Title:

Mr

Forename:

Jeffrey

Surname:

Easdown

Representing:

Self

Organisation (if applicable):

What additional details do you want to keep confidential?:

No

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:

Statement of Interest

I have held a Full (Advanced) Amateur Radio Licence since 1978. I am also a professional engineer, specialising in Radio Frequency and Space Applications.
I have been a member of the IET (formerly IEE) since 1987. I am a member of the UK Microwave Group and the British Amateur Television Society. I am also a former past President of the Medway Amateur Transmitting and Receiving Society and a current Committee member of that group.
I design, construct and use equipment for the amateur microwave bands for extension of knowledge, experimentation and communications.

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?:

United Kingdom radio amateurs currently benefit from the use of these bands and removing them will deny those citizens these benefits. Considering the proposed release of the bands, the interests of all users need to be taken into account, including possible coexistence. However, it is agreed that spectrum should be managed in the best way possible for UK Citizens in general.

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?:

Emergency Communications provided by Radio Amateurs, eg voice, video and data links, in the case of a regional or national emergency.

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

Loss of the Release Bands will limit amateur activity further, as some modes requiring wider bandwidths will no longer be possible. As a result, it may also preclude the development of future wide-band modes that may be of benefit to society in general.

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 Release Bands and adjacent bands effectively would remove Amateur access. Many Radio Amateurs are also professional engineers and have gained valuable experience from the use of these bands. The loss to training may not have been evaluated fully-enough. The bands in question provide a unique transition in the spectrum in many technologies, including components, systems, antennas and propagation. The loss of the bands would result in the removal of a valuable Amateur asset and the nullification of significant personal investment in many cases.

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?:

The bands in question benefit from an RSGB band plan that accommodates many modes. However, not all users are RSGB members or indeed may follow the Band Plan and these users may occupy the Adjacent Bands from time to time.

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?:

Adoption of a suitable standard by the Amateur Stakeholder groups, eg RSGB , UK Microwave Group, BATC, etc of an acceptable out-of-band spurious mask for amateur-built/operated equipment. This would allow primary Release Band users to take this into

account in their system design. The solution could be implemented at the Amateur station by means of filtering of the RF output. For applications such as LTE base-stations, these would need to have sufficient front-end linearity to take into account potential flux densities from other band users, in order to mitigate any possible reception effects [Of course, other signals than Amateur may already dictate this practice anyway.] Also, effects on LTE could be mitigated by using the optimum modulation and coding scheme for their system. If anything, it is more likely that LTE spill over may affect adjacent band users, as Amateur operators often work at the limits of reception rather than with large margins.

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?:

What is the definition of 'too onerous' one, ten, or what number of instances ? In practice it will be a function of the resolve demonstrated by relevant bodies in addressing these issues, if arising at all.
The Amateur Licence already contains provisions to address interference and I do not see any immediate need to change this given the evidence so far, with circa Amateur 60,000 licences and statistically a very low number of interference instances by comparison.

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

Whereas loss of any Amateur frequency resource is not desirable, retention of at least part would be. And in that case, the OFCOM preferred option would be acceptable if the alternative is complete loss of bands.

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 mentioned in answer to question 6, out of band spurious masks would be useful. A guideline to this may be the relevant ETSI RTTE Specification, although operating techniques may also affect this, eg over-driving of power amplifiers. It is perhaps more the case that the RSGB could be more pro-active in deriving standards for operation in our ever-more crowded spectrum.