

Met Office response to Ofcom Consultation:

Glasgow 2014 Commonwealth Games.

In keeping with a consultation response (and subsequent additional engagement) that we contributed to a previous spectrum planning process (SPGOG) in the run up to the London 2012 Olympic & Paralympic Games, the Met Office would also like to offer its comments on a number of generic and more specific issues pertaining to the forthcoming Commonwealth Games. The Met Office, as the UK's National Meteorological Service, is responsible for providing a wide range of weather forecast and warning services to the public, emergency responders, aviation and a range of other stakeholders across Government, underpinning the protection of life and property. In order to perform these tasks, the Met Office is strongly reliant upon radio spectrum for its radio communications and remote sensing of the environment. In respect of major sporting and cultural events such as the Commonwealth Games, the Met Office's concerns relate to any uncontrolled or inappropriate use of radio that might affect either business-as-usual activities or more event-specific forecasts in the vicinity of the event.

The Met Office would be most concerned by any activities planning to use key meteorological bands, such as 400 MHz (where we operate radiosonde weather balloons, acquiring essential observations of the atmosphere for climate and forecast model purposes) and 5.6 GHz (where we operate the UK Weather Radar Network to detect severe weather and the associated risk of flooding). We have have engaged in COGSPLAG to date to this effect. In the Central Belt of Scotland in particular, we operate 2 such C-band weather radars: at Holehead (outside of Glasgow) and Munduff Hill (near Perth). This observing capability is essential to providing accurate forecasts and warnings for the Glasgow and Edinburgh vicinities. Whilst license-exemption applies to some additional uses of the 5.6-5.65 GHz band (eg – wifi/WLAN, which must operate on a non-interference basis – noting for example comments in Section 5 p28), severe interference to weather radars from unmitigated use of such technologies - either operated illegally or as non-standard versions brought in to the UK (potentially from outside of the EU and thus not compliant with current standards) - can severely undermine the ability of the Met Office and emergency responders to accurately respond to episodes of severe weather that may ultimately affect the Commonwealth Games themselves. We thus call upon Ofcom to ensure that such bands are excluded from any consideration for additional use and that any episodes of interference are dealt with in as similarly efficient and effective manner as was conducted for the recent 2012 London Games.

Please find below the Met Office's response to specific questions raised in this consultation on the forthcoming Commonwealth Games:

Question 1. Do you agree that the most relevant comparator for a top-down approach is likely to be the London 2012 Games? Coordination at the London 2012 Games was generally very good and interference to BAU/other services does appear to have been kept to a minimum. As such, we would agree that using London 2012 as a model for the Glasgow Games seems entirely appropriate.

Question 7. Do you have any comments on the scope for maximising supply by using higher-frequency spectrum? A number of frequencies referenced in paras 7.33-7.40 suggest the possibility of higher frequency use – we would advocate that any use of higher frequencies is made with reference to avoidance of any passive bands used for meteorological earth observation (notably exclusive passive bands as denoted under ITU Radio Regulation 5.340).

Question 17. Do you have any other comments on our assessment and proposals for wireless cameras? The Met Office notes the suggestion in section A3.3 (p55) of use of 5-6 GHz spectrum for wireless cameras. Whilst the second bullet in A3.10 suggests that radar bands (such as 5.6-5.65 GHz) "may be usable", we endorse that Table A3.1 excludes use of 5.6-5.65 GHz (p57).

Question 20. Do you have any other comments on our assessment and proposals for point-to-point links? Again, our general comments re: use of the 5 GHz weather radar band apply and we welcome exemption of 5.6-5.65 GHz from Table A3.2 (p59; relates to point-to-point links above 5 GHz).



Question 25. Do you have any comments on our assessment and proposals for WLANs? WLANs are allowed to operate in the 5.6-5.65 GHz weather radar band on a non-interference basis, thus availability of the band 5470-5725 MHz as denoted in Table A4.5 (p65) is not inconsistent with European Directions relating to WLAN use. However, we would urge that where devices are employed in this band (potentially non-standard) that Ofcom enforcement of interference issues should be swift and conclusive in resolving any problem to the UK Weather Radar Network.

Question 26. Do you agree that licensing arrangements for users covered by the spectrum guarantees should not be subject to a special regime as we have for the London 2012 Games? As commented upon earlier, we believe the London 2012 coordination to have been effective, thus we would endorse any replication of this model.

Question 29. How can interference management be most effective in ensuring the successful running of Glasgow 2014? Are there other measures we should consider implementing? To what extent is your response based on previous experience of similar events? As per our answer to Questions 1 & 26, we endorse use of the model applied to frequency coordination and interference resolution as used at London 2012.

Question 30. Do you have any comments on our approach to test events? We request that the Met Office continues to be informed of details pertaining to any test events through the COGSPLAG coordination mechanism, so that we can prepare for and monitor any potential interference events that may arise.

Any questions or comments recording this recognizes should be contact

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