Public consultation on the needs for Internet speed and quality beyond 2020

GENERAL INFORMATION ABOUT THIS PUBLIC CONSULTATION

The European Commission has prepared this public consultation to look into the needs for Internet speed and quality beyond 2020. The purpose is to assess and understand those needs better with a view to developing public policy to accompany investors in the deployment of future-proof connectivity networks and to ensure that all users, e.g. households, businesses, public institutions, can take advantage of the digital economy and society. This public consultation is addressed to everyone (citizens, businesses, NGOs, public authorities, etc.) and every sector (from agriculture to ICT, from education to automotive, services and industry) which has an interest in ensuring that their future Internet connectivity needs are fully met.

Some of the questions below make a distinction between fixed and mobile connectivity. Fixed connectivity is to be understood as connectivity available at a fixed location, e.g. at home or at work (and not necessarily on a fixed line). Mobile connectivity is to be understood as connectivity available to individual users and objects “on the move”, e.g. when commuting, when travelling, in shopping centres, in stadiums, etc.

Most of the questions below are designed to be answerable by all stakeholders, with various levels of technical details. A few questions, however, are more complex and addressed in particular to respondents who have a deep knowledge of connectivity quality features and their forthcoming evolution. The attached document gives definitions / examples of connectivity features, as well as further background, that aim at helping respondents to better understand some of the questions.

Background and definitions for the public consultation on the needs for Internet speed and quality 2020

BG.docx
CS.docx
DA.docx
DE.docx
EL.docx
EN.docx
ES.docx
ET.docx
FI.docx
FR.docx
HR.docx
HU.docx
IT.docx
LT.docx
LV.docx
MT.docx
NL.docx
PL.docx
PT.docx
RO.docx
SK.docx
SL.docx
SV.docx

GENERAL INFORMATION ABOUT YOU

Are you responding as?

- ○ An individual in my personal capacity
- ◉ The representative of an organisation

Do you have a disability or respond on behalf of an organisation of persons with disabilities?

- ○ Yes
- ◉ No

In which country is your organisation based?

Belgium

Please indicate your age group.

○ Below 20 ○ 20-30 ○ 30-40 ○ 40-50 ○ 50-60 ○ Beyond 60

Are you / your organisation based in?

- ○ An urban area with a minimum population of 50 000
- ○ A rural area with a maximum population of 5 000
- ○ A sub-urban area with a population between 5 000 and 50 000

Is connectivity the primary means by which your business is conducted or an important part of your business or activity / an important component for your household?

- ◉ Yes
- ○ No

If connectivity is the means or an important part of your business or activity, what is the scale of your activity?

- ☐ Local / regional
- ☐ National
- ☑ European
- ☐ Global

Please tick the box(es) that appl(y)(ies) to your organisation and sector.

- ☐ National authority
- ☐ Regional authority
- ☐ Representative association at EU level
- ☑ Non-governmental organisation
- ☐ Representative association at national level
- ☐ Independent professional
- ☐ Micro enterprise (less than 10 persons employed)
- ☐ Small enterprise (10-49 persons employed)
- ☐ Medium-sized enterprise (50-249 persons employed)
- ☐ Large enterprise (250 or more persons employed)
- ☐ Research institute
- ☐ Education establishment
- ☐ ICT industry
- ☐ International organisation
- ☐ Other

Please specify the NACE code if applicable.

The list of NACE codes is available here.

In which country(ies) does your organisation operate?

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Italy
- Ireland
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- United Kingdom
- Other

Is your organisation registered in the Transparency Register of the European Commission and the European Parliament?

- (●) Yes
- ( ) No

Please indicate your organisation's identification number in the Transparency Register.

16311905144-06

Please enter the name of your institution/organisation/business.

European Digital Rights (EDRi)

Please enter your / your organisation's address and contact details.

Rue Belliard 20
1040 Brussels - Belgium
https://edri.org
@edri
+ 32 2 274 25 70

Contributions received will be published on the Commission's website unless it would harm your legitimate interest. Do you agree to your contribution being published?

- (●) Under the name supplied. (I consent to the publication of all the information in my contribution, and I declare that none of it is subject to copyright restrictions that would prevent publication.)
- ( ) Anonymously. (I consent to the publication of all the information in my contribution except my name/the name of my organisation, and I declare that none of it is subject to copyright restrictions that would prevent publication.)
- ( ) No publication - your answer will not be published but it may be used internally by the Commission. Note that your answer may be subject to a request for public access to documents under Regulation (EC) No 1049/2001.

QUESTIONS

All questions are optional. Please reply consistently either as an individual or as an organisation or a public authority as per your responses to the "information about you" section.

