

**BEREC Report on the outcome of the public  
consultation on the draft BEREC Report on  
COVID-19 crisis – lessons learned regarding  
communications networks and services for a  
resilient society**

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# 1. Introduction

The COVID-19 pandemic has had a significant impact on the European electronic communications markets. As lockdown measures were introduced across the European Union in the spring 2020, the demand for electronic communications services and electronic communications networks increased (“spiked”) significantly. The crisis has clearly demonstrated that connectivity is essential and a “must-have” for all sectors of society.

As the increased use of electronic communications networks may become the new norm, BEREC had a clear role in monitoring and reporting on the situation. Therefore, BEREC included a work item, 5.3.1. in its Work Programme 2021, titled “BEREC Report on COVID-19 crisis – lessons learned regarding communication networks for a resilient society”.

The *draft BEREC Report on COVID-19 crisis – lessons learned regarding communication networks for a resilient society* (hereinafter: draft Report) focuses on the following main areas related to the situation resulting from the pandemic:

- measures adopted at national level, with particular focus on NRAs’ actions in order to cope with the impact of the COVID-19 pandemic on the provision of electronic communication networks and services;
- assessment of the effects of the crisis on the industry;
- collection of case studies and potential regulatory lessons;
- identification of further necessary measures that NRAs might take in order to increase preparedness in case of future similar events and long-term readiness of networks in case of crises.

The draft Report also includes insights concerning Internet Access Services (IAS), including commercial practices, traffic management, best practices and ways forward regarding a consistent application of the Open Internet Regulation<sup>1</sup> (OIR) across the European Union.

Additionally, input from an external study, commissioned by BEREC, ‘*Post Covid measures to close the digital divide - BEREC study with a forward-looking approach which could help NRAs in designing the right conditions to improve digital inclusion for all citizens*’ will also be incorporated in the final version of the Report.

The 47<sup>th</sup> plenary meeting of the Board of Regulators approved the draft Report for publication on 10 June 2021. The public consultation was launched on 14 June 2021 and it lasted till 9 August 2021. BEREC received contributions from **DIGITALEUROPE, ESOA, ETNO, Everbridge, Huawei, Vodafone group** and **2 additional confidential contributors**.

This Report is intended to reflect the submissions received from the stakeholders during the public consultation and BEREC’s response to these submissions.

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<sup>1</sup> [Regulation \(EU\) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users’ rights relating to electronic communications networks and services and Regulation \(EU\) No 531/2012 on roaming on public mobile communications networks within the Union](#)

## 2. Comments on Q1. Were the measures implemented by NRAs during the pandemic effective?

**DIGITALEUROPE**, **Vodafone group** and the **confidential contributors** agree that measures implemented by NRAs during the pandemic were effective. **DIGITALEUROPE** emphasised that it was positive that NRAs refrained from direct regulation of traffic delivery, relying instead on operators and content providers to manage potential congestion, but retaining the right to intervene in appropriate circumstances if necessary. **Vodafone group** listed several cases where it claimed that there would have been scope for improvement. One of the confidential contributors also referred to the long-lasting relationships between the institutions (European Commission, BEREC, NRAs), and between the institutions and operators, which in their opinion have helped to manage the crisis in a calm and responsible way.

**BEREC Answer:** BEREC welcomes the positive feedbacks from the stakeholders regarding the measures implemented by NRAs during the pandemic. BEREC also appreciates the positive input from Vodafone group. Regarding the concerns raised by Vodafone group, BEREC is not in a position to assess certain actions of the NRAs.

**Changes to the draft Report:** No

On the topic of network traffic delivery, **Digital Europe** says that NRAs refrained from direct regulatory intervention, relying instead on operators and content providers to manage potential congestion. It considered that this was the correct approach, as voluntary measures are sufficient to manage the increase in network traffic. **ETNO** and **ESOA** also highlight the role of operators when dealing with the increase in internet traffic, to avoid network congestion.

**BEREC Answer:** BEREC notes that several of the comments related to network traffic are in line with what was mentioned in the draft report with regards to the ability of operators to cope with the increase of data traffic over networks. Regarding NRAs' role, BEREC recalls the variety of measures taken by NRAs, especially the monitoring and reporting of the internet traffic situation in each Member State, guaranteeing the consistent application of the Open Internet Regulation.

