

Giles Tanner's speaking notes for the Network Insight Seminar - Digital TV growth & policy: 2 December 2005

The existing legislation dealing with digitalisation of free to air television is thin on exactly what happens at the *end* of the simulcast period. [Schedule 4 of the BSA provides that the simulcast period in non-remote areas started on a date between 1 January 2001 and 30 December 2003 and will run for eight years, 'or such longer period as is prescribed in relation to that area'. For metropolitan areas, that means at least eight years after 1 January 2001. For regional areas, it will be at least eight years from whichever date before 1 January 2004 was selected as the commencement of the simulcasting period in that area. And it is open-ended, that is, any later date or dates could be prescribed.]

In the areas defined as 'remote,' the simulcast period will be a period still to be determined by ACMA under the relevant digital conversion scheme.

At the end of the relevant simulcast period, all analogue television transmissions in each area are to cease, and that digital transmissions will continue using such channel or channels as ACMA allots under the relevant digital conversion scheme or under a digital channel plan¹ (Incidentally, this doesn't have to be other of the channels currently used to provide analogue and digital simulcasting – giving ACMA a relatively free hand to decide which spectrum is to be used for existing digital television services after the end of simulcasting.

However, the spectrum in question is still Broadcasting Services Bands spectrum, i.e. spectrum that is planned under special rules designed to promote the industry-specific objectives of the BSA. Internationally we are seeing a lot of jockeying to decide how the 'digital dividend' will be 'spent.' Particularly in European countries, where broadcasting spectrum is scarce, there is pressure to use vacated analogue channels to further enhance the broadcasting system. In the US, by contrast, a large chunk - 108 MHz wide - of the UHF spectrum currently occupied by television has already been identified for non-broadcasting uses such as public safety and wireless services, the latter expected to be worth a lot of money, indeed some spectrum has already been sold underneath the existing television services, although debate continues about when and how to clear them off it.

So who in Australia will decide whether the 'digital dividend' is all spent on further improvements to the broadcasting system or whether some of it finds other uses? Despite the merger, ACMA has no overarching power to choose which of the different sets of objectives, those in the BSA or those in the Radiocommunications Act 1992, are appropriate to any particular bit of spectrum – this decision is the Minister's. So both ACMA and the Minister would need to be involved in any decision about which channels existing broadcasters' digital services would remain on – or move to – after simulcasting.

Otherwise, the legislation is silent on the how and when of analogue switch-off.

Instead, the BSA requires the Minister to cause a number of reviews to be conducted in 2004 and 2005 on matters relating to digital television. Four were undertaken in 2004, a fifth in the first half of 2005 and the sixth and last – a review of the duration of

¹ See, for example, clause 6(3)(ha) of Schedule 4.

the simulcast period – kicked off this September with another issues paper from DCITA. This review will examine not only the timetable for switch-off, but the agenda which needs to be adopted by industry, the government and others to complete the changeover to digital. Issues dealt with in previous reviews include the current qualified prohibition on multi-channel services and the moratorium on issuing new commercial television licenses. Despite intense media speculation, the official position remains that the government is considering its response to these various reviews.

At the same time as these statutory reviews, the House of Representatives Standing Committee on Communications, Information Technology and the Arts is conducting an inquiry into the take-up of digital television in Australia – issues raised in the inquiry overlap somewhat with the final review. The Committee is likely to report in early 2006.

Against this backdrop, on 9 November - while opening the ACMA broadcasting conference - the Minister gave some significant pointers to government thinking about digital television. The theme of her remarks on television digitalisation was how the government could better facilitate the take up of digital television, and energetically strive for analogue switch-off. It sent a strong signal that Government is conscious of the benefits of yielding the analogue dividend and concerned that Australia not be left behind.

Specifically, the minister announced she would broaden the scope of the present reviews to include formulation of a Digital Action Plan for Australia. The goal of such a plan would be a 'consortium of committed stakeholders – from manufacturers and retailers to broadcasters, consumers and government – that recognise the financial and technical benefits in reaching switch-off for the ultimate benefit of all Australians.'

What I found most striking about the Minister's remarks was how serious she was about switching off sooner rather than later. Though sceptical that a 2008 switch-off was achievable, she queried whether 2010 might be achievable in Sydney. She flagged a number of issues that might be addressed in a digital action plan – these included some variations on mandating digital receivers, as the US is doing; augmenting existing consumer information; additional marketing opportunities for digital equipment and services, a consideration of whether subsidies for disadvantaged groups would be appropriate in Australia, and whether the ABC and SBS might be able to play a stronger role in promoting digital-take-up that would also assist the local production sector. She identified technical barriers to take-up, for example, reception difficulties experienced by some viewers and a possible need for testing new equipment and services.

