# Variation to Licence Area Plan – Mackay Radio – 2016 (No.1)

The Australian Communications and Media Authority makes this instrument under subsection 26(2) of the *Broadcasting Services Act 1992*.

Date 28 June 2016

Richard Bean

[signed]

Member

Brendan Byrne

[signed]

~~Member~~/General Manager

**1. Name of Instrument**

This instrument is the *Variation to Licence Area Plan – Mackay Radio – 2016 (No. 1)*.

**2. Commencement**

This instrument commences on the day after it is registered.

*Note: An instrument is registered when it is recorded on the Federal Register of Legislation (FRL) in electronic form: see the Legislation Act 2003, s4 (definition of register). The FRL may be accessed at* [*http://www.legislation.gov.au*](http://www.legislation.gov.au)*.*

**3. Variation**

The *Licence Area Plan – Mackay (Radio) – October 1997* (F2005B00771) determined by the Australian Broadcasting Authority on 30 October 1997, is varied as follows:

1. rename the instrument as the “Licence Area Plan – Mackay Radio”;
2. amend the heading on the title page so that it reads “Licence Area Plan – Mackay Radio”;
3. on the first page of the instrument:
	1. amend the heading so that it reads “Licence Area Plan – Mackay Radio”;
	2. number the three paragraphs as clauses (1), (2) and (3) consecutively; and
	3. omit clauses (1) – (3) and substitute the following clauses:

“(1) This plan for broadcasting services in the Mackay area of Queensland is made under subsection 26(1) of the *Broadcasting Services Act 1992*.

(2) Eleven national radio broadcasting services, four commercial radio broadcasting services and four open narrowcasting radio services are to be available in the area described at Attachment 1.1 to this plan with the use of the broadcasting services bands. The characteristics, including technical specifications, of the services that are to be available in the area described at Attachment 1.1 are set out in Schedule One and Attachments 1.2 – 1.28 to this plan.

(3) Two community radio broadcasting services are to be available in the area described at Attachment 2.1 to this plan with the use of the broadcasting services bands. The characteristics, including technical specifications, of the services that are to be available in the area described at Attachment 2.1 are set out in Schedule Two and Attachments 2.2 and 2.3 to this plan.

(4) A reference in this plan to a schedule or an attachment includes reference to that schedule or attachment as amended from time to time.”;

1. immediately before Schedule One:
	1. omit the heading “SCHEDULES”;
	2. omit the words “The Schedule sets out:” and all six paragraphs marked with dot points that follow;
2. omit all Schedules and substitute all Schedules of this instrument; and
3. omit all Attachments and substitute all Attachments of this instrument.

|  |  |
| --- | --- |
|  |  |

Schedule One

Licence Area Plan : Mackay Radio

Licence Area : MACKAY RA1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service Category | Channel/ Frequency | Service Licence No | Transmitter Specification No | Attach No | Area Served |
| National | 93.1 MHz | N/A | TS1562002 | 1.2 | Airlie Beach |
| National | 89.9 MHz | N/A | TS5507003 | 1.3 | Airlie Beach |
| National | 95.5 MHz | N/A | TS7471001 | 1.4 | Airlie Beach |
| National | 93.9 MHz | N/A | TS1130979 | 1.5 | Airlie Beach |
| National | 93.3 MHz | N/A | TS10007373 | 1.6 | Glenden |
| National | 92.5 MHz | N/A | TS10007374 | 1.7 | Glenden |
| National | 97.9 MHz | N/A | TS1562001 | 1.8 | Mackay |
| National | 101.1 MHz | N/A | TS5507001 | 1.9 | Mackay |
| National | 102.7 MHz | N/A | TS6155001 | 1.10 | Mackay |
| National | 99.5 MHz | N/A | TS7603001 | 1.11 | Mackay |
| National | 104.3 MHz | N/A | TS10013399 | 1.12 | Mackay |
| Commercial | 94.7 MHz | SL1964 | TS1964002 | 1.13 | Airlie Beach |
|  | 100.3 MHz | SL1964 | TS1964001 | 1.14 | Mackay |
|  | 89.9 MHz | SL1964 | TS10013239 | 1.15 | Nebo |
|  | 93.3 MHz | SL1964 | TS9692001 | 1.16 | Clairview |
| Commercial | 91.5 MHz | SL4181 | TS4181602 | 1.17 | Airlie Beach |
|  | 1026 kHz | SL4181 | TS4181001 | 1.18 | Mackay |
| Commercial | 90.7 MHz | SL1150018 | TS10007569 | 1.19 | Airlie Beach |
|  | 101.9 MHz | SL1150018 | TS6396001 | 1.20 | Mackay |
|  | 91.7 MHz | SL1150018 | TS10013398 | 1.21 | Glenden |
|  | 92.3 MHz | SL1150018 | TS10013132 | 1.22 | Nebo |
| Commercial | 92.3 MHz | SL1150089 | TS10008027 | 1.23 | Airlie Beach |
|  | 98.7 MHz | SL1150089 | TS10007929 | 1.24 | Mackay |
| Open Narrowcasting | 103.5 MHz | N/A | TS6395001 | 1.25 | Mackay |
| Open Narrowcasting | 93.9 MHz | N/A | TS10007550 | 1.26 | Mackay |
| Open Narrowcasting | 96.3 MHz | N/A | TS10008147 | 1.27 | Proserpine |
| Open Narrowcasting | 93.5 MHz | N/A | TS10008146 | 1.28 | Sarina |

