

Bright Lines in the Spectrum: Datacasting as a Case Study in Regulating Convergent Technology

Joanna Davidson examines the new legislative framework for datacasting.

Following the intense lobbying and negotiating effort which culminated in the last-minute passage of the *Broadcasting Services Amendment (Digital Television and Datacasting) Act 2000* (Cth) ("Digital Act") in the Senate on 29 June 2000, the Minister for Communications, Information Technology and the Arts commented in a media release

"Digital TV and datacasting must appeal to consumers if it is to succeed – ordinary Australians must be given a compelling reason to buy a new television set or a new set top box".¹

The final form of the Digital Act encapsulates the enduring challenges to government when regulating emergent, convergent, technologies. This article will examine the ramifications of the datacasting regime, addressing the question of whether Senator Alston's "compelling reason" to take up the new services has been legislated out of existence.

DATACASTING AND CONVERGENCE

Datacasting technology is an example of tertiary convergence: the further merging of the IT, media and telecommunications sectors and their broad extension into households, with the addition of external services such as retail and finance businesses, all happening on televisions, a virtually ubiquitous piece of consumer technology.² It therefore has *all* the attributes of a "services sector restructuring enabled by digitalisation", the definition of convergence adopted by the Department of Communications, Information Technology and the Arts.³ It is potentially the definitive "sticky" environment.

This technology has significant advantages for the development and delivery of broadband content, utilising the potential of the broadcasting service bands to be the "big pipe" needed to redress the spectrum drought identified by the National Bandwidth Inquiry. Datacasting has the potential to eliminate

the need for a physical connection to every home to deliver broadband services, posing a challenge to high-speed Internet carriage by cable or DSL; as well as increasing Internet penetration across the "digital divide".⁴

This is the blue sky picture, the sort of philosophy espoused in the UK, whose Minister for E-Commerce, Patricia Hewitt, has stated that:

"For us, the issue is how do we enable people to access the greatest richness of internet content at any time, using any device".⁵

However, datacasting is itself a term largely unique to Australia, with similar services overseas still mostly confined to the status of "vapourware".

As this article will illustrate, the Digital Act has probably defined datacasting into dullness, destining it to fulfil the prophecy of being:

"The first broadcasting technology that is in search of a business case, rather than responding to one".⁶

DEFINITIONAL PROBLEMS

Datacasting was initially defined in the *Television Broadcasting Services (Digital Conversion) Act 1998* (Cth) ("Digital Conversion Act").⁷ Essentially, the definition restricts a datacasting service to digital information transmitted in the broadcasting service bands that is *not* a broadcasting service. This distinction is a crucial one which informs the regulation of datacasting in the Digital Act, and is lumbered by what the Productivity Commission described as a:

"legacy of quid pro quos [which] has created a policy framework that is inward looking, anti-competitive and restrictive. As boundaries between media dissolve and the old concept of broadcasting becomes obsolete this regulatory framework is eroding or becoming circumvented."⁸

DATACASTING LICENCES

Recognising the structural separation between service activities and underlying service delivery in convergent industries, the Digital Act sets out a regime for datacasting licences which is quite different from the current arrangements governing broadcasting licences.

Two different licences need to operate together in order for a datacasting service to function. The first is a datacasting transmission licence, which is the licence to operate the actual transmitter used to transmit the datacasting service, and is subject to the *Radiocommunications Act 1992* regulatory obligations in relation to the transmission. The second is a datacasting licence under the BSA, which authorises the actual transmission of content.

These licences may be held together, or by separate entities, in which case the transmission licence holder will need to apply to the ABA for a "nominated datacaster declaration" authorising the provision of the combined service by separate licence holders.⁹

CONVERSION TO A BROADCASTING LICENCE

The establishment of a bright-line distinction between a datacaster and a broadcaster for the purposes of protecting the franchise of free to air television broadcasters fosters uncertainty amongst potential datacasting licence holders.

This is manifested in the Digital Act's silence over the question of conversion of a datacasting licence to a broadcasting services licence when the moratorium on new commercial television licences ends on 31 December 2006 – a conversion which would be fraught with difficulties under the Digital Conversion Act.

The ABA has commented that without a datacasting channel being cleared and re-auctioned as a commercial television broadcasting service, the allocation of a commercial television broadcasting licence to a datacaster under parts three

and four of the *Broadcasting Services Act* ("BSA") would probably be impossible.¹⁰

MULTIPLE REVIEWS

Further uncertainty is engendered by the multiple reviews of the regime, including one of the entirety of the new BSA Schedule 6 by the end of 2002¹¹ a result of the end of definitional certainty which means that legislative restrictions on datacasting services may be circumvented by new technology within a few years.

The accrued rights of datacasters are also limited, the term of the licences being ten years with the expectation of a single renewal for five years only,¹² in contrast to the free to airs' expectations of renewal and standard 25 year licences for the telecommunications spectrum.

