Arthur D Little

Cable Operator's Contribution to the European Digital landscape

May 2016

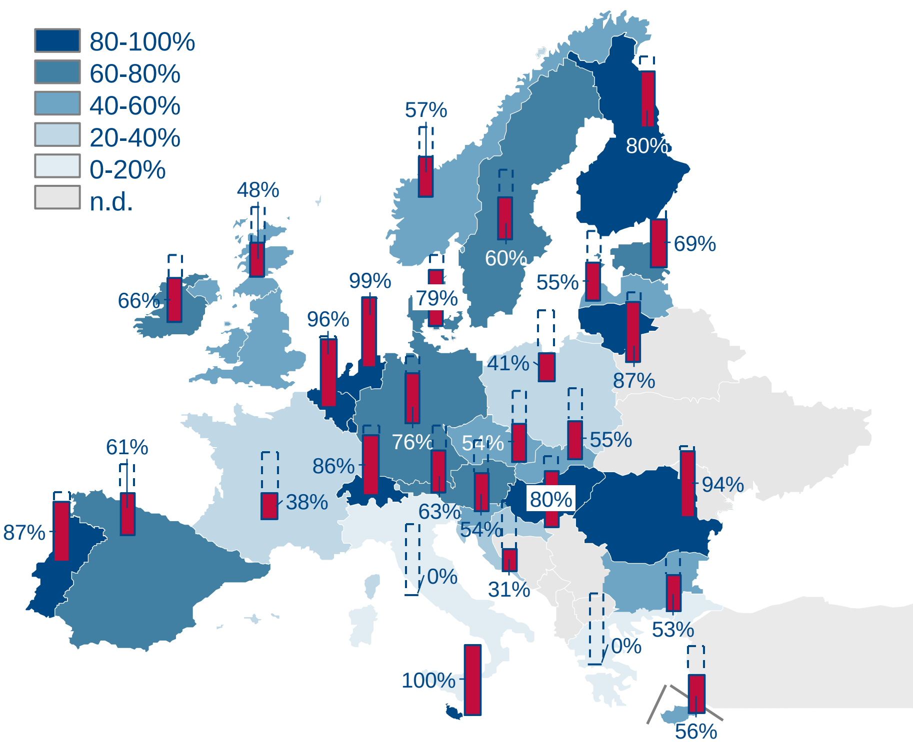
Cable Europe

Cable operators reach more than half of European households and constitute a major actor in the European digital landscape

