

The digitalisation of radio



How the United Kingdom has handled the rollout of digital radio – lessons for New Zealand.

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Kineta Knight
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Introduction

Digital technology is now at the forefront of international media, quickly leaving the analogue medium behind. With the evolution of television in New Zealand moving into the digital age, such as Sky Television and the introduction of Freeview, the switching of radio from analogue to a digital form promises to follow closely behind.

The reason digital radio is of major interest in New Zealand is because the Government, along with a digital service provider and some of the nation's major broadcasters, have been trialling a digital service. But, for New Zealand there are still uncertainties over which digital option to choose, how best to introduce it and control growth, what impact it will have on existing stations, and what will happen to the current market when new stations are established?

New Zealand broadcasting and telecommunications company Kordia has already trialled a digital service, Digital Audio Broadcasting (DAB), but the Government is yet to commit to a long-term rollout of the technology. With FM analogue frequencies set to expire in 2011¹, big questions need to be asked in New Zealand: which digital option should we adopt, is it worth the expense, and does a country the size of New Zealand, with a plethora of station choice, really need it?

DAB is currently one of the most popular forms of digital radio, used by approximately 1,000 stations worldwide, however, DAB+ (Digital Audio Broadcasting Plus), DRM (Digital Radio Mondiale), DMB (Digital Multimedia Broadcasting), HD Radio, and Satellite Radio are other variations of the medium.

This is where looking at the experiences of the United Kingdom and how broadcasters there have handled the rollout of digital radio is vital.

The UK introduced DAB in 1996 and about eight million people² have since tuned into the idea by purchasing a portable DAB unit so they can listen to digital radio as they please.

DAB has been embraced by the UK's public broadcaster, the British Broadcasting Corporation (BBC), which has a good working relationship with the system. However, in February 2008, one of the UK's biggest radio forces, GCap Media, "pulled the plug"³ on it. GCap chief executive Fru Hazlitt said at the time: "DAB radio is not the future. FM and broadband is."⁴

Nevertheless, more than 550,000⁵ DAB radios were sold in the UK during December 2007 alone showing that its popularity is not waning. And, according to Aaron Olphert from Kordia, DAB radios outsold iPods in the UK in the same month.⁶ He said it is also becoming hard to find stereos with only FM receivers in the high street electronic retailers and it is more common to find a DAB stereo that also has FM.

Parts of Asia and Europe are also using DAB, as was Germany until it "flicked the switch",

¹ Dubber, Andrew *The digitalisation of radio in NZ*, The Great New Zealand Radio Experiment, Page 70

² Finn, Matthew, Radio New Zealand, Interview, February 21, 2008

³ Ashton, James http://business.timesonline.co.uk/tol/business/industry_sectors/media/article3340864.ece

⁴ Plunkett, John http://blogs.guardian.co.uk/organgrinder/2008/02/double_blow_for_dab_radio.html

⁵ Plunkett, John <http://www.guardian.co.uk/media/2008/jan/23/digitalradio.radio>

⁶ Olphert, Aaron, Kordia NZ, Interview, February 18, 2008

giving up on the service.⁷

These mixed developments have made researching the rollout and subsequent experiences in the UK hugely important for New Zealand.

In the UK, the growth of DAB technology, how new stations have developed, the impact on larger existing stations and the positives and pitfalls of the technology all offer valuable information to New Zealand.

Kordia's DAB trial in Auckland and the CBD of Wellington was a good start in testing the service. The operation started in October 2006 and had audio and data services running on the network. The services included static and scrolling text on the VDU (Visual Display Unit), an EPG (Electronic Programme Guide) and slideshows.

The following eight stations were part of the DAB pilot:⁸

- RNZ National
- RNZ Concert
- George FM
- Base FM
- BBC World
- Radio Tarana
- Tarana Unplugged
- Mai FM

However, as yet, Kordia's limited results cannot offer the same knowledge available from 13 years of going 'live' in the UK.

This research calls upon digital radio experts and those with first-hand practical knowledge of the medium, companies using digital radio, digital radio critics, articles and practical research. They include the British Broadcasting Corporation, GCap Media and the UK media watchdog Ofcom. This is by no means highly technical research, more a case study into how UK broadcasters have approached and developed the medium.

While digital technology is at the forefront of international media, will moving radio onto the digital platform work in New Zealand? Practical knowledge from years of the service in the United Kingdom will offer great insight into whether it is even a feasible idea.

⁷ Libbenger, Jan http://www.theregister.co.uk/2008/01/28/germany_switches_dab_off/

⁸ Olphert, Aaron, Kordia NZ, Interview, February 21, 2008

DAB – an overview

AM and FM broadcasting is well established the world over. However, the potential benefits of DAB technology outweigh that of analogue with its promises of improved sound quality, wider station choice, and the added features offered to the consumer on a DAB set, through its LiveText and EPG (Electronic Programme Guide) on the VDU (Visual Display Unit).

DAB promises to offer AM stations the sound of an FM, and the FM frequencies a CD-quality sound. It has also been hailed as the saviour of the AM band, as many existing and new stations are vying for an FM frequency – due to the better quality of sound and because most new stereos can only pick up FM stations. But because there are no FM frequencies left on the dial in many areas of New Zealand (and when one is vacated, it costs several million dollars to purchase), it means that DAB could well be the best option for these stations.

The functions of digital technology makes remembering the frequency of stations a thing of the past, especially when travelling to a different city, as digital allows listeners to tune into radio stations by name. It also makes for a better listener experience without interference from other stations and navigational limitations, such as mountains, that have historically undermined the AM/FM bands. The digital radio locks on to the strongest signal it can find and ignores everything else.⁹

Some DAB radios have a feature that also allows users to replay radio – including pausing and rewinding news and programmes.

The digital radio comes with a VDU which passes on information about current and upcoming programmes and songs. It also gives details of the artist, interesting facts, and scrolls up-to-the-minute news and sport. Some radios even allow you to record your favourite radio programme and listen when you want to.

Take the BBC as an example of how digital radio works. They have their existing FM stations simulcasting on DAB and some of those stations have an additional channel. The extra station brings more news on the news channel, more sport on the sport, as well as the music, comedy, drama, children's programming and more.

As digital radio is far more efficient than analogue radio, it can offer more radio stations locally and nationally, and cater for different interest groups. DAB is also available on digital television, in some cars and online. Some phone companies are also looking at putting it on their phones.

Multiplexes are used to broadcast DAB, of which the UK has two national and various regional ones. The BBC has one national multiplex and commercial broadcasters utilise the other – Digital One. The commercial broadcasters include Classic FM, TalkSport, Absolute Radio, and Planet Rock.

DAB+ is the upgraded version of DAB but is unfortunately not compatible with DAB sets. However, it is about twice as efficient as DAB with higher sound and reception qualities.

⁹ Olphert, Aaron, Kordia NZ, Interview, February 21, 2008

PART ONE – New Zealand media figures react to DAB

The majority of media figures in New Zealand believe digital radio is the future and that it will most probably be in the form of DAB, DAB+ or HD Radio.

Yet these same industry leaders still know little about the differences between each digital format and what impact they will have.

According to Matthew Finn from Radio New Zealand, commercial radio is “scared”¹⁰ of DAB because of the impact it could have of opening up the market to many more commercial competitors.

Mai FM’s managing director Graham Pryor echoes that sentiment: “DAB radio is the only option that we should be considering in New Zealand for lots of reasons. However, the incumbent networks will try and limit this because it allows lots of new stations to enter the market which is the expected response from the commercial market.”¹¹

Despite considerable optimism about the introduction of digital radio in New Zealand, there are some who believe it is years away, and others who say it will not even get off the ground.

It is this division of opinions which has made studying the digitalisation of radio in the UK even more critical.

When prominent New Zealand media figures were approached about digital radio they were happy to talk about their thoughts on the future of DAB/DAB+ in New Zealand, but many also forwarded links about what was currently happening with DAB in the UK.

It seems that now, in 2009, no one is making a stand for digital radio and running with it or coming up with a better idea for the future of radio in New Zealand. The Government is leaving it up to broadcasters to decide, yet the broadcasters all have differing opinions. The digital age is already here – just look at Sky and Freeview. Shouldn’t radio, the forefront of communication, be next?

Even though Kordia has been trialling DAB, some commercial broadcasters are more keen for the alternative choice – HD Radio, which can be broadcast using their existing FM licences.

The Radio Broadcasting Association (RBA), whose members include New Zealand's two largest commercial broadcasters, The Radio Network and RadioWorks, have begun their own trials of the HD system.

Olphert said public and commercial broadcasters have not agreed which standard they should back and DAB and HD are incompatible systems.

The reason RBA has been trialling HD Radio is because it would protect commercial broadcasters current investments on the crowded FM dial and shield them from the threat of new competition from DAB/DAB+ broadcasters.

One of the drawbacks from this idea is the cost and availability of HD radios. These are popular

¹⁰ Finn, Matthew, Radio New Zealand, Interview, February 21, 2008

¹¹ Pryor, Graham, Mai FM, Interview, February 20, 2008

only in the United States and HD radios made for the US market would not work in New Zealand.

Olphert said it makes more sense to go with the DAB+ option because those radios are likely to be cheaper and more widely available than HD radios.

He said that Asia and Australia, our closest markets, are going to be using DAB+ and that in a couple of years' time cars will probably come with a DAB+ receiver built in too.¹²

Olphert said the main reason HD appeals to commercial broadcasters is because it uses FM frequencies they already own. And with DAB+ they might then face fresh competition from new broadcasters who had been previously shut out of the FM range in all major cities because of the lack of dial space.

An article by John Drinnan for the New Zealand Herald¹³ gives another example of radio bosses taking charge over digital radio.

Drinnan writes that the commercial radio industry had given the Government radio frequency experts a “don't you dare” warning after suggestions it was working on an early start-up for digital radio.

The article said that Radio Broadcasters Association executive director David Innes “thundered back on behalf of The Radio Network and MediaWorks”.

Innes said: “MED (Ministry of Economic Development) and Kordia are doing broadcasters and listeners alike a disservice by suggesting that digital radio, via DAB technology, is imminent, when clearly it is not.”¹⁴

“The RBA takes exception to this wasteful use of taxpayers' money and urges their respective ministers to halt this provocative speculation,” Innes added.

Drinnan writes: “Digital radio appears to be a touchy topic in the radio industry probably because it is still in its infancy and is still being tested.”

With FM frequencies set to expire in 2011¹⁵, Andrew Dubber cautions broadcasters that a decision must be made soon. Writing in his chapter *The Digitalisation of Radio in New Zealand* in the book *The Great New Zealand Radio Experiment*, Dubber said: “...rather than commit to an expensive 20-year lease that may well tie them to an old, possibly obsolete, technology until the year 2031, broadcasters may wish to look at resolving DAB issues before the licences expire.”¹⁶

¹² Olphert, Aaron, Kordia NZ, Interview, February 21, 2008

¹³ Drinnan, John http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=10506122

¹⁴ Ibid

¹⁵ Dubber, Andrew *The digitalisation of radio in NZ*, *The Great New Zealand Radio Experiment*, Page 70

¹⁶ Ibid

PART TWO – DAB in the UK

DAB terminology:

Key terms when it comes to DAB:

- **Multiplex** – the platform on which DAB is broadcast from. The UK has two national and various regional multiplexes. These are licensed by Ofcom.
- **Digital One** – multiplex utilised by UK commercial broadcasters
- **DAB radio set** – eight million sets sold nationwide in the UK
- **RAJAR** – Radio Joint Audience Research
- **EPG** – Electronic Programme Guide
- **VDU** – Visual Display Unit

Key players in digital radio in the UK:

- **Ofcom** – industry regulator (the Office of Communications and the regulatory of the UK media)
- **DRDB** – Digital Radio Development Bureau
- **DRWG** – Digital Radio Working Group – UK government-commissioned group
- **BBC** – at the forefront with DAB technology
- **GCap Media** (now known as Capital, but referred to as GCap in this report)
- **Channel 4**
- **Multiplex owners**

Introduction

Comparing the existence of digital radio in the UK to the initial stages of the medium in New Zealand is actually not that different. The main difference is that the UK has decided on a system and has been 'live' with DAB for 13 years. The similarities are that there are discussions about its future and how long it will last.

