



**Australian
Broadcasting
Authority**

LICENCE AREA PLAN

BUNBURY

(RADIO)

NOVEMBER 1996

LICENCE AREA PLAN - BUNBURY

DETERMINATION

The Australian Broadcasting Authority hereby makes this plan for broadcasting services in the Bunbury area of Western Australia, under subsection 26(1) of the *Broadcasting Services Act 1992*.

Six national radio broadcasting, three commercial radio broadcasting services and two open narrowcasting radio broadcasting service are to be available in the Bridgetown area described at Attachment 1.1 to this Determination 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 the Schedule One and Attachments 1.2 - 1.16 to this Determination.

One community radio broadcasting service is to be available in the area described at Attachment 2.1 to this Determination 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 Attachment 2.2 to this Determination.

One community radio broadcasting service is to be available in the area described at Attachment 3.1 to this Determination 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 3.1 are set out in Schedule Two and Attachment 3.2 to this Determination.

One community radio broadcasting service is to be available in the area described at Attachment 4.1 to this Determination 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 4.1 are set out in Schedule Two and Attachment 2.2 to this Determination.

(Determined by the Australian Broadcasting Authority on 12 November 1996)

SCHEDULES

Each of the Schedules sets out:

- the category of each of the services that are to be available in that area (column one),
- the service licence number which has been allocated to the service, if appropriate (column two); N/A = Not Applicable, as the *Broadcasting Services Act 1992* only requires service licences for Commercial and Community services.
- the number of transmitters required to transmit the service,
- the transmitter specification number which has been allocated to each transmitter (column three),
- the identifying number of the attachment where the technical specifications for each transmitter are described (column four). (Each set of technical specifications referred to in the Schedules is an attachment to this determination).
- the general area served by each transmitter (column five).

SCHEDULE ONE

Licence Area Plan - Bunbury - (Radio) - November 1996

Category of Service	Service Licence No:	Transmitter Specification No:	Technical Specifications	General Area Served by Transmitter
National	N/A	TS002140	See attachment 1.2	Bunbury
National	N/A	TS002142	See attachment 1.3	Bunbury
National	N/A	TS002335	See attachment 1.4	Busselton
National	N/A	TS002346	See attachment 1.5	Busselton
National	N/A	TS002268	See attachment 1.6	Augusta
National	N/A	TS002269	See attachment 1.7	Augusta
Commercial	SL010404	TS002334	See attachment 1.8	Bunbury
		TS002336	See attachment 1.9	Collie
		TS002344	See attachment 1.10	Margaret River
Commercial	SL010043	TS002138	See attachment 1.11	Bunbury
Commercial	SL010074	TS002241	See attachment 1.12	Bunbury
		TS002747	See attachment 1.13	Collie
		TS002748	See attachment 1.14	Margaret River
Open Narrowcasting	N/A	TS002242	See attachment 1.15	Bunbury
Open Narrowcasting	N/A	TS002240	See attachment 1.16	Busselton

SCHEDULE TWO

Licence Area Plan - Bunbury - (Radio) - November 1996

Category of Service	Service Licence No:	Transmitter Specification No:	Technical Specifications	General Area Served by Transmitter
Community	SL010066	TS002243	See attachment 2.2	Bunbury

SCHEDULE THREE

Licence Area Plan - Bunbury - (Radio) - November 1996

Category of Service	Service Licence No:	Transmitter Specification No:	Technical Specifications	General Area Served by Transmitter
Community	SL010062	TS002158	See attachment 3.2	Collie

SCHEDULE FOUR

Licence Area Plan - Bunbury - (Radio) - November 1996

Category of Service	Service Licence No:	Transmitter Specification No:	Technical Specifications	General Area Served by Transmitter
Community	SL010068	TS002229	See attachment 4.2	Margaret River

ATTACHMENT 1.1

LICENCE AREA FOR SERVICE LICENCE NUMBERS: SL010404, SL010043 and SL010074 COMMERCIAL RADIO BUNBURY WA

The licence area, in terms of areas defined by the Australian Bureau of Statistics at the Census of 6 September 1991, is:

<u>Area Description</u>	<u>Persons</u>
Augusta-Margaret River (S)	5875
Bunbury (C)	25676
Busselton (S)	13514
Capel (S)	4918
Collie (S)	9063
Dardanup (S)	5033
Harvey (S)	12386
Waroonna (S)	3044
WA CD 051001	333
WA CD 051002	268
WA CD 051003	216
WA CD 051005	160
WA CD 051006	499
WA CD 051007	662
WA CD 051008	434
WA CD 051009	281
WA CD 051010	701
WA CD 050901	225
WA CD 050902	472
Total Persons	83760

Note: Standard terminology used by the Australian Bureau of Statistics:

