

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.

This report focuses on, and summarises, the main updates of an ongoing monthly information gathering exercise, and includes the most recent data provided to BEREC by its constituent NRAs as of 24 November 2020. This month's report provides an update on the information collected by BEREC (for the first time last month) regarding the status of networks in Member States (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.), 33¹ 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 report² for further details on some of the early measures applied by NRAs during the crisis. The summary report will continue to be updated based on regular input from NRAs with the next iteration expected to be released on 18 December 2020.

1. Status of internet capacity

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

For this report, 4 NRAs³ have provided updates of substance (i.e. information highlighting changes in answers to the questions asked in BEREC's information gathering exercise) on

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

³ NRAs from the following Member States have provided substantive updates since the previous data gathering exercise: IT, MT, PL and PT.

the status of internet capacity in their Member State since the previous information gathering exercise (27 October 2020), while 19 NRAs⁴ have explicitly mentioned that either the situation remains stable or there is nothing new to report. Please refer to previous iterations of the internet capacity summary report for further details on some of the early measures applied by NRAs during the crisis.

Key updates since previous report

- *In IT, due to new local and national restrictions, since October 2020 a significant increase in traffic has been reported (compared to the situation in February 2020).*
- *In PL, most ISPs reported a significant increase in traffic during working hours due to the launch of distance learning*
- *In PT, overall internet traffic has increased through November. Mandatory teleworking was ordered in Portugal during the week of 2-8 November and since then data traffic has increased steadily.*

1.1. Network issues raised by NRAs

In general, three phases in the evolution of internet traffic have been observed during the crisis: an initial sharp increase, a period of stabilisation and a decrease from the peak.

The following updates on the status of internet traffic have been reported:

In IT, due to new local and national restrictions, since October 2020 a significant increase in traffic has been reported (compared to the situation in February 2020). However, there has been no issue of exceptional network congestion in mobile and fixed access networks.

The most recent statistics presented from IT suggest that mobile data traffic is up by 46% in intensity⁵ and up 44% in volume⁶ (since February 2020). Mobile voice traffic, during the same period, is up by 20% in intensity⁷ and up by 26% in volume⁸. For fixed data traffic, intensity is up by 39% and volume is up by 62%, while for fixed voice traffic, intensity is up by 22% and volume is up by 18%.

In MT, between March and June, the NRA collected regular information from network providers about the traffic loads experienced, traffic management requirements and network capacity. The data showed that while there was an increase in traffic and network demand, such demand did not cause any material impact on the networks. There was no need for the

⁴ NRAs from the following Member States having explicitly mentioned that there were no changes since the previous data gathering exercise: AT, BE, BG, CY, CZ, DE, DK, EL, FI, FR, HU, IE, LT, LV, NL, NO, RO, SE, SK.

⁵ Data traffic intensity: peak traffic registered during the week (measured in Gbps)

⁶ Data traffic volume: sum of the data transmitted and received on the network during the week (measured in TB)

⁷ Voice traffic intensity: sum of the minutes of voice traffic during the peak hour of the week (measured in millions of minutes)

⁸ Voice traffic volume: sum of the minutes of voice traffic registered during the week (measured in millions of minutes)

providers to make use of exceptional traffic management measures during the period. Acknowledging the stability of the situation, the reporting was stopped. Since then, the NRA has continued with its own monitoring, collecting information about user experience primarily through its own channels for consumer complaints and other means such as social media. The NRA notes that the level of complaints received are stable and on par with complaints received before the Covid-19 pandemic. Hence the NRA notes that networks have remained stable even during the Covid-19 pandemic.

In PL, most ISPs reported a significant increase in traffic during working hours due to the launch of distance learning. However, there have been no reports of any major temporary or exceptional network congestions resulting in a significant deterioration of the quality of Internet access service for end users

In PT, overall internet traffic has increased through November. Mandatory teleworking was ordered in Portugal during the week of 2-8 November and since then data traffic has increased steadily. On 15 November, mobile data traffic was 10% above the volume registered the week before the declaration of the pandemic. On the same day, fixed data traffic was 72% above the volume registered the week before the pandemic was declared.

Both IT and PL informed BEREC that while they are monitoring potential problems with respect to Regulation (EU) 2015/2120, until now there is no evidence of any breach to the regulation and the NRAs have not been required to take any decisions.

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.

29 NRAs⁹ have responded to this request (all indicating 'status green'). In the case where an NRA did not respond, the map appropriately shows 'no data' for such countries¹⁰.