THE GENRE CONDITIONS: ENFORCING DIFFERENCE

Leaving aside the future use of datacasting spectrum, genre restrictions in the Digital Act designed to enforce the distinction between datacasting and broadcasting on the basis of the "look and feel" method severely constrain the genre and format of datacasting content.

Datacasters must not transmit the whole or an extract of a category A television program (including drama, sports, music, lifestyle, documentary, children's entertainment, quiz and comedy programs) unless the extract is ten minutes or less and cannot be combined with other extracts to create the whole or a majority of a category A program.¹³

Nor can they transmit a category B program or an extract from a category B program (including news, current affairs or weather bulletins and financial or business information) unless the extract is less than ten minutes long, couldn't be combined with other bulletins to form a longer bulletin and is not updated within 30 minutes. Further, a datacaster may not transmit any audio content which would amount to a commercial audio broadcast.¹⁴

These provisions effectively prohibit any content which might be seen as extracts in the form of either "segments" or "reports" with similar presentation or style, since together they might constitute a longer program.

Datacasters are left with exceptions to this regime to underpin their offerings: information only programs (strictly

defined to exclude programs with a significant emphasis on dramatic impact or entertainment),¹⁵ educational programs, parliamentary or court proceedings, interactive computer games, home shopping and, on the face of it, Internet carriage services. However, the carve-out of the genre conditions only applies to full individual point-to-point Internet access, not to content selected and copied from the Internet by the datacasting licensee (the "walled garden" model).¹⁶

INTERNET OVER THE AIR?

Given that individual point-to-point "Turbo Internet" only allows a small number of users to be accommodated by the available bandwidth, it is certainly not a commercially viable model for popular web sites containing streaming video and multimedia material.¹⁷

The fact that the genre restrictions have been imposed on the "walled garden" model means that datacasters will have to constantly review the content of each web site they transmit and block access to any audio or video content which would offend the genre conditions. Anti-avoidance provisions prevent a datacaster from attempting to evade the conditions by placing their content on a web site and providing a link to that web site.¹⁸

Senate amendments to the Digital Act inserted an "exception" to the genre conditions for content copied from the Internet, provided that the ABA makes an exemption order on the basis that it is satisfied either that breaches of the genre conditions would be minor, infrequent or incidental; or that transmission of the material would not be contrary to the purpose of the genre conditions. The purpose of the genre conditions is, of course, to restrict broadcasting-style content of precisely the type over which datacasters are likely to seek exemption orders.¹⁹

This example of circular drafting means that it will be difficult to argue that rich multimedia content fits the exemption conditions. In addition, datacasters will presumably be required to present a case to the ABA for the exemption of each web site they wish to transmit – and they may wish to transmit several hundred sites. Both of these factors tend to the conclusion that the exception is unlikely to allow for very much more transmission of exactly the sort of content which would truly benefit from delivery over the bandwidth.

The way in which the clause giving the ABA power to make an exemption order for content copied from the Internet has been drafted also leaves open the possibility that a new request for exemption will have to be made each time the content of a site is updated. Subclause 27A(1) states that exemption orders may be made "in relation to the transmission of the matter", but does not clarify the coverage of such an order or address the issue of change in the nature of the matter. The ABA's interpretation of the degree to which the matter must be altered before a new request to make an exemption order is required will be crucial to the amendment's effectiveness in achieving what its advocates described as a "freer and looser"²⁰ walled garden, and, ultimately, more viable datacasting services.

COMPETITION SENSITIVITIES

So far, this article has considered the legislative regime for datacasting alone. However, its incorporation into the BSA as part of the package of reforms associated with the conversion to digital television has significant implications for potential datacasters. Digital technology means that delivery mechanisms are an increasingly specious criteria to use when classifying content providers – in effect, the distinctions between datacasters, subscription and free to air broadcasters are being drawn by legislative rather than technological standards. Competition sensitivities, between these three types of content providers are, therefore, more and more a function of the drafting of their legislative frameworks.

Large potential areas for anti-competitive conduct are structured into the Digital Act. For example, the fact that free to air broadcasters will be allowed to broadcast electronic program guides ("EPGs") brings them into direct competition with datacasters offering such services. EPGs are the core menu presented to the viewer – therefore the controller of the EPG can control what is viewed, rendering them the pot of gold in digital TV terms.

EPGs are regulated under the Digital Act in an attempt to prevent exclusive alliances between FTAs and datacasters. The Act provides that datacasting licensees may transmit EPGs which contain either:

- information about their own programs; or
- information about television

programs transmitted by commercial or national broadcasters, *so long as* equivalent information is transmitted about its own programs and those of each other commercial or national broadcaster.²¹

However, commercial or national broadcasters must request the transmission of their information before this limitation comes into effect, meaning that common standards will not necessarily be applied in EPGs. A strict interpretation of the term "equivalent information" will also be crucial. Pay television services are not covered at all. This contrasts with the situation in the UK, where the Independent Television Commission created a *Code of Conduct on Electronic Programme Guides*, which not only ensures that there is no discrimination between free to air and pay television services, but also includes exact standards for size, ranking, colour and image of displays connected with broadcasters and restricts the terms of contracts between broadcasters and EPG providers.

