



Broadband Coverage in Europe 2018

Mapping progress towards the coverage
objectives of the Digital Agenda

FINAL REPORT

A study prepared for the European Commission
DG Communications Networks, Content & Technology
by:



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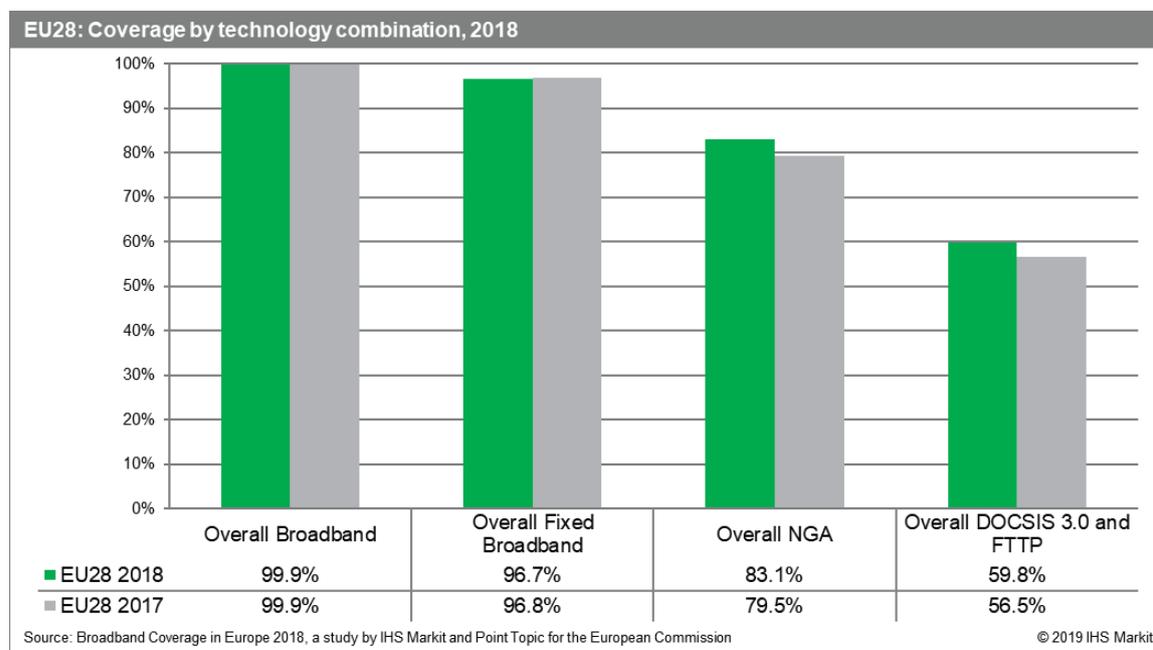
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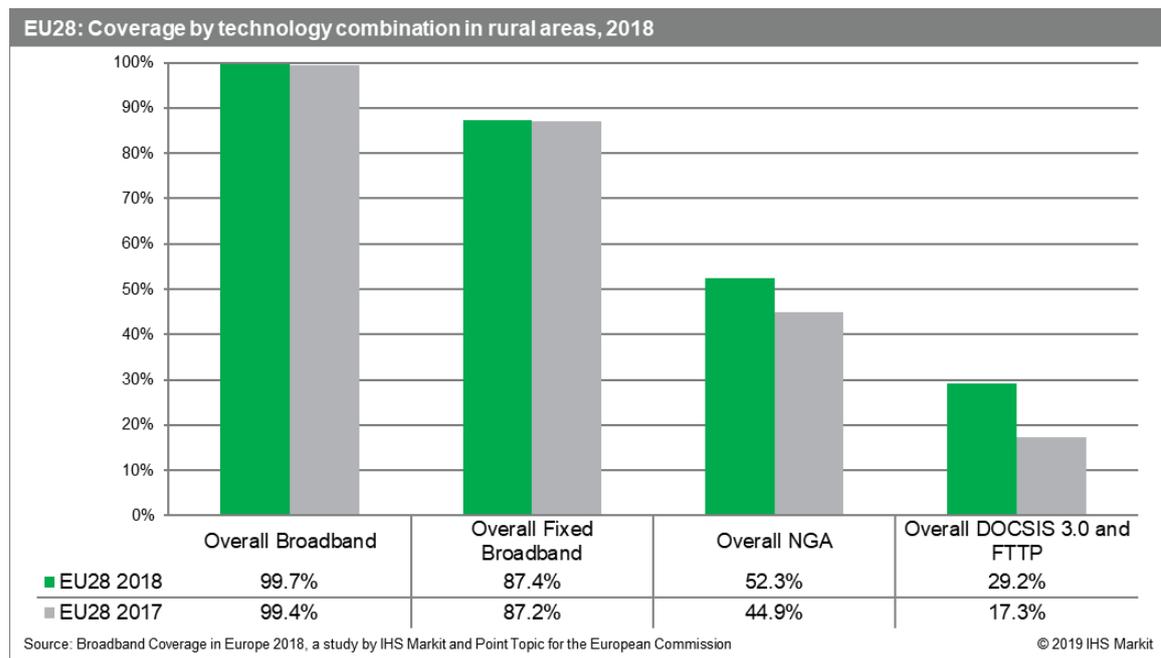
Executive Summary

