

2021 Spectrum Forum

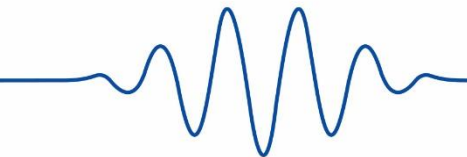
November 2021

WRC-23 AI 9.1b and the 23cm Band



Radio Society of Great Britain

Advancing amateur radio since 1913



Background

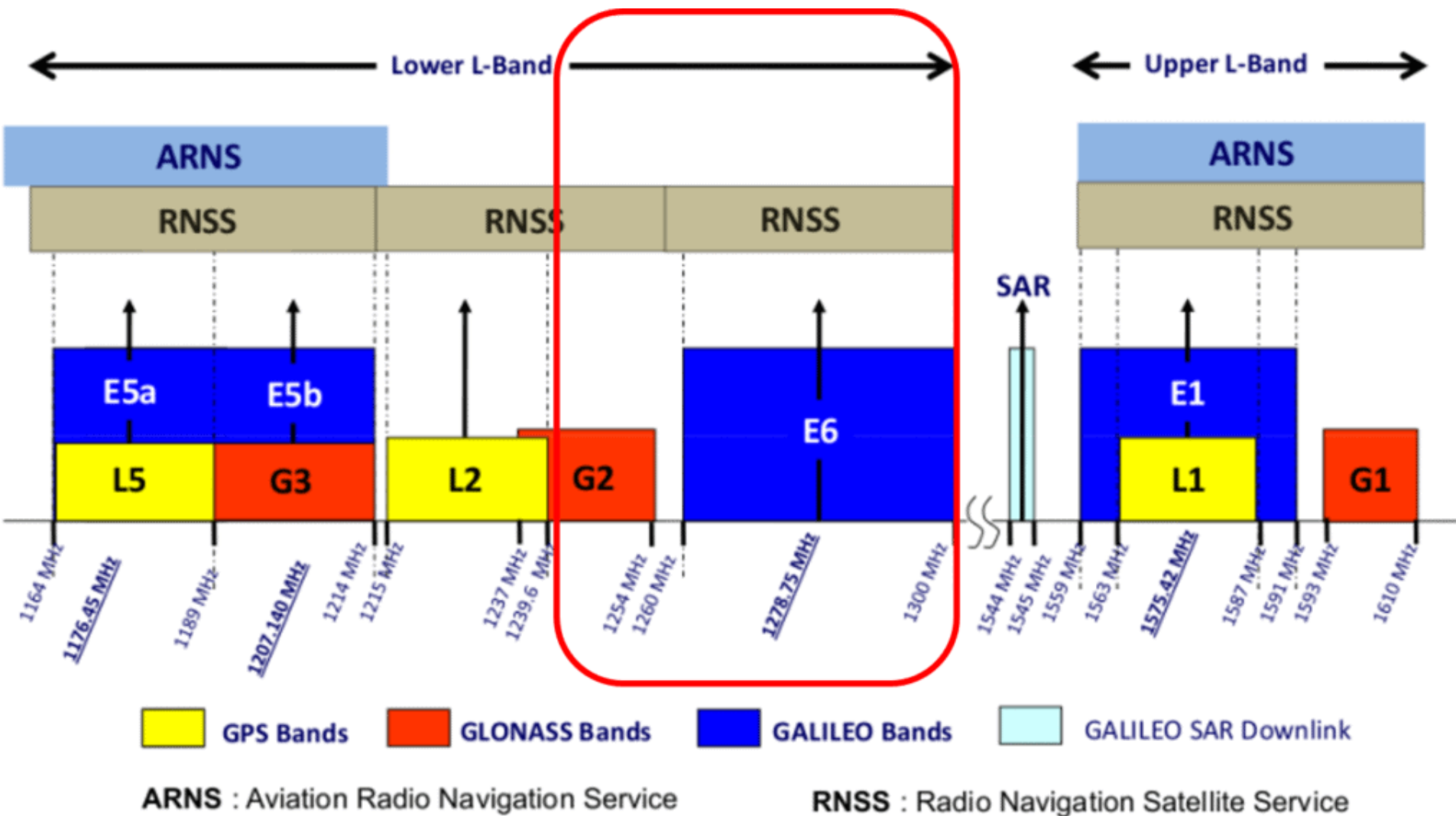
■ In CEPT:

- Two working groups are developing European regulatory documents to harmonise the RNSS band for GALILEO and GLONASS and to provide “guidance” for administrations on measures that might be needed to protect systems in Europe from amateur transmissions in 1240-1300MHz.
- In addition, the Conference Preparatory Group is developing the CEPT position on the WRC23 AI 9.1b.