Overview of the Cable companies place in the EU digital landscape

- 2014, EU 28 -

% of homes passed by cable per country

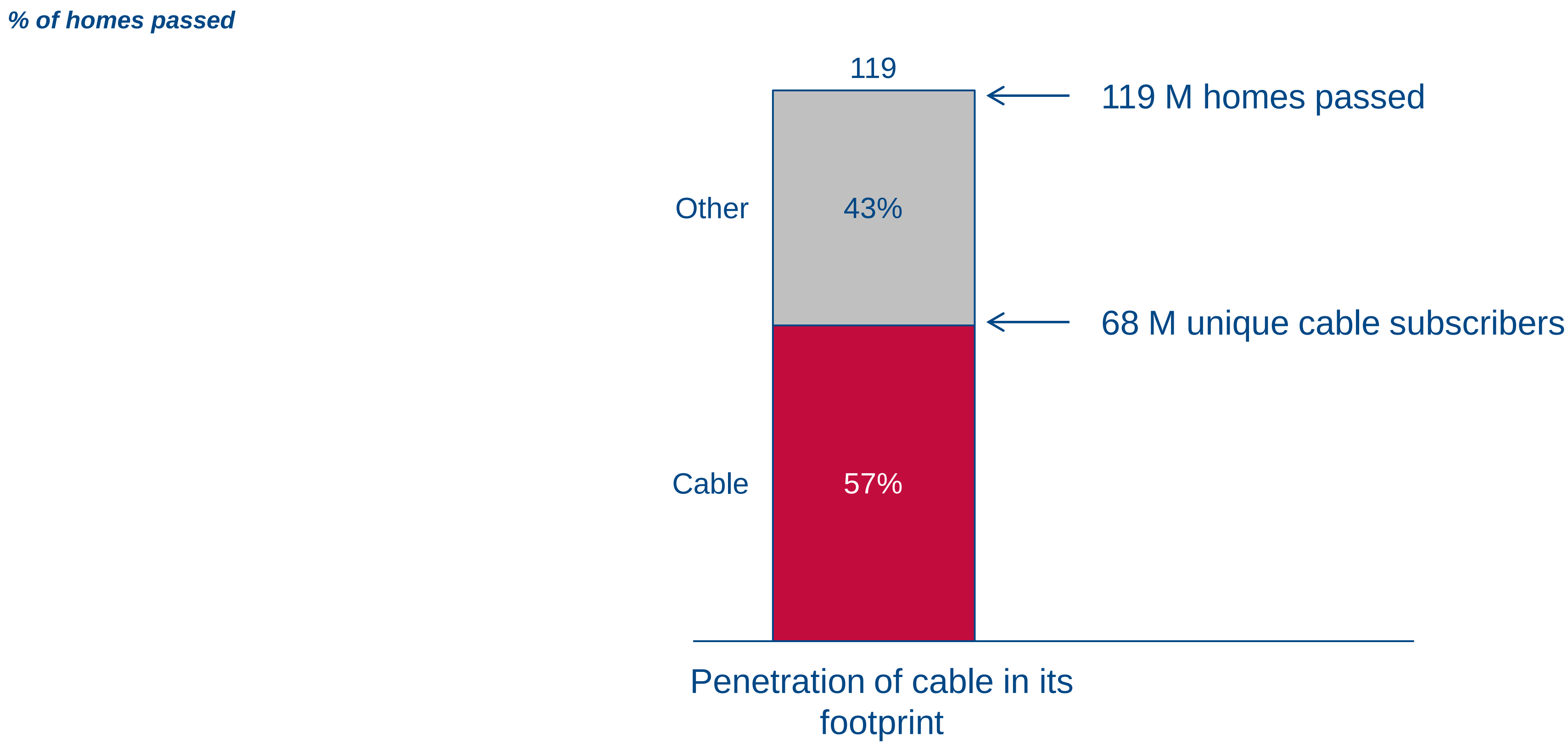


- **26 markets in Europe with 119 M homes passed – 54% of EU28 homes (63% when excluding Italy and Greece)**
- **56 M subscribers accessing TV via cable**
- **32 M subscribers connected to internet via cable**
- **Total revenues exceeding € 21 bn**

Source: Arthur D. Little analysis, European Commission Digital Agenda, IHS, cable companies websites & annual reports, press releases, Screendigest 2011, WiK, Credit Suisse, jcta.

Cable is a major actor in its footprint with 57% of the consumers adopting cable for at least one cable service

Penetration of cable in its footprint
- 2014, EU 28 -

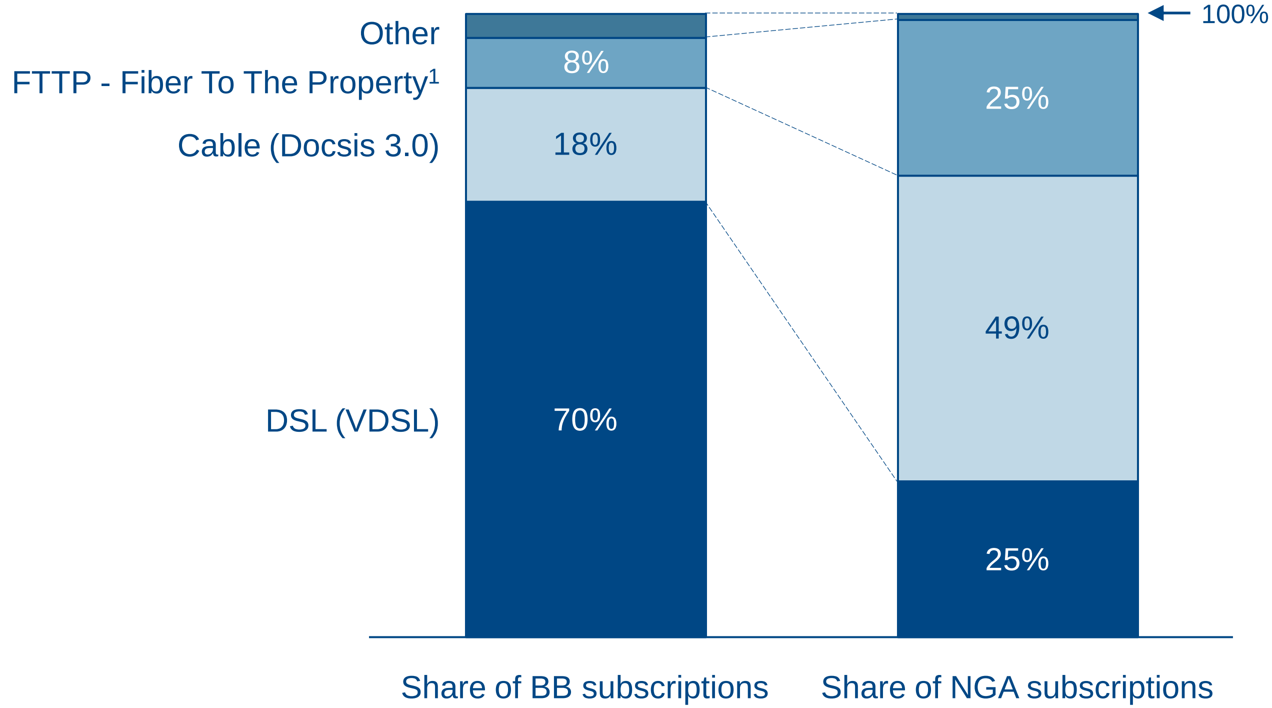


Source: Arthur D. Little analysis, European Commission Digital Agenda, IHS, cable companies websites & annual reports, press releases, Screendigest 2011, WiK, Credit Suisse, jcta

Cable is currently the largest provider of Next Generation Access (NGA) despite its lower share in broadband subscriptions

