

Spectrum for Wireless Broadband - an update

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Spectrum for Wireless Broadband

- The Challenges
- Previous spectrum options 1.8 GHz to 28 GHz

- 3 GHz "Area Wide Licence"
 - ACMA progress in Remote areas
 - ACMA progress in Rural/Regional/Metro areas
 - Licensing vs Registration





Spectrum Challenges

Availability

- Usually reserved for Spectrum Licensing
- Contention for the limited
 Apparatus Licensing options
- Further limitations due to embargoes, restrictions, coordination between non homogenous services

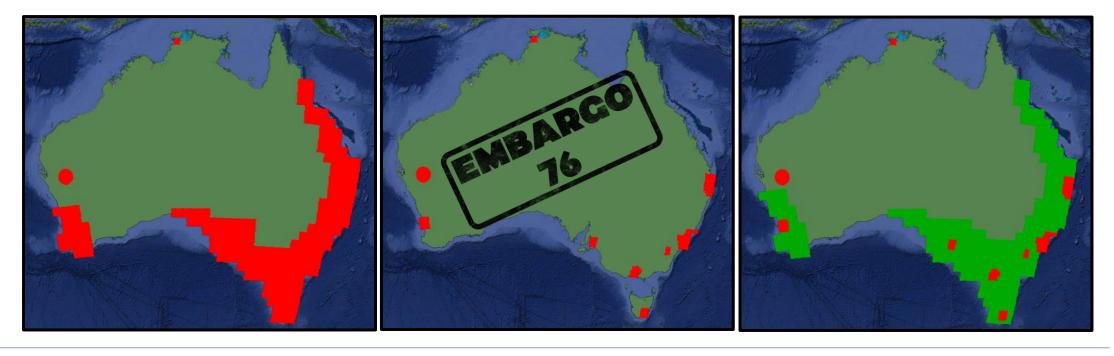
Complexity

- Diverse Licence Types each with unique implementation of processes, rules and fees
- Incongruous area definitions and area naming between bands





Spectrum Options



1.8 GHz PTS

10 MHz FDD

1.9 GHz PMP

5-20 MHz TDD

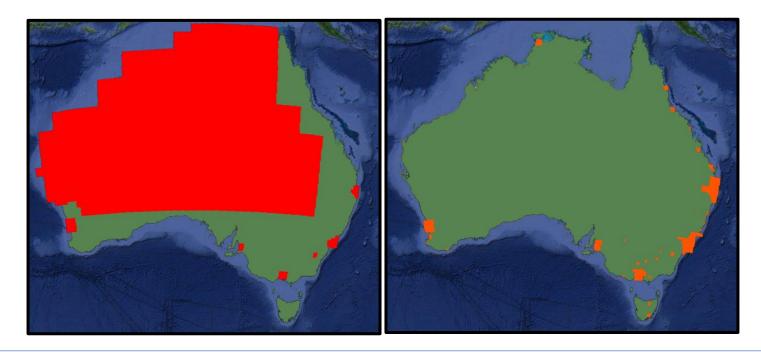
2 GHz PTS

10 MHz FDD





Spectrum Options



5.6 GHz PMP

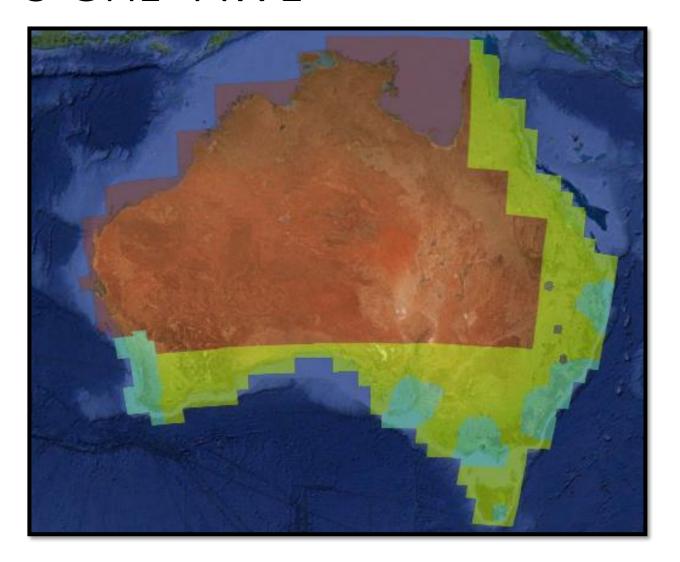
20 MHz FDD

26/28 GHz AWL

3 GHz "AWL"







- Remote3400-4000 MHz
- Rural
 3750-3950 MHz
- Metro and Regional 3800-3950 MHz





Area Wide Licensing – Two Steps

Step 1

"Licensing"

Area

Frequency (range)

Step 2

"Device Registration"

Record details (location, power, antenna, frequency, emission, azimuth, height etc.)

