

## Spectrum Framework Review

### Consultation questions

**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) Ofcom should allow scope for future development of new technologies that may not have been introduced as yet. Consideration for the management of the spectrum for the latest development should also relate to the bandwidth it requires, thus allowing space for new technologies. To just release spectrum without considering future developments and technologies will limit progress and is short sighted.
- A1(b) Amateur Radio has been the starting place for many innovative mode of communications and career in electronics. It has a wealth of radio related expertise and in time of emergency a voluntary resource that can be relied on to be available, any time (and at no cost).

**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(a) Yes
- A2(b) Every 3 to 6 months, and allowing time to digest the contents and make an informed response on the issues raised.
- A2(c) Information should be included informing the spectrum user of what is planned, by whom, how it fits in within EU, ITU and World harmonisation, taking note of who has a primary allocation (even those in a listening mode only - Radio Telescopes). Radio waves are no respecter of borders even VHF and UHF ranges are over the horizon and beyond.

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

I feel that the Consultative Document and suggested actions have serious implications to the future of Amateur Radio, that should be regarded as a National Asset. In particular the following are of greatest concern:

- A3.1) The proposal to withdraw from Amateur licenses will encourage a free for all on the present Amateur bands, and undisciplined attempts at communication could result in abuse leading to denial of facilities. A similar approach to licensing Aeronautical Radio should adopted across to Amateur Radio; the same importance and intent applies here to.
- A3.2) The disregard of existing international agreements such as those in force with the ITU and EU can only result in disruption to international amateur communications.
- A3.3) Cognitive Radio will interfere with Radio Amateur stations operations without warning resulting in a major problem to the normal operations within.
- A3.4) Ofcom having agreed the new License structure with an entry level at the current point is sufficient for a broad age range from 8 years to OAP. I see no sense in making it easier as the resulting entry level would fall far short in critical areas, namely safety interference etc. It is correct now, and serves the purpose it was designed for a safe and educated progression form Foundation, Intermediate to Advanced with correct safety / instruction for each licence category gained.
- A3.5) The deployment of Ultra Wide Broadband transmissions, particularly using the domestic power supply BPL, would constitute a major source of electronic pollution / RF smog. And may in time be so bad that loss of life may result do to critical information being corrupted in high RF smog areas.

In the United Kingdom Amateur Radio provides the following National and International facilities.

- A3.6) As a hobby it nurtures a source of interest and expertise and encourages careers in the electronics industries and services. Without this entry point many young people will have never perused a technical based career leading to a slow and potential skill shortage that is being seen in other areas of industry (Teaching, Doctors etc).

- A3.7) Amateur Radio operates and maintains National and International emergency communications networks for disaster relief including Lockerbie air crash, New York's September 11th, and the Tsunami aftermath. Due to the construction of Amateur Radio equipment operation from portable / mobile power sources is possible and the reliance on national power grid / domestic supply is unnecessary. Also its application to assist in countering the effects of a major terrorist attack should be recognized. There are some 60,000 licensed radio amateurs in the United Kingdom and within this an emergency network of volunteers (Raynet – see Lockerbie air crash).
- A3.8) Amateur Radio overcomes cultural, ethnic boundaries, language and disabilities (Sight, Sound) to allow a multitude of modes communications to be used and developed.
- A3.9) Amateur Radio has been the starting place for many innovative mode of communications and career in electronics. It has a wealth of radio related expertise and in time of emergency a voluntary resource that can be relied on to be available, any time (and at no cost).

**Q4:** Are there important lessons to be learnt from experience in other countries that is not addressed here?

**A4** I have limited input here, but I am led to believe the USA have only been re-auctioning spectrum after the previous occupiers business has failed. As for the other countries, I know not what is to be gained if you think we should be looking to them.

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

**A5:** In short NO.

**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(a) You have identified areas including Amateur Radio where trading and liberalisation should be restricted but have all ready ignored primary status and allocated to some holy inappropriate application to some Amateur Radio spectrum - 24GHz and 79GHz to start with.

A6(b) Having identified these areas, including Amateur Radio I would answer NO. Amateur Radio is a world wide pass time where the building blocks for all radio related innovation. See A3

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

A7 No, please bear in mind the primary and secondary users on any band. Incompatible systems will lead to much investment being wasted along with aggravation for the new end user. A prime example is the use 433.920MHz for car key fob entry systems. One transmission on the 70cm band (and not necessarily a radio amateur transmission) will render the entire alarm system locked out.

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

A8 No. The threshold of the system you employed limited the results. To measure vacant spectrum against a reference signal of a TV transmitter will put all weaker transmissions down, as if they are just background noise. This will lead to a false conclusion, whilst gratifying to Ofcom's plans, of a vacant and underused spectrum. Also Radio Amateurs only transmit for short time intervals utilising the remaining time to receive a reply that are invariably of a weak signal nature.

**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 No. There needs to be more study from the feedback created from this consultation input.

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

A11(a) No. There needs to be clear guidelines to prevent an uninformed and lawless free for all.

A11(b) No not without the review of the data from this consultation .

**Q12:** Should Ofcom do more to resolve interference?

A12 Yes. Ofcom is the only body that can resolve interference with any enforcement. Ofcom should have regard for the EU position on EMC issues. The withdrawal from EMC testing as an Ofcom department is a backward step. Even the tendering out of this service has serious implications on the validity of the EMC testing standards if Ofcom has no direct control over the methods of EMC testing. Also see A3.1

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

A13 OFCOM should review the situation to ensure that innovation is not held back or ignored on a regular time frame.

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

A14 No. It appears Ofcom has no harmonised approach in respect of EU / ITU or other band users. Do look at the wider picture of what other Radio Regulatory Body's are doing in respect of harmonisation in the EU / World. To just "go it alone" will have consequences on EU co-ordination, equipment costs to the end user and interference issues for all concerned let alone the chaos it will cause.

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

A15 See Response A14

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

A16 Frequency division should be continued as the primary method allocating licences to users.

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

A17 No. The uses of cognitive radio systems and similar technologies have little regard to the Radio Amateur and can cause interference to all bands users. Command and Control management must be implemented to ensure interference issues are avoided

**Q18:** Do you agree with the RIA?

A18 NO. All actions seem to based purely on monetary gain only.