Proposal to vary the Tasmania digital radio channel plan for Launceston

Consultation paper

SEPTEMBER 2023

Canberra

Red Building   
Benjamin Offices  
Chan Street   
Belconnen ACT

PO Box 78  
Belconnen ACT 2616

T +61 2 6219 5555  
F +61 2 6219 5353

Melbourne

Level 32   
Melbourne Central Tower  
360 Elizabeth Street   
Melbourne VIC

PO Box 13112  
Law Courts   
Melbourne VIC 8010

T +61 3 9963 6800  
F +61 3 9963 6899

Sydney

Level 5   
The Bay Centre  
65 Pirrama Road   
Pyrmont NSW

PO Box Q500  
Queen Victoria Building   
NSW 1230

T +61 2 9334 7700 or 1800 226 667  
F +61 2 9334 7799

Copyright notice

[Creative Commons logo](http://i.creativecommons.org/l/by/3.0/88x31.png)

<https://creativecommons.org/licenses/by/4.0/>

Except for coats of arms, logos, emblems, images, other third-party material or devices protected by a trademark, this content is made available under the terms of the Creative Commons Attribution 4.0 International (CC BY 4.0) licence.

We request attribution as © Commonwealth of Australia (Australian Communications and Media Authority) 2023.

All other rights are reserved.

The Australian Communications and Media Authority has undertaken reasonable enquiries to identify material owned by third parties and secure permission for its reproduction. Permission may need to be obtained from third parties to re-use their material.

Written enquiries may be sent to:

Manager, Editorial Services  
PO Box 13112  
Law Courts  
Melbourne VIC 8010  
Email: [info@acma.gov.au](mailto:info@acma.gov.au)

Executive summary 1

Introduction 2

Digital radio channel plans 2

The ACMA’s broadcast planning priorities 2

Planning principles – regional digital radio 3

Proposed changes to the Tasmania DRCP 4

ABC radio trials 4

Proposed approach to making the Launceston DRCP 4

Declaring a foundation category 1 DRMT licence 5

Deeming of community radio licence areas 5

Proposal 6

Invitation to comment 7

Making a submission 7

Appendix A – Draft technical specifications 8

Proposed technical specifications for Launceston RA1 (Launceston) 8

Proposed technical specifications for Launceston RA1 (Mount Barrow) 9

Appendix B – Coverage map 10

Appendix C – Digital radio regulatory regime 11

Licence categories 11

Right to apply for a licence and right to access a multiplex 11

Digital radio channel planning 12

Issuing foundation DRMT licences 12

Service commencement 13

Executive summary

The Australian Communications and Media Authority (the ACMA) is proposing to vary the [Radiocommunications (Digital Radio Channels — Tasmania) Plan 2007](https://www.legislation.gov.au/Details/F2017C00477).

The proposed variation to the Tasmania DRCP will:

* allot and reserve frequency channels
* determine licence types

add new technical specifications for digital radio multiplex transmitters (multiplex transmitters) for the Launceston RA1 licence area.

This consultation does not ask specific questions. However, we welcome comment from interested stakeholders on the issues raised in this paper or any other issues relevant to digital radio in Launceston.

# Introduction

The ACMA is proposing to vary the [Radiocommunications (Digital Radio Channels — Tasmania) Plan 2007](https://www.legislation.gov.au/Details/F2017C00477) (the Tasmania DRCP). This legislative instrument currently contains the digital radio channel plan (DRCP) for the Hobart area. The proposed variation will vary the Tasmania DRCP to allot and reserve frequency channels, determine licence types and determine the technical specifications for multiplex transmitters in the Launceston RA1 licence area.

In addition to 6 ABC radio services[[1]](#footnote-2), there are 2 commercial radio broadcasting licences that authorise the provision of analog services in Launceston RA1: 7EXX (90.9 Chilli FM) and 7LAA (92.5 FM), both of which are controlled by Australian Radio Network Pty Limited.

There are 3 analog community radio broadcasting services operating in the Launceston area. Two community radio broadcasting services have been planned for and allocated licences in Launceston RA2[[2]](#footnote-3), and 1 community radio broadcasting service has been planned for and allocated a licence in George Town RA1.[[3]](#footnote-4) One community radio broadcasting service has been planned for Northern Midlands RA1, but the licence has not been allocated.