Broadband subscription and NGA penetration by technology
- 2014, EU 28 -

% of broadband and NGA subscriptions (**NGA; ≥30 Mbps)**

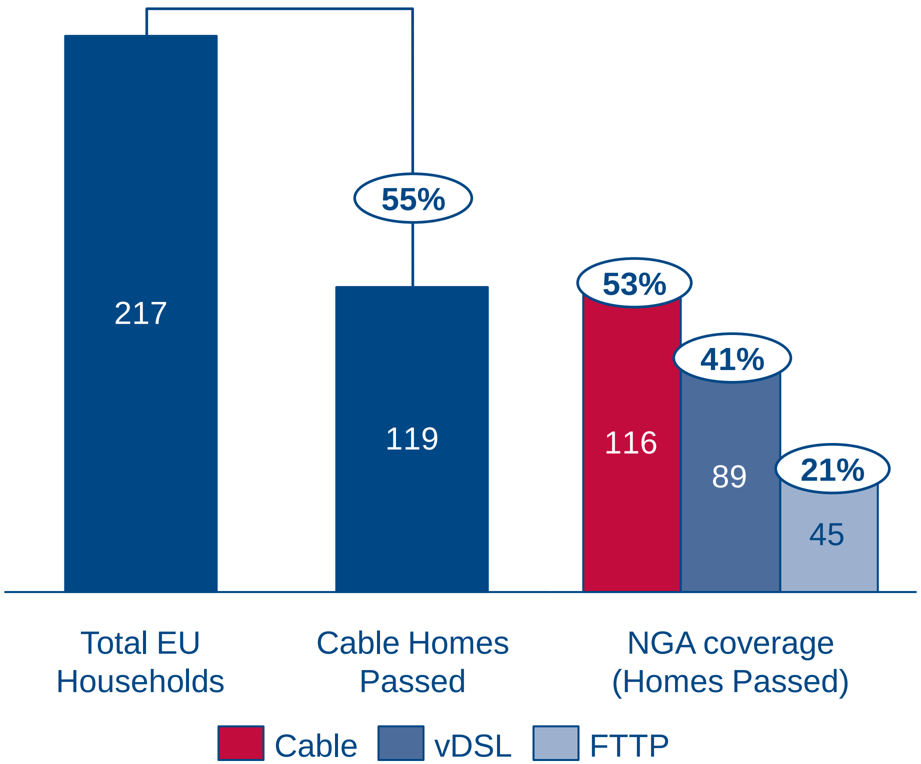


Source: Arthur D. Little analysis, European Commission Digital Agenda. 1. Includes Fiber To The Home (FTTH) and Fiber To The Building (FTTB)

Cable is the technology most able to connect a large base of the population with next-generation very high speed access in Europe

NGA coverage by technology
- 2014, EU 28 -

M or % of home passed



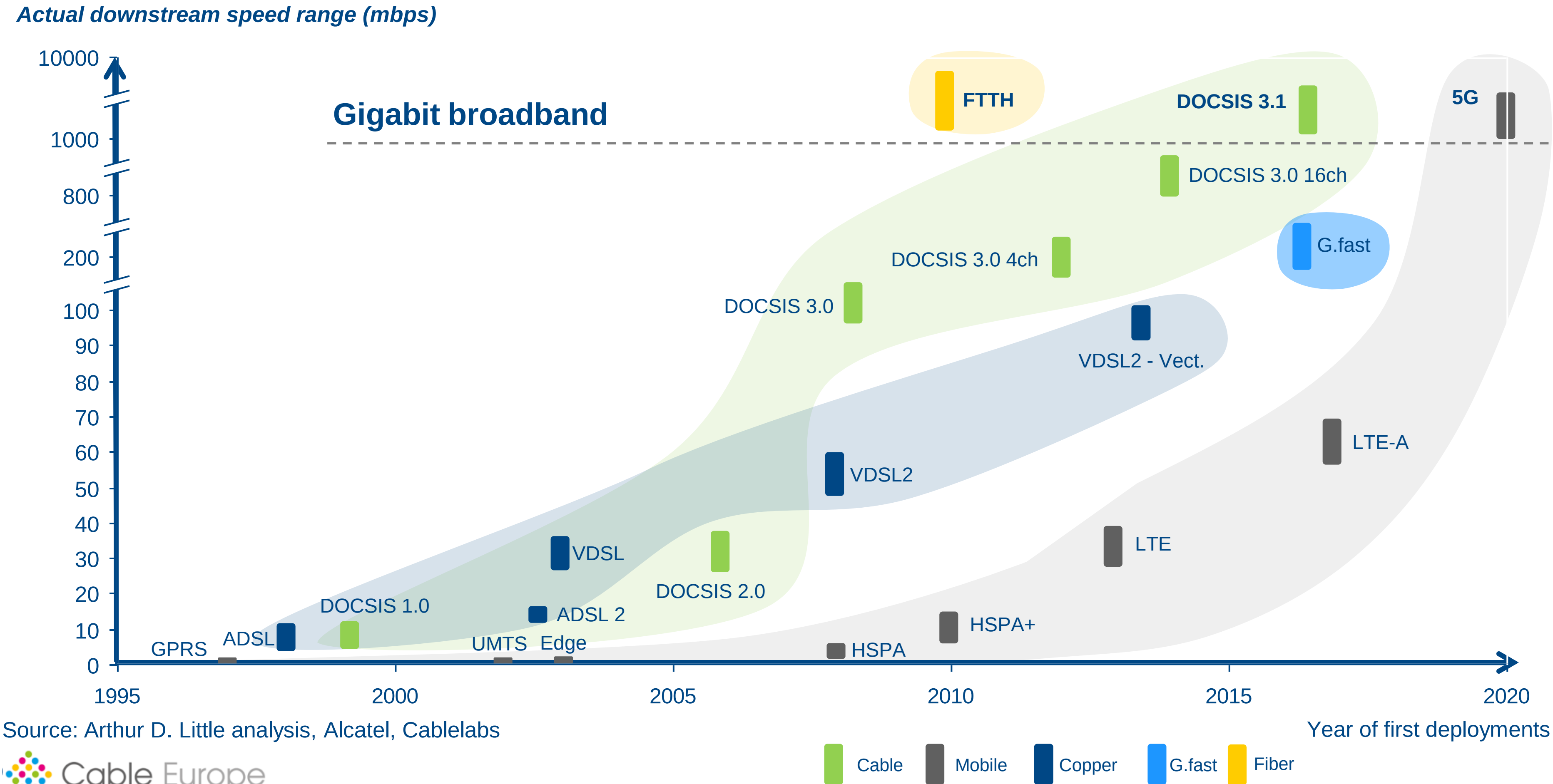
- **98% of the cable network is upgraded with DOCSIS 3.0**
- **71% of European homes are passed by at least one NGA**
- **Compared to other technologies, Cable has the highest coverage of Next Generation Access (NGA; ≥30 Mbps) in Europe**
  - 53% of EU 28 households passed by cable NGA (63% when excluding Italy & Greece)
  - 41% for VDSL
  - 21% for Fiber To The Property (including FTTH and FTTB)

