



European
Commission

Broadband Coverage in Europe 2016

Mapping progress towards the coverage
objectives of the Digital Agenda

EXECUTIVE SUMMARY

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



IHS Markit™ **POINT**  *topic*

This study was carried out for the European Commission by



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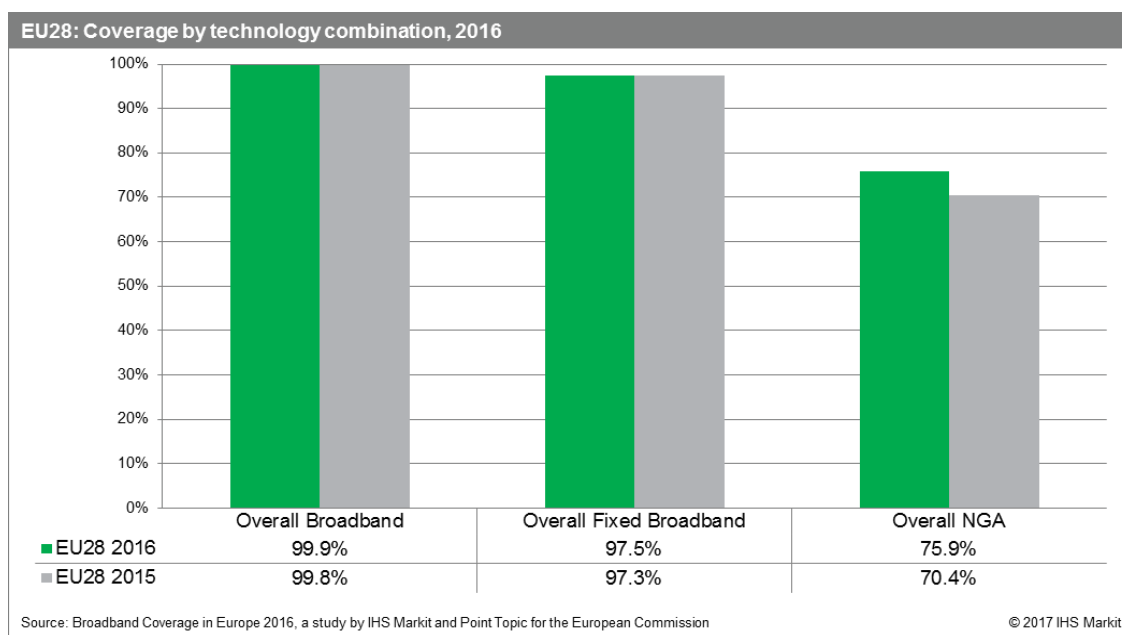
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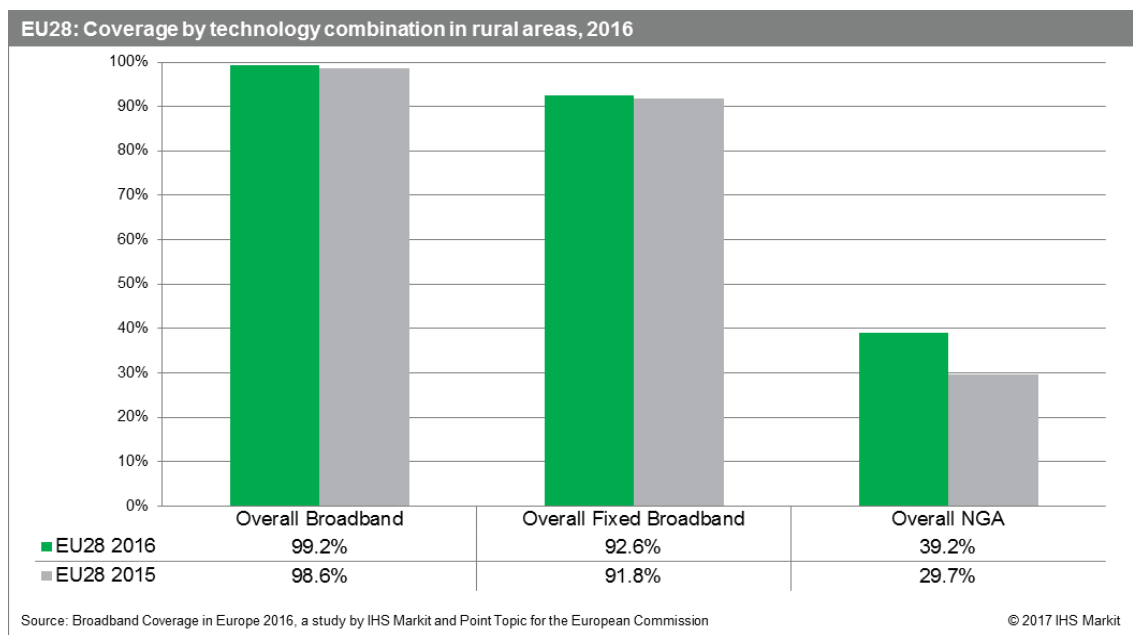
Executive Summary