## Digital radio channel plans

DRCPs are legislative instruments made by the ACMA under section 44A of the *Radiocommunications Act 1992*. The matters that we consider in preparing DRCPs are set out in Appendix C.

A DRCP allots and reserves frequency channels (frequency blocks) for use by digital radio multiplex transmitters (DRMT) licensees in each licence area. Digital radio is planned on the basis of ‘designated BSA radio areas’, which correspond with commercial radio licence areas planned under Part 3 of the *Broadcasting Services Act 1992*. DRMT licences provide for the shared use of digital transmission infrastructure (the multiplex transmitters) by national, commercial and community radio broadcasting services. In making DRCPs, we must also determine the number and types of DRMT licences to be issued, and the technical specifications of multiplex transmitters operated under DRMT licences.

More information about the digital radio regulatory regime is available at Appendix C, and on our [website](http://www.acma.gov.au/).

## The ACMA’s broadcast planning priorities

In 2020, we published our strategic broadcast planning priorities in [*The future delivery of radio*](https://www.acma.gov.au/publications/2020-03/report/future-delivery-radio) report. These priorities allow us to better target resources to improve the diversity and service quality offered in a radio licence area. The following activities are the focus of our broadcast planning:

transitioning commercial, community and national radio services in regional areas from AM to FM, where spectrum is readily available

supporting the rollout of digital radio where feasible

improving coverage for national, commercial and community broadcasting where spectrum is available

supporting trials of new types of broadcasting technology.

In June 2023, we [provided an update](https://www.acma.gov.au/sites/default/files/2023-06/Broadcast%20planning%20priorities%20June%202023%20update.pdf) on how we intend to deliver these priorities, which include:

preparing DRCPs for licence areas where agreement has been achieved with the radio industry on the technical specifications for digital radio, and if a relevant commercial broadcasting licensee or a national broadcaster has committed to commence the service within 2 years from the date of a request

encouraging broadcasters and licensees considering digital rollout to discuss their plans with the ACMA

encouraging broadcasters and licensees in neighbouring licence areas to make submissions to any DRCP consultation process the ACMA conducts, to let us know their plans, even if those plans may lie well into the future.

We also advised that the digital radio legislative framework provides the only pathway for eligible incumbent commercial, national and community broadcasting services to access a digital radio multiplex transmitter. The ACMA will not support digital radio trials to sidestep the regulatory requirements for permanent licensing or to facilitate broadcasting services that are not eligible to access a digital radio multiplex transmitter under the legislative framework.

## Planning principles – regional digital radio

In addition to our broadcast planning priorities, our [*Planning principles for the expansion of digital radio to regional Australia*](https://www.acma.gov.au/publications/2016-12/guide/planning-principles-expansion-digital-radio-regional-australia) provide information on how we exercise our statutory decision making in relation to the rollout of digital radio. The planning principles are based on those developed by the Digital Radio Planning Committee for Regional Australia in 2018. The committee comprised key industry bodies and stakeholders, including national broadcasters, the commercial radio broadcasting industry, the community radio broadcasting industry and the then Department of Communications and the Arts. The principles were the result of 12 months of extensive feasibility studies and research by a technical sub-committee.

The first principle (Planning Principle 1—Overall planning approach) states that ‘the planning of a licence area should address the wider area through the development of a regional plan (indicative regional allotment plans) encompassing all areas which may be affected by the transmission in the target licence area’.[[4]](#footnote-5) Digital radio allotment plans have been provided to network engineers for commercial, community and national radio broadcasting services.

Another of the planning principles (Planning Principle 2—Proposed frequency allotment planning approach) specifies that a maximum effective radiated power (ERP) of 5 kW will be used in the allotment planning process for most licence areas. However, due to their proximity to other licence areas, certain licence areas will need to have multiplex transmitters that are authorised at a power less than 5 kW at the outset. Conversely, multiplex transmitters for more isolated areas may be permitted to operate at an ERP greater than 5 kW. The allotment plans allow for the prediction of interference potential with a degree of certainty and an assessment of the impact of the proposed increase in power on services in other licence areas. If an increase in ERP is requested by a DRMT licensee, this is considered on a case-by-case basis.

# Proposed changes to the Tasmania DRCP

We propose to vary the [Tasmania DRCP](https://www.legislation.gov.au/Details/F2017C00477) to insert a new DRCP (as Schedule 2 to the Tasmania DRCP) to allot and reserve frequency blocks, determine licence types and determine the technical specifications for multiplex transmitters in the Launceston RA1 licence area.