**Changes to the draft Report:** No

### 3. Comments on Q2. What areas of interventions/ specific measures taken by NRAs were the most important ones?

During the public consultation, stakeholders indicated various measures as important ones in order to tackle the difficulties raised by the COVID-19 pandemic. **One of the confidential contributors** mentions the reduction of wholesale unit cost of copper and fibre Ethernet bandwidth as an important measure. **DIGITALEUROPE** emphasises the importance of NRAs refraining from unnecessary intervention. Furthermore, they also highlight the significance of the OTT service providers and suggests that NRAs should rely on these direct industry channels —which have proved their robustness and effectiveness during the COVID-19 disruptions — to respond to the diverse and unpredictable future challenges that are certain to arise. **Vodafone group** lists numerous examples of NRAs actions from DE, EL, ES and HU. However, they submitted negative comments on the spectrum case studies namely, aside from the ES example, that none of the regulatory authorities with pending awards reassessed their approach to the sector and, instead, continued with their original award procedures, including some procedures which were particularly damaging to the investment environment. According to **Everbridge** public warning systems play also important role in the fight against the pandemic mentioning EL, NL, NO and SE as examples.

**BEREC Answer:** BEREC notes the comments received.

**Changes to the draft Report:** No

Concerning zero-rating certain internet traffic, **DIGITALEUROPE** pointed out that the Open Internet Regulation provides sufficient flexibility for zero-rating offers. **Vodafone group** refers to the importance that providers have sufficient flexibility to respond to the needs of vulnerable groups e.g. through zero-rating certain internet traffic.

However, this stakeholder also points out that in Spain initiatives like zero-rating of COVID-19 applications proved less efficient while zero-rating of educational or government websites applied in some countries were seen as helpful measures during the pandemic.

**BEREC Answer:** BEREC takes note that during the pandemic several countries applied zero-rating of certain internet traffic e.g. with regard to educational content or COVID-19 tracing applications. In substance, the comments did not raise issues materially beyond those that BEREC raised in its draft report published for consultation. More importantly, it has to be considered that the European Court of Justice (ECJ) issued three decisions concerning zero-rating on 2 September 2021 (thus, after the draft report on COVID-19 was published for consultation). BEREC has already announced that following these ECJ decisions it plans to review the BEREC Guidelines on the Implementation of the Open Internet Regulation as regards zero-rating. Against this background of these latest developments, BEREC does not see a need to amend the COVID-19 report, which reflects the status quo prior to the ECJ decisions.

**Changes to the draft Report:** No

**DigitalEurope** considers that NRAs have shown appropriate regard for industry traffic management practices, not only by allowing the private industry to manage traffic delivery during the pandemic, but also by resisting calls from some operators to permit discriminatory practices prohibited under the Open Internet Regulation.

**BEREC Answer:** As stated in the report, BEREC believes that the Open Internet Regulation has sufficient flexibility, which do not warrant the need to implement measures contrary to the provisions foreseen in the referred Regulation.

**Changes to the draft Report:** No

#### 4. Comments on Q3. What further NRAs' interventions/measures could have helped to fight against the pandemic?

Apart from the measures taken during the pandemic, stakeholders suggested several actions, which could help a similar crisis in the future. **Huawei** suggests taking measures in the fight against fake news. They consider that BEREC should serve as a source of independent, reliable and high-quality information. Furthermore, they suggest follow-up actions like organizing workshop or learning from different experiences from other regions. **ESOA** highlights the importance of satellite connectivity and suggested that NRAs should focus on preparedness for emergency situations. **DIGITALEUROPE** mentions that the current Open Internet Regulation is fit for purpose and while no “exceptional traffic management measures” are known to have been required in response to COVID-19—with networks across Europe still functioning well—this does not foreclose their use in the future, consistent with the Open Internet Regulation. **Vodafone group** would put more emphasis on right conditions for investments. They encourage NRAs to recognise the challenging economic climate through a regulatory strategy, which enables operators to build resilient and capable networks; maximise operators' ability to expand capacity cost effectively. They also support the repositioning of the sector among investors as attractive and suitable for capital markets to provide the financing necessary - in the short term and longer term - to ensure strong, effective network competition. **ETNO** listed several difficulties, which they experienced during the crisis, such as non-homogeneous digitisation and digital readiness; diverging views on privacy provision related to contact tracing applications; difficulties in getting relevant authorisations or permits at local level to deploy, manage and repair networks and delays on 5G deployment; continuity of revenue decreasing regulatory measures, such as the application of delegated act on mobile and fixed termination rates<sup>2</sup> Regarding the contact tracing applications, **Everbridge** suggests that modern multi-channel Public Warning Systems rolled out in cooperation with MNOs could ensure much higher population coverage rates than using downloadable apps.

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<sup>2</sup> [Commission Delegated Regulation \(EU\) 2021/654 of 18 December 2020 supplementing Directive \(EU\) 2018/1972 of the European Parliament and of the Council by setting a single maximum Union-wide mobile voice termination rate and a single maximum Union-wide fixed voice termination rate](#)

**BEREC Answer:** BEREC highly appreciates the constructive suggestions of the stakeholders. BEREC agrees that NRAs are playing their role on the basis of the principles mentioned by the Vodafone group.