1. Is your / your organisation's main Internet connection (the one you pay for if you reply as an individual or your organisation pays for if you reply as an organisation)?

- ( ) A residential connection (fixed or bundled)
- ( ) A professional connection
- ( ) A leased line
- ( ) A mobile only connection

2. What is the maximum number of devices (e.g. computers, tablets, smart phones, televisions, assistive technologies, cameras, sensors and other connected objects) that share simultaneously the same main connection in your organisation / household?

- Less than 3
- Between 3 and 5
- Between 6 and 10
- More than 10

Please specify.

3. How do you think that the maximum number of devices that will share simultaneously the same main connection in your organisation / household will evolve by 2025?

- Decrease
- Remain stable
- Increase slightly
- Increase significantly

Please specify.

4a. Which of the following Internet services and applications do you / does your organisation use and how often?

	Continuously through **fixed** connectivity	At least once a day through **fixed** connectivity	At least once a week through **fixed** connectivity	At least once a month through **fixed** connectivity	At least once a year through **fixed** connectivity	Continuously through **mobile** connectivity	At least once a day through **mobile** connectivity	At least once a week through **mobile** connectivity	At least once a month through **mobile** connectivity	At least once a year through **mobile** connectivity
Data repository (e.g. archiving files in the cloud)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Text communication (e.g. e-mails, instant messaging, social media)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Voice communication (e.g. IP telephony)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Video communication (e.g. video conferencing, video calls)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Collaborative tools (e.g. social networks)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Connected objects (e.g. cameras, sensors)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Assistive devices and/or accessible technologies	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

4b. Which of the following content, products and services do you / does your organisation access to (primarily download) and how often?

	Continuously through **fixed** connectivity	At least once a day through **fixed** connectivity	At least once a week through **fixed** connectivity	At least once a month through **fixed** connectivity	At least once a year through **fixed** connectivity	Continuously through **mobile** connectivity	At least once a day through **mobile** connectivity	At least once a week through **mobile** connectivity	At least once a month through **mobile** connectivity	At least once a year through **mobile** connectivity
Access to text content (e.g. blogs, newspapers)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Access to audio content (e.g. music streaming)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Access to video content (e.g. video games, IPTV)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Access to financial / banking products and services	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Access to e-commerce / shopping products and services	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Access to e-learning products and services	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Access to digital public services	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Access to e-health products and services	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

4c. Which of the following content, products and services do you / does your organisation provide (primarily upload) and how often?

	Continuously through **fixed** connectivity	At least once a day through **fixed** connectivity	At least once a week through **fixed** connectivity	At least once a month through **fixed** connectivity	At least once a year through **fixed** connectivity	Continuously through **mobile** connectivity	At least once a day through **mobile** connectivity	At least once a week through **mobile** connectivity	At least once a month through **mobile** connectivity	At least once a year through **mobile** connectivity
Provision of text content (e.g. blogs, newspapers)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Provision of audio content (e.g. music streaming)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Provision of video content (e.g. video games, IPTV)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Provision of financial / banking products and services	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Provision of e-commerce / shopping products and services	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Provision of e-learning products and services	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Provision of digital public services	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Provision of e-health products and services	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

5. Among the Internet services, applications, content and products mentioned in questions 4a, 4b and 4c , how many at most do you / does your organisation use simultaneously through the same fixed connection?

- 1
- 2-3
- 4-5
- 6-10
- More than 10

Please specify.

6a. How do you think your / your organisation's uses of the following Internet services and applications will evolve by 2025 compared with today?

	Not used anymore through **fixed** connectivity	Less used through **fixed** connectivity	Used the same through **fixed** connectivity	More used through **fixed** connectivity	Not used anymore through **mobile** connectivity	Less used through **mobile** connectivity	Used the same through **mobile** connectivity	More used through **mobile** connectivity
Data repository (e.g. archiving files in the cloud)	☐	☐	☐	☐	☐	☐	☐	☐
Text communication (e.g. e-mails, instant messaging, social media)	☐	☐	☐	☐	☐	☐	☐	☐
Voice communication (e.g. IP telephony)	☐	☐	☐	☐	☐	☐	☐	☐
Video communication (e.g. video conferencing, video calls)	☐	☐	☐	☐	☐	☐	☐	☐

Collaborative tools (e.g. social networks)	☐	☐	☐	☐	☐	☐	☐	☐
Connected objects (e.g. cameras, sensors)	☐	☐	☐	☐	☐	☐	☐	☐
Assistive devices and/or accessible technologies	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐

6b. How do you think the way you / your organisation access(es) to the following content, products and services will evolve by 2025 compared with today?

