

Introduction

Liberty Global welcomes the opportunity to comment on BEREC's draft Work Programme for 2019 (WP2019).

Telecommunications markets have undergone profound change since liberalisation 20 years ago. Monopolies have been replaced with strong competition. New market structures are serving Europe well, as operators compete in counter-cyclical waves of long-term network investment. Market outcomes for consumers in terms of prices, quality, speeds and coverage have improved significantly.

BEREC recognizes a regulatory evolution has begun in the European electronic communications sector, which is intended to help improve the consumer experience, lead to greater competition and investment, and benefit the players in the digital ecosystem. The new European Electronic Communications Code (Code) and the work that BEREC will undertake for its implementation is aimed at achieving very clear objectives – to promote competition and investment, promote the internal market, empower and protect consumers and promote connectivity.

Liberty Global supports the aim to modernize regulation of the electronic communications sector, and to establish an environment conducive to investments. The objectives for regulation formulated in the Code and adopted by BEREC are key to realize this. BEREC plays a pivotal role in ensuring that National Regulatory Authorities (NRA) strike the right balance between these objectives and the level of regulation, minimizing the risk of regulatory error, and thereby uncertainty, at a time when high levels of investment are needed more than ever to realise the EU Gigabit ambitions. Reaching Europe's connectivity objectives is said to require €500bn, most of it from private sector, and under current investment trends there is already a €155bn shortfall.¹

Liberty Global supports BEREC's commitment to engage with stakeholders, with the aim of focussing its work on issues that are relevant to them. BEREC's stakeholder engagement is intended to promote effective regulation based on high-quality professional standards applied by NRAs. Consulting stakeholders on BEREC initiatives is instrumental to this engagement. For this to be effective BEREC should consult stakeholders on all its initiatives. However, in its WP2019 BEREC selected a number of initiatives that are not open to consultation, some are just subject to a BEREC internal workshop. Also, stakeholders should be given sufficient time to respond. The 3 week deadline given to respond to the WP2019 is too short and does not allow stakeholders to provide adequate input on their interests.

In its response, Liberty Global will follow the order of the WP2019. Where Liberty Global does not now comment on an initiative identified in the WP2019, Liberty Global may do so when the specific

¹ European Commission (2016), 'State of the Union 2016: Commission paves the way for more and better internet connectivity for all citizens and businesses', press release, 14 September, http://europa.eu/rapid/press-release IP-16-3008 en.htm



initiative is consulted by BEREC. Liberty Global may provide more detailed responses to individual consultations.



About Liberty Global

Liberty Global (NASDAQ: LBTYA, LBTYB and LBTYK) is the world's largest international TV and broadband company, with operations in 10 European countries under the consumer brands Virgin Media, Unitymedia, Telenet and UPC. We invest in the infrastructure and digital platforms that empower our customers to make the most of the video, internet and communications revolution. Our substantial scale and commitment to innovation enable us to develop market-leading products delivered through next-generation networks that connect 21 million customers subscribing to 45 million TV, broadband internet and telephony services. We also serve 6 million mobile subscribers and offer WiFi service through 12 million access points across our footprint.*

In addition, Liberty Global owns 50% of VodafoneZiggo, a joint venture in the Netherlands with 4 million customers subscribing to 10 million fixed-line and 5 million mobile services, as well as significant investments in ITV, All3Media, ITI Neovision, Casa Systems, LionsGate, the Formula E racing series and several regional sports networks.

^{*} The figures included in this paragraph include both our continuing and discontinued operations, adjusted for our July 31, 2018 sale of UPC Austria



Strategic priority 1: Responding to connectivity challenges and to new conditions for access to high-capacity networks

1.1 Very high capacity networks & 1.2 study on determinants of investment in very high capacity networks

The Code has rightly identified the roll-out of Very High Capacity (VHC) networks as one of the critical challenges of our times. It is investment in VHC which underpins applications, business models and service innovation that, in turn, drives growth in every other part of the European economy.

It is key that regulation remains technology neutral. VHC networks should be defined as *any* network facilitating speeds in access of 100Mb/s download – either fixed or mobile networks (5G).