We received a request from the Australian Broadcasting Corporation (ABC) to expedite the development of a DRCP for Launceston to enable the ABC to transmit its broadcasting services as part of a digital radio trial. If the trial is successful, the ABC may establish permanent digital radio services in Launceston.

The ABC has agreed to the technical specifications, and it has committed to commence digital transmission of its broadcasting services when a category 3 DRMT licence is issued as part of the digital radio trial.

## ABC radio trials

The ABC was issued with a scientific licence under section 100 of the Radiocommunications Act on 29 June 2023. This licence authorises the ABC to commence a trial in Launceston with a licence condition that prevents the provision of broadcasting services.

The ABC wishes to trial new technology for the provision of digital radio. In order to test certain aspects of the new technology, the ABC wishes to transmit its broadcasting services as part of the trial. The ACMA’s policy is to not permit broadcasting services to be transmitted as part of digital radio trials conducted under scientific licences. Our view is that the technical aspects of such trial are generally able to be tested and assessed by the transmission of a test signal or looped audio content.

To authorise the ABC’s transmission of its broadcasting services as part of the trial and allow the permanent commencement of digital radio services in Launceston, we propose to make a DRCP for Launceston.

## Proposed approach to making the Launceston DRCP

To expedite making the DRCP, we propose to use the technical specifications for the channels allotted for both the category 1 and the category 3 DRMT licences in the indicative regional allotment plan for Launceston.

The final technical specifications for permanent ABC digital services, if they are established, will not be known until the end of the trial.

We may conduct another consultation on a proposed variation to the DRCP in the future if the ABC requests changes be made to the technical specifications at the end of the trial when it is ready to commence full services in Launceston or when the commercial and community broadcasters are ready to commence digital services.

Making a DRCP for Launceston is a prerequisite for issuing DRMT licences authorising the operation of multiplex transmitters for the transmission of digital national services, digital commercial radio broadcasting services and digital community radio broadcasting services.

## Declaring a foundation category 1 DRMT licence

It has been the ACMA’s usual practice when consulting on making a DRCP, to concurrently consult on a declaration made under section 98C of the Radiocommunications Act that a specified category 1 DRMT licence proposed to be issued is a foundation category 1 DRMT licence. By making such a declaration, the ACMA may then issue a category 1 DRMT licence to an eligible joint venture company formed by the commercial radio broadcasting licensees and the digital radio broadcasting representative company (if any) for the relevant licence area.

We have decided not to consult on making that declaration for Launceston at this time, as we have not received an indication from the commercial radio broadcasting licensees in the Launceston area that they are interested in rolling out digital radio services. A declaration is not needed before the ACMA issues a category 3 DRMT licence to national broadcasters.

We welcome comments from the commercial radio broadcasting licensees and any digital radio broadcasting representative company in Launceston on their plans to rollout digital services in Launceston. If there is a commitment to rollout permanent digital radio services, we will consider making a foundation category 1 DRMT licence declaration, which would enable an eligible joint venture company to be allocated the foundation category 1 DRMT licence.

## Deeming of community radio licence areas

Currently, there are no community radio broadcasting services in Launceston eligible to provide digital radio services. If a foundation category 1 DRMT licence declaration had been made following a commitment from commercial radio broadcasters to rollout digital services in Launceston, the ACMA would need to make an additional determination to enable community radio broadcasters to provide digital radio services in Launceston.

The ACMA could make a determination under subsection 8AD(3) of the Broadcasting Services Actthat a specified licence area of a community radio broadcasting licence is taken to be the same as the Launceston RA1 licence area to provide digital radio services. We would consult before making such a determination.

If a community radio licence area had been deemed to be the same as a commercial radio licence area, the community radio broadcasting licensees for that community radio licence area would be eligible to seek access to the foundation category 1 DRMT through a digital community radio broadcasting representative company. This would enable digital radio services to be provided by community radio licensees in the commercial radio licence area.

We are not proposing to consider deeming of community radio licence areas at this time as there is no practical purpose for this until a foundation category 1 DRMT licence declaration has been made, as this is a prerequisite for digital transmissions of commercial and community radio broadcasting services. As outlined above, we require a commitment from commercial broadcasters to rollout digital radio before we would consider making a foundation category 1 DRMT licence declaration.

