Spectrum Review
Potential reform directions

Community Broadcasting Association of Australia (CBAA) submission in relation to the review of spectrum policy arrangements and consultation paper issued by the Department of Communications

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1. Introduction

1.1 The Community Broadcasting Association of Australia (CBAA) welcomes the opportunity to submit comments in relation to the discussion paper, Spectrum Review - Potential Reform Directions, November 2014.

1.2 The discussion paper is part of a review of spectrum policy arrangements first announced by the Minister for Communications in May 2014. Spectrum is a valuable public resource and a major contributor to economic and social well-being. The paper explores proposals intended to maximise the economic and social return from spectrum. The review is part of the Government's commitment to streamline regulation and cut red tape.

1.3 The scope of the review is to look at the operation of the *Radiocommunications Act 1992* and other radiocommunications primary and subordinate legislation (including regulations and delegated instruments). The review is to consider the interaction of the Radiocommunications Act with other portfolio legislation such as the *Broadcasting Services Act 1992* and the *Australian Communications and Media Authority Act 2005*.

1.4 The discussion paper outlines a number of proposals for reform, and the Minister has headlined three areas to be considered:

(a) implement a clear and simplified framework of policy accountability where the Minister makes over-arching policy statements about spectrum planning and may intervene for specific purposes, such as to reserve, allocate or re-allocate spectrum in a plan.

(b) replace the current apparatus, class and spectrum licenses with a single licensing framework, and provide the ACMA the flexibility to set licence parameters.

(c) a specific focus on spectrum and arrangements for free-to-air television broadcasting, noting that the highest growth in value has been in the spectrum used by television broadcasters, with potential for non-broadcast use and a second digital dividend.

1.5 The Minister has highlighted the specific case of community television broadcasting and cited its use of spectrum, colloquially known as the sixth television channel.

1.6 The Minister announced that current (apparatus) licensing arrangements for community television broadcasting will be extended until 31 December 2015, and that the Government believes the best outcome for community television would be to use the Internet as its distribution platform in the future.

1.7 The discussion paper also highlights the specific case of community television broadcasting, not in terms of best outcomes for community television, but in the context of ensuring spectrum is allocated to its highest value use.

1.8 The discussion paper proposes that, to promote efficient use, pricing for spectrum be market based, with the ability for the Minister to determine otherwise on an exception basis. The paper notes that users want allocation decisions based on overall public benefit – including the less easily quantifiable social benefits as well as economic benefits.

1.9 The CBAA has agency in this debate as the peak body for community broadcasting in Australia.

1.10 The CBAA represents licensed community radio broadcasters. Nationally, over 350 community radio services provide significant public benefit: a diverse mix of cultural and specialist talks, educational, music, Indigenous, print handicapped, youth, seniors, religious and ethnic language and multi-cultural radio services.

1.11 Community television licensees are represented through the Australian Community Television Alliance (ACTA), and the CBAA continues to advocate the public policy principles that underpin community broadcasting generally and makes comment accordingly.

2. Framework for public accountability

Public policy to be kept in legislation and guide Ministerial policy, control and interventions

2.1 The discussion paper proposes there be a clear, transparent and simplified framework of policy accountability where the Minister makes over-arching policy statements about spectrum planning and may intervene for specific purposes, such as to reserve, allocate or re-allocate spectrum in a plan.

2.2 Decisions with significant public policy implications would remain in the Minister's control and day-to-day management of spectrum consistent with government policy would be the responsibility of the ACMA.

2.3 In response to this proposal, the CBAA considers the Minister is best guided in any policy statements, whether they be broad or specific, by reference to legislation that sets out broad public policy outcomes as previously agreed by Parliament.

2.4 The CBAA agrees that once broad policy directions are set, Ministerial intervention using specific direction powers are best kept on an exception basis, and in a transparent manner.

2.5 Specific directions ought not contradict broad policy directions but be limited to clarifications.

2.6 The Radiocommunications Act provides little guidance on broad public policy, save for articulating an ambition for efficient use of the valuable public good that is spectrum.

2.7 The Broadcasting Services Act, as complementary legislation that interacts with the Radiocommunications Act, provides useful guidance on agreed public policy for broadcasting.

2.8 The CBAA considers any revisions to legislation sought as a result of the process of spectrum management reform ought clearly carry forward and set out agreed public policy objectives, including for those services, such as broadcasting, that have key cultural and public benefit.

2.9 A 'minimal' approach to legislative change would be to retain agreed public policy objectives, including for broadcasting, within the separate legislation that is linked to the Radiocommunications Act, as currently.

2.10 An alternative approach is to consolidate the public policy objectives, including for broadcasting, into revised broad scope legislation.

