



Variation to Licence Area Plan – Newcastle Radio – 2018 (No.1)

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

Dated: 24 August 2018

Nerida O'Loughlin
[signed]
Member

James Cameron
[signed]
Member/~~General Manager~~

Australian Communications and Media Authority

1 Name

This is the *Variation to Licence Area Plan – Newcastle Radio – 2018 (No.1)*.

2 Commencement

This instrument commences at the start of the day after it is registered on the Federal Register of Legislation.

Note: The Federal Register of Legislation may be accessed at www.legislation.gov.au.

3 Authority

This instrument is made under subsection 26(2) of the *Broadcasting Services Act 1992*.

4 Variation

The *Licence Area Plan – Newcastle (Radio) – October 1998 (F2005B00625)* is varied as follows:

- (a) rename the instrument as the “Licence Area Plan – Newcastle Radio”;
- (b) on the title page, omit the heading “Licence Area Plan – Newcastle (Radio)”, substitute “Licence Area Plan – Newcastle Radio”;
- (c) on page 2, paragraph (6), omit “Schedule Four”, substitute “Schedule Five”;
- (d) on page 2, omit paragraph (7), substitute:
 - (7) In this plan, unless the contrary intention appears:
 - (a) a reference in this plan to a schedule or an attachment is a reference to a schedule or an attachment to this plan;
 - (b) a reference to the *Broadcasting Services (Technical Planning) Guidelines 2017* is a reference to that instrument as in force from time to time;
 - (c) a reference to any other legislative instrument is a reference to that other instrument as in force from time to time; and
 - (d) a reference to any other kind of instrument or writing is a reference to that other kind of instrument or writing as in force or in existence at the time the reference was included in this plan.

Note 1: For references to Commonwealth Acts, see section 10 of the *Acts Interpretation Act 1901*; and see also subsection 13(1) of the *Legislation Act 2003* for the application of the *Acts Interpretation Act 1901* to legislative instruments.

Note 2: All Commonwealth Acts and legislative instruments are registered on the Federal Register of Legislation:

- (e) repeal Schedule One, substitute Schedule One at Schedule 1 to this instrument;
- (f) in the heading to Attachment 1.1, omit the full stop after “1.1”;
- (g) in the subheading to Attachment 1.1, insert “and” after “SL4117,” and before “SL4126”;

- (h) repeal Attachments 1.2-1.18, 2.2, 2.3, 3.2, 4.2 and 5.2, and substitute Attachments 1.2-1.19, 2.2, 2.3, 3.2, 4.2 and 5.2 in Schedule 2 to this instrument; and
- (i) in the subheading to Attachment 2.1, insert “and” after “SL3053,” and before “SL1150030”.

Schedule 1

(Paragraph 4(e))

Schedule One

Licence Area Plan : Newcastle Radio

Licence Area : Newcastle RA1

Service Category	Channel/ Frequency	Service Licence No	Transmitter Specification No	Attach No	Area Served
National	1233 kHz	N/A	TS4017001	1.2	Newcastle
National	1413 kHz	N/A	TS10003433	1.3	Newcastle
National	1458 kHz	N/A	TS2220001	1.4	Newcastle
National	1512 kHz	N/A	TS4015001	1.5	Newcastle
National	102.1 MHz	N/A	TS4000001	1.6	Newcastle
National	106.1 MHz	N/A	TS3003001	1.7	Newcastle
National	95.9 MHz	N/A	TS10014308	1.13	Port Stephens
National	95.1 MHz	N/A	TS10014305	1.14	Port Stephens
National	98.3 MHz	N/A	TS10014313	1.15	Port Stephens
National	91.9 MHz	N/A	TS10014307	1.16	Port Stephens
National	92.7 MHz	N/A	TS10014306	1.17	Port Stephens
Commercial	1143kHz	SL4115	TS4115001	1.8	Newcastle
Commercial	97.5MHz	SL4115	TS10014314	1.18	Port Stephens
Commercial	90.5 MHz	SL4115	TS12000310	1.19	Lake Macquarie
Commercial	102.9 MHz	SL4117	TS4117001	1.9	Newcastle
Commercial	105.3 MHz	SL197	TS197001	1.10	Newcastle
Commercial	106.9 MHz	SL4126	TS4126001	1.11	Newcastle
Open Narrowcasting	1341 kHz	N/A	TS6874001	1.12	Newcastle