When it comes to digital radio, Europe has been the powerhouse behind the move towards DAB. The first stages of development came in 1981, and its first transmissions were in Germany in 1988. The following decade, the UK picked up on DAB (also known as Eureka 147) in 1996. It became the first country to broadcast a wide range of stations on the medium.

Digital radio spends quite a lot of time making the news in the UK, with some critics questioning its lifeline. The ubiquitous pessimistic attitude towards DAB comes from media commentators, opinion columns and, in some cases, heads of media organisations.

An article in the Guardian¹⁷ said that critics claim that the sound quality of DAB has not matched the promises that were first made of the digital technology: "With too many services squeezed into too little bandwidth, with the result that the signal is not as clear as analogue FM."

And after GCap head Fru Hazlitt said she was pulling the plug on DAB in early 2008, it forced other media organisations, such as the BBC, to make it clear that it was not a dying medium. Jenny Abramsky, director of BBC Audio & Music, and Nathalie Schwarz, chair of 4 Digital Group, issued a joint statement¹⁸ saying that the latest RAJAR figures (Radio Audience Joint Research) show that digital radio listening hours were growing and that DRDB (Digital Radio Development Board) had reported a "substantial increase in sales of DAB sets".

In their statement, the pair said: "It is clear to us that DAB has an exciting future in a fast converging UK media industry. The BBC and 4 Digital Group are committed to digital radio long term and both believe that working together, and with the rest of the radio industry, is vital if we are to secure the UK's position in the forefront of digital radio development.

"We want to work together to make the very best of UK radio available to everyone, while continuing to compete to provide the very best audio content that will be the primary means of ensuring the success of digital radio in the years to come."¹⁹

While DAB's big names were reassuring listeners that everything was running to plan, questions were still being raised about DAB.²⁰ An article by John Plunkett said that according to a new report, DAB may end up to radio what Betamax was to video.

Plunkett writes: "The report, by media and telecoms specialist Enders Analysis, said the launch of the second national commercial digital radio multiplex, headed by Channel 4, might exacerbate the problems rather than solve them, and warned that media regulator Ofcom would face a public outcry if DAB failed.

¹⁷ Plunkett, John <http://www.guardian.co.uk/media/2008/feb/07/commercialradio.ofcom>

¹⁸ Schwarz, Natalie <http://radiotoday.co.uk/news.php?extend.3041>

¹⁹ Ibid

²⁰ Plunkett, John <http://www.guardian.co.uk/media/2008/jan/29/radio.digitaltvradio?gusrc=rss&feed=media>

“Enders Analysis added that the high cost of DAB transmission and slow growth in revenue had combined to undermine confidence in the new medium and led to the closure of a string of national digital stations.”²¹

The report, written by Grand Goddard,²² urged the radio sector to "stop continually beating its chest in public about the wonders of DAB and instead partake in an honest industry debate about the future of the platform".

"The exodus of stations from the DAB platform is starting to look like a stampede," said the Enders report.

“..the future health of the DAB platform must be under question.”

John Plunkett

Plunkett added: "With three of the largest radio groups having reduced their commitment to the DAB platform in recent months, their stations having been replaced by a mix of ethnic, religious and non-commercial broadcasters, the future health of the DAB platform must be under question."²³

Goddard's report ends with a prediction from Richard Wheatley, the chief executive of the Local Radio Company: "DAB is the Betamax of radio."²⁴

The national digital stations that have already closed include GCap's Core, UBC's Oneword and Virgin Radio's Groove. GCap's Chill and Fun Radio have also been scaled back, while Virgin scrapped plans for a new national digital station, Virgin Radio Viva.

The Enders report said the launch of digital stations such as Polish Radio London, Rainbow Radio and BFBS Radio, owned by the British Armed Forces, had worrying echoes of the decline of the AM waveband at the end of the 20th Century.

"The DAB platform of 2008, particularly in London, is already starting to resemble the AM platform of 1998, suggesting that DAB might have already been written off by the sector as a means to reach the 'mass market' audiences that national advertisers desire from the medium," the report added.

Goddard said the proposed launch of a second national commercial digital multiplex, headed by Channel 4, was unhelpful at a time when the first – run by Digital One – was struggling to fill its capacity.

He said that Channel 4 was now faced with the imminent task of launching a brand new DAB multiplex “in the middle of a snowstorm around the future of the whole platform”. By the end of 2007, Goddard said it was evident that the 'master plan' for DAB which the radio industry had clung to since the mid-1990s was simply not going to work.

Goddard said: "The closure of two longstanding national digital-only stations – Core and Oneword – combined with reductions in the service of several other digital brands helped to

²¹ Plunkett, John <http://www.guardian.co.uk/media/2008/jan/29/radio.digitaltvradio?gusrc=rss&feed=media>

²² Goddard, Grant <http://www.endersanalysis.com/publications/publication.aspx?id=514>

²³ Plunkett, John <http://www.guardian.co.uk/media/2008/jan/29/radio.digitaltvradio?gusrc=rss&feed=media>

²⁴ Goddard, Grant <http://www.endersanalysis.com/publications/publication.aspx?id=514>

crystallise the problems: too much spectrum, not enough consumer hardware take-up, and not enough enthusiasm for DAB from listeners or advertisers."²⁵

He said the issue of DAB overcapacity had to be "urgently resolved" by Ofcom, Digital One, Channel 4 and transmission business Arqiva. He added: "Put bluntly, can the UK commercial radio sector really support two DAB multiplexes?"

Goddard said that Ofcom faced a public outcry if the DAB platform were to fail, with owners of the millions of DAB receivers sold demanding a refund.

Once again in retaliation to the negative press, Natalie Schwarz, chair of 4 Digital Radio, the consortium that won the second DAB national multiplex licence and the Channel 4 director of new business and corporate, wrote an article in the Guardian, stating: "Why we must stick with digital radio."²⁶

Perhaps it is the benefit of hindsight and knowing that Channel 4 later pulls out of DAB, but there was no real depth to her article which merely reiterates what the latest RAJAR results were and that DAB was still very much in its infancy, particularly compared with digital television.

She explained the bonuses of DAB like a salesperson who is trying to sell you a DAB set: "It is easy to see why consumers would embrace DAB because the advantages are numerous. Using the range of digital receivers already on the market, it will be possible to access increasingly rich services, while radio electronic programme guides will mean downloading content to a hard drive is no longer the sole preserve of digital TV."²⁷

Schwarz goes on to say that: "We are confident about the future of DAB radio as the linchpin for radio's digital future and plan to meet the diverse tastes and interests of its growing audience by offering more choice and exploiting its full potential with fresh and imaginative programmes and services.

"These fledgling years of digital radio may not be easy but we are determined to stay for the long haul. We would be mad not to."²⁸

Later in 2008, after C4 had pulled out of DAB (more in the Channel 4 chapter), rather than cry foul, it was a fresh reason for people to start backing DAB. It prompted Paul Smith's article in the Guardian – Why reports of DAB's death are greatly exaggerated²⁹.

Smith said that when the latest RAJAR figures were released there was more concern than usual for the health of digital stations – with those who had already ploughed millions into the medium looking for reassurance that DAB radio still had the capability to flourish, following Channel 4's decision to ditch its digital radio project.

Having said that, Smith said that while commercial radio fared well in the latest figures, the BBC continued to dominate, attracting 55.5 per cent of all radio listening.

²⁵ Goddard, Grant <http://www.endersanalysis.com/publications/publication.aspx?id=514>

²⁶ Schwarz, Natalie <http://www.guardian.co.uk/media/2008/feb/01/digitaltvradio.radio?gusrc=rss&feed=media>

²⁷ Ibid

²⁸ Ibid

²⁹ Smith, Paul <http://www.guardian.co.uk/media/2008/oct/20/rajars-digital-radio>

“...this suggests that reports of DAB's death may be premature.”

Paul Smith

Smith said: “All stations in the BBC's digital portfolio, with the exception of the Asian Network, posted increase in audience and listening hours. Taken together with the success of their commercial counterparts, this suggests that reports of DAB's death may be premature.”³⁰

Other critics were more blatant, with Paul Donovan's Sunday Times article, Why DAB is here to stay.³¹

Donovan writes: “DAB, RIP? Channel 4's decision to get out of digital radio comes only months after our biggest commercial radio group also abandoned it (GCap). In addition, four national digital-only stations – Oneword, Core, Life and theJazz – were killed off earlier this year. There is now just one national commercial station, Planet Rock, available only on digital. So, on the face of it, the harbingers of DAB doom are right to give it the black spot.”³²

He goes on to point out the factors that have contributed to Channel 4's decision. They include the economic downturn, muddled invested plans, the migration of advertising to the internet, strong competition from BBC services that are, by comparison, awash with money, and the need to cut costs in these extraordinary times. As Channel 4 aims to save £100 million (NZ\$257m)³³ over two years, pulling out of digital radio was just one part of that.

Donovan said: “Yet I remain hopeful. Planet Rock may be the only national commercial station available on digital-only alone, but there are also five national BBC stations in this position.”³⁴

He said the total audience for these six stations is almost four million, which is the total readership of The Sunday Times, and as Donovan writes: “Not to be sneezed at, in other words”.³⁵

Furthermore, he said that over 25 per cent of all British households now have a DAB radio, which is nearly eight million sets, and that people are increasingly listening to radio on digital devices, including computers, mobile phones, WiFi internet radios, and cable, Sky and Freeview television.

Donovan said: “There is still spare capacity on the digital spectrum, and... one way or another, I think digital is here to stay.”³⁶

³⁰ Smith, Paul <http://www.guardian.co.uk/media/2008/oct/20/rajars-digital-radio>

³¹ Donovan, Paul http://entertainment.timesonline.co.uk/tol/arts_and_entertainment/tv_and_radio/article4957199.ece

³² Ibid

³³ www.xe.com

³⁴ Donovan, Paul http://entertainment.timesonline.co.uk/tol/arts_and_entertainment/tv_and_radio/article4957199.ece

³⁵ Ibid

³⁶ Ibid

Establishing DAB in the UK: the benefits

The DAB format was created in the 1980s and became popular the following decade in several countries, including the UK and many parts of Europe.

The medium is aimed at all consumers, and especially because the public broadcaster, BBC (British Broadcasting Corporation), is heavily involved, it has to be aimed at everyone because they pay their licence fee.

Jon Heasman, a senior associate in radio licensing at Ofcom, said that when DAB was first introduced, companies who could, embraced it. “I think the BBC and the commercial radio sector viewed DAB as an opportunity because you can have more stations on DAB, even the first generation technology that we have in this country, you can get so many more services than FM radio.”³⁷

Heasman said because DAB does not restrict the number of stations like FM does with its limited bandwidth, you can cater for people's tastes and interests better by giving them more of what they want on the radio. “Even the BBC has taken the opportunity as well to do a lot of the services they wouldn't have had room for on FM. Things like Asian network, 6Music – which is more of an alternative pop music service, 1Xtra which is a cutting-edge black music service.”

Commercial radio was not introduced to the UK until 1973, so by then a lot of the BBC national services were already established. The extra space on the FM band could have been used for more national commercial radio stations, but the government decided it wanted commercial radio to be localised around the country rather than nationalised. This is the reason why DAB became the ideal national service provider.

DAB has been marketed in different orders of importance over the years. Heasman puts increased station choice at the top of the list. He said there was a desire for more services that you cannot get on the AM/FM bands and the radio industry wanted to give people more choice.

