

SDG Goal 9	Industry, innovation and infrastructure
SDG Target 9.c	Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020
SDG Indicator 9.c.1	Proportion of population covered by a mobile network, by technology
Time series	Households covered by a mobile network

1. General information on the time series

- Date of national metadata: 25 October 2023
- National data: <http://sdg-indicators.de/9-c-1/>
- Definition: The time series measures the share of households which are covered by a mobile network.
- Disaggregation: länder; technology

2. Comparability with the UN metadata

- Date of UN metadata: March 2025
- UN metadata: <https://unstats.un.org/sdgs/metadata/files/Metadata-09-0c-01.pdf>
- The time series is partly compliant with the UN metadata. In contrast to the UN metadata the time series shows the share of households, not the proportion of population covered by a mobile network.

3. Data description

- Before 2021: The data is derived from the German Broadband Mapping portal (Breitbandatlas) of the Federal Ministry of Transport and Digital Infrastructure (BMVI) and is made available to the Federal Statistical Office every six months. The BBA is the German government's central information medium, presenting broadband availability in Germany in a grid overview. Using interactive maps, the BBA illustrates which technologies and bandwidths are available for data transmission down to the local area (district level, street sections) - both in the fixed network and in mobile communications.

From 2021: In accordance with Section 103 (3) of the German Telecommunications Act (TKG), mobile network monitoring (as the data basis for the previous Broadband Mapping portal) presents the actual, site-specific mobile network coverage, i.e., the mobile coverage consumers can expect on their terminal equipment at a specific location. For this purpose, data on mobile communication coverage in outdoor areas is collected on a quarterly basis from the three established mobile network operators (Telekom Deutschland GmbH, Vodafone GmbH, Telefónica Germany GmbH & Co. OHG) for the individual technologies. The Bundesnetzagentur has issued uniform specifications to the mobile network operators regarding the calculation of mobile network coverage in order to ensure comparability of the data. Dynamic factors, such as the weather or the utilization of the mobile network, are not taken into account.

For 5G technology, data was collected by the network operators for the first time for October 2021 as part of mobile network monitoring. The 3G network was shut down at the end of 2021 to increase the capacity of the 4G network and to expand the 5G network.

4. Access to data source

- Broadband Atlas (only available in German):
<https://www.gigabitgrundbuch.bund.de/GIGA/DE/Breitbandatlas/start.html>
- Older Reports to Broadband Atlas (until 2020) (only available in German):
<https://www.bmvi.de/SharedDocs/DE/Artikel/ZukunftBreitband/aeltere-berichte-zum-breitbandatlas.html>

5. Metadata on source data

- Broadband Atlas (only available in German):
<https://www.gigabitgrundbuch.bund.de/GIGA/DE/Breitbandatlas/start.html>

6. Timeliness and frequency

- Timeliness: Not available.
- Frequency: Annual

7. Calculation method

- Unit of measurement: Percentage
- Calculation:

Households covered by a mobile network = $\frac{\text{Households covered by a mobile network [number]}}{\text{Households [number]}} \cdot 100 [\%]$