

**Title:**

Mr

**Forename:**

Peter

**Surname:**

Blakeborough

**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?:**

Nil

**Ofcom may publish a response summary:**

Yes

**I confirm that I have read the declaration:**

Yes

**Additional comments:**

Personal statement.

Professionally, I have worked as an engineer, largely in broadcasting but also in manufacturing for the world market. This included the TV broadcast industry and RF and microwave field for in excess of 40 years. Member of the Institution of Engineering and Technology, C Eng MPhil. MIET.

As radio amateur I have particular interest in Digital ATV and the higher microwave band to 76Ghz.

Currently the President of the BATC and member of the RSGB Spectrum forum

**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?:**

Q1. Spectrum is a finite resource. I agree the process of reviewing and re allocation to give the most productive use of the bands.

**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?:**

The retention of the segment 3400 to 3410 would provide bandwidth to allow DATV operation as a repeater output.

Filtering technology and choice of modulation bit rate should give adequate margins. Repeater input could be provided on a separate 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?:**

I would strongly support an allocation in 2.3GHz band for experimental applications such as satellite and EME work. The introduction of new engineers and technicians to real application has benefits to wider industry.

**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?:**

Proper band planning by the RSGB and special interest groups, such as UKuG and BATC, in conjunction

with the Primary User and other interested parties has to be at the heart of mitigation.

It may require some further development, particularly with

respect to the linearity of amateur television repeater transmitters, With regard to the receiver performance of LTE base stations, providing extra low-loss bandstop filtering to reject large signals in specific areas of the adjacent band is not particularly difficult. The cost to the system operator would

be marginal, particularly if the protection measures were included at an early point in the system planning. I believe

that it could be acceptable, in this case, to specify the maximum adjacent channel power (ACP) performance of

amateur transmitters to assist with the mobile operator's system implementation. This would also be significant to the Primary User and to other services sharing the allocations. It would not be particularly onerous to add frequency domain filtering to the output circuitry of an amateur transmitter to minimise energy radiated a few MHz away from the centre frequency. The amateur fraternity has the equipment and expertise to design, make and test suitable filters.

**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?:**

No I do not agree with general variation clause to deal with a local issue. There has long been a mechanism within amateur radio licensing by which the licence schedule has been individually modified in order to solve specific interference problems. Given that, it would be difficult to justify a global modification to licences as necessary to solve specific interference problems. It is likely that amateur radio organisations, such as the UK Microwave Group (UKuG) and the British Amateur Television Club (BATC) under the auspices of the Radio Society of Great Britain (RSGB) could provide first-line investigation of reported interference to Primary Users. As noted in a reply to previous question, many amateurs operating at these frequencies are, in reality, very experienced professionals.

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

No I do not agree with the preferred option. Continued amateur access to this frequency range is highly desirable from considerations of self-education and experimentation. The self training aspect of amateur licences has, and will benefit UK industry by providing new personnel with RF knowledge.

**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 Amateur Radio Licence already contains clauses requiring amateurs not to cause undue interference to other services. It is difficult to see any variation to the current Licence which would reduce the risk of causing harmful interference.