- The Broadband Coverage in Europe study is designed to monitor the progress of EU Member States toward their specific broadband coverage objectives – 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 the IHS Markit in partnership with Point Topic to run the 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 2016 compared to the situation at the end of June 2015. 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 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.

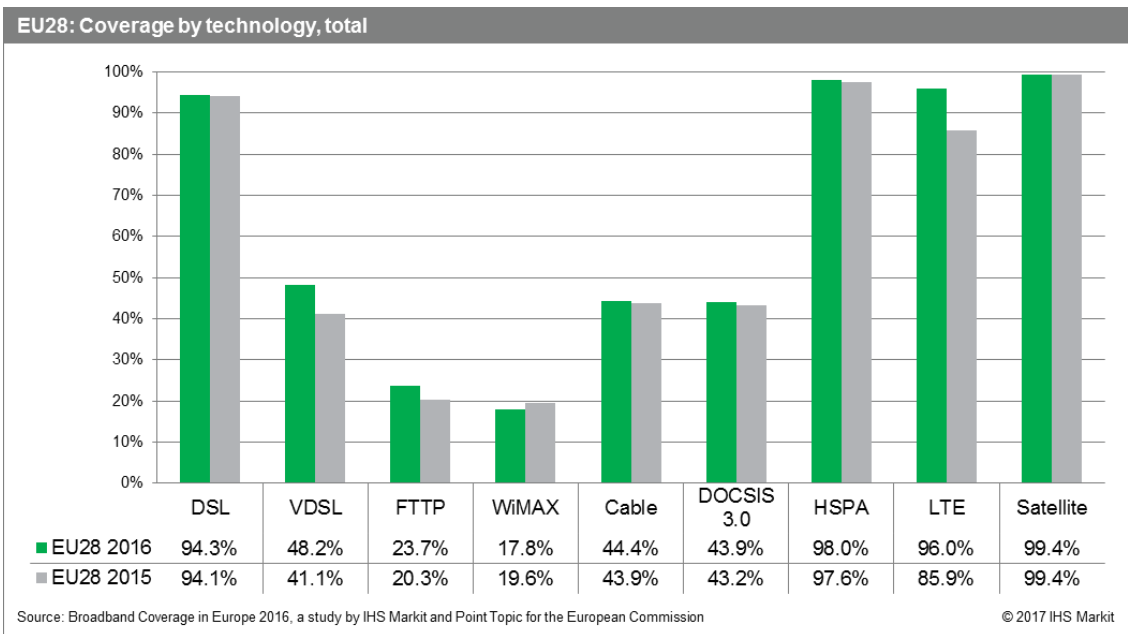


- The collected data shows that over 218 million EU households (99.9%) had access to at least one of the main fixed or mobile broadband access technologies at the end of June 2016 (excluding satellite). This equates to a 0.1 percentage point increase, or 1.4 million additional households, compared to the end of June 2015.

