

The world wakes up to digital TV

The U.K., U.S. and Sweden have just launched digital television services. Other countries are soon to follow. Can Australian broadcasters learn anything from their experiences?

According to a survey from U.K. market information company GfK Marketing Services, British consumers began preparing well in advance for the launch of digital terrestrial television in November. Some 58,300 digital satellite set-top boxes were sold in the U.K. in October and 90 per cent of adults polled at that time had "heard of digital TV".

October 1 was the day Rupert Murdoch's BSkyB Sky Digital 200-channel digital service officially launched. Its "value" package of a minimum of five channels costs £6.99 a month (\$17.50) and four "mid-basic" packages of 15 channels each (Kids & Music, Knowledge, Lifestyle and Popular Mix) cost £8.99 a month (\$23.50). The "family" package, a 40-channel offering, costs £11.99 a month (\$31.50) and the full 200 channels can be had for £29.99 a month (\$78.50). Six additional premium channels (three movies and three sports) cost subscribers from an extra £18.99 each per month (\$50.00).

Sky hardware - dish, set-top box and remote control - costs new subscribers £199.99 (\$526.00) while existing customers of BSkyB's pay TV service pay £159.99 (\$421.00).

Many U.S. consumers are already converts to digital television with in excess of 20 million households now watching television on large-screen sets which cost on average US\$3,000 each.

Sky has direct-to-home and cable deals with Viacom's Paramount Channel, MTV, Nickelodeon, Fox Kids, Discovery, Discovery Multiplex, Discovery Home and Leisure, Discovery Showcase, Animal Planet and National Geographic. It also carries terrestrial Channel 4 and 4's movie service Film Four.

BSkyB's major rival, ONdigital, the world's first commercial digital terrestrial service, launched six weeks later on November 15. Backed by U.K. media groups Carlton and Granada, ONd has licenses to operate three digital terrestrial multiplexes (the remaining multiplexes are divided among existing terrestrial broadcasters). ONd offers subscribers any six "primary" channels from a choice of 12 at a charge of £7.99 a month (\$21.00). It is aimed at the 18 million U.K. households not taking cable or satellite. Further channel launches on will include ITV2, the U.K. version of Eurosport, MTV, Nickelodeon and the Paramount Comedy Channel. It also offers premium channels FilmFour, Sky Premier, Sky MovieMax, Sky Sports 1 and Sky Sports as well as its own productions, plus Carlton and Granada programming (Carlton Kids, Carlton World, Carlton Select, Carlton Food Network, Carlton Cinema, Granada Plus, Granada Men and Motor, and

Granada Breeze).

Subscribers can receive ONd on existing antennae but need a digital set-top decoder. Some 70 per cent of U.K. TV households are able to receive ONd; this figure is expected to reach 90 per cent by the end of 1999. Sky Digitalis expecting to sign up roughly half of an estimated 12 million pay TV homes by 2003. While Sky claims to have signed up more than 100,000 subscribers since October 1, ONd counterclaims that more than 20,000 set-top boxes for its service were sold in its first 48 hours of operation.

ONd's interactive services, including email, will launch next year. Sky Digital is also involved in interactive services platform British Interactive Broadcasting (BIB), a joint venture between BSkyB, British Telecom, the Midland Bank and Matsushita. The service under the "Open" brandname will include homeshopping and games and will launch in mid-1999, though Sky Digital subscribers are being offered the service on trial this month.

America

Digital television also launched in the U.S. on November 1, 1998. By November 16, some 89 digital television stations had begun operating in markets including New York, Los Angeles, Philadelphia, San Francisco, Boston, Dallas, Washington DC, Detroit, Atlanta, Houston, Seattle, Portland, Indianapolis, Charlotte, Raleigh, Milwaukee, Cincinnati, Kansas City, Columbus, Harrisburg, Honolulu, Madison and Jackson.

Digital coverage in the U.S. is presently 37.4 per cent (or 37 million households) of total television households. By November 1, 1999, when the top 30 markets must convert,

coverage will exceed 50 per cent. All stations must be digital by May 1, 2002.

