

Representing:

Self

Organisation (if applicable):

What additional details do you want to keep confidential?:

Keep name confidential

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

Ofcom may publish a response summary:

Yes

I confirm that I have read the declaration:

Yes

Additional comments:

I have held an amateur radio licence since 1978, and until retirement was a professional academic physicist. My interests in these bands are experimental; my aim is to build and test equipment across the range of microwave bands accessible to radio amateurs, and publicise my work and ideas to encourage more people into the more technical aspects of amateur radio.

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?:

Yes - this is unarguable in terms of numbers alone.

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?:

Not to my knowledge, though there could be some other uses because amateur radio, especially at these higher frequencies, is an experimental interest.

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

I am not convinced that full consideration has been given to the wide variety of amateur radio activity as a self training exercise. Much of my amateur radio activity is about the design and construction of equipment, and often reporting on this (though the internet or magazines and

newsletters) to other radio amateurs. The actual operation of the equipment occupies a much smaller proportion of the time I spend on amateur radio.

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?:

This would remove access to radio amateurs to two very important steps in the frequency spectrum, leaving a big gap between 1.3GHz (where design and construction of equipment is challenging but not too difficult) and 5.7GHz, where very different techniques need to be used. The access to many different frequencies, even if only a relatively small bandwidth of each, is extremely valuable to radio amateurs in terms of learning how to design, build and use equipment for these frequencies.

This would also effectively cause financial loss to radio amateurs, some of whom will have invested well over £1000 on commercial equipment for each band.

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?:

Not to my knowledge, though there could be some other uses because amateur radio, especially at these higher frequencies, is an experimental interest.

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?:

As little commercial equipment is available specifically for the amateur bands at these frequencies, and the commercial equipment available is modular and so needs to be assembled into a working station, amateurs working at these frequencies tend to be much more technically aware than, for example, those using commercial equipment on the HF and VHF bands. In the UK amateur radio microwave community, there are many amateurs who own or have access to excellent test equipment which can verify the correct operation of amateur equipment for these frequencies; these resources are already in use, but should be built on if further demonstrable proof is needed. The UK Microwave Group has a list of people to whom reference may be made for help with technical issues; this could easily be expanded.

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?:

It is clear that even at present the number of cases of reported interference from amateur radio is small; it is not likely to become large in this case given the relatively small number of amateur stations involved. It is important that individual cases are solved quickly, rather than a blanket ban of operation being invoked. Radio amateurs are all too well aware of the many cases of interference to their operation that are caused by other users, especially where at present their use of the bands is secondary, but also unintentional interference from poorly designed consumer equipment.

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

In general yes, though the loss of access to so much bandwidth is to be regretted. At present my personal operation does not involve wide bandwidth uses, but I would like to have the option to try different and possibly much wider band modes in future.

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?:

It is important that the current power limit is maintained especially for EME (Moonbounce) operation, although one option might be only to allow full power with the directional antenna specification set so that the amount of effective power radiated below (say) 5 degrees altitude were limited.

For terrestrial amateur communication relatively high powers approaching or even up to the licensed limit could be currently in use on these bands by a few radio amateurs, which obviously makes distant contacts much easier. It is arguable that a somewhat lower power limit could be acceptable if necessary; stations submitting contest logs for the RSGB UK Activity Contests in these bands currently use powers of up to tens of Watts rather than hundreds of Watts. However, UK radio amateurs would not find this very acceptable if it were to be a UK-only action.