- The Broadband Coverage in Europe study is designed to monitor the progress of EU Member States towards the specific broadband coverage objectives set out in the Digital Agenda for Europe – namely: ‘Universal Broadband Coverage with speeds at least 30 Mbps by 2020’ and ‘Broadband Coverage of 50% of households with speeds at least 100 Mbps by 2020’.
- In 2016, DG CONNECT selected IHS Markit in partnership with Point Topic to run the three-year project. The research team surveyed NRAs and telecommunications groups across each participating state to compile the requisite information. Both IHS Markit as well as Point Topic have previously conducted the broadband coverage research. Point Topic was the incumbent provider introducing the original research methodology in the period 2010-2012. IHS Markit (in cooperation with VVA) delivered the study from 2013-2015 and adopted similar data collection and analysis methods to those implemented by Point Topic in order to ensure comparability of datasets for the purposes of time-series assessment.
- The collected data reflects the situation at the end of June 2018 compared to the situation at the end of June 2017. In editions of the study prior to 2015, the collected data reflected the situation at the end-of-year (i.e. end of December). The timeline of the data collection for the 2015 edition of the BCE study was moved forward in order to align reporting of the broadband coverage data with the publications of the Digital Economy and Society Index and the European Semester related country assessments.
- This report covers 31 countries across Europe – the EU28, plus Norway, Iceland and Switzerland, and analyses the availability of nine broadband access technologies (DSL, VDSL, cable modem, DOCSIS 3.0, FTTP, WiMAX, HSPA, LTE and satellite) across each market, at national and rural levels. In addition, three combination categories indicating the availability of one or more forms of broadband coverage are also published. These cover overall fixed and mobile broadband availability, fixed broadband availability and next generation access (NGA) availability. Since the 2017 iteration of the study, DG CONNECT also requested a fourth combination coverage category to be estimated on a national level, establishing overall coverage of FTTP and DOCSIS 3.0 technologies. A rural estimation for overall FTTP and DOCSIS 3.0 coverage has been added in this year’s edition of the study