The second benefit that DAB promises to have is better reception and sound quality to that of any other analogue station. However, there have been a lot of arguments about this with some people disputing the improvement in sound quality, saying FM sounds better. Heasman said: “But the surveys we've done amongst the public who have DAB and FM in their house, all think that they prefer DAB.”

He said that the arguments about sound quality lay with the multiplex operator as it all depends on the bit rates they are broadcasting DAB on. Heasman said: “You can have a lot of stations not broadcasting on good quality, or fewer high quality stations but beyond that argument, there is resistance to interference with DAB, especially in London where you've got a big pirate radio problem on FM, so that kind of thing is attractive with DAB.”

Lindsey Mack, the DAB project manager at the BBC, has also weighed-in on the sound issue: “The BBC thought that the one thing that would really drive DAB listening would be sound quality. We learnt later on that that really wasn't the case. It was more to do with choice and content.”³⁸

³⁷ Heasman, Jon Ofcom, Interview, July 25, 2008. All Heasman quotes in this research are taken from this interview

³⁸ Mack, Lindsey BBC, Interview, August 8, 2008 All Mack quotes in this research are taken from this interview

Which leads to Heasman's third point. At the forefront of advertising DAB are the data services it offers – rolling text on the VDU and the EPG. However, he is not sure how effective it has been. “There was quite a lot of excitement in the early years that data services could provide traffic news across your screen and news headlines and that kind of thing. I don't think this has particularly taken off but the data services could be seen as an attraction and still could be going forward.”

Heasman sees the ease of use with DAB as its biggest selling point. On analogue stations you still have to remember the frequency numbers of the stations you want to listen to, but with digital radio a screen lists the stations in alphabetical order so it is much easier to navigate.

Even the BBC, who of course is not commercially motivated, believes that the rolling text could be better put to use. James Cridland, the head of future media technology at the public broadcaster, said: “I think if you're looking at some of the other commercial opportunities that you have, even LiveText, the wonderful scrolling texts that tells you what's playing on your radio. Twenty-five per cent of people use that every single day which is tremendous, and it also means it's a tremendous place to advertise.”³⁹

Cridland said that many of the commercial radio companies are actually earning additional revenue by selling advertising on there. He said: “If one of the most annoying things when you're listening to local radio – for example The Edge in New Zealand – they've got a client on the phone voicing his own ad, it's like 'What on earth is going on?’”

He said one of the most agitating things on the radio are the advertisements and some DAB operators are turning that around and experimenting with different ways of earning revenue. Before working at the BBC, Cridland was involved with the launch of Virgin Radio Extreme's new youth music station. “What we did was we actually put no advertising on that station at all and instead Sony PSP bought the entire radio station for six months. So there was advertising on the LiveText, there was advertising on a five or six second bumper you heard every so often talking about the new Sony PSP and actually it made such a difference instead of having another two minutes stop-set of ads.”

He said that other commercial companies in the UK have done that as well with a mobile phone company sponsoring an entire radio station for a three-month period.

As Mack points out, the screens can be used in other ways too. “You have an EPG so people know seven days in a row what is coming up, and with a press of a button they can record it.”

The BBC also offers slide shows on the screens, latest news via images, and scrolling text. Mack said: “It's massively enriching through information. I mean LiveText has been going for years and years and years, so suddenly people are beginning to understand the value of it a little bit more, and as a broadcaster it's really up to us to push it and make the audience really understand.”

The benefits for the stations that choose to go on the DAB format are varying, depending on whether you believe in the longevity of the format. Heasman said that one could argue that for an established station there is no benefit other than being able to offer listeners some added data services and perhaps better reception. “But basically if stations believe the future is going to be

³⁹ Cridland, James BBC, Interview, August 8, 2008 – All Cridland quotes in this research taken from this interview

digital, they've got to be there. Even now, 10 per cent of listening hours are on DAB, and if you are an existing station in the local market and you haven't paid to be on DAB, you're potentially missing 10 per cent of your listenership."

But of course there are stations that simply would not be around if it was not for DAB. In 2007, Ofcom stopped issuing any new licences on analogue because the spectrum was full in all the areas where it was viable to have radio stations. The only stations being licensed now are community radio services, plus FM licences when they come up for renewal.

That being the case, DAB is really the only option broadcasters have. Heasman said: "There have been stations that came and went. There were a number in the early DAB days when there was more money in media, and it got going during the internet boom."

Ministry of Sound had its own station for about three years but when they saw that DAB take-up was not fast enough they pulled out. But there are still a few digital-only stations, such as Planet Rock, Chill, Arrow and BBC digital-only stations.

Heasman said: "It is true to say that there aren't as many digital-only stations as a few years ago, but the other important thing to add is that a lot of stations, like Planet Rock, wouldn't even be here if it wasn't for DAB.

"It's no big secret that at the moment no one's making money out of DAB. Because if you've got a DAB-only station, DAB household penetration is 27 per cent so your entire potential audience is only 27 per cent rather than 100 per cent. So inevitably numbers are quite small. Although a lot of these stations are on Sky and stuff too," Heasman said.

"There is simply no other technology."

Nick Piggott

When it comes to the benefits offered by DAB, Nick Piggott, the head of creative technology at GCap is a little more straight-forward: "There is no other technology, not the last 20 years, and not visible in the next five-10 years, that is as cost-effective at delivering radio signals to a mass-market mobile audience. There is simply no other technology."⁴⁰

Piggott said that GCap does not blindly support DAB. Their investment in the format is based on the fact that they strongly believe that mass market radio, and particularly the mobile environment, is a valuable business for the foreseeable future. "If we can make that business more valuable by using digital technology – perfect. We need to make sure that our digital distribution is broadly on the same cost as our analogue distribution and that's what DAB does. So we do look at other technologies."

Using DAB to make the radio experience more valuable for consumers and advertisers is what broadcasters need to be doing, according to Piggott. "If we use the functional capabilities of digital radio to create an exciting, new kind of funky, flashy radio experience it looks better alongside today's other media devices."

He said broadcasters need to make the experience as attractive as something you might get off iTunes. "DAB is visually attractive, it's functionally attractive, it behaves the way people expect

⁴⁰ Piggott, Nick GCap, Interview – September 21, 2008 All quotes (except where stated) are taken from this interview.

digital media, like digital TV, streaming, to behave. So, to a certain extent it's reinvigorating listeners interest in radio and making sure that they continue to listen to radio. Critically, we are still not delivering a product that's interesting and exciting to under 24-year-olds, which is a real challenge for us.”

Other than making it appealing for the consumer, Piggott said the second thing commercial broadcasters need to be doing is using the digital platform to make radio visibly more attractive for their clients. Advertisers are continually looking for ways to measure how active their advertising spend is. “They are looking for innovative ways to do it because innovation cuts through and it's more memorable, and frankly, they are pretty taken with what can be done on the internet – the merging of visual content and that kind of stuff.”

But it is a unified commitment to DAB among the broadcasters that Piggott said is the most important thing needed to achieve this: “It's not a technical problem, it's a problem that the radio industry has, to say, 'Yip, that's what we have to do' and commit to doing it and making it part of the mainstream process.

“It's easy to get Chill as a digital-only radio station to be able to support this, but what advertisers really want to see, is they want to see this functionality on Capital Radio and they want to see it on Heart and they want to see it on Kiss. And until the people who are responsible for those brands understand why it is that those people are doing that, you make these things happen.”

Barrier to not adopting DAB

While the BBC and GCap are at the forefront of DAB in the UK there are others who have not considered the move. Piggott recounts a conversation he had with the managing director of another Bristol radio station whose market share was in decline. They were on three shares while GCap held 24 shares in the market. “I said one of the things you have to remember is that every quarter, more people are listening to digital radio in Bristol... So, every quarter that we get more people to listen to digital, even if your radio station does improve, your market share is going to go into decline, because you're simply not available on the devices and the radios that people want to listen to the radio on.”

Piggott said that the only way to fix that is to put yourself on digital radio. He said once the stations have adopted DAB they can then work on their other problems of growing their audiences, growing younger audiences and improving their advertising.

Cridland's analogy is comparing a contemporary device such as an iPod touch with an FM radio. The iPod plays music, looks good, has loads of functionality, information about the song being listened to, including images. But with an FM radio, “If you're really lucky it can show you the name of the radio station. If you're comparing those two, it's really clear that actually radio must change and become a more involving experience and a more feature-rich experience to continue having the type of relationship we have with the audience.”

He said the only way of adding all these new features, moving with the times, is not on FM, but through digital radio – DAB.

Launching DAB

When DAB was introduced into Europe there was an expectation that all broadcasters would support the format, but the UK became the exception. While public and commercial broadcasters in other countries were picking up on the new medium, it was only the public broadcaster in the UK that was at the forefront of the development, while the commercial sector watched and waited.

It simply came down to money. While the BBC was receiving government support, commercial stations were having to invest “quite heavily” leaving a “big divide” between the two. Heasman said that because the public broadcaster is stable it can afford to develop technology and the new services. On the other hand, commercial radio was very attracted to it because they saw it as a way of evening out the playing field between themselves and the BBC. Heasman said: “In this country commercial radio was largely confined to local commercial radio because the BBC has most of the FM band allocated to it for its national services and there’s only one national FM service, which is not allowed to be a pop-music service either, so it’s classical, so there was a lot of enthusiasm from the commercial radio sector at that time.”

And there still is to some extent. A handful of commercial stations have slowly picked up on the medium, but at this stage those broadcasters are financing DAB themselves through the profits they make from analogue, as, at this point in time, DAB is not a profit-making scheme.

The introduction of DAB has been “hugely important” for the BBC. There had been a lot of concern that everything else was moving into the digital age and radio was not. Mack said: “Our previous director of radio was here at the time, and he was very much behind radio having to go digital so it wasn’t really left behind in any way at all – hence the introduction of DAB to the BBC really. And with it you can do a lot more things as well.”

The current BBC stations on DAB include Radio 1, 2, 3, 4, 5 Live and World Service. Its extra stations brought about through DAB are BBC 1Xtra, 5 Live Sports Extra, BBC 6 Music, BBC Radio 7, and BBC Asian Network.⁴¹

The BBC approached the launch of DAB in two ways. Firstly, it was important for the BBC and commercial radio to work together on its launch. Cridland said: “If you look at where DAB has succeeded was always when public radio was working together with commercial radio. And so the DRWG was a particularly important body because we were all working together as one – marketing DAB radio in the same way, as much as we can, to make sure we’re all heading down the one path on this rather than each of us trying to do weird and wonderful things.”

Cridland said that in commercial radio, stations are there to earn as much money as they possibly can and also to defend as much of the audience share as they can. He said that a lot of the commercial networks launched sister stations in much the same way as the BBC did – simulcasting on DAB as well as the stations off-shoot station. For example, Cridland said: “When I was working at Virgin Radio we launched Virgin Radio Extreme which is a bit like Virgin Radio but with none of the old stuff in it. And we launched Virgin Radio Classic Rock, which is a bit like Virgin Radio but none of the new stuff in it.

“So, if you were young you could listen to Extreme, if you were the maincore radio market 30-

⁴¹ BBC’s DAB site www.bbc.co.uk/radio/waystolisten/digitalradio/

something males, you'd listen to the main Virgin Radio and then the Virgin Radio Classic Rock when you got tired of the new stuff, essentially. And quite a lot of radio stations have done that.”

It may not necessarily be in exactly the same way but it is launching additional formats and ways of doing things that commercial radio was not able to do in the past.

The other thing that drove DAB for the commercial market in the UK was the promise of an analogue radio licence which has a seven-year tenure and after that time stations have to re-apply for that licence. If another station comes along with a better radio idea, format, or fills a gap in the market, then they may win that licence ahead of the existing station. Cridland said: “Clearly that’s a real risk for you as a business if you don’t necessarily know whether you’ll be broadcasting in a year.”