Schedule 2

(Paragraph 4(h))

Attachment 1.2

LICENCE AREA PLAN : Newcastle Radio

Category : National
General Area Served : Newcastle (NSW)
Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS4017001

Transmitter Site :-

Nominal location : Broadcast Australia Site 2 Lawson Ave
WOODBERRY

Australian Map Grid : Zone Easting Northing
Reference 56 374669 6369917

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : MF-AM

Carrier Frequency : 1233 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	1.3 kV

Special Condition :-

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

Attachment 1.3

LICENCE AREA PLAN : Newcastle Radio

Category : National
General Area Served : Newcastle (NSW)
Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS10003433

Transmitter Site :-

Nominal location : Broadcast Site 97 Maitland Rd SANDGATE

Australian Map Grid : Zone Easting Northing
Reference 56 378458 6363734

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : MF-AM

Carrier Frequency : 1413 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
0°T	0	295 V
10°T	0	680 V
20°T	0	1.015 kV
30°T	0	1.245 kV
40°T	0	1.335 kV
50°T	0	1.295 kV
60°T	0	1.145 kV
70°T	0	940 V
80°T	0	730 V
90°T	0	545 V
100°T	0	420 V
110°T	0	360 V
120°T	0	375 V
130°T	0	460 V
140°T	0	615 V
150°T	0	810 V
160°T	0	1.025 kV
170°T	0	1.215 kV
180°T	0	1.325 kV
190°T	0	1.315 kV

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
200°T	0	1.17 kV
210°T	0	890 V
220°T	0	525 V
230°T	0	150 V
240°T	0	275 V
250°T	0	580 V
260°T	0	815 V
270°T	0	970 V
280°T	0	1.06 kV
290°T	0	1.095 kV
300°T	0	1.085 kV
310°T	0	1.03 kV
320°T	0	915 V
330°T	0	730 V
340°T	0	465 V
350°T	0	145 V

Special Condition :-

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

Attachment 1.4

LICENCE AREA PLAN : Newcastle Radio

Category : National
General Area Served : Newcastle (NSW)
Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS2220001

Transmitter Site :-

Nominal location : Broadcast Australia Site 2 Lawson Ave
WOODBERRY

Australian Map Grid : Zone Easting Northing
Reference 56 374669 6369917

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : MF-AM

Carrier Frequency : 1458 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	445 V

Special Condition :-

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

Attachment 1.5

LICENCE AREA PLAN : Newcastle Radio

Category : National
General Area Served : Newcastle (NSW)
Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS4015001

Transmitter Site :-

Nominal location : Broadcast Australia Site 2 Lawson Ave
WOODBERRY

Australian Map Grid : Zone Easting Northing
Reference 56 374669 6369917

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : MF-AM

Carrier Frequency : 1512 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	1.3 kV

Special Condition :-

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

Attachment 1.6

LICENCE AREA PLAN : Newcastle Radio

Category : National
General Area Served : Newcastle (NSW)
Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS4000001

Transmitter Site :-

Nominal location : Broadcast Australia Site Mt Sugarloaf 5A
Mount Sugarloaf Rd WEST WALLSEND

Australian Map Grid : Zone Easting Northing
Reference 56 363171 6359558

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 102.1 MHz

Polarisation : Mixed

Maximum antenna height : 140 m

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Maximum ERP
At all angles of azimuth	80 kW

Attachment 1.7

LICENCE AREA PLAN : Newcastle Radio

Category : National
General Area Served : Newcastle (NSW)
Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS3003001

