Proposal to vary the Mount Gambier licence area plan

Consultation paper

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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

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Written enquiries may be sent to:

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

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Executive summary

The Australian Communications and Media Authority (ACMA) is seeking comments on the proposed changes to the [Licence Area Plan - Mount Gambier (Radio) – December 2001](https://www.legislation.gov.au/Details/F2005B00700)(Mount Gambier LAP).

We are proposing to vary the Mount Gambier LAP to:

enable the commercial radio broadcasting service 5SE in the Mt Gambier RA1 licence area to convert transmission from AM to FM

make spectrum available for 2 new FM transmitters for the commercial radio broadcasting service 5SE to service Mount Gambier and Naracoorte in the Mt Gambier RA1 licence area

vary the existing 5SE AM technical specification so that it will cease to have effect 28 days after commencement of the 5SE FM technical specification

vary the technical specification for the commercial radio broadcasting service 5SEF in the Mt Gambier RA1 licence area to match that proposed for the new 5SE FM transmitter

make other minor amendments.

The draft variation instrument, Variation to Licence Area Plan – Mount Gambier Radio 2022 (No.1*)* that would give effect to the proposed changes is available alongside this paper on the [ACMA website](https://www.acma.gov.au/have-your-say).

# Issues for comment

We welcome comments from interested stakeholders on the issues raised in this paper, or on any other issues relevant to this LAP variation.

Details on making a submission can be found at [*Invitation to comment*](#_Invitation_to_comment) at the end of this document.

# Introduction

## Planning broadcasting services

The ACMA’s broadcasting planning functions are set out in Part 3 of the *Broadcasting Services Act 1992* (the BSA). We promote the objects of the BSA (section 3), including the economic and efficient use of radiofrequency spectrum, and consider the planning criteria set out in section 23 of the BSA. When planning analog broadcasting services, we refer to [*ACMA’s approach to broadcast planning and varying LAPs*](https://www.acma.gov.au/broadcast-planning-resources), which provides an overview of the regulatory framework, policy objectives and planning process for analog broadcasting services.

Under section 26 of the BSA, the ACMA must, by legislative instrument, prepare LAPs that determine the number and characteristics, including technical specifications, of broadcasting services that are to be available in particular areas of Australia. The BSA also provides the ACMA with a discretionary power to vary LAPs.

## AM–FM conversions

Our policy about AM–FM conversions is set out in the [*ACMA’s approach to AM-FM conversions and infill transmitters for commercial radio broadcasting services*](https://www.acma.gov.au/publications/2017-11/guide/am-fm-conversion-and-requests-fm-fill-transmitters) (the AM–FM guidance). In summary, we will consider requests for variations to LAPs to enable conversion of existing AM commercial radio broadcasting services to FM when the requests are from licensees in:

single licensee (solus) regional licence areas, with less than 30% overlap with any other commercial radio licence area

other licence areas where we consider that the circumstances do not put existing FM commercial radio broadcasting licensees at a competitive disadvantage.

We will have regard to the following when considering whether to exercise the discretion to vary any LAP to facilitate an AM–FM conversion for a commercial radio broadcasting service:

FM conversion should not result in any existing radio services being adversely affected in terms of their use of spectrum and the technical parameters of their radio transmissions. Other existing radio services should not have to be retuned, replanned or cancelled, unless a solution can be found that mitigates these impacts without imposing any undue costs on the affected parties.

FM conversion should not result in any significant coverage differences for radio listeners within the affected licence areas. The majority of radio listeners who were able to receive services in AM should be able to continue to do so following FM conversion.

More information about [how we assesses coverage loss](https://www.acma.gov.au/publications/2017-11/guide/am-fm-conversion-and-requests-fm-fill-transmitters) can be found on our website.

## Overview of the Mount Gambier LAP

The Mount Gambier LAP currently determines the licence areas of Mt Gambier RA1, Mount Gambier RA2 and Millicent RA1.

The radio services planned in the Mount Gambier LAP are:

6 national radio broadcasting services to serve the Mount Gambier and Naracoorte areas

2 commercial radio broadcasting services and one community radio broadcasting service to serve the Mount Gambier and Naracoorte areas within the Mt Gambier RA1 licence area

one community radio broadcasting service to serve the Mount Gambier area within the Mount Gambier RA2 licence area

one community radio broadcasting service to serve the Millicent area within the Millicent RA1 licence area.