## Proposal

We propose to:

determine a single category 1 DRMT licence and a single category 3 DRMT licence be issued for the Launceston RA1 licence area

allot the frequency block 9D for use by the licensee of the category 1 DRMT licence

reserve the frequency block 8B for the category 3 DRMT licence.

This proposal is consistent with the indicative allotment plan for the Launceston RA1 licence area.

The frequency block 8B is proposed for the national broadcasters’ category 3 DRMT licence. The regional allotment plan reserves frequency blocks 8B and 9C for the national broadcasters. As the 9C frequency block is already in use in Hobart, we propose to use the frequency block 8B in Launceston for category 3 DRMT. The frequency block 9D is proposed for the category 1 DRMT licence as per the adopted regional allotment plan.

When the digital radio allotment plans were developed, we performed coverage, interference, and overspill modelling. The engineering analysis indicates that the proposed arrangement balances the coverage and signal quality interests of Launceston’s prospective digital radio multiplex transmitter licensees with those of licensees in adjacent licence areas. The proposed arrangement is likely to provide adequate coverage for most of the Launceston RA1 licence area, without unreasonable overspill to adjacent licence areas. Additional on-channel transmitters may be required to target certain areas in the future.

In accordance with the allotment plans, we have developed 2 technical specifications to be included in the DRCP – for multiplex transmitters located at Mt Barrow and Juliana St in West Launceston.

Additional multiplex transmitters, if needed, could be deployed under the ‘co-channel transmitters’ provision of the DRCP and a variation of the DRMT licence. The potential for both interference and signal overspill from these additional transmitters will be considered if a licence variation to add a co-channel transmitter is requested.

The ACMA considers that the proposal is an economic and efficient use of the radiofrequency spectrum and provides an appropriate balance between ensuring adequate coverage of the licence area by the Launceston broadcasting services and limiting interference and overspill to adjacent licence areas.

The proposed technical specifications for the multiplex transmitters to be operated under category 1 and category 3 DRMT licences for the Launceston RA1 licence area are set out in Appendix A.

# Invitation to comment

## Making a submission

We invite comments on the issues set out in this consultation paper.

[Online submissions](https://www.acma.gov.au/have-your-say) can be made by uploading a document on the consultation page on our website. Submissions in PDF, Microsoft Word or Rich Text Format are preferred.

Submissions by post can be sent to:

The Manager

Broadcasting Carriage Policy Section

Spectrum Management Policy Branch

Australian Communications and Media Authority

PO Box 78

Belconnen ACT 2616

The closing date for submissions is **5 pm (AEST),** **Friday 29 September.**

Consultation enquiries can be emailed to [BCP@acma.gov.au](mailto:BCP@acma.gov.au).

#### Publication of submissions

The ACMA publishes submissions on our website, including personal information (such as names and contact details), except for information that you have claimed (and we have accepted) is confidential.

Confidential information will not be published or otherwise released unless required or authorised by law.

#### Privacy

View information about our policy on the [publication of submissions](https://www.acma.gov.au/publication-submissions), including collection of personal information during consultation and how we handle that information.

Information on the *Privacy Act 1988,* how to access or correct personal information, how to make a privacy complaint and how we will deal with the complaint, is available in our [privacy policy](https://www.acma.gov.au/privacy-policy).

