

The future delivery of radio services in Australia

Response to the ACMA issues paper

JULY 2019

As the national peak body for community broadcasters, the Community Broadcasting Association of Australia (CBAA) welcomes the opportunity to respond to the ACMA's issues paper, *The future delivery of radio services in Australia*.

This submission has been informed by consultation with community radio licensees, Sector Representative Organisations, other sector bodies and key stakeholders.

1. Overview

Radiocommunications spectrum

- 1.1 As recognised by the ACMA, radio delivers audio entertainment and information daily to millions of Australians using radiocommunications spectrum whether by MF-AM, VHF-FM and VHF-DAB+ digital broadcasts, or over frequencies used by telecommunications providers to deliver mobile and wireless services.
- 1.2 Use of spectrum for delivery of radio services is subject to development and transition brought about by use of digital technologies. The ACMA has invited views on drivers for radio industry change, including alternative spectrum approaches needed to support radio in the future, and the impact of new delivery platforms on broadcasting policy objectives and the existing regulatory framework.

Free-to-air radio listening is strong and in digital transition

- 1.3 The ACMA's own research, along with Australian radio industry research and global trends, all underline the continued strength of live free-to-air radio broadcasting. Recently published industry figures follow an enduring and consistent pattern, showing that listening to live radio accounts for the overwhelming majority (over 62%)¹ of all listening to audio in any form. In other words, during transition through digitisation, free-to-air radio is an enduring, significant public good.
- 1.4 Within that enduring pattern of listening to live radio, irrespective of analogue or digital delivery, a positive transition towards digitisation is well underway. Where it is available, listening to free-to-air radio services using DAB+ digital receivers now accounts for a significant portion of all live radio listening, analogue and digital, with digital now past 30%².
- 1.5 Australia is not alone in this pattern. Norway has switched off analogue radio services in favour of DAB+ digital radio, with Switzerland soon to follow and the UK has passed trigger points for the consideration of the same. This digitisation of free-to-air radio on a wider basis drives, and is material to, the widespread availability of receivers on a commodity basis and reinforced by EU legislation requiring availability of receivers capable of receiving free-to-air digital radio (including in vehicles).

Free-to-air radio with service diversity is a key public good

- 1.6 Key legislative and regulatory broadcast policy objectives aim to promote diversity in terms of ownership and control; as well as in structural terms, through provision for national, commercial and community services; along with specific objectives to ensure a mix of services is available on commonly available equipment.
- 1.7 Within that framework, community radio provides diversity in terms of specific service outcomes intended to address key areas of social and cultural good.
- 1.8 In the mainland capital cities, where it is available, listening to community radio via DAB+ digital radio accounts for 30.5% of all listening to community radio³, in line with the broader industry pattern.

¹ Commercial Radio Australia, GfK, Share of Audio 2018: Share of Daily Time Spent Listening to any Audio - Live Radio 62.3% www.radioalive.com.au/Research-Insights/Share-of-Audio/2018/Share-of-Audio-2018

² Commercial Radio Australia, GfK, September 2018: 4.21 million DAB+ digital radio listeners.

Commercial Radio Australia, GfK, September 2018: 4.21 million DAB+ digital radio listeners.
Listening using DAB+ digital radio, all stations, 30.4%, average time spent listening of 10.56 hours per week.

Community Broadcasting Association of Australia 2019, National Listener Survey, Wave 1 Data report, July 2019.
Listening using DAB+ digital radio, community stations, 30.5%, average time spent listening of 13.8 hours per week.

www.cbaa.org.au/broadcasters/get-data-national-listener-survey-station-census/national-listener-survey-fact-sheets

Strengthen ACMA resources for radio spectrum and service planning

- 1.9 These listening patterns set out the public interest context, and clearly point to the need for the ACMA to continue, and strengthen, its resource allocation in relation to both spectrum and service planning for free-to-air radio services as radio digitises.
- 1.10 Current spectrum allocations for analogue VHF-FM and MF-AM remain necessary over a five to ten year window. Yet these analogue technologies are heading towards legacy status.

Triggers for sunset of some metropolitan analogue MF-AM

1.11 There is merit in the ACMA, with industry, exploring the factors leading to sunset of (some) MF-AM services in metropolitan areas. This would logically be in favour of digital transmission, with VHF-DAB+ being the mainstay, augmented in a complementary fashion, in hybrid mode, using online/mobile.

Extending the VHF-FM band

- 1.12 There is little to no merit in exploring extension of the VHF-FM band. This would require listeners to purchase new receivers with extended VHF-FM reception capability and entrench analogue in a way that is counter to the trend for digitisation. A better approach is to use VHF-DAB+ digital radio, recognising it offers extra service opportunities, capabilities and economies and is already or soon to be in place in the areas of Australia with the greatest VHF-FM channel scarcity.
- 1.13 Other than on a specific case-by-case basis, there is little merit in exploring a wholesale restack of channel planning and assignments with the existing VHF-FM band. This would be highly disruptive to listeners and result in little benefit above what can currently be achieved.

Existing VHF-DAB+ digital radio

- 1.14 Given the positive progress of VHF-DAB+ digital radio implementation to date, the wider circumstances and recognising the need for investment stability, common receiver availability and timeframes, the CBAA supports the use of VHF-DAB+ digital radio as the mainstay technology to deliver free-to-air digital radio services, supported and augmented by other technologies working in a complementary and hybrid manner.
- 1.15 The work of the industry-based Digital Radio Planning Committee, chaired by the ACMA, has been valuable in determining planning principles and setting out regional allotment plans for digital radio, using a total of eight DAB frequency blocks within VHF (television) broadcast services band spectrum.
- 1.16 The CBAA is pleased to note that allotment outcomes to date, and some resources associated with this work, have been made available by the ACMA. The significant amount of detailed and objective work undertaken by the ACMA in this work to date is acknowledged.

