

Microwave Managers Report Jan-Aug 2008

Highlights

- Papers submitted and preparations underway for IARU-R1 2008 Conference
- Continued involvement on consultations inc MoD & 2012 Olympics Spectrum
- Affiliated societies active with innovative developments
- Continued progress on Beacon Licensing

This report covers the first half of 2008 following the Winter Spectrum Forum meeting
Readers are referred to the previous report for the period Jul-Dec 2007

Murray Niman G6JYB, Sep-2008

General Commentary

The Microwave Manager remit covers all frequencies above 1GHz and in addition acts as point of contact between the Society and Ofcom for Beacon applications/licensing.

Microwave spectrum is amongst the most highly valued by commercial users, presenting a challenge for amateurs as our bands in the 1.3-10GHz range are all Secondary allocations

Early 2008 focussed on the completion of the papers for the IARU-R1 conference where RSGB will be the largest contributor to microwave matters in the C5 committee. Topics include modernising of procedures and allocations for beacons, changes to spectrum requirements and a new framework for operations in the 23cms band. The various initiatives were highlighted by the leader in the August-2008 edition of Radcom

The end of Jan-2008 saw Ofcom release its statement on the '*Spectrum Framework Review for the Public Sector*' to which RSGB had previously made a submission. This has since been followed by consultations on MoD Defence Spectrum Management (perhaps including a new Band Manager), MoD RSA and pricing for Aeronautical and Maritime frequencies. Close attention to developments in this area as they impact on a number of secondary allocations.

Beacon licensing has been quieter than last year, but is now awaiting a major migration exercise to NoVs from older clearances.

Events attended so far in 2008 included the Amsat-UK colloquium, UKuG roundtables and a MoD Spectrum Management presentation day.

A highly welcome development has been the introduction of the www.batc.tv video website by the BATC. This has led to collaboration with UKuG and Amsat-UK and enables us to show that the higher bands do have innovative construction and use, underpinning spectrum defence.

Microwave Bands Review

23cm – This continues to be the most difficult band to obtain clearances in. Recent successes have been the GB3FRS move and solutions for the GB3BK/GB3MC repeaters, but others are more challenging prompting upgrades to background data and prediction tools. Whilst some amateurs remain concerned re Galileo, there are far more evident and immediate pressures due to the protection zones and masks being applied around current PU assignments such as NATS en-route radars.

2.3GHz – Commercial/AIP pricing pressures are being exerted on this WRC-07 'designated' mobile band. It may also be a candidate for 2012 temporary use by wireless broadcast cameras along with 3.4GHz. ISM levels in 2.4GHz pose serious threats to ATV and satellite reception.

3.4GHz – WRC-07 also 'designated' this band for future IMT services from Mar-2010. It is the subject of EU Decision 2008/411/EC on wireless services and the MoD review. In line with this amateur activity is being focussed on the bottom 10MHz, which is harmonised with other European amateurs and CEPT. During 2008 we successfully influenced a migration of USA EME users from 3456 to 3400MHz and continue to support Amsat interests regarding the 3400MHz band for future downlinks

5.7GHz – Two new beacons GB3FNM and GB3KEU are now operational. GB3MAN is approved for both 5668 and 5760MHz outputs.

10GHz – The Ofcom 10GHz auction process concluded in 22-Feb-2008 with fairly modest prices being paid by Digiweb and T-Mobile. One novel development this year has been GB3TC, a 10GHz FM voice repeater, in Kilsyth that has come into service which can be received by modified satellite LNBS.

24GHz – Activity and achievement in this supposed high loss band continue with distance records in excess of 400km being achieved

>275GHz – We await Ofcom's next-steps on 275+, which is also on the WRC-11 agenda. One option is the possibility of licence exempt based access to a number of mm-Wave bands, similar to that recently been granted for 100mW devices in 61-61.5GHz

2012 Olympic Spectrum use

It is clear that substantial (though temporary) amounts of spectrum may be needed to support the UK treaty obligation for the 2012 games, for microphone links, admin/security and wireless cameras

The period saw the first major Ofcom consultation on 2012 Spectrum Planning at <http://www.ofcom.org.uk/consult/condocs/spectrum2012/> closing in Feb-2008. Discussions on this topic continue with Ofcom ahead of the next, far more detailed, consultation.

EU/CEPT

Extensions to the UWB regulations and the implementation of the Wireless Services directive (affecting the 3.4GHz band) continue to be closely monitored

WRC-11

Although WRC-07 only recently concluded, preparations for WRC-11 are already underway and correspondence is being received. Agenda Items of interest include AI-1.2 on the Regulatory Framework and AI-1.6 on bands above 275GHz and AI-8.1.1/SG-Issue-A on Protection from ISM

Beacons

Beacons continue to be the focus of attention. Ofcom gave excellent service on the mid-2008 site moves for GB3CAM/FRS. Discussions continue with Ofcom on migrating legacy clearances to NoVs for all HF/VHF/UHF/Microwave beacons. A number of updates have also been forwarded to Iain GORDI to update the Region-1 database, with further ones planned. The list below cover those beacon applications handled in the first half of 2008.

Batch-6: Under Consideration

GB3CSB	1296.985	Kilsyth	New Beacon
GB3CSB	2320.985	Kilsyth	New Beacon
GB3CSB	3400.985	Kilsyth	New Beacon
GB3COA	1296.755	Paisley	Changes

Batch-5 Site Moves: Apr/May 2008

GB3CAM	24048.870	Cambridge	Site Change
GB3CAM	10368.755	Cambridge	Site Change
GB3FRS	1296.850	Farnborough	Site Change

External Matters

2008 Region-1 Conference, Cavtat Croatia, 21-26 Nov 2008

Eight microwave papers have been submitted into the C5 VHF/Microwave, as listed below. In addition support has been lent to a number of papers that the VHF Manager has submitted, resulting in a strong RSGB overall input to C5 conference business

Paper No	Title	Author
CT08_C5_13	23cm Narrowband Image and Data	G6JYB
CT08_C5_17	3400MHz Amateur Satellite Allocation	G6JYB
CT08_C5_18	3400MHz EME Developments	G3LTF
CT08_C5_19	A New Vision for 23cms (Vienna B15 follow-up)	G6JYB
CT08_C5_20	Amateur Satellite Handbook Chapter	G6JYB
CT08_C5_25	Microwave Beacon Bands (Use of x.750-x.800)	G6JYB
CT08_C5_26	Microwave Spectrum Requirements*	G6JYB
CT08_C5_36	Beacons Coordination (Handbook updates)	G6JYB

*It is interesting to note that IARU has recently updated its spectrum requirements, prior to the formal discussion at Cavtat

Regulatory Papers

Whilst the number of consultations has levelled off, their complexity is increasing. Two below have been completed, whilst two more on Spectrum Pricing and 10GHz+ Exemption are under consideration.

Sep-2008	Defence Spectrum Management (MoD) http://www.mod.uk/DefenceInternet/AboutDefence/CorporatePublications/ConsultationsandCommunications/
Jul-2008	Spectrum Commons Classes for Licence-Exemption (Ofcom) http://www.ofcom.org.uk/consult/condocs/scc/

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