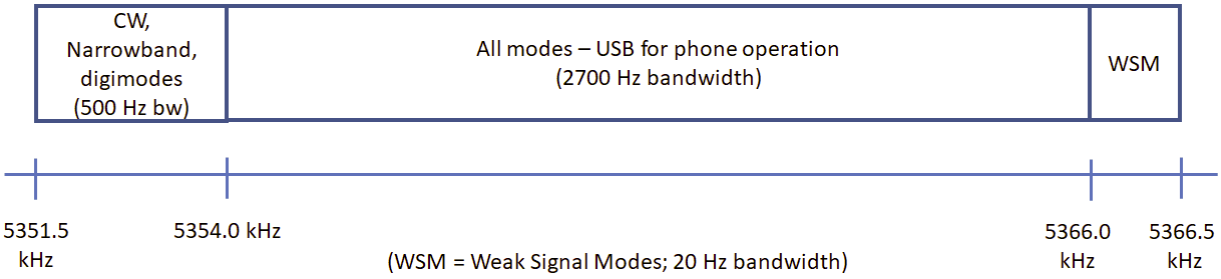
60m FAQs

Q: What frequencies can I use?

As per your sub-licence, the band plan is as set out below. Note: this is the IARU Region 3 band plan. Unlike the trial which was for two fixed frequencies this is for the full WRC-15 60m allocation on a secondary basis. You can operate anywhere within the band as long as you follow the band plan and stay in band.



Q: Why do I need a Sub-Licence when I can operate on the Amateur bands already?

The GURL which covers the amateur bands does not include 60m so Amateurs in ZL have no automatic right to operate there. After excellent work by Bob Vernall ZL2CA in assisting the existing primary user to relinquish its licences in the band, NZART negotiated with RSM to obtain a temporary licence to allow operation in that part of the band using the WRC-15 allocation on a secondary basis for a year. Accordingly a Sub-Licence from NZART is required for you to operate legally.

Q: Why is the licence for a year if the Primary user has vacated the band?

In order to get Amateurs back on 60m quickly, NZART obtained a licence, which is a relatively straight forward process, to allow Amateurs to obtain a sub-licence and get on the air. The licence is for a year to allow time for RSM to see whether there are any interference concerns and, assuming there aren't any, for NZART and RSM to negotiate the addition of the WRC allocation to the GURL and for it to be gazetted.

Q: I had a Sub-Licence for 60m during the previous trial. Why do I need a new one?

Your previous sub-licence expired when NZART's licence for that trial expired.

Q: How do I know I am operating with a power of 15W e.i.r.p?

Effective Isotropic Radiated Power (E.I.R.P) is the total power you radiate from your station. E.I.R.P. = TX power output in dBW, less losses to the antenna (dB), plus antenna gain (dBi). This sub-licence is for 15 Watts e.i.r.p. which equals 11.76 dBW e.i.r.p.

For example:

Half wave dipole 7 m above poor ground	+2 dBi, (no ground reflection, a dipole has 2 dBi gain)
Feedline, balun & connector losses	-1 dB
Transmitter Power 10 W	+10 dBW
Total Power	11 dBW e.i.r.p

Quarter Wave Vertical Antenna (“QWV”) With Radials:

An ideal QWV HF antenna has a gain of 5 dBi where the 36 radials are at least quarter wave long & are above ground. A typical amateur QWV is very likely to have much less gain due having many less radials & buried below the ground.

Example of a QWV with 4 radials buried just below the ground:

QWV	+1 dBi
Feedline & other losses	- 1 dB
Transmitter Power 10w	10 dBW
Total Power	10 dBW e.i.r.p

Watts to dBW conversion table

Watts = dBW	Watts = dBW
1 = 0	6 = 7.8
2 = 3	7 = 8.5
3 = 4.8	8 = 9
4 = 6	9 = 9.5
5 = 7	10 = 10

12.5 = 11	15 = 11.76

It is the responsibility of the station operator to ensure the e.i.r.p. limit is not exceeded. We regret that we cannot help with individual calculations.

Be conservative with your estimate of power out or you will run the risk of an infringement notice from RSM and put a permanent allocation in the GURL in jeopardy. Remember your transmissions may be monitored.

Q: Can I operate anywhere inside the frequencies of operation listed in my sub-licence?

Yes as long as you do not interfere with others and abide by the terms of the band plan as set out in your sub-licence. Unlike the previous trial this is a band allocation and not two spot frequencies. To ensure you stay within the band plan you should note the following:

SSB (USB) Operation
For Single Sideband operation just tune your transceiver to ensure your dial frequency is between 5354.0 kHz and 5363.2 kHz. Being careful that you do not over modulate and create "splatter" that would fall outside the band plan. If your transceiver allows you to adjust your maximum SSB transmit bandwidth, setting it to 2.4 kHz should keep you well within the bandwidth limit and the band plan

CW
Consult your transceiver manual. Some transceivers transmit CW at the exact frequencies shown on their displays, but others offset the actual transmission frequency by a certain amount (for example, 600 Hz). If your manual is not clear on this point, seek advice. If you have access to a frequency counter, this is an excellent tool for ensuring that your CW signal is within the band. As a rule of thumb stay above the bottom 50 Hz of the 5351.5 - 5354 kHz CW allocation and 600 Hz below the top of the allocation.

Digital Operations
For digital modes, set your transceiver to USB mode between 5354.0 kHz and 5363.2 kHz. Then using the audio frequency read out at the top of your waterfall display place your signal between 400 and 2750 Hz. You will then be in-band.

Q: Can I work DX on 60m?
Yes (if you can hear it). Note that overseas band plans do not necessarily align with our band plan. Digital (primarily FT8) operation for example is generally on 5357.0 kHz (USB dial frequency) in the USA and EU (which is within our allocation) and so ZL stations should have no trouble in working such stations in our evening and early morning (subject to propagation). It should be noted that amateurs in many countries (e.g. VK) do not have any access to 60m.

Q: Can I operate in a contest on 60m?
There are no 60m contests.

Q: Why can't I use my special event (single letter) callsign?
No special events should be operating on 60m as this is a small low power band.

Q: What if I hear another signal on the 60m frequency I wish to operate on?
Do not transmit as it is a term of your licence that you do not cause interference to other users. This is the smallest segment of spectrum that Amateurs have access to and you have to accept that from time to time it may be difficult for you to find a clear frequency.

Q: Why are you publishing my name on the NZART website as a sub-licence holder?
This is so other users (and NZART/RSM) can identify who is operating and know the station has the legal right to be on 60m.

Q: Do we have to use type approved equipment on this band?
No, any transmitter may be used on these frequencies PROVIDED:

- it will NOT generate signals outside of the band; and
- It complies with the modulation schemes listed in the licence and its notes.

We are, in fact, keen that good quality non-type approved Amateur equipment is used as this will be an appropriate way to demonstrate that Amateurs can use this band with their normal gear without causing any interference to other users.