Requires frequency coordination, device boundary, and other checks

or

if "Registration Exempt"

Operate without registration or device boundary check

Still must meet Licence Conditions

May even require "detailed coordination"





Apparatus Licensing – AWL Documents

The "LCD"

Radiocommunications Licence Conditions (Area-Wide Licence)

Determination 2020

RALIs called up by the LCD

RALI MS 47

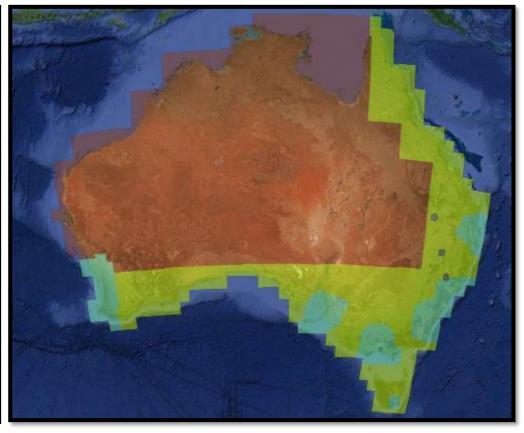
The above are not simple documents to read and understand. But important to note that they apply irrespective of whether registration is needed or not.

3 GHz Licensing Progress





Date	Area	Stage	User limit per area	Status
Jul 2023	Remote	Stage 1 Application Window	100 MHz	Closed
Apr 2024	Rural/ Regional/Metro	Stage 1 Application Window	50 MHz	Closed (Processing)
2 May 2024	Rural/ Regional/Metro	Stage 2 Over the Counter	50 MHz	Open
24 Jun 2024	Remote	Stage 2 Over the Counter	20 MHz*	Pending







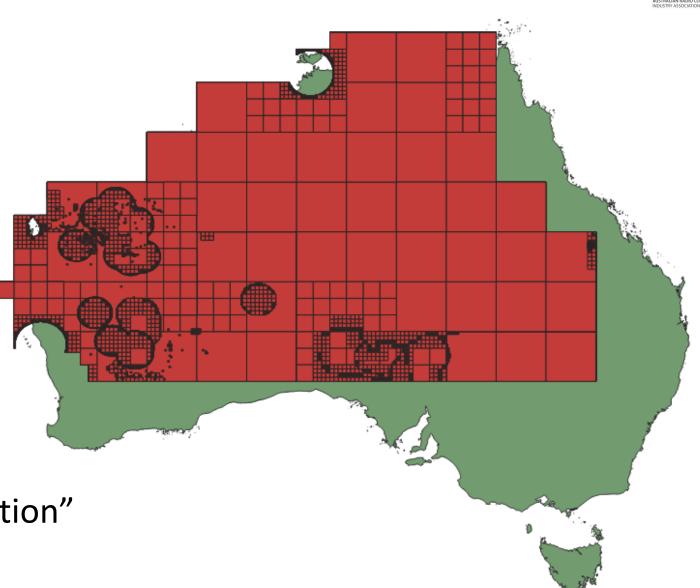
Remote area

- 3400 to 4000 MHz
- Stage 1 completed
- Opportunities remain

Stage 2 applications open

24th June 11am

- First in time
- *20 MHz limit "per application"







Rural/Regional/Metro areas

- 3750/3800 to 3950 MHz
- 50 MHz limit per applicant per area
- 'Stage 1' closed but no licences granted yet
- 'Stage 2' applications now open, 'first in time' basis after Stage 1 finished





AWL Risks

An application does not guarantee AWL will be granted

A granted AWL doesn't guarantee right to transmit. Requires either;

- A) Device Registration
 - Subject to 'Device Boundary', frequency coordination etc.
- B) An "exempt" transmitter
 - May still require "detailed coordination" within 20 km of other services.





AWL coordination

- Incumbent Coordination
 - PMP / Airport / PTP / Earth Station
- Synchronisation
- AAS
- TRP





Point to Multipoint

- Remote area PMP
 - Grandfathered operation only
 - No operational changes permitted
- Convert to AWL?
 - <u>Might</u> be possible (applications **24**th **June** onwards)





AWL key take-aways

For "Licensing" mainly require;

- Frequency
- Area

For "Registration" more detailed information will be required, and registration will only be possible if the area is an appropriate size

So your licence area may need to be larger than your operational area!





More Info

Main 3 GHz Page

https://www.acma.gov.au/allocating-34-40-ghz-band

• Remote 3.4 GHz

https://www.acma.gov.au/area-wide-apparatus-licensing-34-40-ghz-band

• Rural/Regional Metro 3.8 GHz

https://www.acma.gov.au/area-wide-licence-allocation-38-ghz-band