■ In ITU-R

- Studies (in working parties 4C and 5A) are considering what operational or technical constraints might be needed on the amateur services to protect radio navigation services, addressing WRC23 AI 9.1b.
- The CEPT work is complementary to the ITU work

The Wider L-Band Context



23cm band specific context

RNSS System Bands

1258.29 (Galileo)
1257.75 (QZSS)

1278.75

(Galileo) 1299.21
(QZSS) 1299.75

GALILEO E6/QZSS L6 Sig Block

← 1237.8275

GLONASS L2 Sig Block

1255.76 (Note 1)

1256.52

COMPASS B3 Sig Block

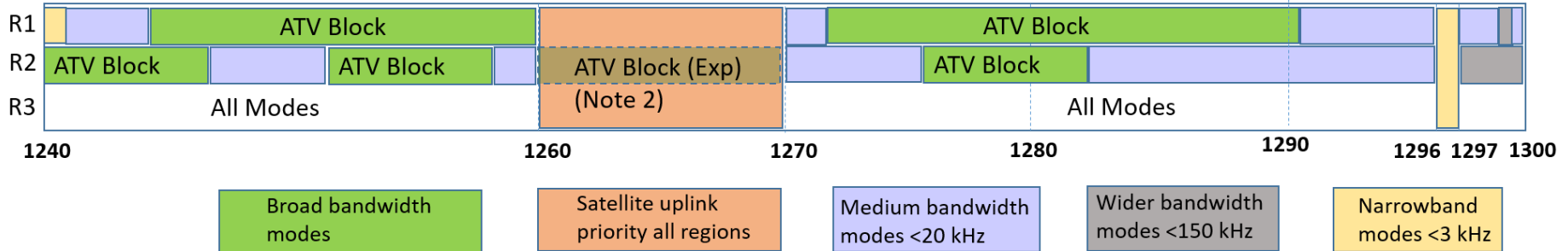
1280.52

← 1212.255

GPS

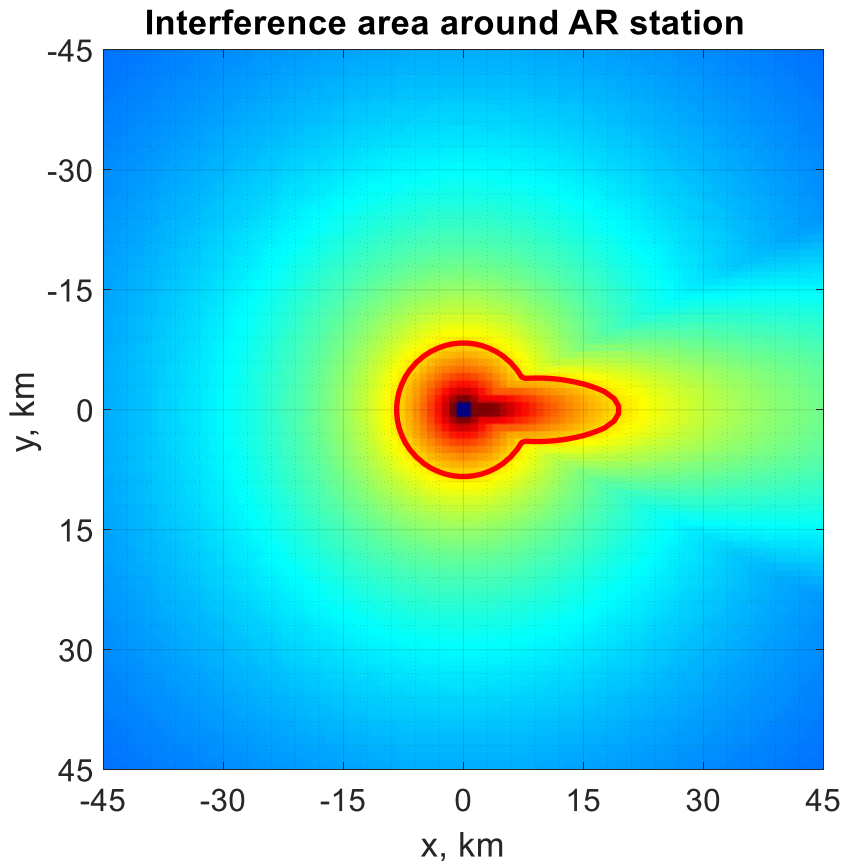
1242.945MHz

IARU Band Plans



Typical Estimation

- Results like these continue to be under discussion and this example (from many) copied here is to help provide context and aid understanding of the scale of the issue.



This example is an estimation of the interfered area around an amateur transmitter operating at 100W:

- Based on the ITU-R P.1546 propagation model for 50% of locations.
- The RNSS receiver antenna gain is -6dBi.

Proposal

- For Ofcom this is a low priority WRC agenda item.
- Therefore it is suggested that the RSGB work with Spectrum Forum stakeholders to jointly highlight the interest in this agenda item for the UK amateur microwave community and their activity in the band.
- For example, narrowband & ATV operators etc.