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Submissions

Submissions to this proposal may be made to the Australian Communications and Media Authority (ACMA) as follows:

By email: rps@acma.gov.au

By mail: Draft Variation to Licence Area Plan for Hobart Radio
         Radio Planning Section
         Technical Planning and Evaluation Branch
         Australian Communications and Media Authority
         PO Box 78
         BELCONNEN ACT 2616

By fax: (02) 6219 5347


Contact details for submissions:

Email: rps@acma.gov.au

Telephone: Christopher Roberts: (02) 6219 5157

Facsimile: (02) 6219 5347

The closing date for submissions is 5.00 pm, Friday 25 March 2011.

All submissions received will be made available for public inspection on the ACMA’s web site.\(^1\) [www.acma.gov.au](http://www.acma.gov.au)

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\(^1\)Under subsection 27(2) of the Broadcasting Services Act 1992, the ACMA is required to make all submissions available for public inspection. Any submission marked “In confidence”, “Confidential” or similar, will not be considered by the ACMA in finalising the LAP variation.
Explanatory Paper

This explanatory paper accompanies the proposed Draft Variation to the Licence Area Plan - Hobart Radio – No.1 of 2011 (Hobart LAP).

Legislative Background

The ACMA prepares Licence Area Plans (LAPs) under subsection 26(1) of the Broadcasting Services Act 1992 (BSA). LAPs determine the number and characteristics, including technical specifications, of broadcasting services in particular areas of Australia with the use of the broadcasting services bands. The ACMA may vary LAPs under subsection 26(2) of the BSA.

Section 23 of the BSA imposes specific obligations on the ACMA when carrying out its planning functions, including, amongst other things, a requirement to perform its functions in a way that promotes the objects of the BSA, including the economic and efficient use of the radiofrequency spectrum.

The object of most obvious relevance to the ACMA’s powers in relation to section 26 of the BSA is that at paragraph (a) of subsection 3(1), that being:

*to promote the availability to audiences throughout Australia of a diverse range of radio and television services offering entertainment, education and information.*

Section 27 of the BSA provides that the ACMA must make provision for wide public consultation when considering whether to make or vary a LAP.

The ACMA refers to the General Approach to Analog Planning when it considers the planning of broadcasting services. This document sets out the legislative framework and planning criteria as well as the general approach to the planning of broadcasting services. It also contains a record of advice and assumptions about matters relevant to the ACMA’s functions and powers under Part 3 (see subsection 27(2) of the BSA).

This document can be obtained from the ACMA’s web site at:

Preliminary Views

In the context of the information contained in the General Approach to Analog Planning, the ACMA has reached the following preliminary views, namely that it should:

- change the technical specifications of the national radio broadcasting service 7PB at Hobart to change the transmitter power to 5 kilowatts (kW) day and night and use an omnidirectional (OD) antenna; *(Preliminary View 1)*;
- make available FM frequency 96.1 MHz, with a maximum effective radiated power (ERP) of 3.2 kW, for an additional transmitter at Devonport for the existing community radio broadcasting service 7RPH at Hobart, and extend the Hobart RA4 licence area to include the coverage area of that additional transmitter at Devonport *(Preliminary View 2)*;
- make available FM frequency 94.9 MHz, with a maximum ERP of 1.5 kW, for a new open narrowcasting radio service at Hobart *(Preliminary View 3)*;
- update the description of the existing commercial and community radio licence areas in the Hobart LAP so that they are defined in terms used in the 2006 census and are consistent with the ACMA’s most recent determination of
population of the licence areas under section 30 of the BSA (Preliminary View 4); and

- make minor amendments to correct previous drafting errors and delete information included for reference only that does not form part of the Hobart LAP and which may create confusion (Preliminary View 5).

A full discussion of these matters is set out in the ACMA’s preliminary views below.
Preliminary View 1 – National Radio

The ACMA proposes to vary the technical specifications of the existing national radio broadcasting service 7PB at Hobart to change its maximum CMF and radiation pattern. It is proposed that this service operate on:

- 747 kHz from Broadcast Site, RALPHS BAY, with a maximum transmitter power of 5 kW (705 V CMF) and an OD radiation pattern.

Background
The Australian Broadcasting Authority (ABA) determined the Hobart LAP in December 2001. In the LAP, a new frequency of 747 kHz (changed from 729 kHz) was identified for the Australian Broadcasting Corporation’s (ABC’s) 7PB service at Ralphs Bay, with a maximum power of 2 kW. The change of frequency was to allow the 7PB service greater night-time coverage.

In 2007, the ABC requested an increase in transmitter power from 2 kW to 10 kW for the 7PB service in order to improve its coverage as part of the government’s commitment to the roll-out of NewsRadio services.

