

# Apparatus Licence

Issued by Delegate of the Australian Communications and Media Authority



## Licensee details

Customer ID	1315913
Licensee	DEPARTMENT OF JUSTICE AND COMMUNITY SAFETY
Trading name	ESTA Emergency Services Telecommunications Authority
Licensee address	c/-10 Wesley Court - Motorola MMR Project, Tally Ho Bus Pk, EAST BURWOOD, VIC 3151

## Licence details

Licence service	Land Mobile
Licence subservice	Land Mobile System - > 30MHz
Licence number	1911712/5
Callsign	VNV883
Date of issue	10/11/2023
Date of effect	10/11/2023
Date of expiry	01/12/2024

## Licence conditions

Your licence is subject to conditions set out in the *Radiocommunications Act 1992*. Your licence may also be subject to such other licence conditions as determined by the ACMA (in licence condition determinations) from time to time, and is also subject to special conditions as detailed on this licence.

The conditions that are imposed on a licence vary according to the type of licence issued, the service being operated and the section of the *Radiocommunications Act 1992* under which the licence has been issued. For further information about the conditions that apply to your licence, please contact the ACMA (see contact details below).

### **Rights of appeal**

A decision by the ACMA to impose further conditions or revoke or vary the conditions of your licence may be reviewable. If you are affected by, and dissatisfied with, such a decision you may apply to the ACMA to have the ACMA reconsider the decision under section 288 of the *Radiocommunications Act 1992*.

An application for reconsideration must state the reasons for the request, and should be sent to the Customer Service Centre, Australian Communications and Media Authority, PO Box 78, Belconnen, ACT, 2616. Applications for review of decisions can be made using the R051 - Application for review of Decision form, available on the ACMA website.

### **Important**

An application for the ACMA to reconsider a decision to impose or vary licence conditions must be made to the ACMA within 28 days of the day on which you are informed of the decision. An application for reconsideration made after that time may not be accepted.

## ACMA contact details

Customer Service Centre  
PO Box 78  
BELCONNEN ACT 2616

Telephone: 1300 850 115  
Email: [info@acma.gov.au](mailto:info@acma.gov.au)

ACMA website: [www.acma.gov.au](http://www.acma.gov.au)

## **Advisory Notes applying to licence no.: 1911712/5**

Conditions applicable to the operation of Land Mobile System station(s) authorised under this licence can be found in the Radiocommunications Licence Conditions (Apparatus Licence) Determination and the Radiocommunications Licence Conditions (Land Mobile Licence) Determination. Copies of these determinations are available from the ACMA and from the ACMA home page ([www.acma.gov.au](http://www.acma.gov.au)).

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Main Station Site

### Station 1:

#### Site details

Site ID	11596
Site address	120 Collins Street, MELBOURNE VIC 3000
Co-ordinates (GDA94)	Latitude: -37.813822 Longitude: 144.969482

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000899731
Transmitter power	50.00 W
EIRP	83.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000899730
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Radiax (Leaky feeder)-Z

### Special Conditions applying to Station 1

The level of power in the adjacent channel must not exceed -16dBm.

When the transmitter is coupled to an antenna the level of all discrete spurious components caused by the transmitter & measured at the connection to the antenna must not exceed -30 DBM. Broadband noise floor of the transmitter measured at the same point must not exceed -47 DBM in a 16 kHz bandwidth for frequency offsets greater than 300 kHz from the transmit frequency.

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 2:

#### Site details

Site ID	47316
Site address	Parliament Underground Station, MELBOURNE VIC 3000
Co-ordinates (GDA94)	Latitude: -37.811313 Longitude: 144.972958

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000899723
Transmitter power	5.00 W
EIRP	8.40 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000899724
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Radiax (Leaky feeder)-Z

### Special Conditions applying to Station 2

The level of power in the adjacent channel must not exceed -16dBm.

When the transmitter is coupled to an antenna the level of all discrete spurious components caused by the transmitter & measured at the connection to the antenna must not exceed -30 DBM. Broadband noise floor of the transmitter measured at the same point must not exceed -47 DBM in a 16 kHz bandwidth for frequency offsets greater than 300 kHz from the transmit frequency.