2.11 Neither approach contradicts an ambition articulated in the discussion paper for a single licensing framework.

2.12 However, both approaches underline that public policy outcomes, as expressed through the Parliamentary process and embedded in current sets of legislation, remain relevant and legitimate.

2.13 The ambition for simplification should not lose sight of the fact the spectrum is a public good and that spectrum management issues extend beyond channel planning, interference management, and a market perspective that seeks to monetise spectrum through private use.

3. Single licensing framework

Framework to recognise different use cases and safeguard public policy outcomes

3.1 While a single licensing framework has an initial elegance, it ought not, in practical execution, result in the homogenous treatment of services.

3.2 There are quite different types of services made possible by use of spectrum. Some services enable one-to-one communications. Others have distinct public policy outcomes, each needing different treatment: Broadcasting, to ensure free and equitable access to democratic discourse; Defence, to ensure the security of the people; and Emergency Services, to ensure safety of life, are some key examples.

3.3 Some licensees make use of public spectrum, thereby denying its use by others, specifically for the purpose of generating private commercial revenue. Other licensees operate for public purposes, some on a legislated non-commercial basis.

3.4 Each licensee and service type may have merit for a well-functioning society, and so the licensing framework must take account of these differences and not limit its treatment of spectrum as a commodity to be traded, without regard to public policy outcomes.

3.5 There are also differences in terms of devices. While many devices might rely on digital communication techniques, realisation into a usable and practical device with specific outcomes is heavily impacted by appropriate radio frequency parameters, including transmitter power, antenna design, sensitivity, selectivity, interference and spectrum band allocations.

3.6 The CBAA is keen to see more detail on how these types of parameters might be attached to a revised licensing instrument, and how, in practical terms, this might differ in flexibility from apparatus licensing with band planning that has a specific service outcome in mind.

3.7 The paper makes a point that Australia's relative physical isolation might allow for spectrum allocations not in line with international allocations. However, Australia is party to radio regulations and international co-ordination arrangements for spectrum management via the ITU, and Australian spectrum planning is best kept in harmony.

3.8 In general, alignment with and influencing of international allocations will remain critically important for major use sectors, especially where there is public / consumer investment in user equipment such as broadcasting and mobile telecommunications.

3.9 Australia does not itself manufacture many devices, and economies of scale mean that harmony with commodification at an international level is necessary in order to ensure devices at suitable quality and price points are available.

3.10 The Minister made the point that all manner of services are undergoing digitisation and that, in some ways, one type of service now differs little from another. This may be true for the internal data layer of systems. However, the one-size-fits-all approach strikes challenges when the transmission layer and the service outcome layer are taken into consideration.

3.11 The CBAA certainly agrees that all manner of services are undergoing digitisation and that is a good thing. It takes comfort from the Government's long-standing commitment to the continued inclusion of community broadcasting services in the transition to digital.

3.12 The Minister recently reiterated the Government's long-standing commitment to inclusion of community radio in the transition to digital [1]. The CBAA is pleased that commitment is being maintained.

3.13 The Government's commitment to community television broadcasting is another matter and is discussed later.

4. Private band management

Industry expertise can be tapped
Balancing competing demands is core business for the ACMA

4.1 The discussion paper proposes greater user involvement in spectrum management and to allow further delegation of functions of the ACMA to other entities, such as private band managers.

4.2 The paper suggests functions to be devolved might include planning, licensing, pricing, fee collection, interference management and dispute resolution.

4.3 If the intention is to outsource activities of the ACMA on a contractor basis then that seems a matter for ACMA internal administrative decision.

4.4 If the intention is to enable greater autonomy for private band management then, there may be significant difficulties.

4.5 A private band manager would logically have responsibility delegated to it for a specific band or bands with which the private band manager has special insight or expertise.

4.6 One can imagine joint ventures comprised of industry aligned but otherwise competitor organisations might manage specific bands for, say, telecommunications spectrum.

4.7 Similarly, joint ventures might emerge for management of specific radio broadcast and or television broadcast bands.

4.8 Even within the one band that has common service outcomes, the relative resources and capacities of stakeholders to tackle complex technical planning, interference management and legal issues might vary widely.

4.9 There are also situations where non-commercial and commercial users of spectrum sit alongside each other in bands, each with legitimate but competing demands on spectrum use.

4.10 Private band managers might often be faced with situations where competing demands would need to be balanced, yet their governing structures may not be disinterested in the outcome.

4.11 At present the ACMA engages with spectrum users, and taps stakeholder expertise and experience, by establishing consultative planning groups. In so doing the ACMA retains over-arching responsibility.

4.12 Planning of new service provision and balancing competing demands for industry stakeholders and taking into account public benefit considerations that would otherwise not be represented, is core business of a spectrum regulator.

4.13 While spectrum allocations and interference management might well be efficiently handled within a specific band or bands, there will be issues where interference is across bands or across industry sectors. It is hard to see how a private band manager would be able to resolve those issues without resort to an over-arching spectrum regulator.

