

Mr D. Anderson

Question 1:Do you agree with our proposal to prioritise consideration of the 5725-5850 MHz frequencies for Wi-Fi, subject to appropriate protections to other users, in particular satellite services? :

No

The interference from wifi to amateur satellite reception would be severe, especially with outdoor wifi equipment.

This also badly affects weak signal working in other parts of this segment.

Question 2:Do you agree with our proposal to re-examine the requirement for DFS across the 5 GHz band, subject to appropriate protections to other users? :

No

DFS is frequently too optimistic in protecting other users.

It should be reduced, or at least made more pessimistic.

The range and reflection ability of 5GHz is high leading to interference where DFS does fails to predict it.

Question 3: Do you think we should pursue the other options we have identified: opening up 5850-5925 MHz, outdoor Wi-Fi use at 5150-5350 MHz, and opening up the 'centre gap' at 5350-5470?:

Yes - but with care over spectral growth affecting adjacent freqys.

Several wifi systems I have seen fail badly in this respect, spreading many MHz either side of the intended transmission.

Question 4:What are your views on the future growth in demand for Wi-Fi? In which use scenarios do you expect to see the greatest pressure for delivery of high quality Wi-Fi access? What evidence do you have to support your views? :

In many cases, mobile phone data is proving more reliable, and more trustworthy than wifi. For security reasons, to protect my data, I do not use unknown wifi access points for example, at least the air interface for 3g/4g is secure.

Question 5:Do you think technology improvements and densification of access points will be sufficient to meet demand or will there also be a need for more spectrum beyond that which we propose to make available? What evidence do you have to link between demand for data and demand for additional spectrum? :

I think in the future 5ghz will be too limiting, much higher carrier freqys will be required in the 30GHz and up range.

Much wifi is over a short distance, that would meld well with the high capacity offered by the much higher carrier freqy. technology is already making access to those freqys much easier. Amateur radio is already making good use of 40ghz/70GHz and over 100GHz freqys. If we can, surly the professionals can instead of wasting effort in the muck lower bands ?

Rather like wasting time with ADSL, when it should be fibre to the premises -better in the long run.

Question 6:What real life speed and quality of experience can consumers expect in practice from devices using the 5GHz spectrum as authorised in the UK now? What changes can we expect as the number of devices increases and technology improves? What difference in speeds and quality of experience would additional spectrum make?:

The technology may improve, but it needs to match the requirement.
I expect much will be short range.

Question 7:How important is contiguous spectrum? How wide should channels be to support future demand? :

Channels should be narrow, although this limits data capacity, reuse would be higher, more flexible and adaptable.

One single "wide" user could block a large area.

Question 8:Do you believe we have correctly identified the incumbent services in 5150-5925 MHz which need to be taken into account in considering opening up more 5 GHz spectrum for Wi-Fi? Are there any other services which will need to be taken into account in future studies?:

There are a lot of video links around, already jamming the allocation for all users.

Question 9:What coexistence studies, measurement campaigns and mitigation techniques do you believe would be most effective for demonstrating coexistence between Wi-Fi and incumbent users? :

Spectral purity is vital.

A bad 20MHz wide signal could interfere 20MHz either side of the intended transmission, spectral growth (IPs) are terrible on some equipment's.

Adherence to indoor use where specified, maximum erps, antennas etc are essential.

Question 10:Do you intend to participate and provide technical material into the ITU and CEPT work? In what way? :

No.

I am an active Radio Amateur (working from LF to Microwave) and professional radio systems engineer working from LF to Microwave in many forms.

As such, I doubt I could directly contribute to ITU/CEPT.