#### **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 been a licensed radio amateur for nearly 40 years. Skills I have learnt as a radio amateur has helped me in my profession as an engineer.

As a radio ham I have particular interest in amateur tv, 2m, 70cm and the microwave bands. Over the years I have built much equipment - and its performance often exceed professional standards

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 argue for amateurs to retain the whole of it current allocation but I am confident we can work alongside other users and not cause interference so would plead for a suitable amount of spectrum to be allocated for further research and development.

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?:

No

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?:

With both the bands under question it is relatively easy to construct transmitters, receivers and antennas. To lose the allocation altogether would see me lose equipment to the value of about £1000 not to mention the hours building and debugging equipment. Many others have invested significantly more. Much of this can not be recycled for other bands. At present there is very little equipment on the surplus market which could be adapted for amateur use on higher bands. Despite it not being a "preferred option" I fear we will get these bands taken away in total sooner rather than later. I hope that Ofcom can continue fruitful discussions with the RSGB, BATC, Microwave Society etc to represent the value amateurs offer in terms of innovation.

#### 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?:

Amateurs do a lot of research in areas that are not immediately obvious. These bands offer many opportunities to study marginal propagation which is neither "UHF" or microwave. This knowledge base helps many of us that are engineers to further our professional research. To lose this would stifle innovation.

# 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?:

Most radio amateurs pride themselves over the technical specification of their equipment often exceeding commercial gear. We have the expertise to design additional filtering and minimise energy on adjacent channels. Indeed many amateur radio and tv repeaters only work because of the technical attention to detail - to have noisy transmitters or broadband receivers would mean our kit just wouldn't work in the field.

If the LTE radio kit is designed properly from the start and has robust band-pass filtering incorporated and the same degree of attention to rf performance as amateurs take there shouldn't be a problem

## 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?:

I feel the hobby and its national societies can self-police any issues which may arise rather than by a blanket proposal . Many amateurs are highly professional engineers who are more than willing to help others. We also have access to good quality test equipment and can readily make additional filtering.

Potential problems won't have a one solution suits all but I believe we can co-exist.

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

It is the least worse option. Continuing access to these bands is highly desirable for continued self training, experimentation and further research and development.

## 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?:

The amateur licence already contains robust clauses to minimise interference to other services. We are also only allowed to use the minimum power necessary for efficient communication.

It might be worth looking at adopting opposite aerial polorisation to the LTE kit and possibly lower limits to eirp,