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 3:

#### Site details

Site ID	47317
Site address	Flagstaff Underground Station, MELBOURNE VIC 3003
Co-ordinates (GDA94)	Latitude: -37.81213 Longitude: 144.955046

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000899725
Transmitter power	5.00 W
EIRP	8.40 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000899726
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Radiax (Leaky feeder)-Z

### Special Conditions applying to Station 3

The level of power in the adjacent channel must not exceed -16dBm.

When the transmitter is coupled to an antenna the level of all discrete spurious components caused by the transmitter & measured at the connection to the antenna must not exceed -30 DBM. Broadband noise floor of the transmitter measured at the same point must not exceed -47 DBM in a 16 kHz bandwidth for frequency offsets greater than 300 kHz from the transmit frequency.

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 4:

#### Site details

Site ID	304093
Site address	Telstra Site City Link tunnels, near Dodds St, SOUTH MELBOURNE VIC 3002
Co-ordinates (GDA94)	Latitude: -37.827309 Longitude: 144.986098

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000899727
Transmitter power	5.00 W
EIRP	8.40 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000899728
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Radiax (Leaky feeder)-Z

### Special Conditions applying to Station 4

When the transmitter is coupled to an antenna the level of all discrete spurious components caused by the transmitter & measured at the connection to the antenna must not exceed -30 DBM. Broadband noise floor of the transmitter measured at the same point must not exceed -47 DBM in a 16 kHz bandwidth for frequency offsets greater than 300 kHz from the transmit frequency.

The level of power in the adjacent channel must not exceed -16dBm.

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 5:

#### Site details

Site ID	51716
Site address	Centre Block Alfred Hospital, Commercial Road, PRAHRAN VIC 3181
Co-ordinates (GDA94)	Latitude: -37.846263 Longitude: 144.982514

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214681
Transmitter power	10.00 W
EIRP	10.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214682
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 6:

#### Site details

Site ID	11633
Site address	MMR site boiler house Austin Hospital, 145 Studley Rd, HEIDELBERG VIC 3084
Co-ordinates (GDA94)	Latitude: -37.756838 Longitude: 145.056901

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214683
Transmitter power	10.00 W
EIRP	10.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214684
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-



## Technical characteristics

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### Supplementary Station Site

### Station 7:

Site details	
Site ID	100126
Site address	Crown Casino Site, SOUTHBANK VIC 3205
Co-ordinates (GDA94)	Latitude: -37.822797 Longitude: 144.959523

Transmitter details	
Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214685
Transmitter power	10.00 W
EIRP	10.00 W
Emission designator	10K1D7W

Antenna details	
Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-

Receiver details	
Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214686
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

Antenna details	
Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-

## Technical characteristics

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### Supplementary Station Site

### Station 8:

#### Site details

Site ID	10010688
Site address	Epworth Hospital, 89 Bridge Road, Richmond VIC
Co-ordinates (GDA94)	Latitude: -37.817156 Longitude: 144.992977

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214687
Transmitter power	10.00 W
EIRP	10.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	-10
Antenna type	Unknown antenna type, size or specifications-

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214688
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	-10
Antenna type	Unknown antenna type, size or specifications-

## Technical characteristics

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### Supplementary Station Site

### Station 9:

#### Site details

Site ID	302012
Site address	Federation Square, Flinders St, MELBOURNE VIC 3004
Co-ordinates (GDA94)	Latitude: -37.817635 Longitude: 144.968526

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214689
Transmitter power	10.00 W
EIRP	10.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	-6
Antenna type	Unknown antenna type, size or specifications-

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214690
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	-6
Antenna type	Unknown antenna type, size or specifications-

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 10:

#### Site details

Site ID	48849
Site address	Various Site Highpoint Shopping Centre, Rosamond Road, MARIBYRNONG VIC 3032
Co-ordinates (GDA94)	Latitude: -37.773798 Longitude: 144.889345

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214691
Transmitter power	10.00 W
EIRP	10.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214692
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 11:

#### Site details

Site ID	43054
Site address	Myer Northland 2-50 Murray Rd, PRESTON VIC 3072
Co-ordinates (GDA94)	Latitude: -37.739013 Longitude: 145.029914

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214693
Transmitter power	10.00 W
EIRP	10.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214694
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 12:

