



remains unchanged but is shown in wide screen format with black bands at the top and bottom of the analog screen. This is done so that none of the picture information is lost through cropping the picture to fit on the standard 4:3 display — you may have already noticed this phenomenon with some of the programming being transmitted today.

The alternative, which may be a choice of the viewer, is to crop the left and right edges off the wide screen display and show it in 4:3 aspect ratio, filling the whole analog television screen; this is sometimes referred to as 'zooming' and is a feature already available on some newer analog television receivers. Some picture information is lost in the zoom mode, but it is really no different from what happens now when a movie shot in Cinemascope (or other wide screen format) is shown on television.

SDTV and HDTV wide screen television sets. Known as integrated television receivers, or iTV, some of these new wide screen digital television receivers are expected to be available on the Australian domestic market in the latter part of 2000, just in time for the introduction of digital terrestrial television broadcasting. If a viewer buys an SDTV receiver then that receiver will not be able to display pictures in HDTV format, but in accordance with the standard, it should be

able to decode HDTV even if it only displays SDTV. If a viewer chooses to buy an HDTV receiver, then that equipment will be capable of receiving and displaying in the appropriate format, anything including SDTV and HDTV that is transmitted using the DVB standards. The choice for the viewer will depend on what cost the viewer can afford or is prepared to pay, and what options the viewer wants to have. Receivers that can display only SDTV are expected to be cheaper than those that can display HDTV; this is due to the higher relative cost of producing the HDTV display equipment.

Note

On 21st December 1999, the Government announced that free-to-air broadcasters are to be required to transmit SDTV at all times, including when they are transmitting HDTV. This does not remove the mandatory requirement for broadcasters to transmit HDTV, and it does not necessarily change the standard. However, it raises the priority for developing an SDTV receiver standard. Such a change is aimed at facilitating the take up of digital television, as it is believed that standard definition receivers could be less expensive than receivers capable of decoding HDTV. Standards Australia committee CT/2 is looking at what changes are necessary to facilitate the availability of an SDTV receiver.

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Single frequency networks for digital television

Discussion Paper on Options

Late in 1999, the ABA formed a consultative group to consider options for and to advise the ABA on options for implementing single frequency network in the digital television broadcasting system for Australia.

The Single Frequency Network Consultative Group (SFN CG) has completed its initial work and has prepared a report which outlines the options for implementing single frequency networks and proposes that the most spectrum efficient solution would be to operated single frequency networks throughout Australia. The report also recognises that interference may occur in certain circumstances, notably where viewers receiver their analog services from a distant transmitter but receive their digital serv-

ices from a nearer local transmitter on an adjacent channel. Options for overcoming this problem are discussed in the SFN report.

The report, *Discussion Paper — Options for Implementing Single Frequency Networks (SFNs) for the Australian Digital Terrestrial Television Broadcasting Services* has been released for public comment: submissions close on 31 March 2000. Copies of the report are available from the ABA, either on its web site <www.aba.gov.au> or in printed form, from the ABA on (02) 9334 7881.

Further work by the Consultative Group will be looking at coverage issues and refinement of technical parameters for digital television channel planning.