Australian Government | acma Australian Communications and Media Authority

Proposal to vary the Hamilton licence area plan

Consultation paper

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Executive summary

Proposed changes to the Hamilton licence area plan

We are seeking your comments on proposed changes to the Hamilton radio licence area plan (LAP). These changes will allow 3HA AM commercial radio broadcasting service to convert to FM. We are proposing to vary the Hamilton LAP to:

- Make FM spectrum available to enable the 3HA commercial radio broadcasting service in the Hamilton RA1 licence area to convert transmission from AM to FM.
- Make FM spectrum available for 3 new FM infill transmitters for the 3HA commercial radio broadcasting service to serve the Hamilton RA1 licence area, at Casterton, Balmoral and Dartmoor.
- Make FM spectrum available for one new FM infill transmitter for the 3HFM commercial radio broadcasting service to serve the Hamilton RA1 licence area, at Casterton.
- Vary the technical specifications for the existing FM infill transmitter for the 3HA commercial radio broadcasting service at Portland, increasing its maximum effective radiated power (ERP).
- Vary the technical specifications for the existing FM infill transmitter for the 3HFM commercial radio broadcasting service at Portland, increasing its maximum ERP.
- Vary the existing technical specification for the 3HA AM commercial radio broadcasting service so that it will cease to have effect 28 days after the commencement of the new 3HA FM transmission.
- Add a standard advisory note limiting protection to suburban grade coverage of 66 dBuv/m to all 3HA and 3HFM FM infill transmitters.
- Make other minor amendments to modernise/update the Hamilton LAP.

A draft variation of the Hamilton LAP accompanies this consultation paper and details these proposed changes.

Issues for comment

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

Details on making a submission can be found at the invitation to comment section of this paper.

Introduction

Planning broadcasting services

Our 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. We consider the planning criteria set out in section 23 of the BSA.

When planning analog broadcasting services, we refer to the ACMA approach to broadcast planning and varying LAPs, which provides an overview of the regulatory framework, policy objectives and planning process for analog broadcasting services.

Under section 26 of the BSA, we 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 us with a discretionary power to vary LAPs.

AM–FM conversions

FM conversion of AM services has the potential to improve listener experience and support industry as it adapts to changing listener preferences. FM conversion can deliver improved audio quality, reduced signal interference and lower costs for broadcasters.

Our published guidance entitled Principles for planning AM to FM conversions in regional licence areas (AM–FM conversion principles) informs the way we resolve complex issues regarding AM–FM conversions and infill transmitters for commercial radio broadcasting services in regional areas.

We will continue to consider and progress current proposals for conversions in non-competitive markets, while we open the program for conversions in competitive areas so that more listeners can benefit. We expect to finalise the requests in non-competitive markets that are currently underway, and where appropriate spectrum has already been identified.

More information about the AM–FM conversion principles can be found on the ACMA website.

Overview of the Hamilton LAP

The Hamilton LAP currently determines the licence areas of Hamilton RA1 and Portland RA1.

The radio services planned in the Hamilton LAP are:

- 5 national radio broadcasting services to serve the Portland area (within the Hamilton RA1 licence area)
- 5 national radio broadcasting services to serve the Western Victoria area (within the Hamilton RA1 licence area)

- 2 commercial radio broadcasting services to serve the Hamilton and Portland areas (within the Hamilton RA1 licence area)
- 3 open narrowcasting radio services, each to serve one of the Hamilton, Casterton and Portland areas
- 1 community radio broadcasting service to serve the Portland area (within the Portland RA1 licence area).

Proposal 1: commercial radio – Hamilton LAP

Summary

We propose to vary the Hamilton LAP to:

- Allow the commercial radio broadcasting service 3HA in the Hamilton RA1 licence area to convert transmission from AM to FM.
    - Make spectrum available for an FM transmitter for 3HA to serve Hamilton. The proposed technical specification will permit an FM transmitter to operate on frequency 98.9 MHz at 20 kW maximum effective radiated power (ERP), with a directional antenna (DA) pattern and a maximum antenna height of 30 m from Comms Tower Ace Radio Site Mt Baimbridge off Mt Baimbridge Rd 6 km N of Hamilton.
- Make spectrum available for a new FM infill transmitter for 3HA to serve Casterton. The proposed technical specification will permit an FM transmitter to operate on frequency 107.5 MHz at 200 W maximum ERP, with an omnidirectional (OD) antenna pattern and a maximum antenna height of 30 m from Broadcast Site Seeleys Hill Casterton.
- Make spectrum available for a new FM infill transmitter for 3HA to serve Balmoral. The proposed technical specification will permit an FM transmitter to operate on frequency 105.9 MHz at 100 W maximum ERP, with an OD antenna pattern and a maximum antenna height of 25 m from Balmoral Recreation Reserve Harrow Balmoral Rd Balmoral.
- Make spectrum available for a new FM infill transmitter for 3HA to serve Dartmoor. The proposed technical specification will permit an FM transmitter to operate on frequency 106.9 MHz at 100 W maximum ERP, with an OD antenna pattern and a maximum antenna height of 20 m from Dartmoor Sports Club Grounds 1 Egan St Dartmoor.
- Make spectrum available for a new FM infill transmitter for 3HFM to serve Casterton. The proposed technical specification will permit an FM transmitter to operate on frequency 106.7 MHz at 200 W maximum ERP, with an OD antenna pattern and a maximum antenna height of 30 m from Broadcast Site Seeleys Hill Casterton.
- Vary the technical specifications for the existing for the 3HA Portland FM infill transmitter, increasing its maximum ERP from 1 kW to 5 kW and changing its antenna pattern from a DA to OD, and decreasing its maximum antenna height from 25 m to 20 m.
- Vary the technical specifications for the existing for the 3HFM Portland FM infill transmitter, increasing its maximum ERP from 2 kW to 5 kW and decreasing its maximum antenna height from 25 m to 20 m.
- Vary the technical specification for the existing 3HA Hamilton AM transmitter so that the specification ceases to have effect 28 days after 3HA commences FM transmission using the abovementioned technical specifications. This allows for a 28-day simulcast period where both the AM and FM transmissions may operate. This simulcast period will assist the licensee to inform the listeners of the change to its radio service.
- Add, or include with new technical specifications, a standard advisory note limiting protection to suburban grade coverage of 66 dBuv/m to all 3HA FM and 3HFM infill transmitters.

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

Hamilton RA1 licence area

The Hamilton RA1 licence area includes:

- the city of Hamilton
- to the north: the areas of Balmoral, Nareen and Rocklands
- to the west: the areas of Casterton, Dartmoor and Killara
- to the east: Hawkesdale, Caramut and Woolsthorpe
- to the south: Portland, St Helens and Port Fairy.

A map of the Hamilton RA1 licence area is at Appendix A.

The licence area includes several national park areas or parts of them, including Budj Bim National Park, Cobboboonee National Park (to the south west) and Grampians National Park (to the north east). Mount Napier is also within the licence area. The southern border of the licence area reaches the Victorian coast.

The Hamilton RA1 licence area's northern border is adjacent to the Horsham RA1 commercial licence area. The Hamilton RA1 licence area is adjacent to the Mt Gambier RA1 commercial licence area to the west. To the east, it shares a border with, and also overlaps with, the Warrnambool RA1 commercial licence area. See the map at Appendix B.

The population of the Hamilton RA1 licence area is determined to be 46,047.[1]

Hamilton is an agricultural area, with sheep grazing a key industry.

Commercial radio broadcasting services in Hamilton

In the Hamilton RA1 licence area we have planned for:

- The commercial radio broadcasting service 3HA, with an AM transmitter serving Hamilton and an FM transmitter serving Portland.
- The commercial radio broadcasting service 3HFM (known on-air as Mixx FM), with an FM transmitter serving Hamilton and an FM transmitter serving Portland.

Both commercial radio broadcasting services planned in the Hamilton RA1 licence area are licensed to Ace Radio Broadcasters Pty Limited (Ace Radio).

The AM transmitter for 3HA is planned to operate on 981 kHz with a maximum cymomotive force (CMF) of 440 V and an OD antenna pattern. The nominal location of the site is in Hamilton and serves the Hamilton area. 3HA has an additional FM transmitter sited at Mt Clay to serve the Portland area, operating on 92.9 MHz with a maximum 1 kHz ERP and a DA pattern.

[1] Determined by the Determination of Population Figures under Section 30 of the *Broadcasting Services Act 1992*. This Determination uses census data from the 2021 Census.

