

Please find below the UK Space Agency response to the fixed links spectrum review consultation.

Question 1): Do you agree with Ofcom's proposal to give an 18-month notice period for the closure of the 10.68 to 10.7 GHz band to new SRD deployments?

We agree with the proposal but would welcome a shorter period than 18 months. The 10.68-10.7GHz band is an important one for Earth Observation and is used to measure surface rainfall rate, soil moisture, sea surface temperature and windspeed. These are important inputs to climate monitoring and are used in weather forecasting and by agriculture. The UK has invested heavily in the satellites that use this band through our membership of ESA and EUMETSAT.

Although this is nominally a passive under RR Footnote 5.340, meaning that all emissions are prohibited, the UK decision to allow short range devices to continue to occupy the band has resulted in severe and unacceptable levels of interference being noted over the UK. The UK Space Agency are a member of the Space Frequency Co-Ordination Group (SFCG) and have agreed Resolution SFCG-A32-1

RESOLVES

1. *that SFCG Members experiencing unacceptable interference to either their active or passive sensors operations from emissions originating from another SFCG Member's administration may contact the Delegation Coordinator of that SFCG Member, as identified by the on-line SFCG membership list, for assistance;*
2. *that once contacted, the SFCG Member contacted will assist, to the extent possible, in addressing the problem within their own administration.*

As SFCG members we have been notified of interference over the UK and under this resolution are requested to correct the problem and we therefore very much welcome Ofcom's decision to close the band to new devices.

We believe a much shorter period than 18 months is desirable; manufacturers should be very strongly encouraged to cease using the band and should be incentivised to replace existing devices which may otherwise continue to cause unacceptable levels of interference for many years to come. We would like to see a concerted effort by Ofcom to clean up the band so that interference to Earth Observation missions and the embarrassment this has caused the UK can be eliminated.

There is a misunderstanding risked in statement 2.3 over the nature of interference:

Large numbers of devices are able to use the same frequencies due to their low transmitting power and limited range. By defining the maximum transmit power, along with other characteristics, the probability of them causing undue interference is low.

Ofcom should also note the lessons that have been learned from the unfortunate allocation of 10.68-10.7MHz to SRDs and should not in future license any devices in passive 5.340 bands. The reason "All emissions are prohibited" is because there is no way of knowing if a device that is currently OK will not be a problem in the future, e.g. with changed band use or very high deployment density of devices. Once devices are in the market it becomes extremely difficult to correct any errors. We therefore recommend that no emission be permitted in 5.340 bands. This should include strong regulations on unwanted or spurious emissions, e.g. from local oscillators in satellite receivers and from transmissions in bands adjacent to 5.340 bands.

Question 2): Do you agree with Ofcom's proposal to licence exempt MSS user terminals operating in the 1518 to 1525 MHz and 1670 to 1675 MHz bands?

The UK Space Agency support this proposal which is in line with a CEPT decision. The MSS service is especially important in the UK and is contributing to growth. Major MSS operators are based in the UK and are expanding their capacity into this spectrum. An extension of the license exemptions into the extended L-band will be of benefit the UK. The proposals indicate that the users of the Metsat band will be adequately protected.