

## The regional digital divide

### Lack of high-speed broadband connections and digital take-up in some regions limit the benefits from digitalisation, including for remote working

The massive shift to remote working following the COVID-19 containment measures introduced in many countries has further increased the need for access to fast and efficient Internet connections and to minimum digital equipment. However, not all places within countries offer sufficient infrastructure for seizing the opportunities offered by digitalisation. Bridging the regional divide in access to fast broadband connections and terminal devices will become increasingly important as households, governments and businesses switch their activities to the digital terrain.

Across OECD regions, people enjoy significantly different access to high-quality Internet. This is particularly true for fibre fixed broadband connections (fibre-to-the-home, FTTH). In advanced economies like Germany and the United States (Figure 2.5, panel A), the gap between the region with the highest and lowest access is of 80 and 68 percentage points respectively. Among 9 countries with available data on fibre access, Colombia stands out for its low levels of coverage, with only 17% of households having access to fibre connections in the capital region and less than 1% of households in the region of Vichada.

Access to high-speed connections (above 30 Mbit/s) is fundamental to seize the opportunities of digitalisation, as the quality of connections matter beyond the access to basic Internet. With the exception of Colombia and Ireland, all 14 countries with available data have at least 1 region with more than 80% of households having access to high-speed connections, often the capital region. Within-country gaps tend to be stark, with a 23-percentage points difference between the most and least connected regions on average. France and Hungary show the largest regional disparities, with a 40-percentage point gap between the regions with the highest and lowest coverage of high-speed Internet (Figure 2.5, panel B). Other countries such as Belgium, Denmark, Spain and the United Kingdom have succeeded in ensuring broad access to a high-speed Internet connection to more than 90% of households across their territories.

A closer look at the access to high-speed broadband reveals a clear urban-rural divide. For example, while 90% of total households in Italy benefit from access to high-speed broadband, only 43% of rural households do so (Figure 2.6). According to the information provided from regulators in 26 OECD countries, 1 in 3 households in rural areas do not have access to high-speed broadband on average. Overall, only 7 out of 26 countries have succeeded in ensuring access to a high-speed connection to more than 80% of households in rural regions.

In order to seize the benefits of digitalisation, access to digital infrastructure needs to be accompanied by the widespread adoption of digital technologies and by minimum digital skills. Almost 11% of people in OECD countries are not using the Internet or do not have access to a computer. Large regional

disparities in the take-up of digital technology also exist within countries, where the share of people using the Internet in the regions with the highest use is 10 percentage points higher than in the region with the lowest use, on average (Figure 2.7).

### Definition

Following the terminology from the European Commission, the term “fast broadband” is used to refer to fixed broadband connections that allow for download speeds greater than 30Mbit/s. Such speeds are necessary to perform many of the tasks associated with remote working, such as high-quality video calls.

Download speeds are only one dimension of broadband quality and do not capture other aspects of service reliability (outages, packet loss rates, latency, etc.) that may vary across regions. In addition, statistics on Internet speed can differ widely according to the source, especially between user-reported and as-advertised information.

### References

European Court of Auditors (2018), “Broadband in the EU member states: Despite progress, not all the Europe 2020 targets will be met”, *Special Report No. 12*, <https://op.europa.eu/webpub/eca/special-reports/broadband-12-2018/en>.

OECD (2019), *Measuring the Digital Transformation: A Roadmap for the Future*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264311992-en>.

### Reference years and territorial level

Figure 2.5: TL2, 2020 or last available year: BEL, CAN, COL, DNK, FIN, FRA (Panel B), DEU, NOR, ESP and USA, 2019; ITA and IRL, 2018.

Figure 2.6: 2019 or latest available year: European Union (EU) countries 2018.

Figure 2.7: TL2, 2019 or latest available year: JPN and USA, 2018; AUS and CAN, 2017.