4.14 Finally, there is a question of scale and whether there is sufficient to enable viability of a private band manager model for any other than the most well-heeled users of spectrum.

5. Television broadcast spectrum and highest value use

Explore options for efficiency in television planning without pre-empting the conclusion

5.1 The discussion paper proposes continual review of options for allocating spectrum to alternative or higher value use. The paper suggests ACMA would indicate options for higher value use and propose options for change as part of its annual work-plan.

5.2 The discussion paper highlights announcements made by the Minister regarding television broadcasting, and the specific case of community television broadcasting as being consistent with this approach.

5.3 It certainly seems consistent to begin a process to trial and explore the use of more efficient technologies for digital television broadcasting.

5.4 However, it does not seem consistent, without a clear and transparent analysis of the channels available or to be used for trials, to exclude the possibility of extended or on-going free-to-air broadcast capacity for community television broadcasting.

5.5 Where current community television broadcasting licensees have a Broadcast Services Band licence to provide a broadcasting service, under the Radiocommunications Act [2], the ACMA has issued a radiocommunications transmitter licence for transmitting the broadcasting service.

5.6 The apparatus licence makes use of a full 7MHz of spectrum, yet as a licence condition, community television broadcasters are limited to broadcast a single Standard Definition (SD) service on a free-to-air basis, with no use of latent capacity permitted by others.

5.7 Use of a full 7MHz RF channel, capable of 23Mbps data capacity, to carry a single MPEG-2 SD television service, at a typical data rate of 4-6 Mbps, is certainly not efficient use of spectrum.

5.8 In part, this awkward situation comes about due to the one-to-one relationship between a broadcast service licence and a radiocommunications transmitter licence for digital television broadcasting, and that is clearly something for exploration and a potential option for reform.

5.9 The CBAA notes, for digital radio broadcasting, that sufficient flexibility has been developed within the Broadcasting Services Act and the Radiocommunications Act to enable shared use by different broadcast licensees of a common RF transmission channel. The concept of separate 'multiplex' licence was developed for transmission, and all broadcast licensees are entitled and/or reserved access, with a related access and pricing regime overseen by the ACCC. This model seems worth exploring as one option to facilitate shared use of television multiplexes.

5.10 It is worth remembering that the specific RF channel currently in use for community television broadcasting has, to date, not been sought for use by others. In that sense there is no spectrum inefficiency. In fact, in the absence of its use by community television it would have had no use at all: a worse spectrum efficiency.

5.11 There is and has been no denial of opportunity to others. Neither is the on-going use of capacity within free-to-air television broadcast spectrum necessarily an impediment to trials of more efficient technology, but more on that later.

5.12 To take the positive, the use of this otherwise latent spectrum / capacity adds diversity to free-to-air television broadcasting, in accordance of the objects of the Broadcasting Services Act.

6. Sixth television channel is not being used

Community television and trials can co-exist with no spectrum inefficiency

6.1 The discussion paper proposes that, in the short term, the sixth television channel is needed to assist in testing and migration to more efficient technology, MPEG-4.

6.2 Trialling of MPEG-4 is cited as a reason to clear community television broadcasters from current use of the sixth television channel.

6.3 The paper goes on to suggest that, longer term, the highest value use of the sixth channel may be for non-broadcast uses: the Minister flagged it might be part of a second Digital Dividend.

6.4 It is important to again clarify that the allocation for the metropolitan sixth television channel is currently vacant. It is not being used by community television.

6.5 The CBAA supports the use of the sixth channel for trials that will lead to further efficiencies in the use of public spectrum. The sixth channel is within designated broadcast spectrum and it makes good sense to use the channel to meet broadcast objectives.

6.6 The idea of a second Digital Dividend is a longer-term ambition. It would not be facilitated by transition to DVB-T MPEG-4.

6.7 While moving to MPEG-4 may be a first step in a more efficient digital television system, it is not necessarily the destination. MPEG-4 technology is not new. It is in use in other countries for terrestrial broadcast television, and for free-to-air satellite broadcast television in Australia.

6.8 It is generally thought that around 80% of current generation digital television sets are capable of decoding MPEG-4 when transmitted using the existing DVB-T transmission. That percentage will no doubt further increase as more sets are sold.

6.9 The Minister has said that MPEG-4 would allow broadcasters to use their existing spectrum to deliver more channels, including in High Definition if they choose to do so.

6.10 If the objective is to trial use of DVB-T MPEG-4, there is no need for the sixth channel to be used at all. A trial of DVB-T MPEG-4 could be implemented as a simulcast within the capacity of any of the existing channels currently providing DVB-T MPEG-2 services.