An assessment of the ABC’s request found that a full time (day and night) increase in transmitter power from 2 kW to 10 kW had the potential to increase night-time interference to the co-channelled AM services 4QS Toowoomba, 6SE Esperance and 3ZA Kumara (New Zealand). The assessment identified power restrictions in the direction of these services that are needed to protect them from interference.

The ACMA provided the ABC with a number of options to improve the coverage of 7PB at Hobart, and also suggested that it propose its own alternative. The ABC proposed a directional antenna system using day/night switching, operating at 10 kW during the day and 5.5 kW at night. The antenna system proposed by the ABC included the required power limitations towards the co-channelled services. This specification was included in the 2007 variation to the Hobart LAP.

Day/night switching is designed to improve the reception and coverage of existing AM broadcasting services by permitting an increase in the maximum transmission power during daylight hours and restricting the power at night. It relies on the fact that the AM signals cause interference to each other over much longer distances at night. This means that higher power operation is often possible during daylight hours without causing interference, but power must be reduced at night.

On 9 August 2007, the ACMA varied the Hobart LAP in accordance with the ABC’s request for day/night switching (10 kW daytime and 5.5 kW night-time) for the 7PB service, using a directional antenna pattern. However, the ABC has advised that, due to the costs involved in installing such a system, it has decided not to commence its service using this specification.

On 5 August 2009, the ABC requested that it be allowed to implement a cheaper alternative antenna pattern that used a guy wire reflector instead of a two mast directional antenna. The ACMA assessed this proposal as suitable, as it met the power restrictions towards the adjacent and co-channel services specified in the Hobart LAP. However, the ABC has again advised that costs have prevented it from implementing this antenna system.
On 8 November 2010, the ABC proposed that, due to the ongoing difficulties implementing a cost-effective antenna system, it be allowed to implement a 5 kW OD service.

**Discussion**

In considering whether to vary the existing LAP specification for the 7PB radio service, the ACMA has considered the technical restraints relating to the delivery of broadcasting services (section 23 (e) of the BSA) at Hobart.

The ACMA has found that:

- operation at 5 kW with an OD antenna pattern will not cause interference to the reception of the co-channelled 4QS, 6SE and 3ZA radio services;
- increasing the transmitter power of the 7PB service from 2 kW to 5 kW day and night will improve coverage in the Hobart area; and
- allowing the operation of an OD radiation pattern as opposed to a directional antenna should result in an antenna system that is more easily implementable and cost-effective for the licensee.

**Conclusion**

The ACMA is of the preliminary view that varying the technical operating conditions of the 7PB radio service so that it operates with a maximum power of 5 kW with an OD radiation pattern represents an economic and efficient use of radiofrequency spectrum. This will maximise spectrum productivity and efficiency as it proposes a power level and radiation pattern that meets the licensee’s requirements and is cost effective and implementable.

It is also considered to promote the objects of the Act, in particular the objects at paragraph 3(1)(a) and (f), as it will maintain the current level of services available and, at the increased power, it is likely to add to the provision of diverse programming and coverage of matters of local significance in Hobart.
Preliminary View 2 – Community Radio

The ACMA proposes to make channel capacity available for an additional transmitter at Devonport for the Hobart community radio broadcasting service 7RPH. The additional transmitter is proposed to operate on:

- 96.1 MHz from Container near TV Translator Site, KELCEY TIER, with a maximum ERP of 3.2 kW with an OD radiation pattern.

The ACMA also proposes to extend the Hobart RA4 licence area to include the coverage area of the additional transmitter at Devonport and to define the new boundaries of the licence area using 2006 census data.

Background

When the ABA determined the Hobart LAP in December 2001, channel capacity was identified for the existing community radio broadcasting service 7RPH at Hobart and for a transmitter for 7RPH to extend its service to include Launceston.

RPH Print Radio Tasmania Inc, the licensee of the 7RPH service, has requested that the ACMA consider making an additional transmitter available at Devonport and extending the Hobart RA4 licence area to include the coverage area of that transmitter.

When carrying out its planning functions under Part 3 of the BSA, the ACMA is required to perform its functions in a way that promotes the objects of the Act, including the economic and efficient use of the radiofrequency spectrum. The ACMA is also required, when performing these functions, to have regard to the range of matters set out in paragraph 23 (a) to (g) of the BSA.

In forming this preliminary view, the ACMA recognises the special significance of the community service provided by 7RPH to a wide range of people who are not able to access normal printed material. In this respect, 7RPH is different to other geographically-based community radio services.

Discussion

In considering whether to grant an extension to the existing 7RPH community radio broadcasting service’s licence area, the ACMA has considered factors listed in section 23 of the BSA, and in particular the demographics and social and economic characteristics (sections 23 (a) and (b) of the BSA), the number of existing broadcasting services and the demand for new services (section 23 (c)), and the technical restraints relating to the delivery of broadcasting services (section 23 (e)) at Devonport.

