



## RSGB 2021 Spectrum Forum Meeting Minutes

Saturday 6 November 2021 at 10.30 am by MS Teams

### 1 Meeting arrangements

- The meeting was held online via MS Teams
- Ian G4FSU agreed to be meeting secretary
- The scheduling overlapped a Regional Forum meeting, limiting attendance by a few
- Formal introductions, attendees registration/apologies omitted to save time

### 2 Apologies

Len Paget GM0ONX, Chris Ducking G3SVL CDXC (covered by Derek Bate, G4XEE), Neil Underwood G4LDR UKuG (covered by Noel G8GTZ), Julian Gannaway G3YGF

#### Opening Remarks:

The meeting opening was addressed by RSGB President Stewart Bryant G3YSX who welcomed all those attending the forum

### 3 Actions arising from the previous Minutes

#### 3.1 50 MHz

A concern regarding the introduction of wideband modes into the 50.5-52 MHz segment had been addressed in the 2021 Band Plan with an update of 'Note-5' usage - the 50.770/790 designation was moved to 51.970/990. A bandwidth related typo in the RadCom version will be addressed in the 2022 edition of the RSGB band plans.

#### 3.2 5 MHz

The aim continues to be to realign some UK specific 'bandlets' in order to achieve more contiguous access to the WRC-15 frequency range. Unfortunately no significant progress had been made in the past year (partly due to Covid restrictions on meetings).

### 4 Spectrum/EMC Reports

#### 4.1 HF Manager

Ian, G4FSU noted that in the event of a future 5MHz realignment being agreed, there may be a loss of the UK specific 5258.5 - 5264 kHz bandlet used by QRP operators. This particular bandlet falls within 5250 - 5275kHz which was internationally allocated to radiolocation (oceanographic radars) at WRC-12. See later for the broader IARU HF Band Plan Review

#### 4.2 VHF Manager

John G4SWX presented his report. General VHF activity had seen some improvements during the Covid lockdown but this has now tailed off. The new EMF conditions in VHF+ were a concern but new RSGB Pre-Assess Equipment Configurations were very helpful.

John advised that the result of his latest progress report to Ofcom for 146 MHz -147 MHz should shortly result in its extension for a further year, though may become even more challenging in this



in future. John also noted ongoing progress in DATV technology, but less so in other high speed Data developments.

### 4.3 Microwave Manager

Barry G4SJH presented his Microwave Report. Of note were ongoing discussions re WRC-23 Agenda Item 9.1b on 1,3GHz/Galileo et al, progress with QO-100, and by various enthusiasts at 122 GHz. Domestically there was nothing too major of concern. It was noted that portable operation plays a major role and that Covid restrictions had impacted this.

Barry noted how challenging it is to get newcomers onto technically challenging bands – and getting a critical mass of QSOs outside of contests. Spectrum pressures continue. A newer trend has been increased interests in mmWave from commercial/government entities for short range devices, Ultrawideband (UWB) and 5G etc.

### 4.4 Intruder Watch

Richard G4DYA pleasingly noted that the new shared IARU logging database had attracted 10000 entries from Monitoring System volunteers in various IARU Member Societies (URE, DARC, RSGB etc). However IARU-MS does need volunteers in Africa and the Middle East.

Whilst HF radars from China, Russia and Iran continued to be problematic, it was disappointing to note that the UK OTHR on Cyprus was also all too prominent (despite past complaints). Other recurring issues arise from Broadcasters in Africa, such as Radio Ethiopia using NVIS within the amateur 7MHz band.

### 4.5 EMC Committee

John M0JAV reported a busy time (and 7000 emails!) on EMF matters. EMF work at HF frequencies was ongoing, complicated by limb current considerations which are neither easy to model or measure. All present were reminded of a series of Ofcom deadlines for amateurs to perform assessments.

On EMC issues, many noise issues had been noted from VDSL2 systems and John requested all to maintain lodging complaints of interference cases to Ofcom (and the use of Lelantos software to definitively verify the source as VDSL). RSGB was also working with DARC and have an example receiver from their ENAMS noise measurement project.

## 5 WRC-23 / Spectrum Sharing Updates

Murray G6JYB introduced this with a few slides covering WRC-23. A number of science and future agenda related items are of concern in HF, 40-50MHz and 241 GHz amongst others. Unusually the WRC-27 future agenda was remarkably defined in detail at WRC-23 and is already in discussion in CEPT-PTA. As per the last cycle, expect no Amateur expansion proposals - with the emphasis remaining on spectrum defence.

The concept of exclusive amateur bands (even when Primary) is being challenged by regulators who believe that spectrum sharing is more efficient. These pressures, are consequently leading to is an increasing effort to show that we already do utilise and share in many bands. The WRC-23 23cm situation is a high profile but not the only example of where we co-exist. The VHF manager highlighted the extreme pressure on 70cm for additional commercial capacity in built up areas.

