

# Microwave Managers Report Nov-2012

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

## Highlights

- Successful outcome for Olympics spectrum and related activities
- Progress on IARU-AC Future Spectrum Strategy
- Talks: Olympics at RSGB Convention, Spectrum at EME2012
- The EME2012 Conference
- Licensing of the first GB3qclass 76 and 134GHz beacons
- Fraser Shepherd award for 30 years of beacon coordination by Graham Murchie G4FSG
- Implementation of the 2012 band plans (mainly Sun City), inc 23cms and mid-year updates

## Lowlights

- Spectrum Release pressures - notably in 2.3 and 3.4GHz
- Slow progress on NoVs etc in secondary allocations
- Significant number of CEPT and WRC-15 related pressures on microwave bands

## Action Arising (from 2011 Forum Minutes)

**NoV delays:** *Murray Niman and John McCullagh to continue pressure and support to Ofcom and the Primary Users where needed.*

The majority of the backlog are ETCC applications but we continue to work closely to progress this and related work to modernise NoVs.

After the last Spectrum Forum two backlog trackers (integrating repeaters, beacons etc), were implemented, separating Primary amateur band issues from Secondary allocations (where we have Primary Users). The Primary list proved very effective, with Ofcom catching up on these. The Secondary backlog list made little progress over the Games period, but was raised again at the October-2012 Ofcom-RSGB meeting.

## General Activity

- Assistance to the EME2012 organisers - and pleased with the overall event success/profile
- Coordination and Outreach for the temporary Olympic Spectrum restrictions inc the web pages at: <http://www.rsgb.org/olympics/> (which should now provide useful background for Glasgow 2014)
- Supporting Consultation responses on VHF Spectrum, Communications Act review

## Microwave Bands Review

### 1.3GHz:

Following the 2011 Spectrum Forum meeting, the new 23cm band plan was introduced, but has not yet had time to have real effect. Some aspects such as 1300MHz+ and Galileo influences were tbd in the first edition and further work is planned inc liaison with the Primary user, ETCC and BATC. Progress by Galileo (inc a tour of the new SSTL assembly facility for it) occurred during 2012.

### 2.3GHz:

RSGB with assistance from BATC submitted an initial paper to Ofcom at the Oct-2012 RSGB-forum meeting regarding usage and impact of spectrum release in the band - as ATV in particular is overlapping the expected release section. The submission also requested restoration of the 2300-2310MHz segment to assist re-planning. Activity in Europe is rapidly heading towards loss of spectrum and the introduction of new LTE-TDD mobile networks (Sweden being an early and influential case). A potential complication by new Medical Networks (MBANS) entering the band is also underway in CEPT SE24 (recently permitted in the USA)

### 3.4GHz:

An update on the MoD website in Aug-2012 indicated there was little interest in short term leases and that full release may be brought forward. Given other pressures, RSGB would prefer this to progress in the area above 3410MHz, as it may reduce pressure elsewhere such as 2.3GHz.

### 5.7GHz:

A new threat to the narrowband noise floor at 5760MHz by non-UWB industrial devices has been identified. IARU-R1 has made a number of submissions to the CEPT SE24 WI-39 drafting group and attended one SE24 meeting - currently ongoing. Potentially hundreds of these 400mW devices would get used in factory locations for automation or indoor/outdoor telemetry

### 10GHz

This may be affected by a new MoD moratorium in 10-10.125 GHz used by ATV and longer term by a couple of WRC-15 agenda items

### 77GHz:

Car radars may be permitted for fixed and helicopter use in 76-77GHz shortly. WRC-15 also has Agenda Item 1.18 item to make related radars a Primary User in the exclusive 78GHz Primary amateur allocation

### 47/76/134GHz:

Pleasing to see increases in millimetre-Wave experimentation both at narrowband and potentially for DATV. Propagation research and Spectrum defence would be enhanced if we were to increase amateur satellite activity in these bands.

## IARU Future Spectrum Strategy in Bands above 148MHz



**FSC**

An interim draft has been completed although work is ongoing. The drafting activity is believed to have already been influential on the recent ARRL 3.4GHz band plan. It is sad to note that one of the instigators of this project, Michael Owen, is now a Silent Key.

It is worth noting that some of its outcomes might have applicability in HF and VHF bands where current approaches are not entirely successful (eg backing White Space to obsolete PLT)

## Beacons

Having retired following a remarkable thirty years or so of continuous service to the Society, Graham Murchie G4FSG received the Fraser Shepherd award at the 2012 RSGB Convention for his work coordinating microwave beacons. Whilst work on the application/NoV process evolves from the RSGB side, this leaves a significant gap on technical support and coordination.

During the past 12m months, six beacons applications have been approved.

GB3WGI	144.487	Lough Navar	New Beacon	Approved May-2012
GB3CSB	5760.985	Kilsyth	New Beacon	Approved May-2012
GB3CSB	10368.985	Kilsyth	New Beacon	Approved May-2012
GB3CCX	47088.940	Cheltenham	New Beacon	Approved Jan-2012
GB3CCX	75976.940	Cheltenham	New Beacon	Approved Jan-2012
GB3CCX	134928.940	Cheltenham	New Beacon	Approved Jan-2012

(An update to correct the CSB NoV is in hand)

However as noted elsewhere this still leaves many in secondary bands that have not progressed for months/years! . inc 70cms and 2.3GHz,- and even basic changes such as Martlesham keying/callsign

With the Games over, work on the new 6m synchronised beacons is expected to pick up and has been informally discussed with a number of parties. New JT modes and a recent proposal are expected to aid this.

Murray Niman G6JYB, Oct-2012