	Not used anymore through **fixed** connectivity	Less used through **fixed** connectivity	Used the same through **fixed** connectivity	More used through **fixed** connectivity	Not used anymore through **mobile** connectivity	Less used through **mobile** connectivity	Used the same through **mobile** connectivity	More used through **mobile** connectivity
Access to text content (e.g. blogs, newspapers)	☐	☐	☐	☐	☐	☐	☐	☐
Access to audio content (e.g. music streaming)	☐	☐	☐	☐	☐	☐	☐	☐
Access to video content (e.g. video games, IPTV)	☐	☐	☐	☐	☐	☐	☐	☐
Access to financial / banking products and services	☐	☐	☐	☐	☐	☐	☐	☐

Access to e-commerce / shopping products and services	☐	☐	☐	☐	☐	☐	☐	☐
Access to e-learning products and services	☐	☐	☐	☐	☐	☐	☐	☐
Access to digital public services	☐	☐	☐	☐	☐	☐	☐	☐
Access to e-health products and services	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐

6c. How do you think the way you / your organisation provide(s) the following content, products and services will evolve by 2025 compared with today?

	Not used anymore through **fixed** connectivity	Less used through **fixed** connectivity	Used the same through **fixed** connectivity	More used through **fixed** connectivity	Not used anymore through **mobile** connectivity	Less used through **mobile** connectivity	Used the same through **mobile** connectivity	More used through **mobile** connectivity
Provision of text content (e.g. blogs, newspapers)	☐	☐	☐	☐	☐	☐	☐	☐
Provision of audio content (e.g. music streaming)	☐	☐	☐	☐	☐	☐	☐	☐
Provision of video content (e.g. video games, IPTV)	☐	☐	☐	☐	☐	☐	☐	☐
Provision of financial / banking products and services	☐	☐	☐	☐	☐	☐	☐	☐

Provision of e-commerce / shopping products and services	☐	☐	☐	☐	☐	☐	☐	☐
Provision of e-learning products and services	☐	☐	☐	☐	☐	☐	☐	☐
Access to digital public services	☐	☐	☐	☐	☐	☐	☐	☐
Provision of e-health products and services	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐

7. How do you think that the maximum number of Internet services and applications that you / your organisation use(s) simultaneously through the same fixed connection will evolve by 2025?

- ○ Decrease
- ○ Remain stable
- ○ Increase slightly
- ○ Increase significantly

Please specify.

This question, sadly, does not make sense, not least because it requires respondents to guess how many useful applications will be invented in the next nine years.
The overall number of applications could rise, but they could be low-bandwidth, and therefore have a minimal impact on services, or could fall, but the applications being used could demand more bandwidth.
We firmly believe, therefore, that the responses to this question will not produce credible responses on which policy can be based.

8. In your view, how important are / will be the following features of **fixed** connectivity?

Should you need further information about the following features, please refer to the introduction "general information about this public consultation" and the attached document "background and definitions on the needs for Internet speed and quality 2020".

	Not important at all **today**	Not important **today**	Neutral **today**	Important **today**	Very important **today**	Not important at all **in 2025**	Not important **in 2025**	Neutral **in 2025**	Important **in 2025**	Very important **in 2025**
Download speed	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Upload speed	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Symmetry	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Latency	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Network congestion	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Resilience	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Reliability	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Uniterrupted access	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Ubiquity	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Other	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

9. In your view, how important are / will be the following features of **mobile** connectivity?

Should you need further information about the following features, please refer to the introduction "general information about this public consultation" and the attached document "background and definitions on the needs for Internet speed and quality 2020".

	Not important at all **today**	Not important **today**	Neutral **today**	Important **today**	Very important **today**	Not important at all **in 2025**	Not important **in 2025**	Neutral **in 2025**	Important **in 2025**	Very important **in 2025**
Download speed	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Upload speed	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Symmetry	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Latency	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Network congestion	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Resilience	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Reliability	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Uninterrupted access	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Ubiquity	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Other	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

10. Which **fixed** connectivity features do you think you / your organisation need(s) today / will need in 2025?

	Today	In 2025
Download speed below 30 Mbps	☐	☐
Download speed between 30 and 100 Mbps	☐	☐
Download speed between 100 Mbps and 1 Gbps	☐	☐
Download speed above 1 Gbps	☐	☐
I don't know about my download speed's needs	☐	☐
Upload speed below 30 Mbps	☐	☐
Upload speed between 30 and 100 Mbps	☐	☐
Upload speed between 100 Mbps and 1 Gbps	☐	☐
Upload speed above 1 Gbps	☐	☐
I don't know about my upload speed's needs	☐	☐
Latency between user and ISP above 100 milliseconds	☐	☐
Latency between user and ISP between 10 and 100 milliseconds	☐	☐
Latency between user and ISP below 10 milliseconds	☐	☐
I don't know about my latency's needs	☐	☐