Extending VHF-DAB+ digital radio

- 1.17 Based on the availability of this foundation work, it is now possible for formal Digital Radio Channel Plans to be drawn and the extension of VHF-DAB+ digital radio services to be implemented with extra confidence, and for a next layer of service planning and flexibilities to be contemplated.
- 1.18 The initial allotment planning, in accordance with current legislation, addresses the provision of VHF-DAB+ services on the basis of alignment with commercial radio Licence Areas. As has been well documented, it is not certain this alignment is the best or only way to provision DAB+ digital radio services, both in terms of spectrum efficiency or in terms of best listener outcomes.

Explore overlay for small-scale VHF-DAB+ digital radio

1.19 There is merit in exploring ways to deliver extra service outcomes to VHF-DAB+ digital radio. Now that there is a clear national channel plan for DAB+ digital radio based on commercial Licence Areas, there is scope to explore, on a case-by-case basis, where that may be augmented with an overlay for small-scale DAB+ services. The CBAA supports the ACMA facilitating exploration and trial of small-scale DAB+ free-to-air digital radio services. There is a significant availability of VHF-DAB+ receivers that will facilitate positive outcomes for listeners.

Explore use of MF-DRM, Digital Radio Mondiale

1.20 Alongside and in concert with provision of VHF-DAB+ digital radio as the mainstay, there is merit in exploring ways in which extra service outcomes might be achieved using MF-DRM digital radio in regional areas, specifically for larger region-wide coverage. It is noteworthy that there is no MF-DRM receiver population in Australia, and it is generally nascent overseas, with early number automotive receivers in India⁴. Even so, the CBAA supports the ACMA facilitating exploration and trial, in the existing MF-AM band, of MF-DRM free-to-air digital radio services.

Explore use of VHF-DRM, Digital Radio Mondiale

1.21 Alongside and in concert with provision of VHF-DAB+ digital radio as the mainstay, there is merit in exploring ways in which extra digital radio services might be achieved using VHF-DRM digital radio. The common availability of VHF-DRM receivers is still a question, with a number in development. The CBAA supports the ACMA facilitating early stage exploration and trial, in the existing VHF-FM band, of VHF-DRM free-to-air digital radio services.

Free-to-air broadcast and online / mobile broadband technology

1.22 Without legislative mandate and significant social transfer pressure on Telecommunications and Mobile Network Operators, there are prohibitive barriers to internet connectivity serving as a cost-effective and socially equitable substitute for terrestrial free-to-air radio broadcast transmission.

Explore options for new spectrum

1.23 The CBAA would support the ACMA exploring options for new spectrum that could be provided to broadcasters specifically to enable content from licensed broadcast services to be provided on a free-to-air basis using mobile technologies, targeting mobile devices without need for a SIM card.

Explore legislation / regulation required for non-metered content

1.24 The CBAA supports the ACMA exploring what legislation and/or regulation would be required to ensure Telecommunications carriers and Mobile Network Operators are required to enable users to access content provided by a primary set of licensed free-to-air radio services on a non-metered basis to users of fixed and mobile broadband services.

Explore legislation / regulation required for open standards

- 1.25 Under current business and network architectures, the content from free-to-air radio services is available via fixed online services and mobile broadband using consumer devices that are not necessarily freely available or operating under open standards.
- 1.26 This may not be of great consequence while there is a parallel free-to-air broadcast platform however were online streaming to become a primary means to hear content from free-to-air radio, then there is a public interest imperative to ensure no market capture by third-parties.
- 1.27 The CBAA supports the ACMA exploring what legislation and/or regulation would be required to ensure there is full transparency and no imbalance or impediment to the 'discovery' of audio and related content provided by licensed free-to-air radio services introduced by makers of third-party devices, including voice activated devices, smart speakers, mobile smart phones, or connected car user interfaces.

Mechanisms to support future of free-to-air radio service digitisation

- 1.28 As radio further digitises, there is scope to examine legislative and regulatory levers that might support public good outcomes for radio. There are cracks and gaps in the legislative and regulatory framework that warrant scrutiny by the ACMA, in concert with the Department of Communications and the Arts (DoCA). These include exploring mechanisms to:
 - add to the ACCC understanding of the public policy imperatives as well as the market dynamics of free-to-air radio broadcasting, given there is now an access regime specific to digital radio.
 - improve equitable access to key infrastructure, including (mostly metropolitan) tunnels and also (metropolitan, regional and remote) towers. Recognising the public policy objectives of free-to-air radio broadcasting, there may be better ways to work with

⁴ Broadcast Asia - ABU/AIBD June 2018. DRM presentation, over 1.5 million in-car MF-DRM receivers in India.

existing legislation, or possibilities to improve legislation to facilitate access to relevant infrastructure.

- The CBAA would support these and related matters being reviewed through the Digital Radio Planning Committee, noting it is as the appropriate industry committee, chaired by the ACMA.
- The CBAA has long-standing concerns in relation to the detail of DAB+ digital radio legislation, including in relation to capacity reservations, limitations around the ability to initiate a multiplex in a new area, and various other aspects. Largely these are matters for consideration with the DoCA.