6.11 The Minister has said that following a move to the MPEG-4 standard the Government will encourage spectrum sharing between television broadcasters and that the Government expects the national broadcasters to lead the way in this regard, with the commercials to follow.

6.12 The sixth channel could be used to trial shared use of a common 7 MHz channel using DVB-T MPEG-4 while simulcasting using the existing, less efficient, DVB-T MPEG-2 standard on other multiplexes. Given the Minister's statements, presumably this trial of shared use would be with the national broadcasters.

6.13 Logically, any trial would, in the first implementation, be on the sixth channel in one or more of the major capital cities. The sixth planned channel in these locations is VHF as part of the common VHF block. This VHF channel is currently vacant.

6.14 The channels being used by community television are on UHF and would not be needed if and when trials are implemented on the sixth channel in each capital. Both trial and community television can co-exist using separate RF channels, with no spectrum inefficiency or denial.

6.15 If DVB-T MPEG-4 trials then moved to implementation stage and the UHF RF channels were required, it seems reasonable that capacity for at least one standard definition community television service be reserved, either within the sixth RF channel or within one of the other broadcaster multiplexes still operating. Each will, by then, be operating with more efficiency.

7. More efficient use of broadcast spectrum

Longer term efficiencies and capacity sharing will enable capacity to be reserved

7.1 Under the existing digital television broadcasting transmission modulation and encoding system, DVB-T MPEG-2, it is possible within a multiplex on one RF channel to broadcast up to a total data rate of 23 Mbps, typically enabling 1 HD and 3 SD services, 5 SD services, or various similar combinations of services.

7.2 Use of the same transmission modulation system, DVB-T, but with more efficient encoding, MPEG-4, maintains a total data rate up to 23 Mbps, but enables more services, say, 1 HD and 5 SD services, or various combinations.

7.3 Another transition, or perhaps as a leap-frog, to the latest transmission modulation and the latest encoding, DVB-T2 HEVC, would increase efficiency again. The total data rate would be in the region of 35 Mbps, enabling, say, 7 HD services, or 1 HD service and 15 SD services, or various combinations. It would enable broadcast of UHD or 4K content, typically requiring 20-30 Mbps.

7.4 Attachment 2 illustrates a number of these points.

7.5 The television RF channel raster allocates six television RF channels across Australia. VHF channels are allocated in the major capitals: channels 6, 7, 8, 10, 11 and 12, with 9 and 9A reserved for digital radio. UHF is used in adjacent regional and remote areas using channels 28-51. The Digital Dividend has freed up channels above channel 51 for telecommunications operators. Not all that spectrum was taken up at auction by telecommunications operators.

7.6 Unassigned sixth channel capacity in UHF is being used for carriage of community television. The unassigned sixth channel capacity in VHF (10) in each major capital remains unused.

7.7 Should there be no available UHF capacity, as a next step, using more efficient MPEG-4 encoding would enable community television to use capacity reserved on one of the five active VHF multiplexes. The licensing implications of this option for reserved capacity within a multiplex should be considered.

7.8 In the interim, while there continues to be available UHF channels, those channels could continue to be used for community television broadcasting.

7.9 A number of the existing DVB-T RF channels could, right now, include an extra MPEG-4 encoded service at 2-3 Mbps with little serious impact on existing DVB-T MPEG-2 service provision.

7.10 Alternatively, in the scenario where an extra RF channel is used, either for trials, or to facilitate transition to DVB-T MPEG-4 with shared transmission facilities, then there will be extra capacity within which an extra MPEG-4 encoded service at 2-3 Mbps could be reserved for community television broadcasting.g

7.11 To facilitate efficiencies using MPEG-4, resulting in enhanced capacity for the free-to-air television services overall, and not reserve at least one standard definition service for community television broadcasting is hard to reconcile with public benefit and seems at odds with the objectives of the Broadcasting Services Act.

7.12 As a further point, while DVB-T MPEG-4 is a short-term efficiency it will not likely yield a spectrum Digital Dividend for Government. Neither will it provide a pathway for terrestrial UHD delivery. It is more about enabling further services within the existing spectrum allocation.

7.13 Much more significant spectrum efficiencies are feasible with a shift to DVB-T2 HEVC. That seems to be an option to explore and to have a time horizon of five to seven years.

8. Broadcasting and the Internet

Internet delivered services are not free and are not broadcasting

8.1 The discussion paper notes that the Government will extend the current (apparatus) licensing arrangements for community television until 31 December 2015.

8.2 In making this announcement on behalf of the Government, the Minister went on to indicate that the Government believes the best outcome for community television would be to use the Internet as its distribution platform in the future.

8.3 The CBAA is pleased that the Government seeks the best outcome for community television but is concerned that these best intentions are not taking full account of the consequences of using the Internet as the only means of distribution.