Beyond these types of measure, the Minister foresaw a plan and timetable for managing the switch-off process itself, possibly a staged process similar to that planned in the UK.

The Minister looked to industry as a key partner in this planning process and was at pains to stress the potential benefits to industry of the digital dividend.

As I say, what I found most striking about the remarks was new evidence of determination to realise the digital dividend sooner rather than later.

And for switch-off dates in major markets as early as 2010 to come realistically into the picture, I think we will need to be doing much more than we are doing at present.

Yes, a series of major countries – including the US, Japan, the UK and other EU states, are all variously girding their loins for analogue switch-off in the range of 2008-2012. We should learn from their experiences and will derive indirect benefit from them. But we must not under-estimate the particular challenges facing Australia in matching the performance of major economies in clearing analogue. These include our unusually high dependence on terrestrial free-to-air television, our current reliance on individual household purchasing decisions to replace or upgrade analogue receivers, and the relatively slow maturation of high definition television as a driver of mass-market demand for digital. We often dwell on the rate of uptake of digital receivers, which is steadily accelerating. The recent ACMA digital television survey found that 13% of homes polled already have a free to air digital receiver, which is broadly consistent with the figure of around one million devices sold overall: we need to remember though that only 7.1% of the total stock of television sets in homes polled were digital-capable, three quarters of households with a free-to-air digital receiver also used one or more analogue-only TV sets, and a mere 3% of households polled were digital-only.

I suppose thus makes for a natural segue into what ACMA is doing to help. In her Forward to the the ACMA report, 'Digital Media in Australian Homes,' also released at our conference, Lyn Maddock wrote that the performance of converged regulators such as ACMA will be judged by their contribution to the digital transformation sweeping the media and communication industries around the world. The Minister endorsed this sentiment so I guess we have an agreed performance criterion here.

An immediate task will be looking again at those famous datacasting channels I seem to talk about every time Mark organises one of these events. In spectrum-abundant Australia we have two additional digital television channels in every market around the country that require no analogue clearance to realise. In her speech the Minister foreshadowed that ACMA may be involved in consulting with industry on possible uses for these channels and how it should be sold or packaged.

What is this about? Well, a lot has happened since the decision to plan these channels was taken and, as the government is once again considering whether to allocate some or all of the channels long-term, we will need to consider how best to utilise them in light of current likely applications. What are these? That is what we mean to find out. The channels were originally designed with MPEG 2, DVB-T transmissions in mind, services that would quite possibly address the same digital receivers as are used for mainstream digital television. The long-running 'commercial trial' of datacasting in Sydney, conducted by BA, is such a service. But since that time, new applications have emerged. Pay television is one such application, whether using MPEG 2 or the more efficient emerging standard, MPEG 4, which already promises to raise channel capacity by about 50%. Another is mobile TV, and we already have a second trial in Sydney – this one operated by BA subsidiary Bridge Networks, testing the DHB-H mobile TV system. Two other mobile TV systems have emerged to date, although only one, QualComm's MediaFLO system, would make use of UHF. Are the datacasting channels particularly well-suited to mobile TV? This question is moot, as the channels were originally designed like ordinary digital TV channels, that is, they operate on different UHF frequencies in different markets, and – to avoid interference with the adjacent analogue and digital TV channels they are interleaved with - they will typically operate from a single, high-powered transmitter co-sited with adjacent television services. Is this the right architecture for mobile TV,

or would mobile TV benefit more from a single frequency nation-wide and a more cell-like arrangement of lower-power transmitters, similar to the way existing mobile services are transmitted? In any case, ACMA will be interested to find out who is interested in which datacasting channels for what applications, to help inform decisions about whether and how the various channels should be packaged up and offered to the market for sale. An issues paper and call for submissions is likely early in the New Year. This paper will also touch on any other technical issues going to the possible release of the channels. For example, how will licensees deal with any interference they cause to television or ancillary devices? What other conditions could or should be placed on the issue of licences?

I have used up my allotted 15 minutes while barely mentioning 'Digital Media in Australian Homes,' ACMA's recent snapshot of digital take up. (Hold up the Report). *Commend browsing through it and point to favourite bits: it allows us to test some observations Ross Henderson of Panasonic has been making for some time about aerial problems, especially in 'MUDs', also Alan Kohler's more alarming theory that many digital STUs are gathering dust on shelves. First, consumer satisfaction levels with digital TV are higher than Kohler might have predicted, with 86% of people we polled either very or somewhat satisfied and a mere 2.6% very dissatisfied. On the other hand, 26.6% of digital users report that they needed to upgrade or replace aerials –support, I guess, for Henderson's concern that digital receiver performance is often affected by the quality of existing aerials and cabling...*