DIGITAL TELEVISION STRATEGY

Background

In December 2004 Cabinet approved the policy programme, *Building a Strong and Sustainable Public Broadcasting Environment for New Zealand – A Programme of Action.* The Programme confirms the government's objectives for broadcast content as:

- contributing to New Zealand's sense of cultural identity;
- extending the range of information necessary for people to participate in the democratic process;
- providing for the interests of minority audiences.

It also establishes a set of principles for policy (including that of universal access to desired content) and reaffirms the direction of government policy for the transition to digital television, through the priority 'Facilitate the Successful Development of Digital Broadcasting Services' and the actions:

- *encourage* the development of digital television . . . by convening government-and-industry working groups;
- *work with* the sector to investigate spectrum allocation policies, infrastructural needs, economic models for digital services, successful free-to-air trials, and the appropriateness of setting dates for the switch-off of analogue transmission; and
- *enable* public broadcasters to take a leading role in providing digital services and to set standards of digital programming in accordance with their public broadcasting mandates. (POL Min (04) 31/5.)

An initial series of decisions in relation to digital television were taken in August 2003 (EDC Min (03) 19/3, 19/4, 19/5, 19/6). These can be summarised as:

- TVNZ and the Māori Television Service to prepare plans for digital services, beginning with a planning timetable;
- where content is publicly funded it should continue to be available free-to-air;
- government to liaise with the wider broadcasting industry regarding the development of a New Zealand digital TV group to plan for and promote digital television;
- holders of spectrum licences able to convert existing analogue licences to digital licences suitable for digital terrestrial transmission, subject to existing valuation policies and technical compatibility;
- agreement in principle to:
    - the reservation of two nation-wide sets of spectrum licences suitable for Digital Terrestrial Transmission (DTT) in the UHF spectrum band for simulcasting existing analogue television services in digital format and/or for public broadcasting;
    - competitive allocation by auction of four nation-wide sets of interleaved spectrum licences suitable for DTT in the UHF band presently used for commercial services, and of two 8 MHz management rights in respect of

spectrum between 502-518 MHz, with an auction to be held only when there is sufficient demand, and subject to the government reconfirming the agreed allocation option.

A further series of decisions were taken by Cabinet in May, October and November 2006.

- The rationale for government's support of a transition to Digital TV was distilled under four headings of universality, national identity, economic transformation and ownership interests (POL Min (06) 8/6);
- It was agreed that analogue switch-off (ASO) is a government objective for the launch of and transition to free-to-air digital television (POL Min (06) 8/8).
- Nationwide sets of digital terrestrial spectrum licences were offered, without resource charge until analogue switch-off, to TVNZ, CanWest, BCL (now Kordia) and to SKY Television in respect of its free-to-air service, Prime (POL Min (06) 8/7);
- Renewal policies in relation to ASO were determined for analogue spectrum licences used for simulcast services, and for digital spectrum licences (POL Min (06) 22/4);
- Funding totalling $25 million to support the free-to-air transmission platform in its initial five years was offered to the FreeView consortium of broadcasters (POL Min (06) 8/7);
- Funding totalling $79 million over six years was allocated for TVNZ to support two new advertising-free digital services (CAB Min (06) 41/3).

This paper collates and summarises the government's full digital television strategy.

The Changing Face of Television Broadcasting

Digital represents the most significant change to television broadcasting infrastructure in its history, with production, broadcasting, transmission and household reception all affected.

Digital broadcasting in New Zealand has, until recently, been associated with pay television, especially SKY. This follows a global pattern, as the first phase of the digital revolution (multi-channel television, via satellite or cable) is driven by private (i.e. commercial) value. While New Zealand has remained in this first phase, it has lagged well behind other OECD countries.

The next phases of the transition to digital are now playing out in other parts of the world: in the second phase, pay TV becomes dominant and free-to-air broadcasting declines, as audiences' viewing is spread over more television channels or shared with other screen entertainment options like gaming (fragmentation). In the third phase, broadband, wireless and mobile technologies will allow television to be accessed via the internet (IPTV), telephone line (through broadband technology), or mobile telephone.

The speed at which technology is developing makes it difficult for broadcasters or governments to plan for the future. The traditional assumptions underpinning broadcasting have been that –

- Spectrum is a scarce commodity (a factor influencing government policy).
- There are a limited number of media outlets (channels).
- Reception is via fixed devices (a television set in the living room).
- Television broadcasters tend to be local.

- The core business of broadcasters is content production, purchase and delivery.
- Broadcast content has a potential impact on a mass audience.
- Content is linear (with scheduled programmes delivered to passive viewers).