What the government did to help push the take-up of DAB was to automatically roll a businesses analogue licence over for another seven years. Cridland said: “It was clearly a good push to get commercial radio to stump up the money. Bearing in mind that DAB listening at the beginning was small so there was no very instant way of re-cooping instant cash out of it. Now most DAB services are in profit albeit not earning the same profit margin by any stretch of the imagination as in old fashioned heritage stations.”

Working closely with their commercial competitors was very important for the BBC. Cridland said that making sure they were all saying the same thing was imperative. Making sure the message for the consumer was not one thing from the BBC and something different from commercial radio. He said it is about broadcasting the same messages at the same time. “So that if you’re a radio listener you will actually hear the same messages promoting one particular thing around DAB. Such as, if you’re out in the car, the fact that you can get pause and rewind radio with DAB etc. You’ll hear the same messages, albeit done in a slightly different way on BBC Radio 1 or on Capital Radio. So, actually working together has been really important in that way.”

Working with the manufacturers of DAB radio sets has also been important. Instead of manufacturers having meetings behind closed doors as to what they want next from their product, Mack encourages open discussions with the radio-makers. “With the DRDB we’re able to bring them all into one room, with everyone around the table, and there’s also regulators that can be involved in government. We’ve always worked quite well with Ofcom as well. And you do need them as part of the mix in order to drive DAB and to make it successful.”

The DRDB has also become an effective forum for the broadcasters. The trade body was set up by both the BBC and commercial radio as a marketing tool and would speak as one voice to the nation about DAB, providing constant marketing messages. Its members are broadcasters and multiplex operators, including BBC, Channel 4, Digital One and GCap, who also fund the DRDB. Mack said: “They don’t actually make any money from it at all, but it’s great because they are a small group that represent us all and they are the people who talk to the market, talk to the manufacturers, the retailers.”

Cost of DAB

The cost of DAB is a highly sensitive subject and rather confidential to any of the broadcasters. The BBC, for instance, does not discuss the amount of transmission because there is a third party involved. Mack said: “The report says our cost to run DAB, which covers about 68 per cent of the UK, is about £40 million (NZ\$102m) a year. But that's all transmission for radio, so that includes analogue as well. We can't give you a figure because then you'd know exactly how much our transmission operator is getting.”

Cridland said: “If you're broadcasting in London and you want to cover roughly the same area that FM covers in London, inside the M25, then roughly speaking a typical music station will pay a little bit more but not much more on the transmission of DAB than what they would pay on FM, so it's fairly similar.”

Basically what that means is that they are paying twice for the privilege of broadcasting the same content on both analogue and digital.

Piggott sees them suffering the huge infrastructure costs of setting up transmitters because they are early adopters of DAB. “The cost is, in my opinion, painfully and unjustifiably high. What we have learnt in the last couple of years is that fundamentally, it was meant to be no more expensive to launch and maintain than an AM or FM network. That isn't reflected in what we're paying at the moment.”

“...we had no idea what value for money was and now we very much do.”

Nick Piggott

He said GCap's DAB transmission costs are substantially far above that of FM. “There is no clear reason why that is, other than we have a contract with a transmission provider to do all of this stuff and we signed a 12-year contract seven years ago and at the time when we signed them we had no idea what value for money was and now we very much do.”

GCap is still under contract to run under the same conditions for another five years. “Fundamentally, we know we can deliver a good dual coverage on FM to DAB at a broadly equivalent cost, so we take away a lot of cost concerns,” Piggott said.

Although he would not go into the finer details of the money spent on DAB, media correspondent Ben Fenton has a fairer idea.

Fenton said: “Commercial radio stations, most of which are held by privately-controlled businesses, have been suffering from the cost of having to transmit digital and analogue signals simultaneously. It is estimated that each costs the commercial industry £25 million (NZ\$64m) a year.”⁴²

The head of what was GCap (Global Radio) said in a recent interview,⁴³ with the Guardian's James Robinson, that the radio industry needs an incentive to invest in DAB.

Global's chief executive, Stephen Miron, said: “As an industry we have already invested £180

⁴² Fenton, Ben <http://www.ft.com/cms/s/74fff8ac-ce38-11dd-8b30-000077b07658>

⁴³ Robinson, James www.guardian.co.uk/media/2009/mar/30/interview-stephen-miron/

million (NZ\$463m) in DAB with very little return. That's a lot of money.”⁴⁴

Although, as Miron said, there is very little return in DAB at the moment, Robinson writes that there is speculation Global will unveil two new DAB stations in the near future, including a talkback station.

Clearly, Global is still looking to the future with DAB despite currently not making a cent out of it.

Logistics of starting up DAB

Logistically, a number of changes were required for the uptake of DAB. The BBC required more staff to carry-out the promised extras of the new medium.

Cridland said: “All of a sudden you've got a radio that tells you what you're listening to, so you better have that data because it's going to be very embarrassing if your main competitor has full 'now-playing' on the screen and all yours says is '10 Great Songs In A Row'. Now, that's not great.”

What it meant was a change to the infrastructure of a radio station. Accurate and double-checked information is imperative. As are correct visuals for the rolling screen. Cridland adds: “You need a lot of additional data if you want to do the job really well and you have to work on it.”

Looking at the BBC's DAB costs, Mack said: “Our digital-only networks are obviously all staffed and there's a cost there. I think the BBC spends £30 million a year on its digital-only stations – which includes all the content, programmes, programming, staff costs and everything else.”

However, it is not the same for commercial radio. Piggott said for them it is not a highly human resource-intensive practice and have not hired any additional staff for the digital side of the business. Out of 1,400 staff, just seven people focus largely on digital. “It is about repurposing content that you've already got and already using online or mobile or whatever and just repurposing it on this platform.”

⁴⁴ Robinson, James www.guardian.co.uk/media/2009/mar/30/interview-stephen-miron/

Promoting DAB

Promoting DAB has been fairly simple for the already-established radio stations as they were able to cross-promote their new station on analogue.

Although it seems very simple and straight forward, Heasman has his doubts. He believes very little has been done to market DAB in the commercial sector and there has been much criticism of that. "There's never been a massive national marketing campaign for Planet Rock simply because it's too expensive because all these stations are being funded, subsidised, by the analogue site." He believes that commercial radio could have spent more marketing their digital services.

On the other hand, because the BBC is more than just radio, it is able to cross-promote the DAB product heavily on television and its existing radio stations.

However, Heasman does not believe that they, or the commercial sector, have utilised the marketing potential as much as one might expect, though he is aware of the difficulties. "Certainly in the commercial sector it's a sensitive area, as GCap, that owned till recently Planet Rock, could have promoted that station on all its local analogue FM services. But it introduces difficult politics because it might mean that listeners might leave that station to go and listen on DAB and... well, I think cross promotion on the radio is difficult."

Nevertheless, the BBC is very happy with the way they market DAB. Mack said they do it purely through marketing and "lots and lots" of cross promoting. "We cross-trail all our networks, and that's why we have sister stations, so Radio 1 can talk about programmes coming up on 1Xtra."

And she said, every now and again they experiment with their content and their presenters to keep DAB fresh and entertaining as part of the marketing and promotion. "They (Radio 1 presenters) will actually take over 1Xtra at certain times at night, so you get massive audiences. And Radio 1 will have Xtra content, so we can do a lot of that."

Other than cross promotion, the BBC also runs large marketing campaigns every year on television, radio and online. Mack said the most effective campaigns are the simple messages. "Last Christmas it was 'Go and buy DAB for Christmas.' It was quite a forceful message for us. Usually it's 'DAB, nice sound', or something along those lines. But it was actually 'go and do something' this time.

Although the BBC, as the public broadcaster, does not have the right to tell their listeners to go out and buy a certain product, through the strong and simple promoting, their listeners read between the lines and purchase a DAB set so they are able to hear the special content they are offering on that channel.

For GCap, Piggott said they run a simple line at the end of the news or a station promo sting that says 'We're on 96.3, online and DAB digital radio'. He said it is "simple yet effective".

Consumer uptake of DAB sets

Establishing a new format in any technology is a challenge, especially when consumers and advertisers seem happy enough with its current form. So when it came to convincing consumers that they needed to buy a DAB set to be able to listen to new stations and extra programmes it became a hard task for broadcasters.

The radio industry had not had to promote radios to consumers since the 1920s, so this became a real challenge for them. The BBC was set up as a broadcaster by the manufacturer of radios so that when you bought a radio you had something to listen to. The BBC was subsequently nationalised and became the public broadcaster.

Piggott said: “No one alive in this radio industry has ever had to go through having to tell people to actually go and buy radios and the reason why they should buy a radio with a colour screen. And that's a very very foreign thing for a radio programmer who is used to succeeding in his objectives by playing 16 songs an hour, with interesting jocks and getting the news at the top of the hour right.”

He said it is about getting people to think about devices, content, and content that is not just audio. Piggott said: “It is not thinking about competition as being we're going to knock the crap out of the other guy three clicks down the FM dial, it's about, ‘How are we going to stop people using iPods?’ What are people listening to and how can we provide to them?”

The next challenge was selling affordable radios to the consumers, and it has only been in the last couple of years that the prices have dropped somewhat.

Piggott is strong on the point that they do not want to “disenfranchise people”, which simply means they need to provide a range of cost-sensitive receivers that are £15 (NZ\$39) or less. But then there is the point that the more expensive model provides more functionality for the consumer (rolling text, EPG etc). “To explain that you get more from a £50 (NZ\$129) radio than a £15 radio is a really big challenge.”

Stations started broadcasting DAB in the late 1990s but it was not until years later that people started to buy them. Prior to about 2002, to buy a DAB radio you would have to go to a specialist shop and they were around the £100 (NZ\$258)⁴⁵ mark.

Piggott said: “Nowadays you can pretty much go into any retailer and buy a digital radio off the shelf for about £15. And it's been the arrival of the very very low cost entry point radios that we've seen significant growth in the last couple of years. So the actual overall number is eight million receivers, it's pretty impressive when you consider that the majority of that has been done in the past couple of years.”

Mack said: “That two million of those have been in the last 18 months I think the picture looks positive.”

Piggott points to the fact that people do not have any clear incentive to buy the radio or any fear that they need it in case they switch off analogue: eight million people have bought the set out of choice.

⁴⁵ XE money converter <http://www.xe.com/ucc/convert.cgi> May 20, 2009

He said: “Unlike other consumer electronic devices where there's some sort of subsidy model or some sort of incentive to go and buy that device – people are buying digital radio just because they want to listen to a digital radio station, they understand the benefit of having more radio to listen to.”

Ofcom has been tracking the DAB household penetration, and while listening to DAB and owning a DAB set was once very niche, in the past two or three years, they have started to see workable numbers when it comes to people who are listening.

Heasman said the main reason for this is simply because the DAB sets are getting cheaper. “You can actually now get a DAB set, it won't be a great quality one, but you can get one, as low as £20 (NZ\$51) now from the supermarkets. And only three or four years ago you'd be hard-pushed to get anything below £100. You can get a really decent DAB set now for £50 certainly.”

Downfalls of DAB

If there are any problems with DAB then the public surely already knows about, as, on a whole, the UK has a culture of blame and negativity which does not take long to hit the headlines. Whether the content is wholly true can only be confirmed by the broadcasters. While much of the bad press is speculation, the radio bodies agree there are a few areas in DAB that could be worked on.

For both commercial and public broadcasters, the biggest problem they are currently facing is the dual distribution charges for analogue and DAB with no immediate gain. Currently, this will only cease when analogue is switched off. (This idea is explored later in DRWG).

Once again GCap becomes a product of being an early adopter of the technology as Piggott believes they do not have a particularly good technology platform. He said: “Our multiplex platform was bought in 2000. There are much better multi-platforms out there. I think most people who are buying digital platforms now are buying better products than we have or had access to and that hinders our ability to develop services.”

His other main concern is the DAB receivers. Manufacturers do not make radios until somebody is broadcasting the content. For example, colour screen receivers will not be seen in shops until a station is broadcasting that kind of content. Piggott said: “There is a chicken and egg situation here, and it is pretty clear now that the content has to come first. And that's the problem for a broadcaster, as they tend to say, 'Well, we're not going to do it until there are receivers out there.' And that's held things up a bit.”