8.4 There arises a question as to whether using the Internet as the only means of distribution is consistent with being a broadcasting service. It certainly does not fit the current definition of broadcasting and contradicts the policy objectives of the Broadcasting Services Act.

8.5 The Broadcasting Service Act has as one of its primary objects "to ensure the maintenance and, where possible, the development of diversity, including, public, community and indigenous broadcasting, in the Australian broadcasting system in the transition to digital broadcasting".

8.6 As a first step in reform, the removal of community television broadcasting licensees from digital broadcasting seems to run counter to this public policy objective enshrined in legislation.

8.7 Drilling into the existing legislation shows a requirement that community television broadcasting programs must be able to be received by commonly available equipment and be made available free to the general public. [3] While it could be argued that Internet connected devices, including televisions, are commonly available, services via the Internet are not free.

8.8 In addition, the Broadcasting Services Act specifically excludes a service that makes programs available on demand on a point-to-point basis from being defined as a broadcast service.

8.9 To emphasise the point further, Minister (Alston) in 2000 issued a determination saying "a service that makes available television or radio programs using the Internet, other than a service that delivers television or radio programs using the broadcasting services bands" is not a broadcasting service. [4]

8.10 Taking all this in account means that the non-profit, community-based governance and ownership structures that are central and defining characteristics to legitimate community broadcasting organisations do not apply to Internet online only operators. It also means no broadcast content, code of practice, legislation or regulation applies.

8.11 Community television online would no longer be legitimate broadcasting and not much different to many other online video platforms.

8.12 Without the legitimacy and obligations of formal broadcaster status, the idea of observing community broadcasting values and principles is really nothing more than a branding exercise.

8.13 None of this is to disregard the importance of online. Rather it is to name up that, unless further legislative change is implemented, for community television broadcasting to be legitimate it must have a core component that is defined as a free-to-air broadcast platform.

8.14 The role of online delivery is important, and the community television broadcasters ought be able to make use of online in the way other broadcasters do: as a complementary platform to enable broader reach and facilitate on-demand services. Not as a replacement for free-to-air.

9. The Internet and video

The lion's share of all video viewing is by way of free-to-air television broadcast

9.1 Although the Internet has been about for some time, the bulk of all video viewing is not via the Internet but by way of free-to-air broadcast television. In respect of video delivery in volume, the Internet's role and capabilities are nascent.

9.2 Research underlines this point. The Australian Multi-Screen Report, compiled by OzTam, Regional TAM and Neilson, shows the volume of viewing by way of free-to-air television averages at over 24 hours per week (97 hours per month). Most of the viewing is live, while just under 2 hours per week is watching later. [5]

9.3 By contrast, viewing video delivered by way of Internet online on laptop or computer averages at a little over 2 hours per week. Around a quarter of homes report having a Smart TV, but the volume of online hours watched on Smart TVs, specifically, as distinct from a computer or laptop, is low and not yet measured reliably. The volume watched on tablets and smartphones is tracking at just under 30 minutes per week.

9.4 In a separate sample of viewers of online on-demand content, Screen Australia [6] found 90% watched broadcast television live, 50% later: with the volume of broadcast television viewing hours being on par with the Multi-Screen Report research. Screen Australia summarised with the headline, "... television still accounts for the lion's share of hours watched".

9.5 In summary, 2014 research indicates that around 89% of all video hours viewed is delivered by broadcast television. 11% of video hours, including some broadcast content, is delivered by Internet online.

9.6 The Multi-Screen report states that Australians continue to watch, on average, a little over three hours of broadcast television each day on their in-home TV sets and that this figure has been consistent over the past decade.

9.7 The research seems clear: use of the Internet for video has not replaced the role of broadcast as the mainstay platform. Internet is acting in complement. Useful for on-demand, niche or some premium content and, if low cost or free, as a substitute for buying or renting movies on DVD.

9.8 Expressed as a percentage of all video hours watched, broadcast has dropped from near enough 100% prior to 2010 to the current 89%. Conversely, over that period online has increased from near enough zero to the current 11%. Attachment 1 illustrates the trend.

9.9 It would be brave to predict the trend into the future. Some suggest the trend to online will bump as a result of additional high profile services launching in 2015.

9.10 Even if a bump does occur, with mainstream viewing so overwhelmingly with broadcast, it is difficult to see how the public's access to diversity in media is best served by closing an existing free-to-air broadcast service, specifically one with a brief to engage the local community and add diversity to free-to-air mainstream media.

9.11 Take up of online is also limited by cost. Not everyone can afford the Internet, or to use large amounts of metered data watching video online. By contrast, as a matter of social policy, engineering design and legislation, broadcasting is free at the point of consumption and enables equitable access to viewing on a large scale.

9.12 To reiterate: the community television broadcasters ought be able to make use of online in the way other broadcasters do: as a complementary platform to enable broader reach and facilitate on-demand services. Not as a replacement for free-to-air.

