

Apparatus Licence

Issued by Delegate of the Australian Communications and Media Authority



Licensee details

Customer ID	20013687
Licensee	SYDNEY TRAINS
Licensee address	Attn: Mr Christopher Go Level 2, Clyde Hub, 146-148 Manchester Road, Clyde, NSW 2142

Licence details

Licence service	Land Mobile
Licence subservice	Land Mobile System - > 30MHz
Licence number	1234147/1
Callsign	VL2RW
Date of issue	04/12/2023
Date of effect	04/12/2023
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

ACMA website: www.acma.gov.au

Advisory Notes applying to licence no.: 1234147/1

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).

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	40134
Site address	Railway Station, GRANVILLE NSW 2142
Co-ordinates (GDA94)	Latitude: -33.83127985 Longitude: 151.00981998

Transmitter details

Assigned frequency	418.400000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693383
Transmitter power	50.00 W
EIRP	83.00 W
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Receiver details

Assigned frequency	408.950000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693386
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Special Conditions applying to Station 1

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 2:

Site details

Site ID	40135
Site address	Railway Station, WESTMEAD NSW 2145
Co-ordinates (GDA94)	Latitude: -33.80847304 Longitude: 150.98798804

Transmitter details

Assigned frequency	418.400000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693357
Transmitter power	25.00 W
EIRP	41.00 W
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Receiver details

Assigned frequency	408.950000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693358
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Special Conditions applying to Station 2

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 3:

Site details

Site ID	40148
Site address	Railway site, Lavender Bay East PI, MCMAHONS POINT NSW 2060
Co-ordinates (GDA94)	Latitude: -33.84404377 Longitude: 151.2069605

Transmitter details

Assigned frequency	418.400000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693359
Transmitter power	25.00 W
EIRP	41.00 W
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Receiver details

Assigned frequency	408.950000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693360
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Special Conditions applying to Station 3

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 4:

Site details

Site ID	40150
Site address	North Sydney Railway Station (Underground) & Tunnel, NORTH SYDNEY NSW 2060
Co-ordinates (GDA94)	Latitude: -33.84115111 Longitude: 151.20701194

Transmitter details

Assigned frequency	418.400000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693361
Transmitter power	25.00 W
EIRP	41.00 W
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Receiver details

Assigned frequency	408.950000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693362
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Special Conditions applying to Station 4

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 5:

Site details

Site ID	40152
Site address	Station & Bay Rd Tunnel, WAVERTON NSW 2060
Co-ordinates (GDA94)	Latitude: -33.83732286 Longitude: 151.1974836

Transmitter details

Assigned frequency	418.400000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693363
Transmitter power	25.00 W
EIRP	41.00 W
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Receiver details

Assigned frequency	408.950000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693364
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Special Conditions applying to Station 5

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 6:

Site details

Site ID	40153
Site address	Railway Station, WOLLSTONECRAFT NSW 2065
Co-ordinates (GDA94)	Latitude: -33.83264192 Longitude: 151.19185465

Transmitter details

Assigned frequency	418.400000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693365
Transmitter power	25.00 W
EIRP	41.00 W
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Receiver details

Assigned frequency	408.950000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693366
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Special Conditions applying to Station 6

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 7:

Site details

Site ID	40167
Site address	Railway Station, TURRAMURRA NSW 2074
Co-ordinates (GDA94)	Latitude: -33.73159772 Longitude: 151.12814368

Transmitter details

Assigned frequency	418.400000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693367
Transmitter power	25.00 W
EIRP	41.00 W
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Receiver details

Assigned frequency	408.950000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693368
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Special Conditions applying to Station 7

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 8:

Site details

Site ID	40168
Site address	Railway Station, WAHROONGA NSW 2076
Co-ordinates (GDA94)	Latitude: -33.71808782 Longitude: 151.11732166

Transmitter details

Assigned frequency	418.400000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693369
Transmitter power	25.00 W
EIRP	41.00 W
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Receiver details

Assigned frequency	408.950000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693370
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Special Conditions applying to Station 8

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 9:

Site details

Site ID	54267
Site address	Railway Station, GUILDFORD NSW 2161
Co-ordinates (GDA94)	Latitude: -33.85413314 Longitude: 150.98453976

Transmitter details

Assigned frequency	418.400000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693371
Transmitter power	10.00 W
EIRP	16.00 W
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Receiver details

Assigned frequency	408.950000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693372
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Special Conditions applying to Station 9

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 10:

Site details

Site ID	54268
Site address	Railway Station, HOLSWORTHY NSW 2173
Co-ordinates (GDA94)	Latitude: -33.96286275 Longitude: 150.95633188

Transmitter details

Assigned frequency	418.400000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693373
Transmitter power	10.00 W
EIRP	16.00 W
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Receiver details

Assigned frequency	408.950000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693374
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Special Conditions applying to Station 10

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 11:

Site details

Site ID	54357
Site address	Railway Station, PANANIA NSW 2213
Co-ordinates (GDA94)	Latitude: -33.95416927 Longitude: 150.99798104

Transmitter details

Assigned frequency	418.400000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693375
Transmitter power	10.00 W
EIRP	16.00 W
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Receiver details

Assigned frequency	408.950000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693376
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Special Conditions applying to Station 11

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 12:

Site details

Site ID	54472
Site address	City Rail (Train Radio), 200m East of Railway Station, ST MARYS NSW 2760
Co-ordinates (GDA94)	Latitude: -33.7624386 Longitude: 150.77763009

Transmitter details

Assigned frequency	418.400000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693377
Transmitter power	25.00 W
EIRP	41.00 W
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Receiver details

Assigned frequency	408.950000 MHz
Bandwidth	12.5000 kHz
Freq. assign. ID	0000693380
Transmitter power	N/A
EIRP	N/A
Emission designator	10K1F3E

Antenna details

Antenna ID	70070
Antenna polarisation	V - Vertical linear
Antenna azimuth	
Antenna height (m)	0
Antenna type	Dipole-D

Special Conditions applying to Station 12

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.