Transmitter Site :-

Nominal location : Broadcast Australia Site Mt Sugarloaf 5A
Mount Sugarloaf Rd WEST WALLSEND

Australian Map Grid : Zone Easting Northing
Reference 56 363171 6359558

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 106.1 MHz

Polarisation : Mixed

Maximum antenna height : 140 m

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Maximum ERP
At all angles of azimuth	80 kW

Attachment 1.13

LICENCE AREA PLAN : Newcastle Radio

Category : National
General Area Served : Port Stephens (NSW)
Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10014308

Transmitter Site :-

Nominal location : Port Stephens Council site Gan Gan Hill
NELSON BAY

Australian Map Grid : Zone Easting Northing
Reference 56 418500 6377900

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM
Carrier Frequency : 95.9 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

Advisory Note :-

This service has been planned on an interference limited basis. Field strengths below the planned minimum median field strength level are likely to suffer interference from other broadcasting services. 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 1.14

LICENCE AREA PLAN : Newcastle Radio

Category : National
General Area Served : Port Stephens (NSW)
Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10014305

Transmitter Site :-

Nominal location : Port Stephens Council site Gan Gan Hill
NELSON BAY

Australian Map Grid : Zone Easting Northing
Reference 56 418500 6377900

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM
Carrier Frequency : 95.1 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

Advisory Note :-

This service has been planned on an interference limited basis. Field strengths below the planned minimum median field strength level are likely to suffer interference from other broadcasting services. 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 1.15

LICENCE AREA PLAN : Newcastle Radio

Category : National
General Area Served : Port Stephens (NSW)
Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10014313

Transmitter Site :-

Nominal location : Port Stephens Council site Gan Gan Hill
NELSON BAY

Australian Map Grid : Zone Easting Northing
Reference 56 418500 6377900

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM
Carrier Frequency : 98.3 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

Advisory Note :-

This service has been planned on an interference limited basis. Field strengths below the planned minimum median field strength level are likely to suffer interference from other broadcasting services. 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 : Newcastle Radio

Category : National
General Area Served : Port Stephens (NSW)
Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10014307

Transmitter Site :-

Nominal location : Port Stephens Council site Gan Gan Hill
NELSON BAY

Australian Map Grid : Zone Easting Northing
Reference 56 418500 6377900

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM
Carrier Frequency : 91.9 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

Advisory Note :-

This service has been planned on an interference limited basis. Field strengths below the planned minimum median field strength level are likely to suffer interference from other broadcasting services. 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 : Newcastle Radio

Category : National
General Area Served : Port Stephens (NSW)
Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10014306

Transmitter Site :-

Nominal location : Port Stephens Council site Gan Gan Hill
NELSON BAY

Australian Map Grid : Zone Easting Northing
Reference 56 418500 6377900

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM
Carrier Frequency : 92.7 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

Advisory Note :-

This service has been planned on an interference limited basis. Field strengths below the planned minimum median field strength level are likely to suffer interference from other broadcasting services. 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 1.8

LICENCE AREA PLAN : Newcastle Radio

Category : Commercial
General Area Served : Newcastle (NSW)
Service Licence Number : SL4115

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS4115001

Transmitter Site :-

Nominal location : Broadcaster Site Off Maitland Rd 1km NW of SANDGATE

Australian Map Grid : Zone Easting Northing
Reference 56 378501 6362806

Site Tolerance : Refer to *Broadcasting Services (Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : MF-AM

Carrier Frequency : 1143 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	550 V

Special Condition :-

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

Attachment 1.18

LICENCE AREA PLAN : Newcastle Radio

Category : Commercial
General Area Served : Port Stephens (NSW)
Service Licence Number : SL4115

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10014314

Transmitter Site :-

Nominal location : Port Stephens Council site Gan Gan Hill
NELSON BAY

Australian Map Grid : Zone Easting Northing
Reference 56 418500 6377900

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM
Carrier Frequency : 97.5 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

Advisory Note :-

This service has been planned on an interference limited basis. Field strengths below the planned minimum median field strength level are likely to suffer interference from other broadcasting services. 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 1.19