10. Reforms: capacity sharing and un-metered delivery

Enable capacity sharing within free-to-air broadcasting
Ensure online delivery of broadcast services is un-metered

10.1 The Minister has suggested the best future for community broadcasting is online, and that the channel now used for community television broadcasting services may be needed for trials.

10.2 The implication is that community television broadcasting licensees would not be issued a radiocommunications transmitter licence beyond 2015.

10.3 The CBAA considers extending the term of the transmitter licences beyond 2015 can remain an option. Transmission on the UHF channels used by community television does not necessarily prevent trials on the metropolitan sixth VHF channel. The current community television broadcasters do not use the metropolitan sixth channel: it is VHF and it is vacant. The CTV broadcasters currently operate on UHF, using an otherwise vacant channel.

10.4 If clearance proves necessary, it would require some early stage amendments and reform of the Radiocommunications Act and/or Broadcasting Services Act. As things further unfold regarding trials, the CBAA asks to be consulted in detail, including on any early stage reform and related amendments to the Broadcasting Services Act and/or Radiocommunications Act.

10.5 Currently, where current community television broadcasting licensees have a Broadcast Services Band licence to provide a broadcasting service, under the Radiocommunications Act the ACMA has issued a radiocommunications transmitter licence for transmitting the broadcasting service.

10.6 There appears to be no avoiding the need for the ACMA to issue a radiocommunications transmitter licence. Section 102 (1) of the Radiocommunications Act is quite explicit.

10.7 The Broadcast Service Band licences issued for Sydney, Melbourne and Brisbane are valid through to 2019, while Adelaide and Perth operate on an annual basis. Positive solutions are needed to express the intent of these licenses on-going. Apart from extending or amending interim arrangements, there appears to be options for on-going reform, including the following.

10.8 The multiplex licensee multiplex model: amend the Radiocommunications Act to enable shared use of capacity by different broadcast licensees of a common RF transmission channel for television broadcasting. The concept of separate entity holding a 'multiplex' licence has precedent in the Act, and all eligible television broadcast licensees would be entitled to access capacity, including a reservation for capacity in each licence area for a potential or actual community television broadcasting service.

10.9 The broadcast multiplex model: amend the Radiocommunications Act to entitle access for eligible television broadcasting licensees to capacity within each licence area on a multiplex licenced or allocated to a single host broadcaster, including a reservation for capacity in each licence area for a potential or actual community television broadcasting service.

10.10 Broadcast to be free on the Internet model: amend the Radiocommunications Act and related legislation to require telecommunications carriers, internet service providers and mobile network operators to treat services provided by holders of Broadcast Service Licences as non-metered data, available within plans but also without need for a plan. This would ensure equity and be in accord with the need for broadcast services to be made available free to the general public.

References and notes

[1] The Government has a long-standing commitment to ensuring access for community broadcasting to digital platforms, and ensuring that access is affordable. As part of an interview conducted on The Wire, Radio Adelaide and broadcast nationally on 3 September 2014, the Minister re-stated the Government's support for digitisation of community radio:

We're very supportive of the presence of community radio stations on digital radio, and we'll co-ordinate with the industry to ensure that community radio is a part of any future digital radio framework…

http://www.cbaa.org.au/content/Community-Radio-a-key-part-of-free-to-air-digital

[2] Radiocommunications Act 1992, s.102 (1)

Subject to subsections (2AA) and (2AB), if a broadcasting services bands licence (the related licence) is allocated to a person under Part 4 or 6 of the Broadcasting Services Act 1992, the ACMA must issue to the person a transmitter licence that authorises operation of one or more specified radiocommunications transmitters for transmitting the broadcasting service or services concerned in accordance with the related licence.

http://www.comlaw.gov.au/Details/C2014C00725/Html/Text#_Toc402353153

[3] Broadcasting Services Act 1992, s.15

The definition of a community broadcasting service, includes sub-section (c) to:

… provide programs that:

(i) are able to be received by commonly available equipment; and

(ii) are made available free to the general public.

http://www.comlaw.gov.au/Details/C2014C00740

[4] Broadcasting Services Act 1992, Determination under paragraph (c) of the definition of "broadcasting service" (Alston)

http://www.comlaw.gov.au/Details/F2004B00501

[5] Australian Multi-Screen Report, Q2 2014. OzTAM, RegionalTAM and Nielsen

Watching TV in the home	97.05 hours per month	All people
Live	89.08 hours per month	All people
Later, via PVR	7.97 hours per month	All people
Watching video on computer/laptop	8.13 hours per month	All people, 2+
Watching video on a smartphone	1.93 hours per month	All people, 16+ Q4 2013
Watching video on a tablet	1.78 hours per month	All people, 16+ Q4 2013

Percentages in text based on viewer hours expressed as a percentage of the total.

