BEREC Summary Report on the status of internet capacity, regulatory and other measures in light of the Covid-19 crisis

In a joint statement with the European Commission, on 19 March 2020, on how network operators can cope with the increased demand of network capacity, BEREC committed to a special reporting mechanism to ensure regular monitoring of the Internet traffic situation in each Member State, in order to be able to respond swiftly to capacity issues. Furthermore, BEREC is collecting information on other measures implemented by National Regulatory Authorities (NRAs) as well as on other initiatives by public and private parties throughout Europe.

Between March 2020 and June 2021, BEREC published its summary report on a regular (primarily monthly) basis. As the reported situation stabilised, and updates from NRAs moderated, it was agreed that a final iteration of the report would be published at 2021 year end. Thus, this report focuses on, and summarises, the main updates provided by NRAs (to cover the intervening period since end of June 2021) as of 15 November 2021.

The report provides an update on the information collected by BEREC regarding the status of internet traffic in Member States (see section 1.1. below) and on the status of networks (see section 1.2. below) based on a 'traffic light' illustration. During the entire reporting period (i.e. since BEREC first published a report on how the Covid-19 crisis is impacting internet capacity etc.), 33[1] NRAs have shared their data about the impact of the crisis on electronic communications networks and the actions taken so far in their respective Member States.

Please refer to the previous iterations of this summary report[2] for further details on some of the early measures applied by NRAs during the crisis.

1. Status of internet capacity

In general, while traffic on fixed and mobile networks have increased during the (approximate) twenty months of the Covid-19 crisis, no major congestion issues have ever been reported by NRAs to BEREC.

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[1] The following NRAs have contributed so far to the information gathering exercises: AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IT, LT, LU, LV, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, and SK.

[2] The previous iterations of the summary report can be found at: https://berec.europa.eu/eng/document_register/search/?reference_number=&title=summary+report&contents=&category_id=&date_from=&date_to=&search=1

For this report, which takes into consideration any new information of relevance between June and November 2021, 2 NRAs[3] have provided updates of substance on the status of internet capacity in their Member States.

Key updates since previous report

- *In IT, the monitoring exercise confirms a growing trend in traffic towards the end of 2021, greater than the peaks measured during periods of restrictive measures.*

- *In PT, overall internet traffic has slightly decreased since the last status update, though still 67% above the volume registered just before the pandemic was declared.*

1.1. Status of internet traffic

In general, three phases in the evolution of internet traffic have been observed during the crisis: a sharp increase in its early weeks, a subsequent stabilisation and, through the latter part of 2020 and through 2021, a decrease from the peak (experienced early in the crisis). The following updates on the status of internet traffic have been reported:

In IT, from October 2020 to April 2021, due to new local and national restrictions, a significant increase in traffic has been reported again, but with no issue of exceptional network congestion in mobile and fixed access network. The monitoring exercise is still ongoing and has confirmed a growing trend in traffic also in the last months of 2021: in particular, current indexes for intensity on fixed networks and for intensity and volume on mobile networks are greater than the peak ones measured in 2020 and at the beginning of 2021 when restrictive measures were in place, also for the innovation due to the live streaming transmission of Serie A football matches. During October 2021 mobile data traffic has registered high increases, compared to the reference levels of the week before the pandemic was declared, both in intensity and in volume, with increments up to +113% and +82%, respectively. Similarly, fixed data traffic has registered very significant increases, compared to the reference levels, both in intensity and in volume, with increments up to +83% and +54%, respectively.

In PT, overall internet traffic has slightly decreased since the last status update, though in October the average weekly volume registered was 67% above that registered in the week before the pandemic was declared. Mobile data traffic has increased in comparison to the previous status report. In October, the average weekly mobile data traffic was 49% above the volume registered the week before the pandemic was declared. Fixed data traffic has slightly decreased in comparison to the previous status report, and in October, the average weekly volume of fixed Internet traffic was 68% above the volume registered the week before the pandemic was declared.

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[3] NRAs from the following Member States have provided substantive updates during the data gathering exercise: IT and PT.

1.2. Status of networks

Figure 1 below illustrates the results of a data collection exercise that BEREC launched in October 2020 regarding the status of networks across Europe. NRAs were asked to provide a response on the overall status of telecommunications networks in their respective countries, based on the following categorisation:

- Green: Networks are working well, Covid-19 is not creating issues for the availability or general quality of IAS. No exceptional traffic management measures justified.

