

REPORT TO RSGB SPECTRUM FORUM JANUARY 2024

Introduction to RAYNET

RAYNET-UK encompasses all groups involved with voluntary and emergency communications in the United Kingdom. Currently this involves around 1600 volunteers around the country organised into groups aligned with Local Authority areas. Emergency Planning decisions in the UK are generally taken at the local authority level meaning that the requirements placed on RAYNET can vary widely around the country depending on local demands. This may therefore vary from simple VHF/UHF analogue voice through to deployment of microwave mesh networks.

Spectrum Utilisation

RAYNET continues to make use of all the allocations provided within the RSGB Band Plan to meet the needs of the User Services. This may be due to capacity constraints in a particular band or because of high noise levels generated by other spectrum users at event sites.

The ability to use the 70cm 'wide split' frequencies (flexed by $\pm 12.5\text{kHz}$) for Talkthrough purposes together with non-standard frequency splits between existing frequencies in the bandplan noted as 'May be used for Emergency Communications' continues but many groups are actively looking at using alternative bands such as 50 and 70MHz to relieve congestion on the more popular bands though this is running up against the challenges of convenience and cost.

Use of our dedicated DMR server has continued to grow, allowing more members to develop their digital mode experience, primarily by linking local low power hotspots to the system. Over 300 members are now registered on the server with an active national net on Sunday afternoons. There are valid comments that this is overdependent on the networks we are meant to replace in an emergency but the concept is that we use the system to develop the working methods to deconflict talkgroup choices etc. when groups come together in more ad-hoc networks. Interest is growing in mesh networking but again the challenges are more in network configuration rather than RF linking so getting the setup correct using internet tunnels allows widely scattered pockets of interest to work together.

Spectrum and licensing challenges

The year felt dominated by the Ofcom consultation on updating the amateur radio licence and the wider threats to 23cm at the World Radio Conference.

23cm is important to some RAYNET groups as that band offers great advantages in tunnel communications, ironically where the perceived clash with GNSS services is least likely to happen. The outcome of the WRC was a great result for the hobby and we truly appreciate the efforts of the IARU volunteers at WRC-23 and particularly Barry Lewis G4SJH in achieving this outcome but recognise that the work is not complete until CEPT comes to some conclusions.

The Ofcom consultation has caused a lot of concern in the emergency communications community, some possibly unintended with drafting issues appearing to reduce the number of User Services. The co-operation of RSGB in facilitating a meeting with Ofcom to discuss the issues surrounding Talkthrough operation and offering to work together in facilitating temporary repeaters in future via a specific block of callsigns is also appreciated.

Greg Mossop
Trustee, RAYNET-UK
19th January 2024