

Apparatus Licence

Issued by Delegate of the Australian Communications and Media Authority



Licensee details

Customer ID	20000315
Licensee	NORTHERN STAR RESOURCES LTD
Trading name	NORTHERN STAR RESOURCES LTD
Licensee address	PO Box 2008, SUBIACO, WA 6904

Licence details

Licence service	PTS
Licence subservice	PMTS Class B
Licence number	10427673/3
Date of issue	23/06/2023
Date of effect	23/06/2023
Date of expiry	30/06/2024

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

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	10027995
Site address	24 km SSW of Ockerburry Hill, Leinster WA
Co-ordinates (GDA94)	Latitude: -28.032871 Longitude: 120.930456

Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0003392332
Transmitter power	40.00 W
EIRP	126.00 W
Emission designator	10M0W7D

Antenna details

Antenna ID	93170
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Omni Directional

Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0003392333
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details

Antenna ID	93170
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Omni Directional

Advisory Notes applying to Station 1

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.

Special Conditions applying to Station 1

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.

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.

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 2:

Site details	
Site ID	10027996
Site address	14.2 km 337TN of Mount McClure, Lake Darlot WA
Co-ordinates (GDA94)	Latitude: -27.529731 Longitude: 120.934951

Transmitter details	
Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0003392334
Transmitter power	20.00 W
EIRP	1.10 kW
Emission designator	10M0W7D

Antenna details	
Antenna ID	93934
Antenna polarisation	S - Slant
Antenna azimuth	85.00
Antenna height (m)	30
Antenna type	Panel (Single-Sector)

Receiver details	
Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0003392335
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details	
Antenna ID	93934
Antenna polarisation	S - Slant
Antenna azimuth	85.00
Antenna height (m)	30
Antenna type	Panel (Single-Sector)

Advisory Notes applying to Station 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.

Special Conditions applying to Station 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.

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.

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.

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	10027996
Site address	14.2 km 337TN of Mount McClure, Lake Darlot WA
Co-ordinates (GDA94)	Latitude: -27.529731 Longitude: 120.934951

Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0003392336
Transmitter power	20.00 W
EIRP	1.10 kW
Emission designator	10M0W7D

Antenna details

Antenna ID	93934
Antenna polarisation	S - Slant
Antenna azimuth	155.00
Antenna height (m)	30
Antenna type	Panel (Single-Sector)

Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0003392337
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details

Antenna ID	93934
Antenna polarisation	S - Slant
Antenna azimuth	155.00
Antenna height (m)	30
Antenna type	Panel (Single-Sector)

Advisory Notes applying to Station 3

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.

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.

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.

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	10027719
Site address	11.6 km 351TN of, Mount Hilda WA
Co-ordinates (GDA94)	Latitude: -26.972973 Longitude: 120.953307

Transmitter details

Assigned frequency	1.86500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0003363981
Transmitter power	40.00 W
EIRP	126.00 W
Emission designator	10M0W7D

Antenna details

Antenna ID	93170
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Omni Directional

Receiver details

Assigned frequency	1.77000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0003363982
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details

Antenna ID	93170
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Omni Directional

Advisory Notes applying to Station 4

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.

Special Conditions applying to Station 4

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.

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.

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.

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	10027717		
Site address	5.3 km 241TN of, Relief Hill WA		
Co-ordinates (GDA94)	Latitude: -30.150934	Longitude:	122.359969

Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0003363983
Transmitter power	40.00 W
EIRP	126.00 W
Emission designator	10M0W7D

Antenna details

Antenna ID	93170
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Omni Directional

Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0003363984
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details

Antenna ID	93170
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Omni Directional

Advisory Notes applying to Station 5

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.

Special Conditions applying to Station 5

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.

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	10027720
Site address	52.4 km 82TN of, Mount Green WA
Co-ordinates (GDA94)	Latitude: -26.06212 Longitude: 120.654348

Transmitter details	
Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0003363985
Transmitter power	40.00 W
EIRP	126.00 W
Emission designator	10M0W7D

Antenna details	
Antenna ID	93170
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Omni Directional

Receiver details	
Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0003363986
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details	
Antenna ID	93170
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Omni Directional

Advisory Notes applying to Station 6

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.

Special Conditions applying to Station 6

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.

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	10009898
Site address	Northern Star Resources nominal LTE site, Tanami 1, Tanami Desert NT
Co-ordinates (GDA94)	Latitude: -18.916667 Longitude: 129.366667

Transmitter details	
Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116370
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details	
Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116371
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 7

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

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. 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.

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:

- 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.

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.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

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.

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	10009897
Site address	Northern Star Resources nominal LTE site, Tanami 2, Tanami Desert NT
Co-ordinates (GDA94)	Latitude: -19 Longitude: 129.7

Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116372
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details

Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116373
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details

Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 8

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. 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.

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

Special Conditions applying to Station 8

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.

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.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

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.

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	10009896
Site address	Northern Star Resources nominal LTE site, Tanami 3, Tanami Desert NT
Co-ordinates (GDA94)	Latitude: -19.25 Longitude: 129.166667

Transmitter details	
Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116374
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details	
Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116375
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 9

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. 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.

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

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.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

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.

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	10009895
Site address	Northern Star Resources nominal LTE site, Tanami 4, Tanami Desert NT
Co-ordinates (GDA94)	Latitude: -19.75 Longitude: 129.366667

Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116376
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details

Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116377
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details

Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 10

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. 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.

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

Special Conditions applying to Station 10

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.

