

Quite a number of YS members have recently received OFCOM notification of a variation to their VHF Radio Licence. For the non-technical, it is quite a daunting read, but we have received the following explanatory notes from the RYA. I hope this helps...

OFCOM INTRODUCES NEW LICENCE REQUIREMENTS FOR LIMITING EXPOSURE TO ELECTROMAGNETIC FIELDS

New requirements have been introduced by OFCOM that will affect all licensable radio equipment carried on board UK vessels.

In response to public concerns, regarding the risk of exposure to electromagnetic field (EMF) emissions from the 4G & 5G mobile phone network, OFCOM has introduced a new requirement for all radio spectrum users to ensure that their equipment does not pose a danger to the general public. This includes all marine communications and associated electronics such as radio, radar and other emergency alerting equipment and applies to vessel and shore-based installations such as yacht clubs.

OFCOM has introduced a new condition that will appear on all new and renewed licences. New licensees must comply with the regulations with immediate effect, whilst license renewals will have between 6 and 12 months, depending upon equipment carried, to comply.

On 01 March 2021, OFCOM published their [Guidance on EMF Compliance and Enforcement](#). We are now aware that simultaneously, OFCOM contacted all licensees to tell them that they are varying the terms and conditions of their licences. The guidance is written in broad terms and is primarily aimed at mobile phone network operators; however, it applies equally to marine licensees. It is clear to us that this has caused considerable disquiet, not least because licensees are struggling to unravel the technical jargon and therefore the details of how to comply is far from clear.

Nevertheless, the RYA has worked closely with OFCOM to ensure that the new measures do not compromise the safety of lives at sea and above all are proportionate and pragmatic. To assist you in interpreting the requirements, here is the RYA's guidance:

- All radio equipment emits EMF whilst transmitting, the purpose of these new regulations is to protect members of the public from harmful EMF emissions.
- If installed according to the manufacturer's instructions, it is extremely unlikely that the installations found on board recreational craft will produce harmful emissions.
- For the purposes of enforcement, OFCOM has included family and friends to be members of the public. The owner, skipper, radio operator and any paid crew of a vessel are covered by alternate legislation and are excluded from these provisions. So, if you are carrying family and friends on board you will need to comply.
- Licensees are now required to provide evidence that their installation does not exceed the general public safety limits for EMF. This can be achieved in one or more of the following ways:
 1. Fit equipment in accordance with the manufacturer's instructions and keep a copy of on board. If they have been lost, most are available and can be printed from the internet.

2. If the manufacturer's instructions cannot be located, OFCOM has created a simple online [EMF calculator tool](#). By inputting your vessels equipment set up, the calculator will provide you with a safe separation distance between the base of the antenna and members of the public. You should keep a copy of this calculation onboard.
3. If the equipment has been installed by a radiocommunications professional, the installer should provide appropriate EMF compliance instructions, these should be kept on board.
4. Emergency communications are exempt from the regulations. Communications relating to the safety of lives at sea, when there is grave and imminent danger to a vessel or person and assistance is required are not affected by these regulations. However, whilst you do not need to comply during an emergency situation, the equipment does have to comply during routine transmissions, including radio checks.
5. The regulations only apply to equipment that can transmit in excess of 6.1W Effective Radiated Power (ERF). ERF is the total power radiated by an antenna, in the case of a typical 25W marine VHF radio set up, the ERF at the antenna is likely to be less than the 25W transmitter power due to the line loss caused by the length of the coaxial cable between the radio and antenna. VHF handheld radios transmit at a maximum of 5W and therefore are exempt from these regulations.

Potential enforcement action

The regulations cite significant penalties for non-compliance; however, this should be put into the context that these regulations are aimed at the mobile phone network operators.

OFCOM, in its guidance, has stated that: *"Ofcom intends to take a proportionate and pragmatic approach to compliance and enforcement. It is not our intention to immediately take enforcement action and impose a financial penalty or other sanctions on a spectrum user if a site on which they are present is found to be in breach of the ICNIRP general public levels regardless of the circumstances. Whilst we may consider such action to be appropriate in certain circumstances, our key objective is to foster and facilitate a climate of compliance across all spectrum users subject to an EMF condition".*

One of the RYA's concerns related to the definition applied to family and friends. OFCOM has assured the RYA, and it is stated in their guidance notes that: *"We will take all relevant circumstances into account when deciding whether to take enforcement action and what enforcement action may be the most appropriate, noting that proactive enforcement in relation to family and friends is unlikely to be our priority".*

Further guidance

The RYA will provide further guidance on how to make effective use of the OFCOM EMF calculator.