

# Apparatus Licence

Issued by Delegate of the Australian Communications and Media Authority



## Licensee details

Customer ID	20045090
Licensee	CHALLENGE NETWORKS RESOURCES PTY LTD
Trading name	CHALLENGE NETWORKS RESOURCES PTY LTD
Licensee address	34 Duke Street, ABBOTSFORD, VIC 3067

## Licence details

Licence service	PTS
Licence subservice	PMTS Class B
Licence number	9949631/2
Date of issue	14/04/2021
Date of effect	14/04/2021
Date of expiry	12/04/2026

## 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)

## **Special Conditions applying to licence no.: 9949631/2**

The licensee must cooperate to the extent necessary to prevent its radiocommunications services from inhibiting the use of radiofrequency spectrum by other licensees operating under a public telecommunication service licence in the area surrounding the station location specified on this licence.

## **Advisory Notes applying to licence no.: 9949631/2**

The 1800 MHz band will be subject to re-planning in the future. This may require licensees to retune radiocommunication devices at their own cost to facilitate large contiguous channels for all licensees in an area.

ACMA will monitor and review the use of, and demand for, this radiofrequency spectrum. ACMA may recommend the re-allocation of these bands, including by price-based allocation, as provided for in the Radiocommunications Act 1992. In view of this, ACMA's policy is that licensing services in this spectrum for periods exceeding 12 months, is not appropriate at this stage.

The shared spectrum arrangements and uncoordinated nature of class licensed radiocommunications devices in the 1880-1900 MHz band:

- a. may result in interference from nearby class licensed radiocommunications devices that may reduce system performance; and
- b. the likelihood of such interference is very low due to the dynamic channel allocation techniques inherent in cordless technologies used in the band; and
- c. protection from such interference cannot be afforded.

## 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	9014909
Site address	Camp 3, 10km NNW of Wittenoom, WITTENOOM WA 6754
Co-ordinates (GDA94)	Latitude: -22.142528 Longitude: 118.314719

#### Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300182
Transmitter power	30.00 W
EIRP	1.69 kW
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	10
Antenna type	Panel (1 sector)-R

#### Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300183
Transmitter power	N/A
EIRP	N/A
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	10
Antenna type	Panel (1 sector)-R

### Special Conditions applying to Station 1

If sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station because of a condition specified in this licence, the station must be operated:

- in a manner that does not cause harmful interference to licensed radiocommunications devices; and
- on the basis that the licensee cannot claim protection from harmful interference from licensed radiocommunications devices.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station that:

- is capable of being moved between places;
- operates from a fixed point within a 5 kilometre radius of the location specified for this spectrum access; and
- uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

## 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 2:

#### Site details

Site ID	9003482
Site address	TPI RBS Site 5, Railway 201KP SSE of, PORT HEDLAND WA 6760
Co-ordinates (GDA94)	Latitude: -21.968156 Longitude: 119.105373

#### Transmitter details

Assigned frequency	1.87750000 GHz
Bandwidth	5.000000 MHz
Freq. assign. ID	0001300184
Transmitter power	30.00 W
EIRP	1.69 kW
Emission designator	5M00G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	40
Antenna type	Panel (1 sector)-R

#### Receiver details

Assigned frequency	1.78250000 GHz
Bandwidth	5.000000 MHz
Freq. assign. ID	0001300185
Transmitter power	N/A
EIRP	N/A
Emission designator	5M00G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	40
Antenna type	Panel (1 sector)-R

## Special Conditions applying to Station 2

If sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station because of a condition specified in this licence, the station must be operated:

- in a manner that does not cause harmful interference to licensed radiocommunications devices; and
- on the basis that the licensee cannot claim protection from harmful interference from licensed radiocommunications devices.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station that:

- is capable of being moved between places;
- operates from a fixed point within a 5 kilometre radius of the location specified for this spectrum access; and
- uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

