

RSGB Microwave Managers Report Nov-2015

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

- DATV progress and innovative mmWave activity
- 2300-2302 MHz NoVs in issue
- Participation in CEPT PTA, for nano/pico-sats (AI-9.1.8) and future Agenda Items (AI-10)
- Progress (though slow) on 275GHz

Lowlights

- Primary User clearance difficulties
- Future 5G telecoms threat to >6GHz (inc 47 GHz Primary), additional uncertainty on 13cms
- Greater occupancy / on-air activity
- Microwave Manager Vacancy

Actions Arising (from 2014 Forum Minutes) - None

General Activity

- Ofcom responses/involvement to WRC-15/19 preparation process
- Changes implemented in 2015 RSGB band plan updates (mainly IARU-R1 Varna results)
- Active in the Region-1 as spectrum specialist

General Comments

Similar to last year – user groups and other activities need to address:-

- Dispelling myths and public outreach/media
- Raising activity and spectrum occupancy levels
- Entry-level introductions and kits (uptodate guides, beginners workshops, low cost kits etc)
- Rising age profile (some key SKs in the past year)
- Exam/training system giving incorrect impressions re propagation etc
- Need for Wow Factors!

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

Some of this is also expected to feature in the 2016 RSGB Spectrum Strategy review.

Microwave Bands Review

1.3GHz:

Pleased to see the first license and implementation of a full 23cm DV/DD repeater system in Yorkshire. Unfortunately we need fresh contacts to facilitate 23cms applications, although other work to facilitate a backlog on beacons etc is in hand (esp as there are additional radars in the band due to Wind Farms).

2.3GHz / 3.4GHz:

The new Ofcom amateur license is now in use confirming 2.3/3.4 changes. Ofcom's auction is a slow process. Aware the Treasury is seeking additional release/sharing in the rest of 13cms.

5.7GHz:

Ongoing activity in Europe/WRC regarding 5GHz expansion of Wi-Fi (and now potentially LTE-U) into the sensitive 5760 and 5840 MHz sub bands.

10GHz:

No change on the MoD moratorium in 10-10.125 GHz used by ATV. The Society also expressed its displeasure at the Ofcom nomination of 10+47 GHz bands for 5G/WRC19. Other WRC15 items now look fairly benign

77GHz:

Pleased to see some excellent distances being worked by UK amateurs. Have kept close tabs on both CEPT work items and AI-1.18 for WRC-15 which affects our 77.5-78GHz Primary allocation.

134 GHz:

Along with 77GHz, this has seen some excellent pioneering activity and good results (see UKuG report).

275GHz+

>275GHz is one of a number of bands which are innovation targets. Whilst we are awaiting the NoV release, our experience was appreciated whilst participating in the UK-Ofcom CEPT-PTA team.

IARU-R1 Interim Meeting – April 2016

It is not clear if specific papers will be drafted by RSGB, but it is expected that a core group discussion will be held regarding challenging bands such as 23cm, 13cm, 9cm. It will also be an opportunity to review spectrum strategy given that we expect a major new WRC19 agenda item for 5G telecoms in the mmWave bands.

Beacons/NoVs

Applications

These use the ETCC front end (which may see some further development over time). In practice only a couple of 28 MHz HF beacons have been fully processed and approved in recent times. All applications in secondary bands (mainly 23cm) have been held whilst we prepare the way to optimise their chances, otherwise we risk losing most of the UK 23cm network if rejected.

State of Play

70cm: Very pleased to see progress in 70cms with all UK beacons now on their IARU-R1 slot and the new GB3LEU online (with GB3UHF due soon).

50 MHz: Ongoing discussions have resulted in UKSMG liaising with the GB3MCB group re a new 'flagship' sync'd beacon. We expect to run a coordinated effort to shift other UK beacons to 50.4xx MHz ahead of their NoVs expiring altogether (which may also involve some hardware modernisation as occurred in 70cms).

47GHz: The state of existing beacons on 47 GHz (a Primary band) is of concern and stakeholders are strongly encouraged to take pro-active action - **Action UKuG?**