

Speech

Date: Wednesday 19th February

Venue: Sydney Convention & Exhibition Centre

Event: Australia Broadcasting Summit 2003

Speech: "The Future of Broadcasting in Australia"

Speaker: Gerry Moriarty, Chairman, Broadcast Australia

Duration: 40 minutes

Introduction by Tim O'Keefe, DBA

Thank you for the introduction Tim. Good morning Ladies and Gentlemen.

Before I begin I would like to thank the organisers of this conference: the following two days will, I am sure, provide an extremely comprehensive overview of the current issues facing our industry and the opportunities and challenges that lie ahead. I look forward to a lively, engaging, perhaps occasionally controversial, two days.

My presentation today concerns the future of Broadcasting in Australia – a somewhat challenging task so I ask for your indulgence for a moment: picture yourself in ten years time, in 2013. Ask yourself this question; how will I, and other people, be consuming and interacting with various broadcast services? Perhaps you can picture yourself with your family, in your home, or travelling in your car. Picture people who have jobs that require them to be mobile and what their information and communication needs will be. Think of the people like the fire brigades, the police and the ambulance services. Picture how all these people might use broadcast services and wireless communications in their working environment and in their leisure time.

I will begin by posing 2 questions that I hope to address in this presentation:

What will the broadcast industry look like in 10 years time and, just as importantly, what is required, or what has to happen, to get us there?

In my view, broadcasting in Australia will change dramatically in the next ten years. Most of the change, in isolation, will be gradual or incremental, but the combined impact of multiple evolutionary changes will add up to significant overall change for the industry. Importantly, terrestrial broadcasting, both television and radio, will continue to be a vital medium in peoples lives, as it is today; it may, however, be used in somewhat different ways. This, I believe, will be based on it's strengths in meeting the increasingly mobile needs of consumers and it's low cost of delivery. Digital broadcasting has the potential to change every part of our lives – business, social, political and educational. Firstly, let me ask the question; Why will broadcasting change? I believe the broadcasting sector will have at least FIVE key drivers of change:

- One, Competition: The increased intensity of competition for peoples eyeballs and leisure time and the competition from different media will drive change in our industry
- Two; Mobility: our society is becoming increasingly mobile and people are wanting, and expecting, access to information in a timely and efficient manner while they are on the move. In many cases they require fast and immediate access to information. This will drive changes in business and consumer requirements.
- Three; The automotive industry as a driver (no pun intended): the automotive industry will increasingly install in-car digital broadcast

equipment that will allow content providers and business application providers as well as traditional broadcasters to deliver new and innovative services. The technologies required to use these services while people are mobile will also be installed in public transport vehicles such as trains and buses. This will drive change in our industry.

- Four: The outsourcing of public sector communication & broadcast facilities. Due to the inability of the public sector to fund the large capital investment projects required for the delivery of new digital communication and broadcast services, outsourcing arrangements will allow private sector capital to be accessed which will drive further change in our industry
- Five; that digital TV is far from achieving its full potential. Not only is technology changing at a fast pace, but when terrestrial broadcasters begin to exploit the potential of increased video compression and interactivity, this will drive the industry. It will encourage new players who in turn will inject further competition into the industry, providing an unpredictable yet exciting dynamic.

I would like to play a short video that steps back into the past before stepping into the future. It will show a story ten years from now, and how a variety of different people will potentially use and interact with broadcast services in the future;

(play video)

Did these scenes fit with your vision for the future of broadcasting in Australia?

There are, I believe, two major themes “embedded” in this video, and I would like to expand further on them. After that I will try to answer the question I asked a moment ago, “what needs to happen to make the broadcast and communications services in this video a reality?”

The first theme in the video is mobility. More accurately, the ability of broadcast services to deliver both information and communication and therefore meet the mobility needs of end users.

The second theme from the video is that technology is no longer the barrier to the sorts of broadcast services that can be delivered to businesses and consumers. What is a barrier, is understanding how commercial broadcasters can profit from all these new services and how public broadcasters can use them to meet their objectives. For no matter how great the technology, a service won't be implemented unless it can be financially viable.

