

**TEF response to the consultation for a BEREC
feasibility study on development of coverage
information for 5G deployments**

November 28th 2019

Introduction

Telefónica S.A. welcomes the opportunity to provide inputs to BEREC's consultation on BEREC's feasibility study on development of coverage information for 5G deployments. In what follows Telefónica would like to submit its views about the provisioning of information on coverage and Quality-of-service (QoS) aspects of future 5G networks, and its relevance to the verticals, in the hope that they will be considered by BEREC.

The BEREC document explores and describes the expected benefits from the consistent and coherent presentation of coverage information for 5G deployments (maps of coverage) and QoS aspects for use by market sectors other than mobile network operators like verticals implementing use cases such as automotive, industrial, environmental monitoring, etc. It also asks for input on the metrics that are of relevance to the verticals.

Telefónica agrees with BEREC that information is a key component of a well-functioning market and understands the interest of NRAs in ensuring that end users are able to make informed choices. However, that possible benefit should be weighed against the burden that information obligations entail for service providers. Indeed, the EECC notes that "to alleviate the burden of reporting and information obligations for network and service providers and the competent authority concerned, such obligations should be proportionate, objectively justified and limited to what is strictly necessary"¹.

BEREC should also be conscious of confidentiality. Publishing very capillary 5G coverage maps at this early stage of 5G deployment could reveal sensitive information about the commercial offering of MNOs, cell site locations and even customer identities, in cases where 5G is being deployed in high-band spectrum for specific enterprise customers.

Mobile Operators have incentives to provide accurate information to verticals

Telefónica is very interested in promoting progress based on technologies such as 5G and internet of things; and especially in supporting the productive sectors that demand the use of new technologies to meet their needs and address the challenges of digitisation in sectors such as agriculture, city management, government, healthcare, manufacturing, public transportation, etc.

Each of the sectors of the economy presents a series of connectivity needs for their respective processes. In the past, they have in general been satisfied through technological solutions based on 4G, 3G and even lower bandwidth standards. Mobile operators have specialized business units that have built tailored solutions for their customers, and it is of the maximum interest to Telefónica to continue that relationship benefiting from all the possibilities that 5G brings about. In our view, the high degree of

¹ Recital 59 EECC

specialization of the operators means that they are the ones with the greatest knowledge and experience in providing services to a wide variety of verticals, in very different sectors and with very different needs. Making available information on coverage and QoS is simply one of many commercial and marketing activities that operators need to undertake.

The information needs for 5G will be discovered through mutual learning

In the view of Telefónica, the publication and making available of information on coverage have to be driven mainly by interactions between operators, developers of 5G applications for verticals and end users. It is in that context, through mutual learning, where the needs of developers and users will be discovered and it will become apparent to operators what kind of coverage information is required for their customers to make an informed choice of supplier. The willingness of Telefónica to provide accurate service and coverage information to verticals is clear, since Telefonica has all the incentives to do it in order to win customers and make a positive business case for 5G. Beyond that, Telefónica also has transparency obligations that already grant a reasonable level of protection to consumers. An example of the information that Telefónica provides are the coverage maps already available on 2G, 3G and 4G networks, developed by each mobile network operator and published on its web page.

Spain: <http://www.movistar.es/particulares/coberturas/movil/4G/>
UK: <https://www.o2.co.uk/coveragechecker>
Germany: <https://www.o2online.de/service/netz-verfuegbarkeit/netzabdeckung/>

Mobile operators dedicate a large number of resources to develop and maintain platforms that gather and make available information on coverage and QoS. They are adapted to the particular needs of each operator and its customers, and introducing changes to suit external requirements is costly. In some countries, NRAs have harmonised to some extent the information that should be provided, forcing operators to introduce new constraints in its information gathering and reporting processes. In our view, BEREC should be cautious when aiming at extending harmonisation to the EU level, and avoid duplicated requests or unnecessary modifications to existing processes.

Information requirements for 5G are in a very early stage of development

Telefónica considers it is too early to set very detailed guidelines and requirements on reporting on 5G coverage, especially regarding the parameters and thresholds that should be measured, because 5G is still a nascent technology and the best way to describe it is unclear.

Discussions among operators and the diverse ecosystem of verticals to discover information needs follow a pattern of trial and error, that is most efficient in a bilateral setting. At most, in order to add value conversations should be undertaken at a sectoral

level. We find it would be overambitious at this point in time to aim at building a comprehensive information platform that covers all possible use cases of all possible verticals across all of the EU.