



Digital television broadcasting is scheduled to start on on 1 January 2001 in metropolitan areas and by 1 January 2004 in regional areas. The ABA has released discussion papers and draft digital channel plans for metropolitan and major regional areas.

# Draft digital channel plans for TV services

An important phase of the conversion from analog to digital terrestrial television has been reached with the release by the ABA of discussion papers and draft digital channel plans for metropolitan and major regional areas.

The ABA has released draft plans for the Adelaide, Brisbane, Canberra, Darwin, Hobart, Melbourne, Newcastle, Perth, Sydney, Toowoomba and Wollongong television markets.

'The ABA has developed these draft channel plans with the interests of viewers foremost in mind,' said Professor David Flint, ABA Chairman. 'The ABA has sought to minimise the number of changes that viewers will have to make to their existing reception equipment to receive digital broadcasts. By the same token, the ABA has sought to reduce costs to broadcasters by maximising their ability to use their existing transmission facilities.'

The release of the drafts is in accordance with the strict timetable the ABA has set itself in order to give broadcasters as much time as possible to test the technology and establish their infrastructure before the commencement of digital television broadcasting on 1 January 2001.

As knowledge of digital television technology is continuing to evolve, the ABA has taken a staged approach in preparing draft digital channel plans. As a result, the draft plans do not identify additional 'translator' channels for local areas that may not receive good television reception from the main transmitter, as the precise need for these is not known at this stage.

The ABA wants to be satisfied that the best technical information is available to it, through programs of test transmissions and further studies, prior to finalising channels for these areas. This approach is aimed at achieving maximum spectrum productivity by optimising channel usage.

The ABA has also released a draft *Digital Terrestrial Television Broadcasting Planning Handbook*. The draft handbook provides information about the technical assumptions used by the ABA in the digital channel planning process as well as the way in which technical assumptions on other matters have been decided.

## Planning for digital

The ABA is required (by Schedule 4 of the *Broadcast-*

*ing Services Act 1992*) to formulate legislative schemes for the conversion of commercial and national television broadcasting services from analog to digital mode.

The ABA determined the Commercial Television Conversion Scheme (the CTC Scheme) on 22 March 1999. The ABA expects to finalise the National Television Conversion Scheme shortly.

Digital transmissions must start on 1 January 2001 in metropolitan areas, and on a date to be determined by the ABA between 1 January 2001 and 1 January 2004 in regional areas.

As part of the implementation of the conversion schemes, the ABA has prepared draft digital channel plans identifying proposed channel allotment and assignment for digital television and other services for metropolitan and those regional markets which will be commencing digital transmissions on 1 January 2001 or soon afterwards.

The ABA has drawn up the

draft digital channel plans in consultation with the Digital Television Channel Planning Consultative Group. This group consists of representatives from the ABA, metropolitan and regional commercial television broadcasters, the National Transmission Agency, the Australian Communications Authority, the Department of Communications, Information Technology and the Arts Laboratory, the Australian Subscription Television and Radio Association, potential datacasters and the Federation of Australian Commercial Television Stations.

## Planning tools

In carrying out its digital planning task, the ABA is using a sophisticated digital terrain model specifically designed for planning purposes in 1995. This effectively models the entire topography of Australia in digital form. For digital signals, as much as for analog signals, the nature of the landscape across which the

## Submissions

The closing date for submissions on both the draft digital channel plans and the draft handbook was **5.00 p.m., Monday 31 May 1999.**

Copies of the draft digital channel plans and the draft digital handbook are available on the ABA web site <[www.aba.gov.au](http://www.aba.gov.au)> or by calling Lydia Melnikoff on Freecall 1 800 810 241.