Affiliated to a number of networks - CBS, ABC, UPN, NBC, WB, Fox, HSN and PBS - each of the digital stations broadcasts the HDTV system. This allows for a single high-definition channel (HDTV) or several so-called standard definition channels (SDTV) with clarity similar to analog TV. HDTV or SDTV can be received in 18 formats, 14 for conventional television, each with varying numbers of lines of vertical resolution, pixels, aspect ratio, frames per second and scanning formats. As many as four or five SDTV signals can be transmitted simultaneously within a broadcaster's 6Mhz channel. Faced with the technological choice between SDTV or HDTV for digital broadcasting, most broadcasters seem to have plumped for HDTV, at least for now.

According to *Broadcasting & Cable*, November 16, 1998: "...a broadcaster will want to attract as many eyeballs as possible to begin to recoup his investment. If he has to wait for a high penetration of expensive high-resolution sets, he could be waiting a long time...[but] with inexpensive digital-to-analog converter boxes down to around \$100 in three or four years, you'll be able to receive every digital signal in the market and display them on your existing set and realise 60-70 per cent of the benefits of digital transmission - if the broadcaster is transmitting in SDTV. In HDTV...you'll only realise maybe five per cent of that improvement because the analog picture tube isn't designed to display high-resolution pictures".

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The major players in digital televi-

sion are terrestrial and satellite broadcasters. The ABC has broadcast *The Wonderful World of Disney* in HDTV format every Sunday since November 1 and has been screening prime time movies in high definition. CBS broadcast the first of four football games in

FCC rules on digital fees in the U.S.

THE Federal Communications Commission (FCC) has determined the fees which will be paid by commercial television broadcasters who choose to transmit subscription services using some of the spectrum capacity provided to them for digital terrestrial transmissions.

The fee has been set at five per cent of gross revenue earned from subscription services. It will be imposed from December 1998 on any digital service which broadcasters offer other than terrestrial commercial broadcasts. The requirement for a fee was included in the *Telecommunications Act 1996*, to ensure that broadcasters who received their spectrum allocation for digital broadcasting at no cost did not have an unfair advantage in the provision of subscription services over cable operators who could only gain access to spectrum through auctions.

The FCC has also established minimum requirements for educational programming to be transmitted by terrestrial broadcasters on their digital services.

HDTV on November 8 followed by an episode of hospital drama *Chicago Hope*. PBS began broadcasting high definition on November 9. Only NBC is waiting

until 1999 before it launches some of its programs in HDTV.

On the satellite front, Rupert Murdoch's News Corp. recently established a foothold in the U.S. digital direct-to-home market by swapping its satellite assets in ASkyB, jointly owned with telecommunications company MCI, for a stake in the country's third largest digital direct-to-home operator EchoStar. The deal follows the breakdown of a similar agreement with second-ranked U.S. digital direct-to-home operator PrimeStar due to regulatory difficulties. Number one satellite operator is the DirecTV-USSB platform, a joint venture which offers two 24-hour channels of HDTV programming. HBO will be part of the DirecTV-USSB venture, offering up to 17 hours of programming daily, from the second quarter of 1999.

What may happen in future in the U.S. is that the terrestrial and satellite broadcasters join forces. Satellite operators have the advantage that their signals blanket the entire country and their transmission capacities far exceed either terrestrial or cable television. Direct satellite broadcasters now have about eight per cent penetration of the U.S. TV market, with 4.1 million consumers on the DirecTV-USSB platform, 2.2 million on PrimeStar and 1.5 million on EchoStar.

Meanwhile, digital terrestrial TV soft-launched in Sweden on October 28. The full service, operated by telecommunications companies Teracom and Nokia, and subscriber management company Senda, should start early next year. Ireland and France both plan to have digital terrestrial television by 2000 and Australia and New Zealand will launch in 2001, followed by Japan in 2003. <

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