#### Site details

Site ID	11599
Site address	Rialto Towers, 525 Collins Street, MELBOURNE VIC 3000
Co-ordinates (GDA94)	Latitude: -37.81852 Longitude: 144.957141

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214695
Transmitter power	10.00 W
EIRP	10.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	92357
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	265
Antenna type	Non-radiating feeder cable

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214696
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	92357
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	265
Antenna type	Non-radiating feeder cable

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 13:

#### Site details

Site ID	300439
Site address	Royal Childrens Hospital, Flemington Road, PARKVILLE VIC 3052
Co-ordinates (GDA94)	Latitude: -37.794655 Longitude: 144.950303

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214697
Transmitter power	10.00 W
EIRP	10.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Unknown antenna type, size or specifications-

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214698
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Unknown antenna type, size or specifications-

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 14:

#### Site details

Site ID	303454
Site address	Near Road Bridge Southland 1239 Nepean Hwy, CHELTENHAM VIC 3192
Co-ordinates (GDA94)	Latitude: -37.958118 Longitude: 145.05321

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214699
Transmitter power	10.00 W
EIRP	10.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214700
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-



## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 15:

#### Site details

Site ID	301559
Site address	Marvel Stadium, Harbour Esplanade, DOCKLANDS VIC 3000
Co-ordinates (GDA94)	Latitude: -37.815459 Longitude: 144.946289

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214701
Transmitter power	10.00 W
EIRP	10.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214702
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 16:

#### Site details

Site ID	10010679
Site address	Victorian Comprehensive Cancer Centre (VCCC), 305 Grattan St, Melbourne VIC
Co-ordinates (GDA94)	Latitude: -37.800109 Longitude: 144.956645

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214703
Transmitter power	10.00 W
EIRP	10.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Unknown antenna type, size or specifications-

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214704
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Unknown antenna type, size or specifications-

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 17:

#### Site details

Site ID	50368
Site address	Hospital, Gordon Street, FOOTSCRAY VIC 3011
Co-ordinates (GDA94)	Latitude: -37.792354 Longitude: 144.886432

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214705
Transmitter power	10.00 W
EIRP	10.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002214706
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	10
Antenna type	Unknown antenna type, size or specifications-

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 18:

#### Site details

Site ID	10010693
Site address	Box Hill Railway Station, Station St / Bank St, Box Hill VIC
Co-ordinates (GDA94)	Latitude: -37.819231 Longitude: 145.12155

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326247
Transmitter power	5.00 W
EIRP	5.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326248
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 19:

#### Site details

Site ID	10010692
Site address	Broadmeadows Railway Station, Johnstone St / Pascoe Vale Rd, Broadmeadows VIC
Co-ordinates (GDA94)	Latitude: -37.683289 Longitude: 144.919313

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326249
Transmitter power	5.00 W
EIRP	5.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326250
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 20:

#### Site details

Site ID	10010691
Site address	Caulfield Railway Station, Station St / Normanby Ave, Caulfield VIC
Co-ordinates (GDA94)	Latitude: -37.877326 Longitude: 145.042342

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326251
Transmitter power	5.00 W
EIRP	5.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326252
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 21:

#### Site details

Site ID	10010689
Site address	Clifton Hill Railway Station, Heidelberg Rd / John St, Clifton Hill VIC
Co-ordinates (GDA94)	Latitude: -37.78857 Longitude: 144.99551

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326253
Transmitter power	5.00 W
EIRP	5.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326254
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 22:

#### Site details

Site ID	10010685
Site address	Macleod Railway Station, Birdwood Ave, Macleod VIC
Co-ordinates (GDA94)	Latitude: -37.726005 Longitude: 145.06939

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326255
Transmitter power	5.00 W
EIRP	5.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326256
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z



## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 23:

#### Site details

Site ID	10010683
Site address	Mordialloc Railway Station, Bear St / Albert St, Mordialloc VIC
Co-ordinates (GDA94)	Latitude: -38.00605 Longitude: 145.08711

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326257
Transmitter power	5.00 W
EIRP	5.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326258
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 24:

#### Site details

Site ID	10010682
Site address	Springvale Railway Station, Springvale Rd / Lightwood Rd, Springvale VIC
Co-ordinates (GDA94)	Latitude: -37.949033 Longitude: 145.153053