There is an important “stimulus” role played by the public broadcasters, and we in Australia have already seen the two national broadcasters lead the way in the roll out of digital terrestrial television. Indeed the National Broadcasters are to be commended as they provide both a competitive stimulus, by creating

a more compelling consumer proposition, as well as embracing the outsourcing model and hence access to private capital.

What is the future of consumer orientated services? Our society's collective thirst for information and entertainment appears insatiable – and just as importantly, consumers want immediate access to information wherever they are. Radio and television were revolutions. They changed our world; five continents very quickly became a global village. The medium is the message, and both are emotional. It's true we don't have that feeling yet about digital television and digital radio. DTV is an evolution of analogue TV and likewise for digital radio. DTV has been a revolution for engineers but it hasn't been so for consumers – but it will.

For the consumer, change will not come suddenly, change will be gradual. We should be mindful of the time it takes new standards to evolve and acquire approval, the time required for legislation, the time required for commercial implementation and consumer acceptance. The evolutionary "cycle" for past major developments in broadcasting in Australia appears to have had a cycle period of about 20 years. In television, look at the evolution from black and white to colour to digital. In radio, look at the evolution from AM to FM to digital. DTV might well be here but it is clearly not yet being fully exploited to anywhere near its ultimate potential – in terms of the choice, breadth and scope of services and interactivity that is possible. I was reminded recently by Martyn Cooper who is credited as the father of the original cellular mobile phone, that 3G mobile technology has already been ten years in development

and widespread customer uptake is still a number of years away anywhere in the world. It's "cycle" time looks to me to be similar to past major broadcasting developments in Australia.

Let us for a moment look at a service that is often referred to as a competing technology to terrestrial broadcast services: streaming media across the internet. As we know, the web evolved from a US Government project and became popular faster than any other medium in history. However, the web, like all media before it, did not experience a "big bang", a "day 1" for delivery for the vast array of services and uses that it currently provides. The internet will be increasingly used for streaming audio and video services. This raises the question of what this means for the future of terrestrial broadcasting. The first point I would make is that there will be competing technologies in the future and I believe they will co-exist and people will use them in different ways. However, there are many reasons to believe that terrestrial broadcasting will remain the visual and aural medium of choice. Broadcast networks provide a significantly lower unit cost of delivery compared to fixed and mobile telecommunication networks. Broadcast is content rich and has a higher share of attention with a proven business model and is ideally suited to meet the increasing mobile needs of consumers at a low cost of delivery. That is it's greatest strength and why I believe it will remain the medium of choice. Our collective challenge is to build on these advantages.

Evolution of DTV will take time. To see how DTV will evolve into a far greater experience for the consumer we must consider the issue of video and audio compression standards (MPEG).

Let us take a moment to look at the technology behind digital television.

Currently, MPEG-2 technology allows us 1 high definition channel at 1080i and 1 standard definition channel, or 4 SD channels for every 7 MHz of spectrum. One of the most recent versions of MPEG, MPEG-4, would allow, 2 HD and 2 SD channels or 1 HD and 4 SD channels per 7 MHz of spectrum. Advances in video compression such as MPEG-4 will soon be available and should be factored into what terrestrial television can offer the households of Australia. MPEG-4 incorporates the capability to deliver enhanced interactive services, is designed to deliver services across different networks, it supports scalable content and it is backward compatible with MPEG-2. Naturally, there are legacy issues; the existing receiver base, the requirement for a digital TV receiver conversion programme and the need for encoding upgrades at the studio. Legacy issues are significant issues as they could easily hamper consumer take up of DTV. For example, enabling the digital TV receiver to receive broadcast software updates over time, thereby future proofing the digital receiver device, is a key selling point. It is in our interests that we as an industry work with equipment manufacturers and others to solve these issues.