2. Background

- 2.1 Community radio stations do more than deliver audio entertainment and information to audiences across Australia. From the outset more than four decades ago, community broadcasting has embraced an enduring ethos of community access, participation and representation.
- 2,2 Community broadcasting has grown to be Australia's largest independent media sector⁵ but has retained its grassroots base. Moreover, stations provide unique skills development pathways in media, broadcasting and content production along with nationally accredited training to build business, leadership and management skills appropriate to a social enterprise model that accommodates a blend of professional and volunteer inputs.
- 2.2 Across Australia community radio addresses general communities of interest but also addresses particular social and cultural needs, such as community development and employment opportunities for First Nations Australians and radio reading services for those with a print disability. Overall the community broadcasting sector, promotes social inclusion and provides a voice for those under-represented in the cultural and social mainstream.
- 2.3 While the CBAA appreciates that the ACMA is seeking industry views on the drivers of radio industry change, the management decisions made by community broadcasting licensees are more appropriately driven by the particular needs and interests of identified local communities than by business or commercial competition issues in any licence area.
- 2.4 At its core, the community broadcasting sector operates in a dynamic and evolving cultural economy. The impact of change, particularly over the last decade or so, on the access and distribution of media content has shifted social and cultural 'connection points'.
- 2.5 Community radio stations provide tangible community support and engender social cohesion in ways that online audio services and social media do not. While fundamentally local in focus, stations have embraced emerging technologies to share content to supplement their terrestrial delivery capacities and improve community service outcomes.
- 2.6 Free-to-air (free-to-receive) terrestrial radio remains a robust, cost-effective and adaptive platform with near-ubiquitous reach to most Australian population centres. In recent years, the mix of ways Australians listen to audio has shifted, primarily in relation to and away from their owned music collections. Listening to audio content on-demand has grown, yet remains a small factor overall, at less than 4% share of all audio listening, while listening to live radio still has the lion's share at over 62%⁶.
- 2.7 Despite digital disruption reshaping patterns of use and consumption of television and print media, community radio retains strong community support and a dedicated and expanding listenership. There remains a sustained trend of growth and diversification in services measured against a range of indicators.
- 2.8 Audience engagement with terrestrial community radio services remains strong and the growth trend in listener numbers has been consistent over the past ten years.
- 2.9 With suitable legislative amendments, adaptive regulatory settings and appropriate planning consideration, the ongoing sector commitment to service diversity outcomes ensures community radio broadcasting's future is strong.

Independent from government, political or commercial control.

Commercial Radio Australia, GfK, Share of Audio 2018: Share of Daily Time Spent Listening to any Audio Live Radio 62.3% Owned Music 8.6%, Streamed Music 15.3%, Online Music Videos 3.4%, Podcasts & Listen Later 3.8% www.radioalive.com.au/Research-Insights/Share-of-Audio/2018/Share-of-Audio-2018

3. Community radio snapshot

- 3.1 In 2019, 5.9 million Australians listen to at least one of the 461 community radio services each week⁷. This represents 30% of Australians aged 15 years or older. Sixty-seven percent of those listeners (4.01 million) were in the five mainland State capitals and 33% (1.95 million) were in regional, rural and remote areas. On average, community radio listeners spend 15.7 hours per week listening.
- 3.2 The latest National Listener Survey indicates that community radio audiences value live and local services that provide local news and community information. The sector caters for diverse community interests and cultural needs including services for First Nations' Australians, specialist multilingual services, faith-based services, radio reading services for those with print disabilities, specialist music services and services for local geographic areas serving a diverse range of community interests.
- 3.3 Almost 1.8 million community radio listeners are outside the capital cities and they represent 28% of the population aged 15+ in non-metropolitan areas.
- 3.4 Sixteen percent of the total community radio audience or nearly one million Australians only listen to community radio services (not to commercial or national services). Thirteen percent of community radio listeners identify as LGBTQIA+, 12% have a sight/vision impairment and 5% identify as being of Aboriginal or Torres Strait Islander background.
- 3.5 Currently licensed to provide 461 radio services across Australia, community radio is a large and diverse sector of the broadcasting industry. 357 full-time community radio stations (344 VHF-FM and 13 MF-AM) and 104 stations with temporary licences (103 VHF-FM and one MF-AM) provide services to communities in metropolitan, regional and remote areas.
- 3.6 Forty-two digital radio services are currently provided in the mainland State capital cities by community licensees on the VHF-DAB+ platform. By the end of 2019 a further 13 services are expected to commence operating digital radio services in Darwin, Canberra and Hobart, with another 15 regional locations under planning consideration.
- 3.7 In simulcast, digital services deliver superior coverage and consistent audio quality compared to analogue services, and community licensees add a further diversity dividend with 31.3% of weekly broadcast hours being unique content. Online live simulcasting and audio streaming services are provided to audiences by 85% of community stations and 32% provide podcasts.
- 3.8 Community broadcasting constitutes the largest component of Indigenous media production in Australia and half (48%) of people who identify as Aboriginal or Torres Strait Islander listen to community radio during a typical week. First Nations media services provide community assets that contribute to strengthening culture, community development and the local economy. First Nations media are committed to providing meaningful paid jobs for local people in communities across Australia.

4. People power

- 4.1 Overall the community radio sector is powered by the efforts and dedication of more than 26,000 volunteers and around 800 paid staff. Over half of stations are entirely volunteer run and 17% of volunteers are under 26 years of age⁸.
- 4.2 This means the community broadcasting sector is an important conduit for skills, training and employment opportunities in media and broadcasting production as well as in organisational governance and management roles.
- 4.3 The Community Media Training Organisation (CMTO) is a registered training organisation that delivers nationally accredited and pathways training (in media production and management) to more than 1,300 trainees each year. More than 300 stations have engaged in formal training offered by the CMTO over the past three years.