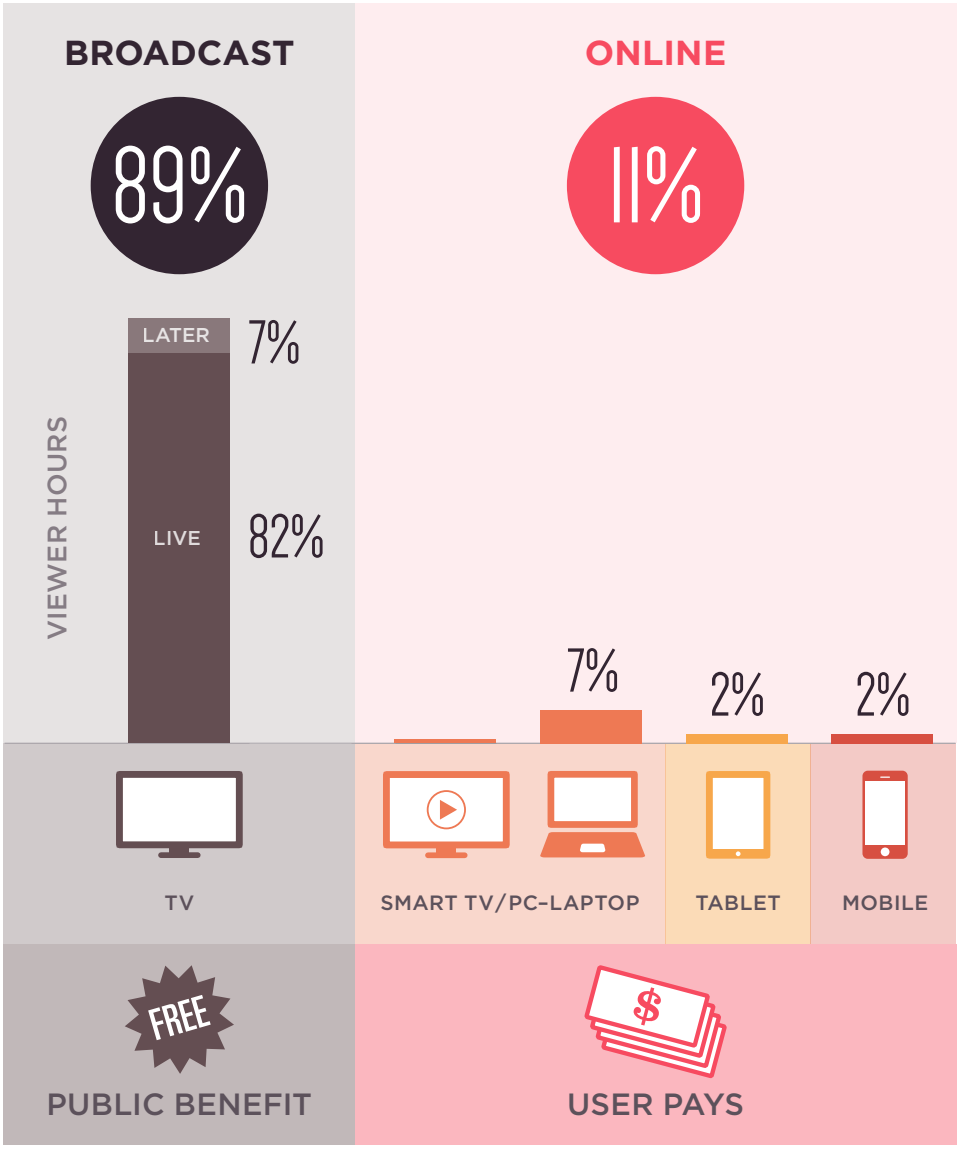
Trend based on equivalent viewers hours from previous Multi-Screen reports, expressed as a percentage of the total.

[6] Screen Australia, 2014, Online and on-demand – trends in Australian online video use.

