In June 2001, the Department of Communications, Information Technology and the Arts called for submissions on its review of the digital transmission of community television services. This is the ABA's submission to the department.

The digital transmission of community television

n June 2001, the Department of Communications, Information Technology and the Arts (DCITA) released a discussion paper, which canvassed issues relevant to its Review of the Digital Transmission of Community Television (CTV). The Broadcasting Services Act 1992 (clause 60C Part 8 Schedule 4) requires the Minister for Information Communications, Technology and the Arts (the Minister) to conduct a review of the regulatory arrangements that should apply to the digital transmission of community television broadcasting services using spectrum in the broadcasting services bands, and how access to spectrum should be provided free of charge. This review must be conducted by 1 January 2002.

The ABA responded to DCITA's call for submissions, and the response is reproduced below. In addition to the ABA, DCITA received submissions from: Aboriginal and Torres Strait Islander Commission; City of Albany, WA; Community Broadcasting Association of Australia; Crookwell Shire Council, NSW; Federation of Australian Commercial Television Stations; Imparja Television; Michael Costello, VIC; NSW Office of Information Technology; ntl Australia; Resolution Audiovisual; RM Catchpoole, QLD; SBS; South Australian Association for Media Education; West Australian Aboriginal Media Association; and Western Australia Department of Industry and Technology.

Introduction

In its investigation into the community television (CTV) trial, the ABA identified a number of factors that have adversely affected the ability of trial licensees to deliver worthwhile CTV services. If access is to be provided for CTV services to transmit in a digital environment, the policy framework should avoid replicating these factors.

While the ABA concluded from its investigation that there is value in some CTV programming, there is clearly nsufficient local programming to fill a full-time television channel. Thus, the value of the analog spectrum provided for transmission of community programs is diluted by the use of retransmitted and filler programs.

The audiences for CTV are small. Oztam rating estimates show that audiences average about one-hundredth of the total television viewing audience. This is not unexpected as local programming is often targeted at particular groups within the areas served and transmission is generally of a poor quality. The current licensing arrangements have contributed to this by discouraging long-term planning and capital investment.

The costs, in particular, those associated with transmission, of providing a CTV service are currently high. The ABA found from its investigation that high transmission costs encourage CTV services to seek efficiencies, which detract from their focus on community broadcasting principles, including community access to airtime for local programming.

The ABA found that CTV trial licensees used excess spectrum to generate revenue to meet the high costs of transmission. This led them to develop relationships with large non-profit organisations and to enter into commercial arrangements with profit-making enterprises. For example, some CTV trial licensees sold large blocks of airtime to commercial organisations (usually a non-profit arm to meet their

licence condition). Others broadcast commercial program material, including advertisements that are shown on commercial television and advertorialstyle programs as commonly shown on subscription services or late night free-to-air services.

If the primary goal of setting spectrum aside for CTV purposes is to provide access for those without recourse to commercial alternatives, the services also require appropriate governance structures to allow for transparent and accountable practices relating to turnover in board and executive positions. Of the CTV trial licensees, the ABA's investigation found that those operating as a consortium were best able to balance the competing demands of providing a CTV service. These demands included adequate community participation in program production, transmission of a reasonable quality and the ability to attract and manage commercial interests.

From its investigation of the CTV trial, the ABA considers the following responses are relevant to the issues posed by the Department of Communications, Information Technology and the Arts (DCITA) in its discussion paper.

1. What part of the spectrum should be set aside and what should be the nature of any carriage obligation?

While the ABA supports providing community access to broadcasting services, its investigation shows that it is highly unlikely that licensees will be able to produce or provide sufficient local programming to provide a 24-hour standard definition television (SDTV) service. As such, setting aside 7MHz for CTV services would be inefficient and would provide an incentive to licensees to become involved in activities that do not meet community broadcasting principles, in particular, funding their services through the sale of digital capacity.

The major constraint on CTV services in an analog environment is their responsibility for the operation and maintenance of transmission facilities. It is not necessary in a digital environment for a 'full channel' to be provided to enable access as it has been in an analog environment. Removal of this onus in a digital environment would allow the amount of capacity to be provided to be better matched with the amount the CTV sector is able to put to use. This would allow CTV licensees to focus on the business of local program production and getting community content to air. Providing CTV licensees with only sufficient capacity for their programming would be best achieved if transmission in a digital environment becomes the responsibility of a third party carriage provider. CTV providers could then be provided with sufficient bits to transmit a CTV service up to a SDTV channel, matching the transmission capacity with the programming stream.

In the context of digital transmission, carriage of community programming in this way could be the responsibility of any owner of spectrum, whether a free-to-air network, a datacasting service or a cable pay TV operator.