- Yellow: Covid-19 is causing limited congestion issues affecting the general quality of IAS (e.g. with 1 or 2 ISPs or networks). Exceptional traffic management measures might be possible, but would require close scrutiny of the NRA under OI Regulation.

- Red: Severe and/or widely spread network congestion issues due to Covid-19 affecting the general quality of IAS and exceptional traffic management measures are likely justified and/or used.
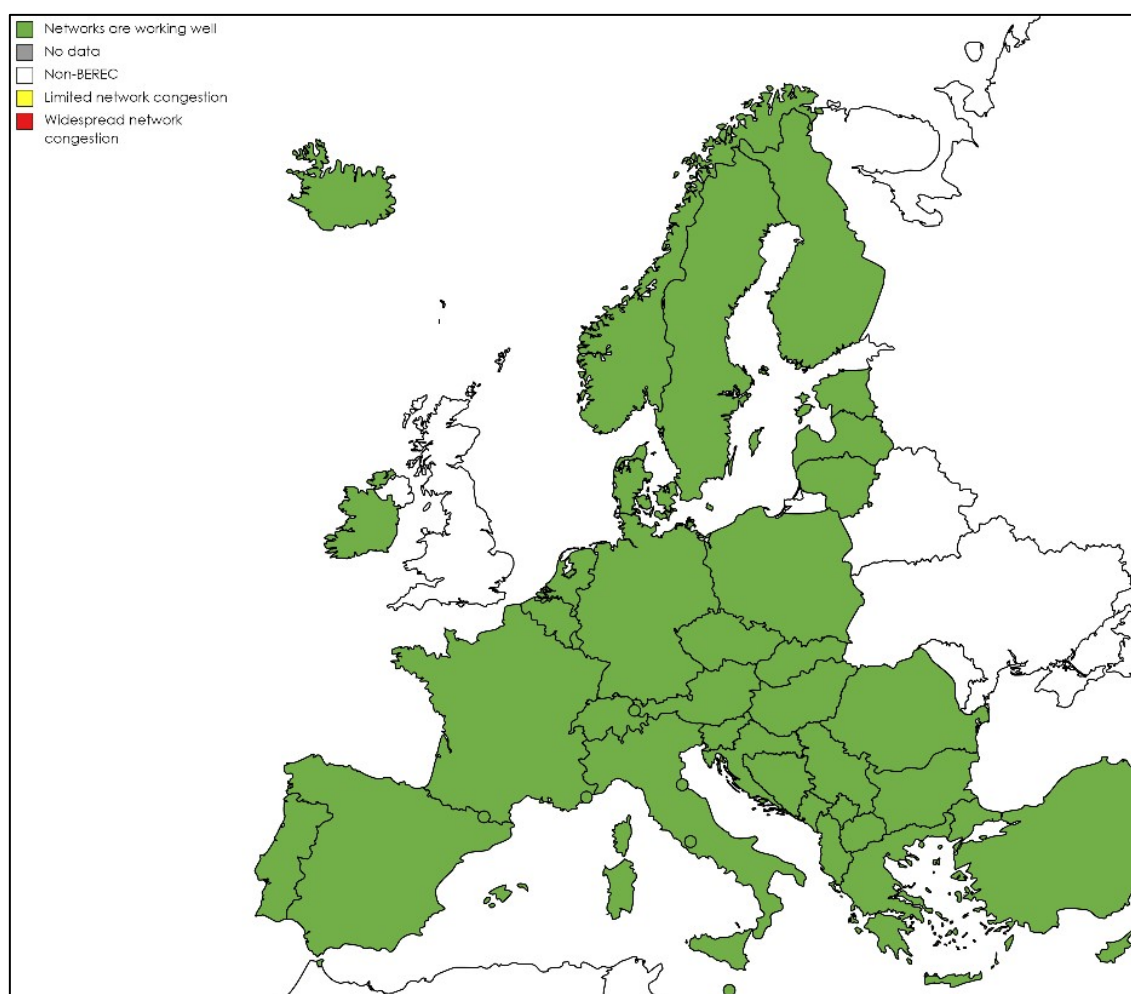
All BEREC NRAs have indicated 'status green'.