(C) = City
(CD) = Collection District
(S) = Shire

LICENCE AREA PLAN :

Category : National

General Area Served : Bunbury (WA)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10002140

Transmitter Site :-

Nominal location : Mt Lennard BUNBURY

Australian Map Grid :	Zone	Easting	Northing
Reference	50	398920	6304100

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode VHF-FM

Carrier Frequency : 93.3 MHz

Polarisation Mixed

Maximum antenna height 160 m

Output Radiation Pattern :-

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

LICENCE AREA PLAN :

Category : National

General Area Served : Bunbury (WA)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10002142

Transmitter Site :-

Nominal location : Mt Lennard BUNBURY

Australian Map Grid :	Zone	Easting	Northing
Reference	50	398920	6304100

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode VHF-FM

Carrier Frequency : 94.1 MHz

Polarisation Mixed

Maximum antenna height 160 m

Output Radiation Pattern :-

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

LICENCE AREA PLAN :

Category : National

General Area Served : Busselton (WA)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS10002335

Transmitter Site :-

Nominal location : BUSSELTON

Australian Map Grid :	Zone	Easting	Northing
Reference	50	335700	6274000

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode MF-AM

Carrier Frequency : 684 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	800 V

Notes:-

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

LICENCE AREA PLAN :

Category : National

General Area Served : Busselton (WA)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS10002346

Transmitter Site :-

Nominal location : BUSSELTON

Australian Map Grid :	Zone	Easting	Northing
Reference	50	335700	6274000

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode MF-AM

Carrier Frequency : 1224 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	920 V

Notes:-

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

LICENCE AREA PLAN :

Category : National

General Area Served : Augusta (WA)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10002268

Transmitter Site :-

Nominal location : Leeuwin Rd/Osnaburg St Junction AUGUSTA

Australian Map Grid :	Zone	Easting	Northing
Reference	50	330600	6200300

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode VHF-FM

Carrier Frequency : 98.3 MHz

Polarisation Mixed

Maximum antenna height 30 m

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Maximum ERP
At all angles of azimuth	50 W

LICENCE AREA PLAN :

Category : National

General Area Served : Augusta (WA)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10002269

Transmitter Site :-

Nominal location : Leeuwin Rd/Osnaburg St Junction AUGUSTA

Australian Map Grid :	Zone	Easting	Northing
Reference	50	330600	6200300

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode VHF-FM

Carrier Frequency : 99.1 MHz

Polarisation Mixed

Maximum antenna height 30 m

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Maximum ERP
At all angles of azimuth	50 W

LICENCE AREA PLAN :

Category : Commercial

General Area Served : Bunbury (WA)

Service Licence Number : SL10404

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS10002334

Transmitter Site :-

Nominal location : 11km E of town BUNBURY

Australian Map Grid :	Zone	Easting	Northing
Reference	50	383800	6310100

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode MF-AM

Carrier Frequency : 963 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	450 V

Notes:-

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

LICENCE AREA PLAN :

Category : Commercial

General Area Served : Collie (WA)

Service Licence Number : SL10404

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS10002336

Transmitter Site :-

Nominal location : 4km ESE of town COLLIE

Australian Map Grid :	Zone	Easting	Northing
Reference	50	424900	6307300

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode MF-AM

Carrier Frequency : 1134 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	450 V

Notes:-

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

LICENCE AREA PLAN :

Category : Commercial

General Area Served : Margaret River (WA)

Service Licence Number : SL10404

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS10002344

Transmitter Site :-

Nominal location : Taunton Farm Lot 2536 Bussell Hwy
MARGARET RIVER

Australian Map Grid : Zone Easting Northing
Reference 50 326100 6257100

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode MF-AM

Carrier Frequency : 756 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	450 V

Notes:-

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

LICENCE AREA PLAN :

Category : Commercial

General Area Served : Bunbury (WA)

Service Licence Number : SL10043

TECHNICAL SPECIFICATION - FM Radio

Specification Number : TS10002138

Transmitter Site :-

Nominal location : Mt Lennard BUNBURY

Australian Map Grid :	Zone	Easting	Northing
Reference	50	399100	6304200

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode VHF-FM

Carrier Frequency : 95.7 MHz

Polarisation Mixed

Maximum antenna height 160 m

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Maximum ERP
180°T - 270°T	60 kW
270°T - 340°T	12 kW
340°T - 180°T	6 kW

LICENCE AREA PLAN :

Category : Commercial

General Area Served : Bunbury (WA)

Service Licence Number : SL10074

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS10002241

Transmitter Site :-

Nominal location : 11km E of BUNBURY

Australian Map Grid :	Zone	Easting	Northing
Reference	50	383800	6310100

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode MF-AM

Carrier Frequency : 621 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	450 V

