

# Microwave Managers Report Nov-2011

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 Olympic Spectrum matters as well as some international/IARU matters

## Highlights

- IARU-R1 Conference in Sun City
- IARU-AC Future Spectrum Strategy
- Satisfactory solution to 24GHz Car Radar
- New Scottish Microwave Roundtable
- Olympic Talk at RSGB Convention
- Progress/support for UKuG-led EME 2012 Conference
- 30 years of RSGB Service by Graham Murchie G4FSG

## Lowlights

- New Spectrum Release pressures (esp in 2.3GHz)
- Lack of approvals on Beacon Applications

## Actions Arising (from 2010 Forum Minutes)

**VHF Aeronautical Mobile:** *Peter Kirby & Murray Niman to arrange a meeting with CAA for them and David Butler to progress this issue (along with a 23cm issue, see below)*

Discussed at Ofcom-RSGB forum and informally with the lead Primary User, esp for low power APRS type applications. Further work planned once liaison/NoV protocols for PUs resolved

**Microwaves:** *liaise with ETCC, BATC, UKuG, AMSAT-UK on the 23cm re-planning.*

Good progress inc at IARU Region-1 Conference re various elements of new band plan

**ATV:** *Murray Niman & Peter Blakeborough to consider the way forward for ATV on 13cm*

Article written for BATC CQ-TV magazine and liaison with ETCC re 13cm. Government and Commercial pressure on 13cm has seen a major increase over past year. Other responses have also included:

- 13cm featuring in Society response to DCMS re Spectrum Release, inc an illustrated annex on ATV
- Successful IARU-R1 inputs to CEPT-SE7s draft report re 2.3GHz Broadband Wireless Systems
- Attendance at briefings on Spectrum Release

Like other bands, ATV's future will be enhanced by spectrum and migration to bandwidth-friendly DATV

## General Activity

- Pleasing to see various initiatives to promote the hobby, contests, new technology etc
- Various comments received and passed to the Contest Committee re the UKAC M5 rule
- Preparations continue for the EME2012 conference in August – see [www.eme2012.com](http://www.eme2012.com)
- Also pleased that the 2011 Convention proved to be a good focus for EME and Beacon topics
- Spectrum defence/release continues to be a major focus of attention

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## Microwave Bands

### 23cms:

For some time there has been little success to acquire clearances in the band. Reflecting the need for a new solution, for some time the band has had a footnote: “**subject to major re-planning**”

The 2010 Forum minutes and a number of IARU papers contain most of the background and template for the new band plan. The new band plan is intended (though not guaranteed) to improve our ability to obtain NoVs for innovative new systems such as DD and DATV, as well as provide contingency measures for the narrowband section at 1296MHz by an international agreed reserve at 1240. It is likely that further refinements may be necessary in due course, and comments are welcome in this regard

### 13cm: **Significant concerns – see earlier Actions**

**9cm:** Inputs made to CEPT-PT1 consultation on decision re channelising arrangements for broadband wireless systems. Focus is to protect the 3400-3410 (EU17) harmonised section.

**6cm:** Likely to be subject to future liberalisation (inc for 802.11ac WiFi)

**24GHz:** **Success.** EU Car Radar decision confirms June 2013 as end date for new SRR car radar in our Primary allocation (after which they have to use alternative frequencies or 79GHz)

**122GHz:** This Secondary allocation is being designated by Europe for ISM. Our 134 allocation is preferred in any case as its Primary and lower attenuation

**134GHz:** New Narrowband section (and increased Contest Multipliers) agreed at Sun City based on 134.928 GHz to support new UK/European activity

## 2012 Olympics

2011 has seen the first real detail regarding spectrum requirements. The Society continues to have a good relationship with Ofcom on this matter. Topics have included:-

- Requests regarding substantial reserve capacity in 70cms for adhoc duplexed PMR in the London, Weymouth and South Essex for a temporary period.
- Spot channels for sailing telemetry equipment in 70cms (tried in two events in summer 2012)
- Opportunities for 'venue engineers'
- Indications, but no formal requests yet, for wireless camera channels in 2.3 and 3.4GHz
- Assurance re key events such as VHF Field Day