It is the first time in history that the radio industry has had to work with radio manufacturers. In the analogue medium, broadcasters have never needed to do so. Piggott said: “We have no idea who makes analogue radios. People just make them. They roll in from China. There's nothing you can do with them, there is no involvement with manufacturers at all.” That is fundamentally different to DAB where broadcasters maintain an extremely close relationship with receiver manufacturers globally. No one in the radio industry can design and deliver new services without talking to them, and the manufacturers can not design and deliver new receivers without talking to broadcasters.

Piggott said people who work purely in the analogue genre do not understand this concept. “It's difficult for people in the analogue side of the business to understand in digital why we spend so much of our time talking to these guys in Asia who are making radios. And that's a big change to the industry, and it's something that TV has had to deal with, it's something that the music industry has had to deal with – everyone in digital media has to deal with it, but from a radio point of view it seems to be more of a concept that has stayed foreign for longer, than any other media.”

For the BBC, coverage is their biggest challenge. They have overcome their initial challenge of providing listeners with a wide range of choice, which was their driving point behind DAB, now this is the new challenge to overcome.

Mack also sees the number of DAB receivers sold as a challenge. Although eight million have been bought, comparing it to the number of digital TV boxes bought, she is not entirely happy. “People are buying Freeview because they know there is a digital TV switchover date. So it's totally different for radio. People think, ‘Why do I have to go and buy DAB when I've already

got six radios in my house, and they don't cost me very much money?"

She asks: "Why should they go and spend £50 more on DAB when they can just listen to Radio 2 on their analogue radio?" Despite the millions of radios sold, Mack said as an industry, they need to address why people are not buying DAB. "A lot of people buy for choice, but I think... we need to explore why they don't want to go out and buy more. Price is the big problem, but they are coming down and down in price. Just today they launched an even smaller handheld set." Although DAB radio prices are continually falling, Mack's aim is to drive it down a little bit further.

Another huge factor, and possibly one of the biggest hindrances to DAB, is its absence from cars. Mack believes DAB would have a higher listenership if it was built into vehicles. "I think that's a major challenge for us."

Heasman sees the car market as the "unsolved" area of DAB. He said it is important for all the European countries to adopt the same digital technology, or for manufacturers to make a multi-standard radio which covers all digital formats. He sees this as the main reason UK car manufacturers are not fitting DAB radios as a standard fit. "They are available as an added option but it's quite an expensive option, and not many people are taking it up."

The other barrier is that radios are now an integral part of the car's dashboard. It is all linked to the car's electronics. Heasman said: "It's not just a case of shoving a radio in a hole like it used to be 20 years ago – it's all part of a car's electronics, so, the car manufacturers will not do a separate kind of radio just for one country.

"This is done on a pan-European basis, and similarly they are not going to manufacture DMB radios just for France either, so you're just going to have to get a multi-standard radio, and until that's all sorted out, I can't see DAB being in cars, or at least not as a factory fit."

Heasman said while the radio industry is not getting in-car listening, it is going to be missing a large market. "I've seen various estimates...It's like a third of all listening in the UK. So, common sense would tell you that it's an important part of listening. And I don't have to tell you that the switch over of the main stations to DAB will not be seriously considered until there's an answer to the car thing."

However, there is a manufacturer that has brought out a little device which can convert FM radio into DAB. It works like the iChip, where you can broadcast your iPod on FM. The Pure Highway basically does the same thing, where it broadcasts DAB radio on the FM frequency on a car radio. It is about £80 (NZ\$206) but it is one way of getting DAB in cars without actually having a DAB set.

Piggott on the other hand does not think it is such a big concern. He said that in the UK, because of "appalling congestion problems" only 17 per cent of radio-listening is done in the car so DAB stations are not losing a huge amount of listeners.

The main reason it is taking so long to get digital radios into cars is because the car manufacturers want a European-wide solution. They are not prepared to put DAB in some vehicles just for the UK and a different digital radio service for elsewhere in Europe. Manufacturers are also waiting on considerable consumer demand before they move forward on this.

Piggott said: “When people say to me, 'Oh, it's dreadful that digital radio isn't in cars, it's all a disaster until it's in cars,' I've always said ‘When did you first buy your CD player? And how long did you have to wait until you had a CD player in your car?’ And that's the paradigm. It took the automotive industry years – nearly a decade – to get CD players in cars. And it went through exactly the same process as digital radio.

“First of all you couldn't do it, then they came out with really clunky add-ons – like the CD boxes in the boot of the car – DAB is exactly the same. You could buy a DAB box but it had to go in the boot of the car, and then they've slowly moved it forwards and there's a slot now in the front. And now you can't buy a car radio with a cassette player. But, it's 2008, CDs have been around since 1984 – 24 years to get to the point when it's the norm to have a CD player in the car. I don't think DAB is doing too badly, frankly. When you set it against that paradigm, I don't think we're doing too badly at all.”

Cridland agrees with Piggott that car-listening in the UK is less than many other radio markets around the world. Even so, he thinks it is important for DAB to be in cars. He also sees the importance of purchasing goods with radios in them. “One thing that would really help is to make sure that when you buy your Sony Mini Disc walkman that it's actually got radio inside it, but not just any radio inside it, it has DAB radio inside it, or a hybrid receiver.”

The mobile phone market is another area that the radio industry would like to tap into. Nokia has said that it would put DAB into their handsets when the technology became universally adopted.

Sari Stahlerg, director of product and technology marketing at Nokia, said: “When the technology reaches mass adoption we would consider putting DAB radios into our phones.

“The more the technology is adopted across Europe and other territories, the more chance it's got of being included,” Stahlerg said.⁴⁶

Although she refused to put a number on it, Stahlerg suggested it would have to be more than 50 per cent across Europe rather than the current low figures.

While Nokia has at least put some kind of figure on it, many car manufacturers are sitting on their hands and waiting for a more-established digital format. All but a few. A car company recently started advertising saying they now offered DAB but this is something Mack cautions consumers on. “You have to be very careful with car companies claiming they have DAB in cars – because they're actually only offering it in one model. We've got a long way to go with car companies, but it's encouraging.

“However, car manufacturers are calling for us to improve our coverage on a geographical basis. And so we say if we do that will you put DAB in cars? It's the whole chicken and egg situation all over again really.”

While cars, mobile phones, reception, coverage and cost being big challenges to DAB, the biggest challenge for Mack was picking the industry up again after Fru Hazlitt announced she was pulling GCap out of DAB. “With one company making an announcement, that got

⁴⁶ Stahlerg, Sari www.pocket-lint.co.uk/news/news

everyone thinking, 'Oh my gosh, DAB is now the Betamax of everything.'" And DAB still has its critics, but the digitalisation of radio had to start somewhere.

Heasman said that when DAB was being developed, in terms of digital radio, it was the only choice. "Now what's happened since is, I suppose the UK is paying a little bit of a penalty for being market leaders in going quite early with it. There had been a number of other digital radio standards developed which are still using Eureka 147 system."

DAB, DAB+ and France's DMB (which is much more video-friendly) are all part of the Eureka 147 system. What Heasman wants to see is a radio to be built which can carry all three systems chips. "Otherwise it's clearly going to be a disaster if the French have one system, the Germans have another, and we have another, because especially in continental Europe you've got to be able to cross borders in your car and still be able to use the radio. So I think the plan is to develop multi-standard radios, but the crucial thing is that they're all related to Eureka 147."

The infamous pulling-out of GCap

DAB received its worst dragging through the papers and uproar about its future when GCap's Fru Hazlitt famously said she was pulling the plug on the medium at the beginning on 2008.

Ofcom's Heasman recalls the factors which he believes led to the decision. He said the previous management of GCap was historically extremely pro-DAB. Right back to the days when it was GWR. The then chief executive, Ralph Bernard, who was probably “the most enthusiastic person in radio about DAB” applied for the first national digital licence, Digital One, and got it.

“To put it simply GCap ran into trouble and became subjected to a lot of take-over bids and there was a change of management for GCap to fight these off, so I think, with Fru Hazlitt coming in there were a couple of things that were fairly obvious. She didn't share Ralph Bernard's visions for DAB. I'm not saying she was necessarily anti-DAB but she probably wasn't quite as positive about it.”

While Hazlitt needed to make some quick cuts, cutting off DAB might have paid off in the long term but not the there and then. In the end it was not just DAB stations they cut, they also sold off some of their FM licences. Heasman said: “Ultimately it was unsuccessful in the sense that they didn't manage to fend off the takeover bids from Global.”

In turn, Hazlitt got ousted by the new management of Global. She had only been there for a year from Virgin Radio. Heasman said: “She was there to do a specific job which was to defend the company against the takeover, she didn't manage it and got the golden handshake.”

Heasman said the new owners are more enthusiastic about DAB than Hazlitt. One of her plans while she was in charge was to sell GCap's majority stake in Digital One which never happened. “GCap hasn't sold their stake in Digital One and they haven't pulled any of their local stations off DAB multiplexes. GCap also own a lot of the local multiplex licenses so they haven't handed any of those back either. I think it's fair to say that Global is more enthusiastic than Fru Hazlitt was.”

From Cridland's point-of-view, as a public broadcaster and former colleague of Hazlitt's at Virgin Radio, the only issue that she had was that the economics of DAB do not yet work for commercial radio. “The cost of transmission is quite high for commercial radio, there's the fact that you need to be on lots of platforms. If you look at the Australian model for DAB+ for example – they're going to have something like 30 stations on one multiplex and of course here at the moment we have eight, nine, 10. Because we're not transmitting DAB+ our costs are quite expensive, and you need to bear in mind that commercial radio is not having a good time commercial-wise at the moment.”

Cridland said that Hazlitt would have panicked. She had to go to the City and tell them how much money she was going to be saving the company. “What was interesting is that Fru's comments were not scripted and they were a little off-pieced with what the company's actual strategies were. The company's strategy was never stop doing DAB, their strategy was: 'Let's take a raincheck on how much we're paying to run some of these multiplexes and let's work out whether the transmission costs are overly high and let's also work out where we're not making money on analogue.’

“The fact is they were earning money but only a profit margin of 5 per cent. When you look at a

standard commercial radio and their margin could be 35 per cent to 40 per cent. All of a sudden it's profit margin that matters to the City.”

Cridland said GCap made a bright move by moving away from being owned by a PLC (Public Limited Company), where they had the City to please all the time, and to start being owned by private companies. “You can actually invest in radio’s future, and not be terrified about the next report to go to the City. And that's a massive difference. And I think it's the only way we can keep radio relevant for the generation is if we invest in great content and also in ensuring the mode of delivery of the radio is every bit as exciting as the audience can get elsewhere.”

Unlike speculation in the press, Ofcom, BBC and GCap are all on the same page when it comes to this matter. Piggott reiterates what the others have said, saying: “Fru's concerns were that the company was not performing financially as our shareholders expected and actually she outlined a number of pretty radical measures to try and improve the profitability of the company on a very short scale so she wanted to reduce our exposure to DAB.”

As Heasman alluded to, Hazlitt wanted to close down Planet Rock and theJazz and she wanted to dispose of GCap's share holding in Digital One. Furthermore, she said GCap was going to hand back regional FM radio licences because they were not making any money either and close down AM network of oldies stations. So, it was not just DAB she wanted to get rid of. “In the end we sold Planet Rock to a management consortium from Planet Rock, so Planet Rock is still on air. We did close down theJazz, but GMG Radio are going to start a jazz station in its place.”

From a consumer point of view they have lost one radio station called theJazz but will get one called JazzFM in return. So arguably, it could be said that GMG took full advantage of a gap in the digital market and took the opportunity to fill it.