Source: Arthur D. Little analysis, European Commission Digital Agenda, IHS, cable companies websites & annual reports, press releases, Screendigest 2011, WiK, Credit Suisse, jcta

Cable operators have been continuously investing in their networks

Cable operators are at the forefront of high-speed access and keep investing in a future-proof technology, which will progressively deliver performance expected from FTTH and 5G

Broadband access technology roadmap (actual downstream speed range)

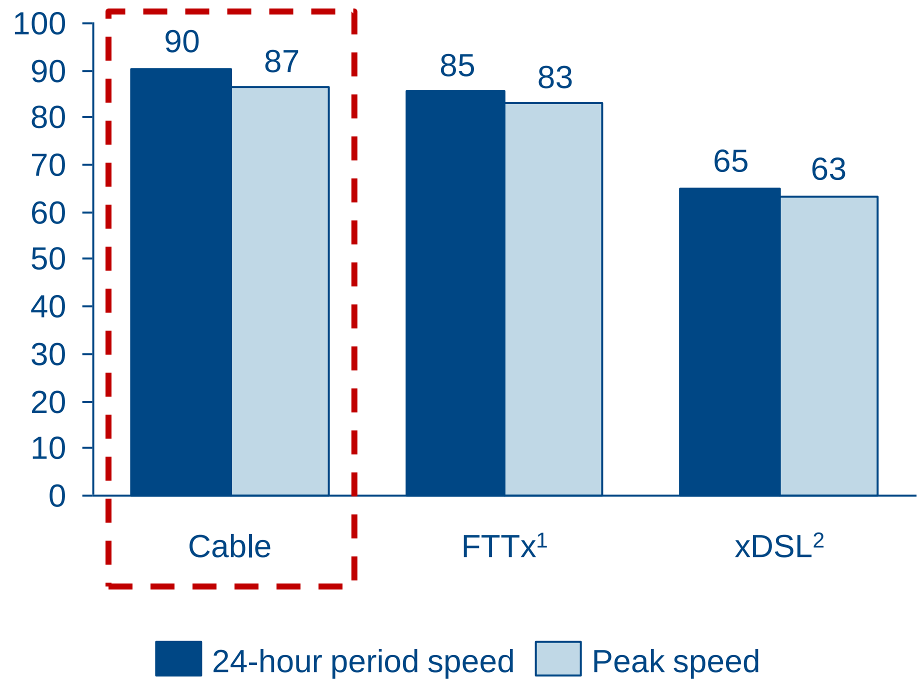


Source: Arthur D. Little analysis, Alcatel, Cablelabs

So far, the speed of cable connections is more reliable than that of other technologies when comparing advertised and actual speed

Download Speed as a % of advertised speed
- 2014, EU 28 + Iceland & Norway -

% of actual download speed / advertised speed



Source: Arthur D. Little analysis, European Commission Digital Agenda Scoreboard using Samknows data. 1. FTTX: include FTTH, FTTC / VDSL. 2. All residential ADSL, ADSL2+ and SDSL services