Schedule Two

Licence Area Plan : Mackay Radio

Licence Area : MACKAY RA2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service Category | Channel/ Frequency | Service Licence No | Transmitter Specification No | Attach No | Area Served |
| Community | 107.5 MHz | SL5522 | TS10007546 | 2.2 | Mackay |
| Community | 105.9 MHz | SL1150019 | TS6393001 | 2.3 | Mackay |

Attachment 1.1

Licence Area - MACKAY RA1

Licence Area ID - 528

Commercial Radio Service Licence numbers: SL1964, SL4181, SL1150018, SL1150089

The licence area, in terms of areas defined by the Australian Bureau of Statistics at the Census of 5 August 2001, is:

| Area Description |
| --- |
| Mackay (C) |
| Whitsunday (S) |
| Sarina (S) |
| Mirani (S) |
| Nebo (S) |
| QLD CD 3052103 |
| QLD CD 3052110 |
| QLD CD 3052101 |
| QLD CD 3052107 |
| QLD CD 3052106 |
| QLD CD 3052102 |
| QLD CD 3052109 |
| QLD CD 3052104 |

Note:

Standard terminology used by the Australian Bureau of Statistics:

 (C) = City

 (CD) = Collection District

 (S) = Shire

Attachment 1.2

LICENCE AREA PLAN : Mackay Radio

Category : National

General Area Served : Airlie Beach (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS1562002

Transmitter Site :-

Nominal location : Broadcast/CMTS Site Shingley Hill AIRLIE BEACH

Australian Map Grid : Zone Easting Northing
Reference 55 678477 7757179

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 93.1 MHz

Polarisation : Mixed

Maximum antenna height : 17 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 250 W |

Attachment 1.3

LICENCE AREA PLAN : Mackay Radio

Category : National

General Area Served : Airlie Beach (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS5507003

Transmitter Site :-

Nominal location : Broadcast/CMTS Site Shingley Hill AIRLIE BEACH

Australian Map Grid : Zone Easting Northing
Reference 55 678477 7757179

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 89.9 MHz

Polarisation : Mixed

Maximum antenna height : 17 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 250 W |

Attachment 1.4

LICENCE AREA PLAN : Mackay Radio

Category : National

General Area Served : Airlie Beach (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS7471001

Transmitter Site :-

Nominal location : Broadcast/CMTS Site Shingley Hill AIRLIE BEACH

Australian Map Grid : Zone Easting Northing
Reference 55 678477 7757179

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 95.5 MHz

Polarisation : Mixed

Maximum antenna height : 17 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 250 W |

Attachment 1.5

LICENCE AREA PLAN : Mackay Radio

Category : National

General Area Served : Airlie Beach (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS1130979

Transmitter Site :-

Nominal location : Broadcast/CMTS Site Shingley Hill AIRLIE BEACH

Australian Map Grid : Zone Easting Northing
Reference 55 678477 7757179

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 93.9 MHz

Polarisation : Mixed

Maximum antenna height : 17 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 250 W |

