

## Response to Public Sector Spectrum Release

### Amateur use of 2310 to 2450 and 3400 to 3475 MHz

I am responding to this consultation as a radio amateur that operates an amateur television station, which is a particular interest of mine within the hobby. My call sign is G8RRHQ and I am a member of the RSGB, and BATC.

The removal of the specified parts of the above bands has to be taken in the context of what has happened elsewhere on bands also used for this purpose (Amateur TV, henceforth called ATV). Clearly if we had plenty of alternative frequencies to use with similar, or better characteristics and range, loss of the above would have less impact on us, than if we only had use of the above bands. Whilst you quote the RSGB band plan as having 315 MHz of spectrum allocated to ATV, that does not take into account that it is almost all on a secondary basis, and much of it is unusable. Your quote does not therefore describe a practical reality available to us at all. Recently new adaptive technology radars installed by the primary user, the MOD, along the north/eastern side of the country, itself as a response by the MOD to offshore developments such as wind farms causing problems for radar, has resulted in a much greater level of interference to us as secondary users of 23cms. As a consequence of this repeater inputs on the lower part of 23cms band that were once useable (\*), are now in many areas unusable.

Our recent problems with 23cms from new radars has therefore meant that ATV operators are reluctantly looking to use higher ATV repeater input frequencies instead of 23cms, just at the time we are told we are likely to lose sections of the next highest frequency available to us on 2.3Ghz and higher. The phrase double whammy comes to mind. The MOD's release of spectrum, which we managed to share with them for many years without interference, ought to have contained some small primary section for amateur use, or even a section within the adjacent bands when reorganised, particularly as the communications industry has just benefitted from the 'digital dividend' at the top of the UHF TV band (and we didn't).

If we are still to use the bands adjacent to the 2.3GHz release etc we need to have a clear idea of what constitutes interference, who defines and measures the interference, and what are the implications for other amateurs using such frequencies. If some new service complains of interference from us, will there be any tests on the equipment being used by them to see if that complies with a specified level of immunity from interference, and indeed, verify we are in fact the cause. Do we all get shut down across the country as a result, or asked to reduce power, and so on. What level of investigation becomes onerous? It is a phrase that is quite subjective. The only thing we do know at the moment is the time scale in question for shutting down amateur use if you state we are causing interference.

The ATV community needs stability to pursue our hobby, as we invest time and money in doing so, only to find we are no longer able to do so as the next commercial venture comes along requiring 'airspace'. Your talk of citizens, consumers, and so on ignores the reality that defines what is occurring, which is that of manufacturers, markets, and profit being the driving force behind the changes. Ofcom's role in serving citizens should be to give some degree of protection to non commercial operators, and preserve a small, but **viable** part of the spectrum for amateur radio and television. That is to mediate between the interests of the citizen and the consumer which are in fact not the same. (Consumers do not exist independently of markets, manufacturers, profit, and are indeed, a product of them. On the other hand the citizen defines a certain relationship between the individual and the state with

the emphasis towards rights. It is the tension between these two you must find a balance between that does not simply follow everything to do with profit, whilst ignoring the interests of the citizen)

## Questions and Answers

### The release bands (2350-2390, 3410-3475 MHz)

*Q1. 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?*

A1: Not entirely, as I have indicated above the released bands could have had benefit to all, with some smaller part preserved fully for amateur use, or alternatively changes to adjacent bands could have been made to accommodate amateurs on a basis where they are not threatened with band removal every time some new development occurs. We need 'security of tenure', as we spend time and money on our hobby. Your question invites a yes or no response, and that frankly is far too simplistic, and ignores the wider context!

*Q2. 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?*

A2:

*Q3. Are there further consequences of removing the release bands from amateur licences that have not been considered in our analysis?*

A3: See my comments regarding the 23cm band, and pressure being put on us there to move to higher frequencies.

### The adjacent bands (2310-2350, 2390-2400, 3400-3410 MHz)

*Q4. 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?*

A4: Removing access to the adjacent bands is a most unwelcome move, or suggestion, and has ramifications for other bands we use. I can only wonder how far such proposals are going, and how far in frequency terms do we have to go to get away from these new users? Is everyone else using the adjacent bands also going to be examined in such terms? Removal would clearly significantly limit the use of ATV.

*Q5. Are there current uses in the adjacent bands other than those detailed in the RSGB's band plan and discussed in Section 3?*

A5:

*Q6. 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?*

A6: This is a strange question, in that how can you provide **demonstrable proof** concerning extra mitigation measures when LTE etc does not exist yet. One of the factors for demonstrable proof is missing. It can only remain conjecture at this stage prior to LTE etc. One can only point to measures like good bandpass filtering, checking our equipment for stray emissions, and so on, as we know little of the other side of the equation, i.e., the parameters of the equipment we might cause interference to, and how that might happen. If one knew more of that it might be possible to have a better idea of how interference to it could be avoided, i.e. is it simply a matter of power, type of transmission and so on. Clearly there needs to be proper detailed planning of band usage involving all parties concerned to see how we might best coexist.

*Q7. 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?*

A7: This is frankly too vague and woolly, and far too subjective. It should not simply be based on reported cases being too onerous numerically, but cases that are verified as such, i.e. the interference is established to be caused by amateurs, and not a batch of faulty LTE products, or enhanced propagation etc. I have also dealt with this question above.

*Q8. Do you agree with our preferred option?*

A8: The preferred option is the best course to adopt given there are so many variables yet to be decided (however, it represents the best of a bad job as far as we are concerned). Space for amateurs should be actively examined in the adjacent bands when things become clearer in the future. Also, space for ATV should be considered on the lower bands. If we had been offered an alternative, the loss of higher frequencies would have been more tolerable. If more of our current Freeview TV band is reclaimed, could we not be considered for a small part of that to give sufficient bandwidth for digital ATV, or even an extension to 2 Meters as per ITU Region 2?

*Q9. Are there additional changes to the Amateur Radio Licence which would assist amateur in lowering the risk of causing harmful interference to new uses?*

A9:

(\*) I am sure the keepers of GB3LO, GB3TN, GB3VL will verify my comments on the increased prevalence of radar if asked, along with many others similarly affected. It has made 1248/9Mhz quite unusable in many parts of the country.