Let us remember the fundamentals, which are (1) that the technology is not the barrier and (2) as more and more studies are showing, choice is the “killer

app” for consumer take up of digital TV, and indeed, so far as we can tell, for digital radio too.

There is of course a trade off between choice and price and I am sure we are all watching with keen interest the results of the Freeview service recently launched in the UK.

I mentioned that the second theme of the video was that technology is no longer the barrier to innovation or the delivery of what the customer wants. If we believe that the technology defines the product, then the future of digital services; DTV, DRB and Datacasting, will be defined by the technology’s inherent interactivity and relatively large bandwidth, and it will be reinforced by the convergence of technologies and products; devices such as the PVR – Personal Video Recorder. The technology available today permits us to dream of the many different types of services that could be made available, some of those suggested in the video - and we can be confident that delivery is possible.

The Personal Video Recorder, a device with 60, 70, 80G bytes or more of hard disk capacity, allows you to conveniently record, store and watch programs. Server based systems will add more capacity to future PVRs. I believe PVRs are the single most important product influencing the business model of traditional broadcasters, FTA and Pay, over the next ten years. They pose both threat & opportunity. Why is this? Wide spread usage of PVRs will re-define the idea of “prime time”, will allow consumers to skip bad

advertising, avoid using cassettes and be intuitive as to users recording requirements. Issues of digital rights management and legal protection will come to the fore in the same way that MP3 has impacted the music industry. The lesson from MP3 is, harness the technology so you control your destiny. Importantly, the technology exists for terrestrial broadcasters to exert control of the use of PVRs. This does however require the broadcasters to determine and control the functionality of digital TV receivers.

Interactivity, another much hyped capability, while not a financial success to date, will come to the fore with more experience and the convergence of television sets, PVRs, set top boxes and personal computers. As more and more channels try more and more flavours of interactivity, we will see what consumers like and what motivates them to move from passive to active participants in television. Recent developments with certain television shows that focus on the youth or the early adopter market, involving viewers interacting with the broadcaster to obtain more information, to vote or request or even to buy something, show that developers and marketers are starting to work constructively with each other.

The advent of a wireless return path for terrestrial television digital set top units and television sets, namely DVB-RCT, introduces new economies and convenience for digital customers. Trials of DVB-RCT have recently been conducted in France and Ireland, we should look with interest at the results and see what opportunities are open to us in Australia. Indeed, I would like to take this opportunity to announce that Broadcast Australia will be conducting

a DVB-RCT trial in Australia this year. The nature of the technology will mean that Broadcasters will increasingly need to work closely with back channel managers, infrastructure providers, advertisers and the production industry to see how they can entice and keep viewers. There are threats to our businesses, but there are even more opportunities, many of these based on currently available technology that has not yet been exploited.

A second example of technology not being the barrier to innovation and delivery of broadcast services, is the use of Single Frequency Networks or SFNs. Broadcast Australia has designed and built SFNs for the ABC and SBS digital TV services in 5 areas around Australia. We had some teething issues but these are bedded down now and we are proud of our achievements in this arena. This does prove that SFNs can be used for digital TV, and also therefore for digital radio, around Australia. This is important for the provision of efficient and user friendly mobile terrestrial audio and video services.

Permit me to jump from the technology to the legislative environment for a moment, because what is technically possible can have an important impact on the legislative environment, and this has implications for compression standards, set top boxes and digital radio to name just three. The biggest decisions are the political and business ones.

If we look at the UK DRB market we can see the benefit of clear legislative foundations. Digital Radio Broadcasters receive an initial 12 year licence period with a further 12 year extension and a guaranteed analogue extension

period if they simulcast in digital. Here is the proof of the policy pudding; in the UK there are now two national digital radio multiplexes, one covering 85% of the country, the other 65%, and both providing over 20 national digital radio stations. There are 38 regional or local multiplexes providing over 300 local digital radio stations

So which business model for DRB will be successful in the UK is too early to tell. However, an interesting note to DRB in the UK is that it is the commercial networks that are leading the roll out of DRB.

