



**BROADCAST AUSTRALIA**

17 March 2006

The Secretary  
Standing Committee on Communications,  
Information Technology and the Arts  
House of Representatives  
Parliament House  
CANBERRA ACT 2600

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Dear Madam

### **Community Broadcasting Inquiry**

Thankyou for the opportunity to respond to the issues raised in the Terms of Reference for the “**Community Broadcasting Inquiry**” being conducted by the House of Representatives Standing Committee on Communications, Information Technology and the Arts.

Broadcast Australia (BA) provides transmission to the community broadcasting sector for the delivery of radio and television services both in urban and rural Australia. BA recognises the important role that community broadcasting plays in Australia by increasing the diversity of media available to the public.

In relation to those issues we wish to make the following comments on the third point in the Committee’s terms of reference: “Technological opportunities, including digital to expand community broadcasting networks”.

Over the last five years, BA has played an active part in the development of government policy relating to the introduction of digital television and radio into Australia including the role to be played by the community sector in relation to this technology. BA broadly supports the direction currently being taken by the Government in relation to community broadcasting and digital. For the information of the committee we have summarised our positions in relation to these key initiatives below.

### **Community Television**

The Committee would be aware that the benefits of digital technology allow the multichannelling of more than one service in a 7MHz television channel spectrum block. This benefit will allow the community television broadcasters to gain access to sufficient digital spectrum to transmit their existing services without the necessity to own/occupy a whole 7 MHz channel (and the costs that flow from this).

In relation to the introduction of digital television in Australia, BA believes that there are essentially three options available to the Government for conversion of community TV services which currently operate on channel 31 in relevant capital city markets:

1. Conversion of community television on the same basis as the Free To Air (FTA) broadcasters i.e. the allocation of a full digital channel (7MHz) with a phase-in simulcasting period of 8 years (or until FTA analogue switch-off, whichever is the sooner);
2. Conversion of community television utilising a simulcasting period (the length of which to be agreed) in conjunction with the allocation of a part of a new digital / datacasting channel for community television use. In this situation, the allocation of a datacasting channel would include a “must-carry” obligation on the licensee (e.g. the licensee would be required to provide a maximum of 4Mbits/second, or a single standard definition program stream, for the carriage of the community broadcaster’s programming) refer diagram in Attachment 1. The actual allocation should depend on the genre of content to be transmitted and the compression technology being applied. BA would not envisage more than 4 Mbits/second being required and that with the application of statistical multiplexing, the average bit-rate would more likely be close to 3Mbits/second.
3. Direct conversion of community analogue services to digital without the benefit of a simulcast period at an appropriate point in the overall digital television take-up cycle (e.g. 50% consumer take-up in the relevant market). Under this option, community TV would effectively be cut-over from analogue to digital, with the new digital community television service using part of the channel 31 spectrum.

BA believes that the best digital migration path for community television is represented by the direct conversion model under which the community television service can continue to be provided using a portion of the channel , with a bit-rate allocation as described at 2 above. Any such “must carry” arrangements would need to be on normal commercial terms to ensure that the channel remains attractive to prospective spectrum owners. The remainder of the channel capacity can be allocated by government for alternative commercial purposes for example, services permitted to be provided under the definition of datacasting.

A “must carry” solution would also allow other services (e.g. datacasting services) to be carried on the same spectrum.

A similar solution ie as part of a ‘must carry’ provision on a datacasting channel eg channel 31, could be applied to indigenous services should the government wish to transmit them more widely sometime in the future.

## Community Radio

In October 2005 The Government announced its Digital Radio Policy and its decision to use the Eureka 147 DAB standard. This policy provided for wide coverage community radio broadcasters **only** in each market to be entitled to a base bit rate allocation of 128 kilobits/second, and up to 256 kilobits/second for the delivery of radio services using digital technology. This allocation was in association with allocations to commercial and national broadcasters and reflects the shortage of desirable ‘Band III’ spectrum that exists, particularly in the larger capital city markets.

BA broadly supports the approach taken by the Government as the only practical way in which all broadcasting sectors (i.e. commercial, community and national), could be given the opportunity to deliver digital services without the need to push

some primary (as opposed to in-fill) services into the less functional 'L-Band' spectrum.

As part of this announcement, the Government also signalled its intention to consider incorporating the adoption of advanced compression technology (e.g. AAC encoding) once satisfied that it is available for use.


The choice of standard will be a critical issue in determining how usable the bit rate allocated to community broadcasters in a specific market will be and whether the enhanced spectrum efficiency available through the use of advanced compression technology can be incorporated. While the Government and industry in Australia both support adoption of the Eureka 147 digital radio standard, the issue of which coding variant is chosen is still an open issue. The 'base' encoding variant of Eureka 147 is known as MPEG 1-Layer 2, whereas the emerging 'advanced' variant, AAC+, is at least twice as spectrum efficient as the earlier version. Broadcast Australia, Commercial Radio Australia and industry players in Australia are participating in various international industry fora in order to monitor relevant developments around the world closely refer Attachment 2.

