techUK Response to DCMS Consultation on Statement of Strategic Priorities

1. Introduction

techUK represents the companies and technologies that are defining today the world that we will live in tomorrow. More than 900 companies are members of techUK. Collectively they employ approximately 700,000 people, about half of all tech sector jobs in the UK. These companies range from leading FTSE 100 companies to new innovative start-ups. The majority of our members are small and medium-sized businesses.

techUK is committed to helping its members grow, by:

• Developing markets

• Developing relationships and networks

• Reducing business costs

• Reducing business risks.

We comment below in relation to telecoms and spectrum, but not postal services.

2. Statement of Strategic Priorities

Consultation questions:

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

Yes. techUK support the Government's commitment to the UK having world-class resilient digital infrastructure.

Specifically, techUK believes that it is right to aim for most premises to have access to gigabit connectivity, and as many consumers as possible should have access to both fixed and mobile gigabit capable connections.

For mobile it is increasingly important that major transport corridors are covered.

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

Yes, techUK agree that the document clearly sets out the role of Ofcom in this regard.

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Section 1 – World-class digital infrastructure

1.1   Full Fibre Connectivity

- 11/13. techUK believes that it is right to aim for most premises to have access to gigabit connectivity. However, given that civil works represent roughly three quarters of the cost of deploying fibre, a position made worse by long line lengths, there are likely to be some consumers for whom full fibre could never be cost-effectively provided, even with sharing passive infrastructure. techUK therefore believes that 5G Fixed Wireless Access (FWA), which is gigabit capable, should be clearly within scope. For those consumers for whom even FWA may not be available, they may have to rely on connections which will never be gigabit capable. Therefore when "outside in" deployment commences, we suggest that a policy should be adopted of ensuring the availability to consumers of the optimal technology which could cost-effectively be made available.

- 22. We also support the object be of regulatory stability and clarity, and agree that market review periods should be of at least 5 years' duration.

1.6   Mobile and 5G Connectivity

- 31. techUK's concern to national roaming and not-spots is that it would discourage investment from Mobile Network Operators and, in practice it may prove difficult to identify enduring partial not-spots. Additionally, there is no consistent definition of 'rural' across the whole of the United Kingdom. techUK would also point out that the proposals contained within the current Ofcom consultation 'Enabling Opportunities for Innovation' would enable local community groups to access unused mobile spectrum to provide localised coverage.

- 33. techUK support the priorities to help create the conditions for a competitive mobile market that supports investment and innovation in 5G. We must ensure that 5G helps create market expansion within the UK and to help Government and Ofcom promote new 5G services from existing and new players through the release of additional spectrum. We support the growth of infrastructure models (including neutral hosts), and urge that greater focus be put into making available public infrastructure (e.g. Network Rail, Highways England) to support neutral host 5G deployment.

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1.7 Spectrum Management

- 37. techUK support the Government's priorities, including the release of 1GHz of spectrum in the 26GHz band and completing the award of the 700MHz and 3.6 - 3.8GHz bands in a timely manner. techUK believe that availability of new spectrum in both the 3.4 – 3.8GHz and 26GHz bands is key to unlocking the full potential associated with 5G. To ensure this, techUK believes that Ofcom should begin consultations by the end of 2019 on an auction design for a subsequent release of 26GHz. The multi-gigabit data rates possible with mmWave technology and the wide bandwidths available in 26GHz will likely enable new use cases benefiting from high instantaneous data rates.

  Early release of some of the 26GHz band will enable UK to be amongst those countries taking the lead in the development of new services and applications like 5G for enterprises, industrial IOT and fixed wireless access in addition to very high-speed mobile broadband. Based on the eco-system demonstrations and product launches at the recent Mobile World Congress in Barcelona, techUK expect the first commercial devices featuring both 3.4 – 3.8GHz and mmWave to be available in the coming months. Testing of 5G end-to-end system at mmWave is currently ongoing in a number of European Member States with commercial 5G devices supporting the 26GHz band. A global eco-system is being driven by imminent commercial deployments in the US, Korea, Japan, Russia and Italy.

  Spectrum is a valuable asset and support the Government's aim to maximise the economic and social value for the UK from spectrum use. We support Ofcom reporting on the utilisation of mobile spectrum, especially with regard to Ofcom's recent proposals for third parties to apply to utilise mobile spectrum where operators have not and will not be deploying. techUK also agrees that mobile spectrum should be able to be leased or pooled. Identifying the opportunities for spectrum sharing in the mobile bands and the extent to which spectrum sharing policies are increasing the utilisation of spectrum will be important.

- 40. techUK agrees with the Government that there should be greater liquidity in the spectrum market and barriers to spectrum trading should be removed. Ofcom has been in the vanguard of liberalising spectrum usage, yet the UK still has no liquid secondary market in spectrum.

1.8 Convergence between Full Fibre and 5G networks

- 44. We support the Government's statement for network operators and mobile operators to work with local authorities and other relevant parties to design infrastructure architecture which can meet the requirements of 5G roll-out. techUK will continue to support future work with DCMS through forums such as the Local Connectivity Group to provide industry insight in enabling greater connectivity across the UK. We support mobile operators being allowed to benefit from use of Openreach's passive infrastructure for the provision of backhaul services as soon as possible.

- We also support the recommendation to Ofcom to consider the merits of alternative effecting remedies, including dark fibre access which has clear applicability to 5G deployment. techUK also believes that public dark fibre should not be excluded from Ofcom's consideration.

- While the Government has with justification focussed on 5G and fibre, telecommunications and spectrum cover a much broader set of activities, some of which could - if not properly co-ordinated between Government and relevant regulators - undermine areas of vital importance to Government. One example is the mutual dependency between the energy sector and telecommunications.

- Increasing use of renewable energy, plus electric vehicles, and the Government's own challenging carbon emission targets, make the transition to smart grid electricity networks an imperative in the coming years. But such networks' increased complexity means that there is a step change in the need for monitoring, control and automation. This in turn entails a major increase in the communications and connectivity requirements, which will be drawn from a mix of technologies, encompassing fixed, wireless and satellite, provided by both public and private/self-provided networks.

- The increasing need for security and resilience however means that the need for private wireless networks will continue, if not increase, which brings with it a spectrum challenge in the UK where spectrum currently available to support private business radio will not accommodate the IP-based and internationally harmonised technology which the electricity sector looks to deploy.

- Clarity on what spectrum may be available to facilitate investment in smart grids applications in the UK is needed and we urge the Government to work with Ofcom in identifying and ensuring access to suitable spectrum for this.

Section 3 – Secure and resilient telecoms infrastructure

- 62. We agree on the Government's support of Ofcom's capability, skills and resources in order to perform an enhance cyber role, especially on leading a cyber penetration testing (T-BEST) programme, working with DCMS, NCSC and network providers to undertake intelligence-led vulnerability penetration tests as an integral part of cyber security management.

- 63. techUK supports the Government undertaking the Telecoms Supply Chain Review, where techUK notes that 5G network infrastructure is considerably more complicated than previous generations of mobile technology and identifying single points of failure is more challenging.