CBAA/McNair yellowSquares, Community Radio Broadcasting National Listener Survey, Wave 1, July 2019

www.cbaa.org.au/broadcasters/get-data-national-listener-survey-station-census/national-listener-survey-fact-sheets

CBAA and Survey Matters, Community Broadcasting Financial Health of Community Broadcasting, October 2017 (nationally aggregated figures)

5. Funding sources and support

- 5.1 Community broadcasting raises 75% of total station revenues from fundraising, sponsorship, membership/subscription fees, training, airtime fees and production services. The remaining 25% of revenue derives from grants from federal, state and local government sources as well as from philanthropic and educational institutions. Sale of on-air sponsorship provides about 40% of total sector income and donor fundraising/gifts accounts for a little over 21%.
- 5.2 In 2018/19 the Community Broadcasting Foundation granted more than \$18 million of Commonwealth financial support to help 200 community media organisations communicate, connect and share knowledge through independent radio, television and digital media.

6. Serving diversity

- 6.1 The ACMA allocates and renews full-time (permanent) licences to eligible community groups to represent community interests either defined by General Geographic Area or by a range of specific community interests including:
 - First Nations (Indigenous)
 - Culturally and linguistically diverse (Ethnic)
 - Community access
 - Print disability (Radio reading services)

- Educational
- Religious (Faith-based)
- Specialist music
- Youth
- Seniors
- LGBTIQA+
- 6.2 Community radio reaches most populated regions of Australia with the largest proportion of stations in the sector located in regional and remote areas (76%). Each type of service category has their own operational model, participation requirements, volunteer requirements, service commitment and content mix to suit the particular need of the community interest to be served.
- 6.3 There are a total of 181 General Geographic Area services which provide local community access. The greatest number of such services are in Regional areas (128) followed by Suburban/Sub-metro areas (40). One of the regional services uses an MF-AM frequency (2WEB). There are 13 remote area licences in this category, all on VHF-FM.
- 6.4 There are 91 Indigenous radio services. This category includes services in 75 Rural & Remote areas, followed by 11 Regional and 5 Metro areas. All but four of these services are on VHF-FM. Three regional Indigenous services use MF-AM 4MW in the Torres Strait, 6FX in Fitzroy Crossing and 6WR in Kununurra and one metropolitan service, 3KND in Melbourne.
- 6.5 Across Australia there are a total of 35 Faith-based services distributed between 29 Regional areas and six Metropolitan areas. There are 34 Religious-Christian services and one Religious-Islamic service. All services in this category are on VHF-FM.
- 6.6 Radio Reading Services (RRS) currently total 18 services that ACMA classifies in the online listings as Print Handicapped. There are 12 RRS stations in regional areas and six in capital cities (including Canberra and Hobart). There are seven RRS stations with MF-AM licences all of them in capital cities. Radio reading services are also provided as content on an additional 20 regional stations under an MOU with RPH Australia.
- 6.7 Six Specialist Music services have metropolitan coverage and three have regional coverage. Youth services are evenly distributed between four metropolitan and four regional areas (all on VHF-FM). There are six Educational services and they are all in metropolitan areas using VHF-FM.
- 6.8 Ethnic radio services are distributed across 91 general geographic area stations in metropolitan and regional areas via full-time Ethnic services in five metropolitan areas and one regional area (i.e. Canberra ACMA-classified as regional). Ethnic community broadcasting is a dynamic diverse sector, serving the needs of hundreds of thousands of Australians of all ages in urban and regional areas across Australia. It is highly cost-effective, harnessing the skills, expertise and time of more than 4,000 volunteers from 125 distinct cultural groups who create 2,070 hours of content every week in over 110 languages.

- 6.9 There is one LGBTIQA+ service broadcast on VHF-FM, which is also simulcast on VHF-DAB+ (JOY in Melbourne). There is also one Community Access service, 3CR, which is broadcast in Melbourne on MF-AM and simulcast on VHF-DAB+.
- 6.10 On the basis of communities of interest and the distribution pattern of current services there is further room for new services to serve unmet community needs and interests, The CBAA recently ascertained that there are a number of community radio licensees interested in taking up unused FM frequencies in regional areas. The community broadcasting sector will continue to adapt current and emerging media technologies to deliver service outcomes to meet the widest range of community need, promote social inclusion and foster the growth and spread of cultural diversity.

7. Policy objectives

The ACMA invites further consideration of the relevant enduring policy objectives that should guide the future delivery of radio services in Australia.

- 7.1 A viable and sustainable community broadcasting sector is essential to the realisation of four of the key objects of the BSA⁹:
 - Promote the availability to audiences throughout Australia of a diverse range of radio and television services offering entertainment, education and information;
 - Promote the role of broadcasting services in developing and reflecting a sense of Australian identity, character and cultural diversity;
 - Promote the availability to audiences throughout Australia of television and radio programs about matters of local significance; and
 - 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.
- 7.2 The CBAA endorses the enduring policy concepts identified by the Department of Communications and the Arts in their 2016 review of the ACMA. They articulate closely with community broadcasting's core values which provide for:
 - A diverse range of viewpoints that enrich Australia's social and cultural fabric;
 - Promotion of community identity and social inclusion;
 - Community participation in free-to-air broadcasting and content production;
 - Contribution to media diversity;
 - Significant amounts of local content; and
 - A unique range of services and programs.
- 7.3 Additionally, community radio services support a broad range of arts and cultural activities at the local level working with smaller organisations that may garner little support or community promotion from the other broadcasting sectors. Local community radio stations provide solid support for local artists, promoting local concerts and festivals and playing local music both in the form of live performances and targeted airplay of recorded works.
- 7.4 There are also a wide range of sector initiatives that support Australian music and arts, independent news and information, media diversity and community engagement. Three notable examples are Amrap (the Australian Music Radio Airplay Project), the Enhanced National News Programming Initiative (ENNPI) and ENGAGE.
- 7.4 There is a clear link between the strength and popularity of local community radio and diverse and passionate local music scenes¹⁰. The CBAA's Amrap initiative distributes and promotes contemporary Australian music to community radio stations nationwide and reduces barriers