Digital technology means that these assumptions are being turned on their head –

- Digital enables much more efficient use of spectrum, with 5 or 6 satellite or terrestrial channels typically able to replace one traditional analogue channel. Once broadband with bandwidth over 2 Mbs (20 Mbs to the home is now a common aim) is used, the capacity to carry content increases exponentially.
- Content can be distributed and exploited across a range of outlets or platforms (terrestrial, satellite, cable, broadband, wireless and mobile, for example).
- Interactive devices are changing the way content is accessed and used, and websites such as "YouTube" have encouraged a proliferation of user-generated content.
- Podcasting and internet streaming allow content to be more discretely transmitted across borders, potentially bypassing producers and right-holders (as occurred in the music industry).
- New players, especially telecommunications companies and ISPs, are entering the broadcasting market, not as content producers, but as aggregators and providers of "connectivity". Google video, for example, is a content navigation tool.
- Multiple channels and platforms mean audiences are fragmenting, making the shared experience of mass or "event" programming less common.
- Programming for niche audiences is particularly at risk, as it can no longer effectively be intermingled with wide appeal shows. Audiences have many other options.
- Non-linear content (accessible by viewers at a time and place they choose) is growing, and can undermine traditional programme scheduling. Devices such as digital recorders allow time-shifted viewing and avoidance of advertising, while IPTV will offer video on demand.

These changes put increasing control into the hands of viewers. There is now a "born digital" generation who are comfortable accessing programmes across a range of devices and who want to participate by interacting, transforming and creating their own content.

The transition can be expensive and long-winded for free-to-air broadcasters. Analogue transmission needs to be maintained as a "simulcast" service until most, if not all, households have converted their reception equipment with a set-top box. In order to retain relevance in terms of audience reach and impact, free-to-air broadcasters must move from being providers of one (or two) full service channels, to become multi-channel operators and/or become providers of niche or specialist services. New services are also needed to make an attractive package for consumers to purchase the conversion equipment they need for their existing analogue televisions.

These factors, together with audience fragmentation, mean there is little opportunity for generating additional advertising revenue to meet the increased costs. Despite the compelling strategic arguments, shorter-term commercial considerations mean the transition is inevitably delayed.

The Future of Television Advertising

One feature of the fragmentation of audiences is the likely threat to revenue from advertising for free-to-air broadcasters over the longer term. So long as full-service free-to-air channels are able to command the biggest single mass audience, they will remain attractive to advertisers. The broadcasters will, however, need to position themselves to identify new revenue streams to future-proof their businesses. This is important in New Zealand where there is a heavy reliance on revenue from spot advertising to support public broadcasting and local content.

New revenue streams are beginning to emerge, such as product placement within programmes, internet advertising that is integral to on demand content, or revenue sharing from subscription services. Free-to-air broadcasters are seeking to retain their point of difference from pay offerings, although there has been some blurring of the distinction between pay and free-to-air providers with developments such as "Top Up TV" as a supplement to the FreeView package in the UK.

These trends underscore the need for a core broadcasting service with local relevance to remain freely and universally available to New Zealand citizens, even if there are supplementary elements of content that are only offered on a pay basis through other delivery platforms. IPTV or mobile telephony, for example, could well offer on demand content as their "point of difference" but will likely do so on a conditional access basis, such as pay per view.

Challenges and Opportunities for Public Television Broadcasting

It is in these new phases of the digital revolution that public value considerations become important. The changes to the traditional television broadcasting business model mean that the future of public and free-to-air television broadcasting, is at risk. Public value can only be preserved and protected with government facilitation. The transition from analogue to digital free-to-air television is therefore a vital first step to ensure public broadcasting and local content will feature in the multi-platform, converged environment.

The changes in traditional broadcasting assumptions raise valid questions about the future of freely and universally available public broadcasting services.

Public value is encapsulated by the core principles of the broadcasting Programme of Action: independence, diversity, quality and universality. The relevance of these principles does not diminish in the digital environment.

A common aim of broadcasting policy internationally has been to ensure the long term future of free-to-air television, and the public service components within it. This goal is important because, while the arrival of digital technology is inevitable, the survival of public service broadcasting and a significant presence of local content is not.

Digital creates particular challenges: to the principle of providing freely available broadcasting services to all citizens, and to the production and promotion of programmes reflecting New Zealand's culture, identity, perspectives and minority interests. Emerging providers of connectivity (like telecommunications companies) typically work to a subscription-based or pay-per-view model. They could eventually provide the primary access into people's living

rooms, with public broadcasters being just one of their sources of programming. The channels and programmes on offer will be globally sourced, and content aggregators will have little interest in the creation of local material.