The ACMA has found that:

- Devonport has a population of 66,103 persons\(^2\) and in comparison to other markets with similar populations\(^3\) has a similar number of national and commercial

\(^2\) Population of Devonport RA1 licence area, 2006 census data.

\(^3\) Bega RA1 (68,260 persons), Burnie RA1 (59,354 persons), Dubbo RA1 (64,249 persons), Griffith RA1 (62,106 persons) and Horsham RA1 (58,641 persons).
broadcasting and open narrowcasting radio services but fewer community radio broadcasting services⁴;

- additional community licences serving a specific community interest as opposed to a general community interest⁵ would be expected to complement rather than compete with existing community services. The ACMA also notes that the print-handicapped are often poorly catered for in mainstream media;

- there is a community interest between the service provided by 7RPH and the print handicapped community of Devonport and this community interest is currently unserved;

- there is currently no evidence of any other aspirant broadcasters or groups in the Devonport area who, by operating a community radio broadcasting service, would better promote the objects of Act;

- the frequency 96.1 MHz from the proposed site, with a maximum ERP of 3.2 kW with an OD radiation pattern, is available and is suitable for the provision of an additional transmitter for the 7RPH community radio broadcasting service;

- if an FM frequency for the 7RPH service was made available at Devonport, 7RPH has advised that it would be taken up; and

- the proposed extension to the Hobart RA4 licence area would be similar in size to the existing Devonport RA1 licence area.

**Proposed area of extension**

The black cross hatched area below shows the proposed area of extension of the Hobart RA4 licence area (shown in yellow). Only the northern component of the licence area is shown.

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⁴ Devonport RA1 has 2 national, 2 commercial and 1 community broadcasting services and 1 open narrowcasting radio service; the average across the surveyed licence areas was, 3 national, 2 commercial and 2 community broadcasting services and 1 open narrowcasting radio service.

⁵ A community radio broadcasting service with a general community interest is licensed to serve the general needs of the broad community in the geographic area of the licence. A community radio broadcasting service with a specific community interest is licensed to serve the interests of a particular sector of the community within the licence area. Examples of a specific community interest include educational, indigenous and print handicapped groups.
Conclusion
The ACMA is of the preliminary view that making the FM frequency 96.1 MHz available for an additional transmitter for the Hobart community radio broadcasting service 7RPH is an economic and efficient use of radiofrequency spectrum. It will improve spectrum productivity and efficiency, as it makes available a service that is likely to be taken up.

It is also expected to promote the objects of the Act, in particular the objects at paragraph 3(1)(a), (f) and (g), as it increases the mix of, and overall number of, broadcasting services available and is likely to increase the provision of diverse programming and coverage of matters of local significance in Devonport.

The proposed Hobart RA4 licence area, as extended and updated to 2006 census data, is detailed in the document “Licence Area Maps” that accompanies this explanatory paper.
The ACMA proposes to make channel capacity available for a new open narrowcasting radio service at Hobart. It is proposed that this service operate on:

- 94.9 MHz from Barker Site (East) GUY FAWKES HILL, with a maximum ERP of 1.5 kW and an OD antenna pattern.

The ‘coverage area’ of this service is a circle of 20 kilometre radius from the nominal transmitter site.

Background
The ABA determined the Hobart LAP in December 2001. In the LAP, channel capacity was identified for one open narrowcasting (ONC) radio service on 1080 kHz, from the 7TAB broadcast site at Ralphs Bay, Sandford.

On 16 November 2009, Mr Maurice McGuire requested that the ACMA consider making channel capacity available for a new ONC radio service at Hobart.

When carrying out its planning functions under Part 3 of the BSA, the ACMA is required to perform its functions in a way that promotes the objects of the Act, including the economic and efficient use of the radiofrequency spectrum. The ACMA is also required, when performing these functions, to have regard to the range of matters set out in paragraph 23 (a) to (g) of the BSA.

Discussion
In considering whether to make a new open narrowcasting radio service available at Hobart, the ACMA has considered the factors listed in section 23 of the BSA, and in particular demographics and social and economic characteristics (sections 23 (a) and (b)), the number of existing broadcasting services and the demand for new services (section 23 (c)), and the technical restraints relating to the delivery of broadcasting services (section 23 (e)).