The Carriage Obligation

With a 7MHz channel, each free-to-air network will be able to transmit around 20 Mbits per second,1 which is sufficient capacity to provide three or four high-quality SDTV services. Subject to regulations, it would therefore be possible for a free-to-air network to simultaneously provide several continuous and entirely independent services in the same 7MHz channel, including for example: two multichannel SDTV services; or a simultaneous SDTV and high definition television (HDTV) transmission; or a television program and simultaneous datacasting.

Alternatively, the CTV service could be carried by a datacasting service or a pay TV cable operator.

This could be achieved by: either mandating one or both service types to provide access for community programming; or determining a carriage provider through an open tender in which all potential carriers may participate. The choice of carriage type is addressed in sections 2 and 3 below.

Retransmission on pay TV as the sole means of carriage for CTV services in a digital environment has the disadvantage of providing only for a service paid for by the consumers. Pay TV, however, may offer broader geographical coverage in the early days of a digital environment. CTV carriage could also provide an additional revenue source for pay TV operators.

2. What does 'free-of-charge' mean?

The ABA investigation indicates that the cost of transmission imposes significant pressure on current providers of CTV services. High transmission costs encourage CTV services to either mimic commercial (free-to-air or subscription) television or to trade airtime to quasi-commercial interests. This results in less community programming and more commercial content on spectrum provided for CTV purposes. This is a trend that is likely to accelerate.

Access for CTV should be provided

free-of-charge on the digital spectrum. This should only be sufficient for the transmission of appropriate community content, excluding retransmitted and filler programs. The capacity required would on average be less than the equivalent of one SDTV channel.

3. Who should meet transmission costs?

Government could meet the costs associated with the digital carriage of a CTV service through a direct subsidy, which is linked to airtime. Alternatively, costs could be met through a direct but tradeable obligation on the networks.

If Government wishes to provide subsidised access for community programming and if it wishes the taxpayer to directly receive the return from the sale of unwanted/unused spectrum, the Government would be the appropriate funder of the major part of the cost of community access. It would be inefficient to achieve this by providing CTV services with excess capacity to on-sell to finance their operations.

A competitive tender process could allow Government to achieve CTV carriage by any free-to-air digital carriage provider. The carriage provider could be either a current commercial or national broadcaster, or a datacaster. Although any subsidy should represent only revenue foregone, the price the networks would bid could reflect a perception that CTV programs are of low quality and any association with them could discourage audiences from watching their other programs.

However, if a tradeable obligation were imposed on the networks, this would place the cost of CTV carriage on the television industry. A tradeable credit

Digital information is transmitted at a rate that is measured in digital bits per second or, more usually, millions of bits per second (megabits 1 or Mbits). The volume of digital bits that can be transmitted depends on the bandwidth of the medium used to carry them. A 7MHz channel will be able to carry around 20Mbits per second when using the digital transmission standard chosen for Australia.

scheme would encourage the networks to trade their carriage obligations to the network with the lowest marginal cost associated with carriage. The questions of quality control and gatekeepers would need to be addressed separately. Ideally, gatekeepers should be independent, separate entities and not content providers.

A decision on whether to involve both datacasters and the commercial broadcasters would depend, in part, on whether to provide a continuous program stream, or discontinuous programming. A continuous stream would allow for a CTV 'brand' to emerge. A branded CTV service would not fit particularly well with the operations of free-to-air broadcasters and would probably, therefore, restrict the potential carriers to subscription services or datacasters.

Alternatively, digital cable pay TV operators could be invited to bid to retransmit CTV services. In this case, although the price would probably be significantly lower, the potential audience reach would also be lower.

If a branded service is the preferred model, and it were to be carried by a free-to-air network, Government could mandate that a CTV service be carried on the spectrum owned by one of the national networks – the ABC or SBS.

4. What should be the technical quality of a CTV service transmitted in digital mode?

If CTV services are to have a real opportunity to attract a stable audience share, they would require access to sufficient bits to transmit a good-quality SDTV service for defined periods of time.

An average bit rate of around 5Mbits per second should provide adequate capacity for a SDTV service. Bit rate management by the carriage provider should allow for some variation in this capacity. This would depend on the requirements of different users.

The commercial networks are required to transmit at least 20 hours of HDTV programs per week. As the free-to-air networks provide more HDTV and enhanced SDTV services, their capacity to carry other services is expected to be reduced.

Free-to-air networks are unlikely to provide CTV services with a continuous program stream and instead would insert CTV programs where capacity is available. In such circumstances, the transmission requirements could include:

- an average 5Mbits per second, which may be varied by the carriage provider to optimise signal quality; and
- a minimum of 50 hours of programming blocks per week, which may be scheduled to suit network programming, for example, between the hours of 9.00 a.m. and 9.00 p.m., seven days per week.