Open standards and interoperability are common technical issues in telecommunications, but they are also a regulatory concern for convergent technologies such as datacasting.

Pancaking, otherwise referred to as "the pizza box syndrome", occurs when there is no common denominator between software used in set-top boxes. Under the Digital Act, domestic reception equipment must not be provided by the holder of either a commercial television or a datacasting licence, or a national broadcaster, unless it is also accessible by commercial and national broadcasters and each datacasting service.²² The legislation also provides for regulations which may deal with technical standards, suggesting any relevant standards must ensure that as far as is practicable,

conditional access systems and application program interfaces should be available to all providers of eligible datacasting services. Standards for pay television access are not included. Careful consideration of the content of standards in the regulations to accommodate convergence, and strict enforcement measures, will be required to avoid anticompetitive structures.

CONCLUSION

Given both the restrictive nature of the genre conditions on content which can actually be datacast, and the narrow exceptions allowed for content copied from the Internet, datacasting's appeal to consumers is likely to be limited. Regulating convergent technologies is a difficult task for government. However, attempting to impose strict legislative distinctions between different users of the broadcasting spectrum in order to protect existing businesses is not the best way of going about the regulatory task. The ABA's interpretation of the Digital Act's licensing provisions and exemptions will be determinative for the viability of the datacasting industry. If the industry fails, it may well be the fault of the legislation which enabled its creation.

1 Media Release, Senator The Hon Richard Alston, "Success of Digital TV Will Rely on Consumer Choice", 062/00, 30 June 2000.

2 Ninety nine per cent, or 6.5 million Australian households own a television set, compared to 50 per cent with personal computers, and 25 per cent with access to the Internet: ABS 8147.0, March 1 2000.

3 Department of Communications, Information Technology and the Arts ("DCITA"), *Convergence Review, Convergence Review Issues Paper*, November 1999.

4 Only 15 per cent of non-metropolitan Australians have Internet access at home: ABS 8147.0, March 1 2000.

5 Quoted in Tony Walker, "For giddy limits of datacasting, try a fudged policy", *Australian Financial Review*, 1 July 2000.

6 Tony Branigan, General Manager, Federation of Australian Commercial Television Stations,

quoting a US broadcaster at the IBC "The Future of Television is Digital TV" Conference, Sydney, 29 May 2000.

7 The definition is now found in section 2 of Schedule 4 to the *Broadcasting Services Act 1992* (Cth) (to be referred to in this article as the "BSA").

8 Productivity Commission, *Broadcasting Inquiry Report*, Report No 11, 3 March 2000, p 5.

9 Digital Act, Schedule 1, items 14 and 140 (which inserts a new Schedule 6 – Datacasting Services into the BSA).

10 Giles Tanner, General Manager, ABA, "Turning Off Mt Barrow: The Regulatory Challenge of Digital Television", Gilbert & Tobin Digital Revolution Conference, Sydney, 14 June 2000. See the amendment to s 34 of the BSA, and the new s 102B of the *Radiocommunications Act 1992*.

11 Digital Act, Schedule 1, item 140 (Clause 61 of new Schedule 6 to the BSA).

12 Digital Act, Schedule 2, item 20.

13 Digital Act, Schedule 1, item 140 (Division 1 of Part 3 of new Schedule 6 to the BSA, clauses 13 and 14 (Category A) and 15 and 16 (Category B)).

14 *Ibid* (Division 2 of Part 3 of new Schedule 6 to the BSA).

15 *Ibid* (Part 1 of new Schedule 6 to the BSA, clause 4).

16 *Ibid* (Division 3 of Part 3 of the new Schedule 6 to the BSA).

17 At least one potential datacaster has suggested that in a 7MHz bandwidth, only 20 people could receive streaming video at the same time, eliminating the commercial viability of providing this service for the most popular web sites containing rich multimedia content.

18 Digital Act, Schedule 1, item 140 (Division 2A of Part 3 of the new Schedule 6 to the BSA).

19 *Ibid* (Division 4 of Part 4 of the new Schedule 6 to the BSA).

20 Doorstop interview, "Digital Television and Datacasting Legislation, ABC and SBS and Multichannelling", Stephen Smith, Shadow Minister for Communications, Parliament House, Canberra, 29 June 2000.

21 Digital Act, Schedule 1, item 140 (Division 1A of Part 3 of the new Schedule 6 to the BSA).

22 Digital Act, Schedule 1, item 125A (inserting new Part 3A of Schedule 4 to the BSA).

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