**Changes to the draft Report:** Some of the suggestions will be incorporated in *Chapter 4.2 – Regulatory Lessons* in the final Report

**ETNO** suggests enhancing the flexibility of regulatory measures, especially those regarding the restrictions on network management capabilities imposed by the Open Internet Regulation. This flexibility is suggested to avoid uncertainty and different interpretations by NRAs on the provisions of the Open Internet regulation to cope with the increase of traffic.

**BEREC Answer:** BEREC would highlight that several stakeholders including ETNO have mentioned ISPs' ability to cope with the increase in internet traffic, even though subject to the Open Internet Regulation, which seems contradictory to the proposed suggestion regarding the enhanced flexibility of regulatory measures related to network management. Notwithstanding, BEREC notes that the principle of equal treatment of traffic, foreseen in the Open Internet Regulation, does not prevent ISPs from implementing reasonable traffic management measures in compliance with Article 3(3) second subparagraph. Although Article 3(3) third subparagraph prohibits ISPs to apply traffic management measures going beyond reasonable traffic management measures, it still presents three exceptions to that rule. Therefore, BEREC still considers that the Open Internet Regulation and the BEREC Open Internet Guidelines are flexible and suitable to face exceptional circumstances, as demonstrated during the COVID-19 crisis.

**Changes to the draft Report:** No

## 5. Comments on Q4. Do NRAs have sufficient regulatory tools to deal with the pandemic?

In general, the participants of the public consultation (**DIGITALEUROPE, Vodafone group, confidential contributors**) believe that NRAs had sufficient regulatory tools to deal with the pandemic. However, **Vodafone group** also mentions that institutional design is also critical and the role of a coordinated and aligned approach becomes as important as the regulatory tools.

**BEREC Answer:** BEREC welcomes the positive feedback of the stakeholders.

**Changes to the draft Report:** The suggestions will be incorporated in *Chapter 4.2 – Regulatory Lessons* in the final Report

## 6. Comments on Q5. What is expected from NRAs in a crisis situation like this?

Stakeholders recommends that various approaches should be expected from NRAs in a crisis situation like this. According to **ESOA**, besides technology neutrality, flexibility and simplification should prevail in implementing authorisation procedures and conditions. **One of the confidential contributors** expects a more proactive intervention, while **Vodafone group** would welcome a more forward looking, ambitious, comprehensive and quicker response from the NRAs in a future crisis. They also highlight that it is important for the operators to have sufficient flexibility to respond effectively to the needs of vulnerable customers (for example with respect to accessibility, availability and affordability). Finally, **one of the confidential contributors** suggests that calm and reasoned decision-making, in direct co-operation with operators shall be expected from the NRAs.

**BEREC Answer:** BEREC acknowledges the comments of the stakeholders. BEREC agrees that it is important for the operators to have sufficient flexibility to respond effectively to the needs of vulnerable customers (for example with respect to accessibility, availability and affordability)

**Changes to the draft Report:** The suggestions will be incorporated in *Chapter 4.2 – Regulatory Lessons* in the final Report

## 7. Comments on Q6. Do you consider that the current sectoral institutional framework has proven to be fit to deal with the crises? What solutions could be envisaged to improve all stakeholders' (including institutions) ability to cope with systematic emergency situations in the future?

In general, according to the stakeholders (**Huawei**, **DIGITALEUROPE**, **confidential contributors**) current sectoral institutional framework has proven to be fit to deal with the crises. **Huawei** suggests that the network has to be ready to flexibly prioritise the traffic related to emergency services and to avoid congestion; the whole end-to-end service chain of those kind of services has to be prioritised, from access to backbone. **ESOA** suggests that regulators should maintain a holistic approach and made sure that solutions based on a mix of technologies (mobile, satellite, microwave and emerging technologies) could be deployed as they could often provide more reliable, quickly deployable and cost-efficient infrastructure connectivity, especially in areas with low density of population. **Vodafone group** proposes that governments might need to adapt their regulatory impact assessment processes to ensure that they would remain relevant to policymaking as countries emerge from the crisis. It will be key for administrations and NRAs to apply regular evidence-based tools to long-term measures following the emergency response. Besides the importance of green and



sustainable recover, **ETNO** suggests to consider promoting investment and reducing the cost of deployment; properly designing spectrum assignment conditions; reinforcing digital communications ecosystem and enhancing the flexibility of regulatory measures such as the restrictions on network management capabilities imposed by the Open Internet Regulation instead of focusing on a degradation of the end-user quality of experience to avoid situations of network congestion. Finally, **Everbridge** suggests considering Public Warning Systems a necessary solution to be envisaged to improve all stakeholders' (including institutions) ability to cope with systematic emergency situations in the future

**BEREC Answer:** BEREC agrees that occurrences of network congestion should be avoided; a holistic and technologically neutral approach should be maintained in crisis situations.