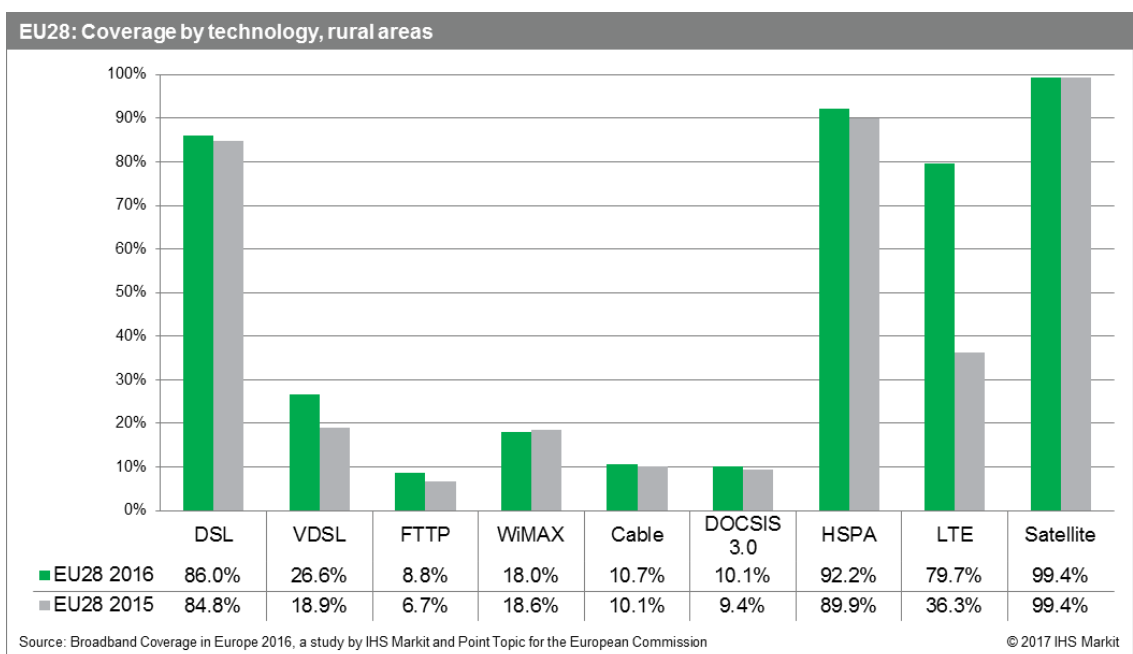
- Overall fixed broadband coverage increased by 0.2 percentage points, reaching 97.5% of households by mid-2016, an equivalent of an additional 1.5 million households and 213 million EU households in total being passed by fixed broadband access technologies.
- Next generation access services (VDSL, DOCSIS 3.0 and FTTP) continued to increase at a similar rate to the previous edition of the study, rising by 5.5 percentage points to cover 75.9% of households across the EU Member States by mid-2016. This translates to 12.8 million new households, meaning that over 166 million households in the EU had access to next generation broadband by the end of June 2016.
- Rural broadband coverage remains considerably lower than national coverage across EU Member States. While 92.6% of rural EU households were covered by at least one broadband technology in mid-2016, less than 40% (39.2%) had access to next generation services.