Notes:-

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

LICENCE AREA PLAN :

Category : Commercial

General Area Served : Collie (WA)

Service Licence Number : SL10074

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS10002747

Transmitter Site :-

Nominal location : 4km ESE of town COLLIE

Australian Map Grid :	Zone	Easting	Northing
Reference	50	424900	6307300

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode MF-AM

Carrier Frequency : 1548 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	450 V

Notes:-

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

LICENCE AREA PLAN :

Category : Commercial

General Area Served : Margaret River (WA)

Service Licence Number : SL10074

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS10002748

Transmitter Site :-

Nominal location : Taunton Farm Lot 2536 Bussell Hwy
MARGARET RIVER

Australian Map Grid : Zone Easting Northing
Reference 50 326102 6257100

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode MF-AM

Carrier Frequency : 1494 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	450 V

Notes:-

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

LICENCE AREA PLAN :

Category : Open Narrowcasting

General Area Served : Bunbury (WA)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS10002242

Transmitter Site :-

Nominal location : 11km E of town BUNBURY

Australian Map Grid :	Zone	Easting	Northing
Reference	50	383800	6310100

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode MF-AM

Carrier Frequency : 1017 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	450 V

Notes:-

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

LICENCE AREA PLAN :

Category : Open Narrowcasting

General Area Served : Busselton (WA)

Service Licence Number : Not applicable

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS10002240

Transmitter Site :-

Nominal location : BUSSELTON

Australian Map Grid :	Zone	Easting	Northing
Reference	50	335700	6274000

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode MF-AM

Carrier Frequency : 1404 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	800 V

Notes:-

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

ATTACHMENT 2.1

LICENCE AREA FOR SERVICE LICENCE NUMBER: SL010066
COMMUNITY RADIO, TOWN OF BUNBURY AND ENVIRONS WA

The licence area, in terms of areas defined by the Australian Bureau of Statistics at the Census of 6 September 1991, is:

<u>Area Description</u>	<u>Persons</u>
Bunbury (C)	25676
Total Persons	25676

Note: Standard terminology used by the Australian Bureau of Statistics:

(C) = City

LICENCE AREA PLAN :

Category : Community

General Area Served : Bunbury (WA)

Service Licence Number : SL10066

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS10002243

Transmitter Site :-

Nominal location : 11km E of town BUNBURY

Australian Map Grid :	Zone	Easting	Northing
Reference	50	383800	6310100

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode MF-AM

Carrier Frequency : 855 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	225 V

Notes:-

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

ATTACHMENT 3.1

LICENCE AREA FOR SERVICE LICENCE NUMBER: SL010062
COMMUNITY RADIO, TOWN OF COLLIE AND ENVIRONS WA

The licence area, in terms of areas defined by the Australian Bureau of Statistics at the Census of 6 September 1991, is:

<u>Area Description</u>	<u>Persons</u>
Collie (S)	9063

Note: Standard terminology used by the Australian Bureau of Statistics:

(S) = Shire

LICENCE AREA PLAN :

Category : Community

General Area Served : Collie (WA)

Service Licence Number : SL10062

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS10002158

Transmitter Site :-

Nominal location : 4km ESE of town COLLIE

Australian Map Grid :	Zone	Easting	Northing
Reference	50	424900	6307300

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode MF-AM

Carrier Frequency : 1089 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	225 V

Notes:-

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

ATTACHMENT 4.1

LICENCE AREA FOR SERVICE LICENCE NUMBER: SL010068 COMMUNITY RADIO, TOWN OF MARGARET RIVER AND ENVIRONS WA

The licence area, in terms of areas defined by the Australian Bureau of Statistics at the Census of 6 September 1991, is:

<u>Area Description</u>	<u>Persons</u>
Augusta-Margaret River (S)	5875
Busselton (S)	13514
Total Persons	19389

Note: Standard terminology used by the Australian Bureau of Statistics:

(S) = Shire

LICENCE AREA PLAN :

Category : Community

General Area Served : Margaret River (WA)

Service Licence Number : SL10068

TECHNICAL SPECIFICATION - AM Radio

Specification Number : TS10002229

Transmitter Site :-

Nominal location : Taunton Farm Lot 2536 Bussell Hwy
MARGARET RIVER

Australian Map Grid : Zone Easting Northing
Reference 50 326100 6257100

Site Tolerance : Refer to Technical Planning Guidelines

Emission :-

Frequency Band & Mode MF-AM

Carrier Frequency : 1332 kHz

Output Radiation Pattern :-

Bearing or Sector (Clockwise direction)	Elevation	Maximum CMF
At all angles of azimuth	0	225 V

Notes:-

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