## 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 3:

#### Site details

Site ID	9016235	
Site address	Hamersley Iron Railway Track, 95 km North West of Tom Price, TOM PRICE WA WA 6716	
Co-ordinates (GDA94)	Latitude: -21.841200	Longitude: 117.608211

#### Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300186
Transmitter power	30.00 W
EIRP	1.69 kW
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector)-R

#### Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300187
Transmitter power	N/A
EIRP	N/A
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector)-R

## Special Conditions applying to Station 3

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station that:

- a) is capable of being moved between places;
- b) operates from a fixed point within a 5 kilometre radius of the location specified for this spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

If sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station because of a condition specified in this licence, the station must be operated:

- a) in a manner that does not cause harmful interference to licensed radiocommunications devices; and
- b) on the basis that the licensee cannot claim protection from harmful interference from licensed radiocommunications devices.

## 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 4:

#### Site details

Site ID	9016239	
Site address	Hamersley Iron Railway Track, 142 km North West of Tom Price, TOM PRICE WA WA 6754	
Co-ordinates (GDA94)	Latitude: -21.529245	Longitude: 117.195652

#### Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300188
Transmitter power	30.00 W
EIRP	1.69 kW
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector)-R

#### Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300189
Transmitter power	N/A
EIRP	N/A
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector)-R

## Special Conditions applying to Station 4

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station that:

- a) is capable of being moved between places;
- b) operates from a fixed point within a 5 kilometre radius of the location specified for this spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

If sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station because of a condition specified in this licence, the station must be operated:

- a) in a manner that does not cause harmful interference to licensed radiocommunications devices; and
- b) on the basis that the licensee cannot claim protection from harmful interference from licensed radiocommunications devices.

## 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 5:

#### Site details

Site ID	9016242
Site address	Marandoo Mine, 45 km east of Tom Price, TOM PRICE WA WA 6754
Co-ordinates (GDA94)	Latitude: -22.653707 Longitude: 118.132311

#### Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300190
Transmitter power	30.00 W
EIRP	1.69 kW
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector)-R

#### Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300191
Transmitter power	N/A
EIRP	N/A
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector)-R

## Special Conditions applying to Station 5

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station that:

- a) is capable of being moved between places;
- b) operates from a fixed point within a 5 kilometre radius of the location specified for this spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

If sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station because of a condition specified in this licence, the station must be operated:

- a) in a manner that does not cause harmful interference to licensed radiocommunications devices; and
- b) on the basis that the licensee cannot claim protection from harmful interference from licensed radiocommunications devices.

## 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 6:

#### Site details

Site ID	600689
Site address	Mesa J Minesite, PANNAWONICA WA 6716
Co-ordinates (GDA94)	Latitude: -21.743058 Longitude: 116.254167

#### Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300192
Transmitter power	30.00 W
EIRP	1.69 kW
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	50
Antenna type	Panel (1 sector)-R

#### Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300193
Transmitter power	N/A
EIRP	N/A
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	50
Antenna type	Panel (1 sector)-R

## Special Conditions applying to Station 6

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station that:

- a) is capable of being moved between places;
- b) operates from a fixed point within a 5 kilometre radius of the location specified for this spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

If sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station because of a condition specified in this licence, the station must be operated:

- a) in a manner that does not cause harmful interference to licensed radiocommunications devices; and
- b) on the basis that the licensee cannot claim protection from harmful interference from licensed radiocommunications devices.