Piggott quashes rumours by saying: “We haven't turned off any transmitters, we haven't reduced the coverage of DAB in any way. We also didn't switch off FM regional radio stations. We did sell one of them in Wales, but we didn't switch it off and we haven't turned off our network of AM stations.”

GCap's (Global Radio's) main focus at the moment is fixing some really core problems they have with their analogue business. They have a requirement to dispose of a number of stations as part of the merger, which are driven by regulatory and legislative deadlines. Piggott said: “They take priority over fixing the DAB stuff. So the DAB integration will happen at some stage once the analogue stuff has calmed down I would have thought.”

GCap had to dispose of six analogue stations in the West Midlands – Birmingham, Coventry, Wolverhampton, Worcestershire, Nottingham and Derby. The merger with Global would have meant they were deemed to have market dominance, owning the first, second, third and fourth-rated stations in each the market. Regulators deemed it unfair to have such market dominance.

Internet radio streaming vs. DAB

While one of Hazlitt's main criticisms of DAB was that 'internet and FM are the future', other broadcasters have differing opinions. When DAB was being developed in the mid 1990s, the internet was quite new and the idea of having internet streaming radio through broadband was not a realistic possibility at that stage. And it can be argued that for a lot of reasons it is not a possibility for broadcasters at the moment either.

"...DAB has five-times the amount of listening to internet listening."

James Cridland

The perception is that internet radio-listening is higher than what it actually is. Cridland said that whenever he speaks at a conference he asks people which has the most radio-listening; DAB radio, listening through the television, or listening on the internet. "Everyone puts their hands up for the internet. But actually DAB has five-times the amount of listening to internet listening."

Cridland said the issue is that no one is selling DAB as an exciting format. "It hasn't got all of the exciting whiz-bangs that say the internet might have and actually there's a real perception out there that DAB isn't very interesting somehow, or it's floundering somehow, or it's very old-fashioned, but actually what we're seeing is consumers really want it, and internet-listening is flat and DAB is growing. It's just really interesting seeing what people's, particularly in the technology world, perceptions are in comparison to what the reality actually is."

Heasman sees there are a lot of problems with radio through the internet – not only for consumers, but for broadcasters too.

"Internet radio broadcasting is peer-to-peer. You're streaming from one person to another. That is a far more expensive model than the broadcaster's model, which is a one-to-many model. So basically any radio station that gets substantial listening on the internet will end up, as things stand at the moment, paying an absolute fortune on streaming charges to ISPs."

Heasman sees that as the main problem. "People say this will be solved in the long-run, and I'm sure it will be, but, as we speak here and now... Take the BBC for example, Radio 2 has got, God knows how many million listeners, and they couldn't possibly, realistically deliver that, or afford to deliver that, via the internet if everyone stopped listening to analogue radio and went to the internet instead."

When it comes to the consumer, there are stand-alone internet-only radios, but the user experience is not yet great. Heasman said: "You switch it on and it actually takes a long time to connect. It's not instant. No one has found a way yet to get internet radio in cars so the whole car thing is not possible at this point in time."

The technical quality of most internet streams is not currently brilliant either as most of the stations in the UK, Heasman said, are broadcasting at 32KB. "There are some criticisms of DAB but on the internet it's so much worse. And also we go back to the problem of access, especially with the BBC, the public broadcaster: everyone pays a licence fee, so everyone is entitled to and expects to receive radio services and internet radio is only possible with broadband." Only about half of the population has broadband, so running radio through the internet would suddenly disenfranchise huge amounts of people that have no way of getting

internet radio.

For the UK to realistically consider internet radio, as the main way to offer radio services, Heasman sees it as being completely premature at this point. “And I'm not saying it will never happen, but if you compare internet radio with digital radio - you can get it in cars, it's easy to use, you don't need broadband, it's a one-off cost to buy the set, there's no subscriptions – because obviously with broadband you have to pay whatever your ISP is charging.”

However, he does admit that no one is saying 'No' to internet radio in the future. “I think we've all agreed that the way of the future, or certainly the medium-term future, is multi-platform. We just think that DAB radio is the most obvious replacement for analogue AM/FM radio in the long term. That's not to say that people won't use internet radio alongside it as well. Because they might want to listen to some specialist station that you can only get on the net.”

The issue that Mack sees with people not buying DAB sets, and instead saying that they can listen to it on the internet, is: “That's absolutely fine because of course you can, but it's not portable. If you are in the car, or walking to work or whatever. I think you just need to look at the different side and the content you've got.”

GCap is extremely active in internet streaming and have a competent internet platform, which rivals much of what the BBC is able to deliver. However, Piggott said it is virtually uneconomic to simultaneously stream on the internet as well. “Added to that, internet streaming doesn't get you in the car, it doesn't get you in handheld devices. Technologies like 3G, WiFi, and satellite in every other way, come with significant other economic costs which are completely justifiable if you're delivering a personalised service to somebody. If you're talking about mass-market radio with three million people listening to the breakfast show in London at 7.15am, they're all listening to the same radio show, then basically that radio show has self-funded. DAB is the only cost model that will achieve that into a mobile domain.”

PART THREE – Current state of DAB in the UK

Introduction

At the time of this research, the three main factors surrounding the current state of DAB are how the recession is affecting it, when Channel 4 is going to launch its intended DAB programme and what the DRWG's 2008 yearly report is going to suggest.

Although DAB has been running in the UK for 13 years, Ofcom's Heasman said that it is “probably at a slight crossroads at the moment”. He said that the outcome of DRWG's report is very important in terms of giving people some sort of certainty for DAB's future.

Furthermore, Channel 4's launch of digital radio would also be a boost to DAB. There is already one national commercial radio multiplex on air, along with the BBC's, but Channel 4's multiplex would give everyone around the country another seven or eight stations.

Heasman said the fact that Channel 4 applied for and was granted a DAB license is quite important for the current state of the medium because C4 is a very popular television service in the UK, meaning not only do they already have a very large audience but there is also a lot of cross-promotion opportunities, like the BBC.

Channel 4 has proposed to bring its own C4-branded radio station. Heasman said: “So, it's a hope that when this comes to air it will be a big boost both for commercial radio and for DAB.” Surprisingly, unlike any other new technology, the demographic that has really embraced DAB has tended to be people in the 40-plus age group. “Young people have not connected with it so well but Channel 4 will be offering a lot of youth programming which I think will be quite important.”

The only thing left to do is for Channel 4 to announce when it intends to launch the service. Heasman said as they are running out of time, Ofcom will have to make the decision whether or not to withdraw C4's DAB license. “They were supposed to be on the air this summer (June 2008), but basically that's not going to happen.”

The reason for Channel 4's delays comes down to whether they should go ahead and build the infrastructure for another national multiplex or just use the unfulfilled capacity on Digital One. There is space on that multiplex because of other stations pulling out and because of a change of policy at GCap. Heasman said it is a case of “watch this space”.

How the recession has affected DAB

While thousands of people lost their jobs in the UK in 2008/2009 and hundreds of businesses have had to close their doors, the recession has hit the media industry hard. Not only has it had to endure huge cuts to staff numbers but the advertising spend has dropped significantly.

As a commercial broadcaster, Piggott knows first hand about how the credit crunch has affected his business: “We've significantly hit an issue, as the radio industry as a whole, has had a very rough time economically over the past two years.” He said the merger between GWR and Capital to form GCap, which was the first major merger in the radio industry, distracted an awful lot of people for a very long time.

“We took our eye off the ball as far as digital was concerned...”

Nick Piggott

Piggott said: “We took our eye off the ball as far as digital was concerned, so we didn't really innovate digital in the way we had justified our original involvement to investors. We said to investors that we didn't want to do digital radio unless we can demonstrate the value of radio to listeners and advertisers. We're not simply going to do this if we're going to take the existing avenue and divide it amongst more operators and stations. We need to make sure we do digital radio in order to grow the overall value of radio. And the merger process we went through unfortunately distracted from doing that, so actually, digital radio in terms of product innovation, largely stagnated in the 2006-08 period.”

He said that although that is a very broad statement, as most consumers would say the service was fine – the radio stations were still there and running and those radio stations were investing more in terms of content, plus audiences were growing.

Piggott said: “At a very high level, digital radio has been doing very well over the past couple of years. The difficulties we've had, in my opinion, we haven't done the things we've needed to do to make sure that radio is bringing in advertising money. So, as we've hit this advertising downturn we don't have some of the functionality and some of the additional things we should be offering to advertisers.”

He said that GCap is in an awkward situation where revenue is in decline but still having a lot of people listening to digital radio – over 10 per cent of radio listening. “Digital...is a valuable part of the business but its not demonstrably generating new revenues, it's just protecting the revenues we've got now,” Piggott said.

He said while Hazlitt's decision was not particularly widely supported in the radio industry, most of the other radio companies came together and spoke of their concerns about DAB but did not think it was a good idea to pull out. Their belief was to fix the concerns rather than walk away from them.

“...the issue we're facing is that it's not popular.”

Nick Piggott

Piggott said: “Having collectively, as an industry, invested a lot of money in this proposition and it's got consumer traction, the issue we're facing is that it's not popular. It's that we as radio companies are not doing very well. The broad sentiment in the industry at the moment is that

there are things we need to change having done this now for nine or 10 years, there are things that are not right and we need to change. But pulling out isn't the right way to fix it.”

“Radio is getting pounded... It's a very, extraordinary bad economic situation...”

Nick Piggott

He said GCap is still on air, though they are not moving as fast as they would like to but points out that it is a general problem across the industry. “Radio is getting pounded at the moment. It's a very, extraordinary bad economic situation, taken into account that the UK is having an extremely bad time economically as it is, and the radio industry is, and advertising is, and radio is within advertising so it's a triple-whammy effect.”

Nevertheless, GCap's general sentiment is that they have to look to the future. Although there are now several other options as to how to digitise radio, the majority of people come to the conclusion that you need a broadcast platform. Piggott said: “And if you conclude you need a broadcast platform, the only broadcast platform that meets the economic paradigm of radio is DAB. And there's no other technology out there.”

Channel 4

While hundreds of thousands of people across the UK have felt the effect of the economic downturn, whether through job loss and/or increased cost of living, Channel 4 has felt the credit punch too – by deciding they had to pull out of DAB, before they even launched it.

Initially, Ofcom awarded the licence for the second national commercial multiplex to 4 Digital Group in July 2007, after receiving two competing bids. The other members of this Group are Bauer Digital Radio Limited, Carphone Warehouse Group PLC, Sky News Radio Limited, Global Radio Ltd, UTV Radio (GB) Limited and UBC Media Group.

Having Channel 4 involved in DAB was seen as a time to re-launch DAB, a spark to make it a success and sell more DAB receivers.

Although there were strong rumours that C4 was going to pull out, it was made official with an announcement on Ofcom's website on October 10, 2008: "Channel 4 has today informed Ofcom of its decision to withdraw from 4 Digital Group, the consortium which was awarded a licence for the second national commercial DAB radio multiplex last year. Ofcom recognises that the economic environment is very challenging and that all organisations need to make decisions in light of the circumstances they face."⁴⁷

This decision, of course, led to the media watchdog having to show support for the medium: "Ofcom continues to believe that DAB offers listeners real benefits. There are now 7.7 million DAB devices in the UK with 11 per cent of all radio listening through these... In addition, Ofcom continues to support the work of the Digital Radio Working Group which is considering the obstacles to the further take-up of digital radio."⁴⁸

The services Channel 4 was planning to launch, to rival the BBC, were:

- E4 Radio Music and comedy aimed at 15 – 29-year-olds
- Channel 4 Radio Speech-based service aimed at 30 – 54-years-olds
- Pure4 Music and speech station aimed at 30 – 49-year-olds, providing an eclectic range of music and intelligent conversation

But because the broadcaster, which had endured a 5 per cent downturn in TV advertising revenue, wanted to reduce costs by £100 million, pulling out of its digital radio was its only choice - saving up to £10 million in 2009.