11. Which **mobile** connectivity features do you think you / your organisation need(s) today / will need in 2025?

	Today	In 2025
Download speed below 30 Mbps	☐	☐
Download speed between 30 and 100 Mbps	☐	☐
Download speed between 100 Mbps and 1 Gbps	☐	☐
Download speed above 1 Gbps	☐	☐
I don't know about my download speed's needs	☐	☐

Upload speed below 30 Mbps	☐	☐
Upload speed between 30 and 100 Mbps	☐	☐
Upload speed between 100 Mbps and 1 Gbps	☐	☐
Upload speed above 1 Gbps	☐	☐
I don't know about my upload speed's needs	☐	☐
Latency between user and ISP above 100 milliseconds	☐	☐
Latency between user and ISP between 10 and 100 milliseconds	☐	☐
Latency between user and ISP below 10 milliseconds	☐	☐
I don't know about my latency's needs	☐	☐

12. Please indicate and specify any relevant aspect of your / your organisation's current and future connectivity needs which you think was not covered by the questions above.

13. Do you consider inadequate connectivity as a risk to?

	No risk at all	Very low risk	Low risk	Neutral	High risk	Very high risk
Competitiveness	○	○	○	○	◉	○
Social inclusion	○	○	○	○	◉	○
Employment	○	○	○	○	○	○
Cohesion / digital divide	○	○	○	○	○	◉
Education and learning	○	○	○	○	◉	○
Research and data driven activities	○	○	○	○	○	◉
Consumer welfare	○	○	○	○	○	◉

Accessibility for persons with disabilities	○	○	○	○	○	◉
Other	○	○	○	○	○	○

14. Overall, do you feel that your / your organisation's current fixed and/or mobile connectivity needs are fulfilled?

- ○ Fully fulfilled
- ◉ Partially fulfilled
- ○ Not at all fulfilled
- ○ I don't know

14a. If you replied "partially fulfilled" or "not at all fulfilled", please specify what you think should be done for your current connectivity needs to be fully fulfilled.

Reality checks with the speeds and quality advertised by ISPs. The Commission, BEREC and NRAs should consider investing in crowdsource analysis of the market offers to monitor and penalise irregularities. E.g. http://broadband.mpi-sws.org/transparency/bttest.php

15. Overall, are you optimistic that your / your organisation's future fixed and/or mobile connectivity needs will be fully fulfilled in 2025?

- ◉ Very optimistic
- ○ Optimistic
- ○ Pessimistic
- ○ Very pessimistic
- ○ I don't know

16. What kind of action(s) can the European Commission take to monitor the development and take-up of connectivity in Europe in line with future needs?

Measures should be focused on reaching connectivity to all of the internet (and not parts of it), all the time and everywhere, while preserving and addressing concerns regarding the security, privacy and data protection of initiatives such as the Internet of Things or connected cars. In addition, zero rating programmes should be prohibited, as limited access to certain parts of the internet is not desirable and monopolies would be created.

The two first responses to question 15ab are somewhat misleading. The Commission and Member States should ensure:
1) complete territorial coverage, but not only as regards basic services. What are basic services and what are not?
2) why only ensure high-quality internet in populated areas?

The Commission should promote peer-to-peer networks such as Guifi.net (see https://guifi.net/en/), as they can achieve connectivity for all. "The project was developed in the center of Catalonia and has become the biggest free wireless network of the world. Despite its highly efficient and sustainable method to provide free and open internet access (even in areas where it is not served by regular telecoms operators), Guifi.net struggles with an administration which hinders this citizen-driven distributed solution. As a result, privately-owned services are promoted to provide internet access in public infrastructures" (see https://guifi.net/node/23359). cf. http://comments.xnet-x.net/fcforum-2015/net-neutrality/

Without prejudice to EDRi's recommendations above, the Commission should aim at
1) improving network transparency, so services and applications' performance is not monitored or manipulated by ISPs. In this sense, the Commission could promote research such as the one that led to "Glasnost: Bringing Transparency to the Internet" (see for instance http://broadband.mpi-sws.org/transparency/bttest.php).
2) collaborating with NRAs and BEREC to ensure access to the Internet remains open and non-discriminatory, in compliance with 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.

ADDITIONAL INFORMATION

Please upload any additional information, e.g. position papers, reports.

Any other comments?

Internet speed and quality are not the sole parameters that the Commission should take into account by 2020 and beyond. Speed and quality are important, but also full connectivity to the whole internet (not parts of it) for all, all of the time, in line with our recommendations above.

Contact

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