LICENCE AREA PLAN : Newcastle Radio

Category : Commercial
General Area Served : Lake Macquarie (NSW)
Service Licence Number : SL4115

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS12000310

Transmitter Site :-

Nominal location : Axicom Site Adj Water Reservoir 117
Violet Town Rd BELMONT NORTH

Australian Map Grid : Zone Easting Northing
Reference 56 375996 6346733

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM
Carrier Frequency : 90.5 MHz
Polarisation : Mixed
Maximum antenna height : 40 m

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Maximum ERP
At all angles of azimuth	100 W

Advisory Note :-

Any transmission in accordance with this technical specification is planned on the basis that it will be protected to a minimum median field strength level of 60 dBuV/m against interference from other broadcasting services.

Attachment 1.9

LICENCE AREA PLAN : Newcastle Radio

Category : Commercial
General Area Served : Newcastle (NSW)
Service Licence Number : SL4117

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS4117001

Transmitter Site :-

Nominal location : NBN TV Site Mt Sugarloaf 3A Mount
Sugarloaf Rd WEST WALLSEND

Australian Map Grid : Zone Easting Northing
Reference 56 363230 6359750

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 102.9 MHz

Polarisation : Mixed

Maximum antenna height : 85 m

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Maximum ERP
0°T - 160°T	20 kW
160°T - 220°T	2 kW
220°T - 360°T	20 kW

Attachment 1.10

LICENCE AREA PLAN : Newcastle Radio

Category : Commercial
General Area Served : Newcastle (NSW)
Service Licence Number : SL197

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS197001

Transmitter Site :-

Nominal location : NBN TV Site Mt Sugarloaf 3A Mount
Sugarloaf Rd WEST WALLSEND

Australian Map Grid : Zone Easting Northing
Reference 56 363230 6359750

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 105.3 MHz

Polarisation : Mixed

Maximum antenna height : 85 m

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Maximum ERP
0°T - 160°T	20 kW
160°T - 220°T	2 kW
220°T - 360°T	20 kW

Attachment 1.11

LICENCE AREA PLAN : Newcastle Radio

Category : Commercial
General Area Served : Newcastle (NSW)
Service Licence Number : SL4126

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS4126001

Transmitter Site :-

Nominal location : Broadcast Australia Site Mt Sugarloaf 5A
Mount Sugarloaf Rd WEST WALLSEND

Australian Map Grid : Zone Easting Northing
Reference 56 363171 6359558

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 106.9 MHz

Polarisation : Mixed

Maximum antenna height : 85 m

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Maximum ERP
0°T - 160°T	20 kW
160°T - 220°T	2 kW
220°T - 360°T	20 kW

Attachment 1.12

LICENCE AREA PLAN : Newcastle Radio

Category : Open Narrowcasting
General Area Served : Newcastle (NSW)
Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS6874001

Transmitter Site :-

Nominal location : Nominal Planning site Sandgate Rd
BIRMINGHAM GARDENS

Australian Map Grid : Zone Easting Northing
Reference 56 376500 6360000

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : MF-AM

Carrier Frequency : 1341 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
0°T	0	270 V
10°T	0	660 V
20°T	0	990 V
30°T	0	1.21 kV
40°T	0	1.29 kV
50°T	0	1.24 kV
60°T	0	1.09 kV
70°T	0	890 V
80°T	0	690 V
90°T	0	530 V
100°T	0	425 V
110°T	0	390 V
120°T	0	425 V
130°T	0	530 V
140°T	0	690 V
150°T	0	890 V
160°T	0	1.09 kV
170°T	0	1.24 kV

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
180°T	0	1.29 kV
190°T	0	1.21 kV
200°T	0	990 V
210°T	0	660 V
220°T	0	270 V
230°T	0	170 V
240°T	0	505 V
250°T	0	775 V
260°T	0	960 V
270°T	0	1.075 kV
280°T	0	1.135 kV
290°T	0	1.15 kV
300°T	0	1.135 kV
310°T	0	1.075 kV
320°T	0	960 V
330°T	0	775 V
340°T	0	505 V
350°T	0	170 V

Special Condition :-

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

Advisory Note :-

The coverage area of this transmission is 30 kilometres measured from a point with the following AMG66 co-ordinates: Zone: 56; Easting: 376500; Northing: 6360000. This point is the same as the nominal transmitter site.

