



**SBS SUBMISSION TO DCITA DISCUSSION PAPER ON  
DIGITAL CONVERSION OF SELF-HELP TELEVISION  
RETRANSMISSION SITES**

**SPECIAL BROADCASTING SERVICE  
AUGUST 2007**

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## CONTEXT

The Special Broadcasting Service Corporation (SBS) is established under the *Special Broadcasting Service Act 1991*. The principal function of SBS is to provide multilingual and multicultural radio and television services that inform, educate and entertain all Australians, and, in doing so, reflect Australia's multicultural society.

SBS broadcasts both analogue and digital television services nationally, two radio services to state and territory capital cities and some regional centres and provides online services at [www.sbs.com.au](http://www.sbs.com.au). Currently SBS provides a total of 251 analogue TV services, 201 digital TV services and 15 radio services operating nationwide. The roll out of analogue television services has now been completed. SBS also provides direct to home satellite services via the Aurora satellite platform and is carried on the Foxtel and Austar subscription television services.

The fulfilment of SBS's Charter objectives is predicated on the use of radiofrequency spectrum for the delivery of broadcasting services across Australia. SBS operates extensively in the AM, FM, VHF and UHF broadcasting services bands.

With its Charter to provide multicultural television and comprehensive multilingual radio broadcasting, SBS provides a specialist public presence. SBS disseminates Australian stories, represents Australian voices and faces, promotes Australia's diverse cultural identity and provides for diversity and innovation in programming.

SBS is also a vehicle for cultural and linguistic maintenance. SBS's Charter requires it to serve the needs of ALL Australians including some of the most disadvantaged groups in Australian society. Many of these groups are in regional, rural and remote areas without access to terrestrial broadcast television services.

### **SBS Self Help**

SBS provides approximately 461 self help television retransmission services (34 metro, 122 regional and 305 remote). Most self help services are owned and operated by local communities, most in remote regions of Australia.

SBS continues to promote the Self Help Subsidy Scheme to state and local governments. A number of equipment suppliers have also taken on the task of promoting the Self Help Subsidy Scheme with considerable success.

### **Achieving 'same coverage' as a result of digital conversion**

As a national broadcaster service, it is a reasonable expectation of all Australians that SBS transmission should be available as widely as possible and that the range and quality of services provided in remote areas should be equivalent to those in metropolitan areas. Despite this, many Australians in areas covered by SBS still have difficulty receiving the full range of SBS services and/or obtaining good quality reception.

Currently, the government provides funding to ensure SBS analogue broadcast transmission to population centres of at least 3000 people. All smaller population centres are reliant on either self help services or the Direct to Home (DTH) satellite transmission for their SBS service. Around two-thirds of the 650 self help sites across Australia retransmit SBS services. SBS estimates that at least 250,000 Australians receive their SBS television service through self help retransmission facilities.

Achieving a fair and appropriate measure of 'same coverage' in digital conversion is vital to ensuring that all Australians have access to all SBS services when analogue switch-off occurs. Audiences should be able to have the same ease of reception for SBS wherever they are able to access SBS and/or other broadcasters.

The assumption that equity in SBS coverage, reception quality and range of services provided (including high definition and multichannel services) is both an appropriate and realisable objective underpins the comments and suggestions made in this submission. The overarching policy objective in relation to same coverage should ensure that all SBS services are provided as widely as possible.

## **SBS RESPONSE TO SPECIFIC ISSUES**

### **Conversion of self help facilities to digital**

Comment is sought on the following issues:

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:

- technical viability;
- costs of conversion, operation and maintenance; and
- any other options for the digital conversion of self-help television retransmission sites.

#### *Individual digital transmitters*

SBS is of the view that where viewers are able to receive any terrestrial digital transmissions they should be able to receive the complete SBS digital multiplex. This would provide equity of service with those in metropolitan and regional Australia who have already been enjoying the improved quality and range of services provide by digital transmission. This would be consistent with government policy to provide digital services to all Australians and is aligned with government policy in other sectors (eg. telecommunications) to assist those living in regional and remote areas to enjoy similar services and facilities as those in metropolitan and urban areas.

SBS acknowledges the higher cost of individual digital transmitters especially if being funded by local communities. However, SBS considers the high costs involved will require additional government support. If left solely to communities to fund, it may deter communities from deploying individual digital transmitters and would encourage the installation of a single digital transmitter with a multiplex of four or five standard definition services from each broadcaster.

#### *Multiplexing equipment*

SBS assumes that the type of multiplex equipment/system that is referred to in the discussion paper involves combining one service from each broadcaster multiplexed into a single transport stream.

SBS considers the installation of a single digital transmitter to broadcast all services to be impractical on two counts. First, it would be both expensive and require expert technical support. Second, it would not enable the provision of the full range of digital

services that are currently provided or will be provided in the future. To limit these viewers to a sub par digital service would not be justifiable under SBS's charter to deliver its services to all Australians.

Locating multiplexing equipment at self help sites, particularly those in remote areas, would involve complex multiplexing equipment at the transmitter site which would be both expensive and require expert technical support. Maintaining multiplexing equipment at the transmitter site would involve additional capital costs (to house equipment) and increased technical expertise that may not be readily available. In addition, the higher cost of such equipment may increase the risk of vandalism or theft.

Such a multiplexing arrangement would also not enable the provision of the full range of digital services (effectively replicating the old analogue service in digital transmission mode) without an ability to provide the benefit of new and additional digital services (such as multichannels or high definition services). This would not be justifiable under SBS's Charter to deliver all its services to all Australians.

