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:

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?:

Possibly, but amateur access to at least some of the spectrum between 2 and 10 GHz should be retained.

This is a leading question, the answers to which ought not to be considered in any report on the consultation. Anybody answering "No" would risk being accused of putting self interest ahead of the public good, which will lead to serious bias in the answers. Its inclusion may well be grounds for a legal challenge to the validity of the consultation.

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 have no knowledge of any other uses.

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

Yes. While amateurs will continue to cooperate with Ofcom, as they did in agreeing to accept restrictions on operation during the Olympic Games, many will feel that Ofcom are in danger of caving in to commercial pressures to the detriment of minority interests such as amateur radio. Ofcom give the impression that the spectrum release will be free for the general public to use, which is clearly not the case.

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 full potential of the radio frequency spectrum in the 2 - 5 GHz region is not known. Over the years, amateur operation have been in the forefront of finding uses of the RF spectrum which professional people thought to be impossible, but later adopted. Removing amateur access completely in this region will preclude any such advances in the future. Examples include the use of HF shot wave radio for long distance communication in the early days, and more recently, the development of weak signal digital modes such as JT65 (which allow reliable communication over relatively vast distances without reliance on vulnerable equipment such as undersea cables and satellites).

Equipment for these bands has usually to be built and many amateurs have invested a considerable amount of time and resources in building equipment, acquiring test equipment to check its performance.

Nowadays, these bands provide a stepping stone for amateurs into the microwave region. Without them, amateur use of the higher bands will be reduced, and with it the danger that the UK in particular will fall further behind its competitors in the field of scientific endeavour.

Amateur TV, which has been forced to higher and higher frequencies over the years because of its bandwidth requirements, will also be seriously impacted, presumably becoming limited to the 10GHz and higher bands.

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?:

It is impossible to provide "demonstrable proof" of events that might occur in the future.

Amateurs have been secondary users of many bands since World War II, and accept the limitations that such access implies. Amateurs will continue to ensure that they do not cause interference to other users in the same of adjacent bands. Providing there are valid technical reasons, amateurs will accept any limitations that Ofcom think necessary.

It is worth pointing out that nearly all users of these bands are members of local clubs and national organisations which have access to equipment such as spectrum analysers and power meters which ensure that any equipment built by members is operating correctly and does not produce unacceptable out of band emissions. My own local club has access to two 24GHz spectrum analysers and professionally trained members with years of experience in operating them. Very few people can become active on these bands without being members of organizations having the relevant technical expertise and equipment, and obviously, amateurs

will take even greater care to minimize interference to other users of the spectrum when such interference is more likely. In the days of analogue TV, interference to domestic televisions was a major issue, and amateurs usually would fit filters to transmitters to minimize any out of band radiations, and developed a whole range of filters to fit to affected receivers to overcome poor design in the receiver. Amateurs published many books and articles on the subject. There is no reason to assume that amateurs would not be able to deal with any interference issues resulting from the current proposals.

Given the amount of money that commercial operators are apparently willing to pay for unencumbered (as you put it) access to the release bands, it does not seem at all unreasonable for Ofcom to ask that they ensure that their LTE base stations are adequately immune to potentially interfering signals in the adjacent bands. Given that the MOD is apparently intending to move some of its services into the adjacent bands, such immunity is presumably necessary to avoid litigation between a major commercial operator and the UK government.

Amateurs would of course be willing to fit filters to their equipment to keep out of band radiations to within Ofcom specified limits, providing such limits are realistically achievable and are not imposed simply to make amateur operation practically Impossible in an attempt to compensate for poor design of the commercial equipment, be it base stations or handsets.

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?:

Absolutely not. Ofcom has a duty to ensure that licensed users of the spectrum are able to continue to use it, irrespective of their commercial might. This suggestion is similar to suggesting that an activity that is currently illegal should be made legal solely because the police find it "too onerous" to enforce the relevant law.
The amateur licence already contains provisions that a station must cease operation on demand by an Ofcom official, and that a licence may be varied in order to mitigate specific interference issues. There would not seem to be any valid reason why any further powers should be necessary, especially powers defined by legally vague terms such as "too onerous" about which lawyers could argue for many hours.

I cannot help feeling that any such provision is proposed to provide an easy route to completely remove amateur bands in the future in response to commercial pressure. If so, it is contemptible. If commercial operators are willing to pay the vast sums hoped for in a spectrum auction, I cannot see why the government could not be able to adequately fund Ofcom to deal with relevant interference issues.

Having said that, most relevant amateur organisations would be willing to work with Ofcom to resolve any interference issues, be it in the form of manpower, equipment, or information relating to amateur activity at relevant times. Although the relaxation of the rules on station log keeping are generally welcomed, few would object to a requirement to keep a log for operation in the adjacent bands. Given the potential risk that a major operator may try to grab more spectrum by alleging serious interference by amateur stations when no such interference exists, or is due to defects in their own equipment, it may even be desirable for amateur stations to keep a log.

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

Yes, providing that any new conditions imposed are not such as to make amateur operation in the adjacent bands practically impossible.

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?:

No. The existing licence conditions would appear to give Ofcom all the powers that they need.