⁹ AT, BE, BG, CY, CZ, DE, DK, ES, FI, FR, HR, HU, IE, IT, GR, LT, LV, LU, ML, MK, MNE, NL, NO, PL, PT, RO, SE, SI and SK.

¹⁰ In this case, 9 countries: AL, ES, RS, CH, LI, BIH, RKS, TR and IS. The map also includes a number of non-BEREC countries, which are clearly indicated with a different colour.

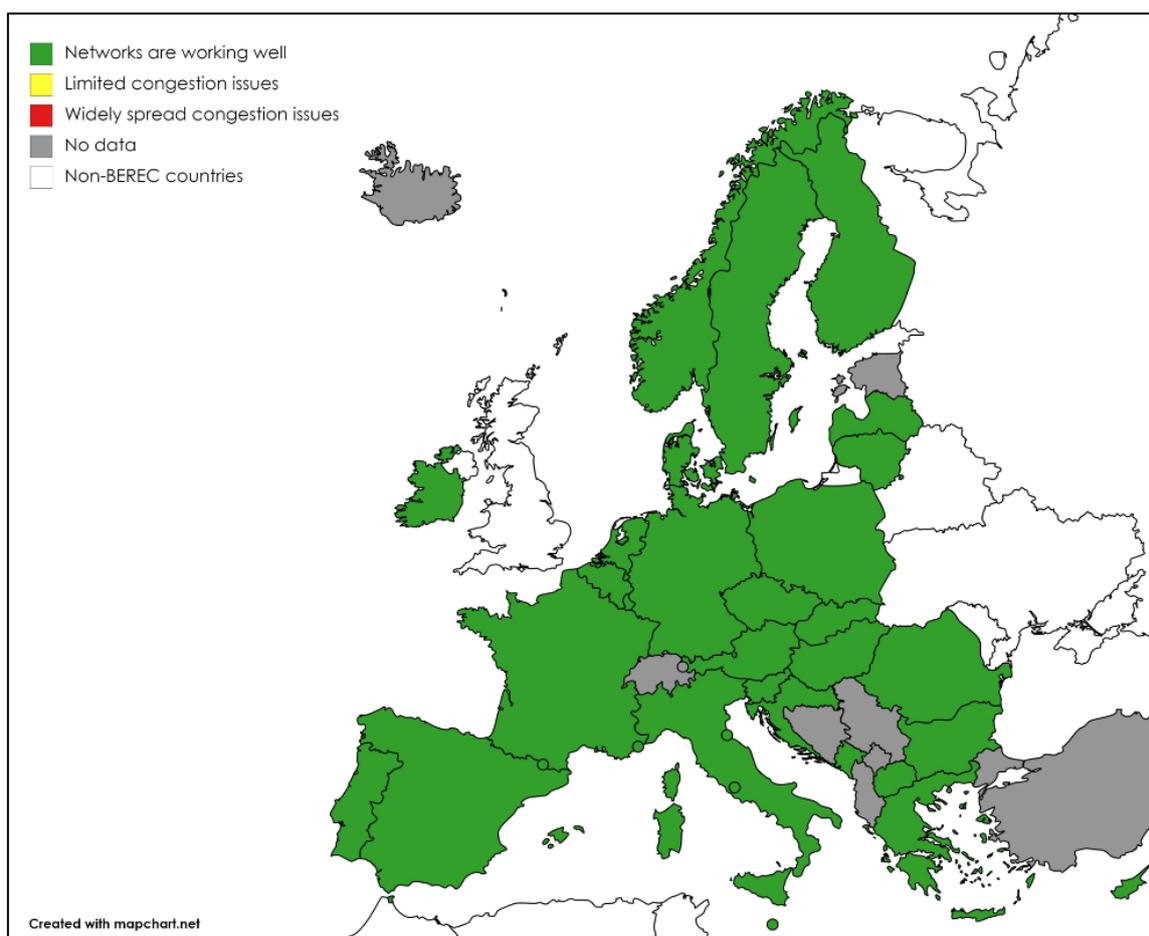


Figure 1: Status of networks (based on information submitted by NRAs up to, and including, 24 November 2020)

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. However, no NRAs provided an update of substance with respect to regulatory actions taken in November.

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

No new information has been provided for November regarding other measures taken by NRAs, public institutions and market players.

A separate report providing a comprehensive, retrospective overview of Member State experiences related to the regulatory and other measures in light of the Covid-19 crisis has been prepared.