**Changes to the draft Report:** The suggestions will be incorporated as much as possible in *Chapter 4.2 – Regulatory Lessons* in the final Report

According to **DIGITALEUROPE**, the Open Internet Regulation is an important framework to guarantee non-discrimination of traffic and to protect the interests of all participants in the internet ecosystem. In addition, that stakeholder referred that, although there were no exceptional traffic management measures applied during the pandemic, they may be applied in situations in the future, in line with the Open Internet Regulation.

**Huawei** considers that the network has to be ready to flexibly prioritise the traffic related to emergency services, in accordance with the Open Internet Regulation, in order to solve network resilience issues and to cope with systematic emergency situations in the future.

**BEREC Answer:** BEREC welcomes the comment related to the relevance of the Open Internet Regulation, namely its flexibility in future crises. In addition, BEREC acknowledges the comment related to the need to adapt the networks with regard to emergency services, to better respond to emergency situations in the future.

**Changes to the draft Report:** No

## 8. Other comments related to the draft Report

According to **Huawei**, the Report is of utmost importance to contribute to a more resilient electronic communications sector and a more resilient society as a whole. The open Internet rules proved to be fit for purpose and there is no need to amend them. They highlighted the importance of acting locally in response to a crisis and also mentioned that free and undistorted competition and technological neutrality are crucial for the resilience of this sector and the infrastructure that it is operating. They agreed with the importance of the issues raised by the Report, but also referred that the full value chain of the electronic communications sector, starting from the supply of raw materials through the whole value chain to the end-user, should be considered. Huawei's contribution also mentioned that sector resilience, highlighted by this pandemic, must also be seen in the context of areas like cybersecurity and sustainability for instance. A more energy-efficient and secure network is *per se* more resilient during a pandemic as well. They also suggested to integrate the experiences from suppliers

as well, because they played a significant role and are key to run resilient networks and should be seen as part of the solution.

In **DIGITALEUROPE**'s point of view NRAs have responded successfully to concerns around connectivity throughout the pandemic. DIGITALEUROPE suggested that the draft Report could highlight the collaboration among network operators and providers of over-the-top (OTT) services. Indeed, a flexible regulatory approach, respecting long-standing industry practices and partnerships, has led to resilient networks and increased availability of communications services to consumers.

**One of the confidential contributors** agrees with most of the factual content of the draft Report and noted that they would not expect BEREC and NRAs to recommend changes to the EU or national regulatory frameworks, or to put in place new or additional regulatory requirements, such as resilience or advance capacity planning imposed by regulation. The European regulatory system, which incorporates the active promotion of competition at all levels of the value chain, has proven to work well in response to the COVID-19 crisis. **One of the confidential contributors** provides several detailed comments related to the draft Report. According to **one of the confidential contributors**, the draft Report did not give enough prominence to the performance and positive contribution of operators. Furthermore, alternative operators have coped with increasing demand for connectivity and avoided network congestion by upgrading their main network hubs to support bandwidth peaks or by upgrading their backhaul infrastructures in order to ensure that customers are served with adequate capacity. **One of the confidential contributors** also provides feedback related to the financial impact section of the Report and also suggested that several measures taken by NRAs were inappropriate.

**BEREC Answer to Huawei's proposal:** BEREC can agree that the full value chain can also be examined; however, this would go beyond the scope of this Report.

**Changes to the draft Report:** No

**BEREC Answer to DIGITALEUROPE's proposal:** BEREC agrees that the collaboration between networks operators and OTT service providers is important, which is mentioned several times in *Chapter 4.2 – Regulatory Lessons* of the Report.

**Changes to the draft Report:** No

**BEREC Answer to the confidential contributor's proposal:** BEREC appreciates that the confidential contributor agrees with most of the factual content. BEREC takes note of the comments on national measures related to suspension of margin-squeeze testing of the offers of the SMP operator; suspension of number portability and no action related to a wholesale price reduction on the SMP operator's copper and fibre Ethernet bandwidth. However, the intention of Chapter 1 on measures applied by the Member States is to describe the national measures and not to assess them. BEREC also takes note of the comment related to the financial impact of the crisis and to the case study on spectrum auction. Regarding the table showing the financial impact of the pandemic on page 10 of the report, the 'unbalanced' selection of only the largest market players has been criticized. The reason for selecting these

operators was that these are publicly traded companies; therefore, their financial results are regularly published. The table now includes TELE2 group's results as well. As for the roaming revenues, BEREC believes that the current text is sufficiently elaborate; the description in Chapter 2.1 is based on NRAs findings on the subject.

**Changes to the draft Report:** *Chapter 1.1 – Consumer related issues* and *Chapter 2.1 – Financial impact of the crisis* of the final Report will be updated in accordance with the above comment.