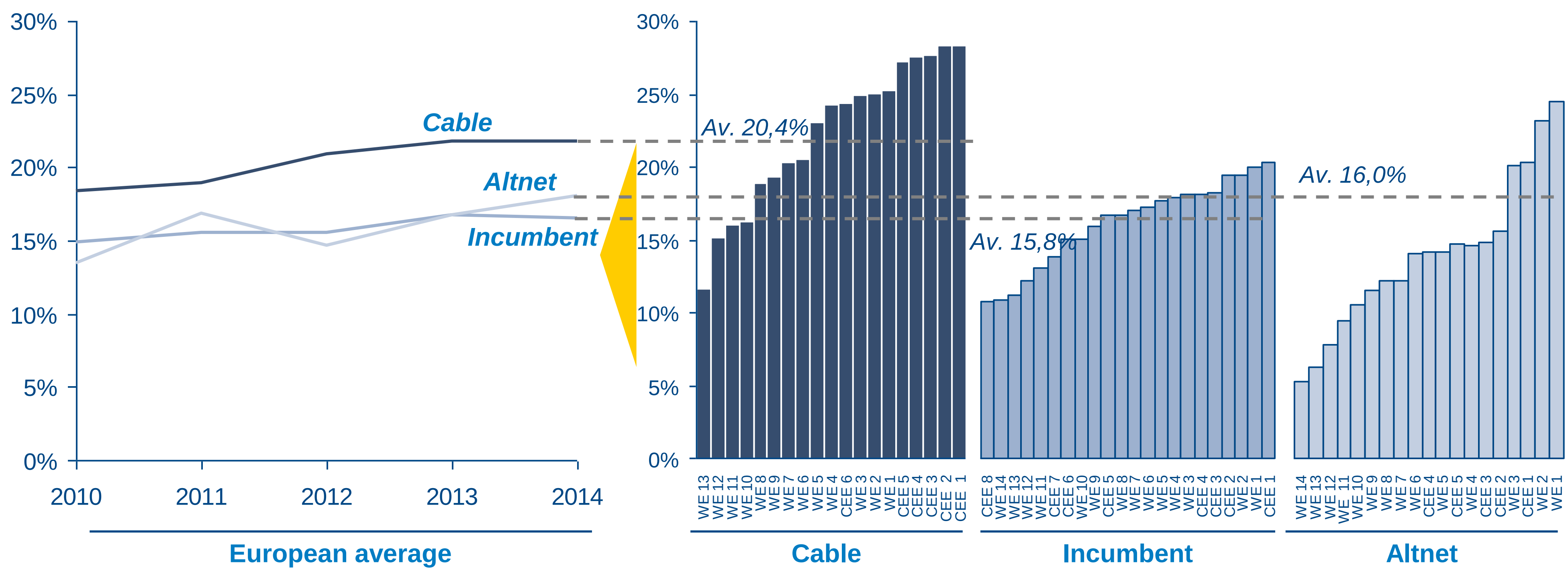
Cable operators have been continuously investing in their networks over the last 5 years and will continue to do so: CableCos have higher capex/sales ratio than other operators

Capex to sales by operator type (evolution and split by country)

- 2010 - 2014, EU 28 -

Fixed capex to sales[1] in %, by operator type

Fixed capex to sales in %, 2010-2014 average of main EU operators, by operator type



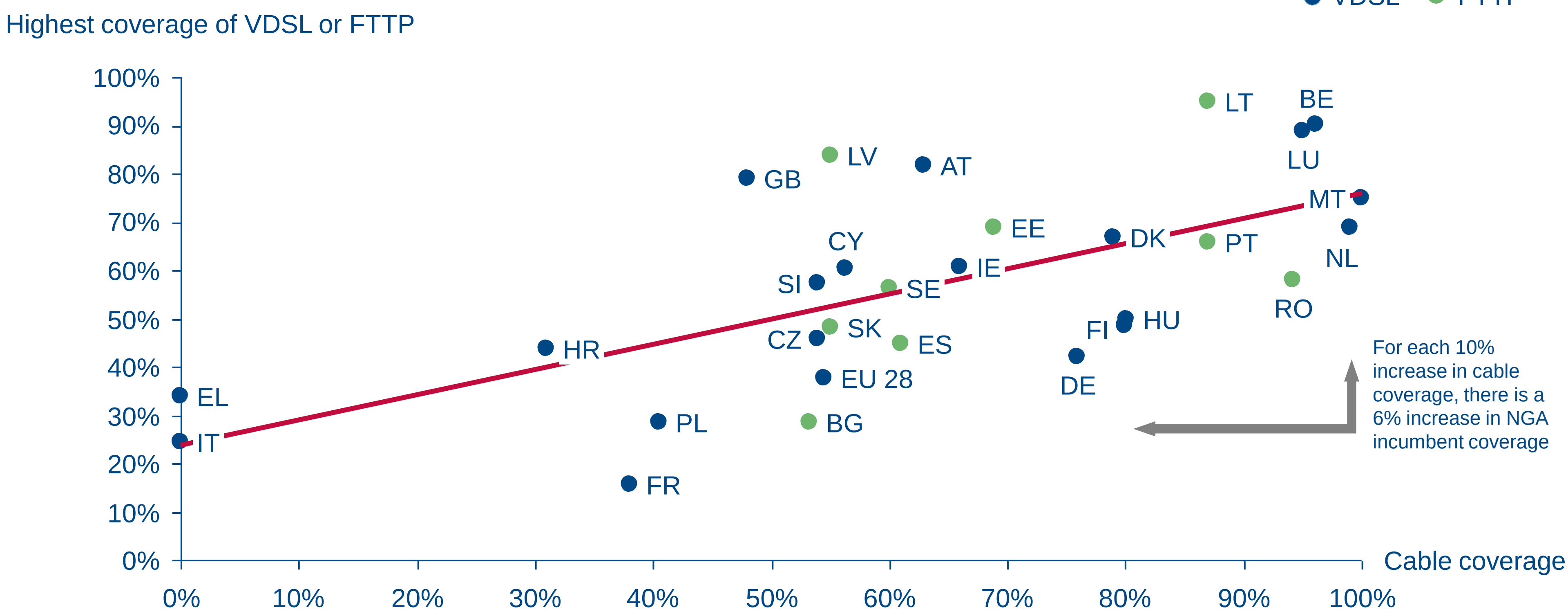
Source: Arthur D. Little analysis, Ovum, Credit Suisse, Bank of America, Broker reports, Annual reports, New Street Research. 1. Computed by taking weighted average capex and sales figures

