

Response to the  
Department of Communications Information  
Technology and the Arts Discussion paper  
on

# Digital Conversion of Self Help Retransmission Sites

August 2007



Department of  
**Industry and Resources**

## INTRODUCTION

The technical staff of the Australian Communications and Media Authority (ACMA) have advised that the spectrum is there. The issue remains the funding of the facilities. In the State Government's *Telecommunications Needs Assessment: the communication needs of regional Western Australia* (2003), local governments repeated their concerns that they and their ratepayers are called on more and more to provide services that are free to ratepayers in metropolitan areas and near city communities.

*Regarding the issues on which comment is sought:*

- I. **Whether the use of individual digital transmitters for each service or the use of multiplexers, would be the most effective option for converting existing analogue self-help retransmission sites to digital in relation to:**
  - o **technical viability;**
  - o **costs of conversion, operation and maintenance; and**
  - o **any other options for the digital conversion of self-help television retransmission sites.**

Local communities will not be able to receive terrestrial signals of digital television if there is no assistance available to these community self-help sites.

The estimates in the paper note that conversion to digital television could cost between \$125,000 and \$210,500 per site. This is a daunting sum for many councils with a very limited ratepayer base and many more pressing demands on their resources, especially since there were some earlier figures noting costs as low as \$50,000 per site.

If self-help transmitters cannot be converted for digital transmission due to the costs involved, it would force viewers to install satellite reception systems. This would incur an expense of @ \$500-\$1200 per household, albeit a lower figure than had previously been considered.

Still, viewers would have to pay for something that they are already receiving for free. According to the *Telecommunications Needs Assessment*, 10.8% of Western Australian households are already reliant on satellite for their television reception. This figure will increase significantly if local communities cannot afford to upgrade their transmitters.

It is understood that the commercial free-to-air telecasters are content with the impending arrangement for the third channel for non-metropolitan WA. The concern here is what will happen to the retransmission facilities that are not operated by the telecasters. 300,000 SBS viewers nationwide rely on the existing analogue self-help transmitters. Many of these facilities are shared by all telecasters in a community.

This issue has can be addressed by establishing a fund to provide resources for local retransmission facilities to convert to digital. In its Digital Action Plan the Commonwealth acknowledges that it is likely that these communities will need special assistance to make the transition to digital. This is a method to do so, with telecasters asked to contribute.

The question of multichanneling arises. Digital retransmission facilities must be equipped to retransmit all the channels emanating from a service. Separate transmitters would be required for each of the multichannelled services. As it currently appears, only the primary digital services of telecasters are available from the Optus C1 satellite. As noted in the discussion paper, multiplexing may not be the answer in remote retransmission sites, so the focus should be on individual transmitters per channel.

Broadband and greater compression ratio may play a future role in retransmission of services. But still, the questions of reception in remote sites remain.

**II. Whether the DTH option for viewers residing in remote areas of Australia where the population is less than 500 should be adopted, rather than converting existing self-help retransmission sites from analogue to digital.**

The preference is for retransmission facilities as far as practicable. The launch of digital transmissions for the two existing commercial services in regional and remote Western Australia in 2008 is awaited eagerly. The third, scheduled for a year later, has attracted great anticipation as well. It is hoped that the three can provide localised services, which would be retransmitted terrestrially.

The key to the DTH option is not necessarily a blanket rule of a population of less than 500. A number can serve as a guide, but individual cases need to be taken into account. If a guideline is necessary, it would be *to allow as small a community as possible to have their own retransmission systems*. Certainly, those who have existing retransmission facilities should be given an opportunity to upgrade. Nor would it be useful in communities where the dishes are targets for vandalism.

In discussing DTH with those in Western Australia who have had experience in satellite dish installation. Several issues arise:

- *Vandalism.* In remote communities, vandalism would occasion realignment of the installation. This often cannot be provided locally. Technicians have to be brought in at great expense. In the meantime, homes are without basic television services. One of WA's best satellite dish installers is located in Wyalkatchem, which is central to the Wheatbelt, but similar expertise is not readily available elsewhere – and those places are a long way from Wyalkatchem. Adding up the costs incurred, it may be more economical to install a retransmission service.
- *Approval by local councils.* Installation of dishes in some shires may also require such endorsements from shires whose regulations may be restrictive in what can be added to existing structures. This may even entail heritage issues. State Governments have had mixed results in forcing councils to make exceptions to zoning rules to solve telecommunications and broadcasting problems.
- *Cyclone-proofing* In northern areas this would also require creating special foundations alongside homes, adding to installation costs. Dishes prove to be impractical in areas prone to cyclonic activity
- *Topography.* . A DTH option would not be satisfactory in a town like Denmark on the Southern coast, where dishes have to be placed very low to the horizon. In a town like Pemberton in the Southwest forests, trees hamper satellite reception and valleys make terrestrial transmissions problematical. Then there are sites, where there are no clear lines of sight for satellites or terrestrial transmitters.
- *Bureaucracy.* The Western Australian experience with services on two satellites called for a special subsidy scheme, which had many hiccups in its administration. A single satellite dish and decoder is the target. Sadly, at the moment, viewers still need second dishes and boxes for reception of Foxtel, which is on a separate satellite from the Free-to-Air services.

**III. Any views regarding the timing of digital conversion of self-help retransmission sites.**

Conversion should take place as soon as practicable.

**IV. Other issues**

As noted in previous submissions, the Western Australian Government champions community broadcasting. We are concerned about how this vital sector will get access to the new channels that are being created. With analogue transmissions being phased out, assurances for access and

financial assistance must be made in order for community television to survive now and into the digital era.

Lacking other assurances, must-carry provisions need to be legislated to meet the Commonwealth's stated goal of using the new channels as platforms for community television. If new licensees are to provide public services, these obligations need to be outlined.

The next step is for assurances to be made for retransmission of capital city services, and then for creation of local services. Currently Access 31 Perth is being transmitted on the Westlink satellite service on weekends. Facilities in Albany and Bunbury retransmit the signal on terrestrial channels. It is expected that such a service could continue in digital on channels to be allotted and new local services would also have a place on the digital spectrum. All of this requires a means of retransmission.

## CONSULTATIONS

*The following organisations and individuals have provided comments in the preparation of this submission:*

Access 31, Perth

Gus Slater, former Chief Engineer, STW-9

Westlink, Department of Local Government and Regional Development

## REFERENCES

Relevant documentation on issues raised in this submission. Copies available upon request

1. **Submission to the Department of Communications, Information Technology and the Arts and the Australian Competition and Consumer Commission discussion papers on New Digital Television Services,**  
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6. **Review of Broadcasting Services Bands Spectrum,**  
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7. **Submission to the House of Representatives Standing Committee on Communications, Information Technology and the Arts inquiry into the Uptake of Digital Television in Australia**  
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8. **State Communications Policy: WA – A Connected Community**  
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