The effort has substantially expanded this year and I am grateful to a range of people/inputs, including from ETCC, Contest Committee and BATC/Amsat-UK

Whilst it has proven difficult to get definitive data at times, the Society has nonetheless been pro-active on news/updates and has introduced a new portal at: <http://www.rsgb.org/olympics/>

Ofcom has its own information at: <http://stakeholders.ofcom.org.uk/spectrum/olympics/>

The latest state of play was presented in a well attended/received joint presentation at the October 2011 Convention – 'Olympic Operating & Opportunities'

## WRC-12

WRC Agenda Items of direct microwave relevance are

**1.6:** Bands above 275GHz. Inputs have been made to Ofcom and IARU in order to protect future flexibility for future and avoid monopolisation by passive services.

**8.2:** Agenda Items for WRC-15/16 and potentially includes major threats inc for additional mobile spectrum and the loss of Exclusive Primary at 77GHz

In addition, also attended CEPT PTC meeting in January at Toulouse for AI-1.23 for 500kHz, where significant progress was achieved.

## IARU Region-1 Conference, Sun City, August 2011

Six papers were submitted into the C5 VHF/Microwave committee, part of a total of fifty papers covering a wide range of VHF and Microwave matters. All six were successful

Paper No	Title
SC11_C5_41	134 GHz Operation and Band Plan
SC11_C5_42	1298 – 1300 MHz Band Plan
SC11_C5_43	Beacon Guidance
SC11_C5_44	VHF Handbook Satellite Chapter (G3VZV)
SC11_C5_45	Microwave Band Plan Updates
SC11_C5_46	Microwave Contest Multipliers

In addition past inputs made at Vienna were also endorsed, or in the case of 50MHz rolled up into the Working Group. Due to cost pressures, the Society could only fund one delegate to attend the conference. Despite multiple parallel streams, considerable amounts were achieved in the Working Groups, Budget, Policy, HF and VHF committees - assisted by inputs from Colin G3PSM and Ian G4FSU (in their IARU roles) and most notably by Graham G3VZV who generously attended at his own expense.

## Future Spectrum Strategy in Band above 148MHz



**FSC**

In October 2010 IARU-AC recognised that bands above 148MHz were in need of new strategy. This was followed up at the IARU-AC meeting held in Sun City with the result that we are now privileged to have a key role, in the new IARU-AC FSC (Future Spectrum Committee) that has been handed the task and asked to report by early 2012

## Beacons

Following a remarkable thirty years or so of continuous service to the Society, Graham Murchie G4FSG has decided to hand over the reins from front-end coordination of microwave beacons.

Since the last Forum meeting Beacons continued to receive attention including

- UK 70cm Project – now submitted to Ofcom for provisional clearance
- Six metre beacons and band planning
- Ongoing applications and NoV delays (see below)

Progress continues to be marred by the lack of Ofcom approvals due to poor resourcing/priorities, as well as Primary User issues. Below is the current application list, stretching over many months:-

Submitted 2011

GB3MHZ NoV mods (all bands, 23cm to 24GHz)

GB3RAL NoV mods (40/50/60/70MHz)

Submitted Nov-2010:

GB3SEE 24048.960 Reigate New Beacon (Approved Dec 2010)

GB3FNY 10368.752 Finningley New Beacon

GB3CCX 47088.940 Cheltenham New Beacon

GB3CCX 75976.940 Cheltenham New Beacon

GB3CCX 134928.940 Cheltenham New Beacon (134GHz)

Submitted Dec-2009/Mar-2010:

GB3ZME 2320.870 Telford New Beacon

GB3BSS 2320.925 Stroud New Beacon (ex GB3PYS freq)

In addition a number of other VHF beacons have been identified as being in need of NoV refresh subject to Ofcom resources (and proposed updates to the NoV format/process)