# Appendix A – Draft technical specifications

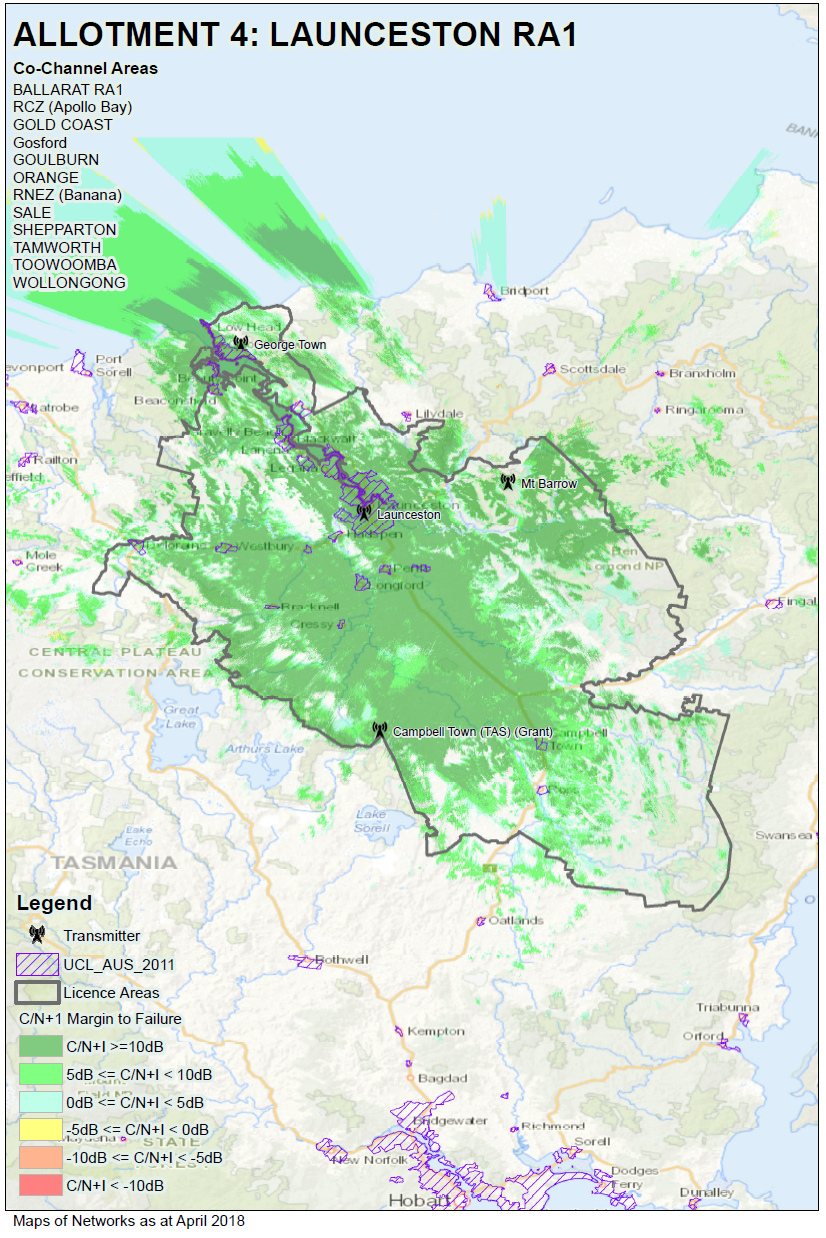
## Proposed technical specifications for Launceston RA1 (Launceston)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Description of proposed broadcasting site | | Telstra/Broadcast Site Juliana St WEST LAUNCESTON, TAS | | | |
| RADCOM site ID | | 33622 | | | |
| Coordinates information (GDA 94) | | Lat. -41.4555 | | Long. 147.1272 | |
| Frequency | | Frequency Blocks 8B (196.880-198.416 MHz) and 9D (207.296-208.832 MHz) | | | |
| Polarisation | | Vertical | | | |
| Maximum antenna height | | 40 metres | | | |
| **Bearing or sector (clockwise direction)** |  | **Maximum ERP** | |  |
| 0°T – 165°T |  | 2,000 W | | |
| 165°T – 205°T |  | 1,000 W | |  |
| 205°T – 245°T |  | 500 W | | |
| 245°T – 285°T |  | 1,000 W | |  |
| 285°T – 360°T |  | 2,000 W | |  |

## Proposed technical specifications for Launceston RA1 (Mount Barrow)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Description of proposed broadcasting site | | Broadcast Australia Tower MT BARROW, TAS | | | |
| RADCOM site ID | | 33804 | | | |
| Coordinates information (GDA 94) | | Lat. -41.3917 | | Long. 147.4262 | |
| Frequency | | Frequency Blocks 8B (196.880-198.416 MHz) and 9D (207.296-208.832 MHz) | | | |
| Polarisation | | Vertical | | | |
| Maximum antenna height | | 40 metres | | | |
| **Bearing or sector (clockwise direction)** |  | **Maximum ERP** | |  |
| 0°T – 25°T |  | 2,500 W | | |
| 25°T – 65°T |  | 1,250 W | | |
| 65°T – 105°T |  | 2,500 W | |  |
| 105°T – 345°T |  | 5,000 W | |  |
| 345°T – 360°T |  | 2,500 W | | |

# Appendix B – Coverage map



# Appendix C – Digital radio regulatory regime

Unlike analog broadcasting, where each broadcaster has its own transmitter and transmitter licence, in DAB+ digital broadcasting, individual broadcasters aggregate or multiplex their content onto one or more multiplex transmitters, using digital compression technology.

