Introduction

1. Mobile UK, which is the trade body for the UK’s mobile network operators EE, O2, Three and Vodafone, welcomes the chance to respond to HM Treasury’s consultation tax reliefs for Research and Development.

2. Our response focuses on a particular aspect of research and development in our sector and points to important linkages to related Government policy on supply chain diversification. Mobile operator members may submit more technical responses on the specific tax measures.

Background

3. The Government has decided that Huawei equipment must be removed from the UK’s 5G networks, leaving the supplier market dominated by Nokia and Ericsson. As all MNOs dual source, competitive pressure in the market has all been but eliminated due to this decision.

4. In light of the critical role that mobile connectivity plays in both the current and future prosperity of the UK, the Government is committed to remedying the lack of competition through its 5G Supply Chain Diversification Strategy (‘5GSCDS’).

5. The 5GSCDS sets out its overall objectives thus:
   - **Supporting incumbent suppliers** to ensure their resilience and ability to supply the market in the near term while supporting their transition into the emerging market structure
   - **Attracting new suppliers into the UK market** to build resilience and competition, prioritising deployments that are in line with our longer-term vision
   - **Accelerating open-interface solutions and deployment** so that we are not reliant on any single vendor and begin to realise our long-term vision for a more open and innovative market

6. Concerning the current consultation, the overall point is that HM Treasury’s tax reliefs for R&D in our sector should align closely with these objectives. And concerning the last of these, the strategy identifies the following activities that will be necessary:

   “Projects within the ecosystem will fund trials and testbeds that will create a dynamic and vibrant proving ground in the UK for operators and suppliers to test and demonstrate the performance and capabilities of interoperable solutions across a range of environments, use cases and applications. This ecosystem will span the
development of physical hardware and equipment, the development of software and virtualised solutions, and the testing and integration of solutions into ‘live’ networks. Specifically, this ecosystem will include:

- **Lab-based R&D** focused on finding scalable solutions to incorporating interoperable interfaces
- **‘Plugfests’** bringing together operators and suppliers to test and demonstrate equipment in representative networks and that inform final technical specifications
- **Open RAN** trials across a cluster of locations, including rural districts, suburban and dense urban sites, to test and prove the performance of Open RAN networks
- **Funding** to support the growth and emergence of vendor-neutral hardware and software-defined solutions based in the UK
- **Testbeds and trials** that test and demonstrate the effectiveness of open interface deployment models for new 5G capabilities, applications and use cases. These will also include the testing and development of complementary technologies such as AI, Cloud and other forms of network virtualisation.

7. The UK’s mobile operators, among others, will be significant contributors to the overall R&D activity that is needed to advance the capability of OpenRAN\(^1\) and other open technologies from their current state to a point where they are a commercially viable alternative to incumbent vendors, including rolling out capital [network] equipment into trials and testbeds.

8. As such, R&D tax relief for both revenue and capital expenditure should be made available at enhanced rates that incentivise the required development work.

\(^1\) OpenRAN – Open Radio Access Network