⁹ Broadcasting Services Act 1992, s.3(1)(a), (e), (ea) and (n)

¹⁰ House of Representatives Standing Committee on Communications and the Arts 2019, Report on the Inquiry into the Australian Music Industry: www.aph.gov.au/Parliamentary_Business/Committees/House/Communications/Australianmusicindustry/Report

to entry for upcoming artists and producers. On average, community radio stations across Australia broadcast 37% of their music content from Australian artists (well surpassing the Community Radio Broadcasting Codes of Practice requirement of 25%).

- 7.5 Community radio is valued by listeners as an independent and local source of information, entertainment and music. When asked to nominate their main reason for listening, community radio listeners' responses rank as follows Local information/local news 49%, Specialist music 34%, Local voices/Local personalities 34% and Australian music/support for local artists 27%¹¹.
- 7.5 The CBAA is currently establishing a sector-wide collaborative news network that will champion local voices and support local journalism. This includes expanding its long-standing National Radio News Service partnership with Charles Sturt University and the launch of a technology-based solution, which will join community radio stations in a news eco-system to facilitate the growth of local and community journalism; enhance stations' news production capacities; and provide training to ensure more local news is being offered to communities nationwide.
- 7.6 Ethnic community broadcasting is an example of how community access to radio can support more effective participation in society for newly arrived communities through culturally and linguistically specific information on settlement services and by providing community access.
- 7.5 The CBAA recognises the important work undertaken in recent years by the National Ethnic and Multicultural Broadcasters Council (NEMBC) through its ENGAGE project in identifying a lack of support for migrant communities in regional areas to be on air. Communities in Shepparton, Bendigo and Mildura have been assisted to start radio programs in languages other than English. The project has identified further country and regional areas that warrant further assistance with clear cases identified in Griffith, Wagga Wagga and Tamworth.
- 7.6 Planning and allocation resources should be dedicated to extending the distribution of social goods already provided by full-time metropolitan ethnic stations and a large network of regional community access providers. The NEMBC has assembled evidence of community need for new VHF-FM services and platform access to DAB+ as it is implemented regionally.
- 7.7 In a similar way, there is clear merit in Indigenous services, radio reading services and other specialist services being part of the primary suite of services made available in each area via DAB+ digital radio.
- 7.8 A further enduring policy concept that warrants preservation is included in section 15 of the BSA, which requires, inter alia, that community radio programs are able to be received by commonly-available equipment and are made available free to the general public.

8. Changing radio environment

The ACMA invites comments and views about the drivers of radio industry change presented here about the current market and suitability of alternative audio content delivery platforms, including alternative spectrum and regulatory approaches needed to support radio in the future.

MF-AM radio

- 8.1 The CBAA notes that for some situations MF-AM radio remains socially and economically important. For some regional and region-wide broadcasters, it provides the only viable wide coverage platform for locally specific broadcasting.
- 8.2 Online delivery, including the NBN, does not offer an alternative. It does not provide free-to-receive services and the NBN is at risk of outage in times of emergency because of the reliance on mains electricity of its household reception equipment. This is further exacerbated by broadband services in many areas being unreliable in their capacity to support continuous listening. Neither VHF-FM nor wireless broadband have the reach to match rural wide coverage MF-AM.
- 8.3 The majority of Indigenous radio services in regional and remote areas use VHF-FM frequencies but the propagation characteristics and geographic reach of MF signals would be worthy of ACMA planning consideration for the extension of service coverage in regional and remote areas or to provide additional first-line services for First Nations Australians.

¹¹ CBAA/McNair yellowSquares, Community Radio Broadcasting National Listener Survey, Wave 1, July 2019 www.cbaa.org.au/sites/default/files/media/NLS%20Fact%20Sheet%20-%20Australia%20-%202019.pdf

- 8.4 There are nine community radio stations in the capital cities (including Canberra) using MF-AM frequencies. Over time degradation of MF-AM from interference becomes a matter of concern. These services now have access to VHF-DAB+ digital radio.
- 8.5 This issue is of particular concern to the six capital city based providers of Radio Reading Services (RRS) that provide first line access for Australians who have difficult reading as a result of vision, cognitive, physical or literacy impairment.
- 8.6 There are also five community radio stations in regional Australia using MF-AM, one of these provides a General geographic service, one is for RRS and three are for Indigenous/Torres Strait Islander communities of interest. All of these services have wide-area coverage, albeit with the limitations of analogue AM audio quality.