The FM transmitter for 3HFM is planned to operate on 88.9 MHz with a maximum ERP of 20 kW and a DA pattern. The nominal location of the site is in Mt Baimbridge and serves the Hamilton area. 3HFM has an additional FM transmitter sited at Mt Clay to serve the Portland area, operating on 93.7 MHz with a maximum 2 kW ERP and an OD antenna pattern.

3HA has been broadcasting in the Western Victoria area on 981 kHz since 1931. It was acquired by Ace Radio in 1984. It broadcasts local news, rural news, local sports, talkback and music.

AM to FM conversion of 3HA

Coverage analysis of 3HA

The ACMA assessed coverage loss by comparing the coverage of the existing:

- 3HA Hamilton AM transmitter located at Hamilton, operating on 981 kHz with a maximum CMF of 440V with an OD antenna pattern
- 3HA Portland FM infill transmitter located at Mt Clay, operating on 92.9 MHz with a maximum ERP of 1 kW with a DA pattern

with the proposed:

- 3HA Hamilton FM transmitter to be located at Mt Baimbridge in Hamilton, and to operate on 98.9 MHz with a maximum ERP of 20 kW with a DA pattern
- 3HA Portland FM infill transmitter located at Mt Clay in Narrawong, to operate on 92.9 MHz with a maximum ERP of 5 kW with an OD pattern
- 3HA Casterton FM infill transmitter located at Seeleys Hill in Casterton, to operate on 107.5 MHz with a maximum ERP of 200 W with an OD pattern, and
- 3HA Balmoral FM infill transmitter located at the Balmoral recreation reserve in Balmoral, to operate on 105.9 MHz with a maximum ERP of 100 W with an OD pattern
- 3HA Dartmoor FM infill transmitter located at Dartmoor Sports Club Grounds in Dartmoor, to operate on 106.9 MHz with a maximum ERP of 100 W with an OD pattern.

The proposed 3HA FM transmitter at Mt Baimbridge would have exactly the same specifications as the existing 3HFM FM transmitter at Mt Baimbridge in terms of nominal location, maximum ERP, maximum antenna height and antenna pattern.

ACMA assessments of coverage loss predict that the new proposed 3HA Hamilton FM transmitter, combined with the 3 infill transmitters at Casterton, Balmoral and Dartmoor, and the modification of the existing Portland transmitter, would result in between 22% and 28% less noise-limited coverage of the overall population within the Hamilton RA1 licence area, compared with the existing 3HA Hamilton AM transmitter combined with its existing Portland infill transmitter. All proposed infill transmitters would be protected to the suburban grade coverage of 66 dBµV/m.

When assessed for interference limited coverage, the coverage loss is also predicted to be between 22% and 28% of the overall population within the Hamilton RA1 licence area. All proposed infill transmitters would be protected to the suburban grade coverage of 66 dBµV/m.

However, these coverage loss figures do not account for whether listeners are able to receive services from other licence areas.

The ACMA published an update in October 2025 to its AM–FM conversion program policy. In the update, we clarified our approach to protecting listeners from coverage loss. We have stated that we may consider whether listeners are able to receive fortuitous coverage of radio services from a neighbouring licence area.

We note that the neighbouring Warrnambool RA1 licence area, whose commercial radio broadcasting service, 3YB, converted to FM in 2018, overlaps with the Hamilton RA1 licence area (see map at Appendix B). Ace Radio is the licensee for both 3HA in Hamilton and 3YB in Warrnambool.

After taking the 3YB FM coverage into account, the ACMA predicts the noise-limited coverage of the overall population within the Hamilton RA1 licence area, compared with the existing 3HA Hamilton AM transmission combined with its existing Portland infill transmitter to be between 3% and 10%. All proposed infill transmitters would be protected to the suburban grade coverage of 66 dBµV/m.

After taking the 3YB FM commercial coverage into account, we predict the interference-limited coverage of the overall population within the Hamilton RA1 licence area, compared with the existing 3HA Hamilton AM transmission combined with its existing Portland infill transmitter to be between 5% and 19%.[2] All proposed infills would be protected to the suburban grade coverage of 66 dBµV/m.

Ace Radio has noted that there are areas in the Warrnambool RA1 and Hamilton RA1 overlap, particularly Koroit, Port Fairy and Woolsthorpe, which it believes have stronger community ties to Warrnambool than Hamilton and are well-served by the 3YB FM transmission. The rest of the coverage loss is scattered population throughout the Hamilton RA1 licence area. Given the 2 commercial radio broadcasting licences are owned by the same licensee, as well as the arguments for the relevance of the different services to different areas, the ACMA believes that these areas being covered by only 3YB in terms of commercial radio services does not significantly deprive the areas of variety nor of relevant radio broadcasting services.

