An Overview of the Digital Radio Legislation

Moses Kakaire reviews digital radio policy and the effect of the Broadcasting Legislation Amendment (Digital Radio) Act 2007.

Introduction

The *Broadcasting Legislation Amendment (Digital Radio) Act 2007* (the **Digital Radio Act**) commenced operation on 28 May 2007. The Digital Radio Act will facilitate the introduction of digital radio broadcasting services in Australia.[1]

This paper provides an overview of some of the key features of the Digital Radio Act and their implications for radio broadcasters and consumers.

The Benefits of Digital Radio

Free to air, broadcast radio is the last of the major media/communications sectors to move to a digital transmission platform. Digital radio will be the most fundamental advance in radio broadcasting technology in Australia since FM stereo radio and will provide benefits like:

- *better quality audio* - with the potential for CD quality sound;
- *interference free reception;*
- *ease of tuning* - listeners can search for stations by name rather than by a frequency;
- *additional radio stations* - digital radio uses spectrum more efficiently and so broadcasters will be able to provide multiple audio channels at the same time;
- *multimedia capability* - digital radio allows the transmission data, text and images in addition to audio channels; and
- the ability *to pause, rewind and record live radio*.[2]

Policy Considerations

The Government first announced its digital radio policy in October 2005.[3] That policy announcement and the Explanatory Memorandum to the *Broadcasting Legislation Amendment (Digital Radio) Bill 2007* and the *Radio Licence Fees Amendment Bill 2007* (the **EM**) suggest that the Government has had to consider and reconcile some difficult policy issues such as:

- *Which technology to adopt* - there are several competing technologies capable of delivering digital broadcast radio.[4]
- *All the technologies are new* - digital radio broadcasting technologies are still relatively new and in the process of being fine-tuned.
- *Spectrum availability is currently low* - most of the spectrum, suitable for digital radio services in Australia, is currently used for other broadcasting or communications uses.[5]
- *The incumbent sector is very large* - there are 270 commercial radio broadcasting services, over 350 community radio licences issued, 2 national radio broadcasters (ABC and SBS) with a number of services each and approximately 2000 narrowcasting radio services.
- *Will it be a 'supplementary' or 'replacement' technology* - a question that the Government has had to consider because of factors such as limited spectrum and the size of the incumbent sector.
- *How to ensure that digital radio delivers new and innovative programming* - the Government has identified this as the key driver that will lead to the consumer take up of digital radio.
- *Equity of treatment for regional areas* - ensuring that people living in rural, regional and remote areas also get access to digital radio services even though costs for deploying digital services in those areas may be disproportionately higher than in metropolitan areas.
- *Maintaining the traditional distinctions between TV and radio* - digital radio technology is capable of transmitting still and moving images and so has the potential to blur the boundaries between radio and TV.[6]

These policy considerations help to explain the way in which the Government has chosen to implement digital radio broadcasting services in Australia.

Phased Introduction

The 'digital radio start-up day' will be declared, by the Australian Communications and Media Authority (**ACMA**) on a licence-area-by-licence-area basis.

However, ACMA must ensure that the digital radio start-up day in the licence areas of Sydney, Melbourne, Brisbane, Perth, Adelaide and Hobart (each known as a **metropolitan licence area**) is **not later than 1 January 2009.**[7]

No ultimate date has been set for the other licence areas (each known as a **regional licence area**). ACMA must ensure that the digital radio start-up day for each regional licence area is the day specified for that licence area in a legislative instrument made by the Minister.[8]

ACMA will have to be satisfied that sufficient action has been undertaken in each licence area, in respect of a number of planning and licensing requirements, before making a declaration of the type referred to above.

On 27 September 2007, ACMA released, for public comment, draft digital radio channel plans and draft frequency allotment plan variations for the metropolitan licence areas. These plans contain details such as the proposed number and categories of transmitter licences for digital radio services, transmission frequencies and associated technical data for the main transmission sites.[9]

Priority for the Major Sectors

Spectrum constraints mean that it is not currently feasible for the entire incumbent radio sector to provide digital radio broadcasting services. Therefore, the Digital Radio Act only makes provision for licensees of:

- commercial radio broadcasting services;
- national radio broadcasting services; and
- services provided pursuant to a 'designated community radio broadcasting licence'.