Although Digital Radio might seem a long way off, I encourage the Federal Government to plan now for the national roll out of digital radio services and look to the success of digital radio policy in the UK and to the automotive industry as a driver for change in this part of the broadcast sector. Digital radio and datacasting could easily deliver significant benefits to people on the move – for drivers and passengers, for people requiring entertainment to people requiring work related information.

As a general guide to understanding the roll out and take up of digital radio, I believe, what was true for FM radio will be true for digital radio. And what was true for FM radio was that the automobile industry drove the take up and acceptance of FM. Car manufacturers know consumers very well. They know that the car radio is important and that new technology in the console, like satellite navigation for example, is always in demand. Once people have DRB

in their cars, it will become “the norm”. Large production volumes, driven by automobile industry sales will drive down prices, just like they did for FM.

I do believe that the broadcast industry, in Australia and globally, is moving towards a model where there will be those that focus on infrastructure and those that focus on content and viewers. This is a long term trend and driven by economics particularly of digital broadcasting. We see it in the structure of the Pay-TV industry here in Australia.

Naturally I sit in the infrastructure provider camp and we can make a useful and necessary contribution to the policy making process.

Let me declare my hand as Chairman of Broadcast Australia. Given the ubiquitous nature of our network and our experience in the industry, Broadcast Australia is very keen to be an active player in the many broadcast services I have mentioned in this speech and as a provider of wireless communication services more generally. Included in that definition are communication services to the emergency services and public safety organisations.

These organisations are staffed by people who risk their lives to help others; be they fire, police, ambulance, coastguard or any of the other myriad groups that protect and serve our community.

You recall the footage in the video from September 11th in New York where the firefighters in the lobby couldn't talk to their fellow colleagues in the stairwell of the same building.

It is not just terrorist attacks, bush fires and train disasters that cause fatalities amongst civilians and emergency service personnel. Lives are needlessly lost every year in many different circumstances. These recent tragedies have highlighted many issues – one of which is the need for improved communication systems. Would it not be logical to have all the emergency services using digital radio systems with common infrastructure, common platforms and common spectrum, across the nation? In addition, I believe that terrestrial digital broadcasting is an ideal medium to support the emergency services with fast, efficient and reliable delivery of mission critical data. In particular, datacasting, as a broadcast service, could easily be used by both the emergency services and as a mass broadcast, public information channel in any emergency. Datacasting is ideal for closed community groups, such as the emergency services, that require secure and encrypted data. Datacasting services can also be unencrypted for public use.

I believe that datacasting should be used for a mix of public and private services and I would like to give you an example. Remember the scene in the video where the young man on the train is delayed because a freight train has caught fire? The fire brigade could datacast weather and traffic maps and information on the chemicals in the fire, to fire trucks at the scene. The fire brigade could datacast a map showing alternative traffic routes and an

emergency contact number to a public broadcast TV channel. Just like triple zero for the telephone, there could be a dedicated “emergency channel” on the broadcast spectrum. In the future, the Fire Brigade could well be a broadcaster.

Broadcast Australia will be taking a leadership role in the upcoming datacasting trial and BA’s Director of Broadcast Services, Clive Morton, who is speaking tomorrow, will expand on our plans for datacasting.

This vision of a common platform for the emergency services, as well as additional applications that could be offered via digital terrestrial broadcasting challenges the current status quo. However, it is a challenge that is achievable in the next decade. It is a challenge that a wireless company like Broadcast Australia can make a valuable contribution to.

I hope the next two days can bring people together so that we can discuss ideas and opportunities, so we can build a financially successful and technically innovative future for all our stakeholders; consumers, shareholders, Government and employees. In the employee category I include the next generation of content producers, engineers, technicians, strategists and sales & marketing people who need to feel that broadcasting is a sector of choice for their careers, because we need to continue to attract and retain them. I am confident we can. Finally, I would like to thank you for your time and I am happy to answer a few questions.