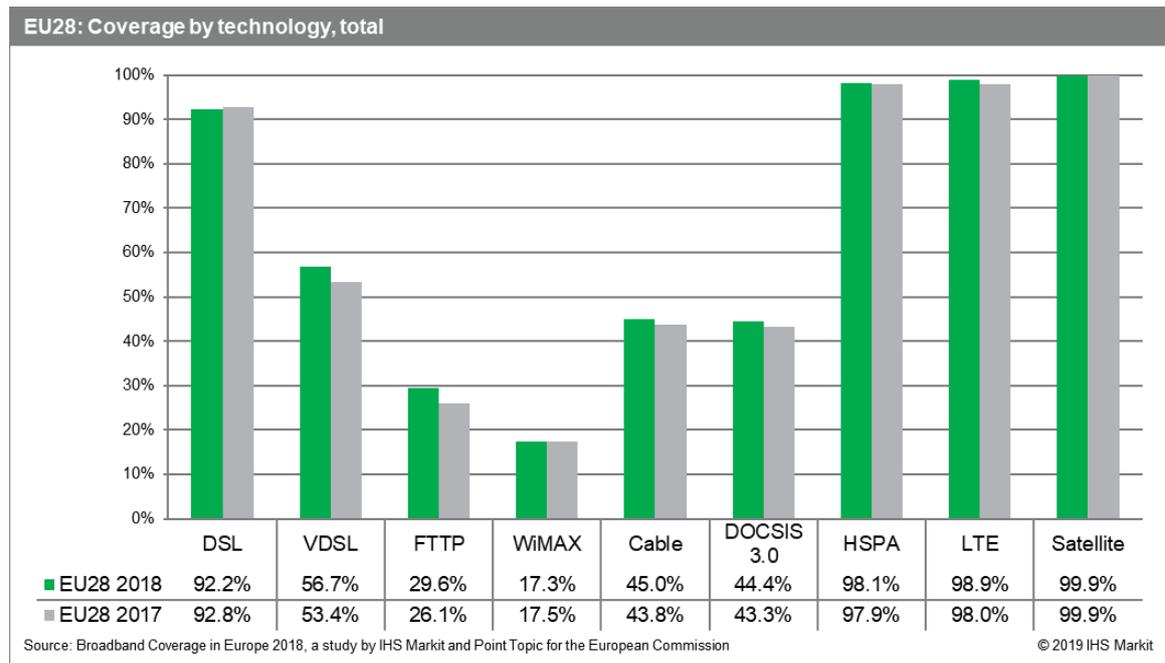


- The collected data show that nearly 223 million EU households (99.9%) had access to at least one of the main fixed or mobile broadband access technologies at the end of June 2018 (excluding satellite) and additional 3.5 million households gained access to broadband services compared to the end of June 2017.

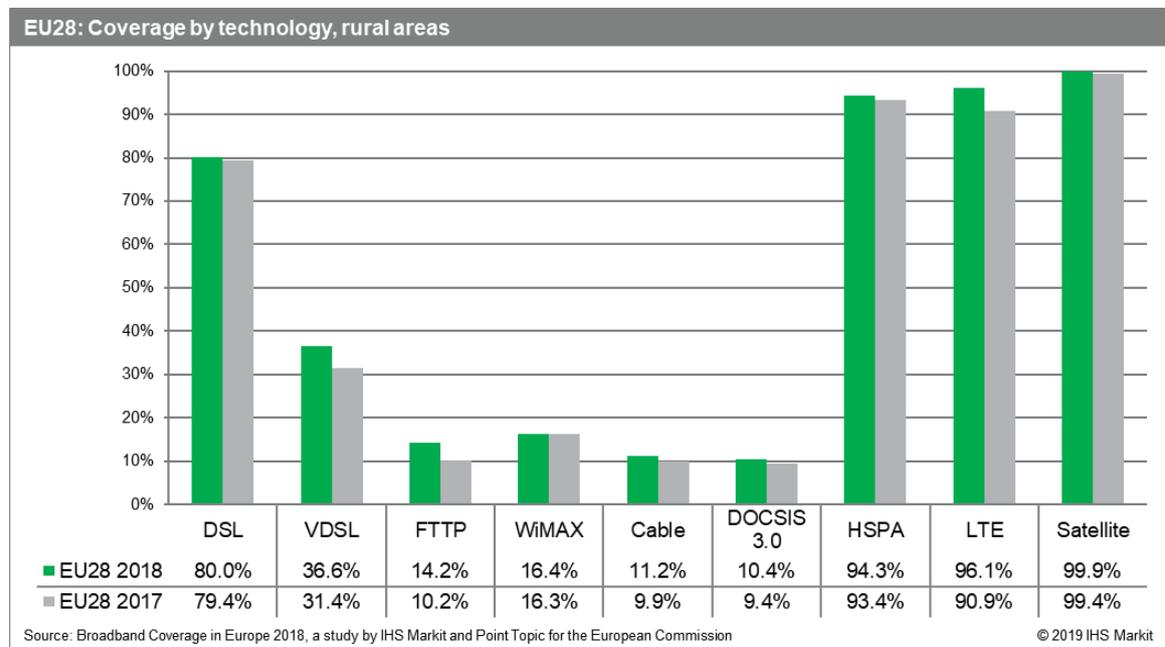
- By mid-2018, the availability of fixed broadband services in the EU reached 96.7% households. During the period, fixed broadband coverage expanded by 2.9 million households, with a total of 215 million EU homes passed by fixed broadband networks at the end of June 2018.
- Next generation access services (VDSL, DOCSIS 3.0 and FTTP) were available to 83.1% of EU households by mid-2018. This equates to a 3.6 percentage point increase, or 10.9 million additional households, compared to the end of June 2017. In total, 185 million households had access to next generation broadband in mid-2018.
- Rural broadband coverage continued to be lower than national coverage across EU Member States. In mid-2018 87.4% of rural EU homes were passed by at least one fixed broadband technology and just over half of them (52.3%) had access to high-speed next generation services. Yet, rural NGA coverage increased by 7.4 percentage points, equalling to nearly 2.6 additional rural households having access to NGA broadband services compared to the end of June 2017.