Cable operators fuel infrastructure-based competition and play a key role in the competitive dynamics of EU digital markets (1/2): CableCos push incumbents to deploy NGA technology

Correlation between Cable coverage and VDSL / FTTP coverage

- 2014, EU 28 -

Technology coverage in %, by country

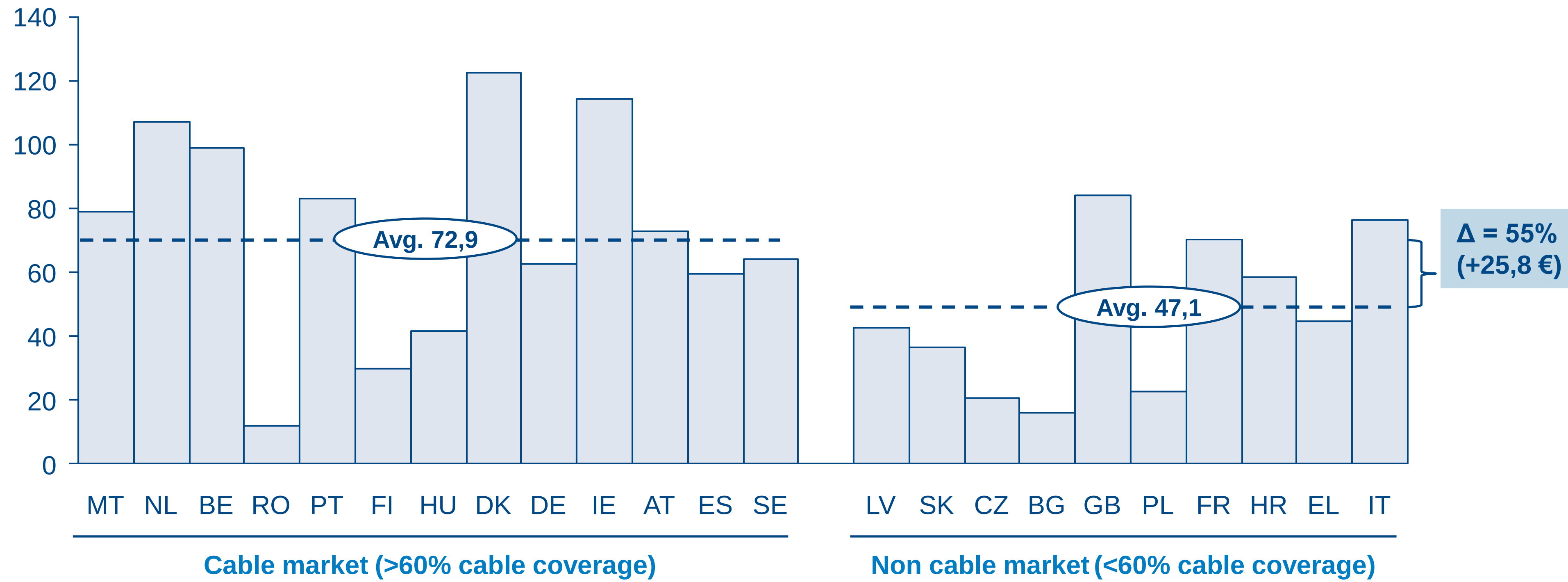


Source: Arthur D. Little analysis, European Commission - Study on broadband coverage in Europe in 2014. Note: The VDSL/FTTP coverage per country is that of the technology (VDSL or FTTP) that has the highest coverage

Cable operators fuel infrastructure-based competition and play a key role in the competitive dynamics of EU digital markets (2/2): Incumbents invest ≈50% more per HH in cable markets

Incumbent fixed investments per household in cable vs. non-cable markets
- 2010-2014 -