A designated community radio broadcasting licence is a licence that is used to provide community radio broadcasting services in the broadcasting services bands and, amongst other things, has a licence area that is (or is deemed to be) the same as the licence area of a commercial radio broadcasting licence.[10]

The effect of this definition is that (for the foreseeable future) only those licensees who are licensed to provide 'wide coverage' community radio broadcasting services will be entitled to provide digital radio broadcasting services.

Assistance With Capital Costs

The Government has agreed to provide financial assistance to the community radio sector

($10.5 million over 4 years) and the national radio broadcasters to help licensees acquire infrastructure so that they can begin digital radio broadcasts by 1 January 2009.[11]

The Government will also provide assistance for the commercial radio sector but in a different form to the other sectors.[12] For a period of 6 years from the digital radio start-up day (and provided that all commercial radio broadcasting licensees in a licence area continue to provide at least one digital radio broadcasting service) no new digital commercial radio broadcasting licences will be issued in that licence area.[13] This 6 year moratorium is designed to ensure that commercial radio broadcasting licensees have a 'level of stability and certainty during the digital radio investment phase'.[14]

The Technology Platform

The Government has adopted a digital radio technology platform known as Eureka 147 or Digital Audio Broadcasting (**DAB**). DAB is the most mature and widely deployed digital radio broadcasting platform in the world. It has been adopted throughout Europe, Canada and a number of Asian countries.[15] It has also been trialled since 2003 in Sydney, by Commercial Radio Australia (**CRA**),[16] and in Melbourne, by a transmission services provider.

DAB uses radiofrequency spectrum more efficiently than analogue AM/FM radio. AM/FM radio requires a separate frequency channel for each radio station. With DAB, the signals of several radio stations are combined (using infrastructure known as a **multiplex**) into a single wideband channel (called a **DAB ensemble**) which is then fed through to a broadcast transmitter for broadcast.[17]

The audio compression standard used in the DAB platform has recently been updated through the adoption of the advanced audio codec (**AAC+**) standard. AAC+ makes it possible to fit 9 separate radio stations into one DAB ensemble. The updated version of DAB using this new compression standard has been christened DAB+.[18]

However, in many regional areas, DAB may not be the most cost effective digital radio platform because of extended coverage requirements. The EM suggests that other digital radio platforms such as Digital Radio Mondial (**DRM**) may be more suitable for regional licence areas.[19]

Before 1 January 2011, the Minister must cause a review to be conducted into, amongst other things, the 'relative merits' of using various terrestrial and satellite technologies that are capable of transmitting digital radio broadcasting services to regional licence areas.[20]

Shared Transmission

DAB uses a shared transmission platform which removes the need for broadcasters to operate individual broadcast transmitters for their digital radio services.

Instead, broadcasters will need to get access to one of the multiplexes in their licence area. Access to, and control of, multiplexes will be one of the central features of the new digital radio regime. A new category of licence known as a **'digital radio multiplex transmitter licence'** has been created to facilitate this.[21]

The holder of a digital radio multiplex transmitter licence will be subject to several licence conditions (including those which require the recognition of certain rights of access seekers) to ensure that eligible incumbent radio broadcasters are able to access multiplexes on a fair and non-discriminatory basis. These obligations are discussed below.

Minimum Guaranteed Rights Of Access

According to the EM, there will be enough multiplexes in each licence area to accommodate the transmission needs of all eligible incumbent radio broadcasting licensees with each licensee entitled to use a minimum level of multiplex transmission capacity.

For the licensees of commercial, designated community and (in some cases) national radio broadcasting services, this entitlement is known as a **'standard access entitlement'**. In practical terms, a standard access entitlement is an entitlement to access a multiple of one-ninth of the total transmission capacity of a multiplex.