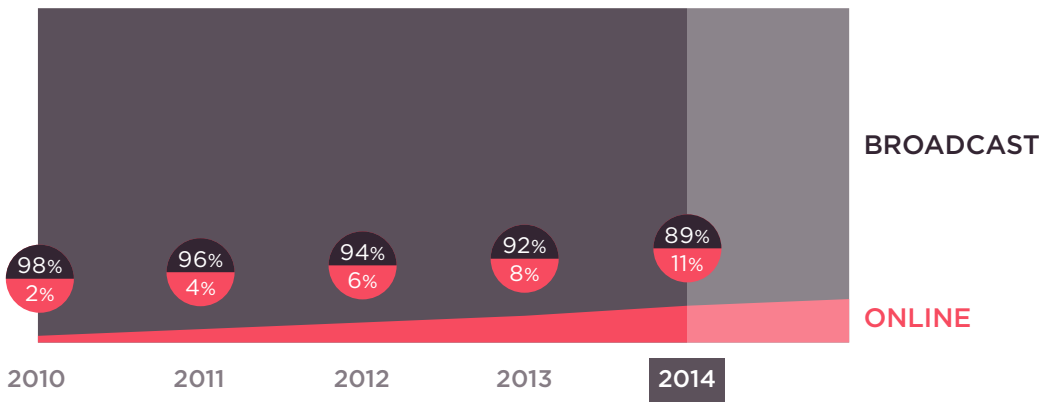
Attachments

1 Australian video viewing hours, by device: how people watch video in 2014
2 Digital television broadcasting, transmission and encoding options

HOW PEOPLE WATCH VIDEO IN 2014



TRENDS



Percentages based on viewer hours derived from Australian Multi-Screen Report, Q2 2014. OzTAM, RegionalTAM and Nielsen.

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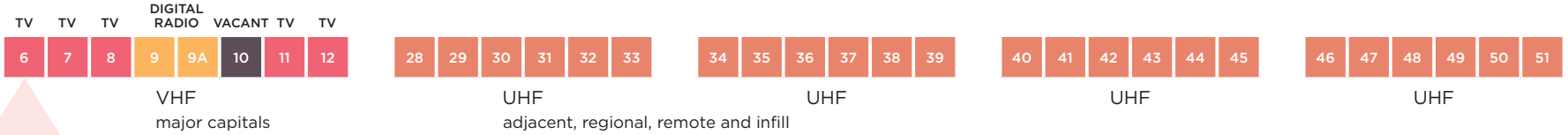
Watching video on a smartphone	1.93 hours per month	All people, 16+ Q4 2013
Watching video on a tablet	1.78 hours per month	All people, 16+ Q4 2013

Trend based on equivalent viewer hours from previous Multi-Screen reports, expressed as a percentage of the total.

DIGITAL TELEVISION BROADCASTING

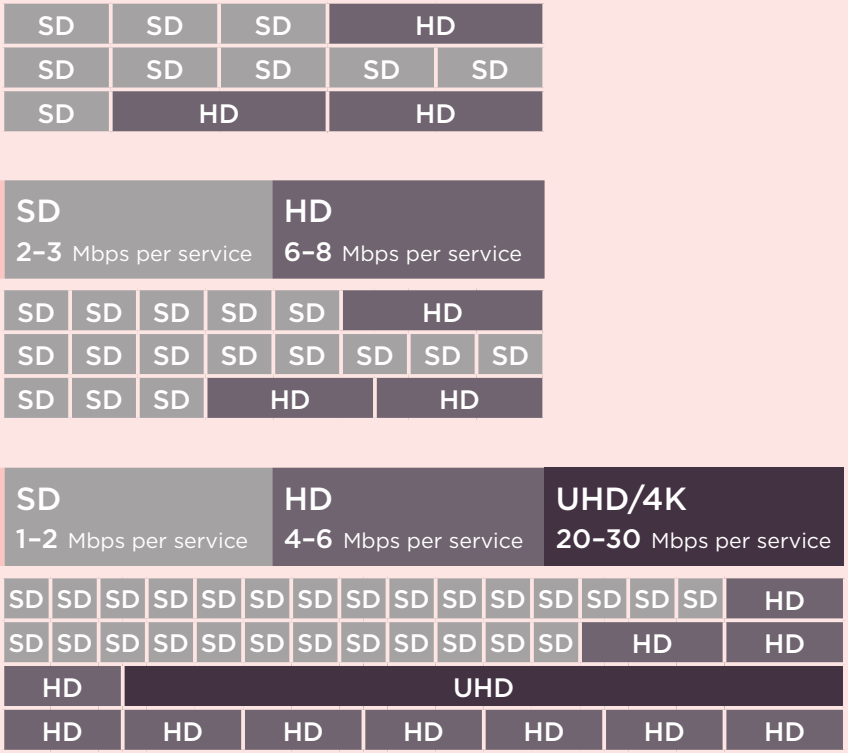
Transmission and encoding options

Planned RF channels for television



Potential services within each RF channel

EXISTING	DVB-T	23 Mbps per RF channel	MPEG-2	**SD** 4–6 Mbps per service	**HD** 8–12 Mbps per service
FUTURE 80% of sets	DVB-T	23 Mbps per RF channel	MPEG-4	**SD** 2–3 Mbps per service	**HD** 6–8 Mbps per service
FUTURE 5–7 years	DVB-T2	35 Mbps per RF channel	HEVC	**SD** 1–2 Mbps per service	**HD** 4–6 Mbps per service



UHD/4K 20–30 Mbps per service

Indicative configuration options per RF channel, ignoring radio configurations