



Liberty Global response to the BEREC consultation on the draft Guidelines on Wholesale Roaming

Liberty Global welcomes the opportunity to provide feedback on the draft Guidelines on Wholesale Roaming (the draft Guidelines). Overall, we support the majority of the draft Guidelines. It provides essential legal certainty, while ensuring that the provisions of the Regulation (EU) 2022/612 of the European Parliament and of the Council of 6 April 2022 on roaming on public mobile communications networks within the Union (Roaming Regulation) are applied in an appropriate and proportionate manner. However, there are a number of areas where further clarification would be helpful. In particular, further clarity on the provision of quality of service, measures to prevent abusive behaviour and the administration of public warning systems would be useful for both access seeker and visited operators. Throughout this document, where we refer to “Guideline X”, we are referring to a provision in the draft Guidelines on Wholesale Roaming. Where reference is made to “Article X”, we are referring to an article in the Roaming Regulation.

Quality of Service

We recognise that quality of service plays a key role in the Roaming Regulation and we welcome the guidance given on these provisions in the draft Guidelines.

However, some of the standards set in the Guidelines are formulated in a manner which is beyond their purpose and disproportionate to the goal of ensuring that roaming customers enjoy a high level of quality of service. We believe that the Guidelines should be adjusted to ensure that roaming customers can enjoy a high level of quality of service without placing a disproportionate burden on the visited operators, while abiding by the principle of legal certainty

Guideline 23 specifies: “The specified minimum service levels should be at least as good as those normally achieved by the MNO in respect of services provided to itself and should, in addition, be consistent with best industry practice.” This is a high standard to set as the default minimum service level and places a high burden on the roaming provider. Achieving this standard could cause visited operator to deprioritise innovation in provision of these services to its own domestic customers to enable delivery of a roaming access seekers’ requests. Instead, setting this standard at a level of service consistent with best industry practice allows visited operators to continue to innovate to provide standards that surpass this standard, while ensuring that roaming customers enjoy a sufficient level of service. This would be both proportionate and appropriate.

Overall, the general provisions for information on quality of service to be provided in the reference offer seem reasonable. However, the provision “the visited network operator should ensure that roaming customers are not subject to conditions that are less advantageous than those it offers to its domestic customers” under Guideline 24 is difficult to enact. The visited operator is not solely in control of quality of service – it can ensure quality of service for the network components, including both RAN and core network, under its own control. The overall quality of service experienced by the



roaming customer is also dependent on the access seeker's core network capabilities, in addition to the capabilities of individual handsets. These are outside of the visited operator's control. Therefore, a caveat would be useful to clarify that the onus on the visited network operator to ensure roaming customers are not subject to conditions less advantageous than those it offers to its domestic customers applies only to the extent that the visited operator has control over the roaming customer's quality of service, and it is not responsible for those elements of quality of service which are under the control of the access seeker, handset manufacturer or otherwise beyond the visited operator's control.

Preventing abusive behaviour

Preventing permanent roaming and anomalous and abusive behaviour is important for both the visited operator and the access seeker. We welcome the provisions under Guidelines 34 and 35 to prevent this behaviour, and we recognise that these measures have largely worked well under the previous regime. However, we note that restricting the assessment of anomalous and abusive behaviour solely to aggregate data may prevent the detection of small numbers of roamers engaging in abusive practices, e.g. permanently uploading large amounts of data. This has adverse impacts on both the visited operator and the access seeker. We would suggest allowing for some degree of exchange of individual information to allow the access seeker to better enforce the fair use policy, preventing fraud and other abusive behaviour which is detrimental to other customers, both domestic and roaming. This also allows for greater ability to use the less stringent measures outlined under Guidelines 35, rather than using more stringent measures with negative impacts for both operators and customers.

Warning Systems

We are supportive of the increased emphasis on transparency regarding public warnings present in the Roaming Regulation. However, some clarity on the provisions contained in the draft Guidelines would be useful. Guideline 17 outlines that no further action should be required of a customer to receive public warnings, other than the installation of a mobile application that enables the receipt of such warnings where such an application exists. It would be useful if the Guidelines specified that the roaming operator is responsible for sharing this information with the customer, as outlined in Article 15. In addition, the provision of such information under Article 15 is predicated on the inclusion of the mobile application in the database being compiled by BEREC under Article 16. It would provide useful clarity if Guideline 17 were to make clear who is responsible for providing this information to the roaming operator and how this obligation interacts with Article 15. Guideline 24 includes a requirement for visited networks to publish information on public warning systems in place in their country in their reference offer.



About Liberty Global

Liberty Global (NASDAQ: LBTYA, LBTYB and LBTYK) is a world leader in converged broadband, video and mobile communications services. We deliver next-generation products through advanced fiber and 5G networks, and currently provide over 85 million fixed and mobile connections* across Europe and the United Kingdom. Our businesses operate under some of the best-known consumer brands, including Virgin Media-O2 in the U.K., VodafoneZiggo in The Netherlands, Telenet in Belgium, Sunrise in Switzerland, Virgin Media in Ireland and UPC in Slovakia. Through our substantial scale and commitment to innovation, we are building Tomorrow's Connections Today, investing in the infrastructure and platforms that empower our customers to make the most of the digital revolution, while deploying the advanced technologies that nations and economies need to thrive.

Our consolidated businesses generate annual revenue of more than \$7.5 billion, while the VodafoneZiggo JV and the VMO2 JV generate combined annual revenue of more than \$19 billion.**

Liberty Global Ventures, our global investment arm, has a portfolio of more than 75 companies and funds across content, technology and infrastructure, including strategic stakes in companies like ITV, Televisa Univision, Plume, Lionsgate and the Formula E racing series.

** Represents aggregate consolidated and 50% owned non-consolidated fixed and mobile subscribers. Includes wholesale mobile subscribers of the VMO2 JV and B2B fixed subscribers of the VodafoneZiggo JV*

*** Revenue figures above are provided based on full year 2021 Liberty Global consolidated results (excluding revenue from the U.K. JV Entities) and the combined as reported full year 2021 results for the VodafoneZiggo JV and estimated U.S. GAAP full year 2021 results for the VMO2 JV. For more information, please visit www.libertyglobal.com.*