Digital radio broadcasting services will be provided initially using 3 different categories of multiplexes designed to carry different combinations of services as follows:

- Category 1 multiplexes will have capacity for up to 7 digital commercial radio broadcasting services (with each licensee having a standard access entitlement of one-ninth of the total multiplex capacity) and the remaining multiplex capacity (two-ninths) will be for sharing amongst digital community radio broadcasting services as determined by their representative company;[22]
- Category 2 multiplexes will have capacity for up to 5 digital commercial radio broadcasting services (with each licensee having a standard access entitlement of one-ninth of the total multiplex capacity), 2 digital national radio broadcasting services (with each licensee having a standard access entitlement of one-ninth of total multiplex capacity) and the remaining multiplex capacity (two-ninths) will be for sharing amongst digital community radio broadcasting services as determined by their representative company;[23] and
- Category 3 multiplexes will be reserved for digital national radio broadcasting services.

A digital radio multiplex transmitter licence for a category 1 or 2 multiplex which is subject to the standard access entitlements of eligible broadcasters will be known as 'foundation digital radio multiplex transmitter licence'.[24]

If the transmission capacity of a foundation digital radio multiplex exceeds the aggregate needs of all eligible broadcasting licensees (i.e. it exceeds the sum of the standard access entitlements for that multiplex), there is scope for interested broadcasting licensees to acquire additional multiplex capacity (known as an 'excess-capacity access entitlement').[25] However, a digital commercial radio broadcasting licensee is not permitted to have more than two-ninths of multiplex capacity in a licence area.[26]

If the total multiplex capacity of the foundation multiplexes in a licence area is enough to fulfil all the standard access entitlements of the digital commercial radio broadcasting licensees, either in existence or likely to come into existence, ACMA may issue a non-foundation digital radio multiplex transmitter licence. Such a licence will not be subject to standard access entitlements.[27]

First Right to Control the Multiplex Transmitter Licence

Broadcasting licensees entitled to access a Category 1 or 2 foundation digital radio multiplex will also have the first right to jointly hold the licence for that multiplex.

To exercise this right, they will have to establish a separate joint venture company, in each case, to apply for and hold the relevant licence.[28] Designated community radio broadcasting licensees will be able to participate in the joint venture company through their representative company.

If no applications are made by an eligible joint venture company or an application of an eligible joint venture company is rejected, ACMA can allocate that digital radio multiplex transmitter licence under a price-based method.[29] Non-foundation digital radio multiplex transmitter licenses are to be issued under a price-based method.[30]

The Multiplex Access Regime

Licensees of foundation and non-foundation Category 1 and 2 digital radio multiplexes will be subject to access obligations set out in Division 4B of Part 3.3 of the *Radiocommunications Act* 1992 (the **Radcomms Act**). These access obligations will be regulated by the Australian Competition and Consumer Commission (ACCC).

Within 3 months of the issue of Category 1 or 2 digital radio multiplex transmitter licence, the licensee will have to submit an access undertaking to the ACCC.[31]

The access undertaking must provide, amongst other things, that the digital radio multiplex transmitter licensee or a person authorised to operate the multiplex transmitter under licence will comply with the terms and conditions contained in the undertaking relating to various access entitlements

of eligible broadcasters such as the standard access entitlements and excess-capacity access entitlements.[32] Such terms and conditions may deal with subject matter such as the price of access to multiplex capacity.

The ACCC can approve or reject an access undertaking. If approved, the access undertaking remains in force for as long as the digital radio multiplex transmitter licence remains in force and continues in effect even if that licence is transferred. Compliance with an access undertaking can be enforced by the Federal Court on application by the ACCC or a party whose rights are affected by a contravention of that access undertaking.[33]

If the ACCC rejects an access undertaking, it may specify alterations which, if made by the licensee, will lead to the ACCC's acceptance of the undertaking.[34] Alternatively, the ACCC may (by written notice to the licensee) determine that an undertaking in the terms specified in the ACCC's written determination, *is* the access undertaking in relation to that licence.[35] The decisions of the ACCC which are discussed above can be reviewed by the Australian Competition Tribunal on application by a person whose interests are affected by such decisions.[36]