Attachment 2.2

LICENCE AREA PLAN : Newcastle Radio

Category : Community
General Area Served : Newcastle (NSW)
Service Licence Number : SL3053

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10008577

Transmitter Site :-

Nominal location : NBN TV Site Mt Sugarloaf 3A Mount
Sugarloaf Rd WEST WALLSEND

Australian Map Grid : Zone Easting Northing
Reference 56 363230 6359750

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 103.7 MHz

Polarisation : Mixed

Maximum antenna height : 120 m

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Maximum ERP
0°T - 160°T	10 kW
160°T - 220°T	5 kW
220°T - 360°T	10 kW

Attachment 2.3

LICENCE AREA PLAN : Newcastle Radio

Category : Community
General Area Served : Newcastle (NSW)
Service Licence Number : SL1150030

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10007610

Transmitter Site :-

Nominal location : Broadcast Australia Site Mt Sugarloaf 5A
Mount Sugarloaf Rd WEST WALLSEND

Australian Map Grid : Zone Easting Northing
Reference 56 363171 6359558

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 99.7 MHz

Polarisation : Mixed

Maximum antenna height : 120 m

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Maximum ERP
0°T - 160°T	10 kW
160°T - 220°T	2 kW
220°T - 360°T	10 kW

Special Condition :-

The licensee is required to reduce ERP in the 160°T - 220°T sector, if any co-channel interference is received by 2SSR Sutherland, especially over the summer months.

Attachment 3.2

LICENCE AREA PLAN : Newcastle Radio

Category : Community
General Area Served : Cessnock/Maitland (NSW)
Service Licence Number : SL1150040

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10007799

Transmitter Site :-

Nominal location : Council Site Bimbadeen Lookout Mount
View Via CESSNOCK

Australian Map Grid : Zone Easting Northing
Reference 56 339100 6363300

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM
Carrier Frequency : 96.5 MHz
Polarisation : Mixed
Maximum antenna height : 30 m

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Maximum ERP
0°T - 100°T	2 kW
100°T - 350°T	500 W
350°T - 360°T	2 kW

Attachment 4.2

LICENCE AREA PLAN : Newcastle Radio

Category : Community
General Area Served : Lake Macquarie (NSW)
Service Licence Number : SL1150043

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10007821

Transmitter Site :-

Nominal location : Nominal Planning Site 15 Silky Oak Dr
MORISSET

Australian Map Grid : Zone Easting Northing
Reference 56 361600 6334400

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 97.3 MHz
Polarisation : Mixed

Maximum antenna height : 30 m

Output Radiation Pattern :-

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

Advisory 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 5.2

LICENCE AREA PLAN : Newcastle Radio

Category : Community
General Area Served : Port Stephens (NSW)
Service Licence Number : SL1150042

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10007804

Transmitter Site :-

Nominal location : Port Stephens Council site Gan Gan Hill
NELSON BAY

Australian Map Grid : Zone Easting Northing
Reference 56 418500 6377900

Site Tolerance : Refer to *Broadcasting Services
(Technical Planning) Guidelines 2017*

Emission :-

Frequency Band & Mode : VHF-FM

Carrier Frequency : 100.9 MHz
Polarisation : Mixed

Maximum antenna height : 30 m

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Maximum ERP
0°T - 220°T	100 W
220°T - 340°T	1 kW
340°T - 360°T	100 W

Special Condition :-

The licensee is required to reduce ERP towards Manly, if any co-channel interference is received by the Manly North community service, especially over the summer months.