Attachment 1.6

LICENCE AREA PLAN : Mackay Radio

Category : National

General Area Served : Glenden (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10007373

Transmitter Site :-

Nominal location : Water Treatment Plant GLENDEN

Australian Map Grid : Zone Easting Northing
Reference 55 614910 7637650

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 93.3 MHz

Polarisation : Mixed

Maximum antenna height : 35 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 20 W |

Attachment 1.7

LICENCE AREA PLAN : Mackay Radio

Category : National

General Area Served : Glenden (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10007374

Transmitter Site :-

Nominal location : Water Treatment Plant GLENDEN

Australian Map Grid : Zone Easting Northing
Reference 55 614910 7637650

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 92.5 MHz

Polarisation : Mixed

Maximum antenna height : 35 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 20 W |

Attachment 1.8

LICENCE AREA PLAN : Mackay Radio

Category : National

General Area Served : Mackay (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS1562001

Transmitter Site :-

Nominal location : Broadcast Tower Mt Blackwood KUTTABUL

Australian Map Grid : Zone Easting Northing
Reference 55 701854 7672862

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 97.9 MHz

Polarisation : Mixed

Maximum antenna height : 67 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| 0°T - 95°T | 40 kW |
| 95°T - 175°T | 100 kW |
| 175°T - 280°T | 40 kW |
| 280°T - 360°T | 100 kW |

Attachment 1.9

LICENCE AREA PLAN : Mackay Radio

Category : National

General Area Served : Mackay (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS5507001

Transmitter Site :-

Nominal location : Broadcast Tower Mt Blackwood KUTTABUL

Australian Map Grid : Zone Easting Northing
Reference 55 701854 7672862

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 101.1 MHz

Polarisation : Mixed

Maximum antenna height : 67 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| 0°T - 95°T | 40 kW |
| 95°T - 175°T | 100 kW |
| 175°T - 280°T | 40 kW |
| 280°T - 360°T | 100 kW |

Attachment 1.10

LICENCE AREA PLAN : Mackay Radio

Category : National

General Area Served : Mackay (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS6155001

Transmitter Site :-

Nominal location : Broadcast Tower Mt Blackwood KUTTABUL

Australian Map Grid : Zone Easting Northing
Reference 55 701854 7672862

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 102.7 MHz

Polarisation : Mixed

Maximum antenna height : 67 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| 0°T - 95°T | 40 kW |
| 95°T - 175°T | 100 kW |
| 175°T - 280°T | 40 kW |
| 280°T - 360°T | 100 kW |

Attachment 1.11

LICENCE AREA PLAN : Mackay Radio

Category : National

General Area Served : Mackay (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS7603001

Transmitter Site :-

Nominal location : Broadcast Tower Mt Blackwood KUTTABUL

Australian Map Grid : Zone Easting Northing
Reference 55 701854 7672862

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 99.5 MHz

Polarisation : Mixed

Maximum antenna height : 67 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| 0°T - 95°T | 40 kW |
| 95°T - 175°T | 100 kW |
| 175°T - 280°T | 40 kW |
| 280°T - 360°T | 100 kW |

Attachment 1.12

LICENCE AREA PLAN : Mackay Radio

Category : National

General Area Served : Mackay (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10013399

Transmitter Site :-

Nominal location : Broadcast Tower Mt Blackwood KUTTABUL

Australian Map Grid : Zone Easting Northing
Reference 55 701854 7672862

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 104.3 MHz

Polarisation : Mixed

Maximum antenna height : 67 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| 0°T - 95°T | 40 kW |
| 95°T - 175°T | 100 kW |
| 175°T - 280°T | 40 kW |
| 280°T - 360°T | 100 kW |

Attachment 1.13

LICENCE AREA PLAN : Mackay Radio

Category : Commercial

General Area Served : Airlie Beach (QLD)

Service Licence Number : SL1964

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS1964002

Transmitter Site :-

Nominal location : Broadcast/CMTS Site Shingley Hill AIRLIE BEACH

Australian Map Grid : Zone Easting Northing
Reference 55 678477 7757179

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 94.7 MHz

Polarisation : Mixed

Maximum antenna height : 20 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 250 W |

Attachment 1.14

LICENCE AREA PLAN : Mackay Radio

Category : Commercial

General Area Served : Mackay (QLD)