The ACCC is also required to determine criteria that it will apply in deciding whether to accept an undertaking or variations to an undertaking[37] and to develop procedural rules to govern the practice and procedures that it will follow in performing its functions or exercising its powers in relation to the digital access radio regime.[38] On 21 September 2007, the ACCC issued a discussion paper seeking views of stakeholders in relation to various aspects of the access regime described here. That discussion paper also contains the ACCC's draft decision making criteria and draft procedural rules.[39]

Expected Programming Changes

The most important changes from the introduction of digital radio broadcasting are likely to be in the area of programming. One-ninth of the transmission capacity of a digital radio multiplex is analogous to 128 kilobits per second of data transmission capacity. This transmission capacity will allow broadcasters to broadcast more than one audio channel at the same time.

CRA reports that:

> *each broadcaster will now have the ability to … split their signal to offer two or three audio channels, or broadcast a combination of better than FM quality sound plus lots of associated data such as text or images.*[40]

To that end, it will not be compulsory for radio broadcasters to simulcast their analogue radio programs in digital mode although it is reasonable to assume that most broadcasters will use some of their digital transmission capacity to simulcast their analogue programs to ensure some continuity of services to their audiences.

However, if a commercial radio broadcasting licensee acquires more than one-ninth of multiplex capacity in any licence area (i.e. an excess-capacity access entitlement), it will not be able to use the additional capacity to simulcast more than 50% of the program content of its own analogue service or another analogue service in the licence area with the exception of certain types of programs like advertising and promotions or news and weather bulletins.[41] This is designed to encourage commercial radio broadcasters with excess-capacity access entitlements to use their additional capacity to provide new digital radio programming.

Digital radio broadcasting licensees will also be permitted to broadcast non-audio content (defined as **'digital program enhancement content'**) which is:

- in the form of **text**,
- in the form of **'still visual images'** (i.e. no video-type services);
- **as specified by the Minster** in a legislative instrument; or
- in any c**ombination of the above forms.**[42]

CRA recently showcased a digital radio-enabled mobile phone which allows users to view, navigate and store visual images broadcast by digital radio stations using DAB+.[43]

There are many potential applications of digital program enhancement content such as displaying news or weather updates, artist and track details and competitions. According to the EM:

> *The power given to the Minister to broaden … the forms of content that could be provided … allows for additional types of content to be brought within the meaning of 'digital program enhancement content'. This may allow, for example, consideration to be given to specifying services such as animation to be provided as 'digital program enhancement content'.*[44]

The Digital Radio Act has also amended Schedule 6 of the *Broadcasting Services Act* 1992 (**BSA**) to establish a new category of service to be known as a **'restricted datacasting service'**. Holders of a restricted datacasting licence will be able to use the DAB digital radio platform to provide services other than traditional radio and TV programming.

The Minister will be able to specify, in a legislative instrument, particular types of content that must not be provided by a restricted datacasting licensee. In the absence any such legislative instrument at this stage, the EM states that restricted datacasting license holders will be subject to the same genre restrictions as those that apply to licensees of datacasting services. In other words, the services that could be provided under a restricted datacasting licence include niche services like:

- information-only programs;
- educational programs;
- interactive computer games; and
- Parliamentary broadcasts.[45]

During the 6 year moratorium period, a person is prohibited from being in a position to exercise control of both a commercial radio broadcasting licence and a restricted datacasting licence.[46]

Legislated reviews of the digital radio regime

Finally, the Government has not legislated for a switch-off date for analogue radio. This is consistent with its view that digital radio is likely to be a supplementary, rather than replacement technology, for analogue radio.