## 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 7:

#### Site details

Site ID	9016246
Site address	West Angels Mine, 110 km from Newman., NEWMAN WA WA 6753
Co-ordinates (GDA94)	Latitude: -23.177572 Longitude: 118.787217

#### Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300194
Transmitter power	30.00 W
EIRP	1.69 kW
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	40
Antenna type	Panel (1 sector)-R

#### Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300195
Transmitter power	N/A
EIRP	N/A
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	40
Antenna type	Panel (1 sector)-R

## Special Conditions applying to Station 7

If sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station because of a condition specified in this licence, the station must be operated:

- in a manner that does not cause harmful interference to licensed radiocommunications devices; and
- on the basis that the licensee cannot claim protection from harmful interference from licensed radiocommunications devices.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station that:

- is capable of being moved between places;
- operates from a fixed point within a 5 kilometre radius of the location specified for this spectrum access; and
- uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

## 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 8:

#### Site details

Site ID	9016248
Site address	Coobina Mine, 53 km south-east of Newman., NEWMAN WA WA 6642
Co-ordinates (GDA94)	Latitude: -23.492812 Longitude: 120.271292

#### Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300196
Transmitter power	30.00 W
EIRP	1.69 kW
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector)-R

#### Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300197
Transmitter power	N/A
EIRP	N/A
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector)-R

## Special Conditions applying to Station 8

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station that:

- a) is capable of being moved between places;
- b) operates from a fixed point within a 5 kilometre radius of the location specified for this spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

If sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station because of a condition specified in this licence, the station must be operated:

- a) in a manner that does not cause harmful interference to licensed radiocommunications devices; and
- b) on the basis that the licensee cannot claim protection from harmful interference from licensed radiocommunications devices.

## 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 9:

#### Site details

Site ID	9016251	
Site address	Paulsens Mine, 105 kilometres south of Pannawonica., PANNAWONICA WA WA 6716	
Co-ordinates (GDA94)	Latitude: -22.828812	Longitude: 116.112018

#### Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300198
Transmitter power	30.00 W
EIRP	1.69 kW
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	40
Antenna type	Panel (1 sector)-R

#### Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300199
Transmitter power	N/A
EIRP	N/A
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	40
Antenna type	Panel (1 sector)-R

## Special Conditions applying to Station 9

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station that:

- a) is capable of being moved between places;
- b) operates from a fixed point within a 5 kilometre radius of the location specified for this spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

If sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station because of a condition specified in this licence, the station must be operated:

- a) in a manner that does not cause harmful interference to licensed radiocommunications devices; and
- b) on the basis that the licensee cannot claim protection from harmful interference from licensed radiocommunications devices.

## 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 10:

#### Site details

Site ID	9016237
Site address	Whim Creek Mine, 71 kilometers from Point Samson., POINT SAMSON WA WA 6718
Co-ordinates (GDA94)	Latitude: -20.847598 Longitude: 117.831340

#### Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300200
Transmitter power	30.00 W
EIRP	1.69 kW
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector)-R

#### Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300201
Transmitter power	N/A
EIRP	N/A
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector)-R

### Special Conditions applying to Station 10

The licensee is not authorised to operate a station:

- (a) in the geographic areas; and
- (b) on the frequencies, where a spectrum licence is in force.

If sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station because of a condition specified in this licence, the station must be operated:

- a) in a manner that does not cause harmful interference to licensed radiocommunications devices; and
- b) on the basis that the licensee cannot claim protection from harmful interference from licensed radiocommunications devices.

## 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 11:

#### Site details

Site ID	9016257
Site address	Challenge BTS1, 78 km from Robe River., ROBE RIVER WA WA 6716
Co-ordinates (GDA94)	Latitude: -22.271318 Longitude: 115.764239

#### Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300202
Transmitter power	30.00 W
EIRP	1.69 kW
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	40
Antenna type	Panel (1 sector)-R

#### Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0001300203
Transmitter power	N/A
EIRP	N/A
Emission designator	9M90G7W

#### Antenna details

Antenna ID	81181
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	40
Antenna type	Panel (1 sector)-R

## Special Conditions applying to Station 11

The licensee is not authorised to operate a station:

- (a) in the geographic areas; and
- (b) on the frequencies, where a spectrum licence is in force.

If sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply to a station because of a condition specified in this licence, the station must be operated:

- a) in a manner that does not cause harmful interference to licensed radiocommunications devices; and
- b) on the basis that the licensee cannot claim protection from harmful interference from licensed radiocommunications devices.