



Consultation title: Exploring future use of the unpaired 2100 MHz (1900 - 1920 MHz) spectrum

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ESN is a key government priority to set up a critical national infrastructure supporting the emergency services and other public safety responders with resilient broadband data and voice capabilities. ESN has to have 100% assured geographical coverage for emergency services to carry out their mandate of saving lives and property. In practical terms, the coverage of EE is not assured across 100% of the geographical area of Great Britain. In operational scenarios where ESN signal coverage is uncertain, a deployed vehicle gateway device can provide temporary coverage extension of a nearby macro cell coverage or creating a coverage bubble.

**EE's deliverables for ESN includes gateway functionality and development of this gateway utilises EE's unpaired 2100MHz band. EE and Parallel Wireless have successfully designed, built, and verified this gateway capability to operate in EE's unpaired 2100MHz band.**

Although this EE unpaired spectrum is currently not in use, it has been developed and ready for use. We anticipate a steady uptake of gateway devices when users migrate to ESN from Airwave. **Revocation of EE's licence for this band will impact the deployment of these gateways, which in turn will impact ESN deployment.**

Though a suitable alternative spectrum is a possible option, there is a concern that it will increase costs of ESN as well as the timelines. As the gateways have already been developed for 2100MHz band, a change will require redesigning and redevelopment increasing timelines as well as costs. Also a different band may require additional payments by EE which is likely to be passed on to ESN. Another issue to consider is that current ESN terminals, Samsung, support the unpaired 2100MHz band while there is no assurance of the availability of LTE terminal chipsets supporting alternative spectrum.