Average, €/ HH - Ranked in descending order of cable coverage



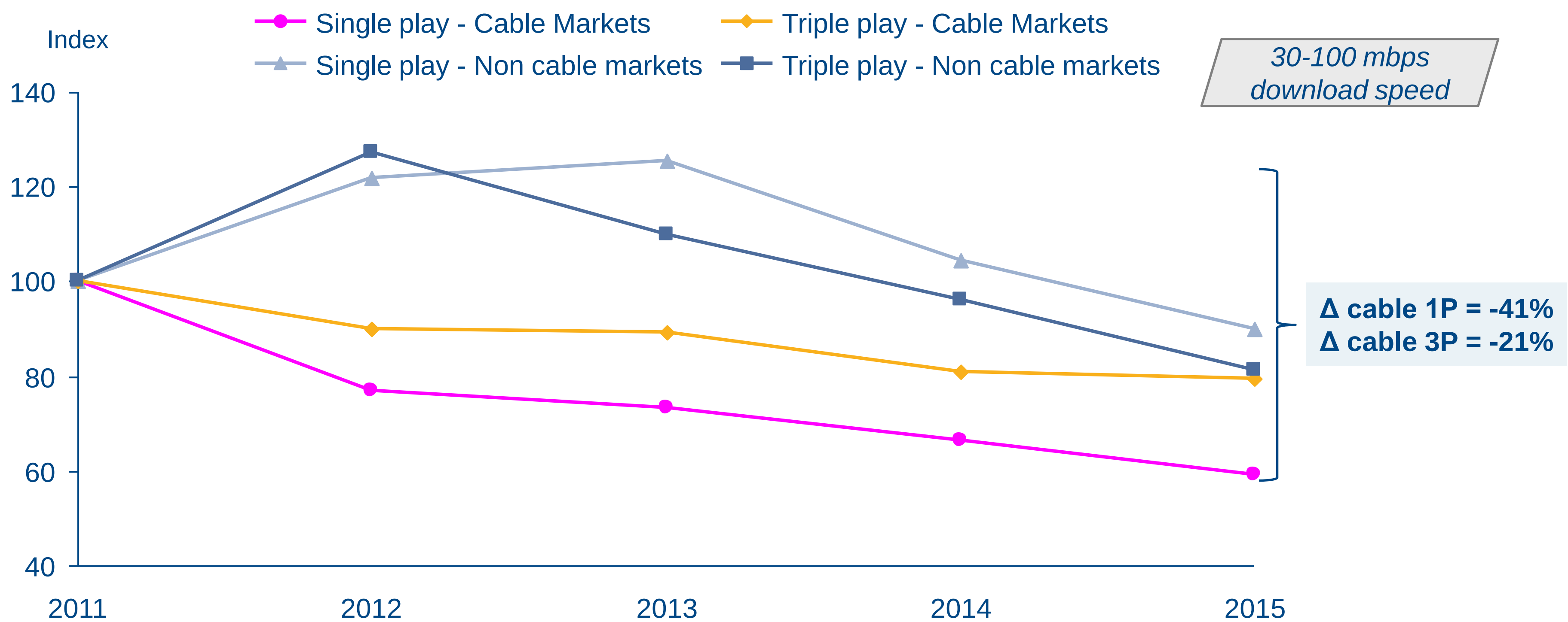
Source: Arthur D. Little analysis, Ovum, Credit Suisse, Bank of America, Broker reports, Annual reports

In cable markets, operators broadband retail prices have been decreasing by 29% over the 2011-2015 period

Evolution of broadband retail price[1]

- 2011 - 2015, EU 28 splited by cable and non cable market[2] -

Index of average broadband prices, 2011 = 100, cable market includes countries with cable coverage >60%



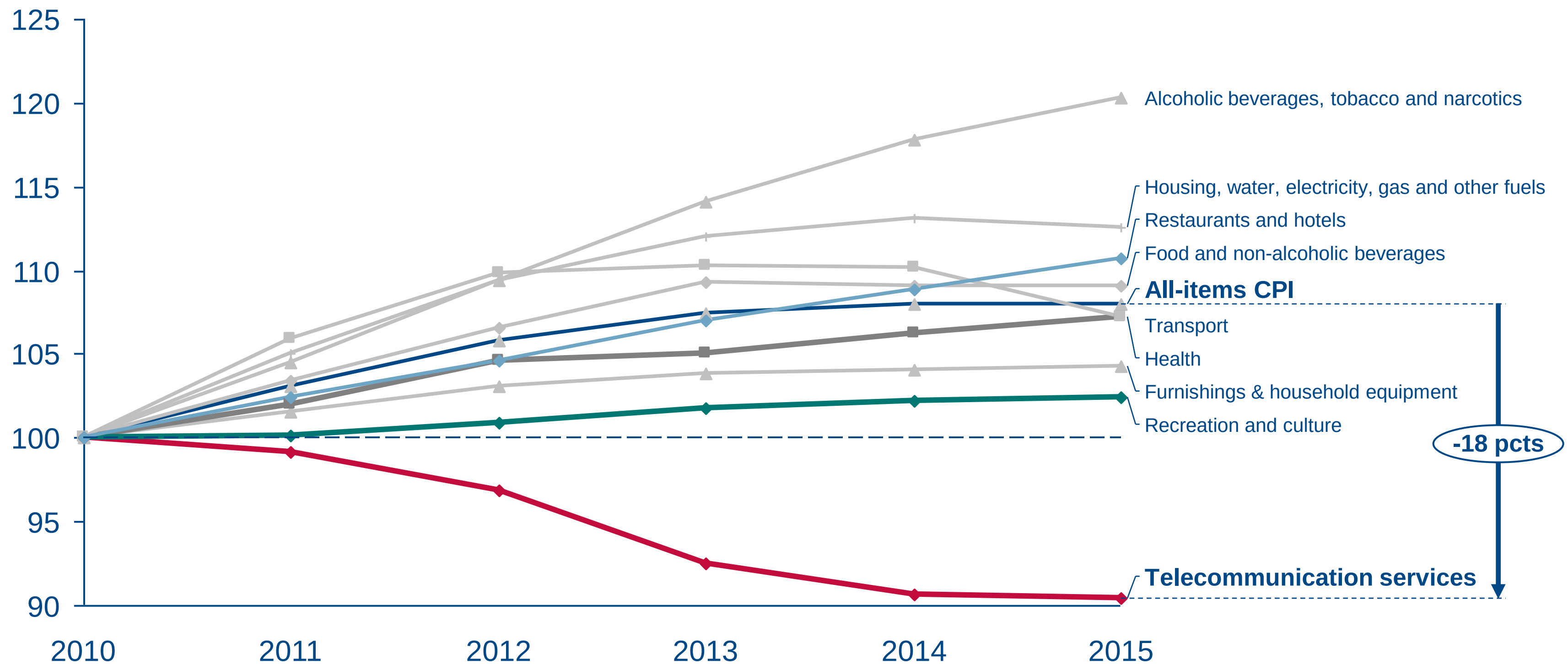
Source: Arthur D. Little analysis, European Commission Digital Agenda using Van Dijk data. 1. Correspond to the minimum price between similar offers from incumbent, cable and alternative network operators, corrected using Purchasing Power Parities (PPPs). 2. Cable market include countries with over 60% of cable coverage: Malta, Netherlands, Belgium, Luxembourg, Romania, Finland, Lithuania, Portugal, Hungary, Denmark, Germany, Estonia, Ireland, Austria, Spain, Sweden, whenever corresponding offers were found on the national market