# Proposal 1: commercial radio – Mt Gambier RA1 licence area

## Summary

We propose to vary the Mount Gambier LAP to:

Allow the commercial radio broadcasting service 5SE in the Mt Gambier RA1 licence area to convert transmission from AM to FM.

Make spectrum available for a FM transmitter for the commercial radio broadcasting service 5SE to serve Mount Gambier. The proposed technical specification will permit an FM transmitter to operate on the frequency 90.5 MHz at 20kW maximum effective radiated power (ERP), with a directional antenna (DA) pattern and a maximum antenna height of 110 metres from the Broadcast site, Mt Burr.

Make spectrum available for a new FM infill transmitter for the commercial radio broadcasting service 5SE to service Naracoorte. The proposed technical specification will permit an FM infill transmitter to operate on the frequency 101.7 MHz at 100W ERP, with an omnidirectional antenna (OD) pattern and a maximum antenna height of 20 metres from the Council site off Smiths St and Wimmera Highway, Naracoorte.

Vary the existing 5SE AM technical specification so that it ceases to have effect 28 days after a service commences using the above 5SE FM technical specifications. This allows a 28-day simulcast period when both the AM and FM transmissions may operate. This simulcast period will assist the licensee to inform listeners of the change to its radio service.

Vary the existing technical specification for the commercial radio broadcasting service 5SEF to have the same ERP, antenna pattern, antenna height and nominal site to that of the proposed main transmitter for the 5SE commercial radio broadcasting service.

We consider that this proposal is an economic and efficient use of spectrum that promotes the objects of the BSA, particularly the availability of a diverse range of radio services and efficient broadcasting planning (paragraphs 3(1)(a) and (b) of the BSA). In putting this proposal forward, we have taken into account the planning criteria in section 23 of the BSA, especially the number of existing broadcasting services and demand for new services (paragraph 23(c)) and technical restraints relating to the delivery or reception of broadcasting services in the licence area (paragraph 23(e)).

## Background

The Mt Gambier RA1 licence area includes the urban centres of Mount Gambier, Millicent and Naracoorte. It also includes numerous sparsely populated areas and coastal locations across the Victorian and South Australian border.

The Mt Gambier RA1 licence area’s northern border is adjacent to the Remote Commercial Radio Service Central Zone RA1 licence area. The Mt Gambier RA1 licence area also shares a border with the Hamilton RA1 licence area to the east, and the Horsham RA1 licence area to the northeast (see [Appendix A](#_Appendix_A:_appendix)). We have determined the population of the Mt Gambier RA1 licence area to be 54,235.[[1]](#footnote-2)

### Commercial radio broadcasting services in Mount Gambier

In the Mt Gambier RA1 licence area, the ACMA has planned for:

the commercial radio broadcasting service 5SE, with an AM transmitter serving Mount Gambier

the commercial radio broadcasting service 5SEF, with FM transmitters serving Mount Gambier and Naracoorte.

Both commercial radio broadcasting services planned in the Mt Gambier RA1 licence area are licensed to South Eastern Broadcasters Pty Ltd (a subsidiary of Southern Cross Austereo).

The AM transmitter for the 5SE service is planned to operate on 963 kHz with a maximum cymomotive force (CMF) of 1.1kV and a DA pattern. The nominal location of the transmitter is at Stonehaven, which serves the Mount Gambier area.

The main FM transmitter for the 5SEF service is planned to operate on 96.1 MHz, with an ERP of 20 kW and an OD pattern, serving the Mount Gambier area. The 5SEF service has another planned and operating infill transmitter at Naracoorte operating on 100.9 MHz with an ERP of 100W.

## AM–FM conversion of the 5SE service

### Eligibility for AM–FM conversion of 5SE service

The Mt Gambier RA1 licence area is a non-competitive market that has less than 30% population overlap with any other commercial radio licence area. The 5SE service, therefore, meets the criteria for an AM–FM conversion for the purposes of the ACMA’s AM–FM guidance.

