

Response to OFCOM consultation questions

“Spectrum Framework Review – A consultation on Ofcom’s views as to how radio spectrum should be managed”, 23rd November 2004

By way of background information, I am a licensed radio amateur with the UK callsign M0KGGK. As a result, the responses focus on the application of the Spectrum Framework Review to the amateur service.

Q1: Are there any other major medium- to long-term spectrum management issues that this review should be considering? Are there any other significant technological or market developments that this review should be aware of when developing its thinking?

A1: A medium to long term view should allow space for the development of emerging and undiscovered technologies, particularly those that use higher bandwidths than is currently the case. It will be easier to plan for the space now, than to ‘open it up’ later – particularly as the development of a new technology can proceed at a faster pace than the mechanisms surrounding the control of spectrum can react.

Q2: Do you believe it is useful to publish a compendium of issues? How frequently should it be published? What information should be included?

A2: Yes – a compendium of issues would be useful if circulated to stakeholders on a quarterly basis. Useful content could include detail of existing allocations, planned allocations, and any information from external bodies, e.g. ITU.

Q3: Are there any other issues of sufficient significance to merit mention in this document?

A3: From an amateur radio perspective, three items are of immediate concern, namely:

- (a) The use of broadband over power lines which has caused substantial and sustained interference to amateur radio communications in the US during trial periods. Despite repeated requests, and even legal action, the power companies in the US have demonstrated that they are either incapable of, or unwilling to, control unauthorised spectral emissions.

The use of such technology in the UK would, in my opinion, be even less appropriate due to the higher population density and the advanced penetration of broadband over copper over recent years, even to very remote parts of the country.

- (b) The use of an unlicensed amateur service would raise significant issues, these being highlighted elsewhere in this response.
 - (c) A more positive approach to international matters. From 2.5.1 of the consultation document *“It is important to stress that while the ITU’s remit is to ensure such inter-country cooperation; nothing in the regulations can constrain each country’s freedom to regulate as it wishes”*. This could be interpreted in a number of ways, one of which is a move away from international agreement. Maybe Ofcom need to consider the wording to make the intention clear, rather than leaving the reader to make assumptions.
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Q4: Are there important lessons to be learnt from experience in other countries that is not addressed here?

A4: Please see note on BPL in A3(a) above.

Q5: Do you agree with Ofcom's intent to maximise the use of trading and liberalisation?

A5: No.

While maximising trading will increase revenue to the exchequer, please bear in mind the need to have spectrum available for UK amateurs that is in general agreement with those in other countries. Radio amateurs are not billion dollar corporations and are not in a position to engage in the arena of spectrum sales.

Amateurs use the spectrum for experiments in technology and propagation, and in doing so gain skills which increase their capability within industries related to communications and technology.

Liberalisation is another phrase for 'absolving responsibility'. It is my firm view that all spectrum in the UK should be tightly managed and policed by the government, or a direct agency of the government.

Q6: Are there other areas, apart from those identified above, where trading and liberalisation should be restricted? Are there areas identified above where you believe the trading and liberalisation could be fully implemented?

A6: The amateur service is covered as a restricted service in Table 4.1

Q7: Do you agree with Ofcom's approach to providing spectrum for licence-exempt use?

A7: Any licence-exempt use in general should adhere to clearly defined performance standards with regard to interference, and be appraised by Ofcom on a regular basis.

Licence exempt use is simply not appropriate to the amateur service. Many enter the hobby from a non-technical background, and simply do not have the skills or experience to operate a transmitting station "straight out of the box" without the risk of interference to others.

The current structure (at the foundation level) before allowing a licence to transmit, enforces:

- Training
- Examination
- Use of type approved equipment

These three items provide some basic safeguards against interference with other users and services, and should not be dispensed with.

Q8: Is Ofcom's proposed methodology to estimate the amount of spectrum provided for licence-exempt use likely to deliver the right results?

A8: While some caveats have been highlighted in the "Measuring Spectrum Usage" summary, it focuses on transmission of signals in the UK. Amateurs with transmitting licenses (and indeed short wave listeners) may spend a large proportion of the time listening for weak signals originating from the UK or overseas. These may be of an insufficient magnitude to register correctly on the measuring equipment.

Furthermore, amateur experiments are taking place to resolve weak signals using computer signal processing which appear below the noise floor. This is another example of where today's amateur experiments are shaping the technology of tomorrow.

Q9: What is the appropriate timing and frequency bands for making available any additional spectrum needed for licence-exempt use?

A9: No comment..

Q10: Do you agree with Ofcom's longer term proposals for spectrum trading?

A10: It is too early to say, as the document covers a wide range of issues, many with far reaching implications

It would be wise to consider feedback to the consultation document in general before making medium or long term strategic plans.

Q11: Is the approach set out here, and in Annex H, for developing technology-neutral spectrum usage rights appropriate? Are there alternatives?

A11: Within the flexibility of a technology-neutral environment, there still needs to be a standard, or set of standards, by which spectrum users can operate to prevent chaos.

Q12: Should Ofcom do more to resolve interference?

A12: Yes. Ofcom need to take a highly visible approach on monitoring interference, responding to complaints, and enforcing compliance.

Q13: To what extent should Ofcom intervene in promoting innovation?

A13: At a level sufficient to prevent innovation from being stifled, although this has to be balanced out by restrictions in place for the greater good. It is something that is constantly changing, and needs to be reviewed on a regular basis – there is no straight answer on this one.

Q14: Do you agree with Ofcom's proposed approach to harmonisation?

A14: The Ofcom approach needs to be less UK-centric than it is now, as observed in answer 3(c).

Q15: Can you foresee any problems with the proposed approach to harmonisation other than those listed above?

A15: Again, less of a UK-centric view.

Q16: Do you agree with Ofcom's proposal to continue with division by frequency as the primary method of dividing the spectrum?

A16: Yes.

Q17: Is Ofcom's approach of not Intervening to mandate entitlements in time appropriate?

A17: No. The use of cognitive radio systems may cause interference if colocated with amateur bands for reasons detailed in A8.

Q18: Do you agree with the RIA?

A18: No. There is too much emphasis on the financial aspects, for example section E5 states *"Because most of our proposals reduce regulation, there is little cost for users."* This statement is immediately followed by *"Benefits ... could be in excess of £1bn per year."*

Clearly, this money will end up being paid by consumers in one way or another, who are unlikely to view it as a 'benefit'.