

Network Rail Infrastructure Limited

Additional comments:

The railway, in common with other critical national infrastructure, relies on high-quality, highly reliable telecommunications. The quantity and quality of information needed to run the network safely and efficiently is set to continue to grow as signalling, passenger information and train management become increasingly sophisticated to deliver the railway Britain's economy needs.

Currently, GB mainland railway operational communications, to train drivers and key staff, is delivered using legacy analogue radio systems, which are gradually being replaced by GSM-R. All of these systems are built upon a common foundation of good quality, dedicated radio spectrum.

In Network Rail's response to Ofcom's previous consultation, we suggested that if Government felt it inappropriate to allocate spectrum for critical national infrastructure, they should apply public service commitments to some of the auctioned spectrum.

This would, however, only safeguard the next generation of mission critical railway connectivity. In ongoing spectrum liberalisation work, Ofcom have first-hand engineering exposure to the vulnerability of 2G networks, such as GSM-R, to interference from third and fourth generation technologies. We urge Ofcom to better understand the interference mechanisms that can result in the denial of critical communication on today's network, and ensure appropriate good-neighbour obligations are integral to the license conditions of the auctioned spectrum.

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?:

Network Rail does not wish to make a specific response to this question at this point in time.

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?:

Network Rail does not wish to make a specific response to this question at this point in time.

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.:

Network Rail does not wish to make a specific response to this question at this point in time.

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?:

Network Rail does not wish to make a specific response to this question at this point in time.

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

Network Rail does not wish to make a specific response to this question at this point in time.

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

Network Rail does not wish to make a specific response to this question at this point in time.

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

Network Rail does not wish to make a specific response to this question at this point in time.

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.:

Network Rail does not wish to make a specific response to this question at this point in time.

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?:

Network Rail does not wish to make a specific response to this question at this point in time.

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?:

Network Rail does not wish to make a specific response to this question at this point in time.