### Coverage analysis of 5SE service

Coverage modelling shows that the 5SE AM transmitter provides daytime coverage of approximately 51,400[[2]](#footnote-3) people within the Mt Gambier RA1 licence area, or approximately 97% of the population of the Mt Gambier RA1 licence area.[[3]](#footnote-4) Coverage also extends beyond the licence area boundary into adjacent licence areas (see ‘Overspill analysis’).

When considering the combined predicted coverage of both of the proposed 5SE FM transmitters within the Mt Gambier RA1 licence area, coverage loss is predicted to affect between 436 and 1,834 people[[4]](#footnote-5), or between 0.8 and 3.4% of the population currently served by the 5SE AM radio broadcasting service within the Mt Gambier RA1 licence area. Coverage loss is predicted to affect scattered populations in areas with low population density at the periphery of the licence area. We consider this to be a low level of coverage loss.

### Overspill analysis

An analysis of the predicted signal overspill from the 2 proposed 5SE FM transmitters indicates there will be a reduction in overspill into adjacent licence areas compared with existing AM coverage.

Coverage modelling shows that the proposed 5SE FM transmitters will provide overspill coverage to between 9 and 162 people[[5]](#footnote-6) in the Hamilton RA1 licence area, which is a significant reduction compared to the AM overspill coverage of approximately 15,100 people in the same licence area.[[6]](#footnote-7) A large proportion of the population who currently fortuitously receive the Mt Gambier AM service can receive the 3HA commercial radio broadcasting service planned in the Hamilton RA1 licence area.[[7]](#footnote-8)

The [ACMA’s approach to broadcast planning and varying licence area plans](https://www.acma.gov.au/am-fm-conversions) states that the ACMA does not afford planning protection to fortuitous reception. We note there may be some population in the Hamilton RA1 licence area who may lose fortuitous reception of the 5SE service. These listeners should be able to access their local services planned in the Hamilton RA1 licence area.

It is predicted that the signal overspill from the proposed 5SE FM transmitters will reach between 584 and 1,430 people in the Remote Commercial Radio Service Central Zone RA1 licence area. This is a reduction in overspill from the current AM service, estimated to reach 1,761 people. The Horsham RA1 licence area is also predicted to have a slight reduction in overspill.[[8]](#footnote-9)

### Interference analysis

Interference analysis predicts that the potential for interference from both the proposed 5SE Mount Gambier and Naracoorte transmitters to services in neighbouring licence areas is low.

The proposed 5SE transmitter operating on 90.5 MHz serving the Mount Gambier area is predicted to receive interference from other broadcasting services, which may affect between 596 and 1,654 people.[[9]](#footnote-10) However, the proposed 5SE infill transmitter operating on 101.7 MHz serving Naracoorte should provide alternative coverage to most of these people, meaning the number of people potentially affected by interference would be reduced.

## Varying the 5SEF service

The 5SEF service operates 2 FM transmitters serving the Mount Gambier and Naracoorte areas. The transmitter that serves the Mount Gambier area is planned to operate on 96.1 MHz with an ERP of 20 kW with an OD pattern from the nominal location of Mt Gambier at an antenna height of 50 metres.

The licensee has requested that the technical specification for the 5SEF transmitter serving the Mount Gambier area be varied so that the antenna pattern, nominal location and antenna height replicate the technical specifications of the proposed 5SE FM transmitter that serves the same area.

The 5SEF transmitter is currently licensed to operate from an alternative location consistent with the change of site criteria in the Technical Planning Guidelines. The proposed nominal location is approximately 120 metres from the current LAP planned nominal location and within close proximity of the current licensed location.

### Coverage analysis of the proposed 5SEF service

The 5SEF service operates an FM transmitter serving the Naracoorte area with a similar technical specification to the proposed FM transmitter for the 5SE service. Therefore, it is predicted that the planned coverage of the 5SEF service with the proposed modified technical specification would be similar to the 2 proposed 5SE FM transmitters, and similar to what is currently licensed.

### Overspill and interference analysis

An analysis of the predicted overspill from the proposed 5SEF transmitter and 5SEF’s existing Naracoorte transmitter indicates there will be similar overspill into adjacent licence areas to the proposed 5SE FM conversion.

