



# International Amateur Radio Union Region 1



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Subject	5 GHz Band Plan Clarification		
Society	RSGB	Country:	United Kingdom
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## 1. Introduction

Clarifications for 5 GHz narrowband segments in the IARU Region 1 VHF Managers Handbook and CEPT footnote ECA17 are proposed.

## 2. Background

The IARU Region 1 5,7 GHz band plan and its footnote(a), whilst well intentioned, could be clearer with respect to the two narrowband segments at 5 668 and 5 760 MHz.

Terrestrial narrowband, EME (moon bounce) and propagation beacon usage have been globally harmonised at 5 760 MHz for many years. Its origins were based on x5 multiplication from standard 1 152 MHz sources.

This is distinct from an additional narrowband designation in the 5 660 band which was introduced to coordinate with satellite uplinks. The 5,6 GHz uplink segment is within a core Wi-Fi band and thus not preferred for terrestrial weak signal usage. However, it is a basis for some AMSAT uplinks. The 5,6 GHz segment also has an error that places all 2,7 kHz bandwidth restriction on all links.

In the CEPT European Common Allocation table (ECA) is footnote ECA 17:-

**ECA17:** *In the sub-bands 3 400 – 3 410 MHz, 5 660 – 5 670 MHz, 10,36 – 10,37 GHz, 10,45 – 10,46 GHz the amateur service operates on a secondary basis. In making assignments to other services, CEPT administrations are requested wherever possible to maintain these sub-bands in such a way as to facilitate the reception of amateur emissions with minimal power flux densities.*

Unfortunately, this does not identify the principal weak signal band at 5 760. If anything, it may accidentally mislead administrations to think that 5 760 is less important.

Improving clarity and protection is especially important as both WRC-15 and WRC-19 have been studying extending Wi-Fi and other mobile related technologies into the 5 725 – 5 850 MHz range.

## 3. Key Points and Proposal

- 5 760 - 5 762 MHz should be clearer in the IARU Region 1 band plan as the main centre of weak signal narrowband terrestrial/EME activity. Usage/errors at 5,6 GHz should also be addressed.
- Additionally, opportunities to improve the ECA footnotes should be pursued, though it is recognised there are associated challenges in doing so.

#### **4. Recommendations**

- Amend the 5,7 GHz Band Plan in the VHF Managers Handbook to more clearly designate the 5 760 – 5 762 MHz range as ‘preferred’ (whilst perhaps trying to simplify its presentation)
- Amend or remove the 2,7 kHz bandwidth restriction at 5 650.0 – 5 668.0 MHz
- Opportunities to improve CEPT footnote ECA17 regarding 5 760 MHz should be sought
- Consider any related changes/actions, depending on the latest 5 GHz situation