No single replacement technology for analogue

- 8.7 The CBAA notes the ACMA's observations about alternatives to analogue broadcast for delivery of free-to-air radio content that makes use of mobile broadband and wireless services as not being in the broadcasting services bands and so outside the BSA regulatory framework. As part of the next steps in radio digitisation it will be useful to harmonise regulation.
- 8.8 Given the positive progress of DAB+ digital radio implementation to date, the wider circumstances and recognising the need for investment stability, receiver availability and timeframes, the CBAA supports the use of DAB+ digital radio as the mainstay technology to deliver free-to-air digital radio services, supported and augmented by other technologies working in a complementary and hybrid manner.
- 8.9 Initial allotment planning, in accordance with current legislation, addresses the provision of VHF-DAB+ services on the basis of alignment with commercial radio Licence Areas. As has been well documented, it is not certain this alignment is the best or only way to provision DAB+ digital radio services, both in terms of spectrum efficiency or in terms of best listener outcomes.
- 8.10 The CBAA has other long-standing concerns in relation to the detail of DAB+ digital radio legislation, including in relation to capacity reservations, limitations around the ability to initiate a multiplex in a new area, and various other aspects. Largely these are matters for consideration with the Department of Communications and the Arts.
- 8.11 The CBAA would support these and related matters being reviewed through the Digital Radio Planning Committee, noting it is as the appropriate industry committee, chaired by the ACMA.
- 8.12 Throughout the first phase of the rollout of DAB+ digital radio in the mainland state capital cities and now moving into regional implementation, community digital radio services provide expanded choice for listeners, additional content diversity and expanded service access to new communities.
- 8.13 Seventy-six percent of the full-time (permanent) community radio stations in regional Australia are the only licensed community service in their licence area¹². The CBAA is promoting the introduction over time on an area-by-area basis, of additional digital-only services with a view to providing first-line support for social and/or cultural needs. This would be of particular benefit to particular communities such as First Nations listeners, newly arrived immigrants or those who require radio reading services.
- 8.14 Multi-platform delivery supports a complex network of interactions, information exchange and content sharing. It is still very much a transitional process for the broadcasting industry and the need for regulatory clarity is becoming pressing in particular with respect to licensing criteria relating to material of local significance¹³. As with any significant transition, it is not always a smooth or equitable process especially for volunteer based sectors with relatively low resource levels.
- 8.15 Radio listening via fixed online and mobile broadband platforms is a useful adjunct to mainstream broadcast delivery. It enables on-demand listening; out-of-area listening; and can act as a supplement where broadcast delivery is not available or impaired.

¹³ s.84 of the Broadcasting Services Act 1992

^{12 204} licences out of a total of 267 regional and remote licence areas

- 8.16 Worldwide, most research tracks radio listening via online, all forms, as being in the range 8-11% of total radio listening¹⁴.
- 8.17 Taking these trends, and the strengths and weaknesses of each platform into account, there is every reason for Government to ensure there is a core set of free-to-air digital radio broadcast services available in each area.
- 8.12 Broadcasting, being free-to-receive, provides a policy basis to ensure a suitably diverse range of views, news, information and cultural discourse are available. Without Government intervention, fixed and mobile broadband services attract data usage fees.
- 8.13 The broadcast model of radio speaks to the ways in which users access information and cultural services. A significant live audience is a key defining feature. Its voice provides a sense of localism and social cohesion. It is a trusted source of news, comment, information, cultural content and analysis. Its voice and cultural output is the result of localised peer review which gives it relevance and status. It has a sense of community.

9. Future scenario one

Radio makes greater use of FM technology

- What are the current infrastructure and cost challenges facing AM radio?
- What are viable options to supplement or replace AM radio over the next 5-10 years?
- What are the benefits and impacts of an extension to the FM band?
- What specific spectrum planning challenges should the ACMA consider?
- 9.1 Ageing transmission infrastructure, along with the attendant maintenance and upgrade costs; and rising levels of interference and service impairment, particularly in urban areas, are key challenges facing providers of analogue MF-AM radio services.
- 9.2 Progressive migration of listeners to receivers that do not provide for the reception of analogue MF-AM services; and difficulties with mobile and car receivers as reception environments, also bring into question the medium term sustainability of analogue MF-AM.
- 9.3 Over the next decade the most viable option for replacing MF-AM transmissions by community radio licensees is to move to VHF-DAB+ digital radio service provision when and as the listener base reaches the requisite scale.
- 9.4 The CBAA supports the existing caveat placed on the current consideration of AM to FM conversions in regional solus markets that existing services are not to be adversely affected and would not support pressure being applied to any incumbent community licensees, either within a licence area or in an adjacent area, to force availability of additional frequencies.
- 9.5 The CBAA supports transparent and agreed engineering solutions to finding additional VHF-FM channels but does not support any wholesale re-planning or re-stacking in solus or multi-service markets on the grounds of unnecessary disruption to listeners.
- 9.6 The CBAA does not rule out use of alternative digital technologies such as Digital Radio Mondiale (DRM) operating on MF spectrum that would otherwise be used for AM services. DRM technology potentially offers better service outcomes than analogue AM services in terms of audio quality, area coverage and spectrum efficiency.
- 9.7 There is little to no merit in further exploring extending the VHF-FM band. This would require listeners purchase new receivers with the extended VHF-FM reception capability, and entrench analogue in a way that is counter to the trend for digitisation. A better approach is to use DAB+ digital radio, recognising it offers extra service opportunities, capabilities and economies and is already or soon to be in place in the areas of Australia with the greatest VHF-FM channel scarcity.
- 9.8 Other than on a specific case-by-case basis, there is little merit in exploring a wholesale restack of channel planning and assignments with the existing VHF-FM band. This would likely be highly disruptive to listeners and result in little benefit above what can currently be achieved.