Service Licence Number : SL1964

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS1964001

Transmitter Site :-

Nominal location : Broadcast Tower Mt Blackwood KUTTABUL

Australian Map Grid : Zone Easting Northing
Reference 55 701854 7672862

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 100.3 MHz

Polarisation : Mixed

Maximum antenna height : 52 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| 0°T - 95°T | 40 kW |
| 95°T - 175°T | 100 kW |
| 175°T - 280°T | 40 kW |
| 280°T - 360°T | 100 kW |

Attachment 1.15

LICENCE AREA PLAN : Mackay Radio

Category : Commercial

General Area Served : Nebo (QLD)

Service Licence Number : SL1964

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10013239

Transmitter Site :-

Nominal location : Telstra Radio Terminal Smiths Hill 6km NNE of NEBO

Australian Map Grid : Zone Easting Northing
Reference 55 676498 7606578

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 89.9 MHz

Polarisation : Mixed

Maximum antenna height : 25 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 250 W |

Note :-

Any transmission in accordance with this specification is planned on the basis that it will be protected to a minimum median field strength level of 66 dBuV/m against interference from other broadcasting services.

Attachment 1.16

LICENCE AREA PLAN : Mackay Radio

Category : Commercial

General Area Served : Clairview (QLD)

Service Licence Number : SL1964

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS9692001

Transmitter Site :-

Nominal location : Vodafone Site Clairview Station Bruce Hwy CLAIRVIEW

Australian Map Grid : Zone Easting Northing
Reference 55 757080 7537510

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 93.3 MHz

Polarisation : Mixed

Maximum antenna height : 25 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 250 W |

Note :-

Any transmission in accordance with this specification is planned on the basis that it will be protected to a minimum median field strength level of 66 dBuV/m against interference from other broadcasting services.

Attachment 1.17

LICENCE AREA PLAN : Mackay Radio

Category : Commercial

General Area Served : Airlie Beach (QLD)

Service Licence Number : SL4181

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS4181602

Transmitter Site :-

Nominal location : Broadcast/CMTS Site Shingley Hill AIRLIE BEACH

Australian Map Grid : Zone Easting Northing
Reference 55 678477 7757179

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 91.5 MHz

Polarisation : Mixed

Maximum antenna height : 20 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 250 W |

Attachment 1.18

LICENCE AREA PLAN : Mackay Radio

Category : Commercial

General Area Served : Mackay (QLD)

Service Licence Number : SL4181

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS4181001

Transmitter Site :-

Nominal location : 4AA AM Site Mt Bassett Cemetery Rd MACKAY

Australian Map Grid : Zone Easting Northing
Reference 55 729532 7662688

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : MF-AM

Carrier Frequency : 1026 kHz

Output Radiation Pattern :-

|  |  |  |
| --- | --- | --- |
| Bearing or Sector (Clockwise direction) | Elevation | Maximum CMF |
| 0°T - 0°T | 0 | 220 V |
| 10°T - 10°T | 0 | 715 V |
| 20°T - 20°T | 0 | 1.1 kV |
| 30°T - 30°T | 0 | 1.212 kV |
| 40°T - 40°T | 0 | 1.095 kV |
| 43°T - 43°T | 0 | 950 V |
| 50°T - 50°T | 0 | 810 V |
| 60°T - 60°T | 0 | 490 V |
| 70°T - 70°T | 0 | 245 V |
| 80°T - 80°T | 0 | 190 V |
| 90°T - 90°T | 0 | 240 V |
| 100°T - 100°T | 0 | 240 V |
| 110°T - 110°T | 0 | 190 V |
| 120°T - 120°T | 0 | 245 V |
| 130°T - 130°T | 0 | 490 V |
| 140°T - 140°T | 0 | 810 V |
| 150°T - 150°T | 0 | 1.095 kV |
| 160°T - 160°T | 0 | 1.22 kV |
| 170°T - 170°T | 0 | 1.095 kV |
| 180°T - 180°T | 0 | 715 V |
| 190°T - 190°T | 0 | 220 V |
| 191°T - 191°T | 0 | 200 V |
| 200°T - 200°T | 0 | 500 V |
| 210°T - 210°T | 0 | 945 V |
| 220°T - 220°T | 0 | 1.18 kV |
| 230°T - 230°T | 0 | 1.205 kV |
| 240°T - 240°T | 0 | 1.09 kV |
| 250°T - 250°T | 0 | 925 V |
| 260°T - 260°T | 0 | 775 V |
| 266°T - 266°T | 0 | 700 V |
| 270°T - 270°T | 0 | 690 V |
| 280°T - 280°T | 0 | 690 V |
| 290°T - 290°T | 0 | 775 V |
| 300°T - 300°T | 0 | 925 V |
| 310°T - 310°T | 0 | 1.09 kV |
| 320°T - 320°T | 0 | 1.205 kV |
| 330°T - 330°T | 0 | 1.18 kV |
| 340°T - 340°T | 0 | 945 V |
| 350°T - 350°T | 0 | 500 V |

