

From Ofcom Media Office UWB FAQs

Source: http://www.ofcom.org.uk/media_office/mofaq/rcomms/uwbfaqs/

Q7 What is the risk of allowing UWB?

UWB does transmit in areas of the spectrum used by others. However, its transmissions are at such a low level that in general Ofcom considers that it is unlikely to be material.

The likely impact of UWB devices on their environment has been tested regularly, dating as far back as 1999. The first tests in the UK revealed negligible interference on cellular systems, home TV receivers and aircraft navigation.

In 2002 the Radiocommunications Agency commissioned an independent report which demonstrated that UWB may have a detrimental effect on a nearby 3G handset.

This report also made the point that the level of interference would depend on how UWB was being used. If, for example, a digital TV signal was being sent across a room, the interference to nearby devices would be high. On the other hand, if you were just downloading music files to a HiFi the level of interference would be drastically reduced.

It is important to bear in mind that after five years of testing and reports from around the world, there is still little consensus on the level of interference likely to be caused by UWB. In the consultation document we set out our views on the testing and modelling performed to date.

Q13 What were the recommendations of the report commissioned from Mason Consultancy?

There is scope for further investigations into the interference effects of UWB on various services, including wireless broadband, UMTS and aeronautical radar. This might lead to additional insights in relation to the detailed regulation of UWB emissions. However, the consultants think it unlikely that such analysis would have any significant impact on the overall conclusions.

Comment: – *Seems to be glossing over the risks prematurely...*

Q14 Have you considered how this will affect future systems and technologies?

We decided not to consider the potential cost of interference from UWB to future systems such as 4G. This is because we believed it would not be possible to quantify the cost to systems which in some cases have not yet been invented and for which there are no specific deployment plans.

Comment: *This sounds naive and short-sighted. Spectrum is a finite resource and low power 'Tertiary users' are to be licensed on a non-interference basis. UWB should not be licensed if there is a risk of such a level of EM pollution that any future system cannot accommodate it*
- it would also reduce the value of auctionable spectrum if noise levels are too high or cannot be mitigated.

Many inputs to the earlier Spectrum Framework Review have been along the lines of this public one from the Communications Management Association

Ofcom's understanding of future spectrum developments which will impact the market

CMA is surprised to see that [at page 5 (1.6)] Ofcom notes that it does not see its role as predicting possible market developments when simultaneously asking for views on UWB and cognitive radio. If Ofcom seeks to auction spectrum in the future it would seem logical that it will have to have some understanding about the general direction of technical standards in order both to plan for efficient use of the spectrum and to improve its own competence in ascertaining what value the spectrum concerned should have.