- Satellite broadband remained the most pervasive technology in Europe in terms of overall coverage. However, satellite coverage is still limited in Estonia and is absent in Iceland.
- In mid-2018, DSL remained the dominant fixed access technology in the EU28, passing 92.2% of homes. This equates to a decline of 0.6 percentage points compared to mid-2017, as total household growth exceeded the speed of DSL deployment. Cable networks continued to be the second most widespread fixed access non-NGA technology, reaching 45% of EU households. WiMAX coverage remained approximately the same, reaching 17.3% of EU households.
- At the end of June 2018, VDSL services reached 56.7% of EU households, an increase of 3.3 percentage points during the twelve-month period. This a considerably slower growth than has been recorded in previous years and as a result, for the first time in six years, VDSL was taken over by FTTP as the fastest growing fixed broadband technology. Yet, VDSL remained the most pervasive NGA technology in the EU28.
- FTTP service availability continued to increase at a similar rate as in the previous year, rising by 3.5 percentage points to pass 29.6% of EU homes at the end of June 2018. This constituted, for the first time, faster growth compared to VDSL coverage, and made FTTP the fastest growing broadband technology.

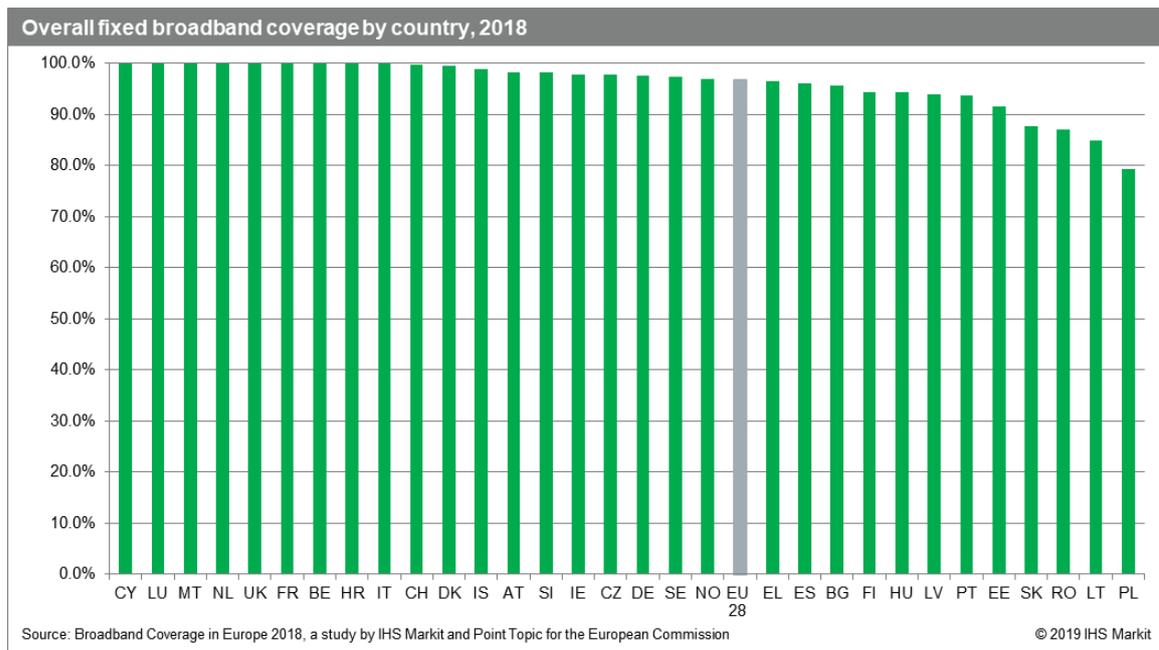


- Among mobile technologies, LTE coverage was higher than HSPA coverage for the first time in the history of the BCE study. LTE grew by 1 percentage point, reaching 98.9% of EU households, and HSPA grew by 0.2 percentage point, reaching 98.1% of EU households. Both HSPA and LTE have been recording slowing growth rates as they approach universal coverage levels.
- Examining rural broadband coverage, there was a difference of 9.3 percentage points between the availability of fixed broadband services at a total level (96.7%) and at a rural level (87.4%). The gap was much wider in terms of NGA technologies, as NGA networks passed 52.3% of rural EU homes, 30.8 percentage points less than total NGA coverage. Nevertheless, the gap between rural and national coverage, for both fixed and NGA technologies, is narrowing compared to previous editions of the study, supported by increasing investment in rural broadband.