With a single public broadcaster and/or a limited number of free-to-air channels with local programming, it is relatively cost-efficient to ensure a reasonable level of locally produced programming, accessed by a significant share of the total television audience. The transition to digital does not simply mean the conversion of existing free-to-air analogue channels to digital transmission. Free-to-air broadcasters have no choice but to become multi-channel and/or niche operators, and to ensure their services and content is accessible in as many ways as possible, in order to maximise audience reach.

At the same time, a move to digital creates opportunities. New forms of broadcasting become possible with interactivity, such as in-depth background material accessible as a supplement to finished programmes. The ability to provide multiple channels means services can be better targeted to minority audiences. New channels can complement and support core services to enhance an overall brand identity, while screenings across multiple platforms achieve overall visibility and impact. In the UK, the BBC has started to make its programming archive available on line to UK residents, who can then incorporate material into their own content creations. It has also developed an interactive media player (iPlayer), which will allow viewers to download any BBC programme that has been transmitted within the previous seven days.

The Mixed Model Approach

The "mixed model" (public broadcasting institutions and contestable funding for local content) underpinning New Zealand's broadcasting policy is particularly suited to the emerging digital television environment. Internationally, the transition to digital has been led by the public service broadcasters, which are the foundation and cornerstone in delivering public value. Increasingly, however, it is seen as important to ensure plurality of voices and suppliers in the provision of local content, so that a defining feature of free-to-air digital services is their strong local focus.

New Zealand operates in a global environment where citizens have ever-increasing choices in their sources of information and entertainment and in their modes of communication. Public broadcasting plays an important role in building New Zealand communities and in reflecting cultural identity. The government has therefore supported the launch of Māori Television and has secured TVNZ as a chartered, publicly-owned broadcaster.

TVNZ ensures New Zealanders have free-to-air access to New Zealand content, to news and current affairs information seen from a New Zealand perspective, as well as access to the best of overseas broadcasting. It does so while remaining a financially viable business generating a financial return for its shareholding Ministers, as owners on behalf of the taxpayers of New Zealand.

TVNZ and Māori Television are significant cultural institutions, whose role is to reflect and inquire into every aspect of New Zealand life, with a special focus on Māori language and tikanga by Māori Television. Support recently confirmed for TVNZ's proposed new digital

services will enable the broadcaster to fulfill this role while retaining popular appeal, by providing a mix of core and niche channels.

Digital technology also creates opportunities for broadcasting funding agencies. NZ On Air will be able to improve the visibility and accessibility of publicly funded content by making sure it is available across many more platforms and devices. At some point in an on-demand future it might be possible for NZ On Air and Te Māngai Pāho to support content for on line delivery and in preparation for this, the government is considering a change to the Broadcasting Act to allow the agencies to operate across such platforms. In the meantime, they will be reliant on free-to-air broadcasters developing and launching new services that feature local content.

The costs to NZ On Air of replicating current levels of local content across an increasing range of channels and platforms would be prohibitive. More innovative ways of ensuring continued visibility and diversity of New Zealand programming in a digital environment will need to be devised. This could include reviewing the way audience behaviour and expectations are changing and how this might be reflected in the cost structure and types of programming for specialist channels: the growth of user-generated content is one example. Digital also creates opportunities for time-shifted viewing of content – from core to niche channels, and vice versa – as well as re-purposing or enhancements to add value and depth to funded content.

With a managed transition, in which the industry and government work in partnership, the following benefits of digital television can therefore be made possible:

- Existing free-to-air services delivered in high-quality pictures and sound to all New Zealanders;
- New and enhanced free-to-air services, with some content fulfilling public service objectives, at more accessible times;
- Enhanced coverage of local news, current, cultural and sports events, providing a shared experience for communities;
- New options for delivering health and education information to citizens;
- Interactive applications to enrich viewing experiences;
- Content streamed live or available on demand via new platforms or devices;
- New Zealand's audiovisual heritage made available through digital platforms;
- Innovative content specifically designed for digital media applications;
- A stronger impetus for broadband uptake, as audience demand for digital content is stimulated;
- Strongly visible services with a clear public broadcasting and national identity mandate (TVNZ and Māori Television), achieving audience reach and impact, and giving New Zealand a voice in a globalised broadcasting environment.

An independent cost–benefit study[1] concluded there was likely to be a net national economic benefit from the launch of free-to-air digital television in New Zealand, but only if the transition is complete, with analogue transmission eventually being switched-off. Analogue switch-off

[1] Spectrum Strategy Consultants: Cost Benefit Analysis of the Launch of Digital Free-to-air Television in New Zealand (April 2006).