iWireless Solutions Ltd Response to DCMS's Consultation "Statement of Strategic Priorities for telecommunications, the management of radio spectrum and postal services"

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iWireless Solutions
Independent House
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iWireless Solutions Ltd (iWireless) welcomes the opportunity to respond to DCMS's consultation "Statement of Strategic Priorities for telecommunications, the management of radio spectrum and postal services" (the SSP).

iWireless is a leading wireless systems integrator. We provide wireless consultancy, audit, design, installation and maintenance services for Cellular, Wi-Fi and other wireless technologies. Many of our solutions provide cellular coverage and capacity in complex indoor environments. We also design and build Cellular and Wi-Fi solutions for outdoor coverage in urban areas.

This response relates to Section 1 of the SSP only. We have no comments on the other sections.

iWireless is supportive of the Market Expansion Model proposed in DCMS's Future Telecoms Infrastructure Review (FTIR) and agree that this "has the potential to deliver the best outcomes in terms of 5G investment, innovation and availability". We are also supportive of IET's 5G Further Faster (5G-FF) initiative.

Answers to the specific questions in the consultation document are given below.

Question 1: Do you agree with the Government's strategic priorities and desired policy outcomes for telecommunications, the management of radio spectrum and postal services?

> We strongly support DCMS's ambitions that the UK should become a world leader in 5G technology and provide world-class digital connectivity across the country.
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> We agree with SSP targets for numbers of premises with gigabit-capable networks. However we believe there should also be targets relating to business premises, as connectivity is essential for the growth of digital business and enables innovation, including high speed cellular connectivity and industrial IoT.
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> We support SSP targets for 95% geographic mobile coverage, as well as the coverage obligations proposed by Ofcom[1] which include new coverage to 140,000 premises. The 700 MHz band will enable high geographic coverage, however data speeds will be limited. We note Ofcom proposes that coverage obligations shall be optional and the premises obligation relates to outdoor coverage, not indoor where 80% of mobile traffic originates/terminates and where there is often poor penetration from external cell sites. We believe alternative infrastructure models including neutral host, together with an effective spectrum sharing process for the 3.4-3.8 GHz band (the primary band for 5G in Europe), will be required to encourage innovation and maximise 5G coverage inside business premises.
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> Stable regulation backed by Government/regulator research and MNO support, which might include a prior approval model as proposed by 5G-FF, is essential for investment by both MNOs and spectrum borrowers. 5G-FF has outlined a number of options for enabling shared spectrum access, including setting aside a small amount of spectrum in this band for innovation, and a policy roadmap for evolving from temporary spectrum loans to dynamic spectrum access. 5G-FF's focus is mainly on rural coverage, however the proposed options are also valid for indoor coverage where spectrum can potentially be underutilised, as pointed out in the FTIR.
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> It is important that MNOs support any spectrum sharing arrangements, so that mobile users experience a consistent service as they roam between networks provided by operators and by 3rd parties. This is particularly relevant for 3rd party indoor solutions which may provide services in areas immediately adjacent to outdoor areas with operator-provided services.

[1] Award of the 700 MHz and 3.6-3.8 GHz spectrum bands, Ofcom, 18th Dec 2018

We support the release of key 5G spectrum bands in a timely manner as outlined in the SSP. We are concerned that Ofcom's Proposed Annual Plan 2019/20 does not include any work items on the 26 GHz band (which Ofcom describes as the 5G mmWave Pioneer Band). Gigabit speed fixed wireless access to premises is one of the principal use cases for 5G, and early release of this spectrum would support DCMS's ambition for world-class digital connectivity.

We note the possible enforcement of "use it or lose it" conditions on MNOs, however we support 5G-FF's view that these conditions should only be use a last resort in the event of market failure. Ofcom should instead work together with MNOs to agree spectrum sharing rules which allow MNOs and third party service providers to maximise 5G coverage growth together.

We agree that Ofcom should report on geographic spectrum utilisation. Ofcom should also consider reporting on numbers of premises covered outdoors, and indoors, subject to criteria agreed with MNOs. This detail could be added to Ofcom's broadband and mobile checker website, allowing consumers and businesses to make more informed decisions on their choice of provider.

We support DCMS's objective to remove obstacles to convergence between full fibre and 5G networks, to enable timely 5G rollout. In our experience the lack of duct/pole access and of dark fibre for backhaul can be significant barriers to the rapid and cost-effective provision of services.

Question 18: Does this document set out clearly the role of Ofcom in contributing to the Government's strategic priorities and desired outcomes?

Yes we believe the SSP clearly sets out Ofcom's role. We support DCMS's view in the FTIR to "encourage Ofcom to assess the feasibility, costs and benefits of potential flexible licensing models, and also consider the trade-offs involved, as part of its continuing consultation on the planned release of spectrum in the 3.6 – 3.8 GHz band", however we see little evidence that Ofcom has carried out this assessment in its consultation document on the release of this band[1]. We note that Ofcom has plans[2] to allow shared access in the 3.8 – 4.2 GHz band, but as DCMS states in the FTIR "this band is used by satellite earth stations and the Government understands that it may be a number of years until this band is widely available in consumer handsets and other 5G equipment, compared with the 3.6 – 3.8 GHz band and other bands harmonised for 5G in Europe".

[2] Enabling opportunities for innovation, Ofcom, 18th Dec 2018