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.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

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.

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	10009894
Site address	Northern Star Resources nominal LTE site, Tanami 5, Tanami Desert NT
Co-ordinates (GDA94)	Latitude: -19.875 Longitude: 130

Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116378
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details

Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116379
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details

Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 11

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. 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.

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

Special Conditions applying to Station 11

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.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

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.

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.

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 12:

Site details	
Site ID	10009893
Site address	Northern Star Resources nominal LTE site, Tanami 6, Tanami Desert NT
Co-ordinates (GDA94)	Latitude: -20.175 Longitude: 129.666667

Transmitter details	
Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116380
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details	
Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116381
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 12

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

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. 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.

Special Conditions applying to Station 12

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.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

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.

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 13:

Site details	
Site ID	10009892
Site address	Northern Star Resources nominal LTE site, West Tanami, Tanami Desert WA
Co-ordinates (GDA94)	Latitude: -19.875 Longitude: 129

Transmitter details	
Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116382
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details	
Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116383
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 13

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

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. 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.

Special Conditions applying to Station 13

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

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.

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.

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.

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 14:

Site details

Site ID	10009899		
Site address	Northern Star Resources nominal LTE site, Kanowna Belle East 42 km north east of, Kanowna WA		
Co-ordinates (GDA94)	Latitude: -30.35	Longitude:	121.933333

Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116384
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details

Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116385
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details

Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 14

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

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. 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.

Special Conditions applying to Station 14

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.

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.

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.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the spectrum access; and
- c) 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 15:

Site details

Site ID	10009900
Site address	Northern Star Resources nominal LTE site, Jundee WA
Co-ordinates (GDA94)	Latitude: -26.416667 Longitude: 120.716667

Transmitter details

Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116386
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details

Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details

Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116387
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details

Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 15

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. 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.

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

Special Conditions applying to Station 15

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.

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.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the spectrum access; and
- c) 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 16:

Site details	
Site ID	10009908
Site address	Northern Star Resources nominal LTE site, Paulsen Mine off Nanutarra Road, Nanutarra WA
Co-ordinates (GDA94)	Latitude: -22.583333 Longitude: 116.25

Transmitter details	
Assigned frequency	1.86500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116388
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details	
Assigned frequency	1.77000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116389
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 16

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. 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.

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

Special Conditions applying to Station 16

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the 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.

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.

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.

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 17:

Site details

Site ID	10009902
Site address	Northern Star Resources nominal LTE site, Ashburton 1, 13 km east north east of, Peak Edgar WA
Co-ordinates (GDA94)	Latitude: -23 Longitude: 116.466667

Transmitter details

Assigned frequency	1.86500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116390
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details

Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details

Assigned frequency	1.77000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116391
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details

Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 17

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

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. 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.

Special Conditions applying to Station 17

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.

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.

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.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the spectrum access; and
- c) 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 18:

Site details	
Site ID	10009903
Site address	Northern Star Resources nominal LTE site, Ashburton 2, 7 km west south west of, Dolphin Hill WA
Co-ordinates (GDA94)	Latitude: -23 Longitude: 117.1

Transmitter details	
Assigned frequency	1.86500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116392
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details	
Assigned frequency	1.77000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116393
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 18

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. 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.

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

Special Conditions applying to Station 18

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.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

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 19:

Site details	
Site ID	10009904
Site address	Northern Star Resources nominal LTE site, Ashburton 3, 13 km south south west of, Beasley Pinnacles WA
Co-ordinates (GDA94)	Latitude: -23.583333 Longitude: 117.05

Transmitter details	
Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116394
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details	
Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116395
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 19

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

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. 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.

Special Conditions applying to Station 19

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.

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.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

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.

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 20:

Site details	
Site ID	10009905
Site address	Northern Star Resources nominal LTE site, Ashburton 4, 13 km south of, Mount Boggola WA
Co-ordinates (GDA94)	Latitude: -23.916667 Longitude: 117.666667

Transmitter details	
Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116396
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details	
Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116397
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	30
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 20

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

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. 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.

Special Conditions applying to Station 20

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.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

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.

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 21:

Site details	
Site ID	10009906
Site address	Northern Star Resources nominal LTE site, East Kalgoorlie, 27 km south east of, Bulong WA
Co-ordinates (GDA94)	Latitude: -30.872875 Longitude: 122.033333

Transmitter details	
Assigned frequency	1.85500000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116398
Transmitter power	40.00 W
EIRP	2.97 kW
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	25
Antenna type	Panel (1 sector, 1710-1880 MHz)

Receiver details	
Assigned frequency	1.76000000 GHz
Bandwidth	10.000000 MHz
Freq. assign. ID	0002116399
Transmitter power	N/A
EIRP	N/A
Emission designator	10M0W7D

Antenna details	
Antenna ID	92176
Antenna polarisation	S - Slant
Antenna azimuth	
Antenna height (m)	25
Antenna type	Panel (1 sector, 1710-1880 MHz)

Advisory Notes applying to Station 21

This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission.

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. 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.

Special Conditions applying to Station 21

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.

Sections 5 and 7 of the Radiocommunications Licence Conditions (PTS Licence) Determination do not apply with respect to the operation of a station under the licence, if the station:

- a) has an indoor fixed antenna and a radiated true mean power less than or equal to 24 dBm EIRP/occupied bandwidth;
- b) is within a 15 kilometre radius of the location specified for the spectrum access; and
- c) uses the receive or transmit frequencies and the emission designator specified for the spectrum access.

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.

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.