Regulation should avoid to favor any specific technology, as this is likely to chill investment in cheaper and faster-to-deploy technologies. A mixed technology approach will not only maximize scope for innovation, and infrastructure competition, but can also serve as the most cost-effective means to achieve Gigabit Society objectives².

Developing a system dynamics model that captures the factors that impact investment decisions is an extremely difficult exercise. Individual stakeholders take their own investment decisions based on a number of factors, including technology type and investment cycles. Capturing this in one model that fits all stakeholders and types of technology to stimulate the effects of regulatory choices and the interaction between investment and competition runs the risk of regulatory error.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure they truly support and foster investments in networks, that stakeholders at all times are consulted and that their interests are taken into account.

1.3 Identification of the Network Termination Point

Although the existing regulatory framework for electronic communications services already laid down a basis for NRAs to define the Network Termination Point (NTP), until now, NRAs have not succeeded in adopting a consistent, coherent and correct interpretation of this concept.

On the contrary, national rulemaking concerning the NTP has been inconsistent and sometimes incorrect. For example, in Germany national law prevented the NRA from defining the NTP. The legislator bound the NRA to a definition that seems to have been written primarily with the interests of domestic manufacturers in mind. Such a fragmented approach continues to this day, with the

² Connectivity for the Gigabit Society, Communications Chambers, November 24th 2016 http://www.libertyglobal.com/pdf/press-release/11-24-New-Report-Says-Europe-Needs-Multiple-Technologies-to-Achieve-a-Gigabit-Society-FINAL.pdf



Dutch Ministry of Economic Affairs and Climate Policy having recently consulted a draft policy guidance which, again, prevents the NRA from adopting a sound definition of the NTP by setting requirements that have no basis in EU law.

Technology neutral regulation is a cornerstone of the Code. The inconsistent and incorrect 'one size fits all' approaches highlighted above are contrary to this principle. They impact one particular access technology much more severely than others.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations.

1.4 Determination of the first concentration point

Sector specific ex ante regulation based on market analysis and the existence of significant market power (SMP) has proven to be remarkably successful, effective and flexible. The existing regulatory framework has ensured that former monopoly markets have transitioned to effective competition. This framework has created robust and dynamic electronic communication markets, and has allowed companies to compete and invest. It has brought substantial added value to society.

The Code introduces the instrument of access obligations beyond the first concentration point or distribution point to a point capable of hosting a sufficient number of end-user connections to be commercially viable for efficient access seekers, where access to wiring and cables inside buildings do not sufficiently address economic or physical barriers to replication. This is not only a very complicated wording of a non-SMP based access obligation. In order to apply the provision, NRAs will have to demonstrate every single aspect of it. Taken too lightly, the application of this provision will increase the risk of regulatory error, deterring further entry and investment.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure they truly support and foster investments in new networks and avoid wasting public money by crowding out private investment.

1.7 Recommendation relevant markets

BEREC will prepare an opinion on the Recommendation relevant markets (Recommendation relevant markets). The Recommendation relevant markets has seen an evolution since its first introduction, with the number of listed markets susceptible to ex ante regulation decreasing, evidencing the increasing competition in the European telecommunications sector. The Recommendation relevant markets indicates NRAs which markets they must analyze. NRAs however have the discretion to analyze other markets as well, applying the three criteria test. With the codification of this test in the Code, the opportunity has been created to further decrease the number of markets listed in the Recommendation relevant markets.

Stakeholders will be able to provide input to the forthcoming consultation of the Commission proposal on the review of the Recommendation relevant markets itself. However, given that BEREC



is committed to engage with stakeholders and this initiative to prepare an opinion impacts stakeholders interests, Liberty Global calls upon BEREC to ensure that stakeholders at all times are consulted and that their interests are taken into account

1.9 Geographical surveys of network deployments

Coverage is a competition issue and disclosing future network deployment plans – being highly sensitive information – should be treated with strict discretion. Deployment of networks has a low degree of predictability beyond the short term and plans are always changing depending on market developments and competition.

Data collected on future mapping represents market intervention and public disclosure of it may lead to a lower degree of investment, as operators will be reluctant to make commitments that may be inefficient. Data from surveys on NGN deployment which would be made available to end-users, should not concern future deployments, but only concern existing networks and already confirmed plans of networks deployments.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure they truly support and foster investments in new networks and avoid wasting public money by crowding out private investment.