Channel 4 chief executive Andy Duncan said that they made the decision "very reluctantly"⁴⁹: "We've pursued our radio plans in good faith and continue to believe DAB has a strong future and that we could make a return from radio in the medium term.

"Frustratingly, our plans have been overtaken by a drastic recent downturn in our revenues and we will have to forgo this future profit stream. We can no longer afford the short-term investment necessary given that we are having to cut so deeply across all parts of the organisation."

The BBC's Tim Davie, the Director of Audio & Music, said that the decision was disappointing

⁴⁷ Ofcom http://www.ofcom.org.uk/media/news/2008/10/nr_20081010

⁴⁸ Ibid

⁴⁹ Duncan, Andy chief executive Channel 4, Press Release, October 10, 2008

news for radio in the UK⁵⁰ because the “plurality of services is very much in the interest of all listeners. However, we appreciate that, in light of the current economic climate, Channel 4 felt that they had to leave the 4DG consortium.”

Although Davie was disappointed with C4's decision, he said that the BBC remained positive about the future of digital radio and DAB.

With this news, the debate as to whether DAB was a whitewash started all over again. Piggott said Channel 4's decision to pull out is “not great” but pointed to the fact that Duncan said the only reason was because of the economic downturn, not DAB as a platform. “I believe Andy (Duncan) when he says that Channel 4 went into this with all good intention, and are just being clobbered by the economic situation. So maybe it's not 'never', just 'not now'.”⁵¹

Piggott said it is a shame, because C4 had some good ideas, particularly in the area of data services, but is not so keen on the renewed negativity toward the medium. “Some of the current doom-mongering is happening because so much expectation was heaped upon Channel 4. If it became perceived wisdom that Channel 4 would invigorate the Digital Radio business, then clearly a 'no show' tends to suggest the opposite. But I would disagree; indeed, some projects in DAB have been held back waiting for the outcome of the Channel 4 / Second National Multiplex story. There are now fewer unknowns to deal with, which hopefully makes decision making on re-inventing DAB somewhat clearer.”⁵²

In Piggott's opinion, not building a second national digital network is a very good thing for the radio industry. “The last thing the industry needed now is to be facing another long-term and expensive commitment to transmission infrastructure; infrastructure that would provide capacity that currently isn't needed.”⁵³

He said there are other benefits too. He believes that DAB in the UK needs a shake up, and one that the right combination of DRWG, Ofcom and the broadcasters will give it. “To make really effective and necessary changes requires as clean a sheet as possible, and it would have been awkward to have a D2 multiplex just a few years into its existence whilst all the other multiplex licences reach potentially useful breakpoints (both in their licence terms and their infrastructure contracts). If DRWG recommends replanning, there's no easier time to do it. Similarly, at some point we will need to look at the opportunities that DAB+ might bring to us.”⁵⁴

“Radio is really suffering at the moment...stations are struggling to stay above water...”

Nick Piggott

Piggott goes back to the economy. “Radio is really suffering at the moment. Small stations are struggling to stay above water, and everyone is feeling the impact of a turbulent economy. Channel 4's arrival might have stimulated some renewed interest in radio advertising, but in the short term they probably would have been grabbing revenue off other broadcasters, and doing that in lean times is hard on everyone.”

He said when reading the doom-and-gloom headlines, and some of the “melodramatic

⁵⁰ Davie, Tim <http://www.ukfree.tv/fullstory.php?storyid=1107051465>

⁵¹ Piggott, Nick <http://nick.Piggott.name/blog/2008/10/11/no-more-channel-4-dab/>

⁵² Ibid

⁵³ Ibid

⁵⁴ Ibid

reporting” and commentary, it is easy to lose track of the fact that DAB is a pretty good consumer story. “In the four years since 2004 we’ve moved household penetration from 3 per cent to 27 per cent, and receiver costs have dropped to sub £20. Admittedly, the five years before that were pretty dud. DAB accounts for 11 per cent of radio listening, which means it’s underpinning about £60 million (NZ\$155m) of revenue for commercial radio.”⁵⁵

“C4 not committing to DAB at this stage won’t kill it...it might just make it stronger.”

Nick Piggott

Piggott said that he knows there is going to be a lot of negativity surrounding DAB for a while, but he believes most of it will not be accurate. “Channel 4 not committing to DAB at this stage won’t kill it, but when the dust has settled, it might just make it stronger.”⁵⁶

⁵⁵ Piggott, Nick <http://nick.Piggott.name/blog/2008/10/11/no-more-channel-4-dab/>

⁵⁶ Ibid

Digital Radio Working Group – the way forward

The Digital Radio Working Group (DRWG) was established in November 2007 with the purpose of bringing together senior figures from the radio industry and related stakeholders, under an independent Chair, to consider; what conditions would need to be met before analogue radio was switched to digital; what was currently hindering the growth of digital radio and how to remedy these things. The DRWG was asked to report its findings to the Secretary of State by the end of 2008.⁵⁷

With Channel 4 announcing it was pulling out of the 4 Radio Group, DAB in the UK almost came to a standstill, waiting on the DRWG's report into the medium's future.

Earlier, Heasman said that the prime motive behind the DRWG was to try and form a road map so that broadcasters were not having to pay dual working costs forever. "There's been a lot of pressure on the government, from the commercial radio sector who have sunk a lot of its money into DAB, to announce the switch off date of analogue radio and that will hopefully drive people by force to go out and buy DAB sets."

He could not have been more spot on. DAB received the greatest support it could hope for as the report, prepared by Chair of the DRWG Barry Cox, set out recommendations for a proactive drive to digital radio.

The report announced 2017 as the intended date to switch from analogue to digital radio.⁵⁸ For that date to happen, the group singled out certain criteria which must be met, including at least 50 per cent of total radio-listening needs to take place on digital platforms.

As of January 2009, 31.4 per cent of adults listened to radio every week on digital, which gives digital platforms a total share of radio listening of 18.7 per cent, according to figures from RAJAR.

DRWG has recommended that Ofcom should monitor the progress and that the definite date for migration would then be announced by the government - ideally two years after the criteria has been met.

Cox said: "We have always believed in the future of digital radio and now urge the industry, along with government and Ofcom to address the barriers to successful migration, so people can access even more choice and functionality in the future.

"Most importantly we need to see overall coverage for DAB to improve along with more focus to get motorists to adopt DAB so that it can be a real alternative to FM services."⁵⁹

Furthermore, DRWG proposed that the government relax some legislative and regulatory burdens placed on the industry, and called for more focus on encouraging motorists to adopt DAB in their cars. They also recommended that the government consider, with European colleagues, a tax exemption for digital radios, to enable cheaper sets.

Culture Secretary Andy Burnham said: "This is a crucial time for the radio industry. I am

⁵⁷ DRWG http://www.culture.gov.uk/reference_library/publications/5700.aspx December 2008

⁵⁸ DRWG http://www.culture.gov.uk/images/publications/DRWG_Final_Report.pdf

⁵⁹ Ibid

pleased that the Working Group has been able to achieve such consensus and has recognised that there needs to be a strong consumer proposition for digital radio.”⁶⁰

Burnham said that the DRWG's recommendations would be studied very carefully.

Media correspondent Ben Fenton said that when 50 per cent of DAB listenership is reached there would be a two-year notice period before the first stations start to migrate fully from FM or AM to DAB.⁶¹

This would include all BBC and commercial national stations as well as the major regional stations.

Fenton said: “Within three years of beginning the migration, all local and community radio stations would be expected to be ready for transmission on digital radio and the analogue spectrum would be available to be auctioned off by the government by 2020.”

He said the industry wholly welcomed the findings of the DRWG.

“This is not an if. This is a when, and that is very important.”

Simon Cole

Simon Cole, the chairman of the DRDB, said: “This is not an if. This is a when, and that is very important. We know what the timetable is.”⁶²

The positive steps initiated in the report came just in time for DAB. A mere month before its release (November 2008) there was a warning that commercial radio stations could abandon digital radio by Christmas if their demands were not met.⁶³

The stations wanted to strike a deal with the government and transmitter owner Arqiva to cut the cost of broadcasting simultaneously across FM and digital frequencies. The three largest commercial radio groups are GCap (Global), Kiss owner Bauer and Guardian Media Group.

Times writer James Ashton said that supporting dual broadcasts collectively costs commercial stations an extra £30 million (NZ\$78m). “Taken alongside a 15 per cent fall in advertising revenues, some groups are barely breaking even.”⁶⁴

However, he said a withdrawal from the technology is complicated because Ofcom made digital transmission a condition of FM licence extensions. “Commercial groups are hoping to break the link between digital and FM licences, as well as negotiate lower transmission fees,”⁶⁵ Ashton said.

⁶⁰ Shaw, Vicky <http://www.independent.co.uk/news/media/tv-radio/switch-to-digital-radio-could-happen-in-2017-1204428.html>

⁶¹ Fenton, Ben <http://www.ft.com/cms/s/74ff8ac-ce38-11dd-8b30-000077b07658>

⁶² Ibid

⁶³ Ashton, James http://business.timesonline.co.uk/tol/business/industry_sectors/media/article5162565.ece

⁶⁴ Ibid

⁶⁵ Ibid

DAB's future in UK

The one thing that all broadcasters agree on is the fact that DAB generally does not mean much to an everyday consumer. At the moment, other than the extra content a listener can get, there is no great rush to buy a DAB set as there is no threat that analogue is going to be switched off anytime soon, before 2017 at least.

“Consumers don't really care about DAB...They don't have an interest in that whatsoever.”

Lindsey Mack

Mack puts it bluntly by saying: “Consumers don't really care about DAB. They don't care what's inside their radio. They don't really care if it's DAB, DAB+ or DMB. They don't have an interest in that whatsoever. It's what comes out and what they can do with it is what matters.”

In the past, Mack said that people would look at the DAB sets and think: “‘Oh my gosh, it really is radio in a wooden box'. We've got to look at why 16, 17, 18-year-olds don't want it. It's quite clear why they don't. They don't want that big wooden box in their bedroom, they don't want to go into a shop and be seen buying it. So, I think there's a lot of work to be done making them look better as well.”

Heasman said that at the moment, no one knows what the future technology is going to be. He said that with the work he has been doing with the DRWG, they can only think of DAB in the short-medium term. “It's been a case that everything gets superbly converged and then everything will come out of a black box through the internet, but we have to look at the here and now and the medium-term future and what people can realistically listen to radio through at the moment.”

Cridland points out that he does not believe that the future of radio is just one thing. He sees the future being multi-platform. BBC Radio 1 for example is available on FM, DAB, online, on television (whether it is terrestrial or satellite). “The industry has always been thinking, ‘What's the one platform that is going to do everything that we want'. Frankly, there isn't just one. DAB is probably closest to old fashioned AM or FM in that it's available for free; it's available as you're driving around in cars; in mobile environments as well as at home, which clearly the internet can't do nor can television. But there are other ways of getting radio to the people as well. So it's not just DAB as being the only thing that we're going for.”

He said the reason that broadcasters are finding it hard financially is because they are spreading themselves on all the different platforms where people can listen to radio. “And all of a sudden their transmission costs are going up and up and up and that's because consumers *expect* radio to be on all of these platforms.”

Moving forward, another point that the broadcasters all agree on is a radio that is all-in-one – with DAB, DAB+ and DMB. Mack said it would lead to a nice European harmonisation that they are all very keen on. “We'd support it massively as we're already supporting it hugely. Doesn't mean we're going to change anything that we're doing but if it leads to better take-up of DAB around the world, then that can only be helpful for us and commercial radio.”

Cridland sees one of the biggest potential concerns is that the people who are in charge of DAB radio are radio people. He said that the thing that they end up doing is something they know how to do – launching more radio stations. But DAB is capable of more than that. “Whether it's

motion video, additional data services... You could actually get a copy of the biggest-selling newspaper in everybody's hands – broadcast over the air – so that anyone can read a newspaper every single day, or one that's totally updated every single second or every single minute.” He said there are so many exciting things that could be done through DAB but because of the fact that it is run by radio people, Cridland does not believe DAB is living up to its potential.

