

Microwave Managers Report Nov-2010

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 international/IARU matters

Highlights

- IARU Interim meeting in Vienna
- IARU-AC Strategy
- UKuG winning EME2012
- Attended all four 2010 Microwave roundtables,
- Delivered talks at Amsat Colloquium and at RSGB Convention

Lowlights

- Passing of Mike Dixon G3PFR former Microwave Manager on 17-Mar-2010
- Lack of approvals on Beacon Applications

Band Plans

1240-1325MHz / 23cms

For some time there has been little success by the ETCC for ATV & Digital communities to acquire clearances in the band. Reflecting the need for a new solution, for some time the bandplan has had a footnote: “**The band 1240-1300MHz is subject to major replanning**”

Elements of this re-planning have been discussed at Cavtat in 2008 and more recently in Vienna in Feb-2010. It is now clear that we have reached the point in the UK that a radical new plan needs to be introduced, for us to progress, and to co-exist with Primary Users (PUs), let alone accommodating future ones such as Galileo. The principal PU has long range en-route aircraft radars in the band which cannot be interfered with. The indeterminate nature of users on repeater inputs is a particular concern to them, in contrast to repeater outputs (or beacons) which are defined and known. The past few years have also seen a significant decline in Packet and Echolink users – in contrast to pent-up demand for DV/DD experimentation, greater use of spectrum-friendly DATV and narrowband innovations.

To this end discussions have been ongoing with stakeholders including ETCC and BATC as not just band plans but existing users and RSGB application processes will undoubtedly be affected in some way.

Elements of the changes will include:-

- Clearance of legacy use from 1240-1240.75
- ETCC to review existing packet clearances (which now have dubious legal standing in any case)
- Digitisation and reverse splits for ATV repeaters so we can best utilise clear sub-bands
- Refarm of 1240-1250MHz, 1298-1300 and 1300-1325MHz (with BATC cooperation)
- Enhancements to ETCC forms and Ofcom/PU interaction including identifying emissions bandwidths/modes on inputs and outputs and potential need for DD/DV triplets
- Likely reduction in use of 1250-1290MHz to allay PU concerns
- Better information exchange with regulators and PUs

It is not clear at present whether the plan will be ready in time for the traditional January edition of Radcom. Meanwhile issues in other bands are:-

- 13cm:** Issues being identified in Europe and further afield, whilst in the UK ATV repeaters in 2400+ suffering QRM and may need migration. Aiming to gain limited access to 2304MHz for EME
- 9cm:** Awaiting Ofcom/MoD RSA statement. Estonia latest state to get amateur allocation
- 24GHz:** Closely following automotive radar developments/politics
- 134GHz:** Need for band planning for coordinate narrowband developments

2012 Olympics

As the year progressed it became clear that both VHF/UHF mobiles and Wireless cameras would be required in unprecedented numbers, putting pressure on previous forecasts of spectrum requirements for the summer 2012 period. The Society continues to have a good relationship with Ofcom on this matter and is providing them with additional information at present. Ofcom now has a dedicated website since its latest statement on Oct-18: <http://stakeholders.ofcom.org.uk/spectrum/olympics/>

WRC-12

The one WRC item of direct relevance is Agenda Item 1.6 which reviews of 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. In addition, meetings have been attended regarding other items and frequencies in support of the HF/VHF spectrum managers

Future Spectrum Strategy

At Cavtat the VHF and Microwave Managers gained approval for a number of strategic spectrum papers which lay foundations for further work. In Summer-2010 this led to an input via Region-1 (complemented by Region-3) with the result that the October IARU-AC meeting had this statement:

IARU-AC Statement Oct-2010:-

The working document that sets out the spectrum requirements of the amateur and amateur-satellite services was reviewed and updated. A need was identified for a new strategy with regard to retaining access to bands above 148 MHz. It was agreed that a committee of experts will be formed to develop recommendations for the AC.

And in the IARU-R3 October Newsletter:-

IARU Region 1 and Region 3 submitted papers to the AC meeting, essentially raising the same issue, namely the strategy of the IARU in respect of bands above 148 MHz. In the past we have accepted secondary status to radiolocation on the basis that this gave us pretty unimpeded access to broader bands. But, as spectrum becomes more and more valuable and various other services use these bands in different places, and also bearing in mind the special requirements of the amateur satellite service, is that policy still appropriate? Should we seek, perhaps, smaller exclusive amateur and amateur satellite bands within the broader shared bands? If so, where? Not an easy question, as there can be as many different uses as there are different countries. These are complex questions and a committee of experts is being asked to make recommendations to the Administrative Council.

Submissions for 2011 Conference

Papers being prepared for the 2011 Region-1 Conference include:-

- Beacons - MGM/bandwidths and reporting (eg upto 2.4kHz BW)
- 23cm Data allocations, especially at 1298-1300 MHz
- Spectrum strategy
- Satellite chapter for the VHF Handbook
- 134GHz bandplan

Following drafts at Vienna we expect an overhaul of VHF/Microwave contest procedures as well

Beacons

Since the last Forum meeting Beacons continued to receive attention including

- Contributions to RSGB Beacon Policy/panel
- NoV for GB3VHF Site Move from Wrotham to Fairseat
- UK 70cm Project
- Liaison re GB3NGI/IOJ/RAL/MCB
- Ongoing applications (see below)

Graham Murchie G4FSG continues assist in coordinating microwave beacons. In common with other applications in secondary bands, whilst beacon technology continues to show tremendous innovation (inc Reverse DDS and JT4G MGM), progress has been marred by the zero Ofcom approvals gained during the year due mainly to Primary User issues. Below is the current application list:-

Submitted Nov-2010:

GB3SEE	24048.960	Reigate	New Beacon
GB3UOB	3400.935	Bath	New Beacon
GB3FNY	10368.752	Finningley	New Beacon
GB3CCX	47088.940	Cheltenham	New Beacon
GB3CCX	75976.940	Cheltenham	New Beacon
GB3CCX	134xxx.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 beacon have been identified as being the focus of licensing activity during 2011 so we need to press Ofcom for resources

External Matters

2010 Region-1 Interim Mtg, Vienna, Feb 2010

In addition to VHF papers, four microwave ones were submitted into the C5 VHF/Microwave committee, of which B01 and B12 below were prioritised by the EC for immediate approval

Paper No	Title
B01	Threatening Developments at 2300-2400 MHz
B06	1240-1250MHz Update and Bandplan Proposals
B07	1298-1300MHz Bandplan
B12	Beacon Developments and Messages

Regulatory Papers

The number of Ofcom consultations has been fewer than previous years whilst the focus has moved to inputs to briefing meetings, IARU papers on Spectrum Requirements/Strategy and CEPT activity

Ofcom

Feb 2010: Amendment to 24GHz Automotive Radar regulations

Feb 2010: World Radiocommunication Conference (WRC-12)

May 2010: Licence Exemption of Wireless Telegraphy Devices

Murray Niman G6JYB, Nov-2010