Your response

Your response should include details of:

- a description of the relevant technology;
- a view of the potential impact of the technology on the sectors we regulate, preferably
- identifying the impact against the criteria listed in section 3.16 of the call for inputs;
- the current state of development of the technology, including any demonstrations of
- feasibility;
- any unresolved issues which need to be addressed for the technology to achieve full
- potential;
- references to key publications and the leading groups working on the technology; and
- whether you would be open to discussing the technology in more detail with Ofcom.

Your response
Confidential? – N
Augmented Reality/Virtual Reality Augmented Reality/Virtual Reality will change the way we access the internet, how we interact with the world and connect with each other. Breakthrough AR glasses are the next computing platform centered around people. Instead of having devices that take us away from the people around us, the next platform will help us be more present with each other and help the technology get out of the way. AR/VR will enable the delivery of new services which are valued highly by people and businesses. Among other examples, AR/VR is already changing the way astronauts and medical surgeons train or helping people with dementia. To achieve its full potential AR/VR needs to get access to the full 5925-7125 MHz. This was acknowledged by the FCC in statements from Chairman Pai, Commissioner O'Reilly and Commissioner Carr.
Terragraph Terragraph is a wireless technology that operates on 60 GHz unlicensed band delivering fiber-like speeds. In markets where fiber access to consumers is cost prohibitive and slow to deploy due to factors such as permitting, trenching etc., Terragraph can be a better alternative to provide fiber-like connectivity at a significantly lower cost. It's also much faster to deploy and can be brought to market in a matter of weeks. Terragraph has the potential to: • Broaden and deepen access to services. • Increase the performance of networks, improving the experience for people. • Lower barriers to entry for providers, enabling choice for people.

- Reduce the cost of delivering services, increasing access and maximising value for customers.
- Change the way we authorise and regulate networks and /services.

Terragraph is already tested in Europe under the current regulatory framework. Modification of the 57-71 GHz regulatory framework runs the risk of slowing down or even derailing the deployment of Terragraph. It is important to maintain stability of the existing 57-71 GHz regulatory framework for Terragraph to reach its potential.

Telecom Infra Project

The Telecom Infra Project (TIP) seeks to accelerate the development and deployment of open, disaggregated and standards-based telecom network infrastructure. As a member company, Facebook collaborates within various TIP workstreams to support the development of flexible and interoperable network technologies which have the potential to:

- Broaden and deepen access to services.
- Increase the performance of networks, improving the experience for people.
- Lower barriers to entry for providers, enabling choice for people.
- Reduce the cost of delivering services, increasing access and maximising value for customers.
- Assure the security and resilience of service delivery.

Among the TIP projects, these technologies seem particularly relevant:

- OpenRAN and OpenRAN 5G NR are defining Radio Access Network (RAN) solutions based on general-purpose vendor-neutral hardware and software-defined technology. The team is also exploring the use of AI/ML to increase performance & efficiency, while lowering costs.
- The Open Wi-Fi Project Group is developing a disaggregated End-to-End Wi-Fi solution, consisting of access points (APs) and a cloud-native control/management plane which interfaces to mobile operators' core networks to enable mobile data offload.
- The Open Optical & Packet Transport Group works on open technologies, architectures and interfaces in Optical and IP Networking, and features key innovations including Disaggregated Cell Site Gateways, Cassini – a disaggregated optical transponder – and Open & Disaggregated Broadband Network Gateway.
- Open Core Network is a cloud-native and converged core supporting 4G, 5G and Wi-Fi access.

Facebook would gladly provide OFCOM with more information on these innovative technologies, their benefits and how they may impact OFCOM's activities.