters of digital television could still receive the same content as analogue viewers, with some added features. This replication of services has meant that the national and commercial broadcasters are now occupying most of the available spectrum. Only two channels across all metropolitan markets remain vacant, originally intended for datacasting services.

The fate of these two channels could prove immensely important for the community sector. Datacasting, as defined in Australian broadcasting policy, is not a technical feature or application, but a service that is restricted from broadcasting traditional television

content. Due to these limitations (which prohibit ‘entertaining content’ or audio-video content of more than 10 minutes in duration), the datacasting spectrum auctions failed to attract commercial interest. In their inquiry into the uptake of digital television, the House of Representatives Committee on Communications Information Technology and the Arts recommended that the government review the datacasting restrictions with a view to lifting them by 2008. Lifting the datacasting restrictions and auctioning that spectrum would effectively open the way for new commercial broadcasters. **An alternative is to allocate one channel for community use**ⁱⁱⁱ.

The Minister has guaranteed community television one SD television channel. Although this may be an adequate short-term solution for current services, assisting them to meet the demands of simulcasting, it means little without a long-term commitment to a full channel. Melbourne’s C 31, for instance, is already close to its full programming capacity, with only a few hours of free airtime in the early morning. A SD channel would maintain current analogue services, without room for new and niche programming. Furthermore, technical and content innovation in the broadcasting industries will leave community television stranded in an out-of-date, limited, SD channel. With a full channel (7MHz), community television could broadcast multiple channels for different community uses, deliver HD programming and produce innovative content for transmission via new technologies.

Switch-Off and Take-Up

The latest round of digital television reviews recommended that the switch-off date be set for 2010. In order to meet this deadline, the government will need to put in place consumer incentives, product labelling and mandated manufacturing standards. The exponential take-up of digital television will erode existing community television audiences in the absence of digital transmission. Early adopters of digital television (estimated at 13% of Australian households) can only receive community television if they disconnect their set-top-box and reconnect their old ‘RF’ antenna. Community television stations are receiving countless complaints from digital television audiences wishing to tune in. Furthermore, our existing community television stations rely upon sponsorship revenue to meet costs. As analogue audiences decline, these services may become financially unviable, causing a serious setback for any future digital services.

Community Television

The Government has delayed making a decision on how it will accommodate community television in the digital television environment, prioritising commercial and national services and waiting to see how digital television progresses. The community sector must be guaranteed a full digital channel **regardless of the shifting arrangements relating to commercial and national broadcasters**. An adequate arrangement for the digital transmission of community television will also involve a viable transition plan. This may involve a standard definition carriage-arrangement in the short-term and assistance in meeting the costs of digital transmission. Although the government has committed \$260million to help meet the costs of digital television in regional areas (some of which will assist regional commercial stations to meet the costs of digital conversion), community television stations have no such security.

Community television has survived within the context of an uncertain regulatory future and with no substantial, ongoing government funding. Its viability has been due to the support of community organisations, educational institutions, local businesses, programmers and the unpaid work of a creative citizenry.

Over a decade-long trial period, the sector has developed workable governance and funding models and attracted a large and dedicated audience. In 2004 trial stations in Melbourne, Brisbane, Sydney, Perth, Adelaide, Lismore and Mt Gambier were granted community broadcasting licenses. Although this has provided a greater level of stability and certainty for analogue services, stations are unable to begin planning for digital transmission.

Despite regulatory uncertainty, stations are moving forward. For example, C31 in Melbourne has taken the first steps by capturing on digital format, creating content using digital video and playing off a digital server. By necessity, it then must broadcast its content in analogue. With a full programming schedule and considerable support from local businesses, C31 has demonstrated that it can make a successful transition to digital broadcasting, with the potential for considerable growth.

The expansion of community television is something to be **encouraged** and to **celebrate**. Australia has a vibrant and creative civil society sphere that promotes communication between citizens and groups. Community broadcasting is living proof of the **open** and **inclusive** aspects of our society and a **dynamic** and **evolving** component of our media landscape.

Next Steps

To date there has been little public debate on the future of Australian digital television services. This is not surprising given the lack of new services offered under the transition regime and only minimal promotion from our current digital broadcasters. The Community Spectrum Taskforce aims to rectify this by:

- Raising awareness amongst, community television users, audiences, producers, trainers and partners
- Connecting existing and potential partners; and
- Providing input into the policy process.

We will be holding a community spectrum summit in June 2006.

As this paper outlines, an inclusive and diverse digital future is possible. We look forward to your response.

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ⁱ The gay, lesbian, bisexual, transgender and intersexual communities

ⁱⁱ www.current.tv

ⁱⁱⁱ Although the commercial sector has failed to see the potential of datacasting, such services are likely to suit the community sector, which will make good use of informational, and educational content forms. Innovations in the community sector may stimulate audience interest in non-standard television content.