Digital radio services are licensed, planned, and operated under the provisions of the *Broadcasting Services Act 1992* and the *Radiocommunications Act 1992*. Among other things, the legislation sets the statutory basis for spectrum planning for digital radio, the allocation of digital radio multiplex transmitter (DRMT) licences and the access regime for multiplex capacity.

## Licence categories

There are 3 categories of DRMT licence:

* category 1: for transmitting commercial radio broadcasting services, and community radio broadcasting services (2/9th of gross multiplex capacity)
* category 2: for transmitting commercial radio broadcasting services, community radio broadcasting services (2/9th of gross multiplex capacity), ABC national radio broadcasting services (1/9th of gross multiplex capacity) and SBS national radio broadcasting services (1/9th of gross multiplex capacity)

category 3: for transmitting only national radio broadcasting services.

The above categories provide flexibility in how national radio broadcasting services may be delivered. Instead of, or in addition to, a stand-alone multiplex transmitter licensed to a national broadcaster joint venture company, the ACMA may issue a ‘category 2’ DRMT licence, in which 1/9th of the gross multiplex capacity is reserved for each national broadcaster. In either case, the ACMA must reserve a frequency block for a category 3 DRMT licence in each licence area.

## Right to apply for a licence and right to access a multiplex

Commercial radio broadcasting licensees (commercial licensees), with an existing licence extant at the time the digital radio legislation came into effect in 2007, have the right to apply for shares in joint venture companies formed to hold one or more ‘foundation’ DRMT licences for a licence area. In addition, each such commercial licensee has, through the access regime, a standard access entitlement to 1/9th of the gross capacity of a multiplex to provide commercial radio broadcasting services. Each commercial licensee (as well as designated community broadcasting licensees and, for category 2 licences, national broadcasters) also has the right to bid for any excess capacity on the multiplex.

Designated community broadcasting licensees may jointly access 2/9th of gross multiplex capacity reserved for their exclusive use, with the allocation of this capacity decided by a community digital radio representative company. The community digital radio representative company may also choose to be a shareholder in the DRMT licensee joint venture company.

The Broadcasting Services Act defines a designated digital community radio broadcasting licensee as a community radio broadcasting licence holder, which has the same licence area as a commercial radio broadcasting licence. This means that in the capital cities, sub-metropolitan or suburban community radio broadcasting licensees do not automatically have access to digital radio transmission rights.

In some cases, a community radio broadcasting licensee may be a designated community radio broadcasting licensee, if its licence area is deemed to be the same as the relevant commercial radio broadcasting licence area under section 8AD of the Broadcasting Services Act or under a determination made by the ACMA. The ACMA has made the [Broadcasting Services (Deemed Digital Radio Licence Areas) Determination 2017](https://www.legislation.gov.au/Details/F2019C00909).

## Digital radio channel planning

Before issuing a DRMT licence, section 44A of the Radiocommunications Act requires the ACMA to prepare a digital radio channel plan (DRCP) for the licence area, that:

* allots frequency channels (frequency blocks) for use by DRMT licensees, where each allocated frequency channel has a bandwidth of at least 1.536 MHz[[5]](#footnote-6)
* reserves a frequency block for a category 3 DRMT licence (national broadcasting)
* specifies the number and category of DRMT licences to be issued for the licence area
* determines the technical specifications of multiplex transmitters
* is consistent with the spectrum plan, any relevant frequency band plans, and any relevant licence area plans prepared under section 26 of the Broadcasting Services Act [[6]](#footnote-7)

as far as practicable, ensures that a DRCP does not discriminate between DRMT licensees, in relation to the technical specifications of multiplex transmitters.

In preparing or varying a DRCP, the ACMA must have regard to the digital radio broadcasting services, that:

are, or will be, authorised by commercial radio broadcasting licences for the designated BSA radio area

are, or will be, authorised by community radio broadcasting licences for the designated BSA radio area

are, or will be, provided by national broadcasters in the designated BSA radio area.