Overspill analysis of 3HA FM transmission

An analysis of the predicted signal overspill from the existing and proposed 3HA FM transmitters indicates there will be a significant reduction in overspill into the adjacent licence areas of Warrnambool RA1 and Horsham RA1, compared with existing AM transmission overspill. There will be a small increase in overspill into the Mt Gambier RA1 licence area, predicted to affect approximately 50 more people (an increase of overspill from 50 to 100 people). The total overspill is predicted to be less than 0.2% of the Mt Gambier RA1 licence area population of 54,235 and is therefore considered acceptable.

Interference analysis

An analysis by the ACMA shows that the risk of potential interference to nearby services from the proposed 3HA FM Hamilton transmitter on 98.9 MHz is low and acceptable.

When the risk of potential interference to nearby services from the proposed modified 3HA FM Portland infill transmitter on 92.9 MHz was assessed by the ACMA, the analysis showed that it may cause interference to the nearby 3ABCRN service on 92.5 MHz. We note that

[2] The ITU-R Rec. P 1546-1 prediction model was 5% coverage loss estimate, with the CRC Predict prediction model 19%. The ACMA's experience is that the ITU-Rec. P 1546-1 model is the more accurate for this terrain for the coverage from Warrnambool RA1 within the Hamilton RA1 licence area, and it concludes that coverage loss is considered low and acceptable.

there is a local ABCRN service on 98.5 MHz in Portland which provides an alternative service to the affected areas. Therefore, the risk of interference is considered low.

There was also risk of interference to the 3ABCFM Western Victoria service in the Portland area on 93.3 MHz. The population potentially affected was estimated to be approximately 715-786 people for the 3ABCFM service mostly in the area around Mt Clay.

The risk of interference is considered medium to low. If the people in the Portland area were to suffer interference with the 3ABCFM service, then Ace Radio would be expected to work with the ABC to mitigate the predicted interference. Further, we note that there are 2 planned but unused frequencies for national radio broadcasting services in the Portland area which could provide alternate transmission for the 3ABCFM Western Victoria Service, if interference were to occur and could not be mitigated.

Similar ACMA analyses assess the potential risk of interference to nearby services, from the proposed 3HA Casterton FM infill transmitter on 107.5 MHz, 3HA Balmoral FM infill transmitter on 105.9 MHz and 3HA Dartmoor FM infill transmitter on 106.9 MHz, as low and acceptable.

A standard advisory note limiting protection to the suburban grade coverage of 66 dBµV/m is recommended to be added to all 3HA FM infill transmitters to manage the risk of interference (see Attachments 1.18, 1.20, 1.21 and 1.22 of the draft variation to the Hamilton LAP).

Varying 3HFM

3HFM operates 2 transmitters in the Hamilton RA1 licence area, one serving the Hamilton area and the other serving the Portland area. The transmitter that serves the Hamilton area is currently planned to operate on 88.9 MHz with a maximum ERP of 20 kW and a DA pattern, from a nominal site location in Mount Baimbridge, and with a maximum antenna height of 30 m. It is this specification that the new proposed 3HA FM transmitter in Hamilton will match in terms of nominal location, maximum ERP, maximum antenna height and antenna pattern.

The 3HFM transmitter that serves the Portland area is currently planned to operate on 93.7 MHz with a maximum ERP of 2 kW and an OD antenna pattern from a nominal site location at Mt Clay and with a maximum antenna height of 25 m.

The licensee has requested that the 3HFM Portland transmitter specification be increased in maximum ERP to 5 kW and have the maximum antenna height decreased to 20 m, to match the suggested specification for the Portland FM transmitter for 3HA. The licensee also requests that an FM infill transmitter for 3HFM be planned at Casterton, to match the FM infill transmitter being planned at Casterton for 3HA.

The proposed 3HFM Casterton FM infill transmitter would broadcast on 106.7 MHz. It would broadcast from Broadcast Site Seeleys Hill Casterton, have a maximum ERP of 200 W, an OD antenna pattern and a maximum antenna height of 30 m. The nominal location, maximum ERP, antenna pattern and maximum antenna height are the same as those of the 3HA Casterton FM infill transmitter.

