

If you want part of your response kept confidential, which parts?:

Personal details

Ofcom may publish a response summary:

Yes

I confirm that I have read the declaration:

Yes

Additional comments:

Statement of Interest and Background

I have worked as a Professional RF/Microwave Engineer for 38 years in the Microwave/Telecom industries both in product design and manufacture as well as cellular network design. I am therefore well versed in the technical challenges of RF co-existence. I have also chaired the DTI (pre-Ofcom) Radio Systems Working Group.

I am also a radio amateur licensed since 1972 with a particular interest in VHF and above operation. I have radio equipment operating in the VHF/UHF and Microwave bands 144MHz through to 76GHz.

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?:

. The question implies a numerical advantage in removing amateur radio operators from the Release Bands and transferring to consumer usage. Using the same logic it would make sense to pave over large areas of green belt for city dwellers. This is therefore a loaded question that pre-supposes successful deployment of new networks.

In a free and open society there should always be allowance for minority interests and especially where they can easily co-exist. It can be conversely argued the Mobile Services industries already have enough spectrum.

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?:

I am not aware of any other activities in the Release Bands.

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

The most significant impact I am aware of is the immediate loss of present ATV operation which some radio amateurs have made significant personal investment in equipment. As with

other user frequency removals, perhaps Ofcom should investigate some form of compensation for those directly affected.

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?:

Removal of Adjacent Band Operation is not warranted as there are no cases of co-existence problems. This would be an unacceptable option.

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?:

I am not aware of any other activities in the Adjacent Bands.

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?:

Demonstrable proof of interference to LTE requires LTE equipment to be made available for tests. In my professional experience with fixed microwave systems, co-existence with space frequency separation is entirely plausible and usually desirable. There will be many potential different scenarios and no one solution fits all should be pre-supposed. Assuming LTE systems are well designed to good RF discrimination performance, there should be no issues. It would be most helpful to have sites using the Release Bands for LTE in a public data base to increase awareness.

In addition radio amateurs have regular "workshops" with access to professional test equipment and will be able to confirm they are clean from spurious emissions outside the intended narrow bandwidth.

There has been a recent example of successful co-existence interference actively resolved by amateur radio operators. A CAA ground radar system in the south east of England operating at 1300MHz +/- became unlocked from its frequency reference and generated widespread interference. Amateur operators triangulated the radar site and informed the technical division of NATS. They were unaware but actively sought a fix and resolved the interference for all parties concerned. Amateur operators are always keen to participate in problem resolution and have the necessary skills and equipment.

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?:

As discussed above, cases of interference will be individual and should be treated as such. I believe the normal RFI process with individuals ceasing operation under NoV and asked for their progress on resolution. Varying licences is a broad-brush solution not appropriate considering the likely number of amateur operators at these frequencies.

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

Yes since the Consultation thus far has almost certainly concluded that the Release Bands will be removed from amateur operation, I agree that Adjacent Band operation is our only option.

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?:

As before, there are no proven changes to the Amateur Licence that would lower the as yet unproven interference potential. In any case the current Amateur Licence already refers to not causing undue interference.