SBS does not support this option as it would eliminate any possibility of delivering SBS multichannel or HD services to these viewers. The system may also require a rescan every time SBS changed its PID structure on the transport stream which might occur several times a year.

In the case of SBS and the ABC distribution of the transport stream to the transmitter site is already provided by satellite so costs for distribution are limited to satellite receivers and antenna.

SBS acknowledges that the commercial television distribution models may make the use of a single transmitter carrying a multiplex of standard definition commercial services a practical option. Use of this option for commercial services should not discourage individual transmitters for both the ABC and SBS.

SBS considers individual transmitters would be the preferred option.

### **DTH reception of satellite television services**

Comment is sought on the following issue:

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.

Direct to Home (DTH) services provide SBS broadcasts to the most marginal consumers outside the existing coverage areas. SBS considers that the relative costs of converting existing self help retransmission sites to digital transmission compared with the installation of DTH facilities in individual households is not the only factor in determining the most appropriate means of delivering digital services to remote areas.

Conversion of existing self help sites to receive existing satellite DTH services would place a cost on the consumer for reception equipment including an appropriate satellite dish and decoder. However, this would not allow the reception of the full suite of digital services available from both national and commercial broadcasters unless both extra satellite capacity and/or new reception equipment is purchased.

The delivery of SBS services by satellite is limited by satellite capacity constraints. To deliver a broader range of digital services (eg. a multichannel service) by DTH satellite would require increased satellite capacity, new compression technology and/or replacement of existing DTH satellite reception equipment. Increased satellite capacity to enable transmission of an additional digital service would be in the magnitude of \$15-20m per year for all broadcasters. Additional costs to broadcast a high definition service as well would be prohibitive.

Consideration needs also to be given to the reception of SBS's television and radio services via the Foxtel/Austar platform. Three SBS standard definition digital services are already carried by Foxtel and Austar satellite pay services. The SBS services available are the World News, SBS in the SE time zone and SBS in the WA time zone. If the Foxtel receivers were enabled to receive unencrypted services they could access the SBS Aurora services directly in 4 time zones. SBS considers there to be potential savings available by removing the duplicated carriage of SBS satellite services.

### **Timing of implementation**

Comment is sought on the following issue:

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

SBS considers that timing of the conversion of self help sites to digital will be dependant on who is covering the cost of conversion and their capacity to pay. In the case of local communities or councils, where resources are likely to be limited, as much time as possible may be needed. SBS would encourage expansion of the Self Help Subsidy Scheme to assist with costs associated with conversion of existing analogue sites to digital.

For those self help sites where spectrum is available a period of simulcast would be appropriate to allow time to communicate the benefits, need and time frame for switch off of analogue services.

Where additional spectrum is not available an overnight swap may be necessary. In these cases, effective communications will be needed well in advance of switchover.

### **Metropolitan and regional self-help television retransmission sites**

For metropolitan and regional areas SBS agrees that the precise coverage of digital television will not be known until both roll out of services is complete and analogue services are shut down. Additional assessment may need to be undertaken to evaluate potential areas where the digital signal may be more robust.

However, there will also be a need for contingency plans to quickly assist regions where digital black spots are identified and suitable self help facilities provided.



### **Remote self-help television retransmission sites**

SBS considers that in most remote self help sites simulcast will be feasible but the time for simulcast will need to take into account both supply side issues in distribution of digital receivers and adequate communication from government to provide clear directions.

SBS acknowledges that final decisions regarding the digital conversion of satellite-fed self help television retransmission sites may not be possible until future satellite transmission arrangements for digital television are finalised.

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**Special Broadcasting Service  
August 2007**



## APPENDIX - SBS TELEVISION TRANSMISSION ARRANGEMENTS

SBS Television transmits throughout Australia via the following means:

### 1. Analogue

- **Terrestrial transmission:** 272 terrestrial transmitters that deliver its analogue service through contracts with three service providers: Broadcast Australia, Imparja and Watson's Technical Services. This includes the Government funded extension to SBS analogue TV coverage to areas of populations between 5,000 and 10,000, completed in mid 2004, and the more recent expansion to populations down to 3000. SBS is exploring possibilities for further extensions.
- **Self help & black spot transmission:** An estimated 461 SBS self help TV transmitters are owned and operated by local communities in mostly remote regions of Australia. The SBS Self Help Subsidy Scheme funded by the Federal Government and administered by SBS provides eligible community groups or local government instrumentalities with 75% of the capped start-up capital costs for SBS Television transmitter installations. The Government's Television Black Spot Program provides those groups in eligible areas with 100% of these costs for television transmitter installations. This is a relatively low-cost way for communities to own and operate their own local transmitter, eliminating the need for households to install large and expensive antenna systems or satellite antennas and receivers.
- **Satellite:** Four Optus Aurora satellite services to all of Australia, including 80,000 remote direct-to-home receivers. SBS continues to provide direct-to-home analogue television and radio services through the Optus C1 satellite.

### 2. Digital

- **Terrestrial:** 231 digital terrestrial services which cover all capital cities and major regional centres, reaching an estimated 95% of the national population.
- **Satellite:** The Optus D1 satellite is used for the distribution of four digital multiplexes to regional and remote transmitter sites, providing the full suite of SBS multichannels across Australia.

### 3. Re-transmission on Pay TV

- Re-transmission services via the cable subscription services of Optus Vision, TransAct and Foxtel and the satellite subscription services of Austar and Foxtel.