



BBC response to Ofcom's consultation: *'Proposed measures to require compliance with international guidelines for limiting exposure to electromagnetic fields (EMF)'*

12 June 2020

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Overview

1. The BBC welcomes the opportunity to respond to Ofcom's consultation 'Proposed measures to require compliance with international guidelines for limiting exposure to electromagnetic fields (EMF)' and acknowledges Ofcom's aim to mitigate risks related to EMF and reassure the public.
2. The BBC and its suppliers operate a large number of transmitting systems across the UK and around the world. These include terrestrial broadcast transmitters and satellite uplinks for the distribution of services to the public. The BBC and its suppliers also use terrestrial, satellite and portable transmitting systems in the production of programmes inside and outside studios and for programme contributions from remote locations. In the UK most are licensed under the Wireless Telegraphy Act (WT Act), either directly by the BBC or separately by its suppliers.
3. In line with advice from Public Health England (PHE) and Health and Safety Executive (HSE) guidance, the BBC has processes in place to ensure compliance with ICNIRP guidelines and exposure limits to electromagnetic radiation. This is the case for equipment under its direct control, both permanently installed and temporarily deployed.
4. There are instances where the BBC holds WT Act licences for transmitting equipment operated and controlled by third parties. The proposals require the licensee rather than the operator to demonstrate compliance with ICNIRP guidelines. This will require appropriate processes and additional administrative arrangements. The proposals from Ofcom do not give clear guidance on what level of compliance the licensee will need to demonstrate: for example, whether the licensee needs to hold records of compliance checks itself, or if they can be held by a third party. The BBC hopes that Ofcom will issue further guidance to licensees on such matters before engaging in punitive enforcement (i.e. that a "bedding-in" period be included).
5. For shared sites or a site radiating multiple services it will be difficult to identify a single licensee causing total EMF emissions to exceed limits. Ofcom propose that multiple users of a site co-ordinate amongst themselves to ensure compliance. For these circumstances more guidance is required from Ofcom to avoid ambiguity and agree how co-ordination can be achieved. Guidance is requested for site managers who may not have the relevant EMF expertise on how to provide licensees with the relevant information to ensure compliance with the proposed measures.
6. The consultation proposes compliance with restrictions for general public exposure to EMF emissions in the ICNIRP guidelines. The BBC supports the aim of public protection. However, it is only practicable to make such assessments for those areas where the public has legitimate access. Where equipment is being operated on sites with no

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legitimate access by the general public, occupational exposure limits should continue to apply, in line with HSE guidelines. An example of an area without public access would be a satellite earth station or an Outside Broadcast (OB) compound which is closed to the public as is often the case at football matches or major national events. The proposed compliance with restrictions for general public exposure should be applied where there is legitimate access by the public – and not beyond that boundary.

7. We note from the update on 7th April that the consultation will now reflect ICNIRP's revised guidelines for exposure limits, published on 11th March 2020, though it is stated that the 'basic restriction values have not changed' from the 1998 limits. Ofcom have undertaken to carry out further measurements, specifically whole body exposure measurements averaged over 30 minutes compared to 6 minutes. The BBC looks forward to reviewing the results of these Ofcom measurements.
8. As the proposals relate to all licensed radio equipment, there needs to be particular consideration for short term Programme Making and Special Events (PMSE) use. Examples include Newsgathering and Outside Broadcasts where vehicles may travel to a location for only a few hours and deploy a range of licensed transmitting equipment. The equipment will include satellite uplinks, talkback systems and wireless cameras but typically only the satellite uplink will exceed the 10W EIRP threshold. Operating in public places compliance can be demonstrated for individual vehicles in typical operation with suitable documentation but it becomes more complex when multiple live broadcast vehicles arrive in an ad hoc manner and operate in close proximity at a major event. It will also be more difficult to identify an individual party responsible for compliance. Nominating the last party to arrive as responsible for ensuring compliance will not be viable. The BBC would like to work with Ofcom and other interested parties to agree a reasonable and practical approach to ensuring compliance in these circumstances.

Question 1: Do you agree with our proposal to take steps to mitigate risks related to EMF and be in a position to hold licensees, installers and users to account if issues are identified? Please explain the reasons for your response.

The BBC understands that Ofcom has a legitimate interest in demonstrating that operators are working within international guidelines on EMF exposure to the general public. For locations where the general public have legitimate access we accept that licensees will need to show that there is compliance with the basic restrictions for general public exposure to EMF. Occupational exposure levels are already monitored on sites where transmitting equipment is licensed and operated by the BBC or its suppliers, according to the existing legislation referenced in A2.3. Additional measurements and/or calculations will be needed to assess compliance with general public exposure levels, assessed at boundaries to which the general public have legitimate access.

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Question 2: Do you agree with our proposal (a) to include a condition in spectrum authorisations requiring compliance with the basic restrictions for general public exposure identified in the ICNIRP Guidelines; and (b) that this condition should apply to equipment that can operate at powers greater than 10 Watts?

If you do not agree with this proposal, please explain what alternative measures you think would be appropriate and why.

- a) The BBC accepts the proposal to include a condition in spectrum authorisations requiring compliance with the basic restrictions for general public exposure identified in the ICNIRP Guidelines. The condition should be applied at boundaries with legitimate access for the general public. Occupational exposure levels will continue to apply to those working within those boundaries as set out in A2.3 of the draft guidance on EMF compliance and enforcement
- b) The condition that it should only apply to instances of equipment that are licensed at an EIRP greater than 10W is proportionate. The question refers to 'powers greater than 10W' but for the avoidance of doubt the assumption is that it relates to 10W EIRP as quoted elsewhere in the proposal.
- c) The draft licence conditions state that "The Licensee shall keep, and make available to Ofcom on request, records (including the results of any measurements, tests and calculations) that demonstrate how it has complied with the basic restrictions for general public exposure...". The BBC suggest that this could be given added clarity by being revised to "The Licensee shall keep **(or shall procure that its contracted operator of Relevant Radio Equipment shall keep)**, and make available to Ofcom on request, records (including the results of any measurements, tests and calculations) that demonstrate how it has complied with the basic restrictions for general public exposure..."

Question 3: Do you agree with our proposed guidance on EMF compliance and enforcement? Please explain the reasons for your response.

The BBC agrees with the draft of the proposed new licence condition but further guidance is needed for its application at sites with multiple licensees. Examples range from shared rooftop sites and outside broadcast compounds to large broadcast transmitting stations and satellite earth stations.

The total EMF emissions at the legitimate boundary of a site with the general public will be the sum of multiple licensees. Individual licensees' responsibility for a breach of basic restrictions will be difficult to attribute and their records may be at odds with Ofcom compliance checks if there have been subsequent changes, for example, to the layout of a site. In the case of new permanent installations only the site manager or landlord can ensure that the party who makes the last change to a site is aware they are responsible for ensuring

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the total EMF emissions from the site continue to comply with the basic restrictions. We believe that determining historically who made the most recent change to a site will be unacceptably burdensome to licensees and observe that in some cases, there may be changes of use of surrounding properties, including new public access that may result in increases in public exposure about which we, as licensees, would have no knowledge.

Where Ofcom suspect a breach of the basic restrictions for general public exposure at a site occupied by multiple licensees, the licensees should be required to engage with the site manager or landlord to provide Ofcom with complete and current site and licensee information before appropriate enforcement action is considered.

ENDS.