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326259
Transmitter power	5.00 W
EIRP	5.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326260
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 25:

#### Site details

Site ID	10010678
Site address	Water Gardens Railway Station, Sydenham Rd, Sydenham VIC
Co-ordinates (GDA94)	Latitude: -37.700817 Longitude: 144.774168

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326261
Transmitter power	5.00 W
EIRP	5.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326262
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 26:

#### Site details

Site ID	10010676
Site address	Werribee Railway Station, Manly St, Werribee VIC
Co-ordinates (GDA94)	Latitude: -37.899272 Longitude: 144.661527

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326263
Transmitter power	5.00 W
EIRP	5.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0002326264
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	6
Antenna type	Radiax (Leaky feeder)-Z

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 27:

#### Site details

Site ID	10023307		
Site address	Ormond railway station building, Northwest corner of North and Katandra Roads, Ormond VIC		
Co-ordinates (GDA94)	Latitude: -37.903592	Longitude:	145.039569

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0003087824
Transmitter power	10.00 W
EIRP	10.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	3
Antenna type	Unknown antenna type, size or specifications-

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0003087825
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	80881
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	3
Antenna type	Unknown antenna type, size or specifications-

### Special Conditions applying to Station 27

The level of all discreet spurious components, measured at the output of the transmitter, must not exceed -30dBm.

The level of power in the adjacent channel must not exceed -16dBm.

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 28:

#### Site details

Site ID	10033791
Site address	Mernda Train Station, Bridge Inn Road opp. Station Road, MERNDA VIC
Co-ordinates (GDA94)	Latitude: -37.602357 Longitude: 145.100949

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0004020154
Transmitter power	5.00 W
EIRP	5.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	3
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0004020155
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	3
Antenna type	Radiax (Leaky feeder)-Z

## Special Conditions applying to Station 28

The level of power in the adjacent channel must not exceed -16dBm.

The level of all discreet spurious components, measured at the output of the transmitter, must not exceed -30dBm.

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 29:

#### Site details

Site ID	10033792
Site address	Clayton Train Station, Cnr Clayton & Carinish Roads, CLAYTON VIC
Co-ordinates (GDA94)	Latitude: -37.924592 Longitude: 145.120606

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0004020156
Transmitter power	5.00 W
EIRP	5.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	3
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0004020157
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	3
Antenna type	Radiax (Leaky feeder)-Z

## Special Conditions applying to Station 29

The level of power in the adjacent channel must not exceed -16dBm.

The level of all discreet spurious components, measured at the output of the transmitter, must not exceed -30dBm.

## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 30:

#### Site details

Site ID	10033793
Site address	Hawkestone Train Station, Cnr Plenty Road & Hawkestone Parade, SOUTH MORANG VIC
Co-ordinates (GDA94)	Latitude: -37.622576 Longitude: 145.097382

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0004020158
Transmitter power	5.00 W
EIRP	5.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	3
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0004020159
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	3
Antenna type	Radiax (Leaky feeder)-Z

### Special Conditions applying to Station 30

The level of power in the adjacent channel must not exceed -16dBm.

The level of all discreet spurious components, measured at the output of the transmitter, must not exceed -30dBm.



## Technical characteristics

Below is a summary of the technical characteristics of the licensed service. Further technical details not displayed here may be found on the ACMA website.

### Supplementary Station Site

### Station 31:

#### Site details

Site ID	10033794
Site address	Noble Park Train Station, Cnr Mons Parade & Leonard Avenue, NOBLE PARK VIC
Co-ordinates (GDA94)	Latitude: -37.966468 Longitude: 145.176176

#### Transmitter details

Assigned frequency	422.162500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0004020160
Transmitter power	5.00 W
EIRP	5.00 W
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	3
Antenna type	Radiax (Leaky feeder)-Z

#### Receiver details

Assigned frequency	427.662500 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0004020161
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1D7W

#### Antenna details

Antenna ID	77
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	3
Antenna type	Radiax (Leaky feeder)-Z

### Special Conditions applying to Station 31

The level of power in the adjacent channel must not exceed -16dBm.

The level of all discreet spurious components, measured at the output of the transmitter, must not exceed -30dBm.