Compared to the current 5SEF licensed service, this represents a reduction of predicted overspill affecting approximately 1,700 people in the Hamilton RA1 licence area. We also predict an increase of overspill affecting approximately 380 people in the Remote Commercial Radio Service Central Zone RA1 licence area and approximately 245 people in the Horsham RA1 licence area.[[10]](#footnote-11) We consider that the predicted levels of overspill are not significant.

## Preliminary view

We consider the proposal to vary the Mount Gambier LAP, convert the commercial radio broadcasting service 5SE to the FM frequency spectrum, and vary the technical specification of the commercial radio broadcasting service 5SEF, to be an efficient and effective use of spectrum. The proposal promotes the objects of the BSA, especially paragraph 3(1)(a), by continuing to provide a significant proportion of the population of Mount Gambier and surrounding areas with a diverse range of radio services.

The draft Variation to Licence Area Plan – Mount Gambier Radio 2022 (No.1) is available alongside this paper on the [ACMA website](https://www.acma.gov.au/have-your-say).

# Proposal 2: minor amendments

We propose to make the following minor amendments to the text, schedules and attachments of the Mount Gambier LAP:

Rename the LAP: Licence Area Plan – Mount Gambier Radio. This change removes a date from the title.

Remove Attachment 1.2, which provides a former technical specification for a national radio broadcasting service that has been replaced by the technical specification at Attachment 1.3.

Remove Attachment 2.2.2, which provides a former technical specification for a community radio broadcasting service that has been replaced by the technical specification at Attachment 2.3.1 (retitled as Attachment 2.3).

Retitle certain attachments to follow a consistent naming convention.

Update the names of various transmitter site nominal locations to reflect the current names of these sites.

Transform all site coordinates to latitude and longitude format using the Geocentric Datum of Australia 1994 (GDA94).

Make consequential amendments to schedules as a result of amendments to the attachments.

Make formatting changes to various attachments.

The draft Variation to Licence Area Plan – Mount Gambier Radio 2022 (No.1*)* is available alongside this paper.

# 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. Submissions in PDF, Microsoft Word or Rich Text Format are preferred.

Submissions by post can be sent to:

The Manager

Broadcasting Carriage Policy Section

Australian Communications and Media Authority

PO Box 78

Belconnen ACT 2616

The closing date for submissions is **COB,** **Wednesday** **4 May 2022**.

Consultation enquiries can be emailed to BCP@acma.gov.au.

#### Publication of submissions

We publish 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.

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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 any complaints, is available in our [privacy policy](https://www.acma.gov.au/privacy-policy).

# Appendix A: Mt Gambier RA1 licence area



1. Section 30 of the BSA provides that the ACMA, having regard to the census data prepared by the ABS, may determine the population of a licence area. The ACMA last determined the population of the Mt Gambier RA1 licence area in 2021 to be 54,235, using 2016 Census population data. [↑](#footnote-ref-2)
2. Population figures are estimated using the AM > 2.5 mV/m contour and 2016 Census data. [↑](#footnote-ref-3)
3. Comparison of the population within the AM > 2.5 mV/m contour and the determined population for Mt Gambier RA1. [↑](#footnote-ref-4)
4. ITU 1546-1 and CRC Predict respectively. [↑](#footnote-ref-5)
5. ITU 1546-1 and CRC Predict respectively. [↑](#footnote-ref-6)
6. Population figures are estimated using the AM > 0.5 mV/m contour and 2016 Census data. [↑](#footnote-ref-7)
7. The 3HA commercial radio broadcasting service operating in Hamilton RA1 licence area is predicted to provide a service to densely populated areas on the Victorian coastline that are currently receiving overspill from the 5SE service. Coverage predictions for the 3HA service utilise the AM contour (> 0.5 mV/m) and FM indicative calculated coverage. [↑](#footnote-ref-8)
8. The Horsham RA1 licence area receives AM overspill to approximately 70 people, which is predicted to reduce to between 20 (CRC Predict) and 65 (ITU 1546-1) people for the proposed FM service. [↑](#footnote-ref-9)
9. Potential for co-channel and adjacent channel interference between 569 people (CRC Predict) and 1,654 people (ITU 1546-1). [↑](#footnote-ref-10)
10. Population counts include areas where the signal exceeds 54 dBμV/m inside boundaries of respective licence areas. [↑](#footnote-ref-11)