1.11 Carry-over work on pricing for access to infrastructure & civil works

At this stage, given the limited period in which it has been in effect in many Member States, Liberty Global doubt whether the timing is right to review of pricing methodologies for access to existing physical infrastructure under the CRD.

When reviewed, Liberty Global considers that EU-level guidance on elements of pricing under the CRD would be desirable to ensure consistency across Europe, but reflecting national circumstances, and to ensure that the best practice pricing methodology is adopted. Any methodology should be easy to apply and should be related to the costs of providing access. Moreover, in circumstances where regulators set access pricing under the CRD, operators should be provided with the data necessary to assess the correctness of the decision.

Liberty Global refers to its 7 November 2018 response to the consultation.

Strategic priority 2: Monitoring potential bottlenecks in the distribution of digital services

2.1 Intra-EU calls

The Code introduces a cap on intra EU mobile and fixed calls and SMSs to be implemented by 15th May 2019. Operators essentially have 4.5 months from the date of the final publication of the Code (expected December 2018) for implementation which is a very short timeframe for such a big



change. Even with full information this timeframe is likely to be an issue and Liberty Global notes that there was a much longer lead in time to implement the provisions on roaming.

While there is some information provided around what is included or not included (e.g. only applies to rates based on actual consumption), there are many gaps. While operators could assume a similar implementation methodology as for the roaming regulations, it is not clear if this is the approach that should be taken.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account. As there is no BEREC consultation foreseen for this element of the BEREC guidelines, Liberty Global calls on BEREC to organize exchanges with the stakeholders before its adoption. For reasons of clarity and consistency it is critical that stakeholders have a clear idea of what proper implementation would entail.

2.2. Harmonized data collection: Authorized Undertakings & OTTs

OTTs providing electronic communications services (ECS) have become crucial market players and are fully in scope of the Code. BEREC may provide a valuable guidance in this regard, as data gathered by OTTs are an important element of a wider picture of competitive dynamics within the market.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.

2.3. Ex-ante margin squeeze tests

Margin squeeze tests are relevant to stakeholders. BEREC should not limit this work stream to an internal work shop.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.

Strategic priority 3: Enabling 5G and promoting innovation in network technologies

3.1 The impact of 5G on regulation, 3.2 Peer review process, 3.3 Carry-over work on infrastructure sharing

In 2018, BEREC made 5G a key focus of its Work Programme. BEREC intends to continue to actively and closely follow the development of 5G. It will, where relevant, work in cooperation with other EU bodies (in particular the Radio Spectrum Policy Group) to identify potential hurdles to a smooth and quick implementation in the Member States.



Liberty Global notes that the promotion of innovation in network technologies should be broader than mobile only. The development of other radio technologies like WiFi and several fixed network technologies is essential. Hence, BEREC should not to look at mobile in isolation but to give due weight to promoting innovation of all networks.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.

Strategic priority 4: Fostering a consistent approach of the net neutrality principles

4.1 Update to the guidelines on Net Neutrality

BEREC's report of 8 October 2018 on "the implementation of Net Neutrality Regulation and BEREC Net Neutrality Guidelines" states that by "late 2018 BEREC will provide the Commission with an evaluation report on its experience with the application of the Regulation and the Guidelines". Liberty Global trusts this evaluation report to the Commission will be made public. As a contributor to this consultation Liberty Global would expect to have the opportunity to comment on the outcome of this evaluation report.

Liberty Global would like to bring to BEREC's attention a potential discrepancy between the WP2019 and the abovementioned report. In the conclusions section the report quotes: "BEREC concludes so far that the net neutrality guidelines are well suited to assist NRAs in performing their tasks of supervision and enforcement as set out in Article 5 of the Regulation". Hence the need for updating the net neutrality guidelines is unclear. Considering that an evaluation of the net neutrality regulation by the Commission will be conducted by 30 April 2019, it would be more appropriate to await the outcome of this evaluation before deciding on an update of net neutrality guidelines.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.

4.2. Implementation of Net Neutrality regulation

Liberty Global considers the report on the implementation of the Net Neutrality Regulation to be an annual report, as done in previous years. Liberty Global would like to point out that compared to previous reports, some discrepancies exist between the feedback provided by NRAs and/or interpretation and compilation from BEREC and what stakeholders are actually observing and experimenting. Liberty Global believes it would be of great value to involve stakeholders in feeding back.



Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.

4.3. Carry-over work on BEREC Net Neutrality measurement tool

As stated in previous consultations, Liberty Global would advise to run the development of this tool through the appropriate ESO (European Standards Organizations) channels. Even though it is a good step forward towards finding harmonization across NRAs, this tool is not guaranteed to be standardized and may create discrepancies with other tools used by the industry. Liberty Global strongly urges BEREC, NRAs and the industry to find a common approach for measuring Internet performance and believe the ESO is the right forum for reaching such consensus.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.

Strategic priority 5: Exploring new ways to boost consumer empowerment

5.3. Contract summary template

Liberty Global supports the view that providing easily understandable information is an essential element for ensuring the welfare and protection of end-users. Information that is reliable, easily accessible, transparent and up-to-date empowers end-users to make informed decisions. Under the Code the EU Commission shall, after having consulted BEREC, adopt an implementing act specifying a contract summary template.

The Code stipulates which information shall be provided to the end-user prior to the conclusion of the contract. This concerns key information including the name and contact details of the provider, contact details, the main characteristics of the service, the price for activation and consumption of the service, contract duration, conditions for renewal and termination, and quality of service information. This serves the interests of customers and gives flexibility to providers as to how to present key information. In a vibrant market, it's important for providers that they can differentiate from competitors, in terms of product offerings and in the presentation of key information. Liberty Global considers that service providers — who are in regular and direct contact with consumers — are best placed to identify the types of information that are relevant to users of their services.

Once all of the key information is presented, Liberty Global also does not see the necessity for a specified format for this information (e.g. font size, layout). When a specific format is required, it should be kept to the minimum. Implementation of a specified format comes with significant administrative costs and it is unclear whether consumers view the product information sheets as helpful in their decision making process.

Liberty Global refers to its 7 November 2018 response to the consultation.



5.4. Quality of service parameters

BEREC should run this or parts of this report through ESO's (European Standards Organizations) channels. Like the Net Neutrality measurement tool, it is of great importance that industry and ESO's are involved in the definition of these parameters. Liberty Global urges BEREC to address the need of identifying different technologies and access networks in order to assess the different QoS parameters. A one-size-fits-all solution or parameter may not be appropriate.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.

5.5. The definition of adequate broadband internet access service

When defining adequate broadband internet access service in the context of universal service, BEREC should ensure that when doing so it safeguards the specific safety net role of universal service that is to fight against social exclusion in the digital society. The network and cost impacts of any decision on a definition should be duly taken into account. The provision in the Code that requires NRAS to define the minimum speed to be available to the majority of consumers bears a considerable risk that USO does not remain a safeguard provision, but obliges network operators to ensure very high bandwidths. This would undermine the Code's objective of investment in high speed networks.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.

5.6. A vision for Europe's telecoms consumers

Most of the areas in the context of consumer empowerment are relevant beyond the telecoms sector and should not be considered in an isolated way, but in the broader context as perceived by consumers. Liberty Global is looking forward to participate in the BEREC workshop in 2019, not only consumer agencies but also operators are very crucial stakeholders in this context and can provide valuable input to this important discussion.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.

5.9. Carry-over work on termination of contracts and switching providers

The Code includes numerous updates and new provisions, that are supposed to further facilitate termination and switching of contracts. An assessment of switching and termination just before Member States transpose all of these rules will therefore only provide an outdated retrospective picture. To truly add value to the discussion Liberty Global suggests BEREC to postpone this



assessment. Also, such an assessment needs to anticipate the broader digital market, since potential barriers for switching and termination are not at all a sector-specific challenge.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.

5.10. Input to European Commission methodology on pricing of bundles

The offering of various services and products integrated in one eco-system is certainly no sector-specific phenomenon. Given that bundles are by no means sector-specific, BEREC should base its consideration on the specification of bundles included in horizontal consumer law and strive for consistency.

Liberty Global calls upon BEREC to ensure that the measures will be designed and adopted in line with the text and spirit of the applicable regulations, in a way to ensure that stakeholders at all times are consulted and that their interests are taken into account.