¹⁴ UK RAJAR Data Release, Q1 2019 results track share of live radio listening via online as being 10.1% in an average week

10. Future scenario two

AM and FM radio progressively migrates to DAB+ digital radio

- How could local geographic area community broadcasters and narrowcasters, (not currently eligible for DAB+) be accommodated in such a scenario?
- Could wide coverage national AM services be economically and technically matched in DAB+? Is DRM a viable alternative transmission technology? Are there other technology, market or conversion options (eg, some markets only?)
- What role might a decision mandating the eventual switch-off of analogue transmitters
 play, either in providing a business case for investment in digital radio transmission or in
 encouraging uptake of digital radios
- What are the risks associated with such a decision?
- What specific spectrum planning changes should the ACMA consider?
- 10.1 The CBAA supports the progressive migration of AM and FM services to the DAB+ digital radio platform with the proviso that it is undertaken on an area-by-area, service-by-service basis but subject to licensees being afforded voluntary discretion to adopt digital and only surrendering an existing analogue content licence when and as they choose.
- 10.2 Under an approach that would have no built-in spectrum sunset or licence surrender imperatives it is left to licensees to make independent decisions about the sustainability of its analogue service delivery arrangements, and whether to take up digital access.
- 10.3 Within the next five to ten years the most viable option for replacing MF-AM transmissions by community radio licensees is a transition to VHF-DAB+ digital radio service provision when and as the listener base reaches requisite scale. Campaigns that target the primary audience of those services and point to and/or provide replacement receivers may also prove useful.
- 10.4 There is merit in the ACMA, with industry, exploring the factors leading to sunset of (some) MF-AM services in metropolitan areas, logically in favour of digital options, with VHF-DAB+ being the mainstay, augmented in a complementary fashion, in hybrid mode, using online/mobile.
- 10.5 DRM may prove viable in certain transmission scenarios for region-wide coverage across rural and regional areas using spectrum currently used for analogue MF-AM. DRM using spectrum currently used for analogue VHF-FM may also have utility for local coverage in the larger cities, but there remain questions about the availability of receivers.
- 10.6 Given the positive progress of VHF-DAB+ digital radio implementation to date, the wider circumstances and recognising the need for investment stability, receiver availability and timeframes, the CBAA supports the use of VHF-DAB+ digital radio as the mainstay technology to deliver free-to-air digital radio services, supported and augmented by other technologies working in a complementary and hybrid manner.
- 10.7 The work of the industry-based Digital Radio Planning Committee, chaired by the ACMA, has been valuable to determine planning principles and set out regional allotment plans for digital radio, using a total of eight DAB frequency blocks within VHF broadcast services band spectrum.
- 10.8 The CBAA is pleased to note that allotment outcomes to date, and some resources associated with this work, have been made available by the ACMA. The significant amount of detailed and objective work undertaken by the ACMA in this to date is acknowledged.
- 10.9 Based on the availability of this foundation work, it is now possible for formal Digital Radio Channel Plans to be drawn and the extension of VHF-DAB+ digital radio services to be implemented with extra confidence, and for a next layer of service planning and flexibilities to be contemplated.
- 10.10 The initial allotment planning, in accordance with current legislation, addresses the provision of VHF-DAB+ services on the basis of alignment with commercial radio Licence Areas. As has been well documented, it is not certain this alignment is the best or only way to provision DAB+ digital radio services, both in terms of spectrum efficiency or in terms of best listener outcomes.

- 10.11 There is merit in exploring ways to deliver extra service outcomes to VHF-DAB+ digital radio. Now that there is a clear national channel plan for digital DAB+ based on commercial Licence Areas, there is scope to explore, on a case-by-case basis, where that may be augmented with an overlay for small-scale VHF-DAB+ services. The CBAA supports the ACMA facilitating exploration and trial of small-scale VHF-DAB+ free-to-air digital radio services. There is a significant VHF-DAB+ digital radio receiver availability that will facilitate positive outcomes for listeners.
- 10.12 Alongside and in concert with provision of VHF-DAB+ digital radio as the mainstay, there is merit in exploring ways in which extra service outcomes might be achieved using MF-DRM digital radio in regional areas, specifically for larger region-wide coverage. It is noteworthy that there is no MF-DRM receiver population in Australia, and it is generally nascent overseas, with early number automotive receivers in India¹⁵. Even so, the CBAA supports the ACMA facilitating exploration and trial, in the existing MF-AM band, of MF-DRM free-to-air digital radio services. There may also be potential to explore HF-DRM.
- 10.13 Alongside and in concert with provision of VHF-DAB+ digital radio as the mainstay, there is merit in exploring ways in which extra digital radio services might be achieved using VHF-DRM digital radio. The common availability of VHF-DRM receivers is still a question, with a number in development. The CBAA supports the ACMA facilitating early stage exploration and trial, in the existing VHF-FM band, of VHF-DRM free-to-air digital radio services.

11. Future scenario three

Free-to-air terrestrial radio progressively migrates to online streaming

- How well will wireless internet connectivity match the coverage of existing free-to-air terrestrial analogue and digital radio? When and how will online streaming be capable of delivering popular real-time radio services simultaneously to a mass audience?
- In what circumstances will it be feasible, or equitable, to rely on wireless broadband networks to deliver services currently delivered via broadcast free-to-air to almost all Australians?
- What are any other implications of this scenario for free-to-air terrestrial radio in the broadcast services bands?
- What specific spectrum planning changes should the ACMA consider? Are there any spectrum implications of this scenario?
- 11.1 Without legislative mandate and significant social transfer pressure on telecommunications and mobile network operators, there are prohibitive barriers to internet connectivity serving as a cost-effective and socially equitable substitute for terrestrial radio transmission.
- 11.2 For fixed and/or wireless broadband internet to become the mainstay listening platform for free-to-air radio services, the following issues would need to be overcome:
 - The need for the listener to meet the costs of data charges
 - The failure of broadband systems to meet the data capacity expectations and needs of households and individual users for a range of audio-visual services
 - The send-end cost to broadcasters multiplying by the number of concurrent users (listeners) to untenable scale.
- 11.3 As with other radio broadcasters, community radio broadcasters make audio and other content available via online websites and mobile broadband device applications, for live simulcast, listen later and on-demand purposes. That is not to be taken as replacement of the free-to-air broadcast model.
- 11.4 Digital radio broadcasting platforms are free-to-receive and, by design, enable concurrent delivery of services to an unlimited number of users. They are efficient for broadcasting. Other delivery technologies struggle to deliver live services to a significant number of concurrent users, especially in a mobile listening situation.
- 11.5 Applying mathematics to typical radio listening patterns quickly makes the case for a digital platform that is designed for broadcast delivery.
- 11.6 While it is obviously possible to deliver radio as a stream to fixed location listeners there are significant infrastructure issues and costs should it become the mainstay listening platform.

