

REPORT TO RSGB SPECTRUM FORUM NOVEMBER 2019

Introduction to RAYNET

RAYNET-UK encompasses all groups involved with voluntary and emergency communications in the United Kingdom. There are currently ~1800 members in a national network of over 100 local groups, who liaise with emergency services, local authorities and other voluntary agencies who could be involved in the integrated management response to major civil emergencies. The groups work with the emergency services and local authority emergency planning units on both live exercises and table-top simulations.

The most visible RAYNET activity is our support to Public Service events, although many groups notify us of their events, not all complete a post-event report but data gathered for the year to date shows RAYNET involvement in 582 events around the country.

Spectrum Utilisation

RAYNET-UK makes use of all the allocations provided within the RSGB Band Plan to meet the needs of the User Services though there is always more focus on 2m/70cm allocations given the large installed equipment base. HF nets operate on 80/60/40m on a weekly basis depending on propagation and the main concerns raised are those expressed by other groups relating to the increasing noise floor on HF. The use of digital modes such as Olivia and JS8call mitigate this in part.

Despite the concentration of Public Service events into the weekends, there are few reported issues between groups over frequency conflicts and these are generally sorted amicably. There was one isolated report of a RAYNET net being contacted for 'points' during a contest but this was also resolved.

In some areas Local Authorities have contacted their RAYNET groups with regard to Brexit planning. To meet the potential need, the 70cm 'wide split' frequencies will be used for Talkthrough purposes but there are fears that the locations planned and the simultaneous demand for those purposes may lead to QRM. Groups are being innovative where possible in the use of non-standard frequency splits between existing frequencies in the bandplan noted as 'May be used for Emergency Communications'. Some have asked whether further wide split frequencies may be made available in the plan. However, given the apparent congestion against other band users it is felt that 'flexing' the current 430.800/438.400MHz pair by ± 12.5 kHz in extremis is likely to be the most acceptable solution to the Forum.

Future Developments

Some RAYNET-UK members are showing interest in the potential for using the QO-100 Narrowband transponder for emergency communications use. Others in the 'New Packet Radio' system developed by F4HDK or the utilisation of low power mesh networking. All driven by the perceived needs of our User Services for faster and more reliable communications and aided by the development efforts of the rest of the Amateur Radio Service.

Greg Mossop
Trustee, RAYNET-UK
14th November 2019