

Your response

Question	Your response
<p>Question 1: Do you agree with our provisional view that the spectrum 733 to 736 MHz paired with 788 to 791 MHz should be made available to and authorised for use by the PSNI in Northern Ireland? If you disagree with our view and consider there is a higher value use, please provide details of this alternative use, particularly considering the issue of the risk of interference from SDL.</p>	<p>Nokia agrees with Ofcom’s provisional view that the spectrum 733 to 736 MHz paired with 788 to 791 MHz should be made available to and authorised for use by PSNI in Northern Ireland.</p> <p>Nokia would like to also emphasize that the same 2x3 MHz spectrum has been designated and is being used for other Mission Critical purposes in France and Spain and it is expected that usage and uptake to increase over the coming years.</p> <p>Our experience shows that other countries considering potential use of the 2x3 MHz – under consultation here – in conjunction with 2x5 MHz of the 3GPP Band 68, 698 to 703 MHz paired with 753 to 758 MHz.</p> <p>Adding 2x5 MHz could provide additional capacity for the coverage requirements for mission critical services such as those of the PSNI, though we understand that in the Northern Ireland case, the 753 to 758 MHz spectrum is licensed to EE as part of the 700 MHz SDL 3GPP Band 67.</p> <p>However, we would like to emphasize that Nokia has been actively engaged in the market development work being carried out by the TCCA, Broadband Industry Group (BIG) to ensure the availability of End-to-End solutions including base stations (eNB) and devices supporting Band 68. Nokia has developed a 4G eNB that supports the 2x3 MHz of 700 MHz 3GPP Band 28 as well as the lower 2x5 MHz of 700 MHz 3GPP Band 68 if applicable.</p>
<p>Question 2: Do you agree with our provisional view that the spectrum 876 to 880 MHz paired with 921 to 925 MHz should be made available to and authorised for use by the PSNI in Northern Ireland? If you disagree and consider there is a higher value use, please provide details of this alternative use, particularly considering the small market potential of this spectrum.</p>	<p>Nokia notes that the spectrum 876 to 880 MHz paired with 921 to 925 MHz is used by most European and many ITU Region 1 markets for Railways Communications meaning with the implementation of GSM-R.</p> <p>Taking into account the analysis made by Ofcom, we understand that there is potential for the NI Rail to benefit from the PSNI network that will develop in this band and therefore expectations can be for an optimised use of both the spectrum and infrastructure by the two entities – PSNI and NI Rail.</p>

	<p>We note though that, while this spectrum – harmonised for GSM-R/FRMCS – could be used for other mission critical users like the PSNI, challenges may arise regarding the device ecosystem: availability of devices in the specific form factor required by PSNI.</p> <p>Nokia is a leading equipment supplier of GSM-R solutions and involved in the 3GPP standardization of the FRMCS evolution.</p>
Question 3: Do you have any other comments on the proposals?	<p>As also highlighted by Ofcom, Nokia would like to draw attention of the 3GPP 5G NR FDD Band n100 developed for FRMCS as it extends the bandwidth to provide 2x5.6 MHz in 874.4 to 880 MHz paired with 919.4 to 925 MHz that provides 2x5.6 MHz that could be considered for future evolution of the mission critical services in the RMR band. Additional capacity could be also addressed in the future with the additional FRMCS band, 1900 to 1910 MHz that is 3GPP-defined as 5G NR TDD Band n101. This could be a potential band to study/consider for additional capacity to the 2x3 MHz in the 700 MHz band and the 2x4 MHz of the 900 MHz railway spectrum.</p>