

# The digitalisation of radio

## **CONTENTS**

Introduction 3

DAB Dan overview 5

**Part**

## **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 2011

giving up on the service.<sup>7</sup>

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:<sup>8</sup>

- 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 on 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.





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

## **PART TWO – DAB in the UK**

### **DAB terminology:**

Key terms when it comes to DAB:





Enders Analysis added that the high cost o

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

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,

*“...t*

### **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 B









## **Launching DAB**

When DAB was introduced into Europe there was an expectation that all broadcasters would support

something else, 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 era

## **Cost of DAB**

The cost of DAB is a highly se

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

Although, a

**Pr**

## **Consumer uptake of DAB sets**

Establishing a new format in any technology is a challe

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

## **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 dud distribution charges for analogue and DAB with no immediate gain. Currently, this will only cease when analogue is switched off. (This idea





Piggott said: "When people say to me, 'Oh, it's dreadful that digital

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 penat

## **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 of 2008.

Ofcom's Heas

standard commercial radio and their margin could be 35 per cent to 40 per cent. All of a sudden it's profn

**Int**

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 ne

## **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 right crossroads at the moment. He said that the out



## **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 a



## **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 crunch 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 mul

news for radio in the

reporting and commentary, it is easy to lose track of the fact that DAB is a pretty good consumer story. On 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 li



pleased that the Working Group has been able to achieve





motion video, additional data services... You could actually get a copy of the biggest-selling newspaper in everybody's

## **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 trial

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

That includes bringing down the pri

## **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

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

## Works cited



Ofcom                                      Ofcom statement on Channel 4 and DAB, Oct 10, 2008  
[http://www.ofcom.org.uk/media/news/2008/10/nr\\_20081010](http://www.ofcom.org.uk/media/news/2008/10/nr_20081010)

Piggott, Nick                              No more Channel 4 DAB, Oct 11, 2008  
<http://nick.piggott.name/blog/2008/10/11/no-more-channel-4-dab/>

Plunkett, John                              Bid to cut local radio content rejected, Feb 07, 2008  
<http://www.guardian.co.uk/media/2008feb/07/commercialradio.ofcom>

Plunkett, John                              Bumper Christmas for digital radios, Jan 23, 2008  
<http://www.guardian.co.uk/media/2008jan/23/digitaltvradio.radio>

Plunkett, John                              Double blow for DAB radio, Feb 11, 2008  
<http://www.guardian.co.uk/media/organgrinder/2008feb/11/doubleblowfordabradio>

Plunkett, John                              Is DAB radio the next Betamax, Jan 29, 2008  
<http://www.guardian.co.uk/media/2008jan/29/radio.digitaltvradio?gusrc=rss&feed=media>

Robinson, James                              'It's been naval-gazing for too long', March 30, 2009  
[www.guardian.co.uk/media/2009mar/30/interview-stephen-miron/](http://www.guardian.co.uk/media/2009mar/30/interview-stephen-miron/)

Schwarz, Natalie                              Why we must stick with digital radio, Feb 1, 2008  
<http://www.guardian.co.uk/media/2008feb/01/digitaltvradio.radio?gusrc=rss&feed=media>

## Websites

BBC

[www.bbc.co.uk/rad](http://www.bbc.co.uk/rad)