

Microwave Managers Report Nov-2014

The Microwave Manager is responsible for amateur bands at 23cm and above and also acts as liaison with Ofcom on Beacon applications. Current duties also include some IARU/international matters.

Highlights

- Ofcom Statement on 2.3/3.4GHz Spectrum provides certainty to plan ahead
- Re-Licensing of all UK beacons (assisted by ETCC) inc new 70cms ones
- Progress on 2.3 and 275GHz NoVs
- Busy at IARU-R1 Conference

Lowlights

- Workload from various licence / spectrum issues
- Concern on activity levels and lack of entry-level initiatives
- Low application rate for Microwave Manager Vacancy

Microwave Actions Arising (from 2013 Forum Minutes)

- None

General Activity

- Ofcom Response to WRC-15 Consultation included several microwave bands (inc 5, 10, 24 & 77GHz)
- Coordination of RSGB band plan updates.
- Active in the Region-1 ERC/PRC teams as spectrum specialist

General Comments

There are concerns that whilst the existing community is highly skilled, weaknesses are not being addressed in terms of:-

- Dispelling myths and Public Outreach
- Raising activity levels
- Entry-level introductions and kits (beginners workshops, low cost kits, too purist, online help etc)
- Rising age profile
- Being undersold by the current Exam syllabus (its short range line of sight etc)
- Need for more Wow Factors!

This isn't unique to microwaves but should be considered by the community as areas to work on.

Microwave Bands Review

1.3GHz:

Following several requests a useful 3-way meeting has been held with Ofcom and the Primary User, mainly aimed at facilitating ETCC repeater requests. Meanwhile extensive time has also been spent in Europe on Galileo related issues.

2.3GHz / 3.4GHz:

In these bands we will lose 2350-2390 and 3410+. The 3.4GHz loss is relatively low impact, whereas 2.3GHz affects ATV users in particular, as well as placing constraints on 2320MHz narrowband usage. In some respects this is still a better outcome than some of our European colleagues are facing.

Ofcom's statement in April-2014 has provided a useful degree of certainty around frequency losses, retained bands, future licence conditions and special registration and operating procedures, so that we can continue share with the current Primary User. Partly in mitigation, Ofcom and the PUs have agreed to new DATV outputs in 3.4GHz and a new 2300-2302 MHz NoV in the formerly lost 2300-2310 segment. These helpful outcomes result from close engagement we have had with the Ofcom spectrum team over the period. We expect that the documents supporting the auction process will be released soon and that ongoing decisions in CEPT which we have also supported will conclude in due course (with amateur radio as a recognised secondary incumbent)

5.7GHz:

It has been interesting to witness the growth of Hamnet in Europe (which exploits 5GHz links). This is unlikely in the more constrained UK allocations. For WRC15 we have expressed our concern that the segment that includes the sensitive 5760 and 5840 MHz sub bands would be subject to QRM from an extension to the Wi-Fi band. This contrasts to the situation lower in the band such as 5668 MHz, which already has Wi-Fi.

10GHz:

This is affected by a MoD moratorium in 10-10.125 GHz used by ATV; and a couple of WRC-15 agenda items

24GHz:

At the second attempt an RSGB Paper has realigned the IARU-R1 wideband centre into the Primary segment

77GHz:

Pleased to see some excellent distances being worked by UK amateurs.

We have successfully made several contributions to CEPT ECC Report 222 on helicopter use of 76-79GHz (in CEPT SE24). The band has increasing complexity due to Agenda Item 1.18 item which proposes automotive h Short Range Devices be made a primary user in our 77.5-78GHz Primary allocation and other short range radar applications.

134 GHz:

Along with 77GHz, this has seen some excellent pioneering activity and good results, resulting in the G3VVB Construction trophy being awarded at the RSGB Convention (see UKuG report).

275GHz+

Bands >275GHz are another innovation target that RSGB has been negotiating access with Ofcom.

Most of the NoV has been drafted and sub-bands identified which may be accessible by further developments of 77 and 134 GHz kit. It may also provide opportunities for collaboration with Universities etc.

IARU-R1 Conference - September 2014

Microwave papers presented by RSGB were:-

- VA14_C5_07: Band Planning – 24 GHz
- VHF-Microwave Spectrum Presentation

Several other issues were covered, based on prior inputs or papers from other Societies inc 23cm/Galileo, 2.3GHz etc. Also chaired working groups on DATV and 50MHz Synchronised Beacons

On spectrum matters, a strong endorsement was obtained for current IARU-R1 proposals for 3.4GHz to be included as part of a future WRC-18 agenda amateur harmonisation item was obtained (along with 1.8MHz and 50MHz).

Beacons/NoVs

A major exercise in March-May was the replacement of all Beacon NoVs undertaken with the very kind assistance of the ETCC who provided the web infrastructure. This also provided the opportunity to incorporate a number of previous frequency clearances. Overall this featured:-

- Block clearance of the 70cm Beacon project on IARU-R1 aligned frequencies after many years
- Additional frequencies for GB3CSB
- Callsign changes for GB3MHZ and GB3MAN
- Various keeper and closedown updates
- Online information on NoVs at <http://www.ukrepeater.net/beaconlist.htm>
- Updated NoV terms

We now plan to move to a fully online process similar to repeaters, although there are new concerns regarding Ofcom delays/changes

Other successful clearances in the period included GB3PKT (10GHz at Clacton) and the high power upgrade for the GB3WGI 144MHz transatlantic beacon

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