Furthermore, although he is a strong supporter of radio, Cridland says: “If the radio industry really truly believes that the future of radio is a speaker in a wooden box then the radio industry has a problem in the future.”

DAB+ for the future?

When broadcasters are given the choice between DAB and DAB+, the latter wins every time. The UK has, perhaps unluckily for them but fortunately for the rest of the radio world, been at the forefront of trialling, and at times enduring, DAB. The UK's roll-out of the medium and the subsequent 13 years that have passed since have been a good testing ground for the likes of Australia who is set to turn on DAB+ in 2009.

“...if you sit and wait for something new to come along you won't end up doing anything...”

Nick Piggott

In hindsight, the UK would have chosen DAB+ if it was in the offing, but in the 1990s DAB was the only choice. But, Piggott said, at least the UK had the determination to get going with it: “One of the problems that the Germans have is that they don't ever commit to doing anything because they are fearful that something new will come along, and the answer is, 'Yeah, something new will come along, but if you sit and wait for something new to come along you won't end up doing anything'.”

He likens the take-up of DAB to computers. “There will always be a better computer tomorrow, but if you don't buy a computer today then you will still be scratching on the stone scribes. It's that simple. You just have to say, we won't make a perfect decision but we can do something now that is going to work for us now.”

And in the case of DAB, they can migrate to DAB+. They do not need to rebuild transmitters or coverage, the only issue the UK has is that they have a great set of legacy DAB radios out there (eight million) that would need replacing, but that is the only thing.

Piggott said: “If you were starting again now, you'd do DAB+. DAB+ is DAB with just a different audio codec. It's exactly the same with the same technology. Again, we're paying the price for being the first people in the market.”

Heasman said that DAB+ has a lot of advantages over DAB. Transmission costs can be cheaper and it offers a lot more services. But again, he says the trouble is the several million DAB sets that have already been sold in DAB format that would not be able to pick up DAB+. “If there was a migration to DAB+ it would have to be in the long term.”

He said it is just another one of those things that the DRWG is looking into. Heasman said it is imperative to create a multi-standard set for across Europe which has DAB, DAB+ and DMB at least. Again, he sees this as a chicken and egg situation. Manufacturers will not introduce these radios until DAB+ is being broadcast in the UK. But DAB+ cannot be broadcast in the UK because there are so many DAB sets already in houses that would not pick up the DAB+ broadcasts.

“For that reason I don't think it's necessarily going to happen quickly. I think at the moment, clearly it's been superseded by other technologies. If you're looking fresh at a place like New Zealand, you probably wouldn't go for the older standard of DAB. However, DAB does everything we want it to do, in terms of more services, more robust reception and data services,” Heasman said.

Mack adds to this: “If you think about the 7.5 million sets already out there and what we would

do to all those poor people, then it wouldn't be a very good move for us to make. But over time, you just don't know. And we certainly will not be doing anything until they're in the market and they are everywhere. But I think that's a little bit away really.”

PART FOUR – Would DAB+ work in NZ?

When considering the benefits of DAB – sound quality, more services, better reception – the question arises whether this would even give added benefit to New Zealand's established analogue radio service.

In reality, New Zealand essentially has a wide diversity and selection of radio stations for listeners to tune into and as all of the UK broadcasters have pointed out, the sound quality of DAB in the UK is not brilliant, so what can DAB+ really offer to New Zealand?

Although Ofcom's Heasman confesses to have limited knowledge of New Zealand radio, he said one of the big attractions to DAB is the fact that it gives a lot of station choice but he sees New Zealand as already offering that. "If you don't have that potential carrot for DAB, and with four million people the economics are going to be even more difficult I would assume, especially if you have a very competitive commercial radio market.

"But that said, in America, although they have a great deal of choice in radio markets there, its satellite-subscription radio has actually done OK even though you would have thought well, 'How many formats are there that don't already exist on terrestrial FM radio in the States?' There seems to be this market for satellite radio in the US. Maybe that's because it's a different model of subscription and it's commercial free."

Mack said it depends what New Zealanders are listening to and whether they are asking for more stations, with more content and for a niche market. "I think you'd really need to look at that and see what people really want. When the BBC launched we had to do a big public value exercise, which took a year, where you go out and ask people what they want. Do they want digital stations? You need to do it, especially if you want plausible listening."

However, other than station choice and sound quality, Heasman warns that if New Zealand does not embrace DAB+ or some type of digital radio system, in the long-term it does risk analogue radio being an old-fashioned medium that broadcasters can do nothing with.

On the other hand, Heasman said that Australia's roll-out of DAB+ is going to be an excellent case study for New Zealand especially because they too have a wide choice of stations on FM, much like New Zealand. Or, he said: "You could also just sit back and wait what happens on the delivery of radio on the net. I think that would be a legitimate option as well."

Cridland also points to Australia as a good test case to watch. He said that because they now know the mistakes that were made in the UK in the past, they will not be making them there. "Joan Warner has been asking all the right questions, making sure that they've learnt from the UK experience. So, just sort of making sure that there is additional content on there. Making sure that it's not just new forms of radio as well, but actually exploring all the other benefits."

He said that Commercial Radio Australia had been really forward-looking in terms of how they could make radios look sexier, how they could add visuals on and how to clearly monetise from it, from the UK's point-of-view.

Cridland said: "There's a lot of changes they've made to the things we're doing here. In a nicely backward, compatible way, which has actually meant that they're really well placed at getting the benefits that we have done to the market here."

That includes bringing down the price of radio receivers, the price of chip-sets that go into them and doing a lot of work around what the content is. “They can really ride on our coat tails and we really do hope that they will do some fantastic work to really push DAB in Australia, because then absolutely New Zealand will follow suit. China will follow suit and all of the Asian region should follow suit if they see fantastic success there.”

Cridland hopes that Australia does not just launch dozens of different classic rock stations. “That's what kind of happened here for a little bit, but thankfully we've relaxed back from the surplus of classic rock stations, but hopefully they don't end up doing that and they realise radio needs to be more than just a speaker in a box in the future.”

“If listeners are...satisfied...you gotta ask where the drive and demand is coming from.”

John Heasman

Heasman has a challenge to those wanting to start up DAB+ in New Zealand: “I must admit, if there's not a lot of people wanting to set up new stations in New Zealand... If you've got those kind of formats already, and there aren't big unfulfilled format gaps in the market, then you do have to ask where the drive is. If listeners are well satisfied by their choice of radio stations, you gotta ask where the drive and demand is coming from.”

Mack is more encouraging by saying: “Have faith. Go for it.” She does warn, however, that if broadcasters do not spend money on decent content, like add-ons and services such as slideshows, they will be in trouble. “I think you've got to spend and you've got to provide something that's different to what the audience is getting at the moment. And basically enrich their listening and make anything you're offering more compelling... You will get your investment back eventually but to drive the audience you have to do that. And you have to get really good-looking devices. That is quite key I think as well.”

She adds: “If you can come back to us with a solution to get DAB in cars – that would be great. We'd be really happy over here.”

Conclusions and recommendations

While the acquisition of radio from analogue to digital in the United Kingdom has been more of a challenge than what the broadcasters would like, slowly, but surely, DAB is taking over.

Around eight million Britons have bought a DAB radio set, so not only are they being rewarded with more station choice, improved reception and in some cases a better quality of sound, but it also means they are ready to be part of the proposed digital switchover in around 2017.

Like most things in the UK, DAB has had a trial by media. It has spent a lot of time filling space in newspapers, with some critics questioning its lifeline. The somewhat ubiquitous pessimistic attitude towards digital radio in the UK comes from media commentators, opinion columns and, in some cases, heads of media organisations.

However, since the analogue switch-off date was proposed by DRWG in December 2008 the articles seem to have disappeared.

DAB has been ideal for the UK as it has allowed broadcasters to establish new national radio stations. This was important because the only national stations in the UK in the past, other than a national classical station, were from the BBC. Digital radio has allowed successful regional stations, and new stations, to go national on DAB. Of course it has also allowed other stations that would not have been given the chance on a loaded FM dial, to broadcast on DAB.

From talking in-depth with UK broadcasters who are at the forefront of DAB, the most practical advice given was that someone in New Zealand needs to make a decision as to the future of radio. Whether New Zealand chooses to adopt DAB+ or HD Radio is not entirely relevant: the point is someone has to decide whether the future is digital.

Heasman warns those not adopting digital radio to be careful of being left behind in the radio world by not following the natural process of moving from analogue to digital technology. And Piggot said that broadcasters who keep waiting for something better to come along will also miss out and end up doing nothing.

The reason HD Radio appeals to commercial broadcasters over DAB+ in New Zealand is because it uses FM frequencies they already own, according to Olphert. And if the broadcasters did opt for DAB they would face fresh advertising competition from new radio stations.

Clearly there are still uncertainties over which service to use, how best to introduce it and control growth, what impact it will have on existing stations, and what will happen to the existing market when new stations are created.

But fortunately, like Australia, New Zealand has the UK's model of trial and error to use as a blueprint for digital radio. And more so for New Zealand, Australia will be a good example of how to start up and run DAB+ in the 21st Century.

A drawback of DAB in the UK has been the fact that from the beginning broadcasters have had to pay dual transmission costs. If New Zealand broadcasters are able to come to a better deal with transmitter/multiplex owners then DAB might become a more popular choice rather than the current arrangement in the UK.

Another obstacle that the UK has not been able to solve is how to sell DAB to under 24-year-olds, a generation brought up on CDs, music downloads and iPods. The withdrawal of popular broadcaster Channel 4 from DAB just before it was set to launch into the digital radio market took away the UK's hopes of drawing in a youth audience.

The answer in New Zealand could be to run an off-shoot station, solely on DAB, from popular stations such as RadioWorks' The Rock or The Radio Network's ZM, to get the younger demographic out there purchasing a DAB+ radio set. The extra content, that needs to be made specifically for a youth market to make them want to listen, needs to be solely on DAB for it to be successful. Broadcasting it on FM as well defeats the purpose.

One of the downfalls of DAB in the UK, even after 13 years, no radio station in the UK has been able to make money from it. That is not so much of an issue when you are the public broadcaster, but because there are many commercial radio stations in New Zealand who are driven by the dollar, the choice comes down to whether they want to enrich their listeners experience through DAB+ or not.

However, it is how the broadcaster uses the VDU and advertising to its advantage that would make it commercially viable. As mentioned in the body of this paper, Sony PSP sponsored a Virgin radio station for six-months instead of running ad breaks. Utilising the visual display unit through rolling advertisements is also essential for added revenue. Cridland said the DAB+ set is a tremendous place to advertise and for experimenting new ways to earn.

If and when New Zealand does adopt digital radio, the UK media figures highly recommend that time and effort is put into the additional content that makes DAB what it is. To have up-to-the-minute information on the visual displays, to have the correct songs, artists and tid-bit of information about the songs scrolling is important. These things will keep DAB fresh, exciting and interesting. The digital radio experience has proven in the UK to be more enriching through an active, informative VDU.

Furthermore, working alongside the DAB+ radio manufacturers is imperative for anyone breaking into the digital market. For the UK it has become an essential part of the broadcasters' vision of making the most out of the DAB radio sets. The same goes with keeping added pressure on mobile and car manufacturers to add DAB+ to their products.

While Heasman questioned New Zealand's intentions for wanting or needing DAB, Mack encouraged the radio industry to go out and see what New Zealanders actually want. Such a survey would find out what they, the listeners, really want from their radio-listening experience rather than what the broadcaster *thinks* they want. This has been a valuable tool utilised by the BBC in the past.

If New Zealand radio is to move and evolve into the digital era a decision needs to be made before the FM licenses expire in 2011. A proactive approach on which digital option to use is imperative rather than passively watching while other countries dominate in radio technology.

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