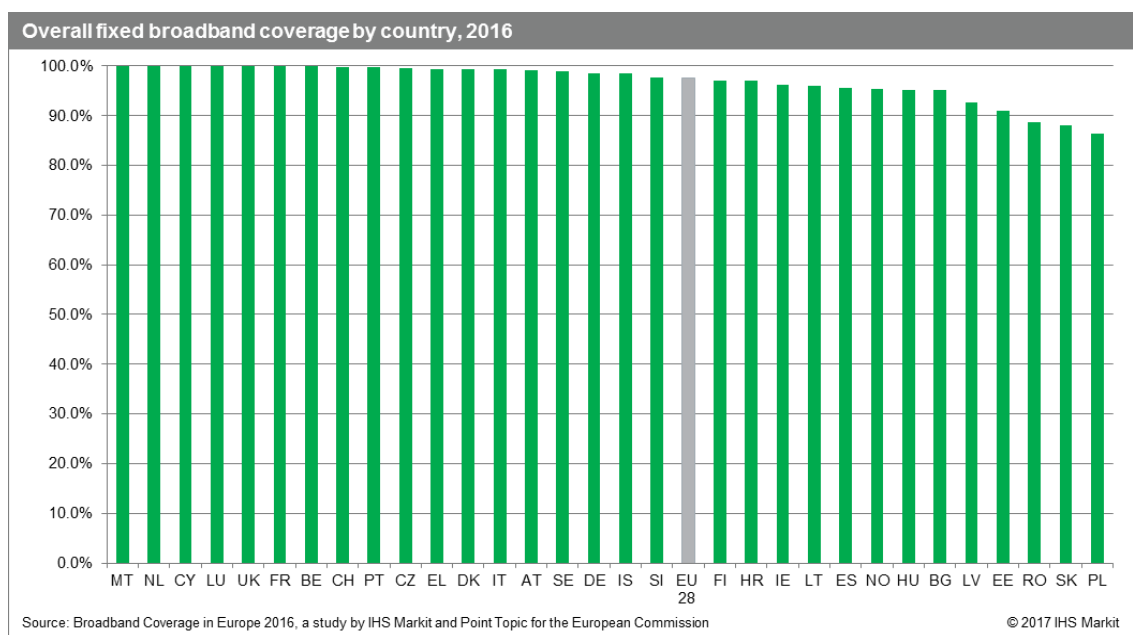
- Satellite broadband remained the most pervasive technology in Europe in terms of overall coverage. However, satellite coverage is still limited in the Baltic countries and is absent in Iceland.
- DSL continued to be the most widespread fixed access technology, reaching 94.3% of EU households by mid-2016, an improvement of 0.2 percentage points. Cable networks were the second most prevalent fixed access technology, covering 44.4% of EU homes (up from 43.9% at the end of June 2015). WiMAX was the only broadband technology to record a reduction in coverage, decreasing by 1.8 percentage points to 17.8%. This is a consequence of many operators discontinuing their WiMAX networks in order to redistribute the spectrum for LTE services.
- VDSL maintained its lead among NGA technologies with a 7.1 percentage point coverage increase in the twelve-month period to mid-2016, making it the fastest growing fixed broadband technology for the fifth consecutive year. At the end of June 2016, VDSL services were available to nearly a half (48.2%) of EU households and as such VDSL continues to be the key driver of NGA coverage growth across the EU.