It is important to acknowledge that even if the AAC+ encoding variant is selected, a bit rate allocation of 128 kbits/second in the larger markets (i.e. capital cities) is unlikely to provide sufficient spectrum for **all** existing community radio broadcasters. Given that digital radio is a supplementary, rather than replacement, technology this is unlikely to be a serious problem in the short to medium term. However, beyond this time, there are probably two basic options available for the provision of digital radio services by other community broadcasters in capital city markets:

1. Identification and allocation of further Band III spectrum. This will not occur in most markets until the shutdown and re-allocation of analogue television spectrum.
2. Utilisation and allocation of non-Band III spectrum, most likely the less efficient L-Band, which would have significant capital expenditure implications (i.e. the need for additional transmission sites in each market) for broadcasters.

Thank you for the opportunity to provide comments on these issues. Should you wish to further explore the issues set out in this short submission, we would be happy to participate in the Committee's public hearings. Please don't hesitate to contact me on (02) 8113 4602 or email [Clive.Morton@broadcastaustralia.com.au](mailto:Clive.Morton@broadcastaustralia.com.au) or Linda Andersen on (02)8113 4654 or email [Linda.Andersen@broadcastaustralia.com.au](mailto:Linda.Andersen@broadcastaustralia.com.au).

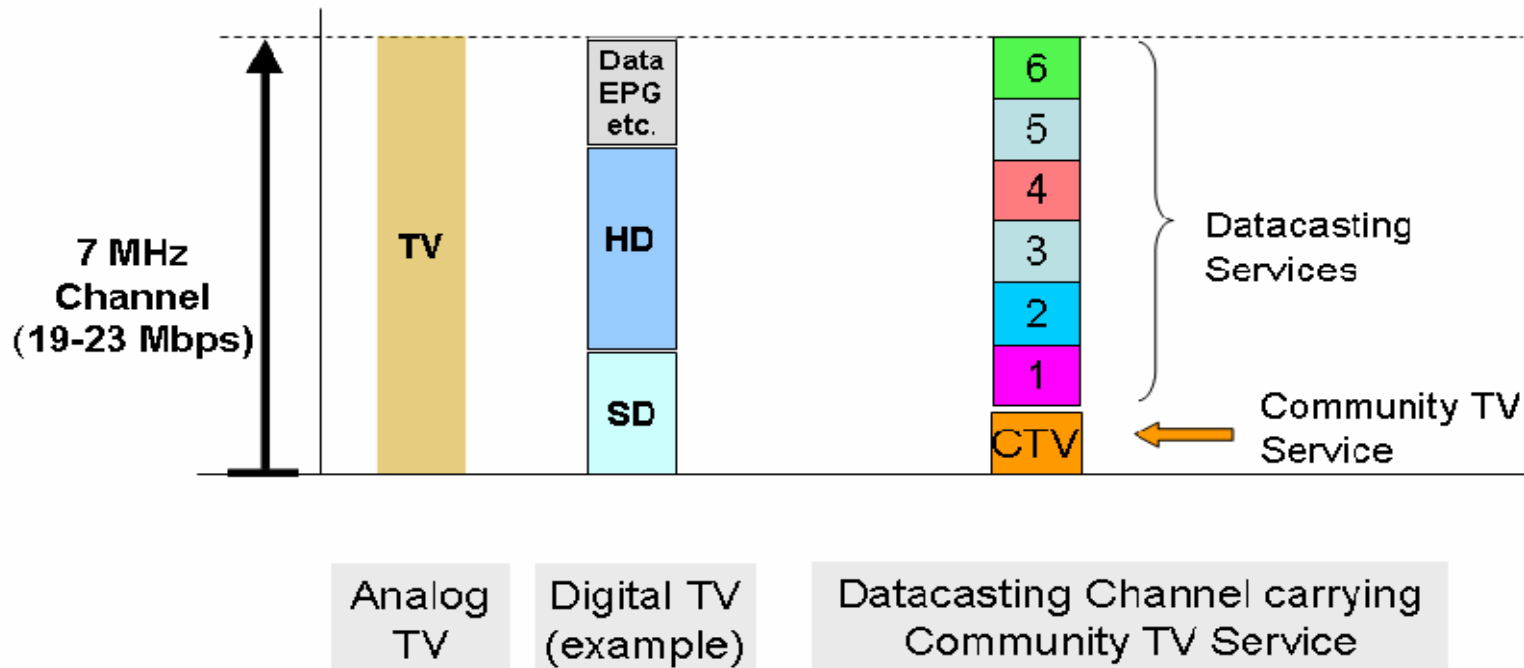
Yours sincerely



Clive Morton  
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Attachment 1

# Datacasting Multiplex



## Attachment 2