Special Condition :-

The direction of minimum CMF is to lie within 1 degree of 77, 113 , 191 and 359 degrees true north. The minimum CMF is to lie in the range 150V to 200V.

The CMF at all elevations is not to exceed the specified CMF at 0 degrees elevation for all angles of azimuth.

Attachment 1.19

LICENCE AREA PLAN : Mackay Radio

Category : Commercial

General Area Served : Airlie Beach (QLD)

Service Licence Number : SL1150018

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10007569

Transmitter Site :-

Nominal location : Broadcast/CMTS Site Shingley Hill AIRLIE BEACH

Australian Map Grid : Zone Easting Northing
Reference 55 678477 7757179

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 90.7 MHz

Polarisation : Mixed

Maximum antenna height : 20 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 250 W |

Attachment 1.20

LICENCE AREA PLAN : Mackay Radio

Category : Commercial

General Area Served : Mackay (QLD)

Service Licence Number : SL1150018

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS6396001

Transmitter Site :-

Nominal location : Broadcast Tower Mt Blackwood KUTTABUL

Australian Map Grid : Zone Easting Northing
Reference 55 701854 7672862

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 101.9 MHz

Polarisation : Mixed

Maximum antenna height : 52 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| 0°T - 95°T | 40 kW |
| 95°T - 175°T | 100 kW |
| 175°T - 280°T | 40 kW |
| 280°T - 360°T | 100 kW |

Attachment 1.21

LICENCE AREA PLAN : Mackay Radio

Category : Commercial

General Area Served : Glenden (QLD)

Service Licence Number : SL1150018

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10013398

Transmitter Site :-

Nominal location : Water Treatment Plant GLENDEN

Australian Map Grid : Zone Easting Northing
Reference 55 614910 7637650

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 91.7 MHz

Polarisation : Mixed

Maximum antenna height : 35 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 250 W |

Note :-

Any transmission in accordance with this specification is planned on the basis that it will be protected to a minimum median field strength level of 66 dBuV/m against interference from other broadcasting services.

Attachment 1.22

LICENCE AREA PLAN : Mackay Radio

Category : Commercial

General Area Served : Nebo (QLD)

Service Licence Number : SL1150018

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10013132

Transmitter Site :-

Nominal location : Telstra Radio Terminal Smiths Hill 6km NNE of NEBO

Australian Map Grid : Zone Easting Northing
Reference 55 676498 7606578

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 92.3 MHz

Polarisation : Mixed

Maximum antenna height : 25 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 250 W |

Attachment 1.23

LICENCE AREA PLAN : Mackay Radio

Category : Commercial

General Area Served : Airlie Beach (QLD)

Service Licence Number : SL1150089

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10008027

Transmitter Site :-

Nominal location : Broadcast/CMTS Site Shingley Hill AIRLIE BEACH

Australian Map Grid : Zone Easting Northing
Reference 55 678477 7757179

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 92.3 MHz

Polarisation : Mixed

Maximum antenna height : 20 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 250 W |

Attachment 1.24

LICENCE AREA PLAN : Mackay Radio

Category : Commercial

General Area Served : Mackay (QLD)

Service Licence Number : SL1150089

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10007929

Transmitter Site :-

Nominal location : Broadcast Tower Mt Blackwood KUTTABUL

Australian Map Grid : Zone Easting Northing
Reference 55 701854 7672862

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 98.7 MHz

Polarisation : Mixed

Maximum antenna height : 52 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| 0°T - 95°T | 40 kW |
| 95°T - 175°T | 100 kW |
| 175°T - 280°T | 40 kW |
| 280°T - 360°T | 100 kW |