The author notes that this view is not likely to be popular with some licensees who have already began or are about to invest in the rollout of digital radio services. There is scope for this issue to be investigated further since, before 1 January 2014, the Minister will be required to cause reviews to be conducted in relation to:

the development of various terrestrial and satellite technologies capable of transmitting digital radio broadcasting services and restricted datacasting services in Australia, the implementation of those technologies in foreign countries and the operation of the BSA in relation to the licensing and regulation of digital radio broadcasting services and restricted datacasting services;[47] and

spectrum issues for digital radio broadcasting and restricted datacasting services, the availability of additional frequency channels for such services and the operation of the Radcomms Act in relation to the licensing and regulation of digital radio broadcasting and restricted datacasting services.[48]

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(Endnotes)

1 The Digital Radio Act amends the *Broadcasting Services Act 1992* (Cth) (**BSA**), the *Radiocommunications Act 1992* (Cth) (Radcomms Act) and the *Trade Practices Act 1974* (Cth) (**TPA**).

2 For more information, see Digital Radio Australia website at http://www.digitalradioaustralia.com.au.

3 http://www.minister.dcita.gov.au/media/media_releases/framework_for_the_introduction_of_digital_radio.

4 The different technologies are discussed in the *Report of the Digital Radio Study Group* (March 2003) at http://www.dcita.gov.au/__data/assets/word_doc/23361/DSRG_report_March_2004.doc. See also http://en.wikipedia.org/wiki/Digital_radio.

5 Explanatory Memorandum accompanying the *Broadcasting Legislation Amendment (Digital Radio) Bill 2007* and the *Radio Licence Fees*

Amendment Bill 2007, p 8.

6 For example, the digital transmission platform adopted in South Korea (Digital Multimedia Broadcasting) carries a combination of digital TV, digital radio and data channels.

7 BSA ss 8AC(3)(a).

8 BSA ss 8AC(3)(b).

9 http://www.acma.gov.au/WEB/STANDARD/pc=PC_310504.

10 BSA ss 8AA and 8AD(3).

11 These funding commitments are in the Federal *Budget 2007-08* at http://www.budget.gov.au/2007-08/bp2/html/expense-05.htm.

12 The Government's 2003 policy announcement (see note 2) states that the Government might, in the future, provide capped financial assistance for commercial radio broadcasters in regional areas.

13 BSA ss 35C and 35D(2).

14 Explanatory Memorandum accompanying the *Broadcasting Legislation Amendment (Digital Radio) Bill 2007* and the *Radio Licence Fees Amendment Bill 2007* p. 39.

15 http://www.wohnort.demon.co.uk/DAB/index.html.

16 CRA is the industry body for the commercial radio sector and its trial is being conducted as a joint venture with commercial radio stations and the ABC and SBS. For more on its trials, see http://www.commercialradio.com.au.

17 http://en.wikipedia.org/wiki/Digital_Audio_Broadcasting.

18 CRA, "Australia to use DAB+ for Digital Radio Rollout", 14 March 2007 at http://www.digitalradioaustralia.com.au/index.cfm?page_id=1001&display_news_id_1129=1002. More information on DAB+ can be found on the website of the technical standard setting body WorldDMB at http://www.worlddab.org.

19 Explanatory Memorandum accompanying the *Broadcasting Legislation Amendment (Digital Radio) Bill 2007* and the *Radio Licence Fees Amendment Bill 2007* p 6. DRM is currently being trialled by Broadcast Australia in Canberra. DRM does not have all the features of DAB and is said to be a narrowband service with the audio quality of a mono FM radio service.

20 BSA s 215A.

21 Radcomms Act s 5.

22 Radcomms Act s 118NR.

23 Radcomms Act s 118NS.

24 Radcomms Act s 5.

25 Radcomms Act .s 118NT.

26 Radcomms Act s 118NV.

27 Radcomms Act ss 102F and 118NU.

28 Radcomms Act ss 102C(2) and 102D(2).

29 Radcomms Act ss 102C(3) and 102D(3).

30 Radcomms Act ss 102C(4) and 102D(4).

31 Radcomms Act s 118ND.

32 Radcomms Act s 118NL and 118NM.

33 Radcomms Act ss 118NZ and 118P.

34 Radcomms Act ss 118NF(4).

35 Radcomms Act ss 118NF(5).

36 Radcomms Act s 118PE.

37 Radcomms Act s 118H.

38 Radcomms Act s 118L.

39 http://www.accc.gov.au/content/index.phtml/itemId/798925.

