

## **Consultation response form**

## Your response

	fidential? – N comment.
remove the notch and allow BFWA use in the whole of the 5.8GHz band? No w The allow the t of th This seer cons plan	fidential? – N to allowing BFWA in the whole 5.8 GHz ad especially above 5830 MHz. view on the RTTT notch. e range 5830 – 5850 MHz is globally cated to the amateur-satellite service in table of frequency allocations in Article 5 he ITU-R Radio Regulations (ITU-RR). is international sensitive service does not m to have been considered in the sultation document. e amateur-satellite service can use this ge in accordance with the IARU band in for space to earth links in conjunction in uplinks in either the 5.6 GHz band (see

satellite uplink bands.

Importantly for the amateur satellite service, this is the lowest frequency band above 1 GHz allocated to the amateur-satellite service in the ITU-R Radio Regulations albeit on a secondary basis. There is no ITU-R fixed service allocation in this range and it is only secondary in the European Common Allocation table (ECA).

Currently the 20 MHz 5.8 GHz BFWA channel centred on 5825 MHz is cofrequency with the lowest 5 MHz of the amateur-satellite allocation but 15 MHz of the allocation remains free from the potential for co-frequency BFWA operation.

In the European Table of Frequency Allocations (ERC Report 025), footnote ECA23 highlights the amateur-satellite service in the band 5830-5850 MHz (amongst others) and states that "....*In making assignments to other services, CEPT administrations are requested wherever possible to maintain these allocations in such a way as to facilitate the reception of amateur emissions with minimal power flux densities*"

No evidence can be found in the consultation that any consideration has been given to the request in this footnote. The addition of new BFWA channels centred on 5825 MHz and 5835 MHz could interfere with the very low flux density signals that can be successfully received by amateur ground stations today.

Amateur-satellite downlink transmissions can be received by any amateur station in any location within the UK. The station might be operated by an individual or it might be part of a club or a group station which may be part of an international collaborative educational satellite system project.

One single interfering BFWA channel has the potential to block all reception of low flux density signals in the entire amateursatellite segment as it can already in the parts of the band used for low flux density terrestrial reception in 5755 - 5765 MHz or 5820 – 5830 MHz. There is no option for the amateur station to change frequency within these sub-bands to escape the interference and maintain operation effectively reducing the amateur utility to zero.

The consultation does not indicate any compatibility studies carried out between BFWA operation and the amateur satellite service. It is stated that Ofcom "....does not expect the proposal presented here to impact coexistence with these other uses." However no evidence to support this can be found in the consultation document.

Although the terrestrial amateur operations in 5755 - 5765 MHz have largely coexisted with the current BFWA operations and ISM applications, some amateurs have reported difficulties with sources of noise desensitising the band in certain locations from time to time.

One channel of 5.8 GHz BFWA operation can completely block the entire UK amateur terrestrial or satellite band and the only mitigation may be to move the BFWA operation to an alternative channel. However it may not be obvious to an amateur operator that BFWA operation is the source of interference and it is probably not obvious to a BFWA operator that they may be causing interference to amateur operations.

If the expectation is an increase in the deployment of BFWA links it is requested that Ofcom recognises the amateur and amateur-satellite service usage in the UK BFWA licensing guidance so that BFWA licence holders can be aware of the potential for sensitive amateur radio applications to be active in parts of the band. This could facilitate the possibility for

	dialogue between an affected amateur
	station and BFWA operator (if it can be
	determined that this is the source of the
	interference) which may result in request for
	the BFWA operator to use an alternative
	BFWA channel.
Question 4: Are there any other	Confidential? – N
considerations that you believe need to be	No comment.
taken into account and that are not already covered in this consultation?	