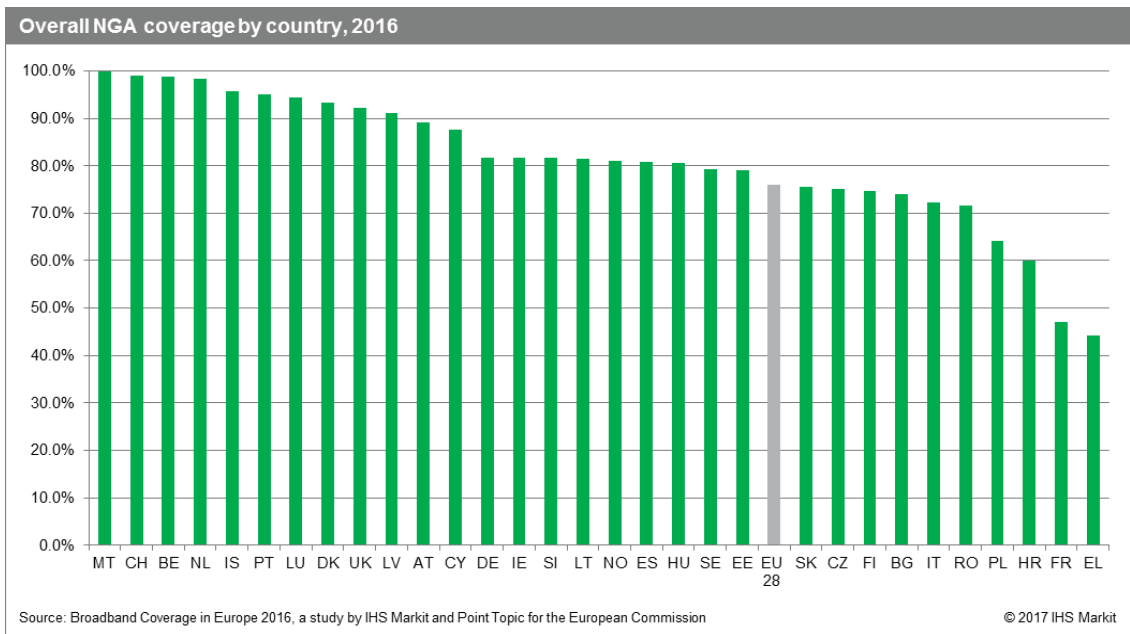
- The number of EU households passed by FTTP networks increased by 3.4 percentage points to reach 23.7% of EU households at the end of June 2016. Whilst this represented slower growth than for VDSL services, it was notably faster than increase in DOCSIS 3.0 coverage, which grew by only 0.7 percentage points to reach 43.9% of EU households.
- Examining mobile broadband technologies, availability of LTE services continued to expand at a fast pace and following a 10.1 percentage point increase, LTE networks covered 96.0% of EU homes at the end of June 2016. A considerable growth making LTE networks nearly as widespread as HSPA networks, which passed 98.0% of EU households by mid-2016.
- Limitations remain in terms of rural broadband coverage. By mid-2016, fixed broadband services were available to 92.7% of rural households across the EU. This is nearly 5 percentage points less than total fixed coverage. The difference was much greater for NGA technologies with rural NGA coverage reaching 39.2% rural homes compared to 75.9% at a national level. Nevertheless, the gap between rural and national coverage, for both fixed and NGA technologies, is declining compared to previous editions of the study suggesting increasing investment in rural broadband.



- As in previous years, the highest growth in rural fixed broadband coverage was reported for VDSL. What is more, rural VDSL coverage grew at a faster rate than in previous years, rising by 8.2 percentage points, to reach 26.6% of rural EU homes by mid-2016. This improvement reflects the continued investment of predominantly incumbent operators to upgrade existing DSL networks in rural areas.
- By mid-2016, HSPA coverage reached 92.2% of rural households compared to 89.9% in mid-2015. Growth in rural LTE coverage was considerably faster in the twelve-month period to mid-2016, increasing by a staggering 43.4 percentage points to 79.7%.
- Out of the 31 study countries, 26 countries reported fixed broadband coverage of above 95.0%, while 19 countries had fixed broadband coverage above the EU28 average (97.5%). A number of countries registered complete, or near-complete, fixed broadband coverage including Malta, Luxembourg, Cyprus, the Netherlands and the United Kingdom. Three countries, Romania, Slovakia and Poland, recorded fixed coverage of less than 90% of households by mid-2016.



- Malta remained the only country to report complete coverage for NGA technologies, while Switzerland, Belgium, the Netherlands, Iceland and Portugal all reported coverage levels at or above 95%.
- Out of the 31 study countries, 21 countries reported NGA coverage above the EU28 average (76.0%). As in the previous edition of the study, Greece reported the lowest proportion of homes passed by NGA networks. In addition to Greece, France was the only other country to report NGA availability of below 50.0% of households in mid-2016.



- Looking at mobile broadband technologies, all of the study countries reported HSPA coverage levels above 95%, with the exception of Germany (92.1%) and Slovakia (90.7%). During the twelve months to mid-2016, LTE technology has become near-universal in many study countries, with LTE coverage reaching 99% of households in eleven study countries. In addition, LTE coverage now reaches similar levels to those of HSPA networks.

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