40 Above n 18.

41 BSA ss 43D(3) and 43D(4).

42 See the definition of 'digital program enhancement content' BSA. s 6(1).

43 http://www.commercialradio.com.au/index.cfm?page_id=1001&display_news_id_2400=1039.

44 Explanatory Memorandum accompanying the *Broadcasting Legislation Amendment (Digital Radio) Bill 2007* and the *Radio Licence Fees Amendment Bill 2007*, pp 38-39.

45 Explanatory Memorandum accompanying the *Broadcasting Legislation Amendment (Digital Radio) Bill 2007* and the *Radio Licence Fees Amendment Bill 2007* p. 56.

46 BSA s 54B.

47 BSA s 215B.

48 BSA s 13B.

Radical Privacy Law Reforms Proposed

Dr Gordon Hughes and Tim Brookes discuss the Australian Law Reform Commissions recent discussion paper on Australian Privacy Law.

Introduction

On 12 September 2007, the Australian Law Reform Commission (**ALRC**) released a 2,000 page discussion paper entitled *Review of Australian Privacy Law*. The discussion paper sets out the ALRC's preliminary views on how Australia's complex privacy laws could be revamped and calls for comments from interested parties by 7 December 2007. A final report to the Attorney General is due by 31 March 2008.

Traditionally, it has been accepted that there is no right to privacy at common law in Australia although some recent decisions have introduced an element of uncertainty. There is, however, extensive privacy legislation. The legislative framework is essentially embodied in the *Privacy Act 1988* (Cth) (**Privacy Act**), complemented by the *Spam Act 2003* (Cth), the *Do Not Call Register Act 2006* (Cth), segments of the *Telecommunications Act 1997* (Cth) and *Telecommunications (Interception and Access) Act 1979* (Cth) and a range of State and Territorial laws, regulations and policies.

The Privacy Act has been amended on numerous occasions, and imposes separate regulatory regimes on the handling of personal information held by Commonwealth government agencies and the private sector, along with specific rules regulating the handling of tax file numbers and certain credit information.

Unquestionably, the existing system has become cumbersome and confusing.

Consolidation Of Privacy Principles

Personal information held in the Commonwealth public sector is regulated by the Information Privacy Principles set out in Section 14 of the Privacy Act. Information held in the private sector is regulated by the National Privacy Principles set out in schedule 3 of the Act. There are some inconsistencies between the two sets of regulations and, in the case of Commonwealth outsourcing to the private sector, a service provider may have a statutory obligation to comply with the National Privacy Principles and a contractual obligation to comply with the Information Privacy Principles. The ALRC recommends that these two sets of privacy principles be consolidated into new 'Unified Privacy Principles'. The rationalisation of the currently inconsistent principles would result, amongst other things, in a limited right for individuals to deal with government agencies anonymously, more robust rules dealing with the handling of sensitive information in the public sector and constraints on public sector agencies transmitting personal data overseas. Furthermore, the ALRC urges clarification as to what amounts to 'consent', clearer rules governing the handling of third party information, more flexibility to disclose information in urgent situations, greater restraints on the collection of irrelevant information and a more efficient process to enable the correction of inaccurate information.

Embracing New Technologies

The ALRC has recognised the need for the Privacy Act to be adaptable so as to address privacy issues posed by new technologies. It notes, in particular, challenges presented by relatively recent technology such as spyware, cookies, radio frequency identification technology and biometric information technology. To guard against any legislative reform becoming prematurely outdated, the ALRC stresses the importance of the legislation remaining technologically neutral. The report also encourages the adoption of – and public education about – privacy enhancing technologies. The ALRC further recommends that email and IP addresses be unambiguously protected by the legislation as 'personal information', and the report raises the possibility of the introduction of a 'take down notice' scheme requiring website operators to remove information which constitutes an invasion of an individual's privacy.