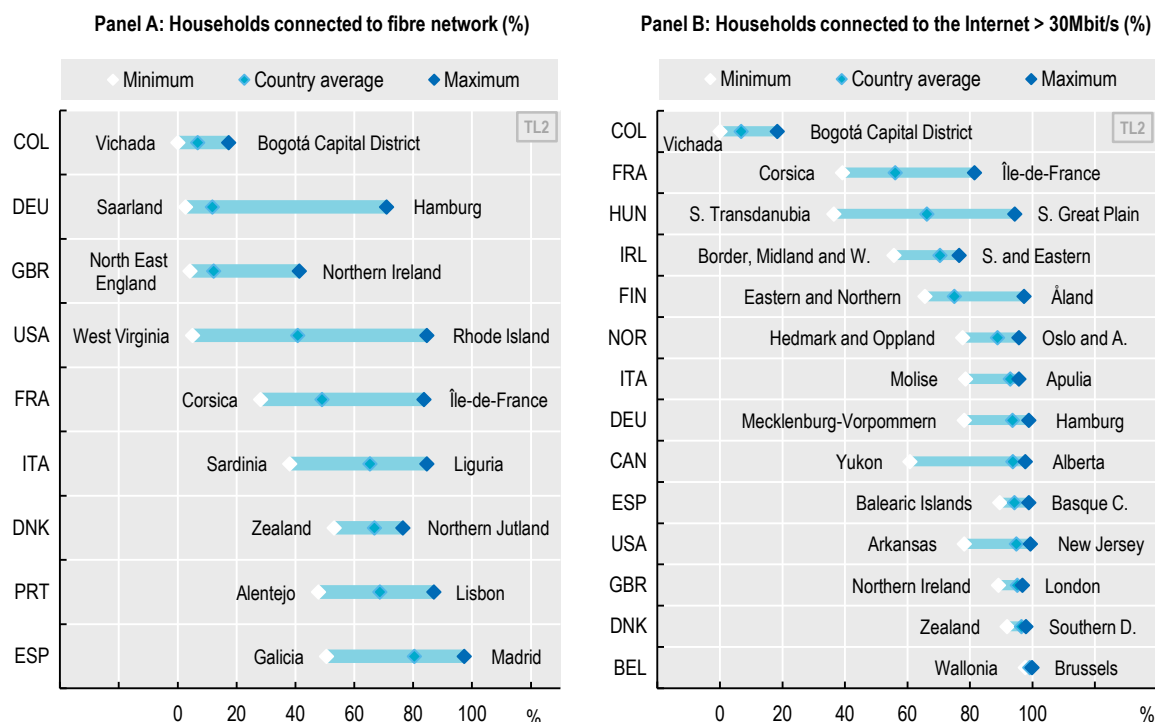
### Figure notes

Figure 2.5, panel B: Internet access with a download speed greater than 30Mbit/s (25Mbit/s for CAN and USA).

Figure 2.6: Internet access with a download speed greater than 30Mbit/s (NGA technologies, for the EU). Rural areas are those with a population density lower than 100 inhabitants per km<sup>2</sup> for EU countries, 400 per km<sup>2</sup> for Canada, 1 000 per square mile (or 386 people per km<sup>2</sup>) for the United States.

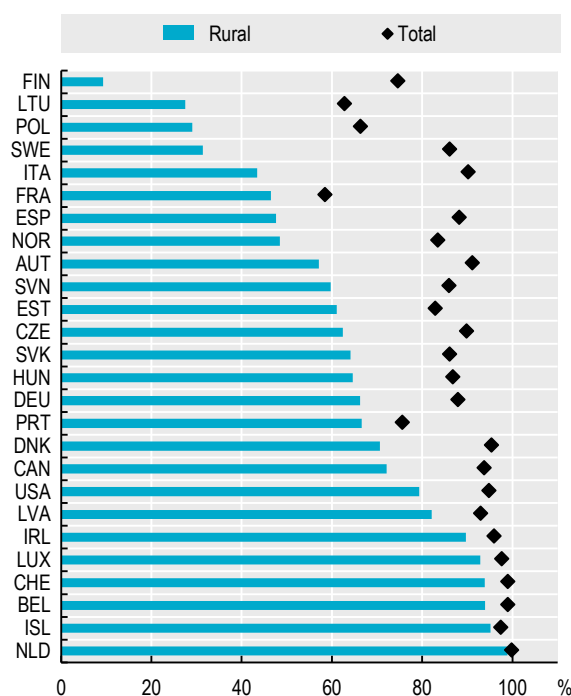
Figure 2.7: Internet use is expressed as the percentage of households that have not used the Internet (EU countries and JPN) or do not have a computer (USA).

## 2.5. Regions differ in access to high-quality internet in 2020, large regions (TL2)

StatLink <https://doi.org/10.1787/888934189659>

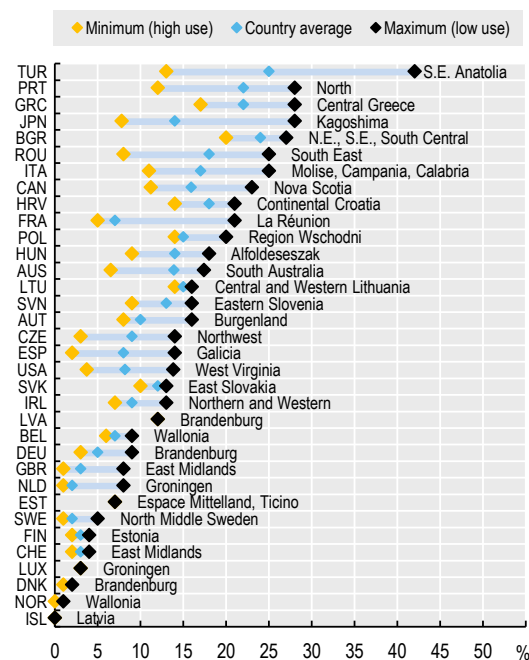
## 2.6. Rural areas lag in access to fast broadband

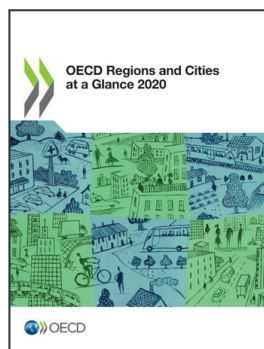
Percentage of households with access to Internet &gt;30Mbit/s in 2019 or latest available year, at the rural and national levels

StatLink <https://doi.org/10.1787/888934189678>

## 2.7. Percentage of people not using the Internet

Percentage of people not using the Internet or who do not have a computer in 2019 or the latest available year, large regions (TL2)

StatLink <https://doi.org/10.1787/888934189697>



From:

## OECD Regions and Cities at a Glance 2020

Access the complete publication at:

<https://doi.org/10.1787/959d5ba0-en>

### Please cite this chapter as:

OECD (2020), “The regional digital divide”, in *OECD Regions and Cities at a Glance 2020*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/5d188b52-en>

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.