Both the Portland and Casterton FM infill transmitters would have a protection note stating that any transmission is in accordance with the technical specification planned on the basis

that it will be protected to a minimum median field strength of 66 dBμV/m against interference from other broadcasting services.

Coverage of the proposed 3HFM Casterton and Portland transmitters

The increases in power for the 3HFM Portland FM infill transmitter and the proposed Casterton FM infill transmitter are to match specifications for the proposed specifications for 3HA FM infill transmitters. This ensures that the coverage in Portland and Casterton areas for 3HFM and 3HA FM is similar.

Interference analysis of the proposed 3HFM Casterton and Portland transmitters

An ACMA analysis indicates that the proposed 3HFM Portland FM infill transmitter on 93.7 MHz may cause interference to the 3ABCFM Western Victoria service in the Portland area on 93.3 MHz, and the 3ABCRR Western Victoria service on 94.1 MHz. The populations potentially affected are estimated to be approximately 715–786 people for the 3ABCFM service and 784–816 people for the 3ABCRR service, all in the area around Mt Clay.

The risk of interference is considered medium to low. If the people in the Portland area were to suffer interference with the 3ABCFM or 3ABCRR service, then Ace Radio would be expected to work with the ABC to mitigate the predicted interference. Further, the ACMA notes that there are 2 planned but unused frequencies for national radio broadcasting services in the Portland area which could provide alternate transmission for the 3ABCFM or 3ABCRR services, if interference were to occur and could not be mitigated. The ACMA has also conducted a similar assessment on the potential risk of interference to nearby services from the proposed 3HFM Casterton FM infill transmitter on 106.7 MHz. The risk of interference is assessed as low and acceptable.

A standard advisory note limiting protection to the suburban grade coverage of 66 dBμV/m is recommended to be added to all technical specifications for the 3HFM FM infill transmitters to manage the risk of interference (see Attachments 1.17 and 1.19 of the draft variation to the Hamilton LAP).

Preliminary view

We consider the proposal to vary the Hamilton LAP 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 Hamilton and surrounding areas with a diverse range of radio broadcasting services.

The proposal has been assessed against the planning criteria in section 23 of the BSA. The proposed variations are considered be an efficient and economic use of spectrum, given the demographics in the area and their social and economic characteristics (paragraphs 23(a) and (b)). They will continue to provide services that are relevant to the particular social demographic, such as rural news, local news and local sports, and have been established in the area for many years. The variations will improve the delivery of this content.

The proposal will also not change the number of existing broadcasting services in Hamilton, but will improve upon an existing service (paragraph 23(c)) and will move it to a more up to date technology, FM transmission (paragraph 23(d)). The interference, overspill, coverage and spectrum availability have been assessed (paragraph 23(e) and (f)) and the proposal is found to be acceptable. We propose to put advisory notes in technical specifications as appropriate to mitigate issues that may arise.

Proposal 2: minor amendments

In addition to the changes above, we also propose to make minor amendments to the text, schedules and attachments of the Hamilton LAP:

- Update the introductory text to the Hamilton LAP to be consistent with modern LAP standards.
- Update the description of nominal locations in Attachments 1.2–1.13 and 1.15–1.18, and Attachment 2.2, to be more specific and better reflect the name of the location. This will not change the actual nominal location.
- Change the Australian Map Grid Reference in Attachments 1.2–1.18 and Attachment 2.2 to Nominal Coordinates (GDA94) standard, which is the modern standard coordinate reference in licence area plans. This includes references to the coordinates in special conditions. Again, this will not change the actual nominal location.
- Remove from Attachments 1.2–1.18 and Attachment 2.2 the reference to the Broadcasting Services (Technical Planning) Guidelines 2017 and put the reference in a substantive clause at the start of the LAP. These changes are not intended to affect the operation of the LAP.
- Make modifications to wording in advisory notes in Attachments 1.14–1.16 to simplify and clarify the wording and make it more accessible. These changes are not intended to change the meaning or effect of the advisory notes.
- Make minor formatting and grammatical changes to the Hamilton LAP and its various attachments.

Invitation to comment

Making a submission

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

- Online submissions 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 8 April 2026**.

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.

Privacy

View information about our policy on the publication of 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 any complaints, is available in our privacy policy.

Appendix A: Map of Hamilton RA1 licence area

Appendix B: Map of Hamilton RA1 and overlapping and adjacent licence areas