Intellect response to:

Ofcom's Consultation on "technical licence conditions for 800MHz and 2.6GHz spectrum and related matters"

About Intellect

Intellect is the trade association for the UK technology industry. In 2007, the industries Intellect represents accounted for 8% of UK GDP, £92bn of Gross Added Value and employed 1.2m people.

Intellect provides a collective voice for its members and drives connections with government and business to create a commercial environment in which they can thrive. Intellect represents over 750 companies ranging from SMEs to multinationals. As the hub for this community, Intellect is able to draw upon a wealth of experience and expertise to ensure that its members are best placed to tackle challenges now and in the future.

Our members' products and services enable hundreds of millions of phone calls and emails every day, allow the 60 million people in the UK to watch television and listen to the radio, power London's world leading financial services industry, save thousands of lives through accurate blood matching and screening technology, have made possible the Oyster system, which Londoners use to make 28 million journeys every week, and are pushing Formula One drivers closer to their World Championship goal.

In the past 12 months 14,500 people have visited Intellect's offices to participate in over 550 meetings and 3,900 delegates have attended the external conferences and events we organise.

Consultation question responses

Question 1: Do you have any comment on the proposal to apply the limits defined in Case A of Commission Decision 2010/267/EU for out-of-block emissions from base stations into all frequencies in the range 470 to 790 MHz, as set out in Table 4.4?

Intellect agrees with the proposals in general but does not believe that it is proportionate to apply Case A for channels 58-60, where a channel is not used in a geographic area. This would leave flexibility to change DTT use but imposes a significant extra burden on base station design, which could increase cost and reduce availability. See also Intellect's response to the consultation on protection of DTT where protection of DTT channels 58-60 is addressed.

Question 2: Do you have any comment on the proposal to set an in-block emission limit of 61dBm/(5 MHz) for base stations in the 800 MHz band?

Intellect has some concerns that the low power limit reduces the ability of the 800MHz band to deliver mobile broadband in remote areas, but notes that a higher level could increase compatibility issues with DTT. Ofcom has not provided an explanation for this choice of power limit.

Question 3: Do you agree with the proposed conditions on antenna placement that would permit the use of the alternative block-edge mask for restricted unpaired blocks? If not, please explain your reasoning and your alternative proposals, bearing in mind the need to remain consistent with the framework provided in Commission Decision 2008/477/EC.

Yes, Intellect agrees with the proposed licence conditions.

Question 4: Meeting the conditions on the use of the alternative block edge mask for restricted TDD blocks would require certain licensees to share information about the locations of their base stations. Do you agree with this proposed approach?

Yes, Intellect agrees with Ofcom's proposal.

Question 5: We welcome comments on stakeholders' preference for the dedicated or hybrid options for low-power shared access as discussed above.

Intellect in its response to the previous (main) Ofcom consultation indicated support for the inclusion of provision of low power systems within the auction design on the basis that this will support innovation and competition that would benefit consumers.

Intellect has also previously indicated that 2x20MHz spectrum for small cells would be ideal, but indicated that some members suggested an exclusive allocation of 2x10MHz is more appropriate. Opinions still vary among members in terms of preferences between these options, including whether hybrid or exclusive spectrum is preferred.

Some Intellect members have expressed reservations as to whether paired spectrum for low power shared access is the best solution and prefer the use of the unpaired spectrum for such applications; because low power shared access can make full use of the restricted channels. Other members consider the TDD to be unsuitable for such applications for various reasons including the timely and harmonised availability of devices.

Question 6: We welcome comments on the appropriate frequency placement for low-power spectrum blocks.

Intellect has no comments on Ofcom's analysis of this.

Question 7: Do you agree with our proposed technical licence conditions for low-power access?

Intellect has considered the analyses by Ofcom and RealWireless but has not carried its own additional studies Intellect would encourage Ofcom to carefully consider any technical submissions it receives and seek to ensure that the final power limits that are decided for low power access are optimised to achieve the performance and coverage that potential licensees require while minimising effects of interference between systems.

Question 8: We welcome comments from stakeholders on the additional restrictions and technical measures we have outlined for the management of interference under the hybrid approach, and the technical licence conditions that would be necessary to implement them.

Subject to Intellect members' range of views on low power licences and the hybrid approach (Q5), Intellect notes that the required measures to facilitate sharing must be practicable to implement and achievable at reasonable costs. In addition to the measures that Ofcom has identified, sharing could be enhanced by reducing the power of small cell systems in the portion of spectrum that is shared with standard power use. The latest LTE standards and vendor implementations include techniques such as advanced scheduling that can be very effective in managing interference between mobile systems. In addition to technical measures, commercial arrangements such as roaming between networks (wholesale access) can be a very effective means of mitigating interference effects that may arise.

Question 9: Do you agree that a Code of Practice on Engineering Coordination, as outlined, is the appropriate approach to manage the coexistence between low-power licensees?

Subject to Intellect members' range of views on low power licences (Q5), Intellect agrees that a Code of Practice on Engineering Coordination is a good approach to manage between low power licensees. Intellect agrees that Ofcom needs to be ready to intervene as necessary if circumstances dictate, in order to ensure that a fair and effective agreement is reached.

Question 10: Do you agree that we should proceed with the approach that terminal stations complying with the relevant technical parameters be exempted from the requirement for individual licensing?

Intellect agrees with Ofcom's proposals in relation to terminal stations.