

**Submission for
Inquiry into the uptake of digital television in Australia**

1. What are the benefits of digital television? How do viewers perceive them?

- **Improved picture**
 - *My reception is fine already*
- **Widescreen format**
 - *I don't have a widescreen TV*
 - *I hate the black bars top and bottom on my 4:3 TV*
- **Improved sound**
 - *My TV sounds fine already*
- **High Definition available**
 - *I don't have a high definition TV*
 - *HD is expensive*
- **One extra SBS channel**
 - *I can only speak English so what's the point?*
 - *Even though I speak (language), why watch this channel for just one show a day?*
- **One extra ABC channel**
 - *Almost everything there is repeats of earlier programmes*
- **Programme guides (EPG/VPG)**
 - *The VPGs aren't interactive and don't cater to my needs*

Is it really any wonder people are reluctant to spend money on digital television, when there is no significant perceived benefit? After all, many people have less than perfect analogue reception and yet have never bothered to spend money on a better antenna. Why should they spend money for nothing?

2. What do people want? What would drive people to invest in this technology?

The two major benefits that digital broadcasting offers over analogue are high definition and the potential for multichannelling. A third – but as yet unutilised – benefit is the provision of a full seven day electronic programme guide (EPG).

Whilst the take-up of HD is being driven by the sales of large plasma and LCD screens and projectors, the cost prohibits most people from benefitting from this technology.

New content, however, would offer a ready incentive to the majority of viewers. This can be achieved either by relaxing the ban on commercial multichannelling, or through the introduction of a fourth commercial network (or both). Government-imposed controls on multichannel content on SBS and ABC should be dropped immediately to allow them to offer more attractive programming on their multichannels.

The existing deal, whereby the government has protected the FTA and pay TV providers from increased competition by multichannelling or a fourth network has proved to be the achilles heel of the digital TV rollout.

3. Having our cake... and eating it too. More efficient use of bandwidth.

The decision to broadcast both HD and SD streams might be seen as a cynical ploy by the FTA networks to make full use of their 7MHz of bandwidth, thereby denying any prospect of multichannelling. However, more recent technological advances mean we can now support both HD broadcasts and SD multichannelling. Europe's HD transmissions use MPEG-4 encoding. This standard is at least twice as efficient as the MPEG-2 standard currently used for both SD and HD in Australia. This means twice as many channels can fit in the same bandwidth as we are using now.

Whilst it is probably too late to switch to MPEG-4 for both SD and HD, Australia could still follow Europe's lead and use MPEG-4 for HD broadcasting.

At the end of 2004, it was estimated that 658,000 digital receivers had been sold in Australia¹. Of these 192,000 were HD units. If Australia were to switch to MPEG-4 for HD, these units could still receive SD broadcasts but would not be able to decode the new HD MPEG-4 encoded streams. Existing boxes would be relegated to SD status because they do not contain the required hardware to decode MPEG-4.

Should Australia switch HD to MPEG-4 encoding, the government should consider a buyback or subsidised replacement scheme for the owners of outmoded MPEG-2 HD set top boxes. The benefits, however, would far outweigh the cost. In addition, HD STBs for the Australian market would be of the same standard as Europe, leading to lower retail prices for consumers.

Ultimately, not changing to MPEG-4 for HD will leave Australia with the legacy of second-rate HD for years to come, and limit future opportunities for expansion of services.

4. What else is wrong?

HD – 576p?

High Definition should be mandated to be broadcasts of **720p and above**. Currently the government classes 576p as HD. Australia is the only country to consider 576p to be HD. This should be changed to bring Australia into line with international practice.

No provision for community channels

Currently there is no provision for allocation of digital bandwidth for community channels (Channel 31). Whilst the ABA has previously mooted that these could be carried on the datacasting mux, I believe they would be more appropriately carried by ABC or SBS on a multichannel.

¹ Source: Digital Broadcasting Australia

5. Conclusions: What should change and why?

HD to use MPEG-4 encoding

MPEG-4 encoding is much more efficient, and will allow two HD channels to easily fit in a single 7MHz mux. Using the current MPEG-2 system, there is barely enough space to transmit an HD broadcast plus the SD channel.

HD redefined as 720p and above

In line with international practice. This will provide higher quality broadcasts to HD viewers.

ABC and SBS exempted from HD requirements

ABC and SBS are currently broadcasting 576p HD, and given their budgetary constraints, should not be required to carry HD broadcasts at all. This would allow them to focus on quality multichannelling in the medium term, increasing value to viewers. ABC and SBS could be required to resume HD programming once analogue frequencies are freed up from 2008.

ABC and SBS multichannel content restrictions dropped

All limitations currently imposed on ABC and SBS should be dropped immediately to make multichannels more attractive to viewers.

Allow a maximum of one SD multichannel per commercial network

This would drive consumer demand for digital television by providing an immediate incentive to consumers to move to the digital technology. The government may wish to consider whether local content quotas currently in place should apply to secondary channels. Given the networks' arguments that multichannelling will lower the standard of local content, it may be prudent to drop local content requirements for secondary channels altogether.

Introduce fourth commercial (digital-only) network

Increased content choice would prove the biggest motivator to drive consumer demand for digital television. A new network, available only on digital, would prove an instant incentive.

Community channels to be carried on an ABC or SBS multichannel

These channels could deliver their streams to ABC or SBS for broadcast on their existing muxes, further increasing choice for digital TV viewers.

Mandating a seven-day EPG

Most STBs currently available have the ability to display a week's worth of programme data, yet the networks only provide "now-and-next" information. The networks also waste their money on pretty (but bandwidth consuming) graphic VPGs when they could offer a much more efficient and informative EPG, allowing viewers to access programme summaries and other details at the press of a button. The government should mandate such provision.