

14th July 2021

Responses in addition to those explicitly requested by Ofcom

In addition to answering the questions asked by Ofcom in the document **consultation-response-form.odt** Nextivity would like to raise additional points regarding licence exemption. This document is the vehicle for those responses.

Consideration of liberalising RF repeaters in 4G TDD bands

In the UK one network (O2) owns and deploys 4G TDD spectrum in bands 38 (2600 MHz) and 40 (2300 MHz). These are relatively high frequency spectrum bands that penetrates buildings relatively poorly and will benefit from the use of RF repeaters.

Nextivity believes now is the time to start work on how to liberalise repeater usage in this spectrum, either by full licence exemption, or by having other schemes such as a lightweight notification regime for reporting installation locations of such devices.

Nextivity has commercial 4G TDD repeaters available and deployed in several countries, including a device capable of repeating, for instance, band 40.

Consideration of liberalising RF repeaters in 5G TDD bands

We believe that to fully realise the capabilities of gigabit-speed 5G as rolled out in the macro network in bands 42 and 43 (3400 MHz to 3800 MHz, also known as band n78) the only feasible solution in many instances will be to utilize TDD-capable RF repeaters.

Nextivity believes now is the time to start work on how to liberalise repeater usage in this spectrum, either by full licence exemption, or by having other schemes such as a lightweight notification regime for reporting installation locations of such devices.

The gigabit/s plus capacity of 5G TDD networks will likely only be available outdoors in a high percentage of geographical coverage, without a cost-effective indoor coverage solution – widely available 5G TDD repeaters will open up this huge outdoor capacity (with the enhanced services that it brings) indoors, to a much broader range of users.

5G TDD RF repeaters in the sub-6GHz bands, will allow mobile network service providers to deploy effective 5G gigabit indoor coverage based on the macro network signal without recourse to wired infrastructure, especially in cases where wired infrastructure provision is difficult or costly. If 5G TDD RF repeaters were made licence exempt, then this would allow customers access to an effective gigabit 5G indoor coverage solution without having to rely on the mobile network provider.