

Title:

Mr

Forename:

John

Surname:

Quarmby

Representing:

Self

Organisation (if applicable):**If you want part of your response kept confidential, which parts?:**

None

Ofcom may publish a response summary:

Yes

I confirm that I have read the declaration:

Yes

Additional comments:

I am active using narrowband modes around 2320 and 3400MHz, and have been using microwave frequencies for amateur communication since 1976. I currently hold the UK record for the longest distance worked by terrestrial propagation on 2.3GHz (1329km) and have contacted stations in 17 countries in Europe. On 3.4GHz I have made contacts up to 1100km and have contacted stations in 13 countries. My amateur callsign is G3XDY. I am retired from a senior role in telecommunications but with no professional radio involvement.

Question 1: Do you agree that it is likely that the benefits to UK consumers and citizens will be greater from the MoD's release of spectrum in the 2.3 GHz and 3.4 GHz release bands than from retaining the current amateur use?:

It is difficult to assign a value to amateur use of spectrum in this range. Removal of access would limit opportunities for experimentation and self training in microwave techniques, which could impact on the availability of future generations of RF engineers in the UK. There is also some doubt about the actual value of this spectrum to the mobile operators, as TDD

services have not been deployed in any meaningful way at lower frequencies, and any usage of this band is likely to only be required after other recently released spectrum becomes congested, this may happen in urban centres, but in much of the UK the release bands will likely lay fallow for many years yet. Ofcom should ensure that the operators make use of spectrum they acquire at the expense of amateur access.

Question 2: Are there current uses in the release bands other than those detailed in RSGB's band plan and discussed in Section 3 of this consultation?:

None that I am aware of.

Question 3: Are there further consequences of removing the release bands from amateur licences that have not been considered in our analysis?:

No

Question 4: There is an option (although not preferred) to remove access to the adjacent bands, as well as to the release bands. What are the consequences of removing access to the adjacent bands from amateur licences?:

The removal of access to adjacent bands would restrict experimentation and self training in this important frequency range. 2.3GHz is particularly useful for small dish moonbounce experiments, as sufficient power can be readily generated and low noise receiving systems are easy to build. Activity levels are increasing worldwide on this band, giving a wide range of stations to test with.

There would also be a financial impact on stations that have already invested time and money in building state of the art narrowband systems for 2.3 and 3.4GHz, as the equipment cannot be retuned and would lose any resale value.

Question 5: Are there current uses in the adjacent bands other than those detailed in the RSGB's band plan and discussed in Section 3?:

None that I am aware of.

Question 6: Are there additional mitigation measures which would provide demonstrable proof that amateurs would not cause interference into LTE in the release bands following the release?:

Good spectrum planning and station siting are important to provide mitigation. Many amateur stations active on these bands are located away from major urban centres, so interference to LTE systems should be very rare. Amateurs will have access to test gear through the RSGB and UKuG to check that their equipment does not radiate signals in the release bands at unacceptable levels. As information on the immunity of handsets and base stations to signals in the adjacent bands becomes available then further mitigation guidelines can be developed, but at this stage the performance of these systems in practice is unknown.

Question 7: Do you agree with the proposed process for varying licences following cases of reported interference and our proposal to vary licences should dealing with the number of reported cases become too onerous?:

Removal of access to adjacent bands would not be proportionate given the limited likelihood of interference. Most amateur operation is low duty cycle intermittent usage with care taken to avoid causing problems to primary users. The exceptions are beacons and repeaters, where a more rigorous regime may be needed to ensure interference is not an issue. This can be achieved using the existing NoV system to set the technical characteristics of repeaters and beacons so as not to cause interference in the release bands or to primary users in the adjacent bands. In the event of a case of interference being ascribed to an amateur, Ofcom already has the power to amend individual licences to restrict operation. Given the low likelihood of interference occurring, this approach is more proportionate than simply removing all access to adjacent bands.

Question 8: Do you agree with our preferred option?:

Ofcom's preferred option is acceptable as a means of preserving amateur access to this part of the spectrum.

Question 9: Are there additional changes to the Amateur Radio Licence which would assist amateur in lowering the risk of causing harmful interference to new uses?:

Ofcom already has the power to vary the terms of individual licences if required, and the existing licence mandates that no undue interference to other services should occur. Improved training and education of amateurs is more important than more onerous licence terms.