Barry then presented his more detailed background slide set regarding WRC-23 AI-9.1b on 23cms, a topic which is the top priority for IARU. This concerns 1.3GHz amateur secondary coexistence with primary Radio Navigation Satellite Services (RNSS) such as Galileo (EU), Glonass (Russia), Compass (China) and QZSS (Japan); and where we already successfully share with incumbent long range L-Band radars. Finally Barry highlighted the ongoing need to tackle the Ofcom 'Low Priority' for this topic.

## 6 HF Band Plan Review / Reform

Ian G4FSU presented a slide pack from an Inter-regional IARU HF Band Plan review group.

These describe that the relatively neutral approach to planning by bandwidth and CoAs was increasingly problematic as it was predicated on largely human 'conversational' use, and was not well adapted to the huge growth in structured/time-sync'd data modes (of which FT8 is prominent), as well as spectrally impolite automatic stations and the emergence of HF Digital Voice/Video

The current proposals are broadly:

- a) Primary usage definitions would be replaced with simplified descriptions of band activity
- b) Enhance 'Centres of Activity' definitions within the data mode segment to identify the three core types of data communication in use today
- c) Develop representations of the HF band plans using newer tools and address mode capacity shortfalls

The IARU slides cover this and include examples of rebalancing between CW, Data and SSB. They also important recognise that there are national regulatory and licensing limitations that can constrain the way forward, Growth in Digital inevitable will require compromises elsewhere.

Those present recognised that there was no easy answer, but several did indicate that any rebalancing should more evenly consider trimming CW and not merely just reduce SSB segments, in order to allow for Digital trends/growth.

So far the proposals have been distributed to all Member Societies and were first discussed in the September Region-3 Conference. The next formal opportunity will be the 2022 IARU Region -1 Interim Meeting (see below). Achieving harmonised changes across the three ITU Regions was recognised as being fraught by national regulatory difficulties. The forthcoming 2022 Region-1 Interim Meeting will provide an opportunity to discuss the HF Band plan proposals in the C4-HF Committee. RSGB will consider drafting contributions in due course.

## 7 IARU Region-1 2021 Workshop and 2022 Interim Meeting

Murray presented some updates on IARU engagement. As a member, RSGB had attended the online Region-3, Conference in September. This provided useful insight into local issues as well as first sight of the HF Band Plan review.

Closer to home, a major effort went into the IARU-R1 Strategic Workshop that was held online over a week in October. RSGB preparation for this include a major SWOT survey in May/June which had over 1000 amateur replying to the RSGB Survey,



The UK results are in RadCom and online, and also provide valuable background for the RSGB 2022 strategy review

**PMN:** The workshop outcomes are now online at: <https://www.iaru-r1.org/stf/> - Shaping the Future

## **8 RSGB Committee Reports**

### **8.1 Emerging Technology Coordination Committee (ETCC)**

Andrew G8DOR reported a further increase in internet voice gateways. This will require a retrospective band plan tweak in 145MHz where two ex-packet channels have been re-designated to accommodate demand.

### **8.2 Contest Support Committee (HF/VHF)**

Ian G0FCT reported that HOPE QSO parties were organised during later lockdowns. Meanwhile Ofcom SCC NoVs had grown to 241 issue.

### **8.3 Propagation Studies Committee (PSC)**

PSC cover a wide range of activities and research. MetOffice data access difficulties and a beacon rebuild to succeed former RAL hardware were discussed.

## **9.0 Group reports**

Murray thanked the following for their reports which were noted.

### **9.1 AMSAT-UK**

Presented by Graham G3VZV. Some concerns over LoRa and commercial cubesats noted

### **9.2 BARTG**

Presented by Ian G4EAN.

### **9.3 BATC**

Presented by Noel G8GTZ – again showing some good progress in DATV developments. New OFDM variants are being pioneered (vs QPSK which has been more common so far)

### **9.4 CDXC**

See report. CDXC expressed their thanks for the effort going into EMF tools which will help their members who will need to show compliance as the May and November 2022 dates occur.



## **9.5 FOC**

Dean G4WQI reported on activity, but also QRM levels as well as HF OTHR interference

## **9.6 G-QRP**

Peter G3XJS presented the G-QRP report. Difficulties with QRP CoAs and support for better alignment on 5MHz were noted

## **9.7 RAYNET-UK**

Greg G0DUB highlighted activity on HF thru to QO-100 as well as more usual VHF/UHF use.

## **9.8 UK Microwave Group (UKuG)**

The Covid impact on microwave roundtable meetings had been a challenge, but take up of 122GHz equipment was very encouraging – the Fraser Shepherd Award was also for 122 GHz

## **9.9 UK Six Metre Group (UKSMG)**

Chris Deacon noted the increase in manmade noise in the 50 & 70MHz bands, as well as the strategic gap left by the demise of GB3RAL on 40/50/60/70 MHz

## **9.11 VMARS**

Tony G3YYH, expressed concern about data interference to AM transmissions on 3615 kHz.

## **Date of Next Meeting**

- Saturday 5 November 2022 - format to be determined.
- Consideration will also be given to an interim mid-year one as well