Your response

Question	Your response
Do you have any comments on our proposals?	Confidential? – N
	OneWeb, a UK company with the mission to provide connectivity to rural and remote parts of the UK and the rest of the world using a space-based network of Low Earth Orbit (LEO) satellites, welcomes this opportunity to comment on 'Ofcom's Plan of Work 21/22'.
	OneWeb resumed its satellite launch programme in December 2020, and is on track to launch commercial services in the UK and the Arctic region by late 2021, and global services in 2022.
	<u>General</u>
	As noted in the consultation document, the unprecedented impact of Covid-19 has proven that connectivity has never been more important for people and businesses. There is a clear need for reliable connectivity across the UK and the globe, no matter how remote the location. With robust and resilient connectivity, people and businesses can access the internet in support of remote working, health care, and education, as well as accessing government communications and services. This requirement and reliance will become increasingly important as more and more services move online.
	By facilitating and encouraging the use of innovative satellite connectivity, such as that being deployed by OneWeb, the UK will be able to deliver a resilient and diverse communications infrastructure, stemming from multiple providers across the telecommunication and space technology sectors. This will result in the UK becoming a world-leader in delivering and providing the kind of connectivity the world needs: high- speed, high-quality, reliable broadband to everyone, everywhere, including in the air and at sea.

It is for these reasons, that OneWeb welcomes Ofcom's strategic priorities for 21/22, in particular '*Investment in strong, secure networks*' and '*Getting everyone connected*'. Further comments against these priorities are provided below.

Further, OneWeb welcomes Ofcom's commitment to its vital spectrum work by continuing to ensure the implementation of domestic and international/ITU rules, enforcement against non-compliance, and leadership in international forums to promote the UK's objectives. To enable the success of satellite services it is key to ensure that access to spectrum is harmonised at the international and regional levels as opposed to a fragmented, domestic approach that is incompatible with the provision of global services. It is vital that satellite operators can have access to portions of spectrum that are not encumbered by terrestrial services, so that mass-market satellite terminals can be ubiquitously deployed, and that access to spectrum for gateways at know locations is facilitated in bands shared with terrestrial services. It is also important to keep a balanced approach when considering conflicting satellite and terrestrial spectrum requirements.

Investment in strong, secure networks

As the pandemic has demonstrated, connectivity has been essential for the delivery of government, business and public services. It is therefore essential that the UK has a robust and resilient communication network that can be accessed by all.

However, although the current Ofcom workplan is focussed on fibre as the primary means to deliver this, the capabilities of rapidly deploying novel satellite constellations - such as OneWeb - must be considered an essential part of the UK's future communication network. The benefits include:

 ubiquitous and global coverage provided by LEO satellites notably for

those areas where terrestrial infrastructure is not available or too costly to deploy;

- high-speed and low latency: that will enable applications such as Virtual Private Networks, video calls, and Voice Over Internet Protocol, while also improving the web browsing end-user experience and, most importantly, will be necessary in the support of 5G backhaul services;
- reliability and resilience to terrestrial natural disasters and man-made disruptions.

A communication network consisting of diverse but complementary technologies (e.g. satellite, fibre, terrestrial wireless and even Wi-Fi) will ensure the UK has resilient and robust connectivity that is accessible regardless of location. OneWeb therefore recommends that OfCom proactively consider LEO satellite technology as an essential part of delivering a strong and secure UK communication network.

Getting everyone connected

OneWeb welcomes OfCom's strategic priority to ensure people and businesses are connected, and to improve access to broadband services in hard-to-reach locations.

However, as well as the physical and geographic challenges that remote locations pose, the low population density of rural and remote populations cannot always support the economical deployment of terrestrial-based technologies. In these cases, satellites are the only means of reaching people and businesses. Previously, the only solution available was geostationary satellites, with latency that is not compatible with cloud-based applications, or truly interactive modern internet usage. However –

as stated above - new and innovative LEO satellite systems like OneWeb offer high-speed, low latency connectivity that can revolutionise what is possible in remote locations.

Further, whilst noting the aims of the Broadband Universal Service and the necessity to have an upper cost limit, below which the customer does not need to pay to receive a broadband connection, it is important to recognise that there will be numerous circumstances where the socio-economic benefits from providing connectivity to business, public service buildings or individual residences, far outweigh this cost cap. In these instances, consideration should be given to the provision of additional funding to realise these benefits, along with the deployment of LEO satellite technology as a cost-effective method to provide essential connectivity to people and communities for which there is no other option.

Conclusion

OneWeb looks forward to continuing our strong working relationship with OfCom both domestically and internationally as we seek to overcome the digital divide in the UK and across the globe.