Overall telecom prices[1] decreasing and evolving with 18 percentage points less than inflation

Evolution of European consumer price index

- 2010 - 2015, EU 28 average -

Consumer price index evolution in %, base 100 in 2010

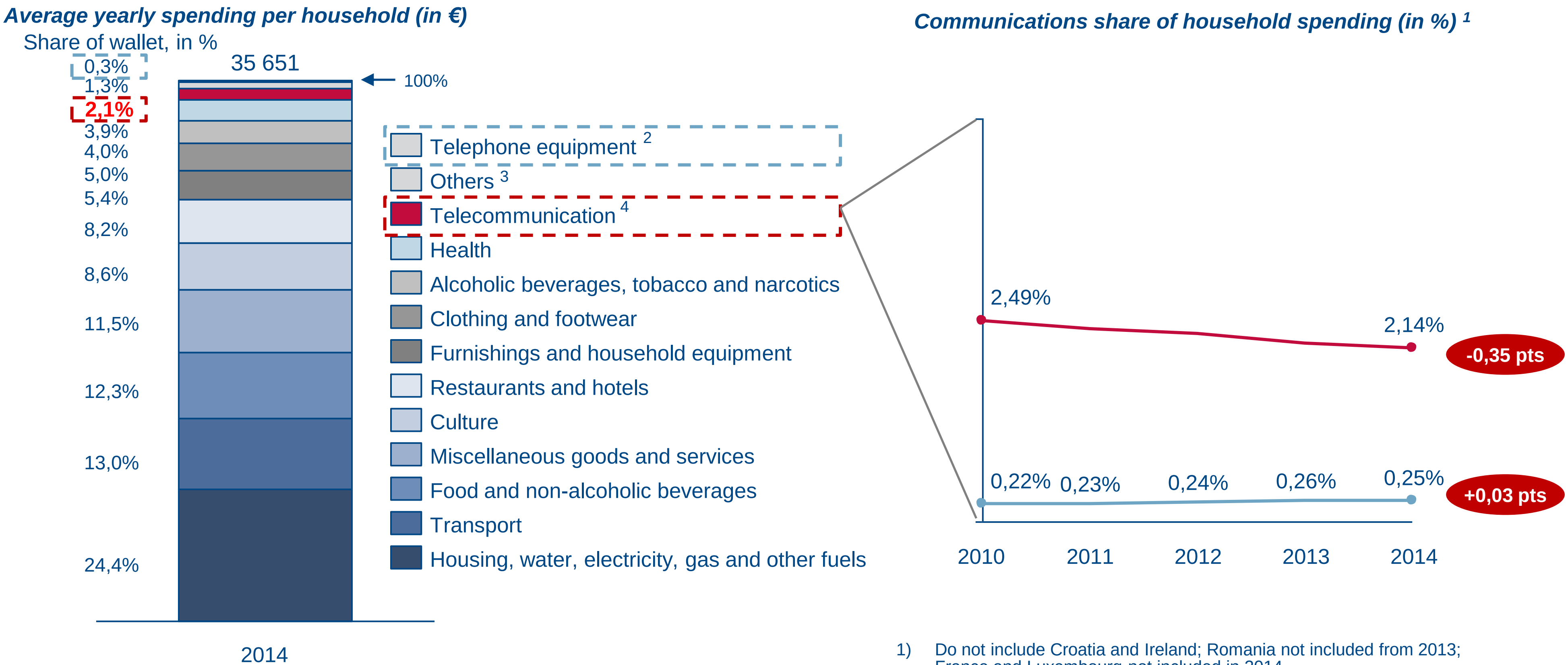


Source: Arthur D. Little analysis, Eurostat. 1. Price for overall telecom services including, Fixed telephony, mobile telephony, internet and TV services; Includes incumbent, cable and alternative network operators price levels

Overall spending on telecommunications as a share of total consumer spending decreasing by 35 pts over a 5 year period

Evolution of European Households Spending

- 2010 - 2014, EU 28 average -



1) Do not include Croatia and Ireland; Romania not included from 2013; France and Luxembourg not included in 2014
2) Includes fixed and mobile phone equipment
3) Includes education and postal services
4) Includes fixed telephony, mobile telephony, internet and TV services

Source: Arthur D. Little analysis, Eurostat

Contact details

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