

Q1: Have all the possible victims of interference been correctly identified and quantified as far as possible?

Yes, as far as this is known to the BBC.

Q2: Have the costs and benefits been correctly captured? In particular, are the costs of interference to WLANs appropriately assessed?

The principle that the financial benefit will continue to increase as higher-powered Wireless Broadband Access (WBA) penetrates 'major urban areas' appears to conflict with the principle that the need for higher-powered WBA is for provision of 'broadband' data connectivity to premises beyond the reach of wired ADSL (given as 2 km from the nearest telephone exchange). Aren't most major urban areas well served with telephone exchanges and other ADSL hubs?

Otherwise the BBC makes no comment in this case.

Q3: Are there any other mechanisms that could be used to restrict device operation to appropriate areas? Of the schemes set out which should be preferred?

The BBC would make the following observations.

A 'Registration' scheme as described would need certain rules to be applied and enforced (the 'code' mentioned on Page 29 of the consultation document). Otherwise it might become simply a means of establishing the precedence of those who deployed higher-powered equipment first in particular areas – who would then expect all subsequent users in the same area to avoid interfering with their operations, rather like 'squatters rights'. However, if the use of WBA is generally in connection with the business of a telecommunications provider, whose activities are regulated by Ofcom, it shouldn't be too difficult to establish suitable rules.

'Location-aware' devices, relying on comparison of co-ordinates derived from GPS with a database, would always be subject to the accuracy of the database. The reputation of domestic GPS navigation devices, used in cars, is becoming slightly tarnished on account of errors in their databases leading members of the public astray. There must be other, less-complicated and less-expensive adaptations of WBA equipment to establish its location – a modem and microcontroller for connection to a telephone line, for example.

Q4: Should we move from specifying radiated power to specifying conducted power?

No, specifying radiated power will always be more reliable.

The treatment of this matter in the consultation document is greatly idealised. It depends on a uniform geographical density of victim receiving devices, it assumes a smooth earth and it disregards clutter loss. For the principal context, provision of 'broadband' access in rural areas, the distribution of victim devices would likely be greater in urban areas and therefore would generally not be uniform around the higher-powered transmitter. Consequently, the potential for causing interference would depend on the ERP or EIRP and would not be accurately represented by the 'conducted' power.

Q5: For 2.4GHz which of these options do you favour? Are there other viable options that should be considered? Or should regulations be left unchanged?

'Option three – a balance between risks and benefits' would appear to be a good place to begin. If, in due course, it transpires that the incidence of interference cases to be resolved is small then a subsequent transition could be made to 'Option one – maximise benefits' if, indeed, there are greater benefits to be had.

Q6: For 5GHz should Ofcom increase the power to 4W EIRP at 5.8GHz in accordance with ECC Recommendation and as set out in the draft IR2007? Should Ofcom open the database for public access to facilitate coordination?

Yes, Ofcom should increase the power at 5.8 GHz as described, and should open the database for public access if this is likely to facilitate self-co-ordination amongst users.

Additional comments

The BBC welcomes the opportunity to be able to comment on these proposals which have potential to improve the provision of BWA in rural areas, which may provide an additional option for delivery of broadcast television and other services to the home in areas not served by terrestrial delivery.

However, the BBC would not wish its positive response in this particular case to be misinterpreted as meaning we would be in favour of a similar approach to increasing power limits generally. Particularly in the case of devices that have potential to interfere with domestic reception of broadcast signals, or potential to interfere with PMSE radio links, any proposal to increase power limits would need to take into account other factors such as public value.