Figure 1: Status of networks

1.3. Regulatory actions taken

NRAs are monitoring the situation and are collecting data from ISPs and other market players about the status of their networks, but are doing so with different regularity. No new information has been provided by NRAs.

1.4. Actions taken and communication by operators

No NRA has provided new information to be included in this section of the report.

2. Other measures taken by NRAs, public institutions and market players

Key updates since previous report

- *IE and PT submitted information related to measures implemented by the NRA.*

- *PT reported on measures adopted by the government.*

- *TR updated its previous report on measures related to the security of communications infrastructures.*

- *PT submitted information related to disinformation.*

- *DE provided an update concerning tracing applications.*

Since July 2021 the electronic communications networks remained stable, no major disruptions occurred and the NRAs kept analyzing the effects of the pandemic.

2.1. Measures implemented by the NRA

IE reported that a further Temporary Spectrum Management Measures initiative was put in place, following a request from MNOs within the State as a consequence of significant changes to the normal network traffic levels and patterns of the electronic communications networks in Ireland. These changes to the normal network traffic levels and patterns were as a direct consequence of severe lockdown restrictions in March 2020. The legislation that gives effect to ComReg's temporary spectrum management measures were initially put in place for 6 months, as a consequence of Covid-19 Irish Government restrictions, secondary legislation needed to be put in place to continue the initiative. Recently new secondary legislation was put in place for the third time on the 2 October 2021, as Covid-19 Government restrictions were not fully lifted. The current version of the temporary spectrum management measures are due to expire on 1 April 2022. ComReg will review the need to continue this initiative in the New Year.

PT reported the practical guide dedicated to the impact of Covid-19 on the communications sector in PT has been frequently updated following the reinforcing of the exceptional and temporary consumer rights over the maintenance of services without pay, the termination or suspension of contracts without penalties or costs until the end of 2021. The practical guide was last updated on 17 September. On 5 November 2021, Anacom published a new assessment of the implementation of communications customer protection measures under the Covid-19 pandemic. Anacom continued to publish statistics related to the number of complaints of the electronic communications sector. According to the statistics published on 1 September 2021, complaints about the communications sector fell in the second quarter 2021 and approached pre-pandemic levels. In fact, electronic communications services were accounted for 18,700 complaints in the second quarter of 2021, down 5% than the complaints registered in the second quarter of 2020 and down 23% when compared with the first quarter of 2021, returning to values close to the ones registered before Covid-19.

2.2. Measures implemented by ministries and other governmental bodies

PT reported that on 7 July 2021, new decree-law[4] was adopted guaranteeing the provision of essential services, including electronic communications services. Through this decree-law, the Government extended some exceptional consumer protection measures, namely the ban on telecom operators suspending the supply of services due to non-payment, until 31 December 2021. On 6 August 2021, the Government[5] also extended the possibility to consumers to cancel their electronic communications service contracts without penalties, or to suspend them temporarily without any costs, in case of unemployment or a fall in household income above 20%, until 31 December 2021.

2.3. Measures related to security of communications infrastructures

TR reported that as a result of examination and malware analysis, signatures were created for mobile applications and malwares, and malware activities were detected accordingly. In this context, TR has detected 750 fake conference applications and implemented the necessary procedures so far. Covid-19 threat intelligence report was published on the CERT Communications Platform which is a secure communications platform among the national CERTs and sectoral and institutional CERTs, and shared with the relevant parties. 133 malware reviews and 612 malware information were shared in the report. Especially, due to the increase in the use of remote working methods, more than 31,000 vulnerabilities have been detected by scanning remote management services and necessary warnings have been issued to the relevant public institutions. In addition, more than 2,300 harmful droppers and command and control centres related to Covid-19 were blocked.

2.4. Measures related to disinformation

PT reported that on 28 July 2021, Anacom released a video[6] about 5G that highlights the benefits and fears surrounding this technology.

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[4] Decree-Law No. 56-B/2021 of 07.07.2021
[5] Decree-Law No. 70-A/2021, of 06.08.2021
[6] https://www.anacom.pt/render.jsp?contentId=1687336

2.5.   Measures to monitor the spread of Covid-19

DE reported that by 9 November 2021, the Corona-Warn-App has been downloaded almost 36 million times.