

subscription services directly to DTTV viewers before their analog spectrum is returned to government, they could be required to do so in association with an existing pay TV operator. In that way, they would be required to share the scarce DTTV resource if they went beyond the ambit of their free-to-air remit.

Such a measure would at least be consistent with what I believe will be, in fact, the long-term market-drive outcome for TV in the era of digitisation- the availability of most services on most digital platforms. This will benefit the viewer enormously and, in the end, it is the viewers' reaction which will

determine the winners and losers in the great digital television adventure.

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DVB or not DVB?

John Collette, Head of Technology at the Australian Film, Television and Radio School, provides a technical reality check on the digital television debate

In the rush of hyperbole surrounding the introduction of digital broadcasting, the issues raised centre on the technologies and not the real uses. From all sides, the lobby groups vie for a slice of spectrum while arguments are raised about a "future" that will fail to appear unless urgent decisions are made about the allocation of spectrum for this vital new development. At the same time, the nature of content is largely ignored, as if the medium were transparent enough to "invent itself" when it arrives, and an eager public are also waiting for the "next big thing" to buy....

What underlies the possibility of digital broadcasting is one of two options: the delivery of a high resolution picture, or the delivery of several smaller ones on the same bit of bandwidth. Beyond this, there is the hazy question of "interactive services" such as wireless internet transmission, and the spectre of "interactive" television (was that sighted once in a trial in Orlando never to be seen?).

REALITY OF HDTV

Let's examine the options. The first is the "vital" move to HDTV broadcasting by the networks. This is said to be the future of the medium, and if the spectrum is allocated, there will be an interim program period, possibly utilising the multicasting model of sending several regular channels at once.

If allocated on this basis, will the glamorous world of HDTV broadcasting ever really arrive? The same argument was used in the United States and has suffered a reality check for the same reasons it will here. There are no facilities with HDTV production pathways - a station may deliver pre recorded content from a single player, but there is no studio infrastructure for the delivery of news, sitcom or other standard TV fare - the

cameras, switchers, vision mixers and associated equipment are simply not there. There is also a limited amount of programming available in HD formats. New machines for film transfer allow film to be mastered as HD material, yet is this enough? With the advent of the same MPEG-2 architecture in new generations of DVD players, will it be a competitor for a movie market which promises to make a quality home movie product at a unit cost of three dollars, high data integrity and resolution and small enough to be put into a spare shelf at the corner shop?

Wait also! Aren't we forgetting that nobody actually owns an HD TV? And although over 95% of people say they would like to watch HD broadcasts, less than 30% want to pay a premium for the price of a new receiver. Who needs to watch the news in HD anyway?

MULTICASTING

With a distinct lack of the "value added" component in the HD area to urge people to migrate to the format of the future, an intelligent use of the DVB bandwidth would be intelligent multicasting. Imagine four feeds of *Seinfeld* that start every half hour, or four nightly news bulletins. Each channel has the opportunity to stagger its programming to lessen the tyranny of the "window" that locks shows into a single timeslot, and has introduced the concept of "time shifting" programs through the ubiquitous VCR. (Which is locked to the existing resolution....)

When a big event arises, say the broadcast of an AFL match, the programming merges into a single broadcast, carrying four views of the action, chosen by the viewer. This would require a rethink of the logistics of sports coverage, but it is nothing that a network could not adapt to tomorrow if called upon.

This is a great idea, as it extends the possibilities of the televisual medium into a kind of multichannel delivery system. It has enormous commercial benefits for the companies that transmit on this new system. The arguments that are not raised in the current debate are those about the nature of content, local content regulations, community interest and the like, but these interests don't have the lobbying muscle of the media and broadcasting companies.

DATACASTERS

Noises are also being made from the internet "Industry" - principally from companies who resell bandwidth - service providers. The possibility of sending data packets by satellite is a real one. However, there are existing developments in low-orbit satellites that are designed to do this, and the "orbiting internet" is as prone to congestion as in internet-on-the-land-as-we-know-it. DVB spectrum allocated in this manner seems unlikely to provide a lasting benefit as the available (and very finite) bandwidth is eventually choked by unregulated data packets.

SPECTRUM AS A RESOURCE

What is important is that the possibility of "allocating" spectrum on the basis of a worthy argument is beside the point. The point is that spectrum in the current mediascape is a valuable commodity. Unlike the pros and cons of debates about privatisation, spectrum is clearly about money, as is commercial broadcasting. If spectrum is allocated, it should be at a high price. It is a finite resource, and one that companies want to turn to commercial advantage.

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