



International Amateur Radio Union Region 1

Europe, Middle East, Africa and Northern Asia

Founded 1950

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SUBJECT	Operation at 5MHz and WRC15		
Society	RSGB	Country:	UK
Committee:	C4	Paper number:	VIE13/C4/08
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Introduction

Agenda item 1.4 at WRC 2015 addresses the consideration of an allocation to the amateur service within the 5.25 – 5.45MHz spectrum. Although several countries already allow operation at 5MHz, considerable work will be needed by member societies in persuading their administrations to support this effort.

Background

Amateur radio Interest and activity on frequencies around 5MHz has now been in operation for over 10 years with many countries now having some form of allocation around 5MHz.

In particular, NVIS (Near Vertical Incidence Skywave) propagation at these frequencies provide well-documented properties for reliable communications over distances up to about 500km, making the band very desirable for emergency communications. Propagation around 5MHz is also significantly different to the two adjacent amateur bands at 3.5MHz and 7MHz and thus fills an important gap in the amateur service allocation.

Activity in the UK on 5MHz over the last 10 years has reliably proven that amateur stations can co-exist with other services, and has also shown that cooperation and interoperability between services is possible. In the latter case, UK amateurs have been permitted to contact military cadet stations also operating on the same frequencies and this has provided valuable experience of operating inter-service nets.

As part of the original experimental access to the 5MHz allocation in the UK, much data has been collected to demonstrate the effectiveness of low power and simple antennas to provide reliable communications within the country.

As more countries gain access to frequencies around 5MHz, it is important that operating standards are maintained to demonstrate our ability to coexist with primary users. In particular, this means paying more attention to potential interference issues and careful observance of frequency allocations that may be somewhat different to the existing amateur bands. In particular, no form of contest activity should take place in the 5MHz allocation.

Recommendation

1. That member societies actively engage with their administrations to support Agenda Item 1.4 within CEPT and other regulatory organisations.
2. That, in countries where 5MHz operation is permitted, member societies promote activities and operating standards consistent with supporting Agenda Item 1.4. at WRC15. In particular, promotion of emergency communications and reliability of NVIS propagation as well as examples of compatibility between the amateur and other radio services is to be encouraged.
3. That contests, or any other form of high-usage activity, is discouraged in the 5MHz allocations.

Annex 1. UK 5MHz Allocation as of January 2013

The table below shows the 5MHz frequency allocations to UK amateurs who have applied for access to the band via a Notice of Variation to the main licence. Power is restricted to 100 Watts or 200W eirp and maximum antenna height is 20 metres.

Lower Limit kHz	Upper Limit kHz	Notes on Current Usage
5258.5	5264.0	CW activity. 5258.5kHz international use
5276.0	5284.0	USB dial frequency 5278.5kHz international use. Emergency Comms. CoA
5288.5	5292.0	Experimental beacons on 5290kHz
5298.0	5307.0	All modes, highest USB dial frequency 5304kHz
5313.0	5323.0	All modes, highest USB dial frequency 5320kHz
5333.0	5338.0	Highest USB dial frequency 5335kHz
5354.0	5358.0	Highest USB dial frequency 5355kHz
5362.0	5374.5	Digital modes activity. Highest USB dial frequency 5371.5kHz. International use
5378.0	5382.0	Highest USB dial frequency 5379kHz
5395.0	5401.5	Highest USB dial frequency 5398.5kHz international use
5403.5	5406.5	USB dial frequency 5403.5kHz international use