 $^{^{15}}$ Broadcast Asia, June 2018. DRM presentation, over 1.5 million in-car MF-DRM receivers in India.

There are costs to the listener for data charges; the send-end cost to broadcasters multiplies by the number of concurrent users and, for typical broadcast sized audiences, quickly becomes a major broadcaster cost, including for community broadcasters. Multicast network protocols and edge servers would need to be widely deployed.

- 11.7 Listeners on the move would need to rely on mobile broadband. The spectral demand that radio audiences place on mobile broadband is highly significant. A typical mobile broadband implementation with 100+ sites across a city, with capacity dedicated to radio service delivery would fall orders of magnitude short in terms of delivery capability.
- 11.8 There are typically 10-60 radio stations in each licence area in Australia. In the larger cities, each of them would command a peak concurrent audience well above 50,000. Typical metropolitan community stations each reach over 100,000 concurrent listeners. Typical small regional town stations each reach over 5,000 concurrent listeners.
- 11.9 The obvious conclusion: mobile broadband is not suited to radio station audience sizes. It is suited to on-demand and boutique scale live delivery. The ideal is to integrate fit-for-purpose broadcast platforms together with mobile broadband platforms into the one receive device.
- 11.10 A relief may be to operate the mobile network in "multimedia broadcast multicast mode", either per cell or across a single frequency network multi-cell implementation. While technically possible, this requires setting aside data capacity otherwise used to generate transactional revenue; a new handset design; and legislation to ensure provision of radio services remains a fixture on the platform.
- 11.11 Using a proprietary standard, Telstra is currently experimenting with this type of technology. Caveats include that is for selected live video (typically sporting) events, in selected locations, and to select compatible mobile handsets. It is early days and, while this model may fit with a mobile network operator's agenda to better manage its own data bottlenecks in delivering and monetising its own services, it does not address the costs that would flow to both licensed broadcaster and user. It is not free-to-air.
- 11.12 To ensure a free-to-air outcome would require either:
 - legislation put upon the telecommunications and mobile network operators; and/or
 - provision of a parcel of compatible spectrum in each area of Australia otherwise suitable for mobile broadband purposes, but instead dedicated for free-to-air radio delivery via a mobile device without need for a SIM card.
- 11.13 While desirable, the legislative logistics of navigating that outcome might make free-to-air digital radio on the basis of a fit-for-purpose broadcast platform seem simple by comparison.
- 11.14 Nevertheless, the CBAA would support the ACMA exploring options for spectrum that could be provided to broadcasters specifically to enable licensed broadcast services to be provided on a free-to-air basis targeting mobile devices without need for a SIM card.
- 11.15 Under current business and network architectures, the content from free-to-air radio services is available via online using consumer devices that are not necessarily freely available or operating under open standards.
- 11.16 This may not be of great consequence while there is a parallel free-to-air broadcast platform, however were online streaming to become the primary means to hear content from free-to-air radio, then there is a public interest imperative to ensure there is no market capture by third-party interests.

12. Legislative and regulatory futures

- 12.1 Broadcasting, being free-to-receive, provides a policy basis to ensure a suitably diverse range of views, news, information and cultural discourse are available.
- 12.2 Social inclusion and universal access principles underpin the need to avoid a community divide based on the ability to pay for digital platform access fees for essential first-line services provided as a public good. Accordingly the CBAA calls for appropriate legislative amendment and regulatory reform and to ensure a primary set of digital radio services are available to all Australians by way of DAB+ in the first instance and via online carriage on a non-metered (zero-rated) basis.

- 12.3 The broadcast model of radio speaks to the ways in which users access information and cultural services. A significant live audience is a key defining feature. Its voice provides a sense of localism and social cohesion. It is a trusted source of news, comment, information, cultural content and analysis. Its voice and cultural output is the result of localised peer review which gives it relevance and status.
- 12.4 The CBAA supports the Government and the ACMA exploring what legislation and/or regulation would be required to ensure there is full transparency and no imbalance or impediment to the 'discovery' of audio and related content provided by licensed free-to-air radio services introduced by makers of third party devices, including voice activated devices, smart speakers, mobile smart phones, or connected car user interfaces.
- 12.5 The CBAA supports the Government and the ACMA exploring what legislation and/or regulation would be required to ensure Telecommunications carriers and Mobile Network Operators are required to enable users to access content provided by a primary set of licensed free-to-air radio services on a non-metered basis to users of fixed and mobile broadband services.
- 12.6 There is a case for regulatory oversight to ensure the availability of key broadcasting services, including community, commercial and national services in digital. Analogue broadcasting remains necessary for the time being but will ultimately not be sufficient in an age where the primary user devices are increasingly digital-only and democratic discourse is trending digital.

This submission has been endorsed by the Community Broadcasting Sector RoundTable comprising the following community broadcasting Sector Representative Organisations: Australian Community Television Alliance (ACTA); Christian Media and Arts Australia (CMAA); Community Broadcasting Foundation (CBF); National Ethnic and Multicultural Broadcasters' Council (NEMBC); and RPH Australia (RPHA).









