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Ministry of Transport and Communications
Services Department, Basic Services Unit
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In response to the **proposal for a Government Decree on the Internet access service for a universal service and on a minimum requirement for services provided to special groups**, published by the Ministry, OneWeb submits the following comments.

General Background on OneWeb

OneWeb is a global telecommunications provider, headquartered in London, UK. The OneWeb system will provide low latency, high capacity, connectivity solutions to customers through a new generation of low-earth orbit (LEO) satellites. OneWeb believes that satellite systems have a key role to play in a multi-network broadband ecosystem, often in a complementary way to terrestrial telecommunication solutions.

Satellites already play significant roles in today's 2G, 3G and 4G/LTE networks and are well placed to continue playing such roles for 5G networks. This is especially the case with the new generation of LEO satellites, such as OneWeb's, that will be able to provide low latency, high-throughput connections to any spot on the globe. OneWeb's satellite service will be supported by innovative low-cost user terminals that can provide backhaul capability to last mile technologies such as LTE, 5G or Wi-Fi network.

Opinion of OneWeb on the proposal for a Government Decree

OneWeb welcomes the review proposed by TRAFICOM to increase the minimum requirements for the regulation of universal service subscriptions. The proposal assesses

different options for quality requirements and potential solutions to fulfil the connectivity needs of the Finnish citizens. OneWeb agrees with the intention to raise the minimum required offer that will bring up connectivity standards. Doing so will not only guarantee constant operability of the subscription, but also guarantee the support of basic services such as e-mail, online government services, e-commerce, or online banking, amongst many others listed in Annex V of the Directive on the European Electronic Communications Code (2018/1972 / EU). However, additional cost will be incurred for operators to upgrade and extend the coverage in remote area, such cost needs to be assessed and considered as discussed in a later section.

Covid-19 pandemic has highlighted the criticality of access to broadband connectivity to all, and these services as mentioned have experienced exponential increase in demand that needs to be equated by a capable offer, which is currently limited. Recent breakthroughs in satellite broadband have made it plausible to fulfil these needs, as Low Earth Orbits Satellite (LEO) constellations become the last piece of the puzzle that pragmatically solves the coverage worldwide while experiencing fibre like connectivity. In addition, the accessibility of this services to special needs groups should be inherently implied. OneWeb thinks no lesser quality service should be awarded to this groups and access to said service should be facilitated as public offering.

Partnership model to provide remote connectivity

OneWeb would like to inform the Ministry that it already has coverage over the entirety of Finland and is capable of starting services within the next 3-4 months. It should also be highlighted that OneWeb operates a wholesale model, whereby OneWeb will be working hand in hand with its local distribution partners (e.g., MNOs such as Telia or Elisa in Finland).

These operators usually provide a good quality mobile broadband in cities, well above the current or proposed speed requirement, but it is less straightforward to achieve a similar ubiquitous coverage and broadband speed in rural and remote areas. Middle-mile, or backhauling, is the biggest challenge for telecom operators. Depending on terrain and distance to the nearest node, fibre roll out is not always feasible, or economically viable.

In contrast, LEO network services can be accessed wherever there is direct line of sight to the sky above. OneWeb would be able to offer high throughput (up to 200 Mbps per user terminal) and low latency (under 100 ms) backhauling solutions for their 4G or 5G base stations. OneWeb will enable those terrestrial operators to upgrade their existing 2G or 3G sites to 4G/5G and extend their network coverage to places that could not be connected economically.

Such partnership model works particularly well for the consumer, as the users in those remote area will effectively use the same LTE, 5G and/or Wi-Fi devices. In addition, in case of national mobile operators' customers, they would pay the similar monthly fees than their counterpart in the cities.

Cost elements should be carefully assessed

Lastly, the cost element of providing additional coverage or better-quality broadband should not be underestimated. Both OPEX and CAPEX investment necessary for remote area cell sites can be much higher than in an urban environment. This is usually exasperated by the very low return on investment due to the sparsely populated areas. Therefore, even if OneWeb solution can improve the economics considerably for the backhauling part of the remote site deployment, the total cost of providing enhanced coverage should be carefully assessed, and additional USF grants should be made available to USF operators to make sure the business model is sustainable.

We remain at disposal of the Ministry for any clarifications on OneWeb network and services shall you find it useful.

Yours truly,

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OneWeb