Attachment 1.25

LICENCE AREA PLAN : Mackay Radio

Category : Open Narrowcasting

General Area Served : Mackay (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS6395001

Transmitter Site :-

Nominal location : Nominal Planning Site MACKAY

Australian Map Grid : Zone Easting Northing
Reference 55 701814 7672865

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 103.5 MHz

Polarisation : Mixed

Maximum antenna height : 52 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| 0°T - 95°T | 40 kW |
| 95°T - 175°T | 100 kW |
| 175°T - 280°T | 40 kW |
| 280°T - 360°T | 100 kW |

Special Condition :-

The coverage area of this service is a circle with a radius of 80 kilometres measured from a point with the following AMG co-ordinates: Zone 55; Easting 701814; Northing 7672865. The radius is not to exceed 50 kilometres from the coastline.

Attachment 1.26

LICENCE AREA PLAN : Mackay Radio

Category : Open Narrowcasting

General Area Served : Mackay (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10007550

Transmitter Site :-

Nominal location : Nominal Planning Site MACKAY

Australian Map Grid : Zone Easting Northing
Reference 55 726722 7659684

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 93.9 MHz

Polarisation : Vertical

Maximum antenna height : 20 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 20 W |

Special Condition :-

The coverage area of this service is a circle with a radius of 10 kilometres measured from a point with the following AMG co-ordinates: Zone 55; Easting 726722; Northing 7659684.

Attachment 1.27

LICENCE AREA PLAN : Mackay Radio

Category : Open Narrowcasting

General Area Served : Proserpine (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10008147

Transmitter Site :-

Nominal location : Nominal Planning Site PROSERPINE

Australian Map Grid : Zone Easting Northing
Reference 55 664600 7742960

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 96.3 MHz

Polarisation : Vertical

Maximum antenna height : 15 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 20 W |

Special Condition :-

The coverage area of this service is a circle with a radius of 10 kilometres measured from a point with the following AMG co-ordinates: Zone 55; Easting 664600; Northing 7742960.

Attachment 1.28

LICENCE AREA PLAN : Mackay Radio

Category : Open Narrowcasting

General Area Served : Sarina (QLD)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10008146

Transmitter Site :-

Nominal location : Doug Waterson Site Sarina Beach Road SARINA

Australian Map Grid : Zone Easting Northing
Reference 55 731872 7632387

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 93.5 MHz

Polarisation : Vertical

Maximum antenna height : 10 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 20 W |

Special Condition :-

The coverage area of this service is a circle with a radius of 15 kilometres measured from a point with the following AMG co-ordinates: Zone 55; Easting 731872; Northing 7632387.

Attachment 2.1

Licence Area - MACKAY RA2

Licence Area ID - 662

Community Radio Service Licence numbers: SL5522, SL1150019

The licence area, in terms of areas defined by the Australian Bureau of Statistics at the Census of 5 August 2001, is:

| Area Description |
| --- |
| Sarina (S) |
| Mirani (S) |
| Mackay (C) - Pt B |
| QLD CD 3052408 |
| QLD CD 3052406 |
| QLD CD 3052403 |
| QLD CD 3051608 |
| QLD CD 3051209 |
| QLD CD 3051505 |
| QLD CD 3051412 |
| QLD CD 3051409 |
| QLD CD 3051805 |
| QLD CD 3051601 |
| QLD CD 3051402 |
| QLD CD 3052407 |
| QLD CD 3051613 |
| QLD CD 3051210 |
| QLD CD 3051606 |
| QLD CD 3051309 |
| QLD CD 3051813 |
| QLD CD 3051305 |
| QLD CD 3051302 |
| QLD CD 3051208 |
| QLD CD 3052402 |
| QLD CD 3051306 |
| QLD CD 3051709 |
| QLD CD 3051513 |
| QLD CD 3051708 |
| QLD CD 3052405 |
| QLD CD 3051508 |
| QLD CD 3051311 |
| QLD CD 3051315 |
| QLD CD 3051221 |
| QLD CD 3051815 |
| QLD CD 3051806 |
| QLD CD 3051520 |
| QLD CD 3051604 |
| QLD CD 3051802 |
| QLD CD 3051812 |
| QLD CD 3051203 |
| QLD CD 3051510 |
| QLD CD 3051809 |
| QLD CD 3052409 |
| QLD CD 3051303 |
| QLD CD 3051401 |
| QLD CD 3051504 |
| QLD CD 3052413 |
| QLD CD 3051310 |
| QLD CD 3051314 |
| QLD CD 3051811 |
| QLD CD 3051605 |
| QLD CD 3051212 |
| QLD CD 3051514 |
| QLD CD 3051710 |
| QLD CD 3051207 |
| QLD CD 3051308 |
| QLD CD 3051312 |
| QLD CD 3052410 |
| QLD CD 3051707 |
| QLD CD 3051810 |
| QLD CD 3051609 |
| QLD CD 3051509 |
| QLD CD 3051807 |
| QLD CD 3051408 |
| QLD CD 3051512 |
| QLD CD 3051218 |
| QLD CD 3051214 |
| QLD CD 3051204 |
| QLD CD 3051411 |
| QLD CD 3051603 |
| QLD CD 3051614 |
| QLD CD 3051814 |
| QLD CD 3052401 |
| QLD CD 3051611 |
| QLD CD 3051704 |
| QLD CD 3051222 |
| QLD CD 3051519 |
| QLD CD 3051407 |
| QLD CD 3051701 |
| QLD CD 3051801 |
| QLD CD 3052411 |
| QLD CD 3051405 |
| QLD CD 3051702 |
| QLD CD 3051607 |
| QLD CD 3051406 |
| QLD CD 3051705 |
| QLD CD 3051516 |
| QLD CD 3051612 |
| QLD CD 3052412 |
| QLD CD 3051216 |
| QLD CD 3051217 |
| QLD CD 3051403 |
| QLD CD 3051506 |
| QLD CD 3051711 |
| QLD CD 3051703 |
| QLD CD 3051518 |
| QLD CD 3051816 |
| QLD CD 3051610 |
| QLD CD 3051804 |
| QLD CD 3051706 |
| QLD CD 3051205 |
| QLD CD 3051712 |
| QLD CD 3051213 |
| QLD CD 3051313 |
| QLD CD 3051410 |
| QLD CD 3051202 |
| QLD CD 3051206 |
| QLD CD 3051808 |
| QLD CD 3051817 |
| QLD CD 3051803 |
| QLD CD 3052404 |
| QLD CD 3051515 |
| QLD CD 3051502 |
| QLD CD 3051301 |
| QLD CD 3051602 |
| QLD CD 3051501 |
| QLD CD 3051713 |
| QLD CD 3051503 |
| QLD CD 3051404 |
| QLD CD 3051304 |
| QLD CD 3051517 |
| QLD CD 3051511 |
| QLD CD 3051215 |
| QLD CD 3051714 |
| QLD CD 3051507 |
| QLD CD 3051211 |
| QLD CD 3051219 |
| QLD CD 3051220 |

Note:

Standard terminology used by the Australian Bureau of Statistics:

 (C) = City

 (CD) = Collection District

 (S) = Shire

Attachment 2.2

LICENCE AREA PLAN : Mackay Radio

Category : Community

General Area Served : Mackay (QLD)

Service Licence Number : SL5522

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10007546

Transmitter Site :-

Nominal location : Nixon Site Black Mountain MACKAY

Australian Map Grid : Zone Easting Northing
Reference 55 717890 7668635

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 107.5 MHz

Polarisation ; Vertical

Maximum antenna height : 30 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 1 kW |

Attachment 2.3

LICENCE AREA PLAN : Mackay Radio

Category : Community

General Area Served : Mackay (QLD)

Service Licence Number : SL1150019

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS6393001

Transmitter Site :-

Nominal location : Nixon Site Black Mountain MACKAY

Australian Map Grid : Zone Easting Northing
Reference 55 717890 7668635

Site Tolerance : Refer to *Broadcasting Services
 (Technical Planning) Guidelines 2007*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 105.9 MHz

Polarisation : Vertical

Maximum antenna height : 30 m

Output Radiation Pattern :-

|  |  |
| --- | --- |
| Bearing or Sector (Clockwise direction) | Maximum ERP |
| At all angles of azimuth | 1 kW |