The ABA's investigation found that CTV audiences are selective as to which programs they wish to watch. ABA-commissioned research shows that viewers often tune in to watch particular programs of between half to one-hour duration. As such, allocating programming blocks for CTV services may be of little concern to viewers.

Such requirements could also be applied to access through datacasting services or cable pay TV operators. These services are more likely to also offer the option of a 'branded' CTV service.

Some CTV trial licensees stated during the ABA's investigation that continuous transmission is essential to building a profile and identity for their services. Having a branded channel was seen to be important to securing revenue through sponsorship and airtime sales. They argued that it was difficult to establish a regular audience if transmission was sporadic. Although eliminating the responsibility for transmission would diminish the need to generate substantial amounts of revenue, continuous transmission of a CTV service by a datacasting service rather than a free-to-air network would allow audiences to more easily distinguish CTV programming.

5. Should the CTV sector be permitted/required to simulcast?

The ABA investigation found that in a number of locations, the use of free analog spectrum for CTV services is not very effective. Rather than mirror the simulcast policy for free-to-air broadcasting, early migration of CTV services from analog to digital would allow analog spectrum to be freed up and eliminate transmission costs faced by CTV services

Where CTV services are currently available, an effective approach may be to retransmit CTV on cable pay TV services² in addition to digital transmission. Given that CTV services are currently available mainly in capital city areas, this option would not have an adverse impact on potential audiences. Rather, they would have the benefit of better quality pictures with guaranteed delivery. The amount of cable bandwidth subsidised by Government could also be tailored directly to the level of adequate programming available.



² Satellite pay TV bandwidth is constrained, and it unlikely that there is sufficient available spectrum for the retransmission of all community programming.

Thus, the cost to Government of freeing up the sixth channel is likely to be minimal while CTV audiences are small and their signal is of a lesser quality. In Melbourne and Perth, however, where support for CTV is highest, it may be necessary to continue to use the sixth channel for at least part of the simulcast period.

Cable pay TV operators choose to retransmit the free-to-air networks. Although the marginal cost associated with cable pay TV retransmission of CTV is likely to be very low, it is unlikely that they would agree to retransmit CTV services at no cost. A possible solution would be a Government purchase of bandwidth from the pay TV cable operators for CTV retransmission: this would enable the sixth channel spectrum to be sold.

6. What would be an appropriate licensing regime for CTV services?

The ABA concluded from its investigation into the CTV trial that the absence of an appropriate regulatory framework for CTV services was a contributing factor to some of their problems. Thus, CTV services carried by a digital provider should be licensed as community broadcasting services and be required to comply with appropriate community broadcasting requirements. In addition, they should be required to develop a CTV code of practice and to register it with the ABA within 12 months of commencement of the first digital CTV service.

Community broadcasting service licences should be allocated with a new condition that licensees demonstrate their continuing compliance with community broadcasting requirements. This will be determined through annual assessment

against established performance criteria. Non-performance may result in a number of enforcement actions, including suspension or cancellation of the CTV licence, thus making it available for re-allocation. This would ensure efficient use of capacity made available for CTV purposes. If Government decides to purchase capacity rather than provide for a branded channel, then there may be advantages in licensing either a number of content providers and/or a consortium.

7. What should be the coverage of CTV services?

Although CTV services are currently licensed in the five mainland capital cities and one regional city, their coverage is uniformly poor as the high cost of providing quality transmission is beyond their reach. In a digital environment, any area would be able to receive a CTV service, provided there is a carrier licensed to do so.

The ABA's investigation found that CTV services provide an outlet for local and innovative programming not available on the free-to-air networks or pay TV, including local news and current affairs, local sports and other local events. The emphasis on local programming means that CTV content is often relevant only to the areas for which they are produced. The primary focus of CTV services should be on providing community access and facilitating local program production rather than providing a national service, although some national programming may be relevant.

However, the ABA investigation also found that the success of a CTV service is a function of the economic viability of the market in which it operates. For example, smaller towns such as Bendigo and

Hobart were unable to gain sufficient momentum to provide a CTV service. Therefore, it may not be appropriate to have carriage for community access and programming at a highly disaggregated level.

Communities in such areas may wish to produce programs and to receive them from a CTV service operating from a larger town in the region or state. For example, the success of the Perth licensee's WA-specific programming has resulted in the WA Government approaching the ABA to request that its services be extended to Albany and Bunbury.

Further, communities are defined not by geographic location alone. Syndication of some CTV programming could improve efficiencies for licensees by making appropriate broadcast material more widely available. Examples of such programs are those currently produced by groups, which identify themselves as being of a particular ethnicity, religion or sexuality. CTV may also facilitate the programming needs of community groups not currently involved in program production. For example, members of the print handicapped and the deaf communities may produce programs, which may have a wider appeal within their communities regardless of where they live.