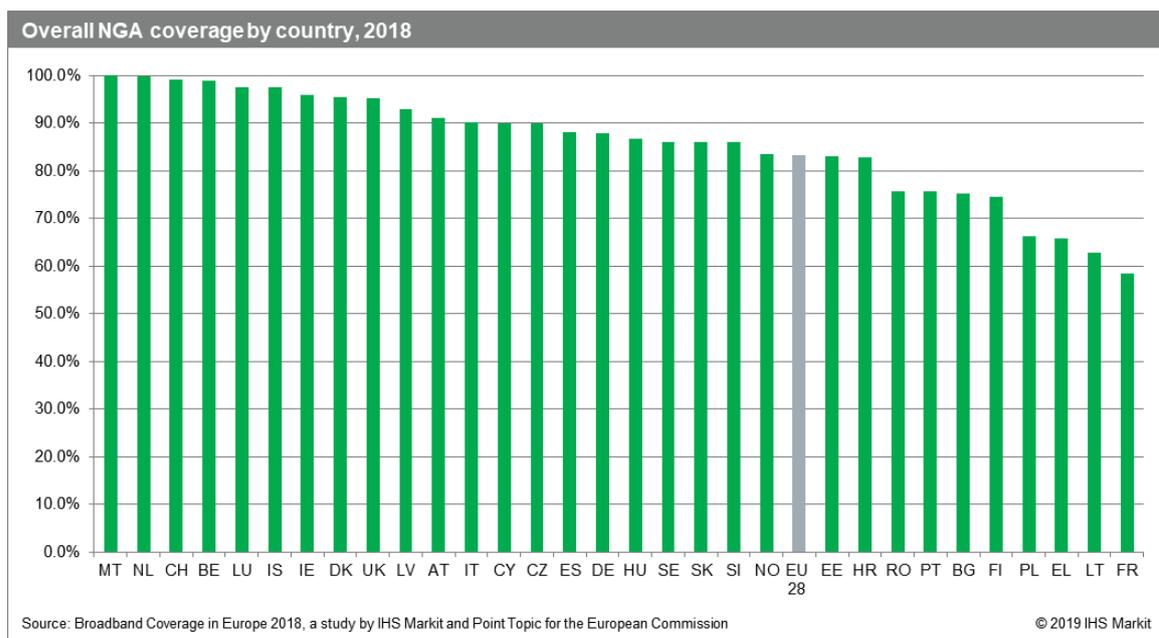


- VDSL coverage continued to expand more quickly than other fixed broadband technologies in rural areas. Rural VDSL availability increased by 5.2 percentage points in the twelve months to mid-2018, passing 36.6% of rural EU homes. Growth in rural VDSL services highlights the focus of operators, in particular incumbent operators, on upgrading existing DSL networks in rural areas.

- Examining mobile broadband technologies, the growth in availability of LTE networks decelerated, with rural LTE coverage improving by 5.3 percentage points compared to 9.4 percentage points last year. By mid-2018, LTE reached 96.1% of rural EU households. Consequently, LTE coverage surpassed rural HSPA services for the time, as HSPA reached 94.3% of rural households at the end of June 2018, having increased by 0.9 percentage point.
- Out of the 31 study countries, 22 countries registered fixed broadband coverage levels above 95.0%, while several countries registered complete fixed broadband coverage including Malta, the Netherlands, France, Cyprus, Luxembourg and the United Kingdom. In four countries (Slovakia, Romania, Lithuania and Poland), fixed broadband availability was below 90% of households.



- As in 2017, Malta was the only country to report complete coverage for NGA technologies, while the Netherlands, Switzerland and Belgium all reported NGA coverage levels equal to or above 99%.



- At 58.5% and despite increased availability of NGA services, France remained the lowest ranked nation of this study in terms of the proportion of homes passed by NGA networks. Moreover, three

other countries (Poland, Greece and Lithuania) registered NGA availability of below 70% of households in mid-2018.

- Looking at mobile broadband technologies, LTE coverage reached at least 99% of households in 19 study countries, with no country recording lower than 95% coverage. In relation to HSPA networks, Germany (91.3%) remained the only country to record HSPA coverage levels below 95%. It is also worth noting that LTE became more prevalent than HSPA at the European level for the first time this year.

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