The ACMA has found that:

- Hobart has a population of 229,020 persons and in comparison to other markets with similar populations has markedly more national radio broadcasting services, a similar number of commercial and community radio broadcasting services, and considerably fewer open narrowcasting services;
- the request by Mr McGuire represents an expressed demand for an additional open narrowcasting radio service at Hobart;

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6 2006 Census Data.
7 Townsville RA1 (193,997 persons), Toowoomba/Warwick RA1 (193,742 persons), and Wollongong RA1 (263,566 persons).
8 Hobart RA1 has twelve national radio services, compared with an average of four national radio services in the Townsville RA1, Toowoomba/Warwick RA1 and Wollongong RA1 licence areas.
9 Hobart RA1 has one open narrowcasting radio service, compared with an average of three open narrowcasting radio services in the Townsville RA1, Toowoomba/Warwick RA1 and Wollongong RA1 licence areas.
the frequency 94.9 MHz, with a maximum ERP of 1.5 kW and an OD antenna pattern, is available and is suitable for the provision of an additional open narrowcasting radio service at Hobart;

- open narrowcasting radio services have a major role in promoting diversity, particularly of information but also of certain types of entertainment, such as entertainment in languages other than English or religious information; and

- if a new open narrowcasting radio service was made available it is likely that it would be taken up.

Coverage Area
The 'coverage area' of this service is described as that area up to a radius of 20 kilometres from the nominal transmitter site.

Transmissions received outside the planned 'coverage area' are considered fortuitous and are not protected.

The blue line on Map 1 shows the predicted\(^\text{10}\) coverage\(^\text{11}\) of the proposed ONC service at Hobart operating according to the planned specifications.

Map 1

Conclusion
The ACMA is of the preliminary view that making the FM frequency 94.9 MHz available for a new open narrowcasting radio service at Hobart is an economic and efficient use of radiofrequency spectrum. It will improve spectrum productivity and efficiency, as it makes available a service that is likely to be taken up.

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\(^\text{10}\) Actual coverage may vary from the planned coverage, depending on local conditions.

\(^\text{11}\) The coverage contour shown represents the predicted extent of receive rural stereo grade service (median 54 dBuV/m).
It is also expected to promote the objects of the Act, in particular the objects at paragraph 3(1)(a), (f) and (g), as it increases the mix of, and overall number of, broadcasting services available and is likely to increase the provision of diverse programming and coverage of matters of local significance in Hobart.
Preliminary View 4 – Licence Areas

The ACMA proposes that the existing commercial and community radio broadcasting licence areas in Hobart LAP be redefined using 2006 census data but otherwise remain unchanged.

The licence areas for commercial and community radio broadcasting services in the Hobart RA1, Hobart RA2, Hobart RA3, Huon Valley RA1 and Tasman Peninsula RA1 licence areas in the Hobart LAP are currently described using boundaries from the 2001 census.

The Australian Bureau of Statistics (ABS) has made available to the ACMA the most recently published census (2006), as prepared by the Australian Statistician. Therefore, the ACMA proposes that these licence areas be redefined using 2006 census data, but otherwise remain unchanged.

These licence areas, updated to 2006 census data, are detailed in the document “Licence Area Maps” that accompanies this explanatory paper.
The ACMA proposes to update the Schedules and Attachments in the Hobart LAP.

The ACMA proposes to make amendments to Schedules one to six and to each of the Attachments that contain the characteristics, including technical specifications, of the radio broadcasting services in the Hobart area.

The ACMA does not intend these minor amendments to alter any existing rights or obligations. It proposes to replace Schedules and Attachments in their entirety, without changing the substantive parts, to facilitate these minor amendments.

The proposed changes to schedules include:
- removing the words “December 2001” from the heading at Schedules Three, Five and Six; and
- removing the words “August 2007” from the heading at Schedules One and Two.

This information was included for ease of reference only, but may be confusing.

The proposed changes to the Attachments include:
- removing the words “December 2001” from the headings to Attachments 1.2, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.20, 3.2, 4.2, 4.3, 5.2, 6.2 and 6.3;
- removing the words “August 2007” from the headings to Attachments 1.4, 1.19, 2.2 and 2.3;
- updating the site tolerance field to refer to the Broadcasting Services (Technical Planning) Guidelines 2007 on Attachments 1.2, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.19, 1.20, 1.21, 2.2, 2.3, 3.1, 3.2, 4.1, 4.2, 4.3, 4.4, 5.2, 5.3 and 6.2; and
- updating the nominal locations of the transmitter specified at Attachments 1.6, 1.7, 1.8, 1.9, 1.10, 1.13, 1.14, 1.15, 1.16, 1.17, 1.19, 1.20, 2.2, 2.3, 3.2 and 4.2 to provide a more accurate description of the transmitter site.

This information has been updated for ease of reference only and does not signify a change to the broadcast site for the transmitters.

The nominal location of the transmitter and the Australian Map Grid reference specified in Attachments 1.2, 1.5, 1.11, 1.12 and 4.2 are proposed to be updated to reflect the actual locations of the transmitters for these services. The change in coordinates does not change the planned performance of each of the services.