## Issuing foundation DRMT licences

The general rule for DRMT licences is that they are allocated using a price-based system under section 106 of the Radiocommunications Act.

The issue of a *foundation* DRMT licence in a licence area is an exception to the rule. The Radiocommunications Act provides that for a foundation DRMT licence:

incumbent commercial licensees and the digital community radio broadcasting representative company (and, for category 2 DRMT licences, the national broadcasters) are provided with a one-off opportunity to form a joint venture company and be issued a DMRT licence without a price-based allocation

incumbent commercial licensees have a *standard access entitlement* to capacity on the multiplex and designated community radio broadcasting licensees have a collective right to a certain multiplex capacity, as nominated by a digital radio community representative company (and national broadcasters have a standard access entitlement for category 2 DRMT licences).

A foundation category 1 or 2 DRMT licence must commence transmitting broadcasting services on the digital start-up day for the designated BSA radio area.[[7]](#footnote-8)

The ACMA may declare (under section 98C of the Radiocommunications Act) that a specified category 1 DRMT licence that is proposed to be issued is a foundation category 1 DRMT licence for the purposes of the Radiocommunications Act.

The ACMA may declare (under section 98D of the Radiocommunications Act) that a specified category 2 DRMT licence that is proposed to be issued is a foundation category 2 DRMT licence for the purposes of the Radiocommunications Act.

Section 98E of the Radiocommunications Act provides that in exercising its powers under sections 98C and 98D for a particular designated BSA radio area, the ACMA must ensure that the access entitlements under the foundation category 1 or 2 DRMT licences for the designated BSA radio area do not exceed the number of standard access entitlements[[8]](#footnote-9) that do exist, or may come into existence, under subsection 118NQ(2) of the Act, rounded up to the nearest multiple of 7 (this is because under DAB+ technology, the total number of standard access entitlements for commercial licensees that can be accommodated on a category 1 DRMT is 7).

## Service commencement

Digital commercial and community radio broadcasting services cannot commence in a licence area until the day the ACMA specifies (under section 8AC of the Broadcasting Services Act) as the ‘digital radio start-up day’. Before declaring the digital radio start-up day, the ACMA must be satisfied, in addition to completing planning and licensing, that an access undertaking under Division 4B of Part 3.3 of the Radiocommunications Act is in force for the relevant DRMT licences that have been issued for the licence area.

It is a condition of a foundation category 1 or category 2 DRMT licence that the licensee must commence transmission of at least one service under the licence on the digital radio start-up date and continue to provide a service from that date.

The digital radio start-up day does not affect national broadcasters where their services are transmitted using a category 3 DRMT licence. National broadcasting services may commence under a category 3 DRMT licence at any time after the ACMA issues the licence.

Detailed information about the planning process for making DRCPs is available on the [ACMA website](http://www.acma.gov.au/).

1. The ABC radio services are 7ABCFM, 7ABCRN, 7NT, 7JJJ, 7PNN and 7NT. [↑](#footnote-ref-2)
2. The licensees are Launceston Christian Broadcasters Inc. and Launceston Community FM Group Inc. [↑](#footnote-ref-3)
3. The licensee is Tamar FM Inc. [↑](#footnote-ref-4)
4. Planning principles at page 2. [↑](#footnote-ref-5)
5. DAB+ digital radio operates in the Band III VHF TV spectrum. One 7 MHz TV channel can accommodate 4 DAB+ frequency blocks. [↑](#footnote-ref-6)
6. Subsection 44A(2) of the Radiocommunications Act. The spectrum plan is the Australian Radiofrequency Spectrum Plan 2021. The spectrum plan divides the Australian radiofrequency spectrum into several frequency bands and specifies the general purpose and use for each band. There are no relevant frequency band plans currently in force. [↑](#footnote-ref-7)
7. Paragraphs 109B(1)(i) and (j) of the Radiocommunications Act. Pursuant to section 8AC of the Broadcasting Services Act, the ACMA may, by writing, declare a specified day to be the digital radio start‑up day for the licence area. [↑](#footnote-ref-8)
8. Each incumbent commercial radio broadcasting licensee has one standard access entitlement, which provides a right to access to 1/9th of the gross capacity of a multiplex. With DAB+ technology, this allows for 128 kbps of data or 2 FM quality services; or a greater number of lesser audio quality services. [↑](#footnote-ref-9)