## Digital channel plans

Area served	Not assigned						
<b>Sydney</b>	<b>ABN</b>	<b>ATN</b>	<b>TCN</b>	<b>TEN</b>	<b>SBS</b>	<b>CTV</b>	
Analog	2	7	9	10	28	31	
Digital	12	6	8	11	34	*	29
<b>Newcastle</b>	<b>NBN</b>	<b>ABHN</b>	<b>SBS</b>	<b>NEN</b>	<b>NRN</b>		
Analog	3	5A & 48	45	54	57		
Digital	36	37	38	53	56		51
<b>Wollongong</b>	<b>SBS</b>	<b>ABWN</b>	<b>WIN</b>	<b>CTC</b>	<b>CBN</b>		
Analog	53	56	59	62	65		
Digital	54	57	36	37	38		50, 51
<b>Canberra</b>	<b>CTC</b>	<b>ABC</b>	<b>SBS</b>	<b>WIN</b>	<b>CBN</b>		
Analog	7	9	28	31	34		
Digital	6	9A	30	11	12		40, 41
<b>Melbourne</b>	<b>ABV</b>	<b>HSV</b>	<b>GTV</b>	<b>ATV</b>	<b>SBS</b>	<b>CTV</b>	
Analog	2	7	9	10	28	31	
Digital	12	6	8	11	29	*	32, 35
<b>Brisbane</b>	<b>ABQ</b>	<b>BTQ</b>	<b>QTQ</b>	<b>TVQ</b>	<b>SBS</b>	<b>CTV</b>	
Analog	2	7	9	10	28	31	
Digital	12	6	8	11	36	*	38
<b>Toowoomba</b>	<b>SBS</b>	<b>ABQ</b>	<b>STQ</b>	<b>TNQ</b>	<b>RTQ</b>		
Analog	53	56	59	62	65		
Digital	52	55	58	61	64		66, 67, 68
<b>Adelaide</b>	<b>ABS</b>	<b>SAS</b>	<b>NWS</b>	<b>ADS</b>	<b>SBS</b>	<b>CTV</b>	
Analog	2	7	9	10	28	31	
Digital	12	6	8	11	30	*	33, 36
<b>Perth</b>	<b>ABW</b>	<b>TVW</b>	<b>STW</b>	<b>NEW</b>	<b>SBS</b>	<b>CTV</b>	
Analog	2	7	9	10	28	31	
Digital	12	6	8	11	29	*	32, 35, 38
<b>Hobart</b>	<b>TVT</b>	<b>ABD</b>	<b>SBS</b>	<b>TNT</b>			
Analog	6	2	28	31			
Digital	7	8	9A	10			11, 12
<b>Darwin</b>	<b>ABD</b>	<b>NTD</b>	<b>SBS</b>	<b>TND</b>			
Analog	6	8	28	34			
Digital	30	31	29	32			33, 35, 36, 37, 38, 39

Planned digital channels for main stations in metropolitan and certain major regional areas.  
 Analog: Analog channel assignments/  
 Digital: Proposed digital channel assignments

\* The Digital Conversion Act states that the digital transmission of community television services currently operating on the sixth analog channel, will be in spectrum allocated for use for the provision of datacasting services.






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transmissions occur is the one of the most significant influences on the signal quality.

The ABA is using a range of internationally accepted tools to predict the propagation path of digital television signals. These include well-established and still valid models such as ITU Recommendation 370, and those developed by Bullington and the BBC. They

also include the most recent tools such as CRC-COV: a Canadian propagation model developed specifically to predict the behaviour of digital transmissions.

The use of a digital terrain model and the accurate analysis of the propagation path remain the most important factors in efficient digital planning. 

### Draft Digital Terrestrial Television Broadcasting Planning Handbook

The ABA has released for public comment a draft *Digital Terrestrial Television Broadcasting Planning Handbook*. The draft handbook provides information about the technical assumptions used by the ABA in the digital channel planning process as well as the way in which technical assumptions on other matters have been decided.


The purpose of the handbook is threefold:

- to publish an explanation of the general and technical assumptions to which the ABA will have regard when making a DCP under the conversion schemes;
- to publish the technical assumptions to which the ABA must have regard when considering whether a commercial or national television broadcasting service will 'achieve the same level of coverage and potential reception quality as is achieved by

that service in analog mode'. The ABA is required to publish these assumptions under section 6(1) of the commercial and national conversion schemes; and

- to provide a document that explains the technical planning processes involved in planning of new digital television services as well as the conversion of existing analog television services.

The overriding technical planning assumptions are set out in section 2 of the handbook, section 3 discusses the assumptions and methods used in the development of digital channel plans (i.e. channel planning), and section 4 provides the planning parameters and requirements for planning individual services (i.e. service planning).

It should be noted that the handbook is not a legislative instrument, unlike the ABA's *Technical Planning Guidelines*. 

# Exposing could have

The ABA's experience with the Trade in Services Protocol to the Australia New Zealand Closer Economic Relations Trade Agreement (CER) shows that trade agreements can have serious consequences for Australia's cultural policies,' Professor David Flint, Chairman of the ABA, said.

In response to concerns about the CER, the Government has said it will amend the *Broadcasting Services Act 1992* to confine foreign access to local content quotas to New Zealand. The Government has also said that Australia's cultural objectives for the audiovisual services sector will be taken into account in negotiating future trade agreements.

The ABA has made a submission to the Department of Foreign Affairs and Trade (DFAT) on next year's World Trade Organisation multilateral trade negotiations. The ABA's submission outlines the possible consequences of the General Agreement on Trade in Services (GATS) for the ABA's functions.

Professor Flint welcomed DFAT's public consultation process and stressed the importance of canvassing issues with all interested parties be-

fore entering international trade commitments that encompass cultural industries.

'The ABA has administrative policies about market access and national treatment in the broadcasting sector which it believes are relevant in the preparation of the Australian offer,' said Professor Flint.

Australia did not include the audiovisual services sector in its offers during the previous round of negotiations, allowing Australia to continue to impose measures that may have a limiting effect on trade. Penalties apply where countries with sectoral commitments under GATS introduce new trade restrictions or increase the burden of existing regulations.

Some countries, particularly the USA, will see Australia's local content requirements, restrictions on foreign television commercials, and foreign investment limits in broadcasting as trade barriers and will pressure Australia to remove these rules.

Professor Flint said the commercial strength of the US film and television industry and the economics of the global market mean that there continues to be a need to safeguard a place for cultural expression on Australian screens.

