

Creating a brighter future

Webinar:
European FTTH Forecast 2013-2018:
Behind The Numbers

Moderator: **Jan Schindler**
Chair Market Intelligence Committee
FTTH Council Europe

Presenter: **Graham Finnie**
Chief Analyst
Light Reading

FTTH Council Europe



A sustainable future
for Europe
enabled by
Fibre to the Home

FTTH Conference 2015

Join us Next Year in Warsaw!

10-12 February 2015



Warsaw, 10 – 12 February 2015

Webinar

- 20-25 minutes presentation
- 15-20 minutes Q&A
- Post your questions in the questions box of the webinar system
- Relevant questions that are not answered during the webinar will be answered by email
- The slides will be available for download after the webinar
- The webinar is recorded and can be viewed as video-stream afterwards. The video will be available on the website of the FTTH Council Europe within one week
- Slides and information about the availability will be sent to registered attendees by email



The following presentation does not necessarily reflect the opinion of the FTTH Council Europe

FTTH Council Europe

Post your comments on the Webinar on Twitter:

#ftthwebinar



LightReading **WEBINAR**

European FTTH Forecast 2013-2018: Behind The Numbers

Prepared For:



Fibre to the Home
Council **Europe**

CREATING A BRIGHTER FUTURE

Introduction

- Based on individual analyses of 21 countries, and brief reviews of a further 23 countries
- Covers a total of just over 324 million households, 206 million in the EU and 118 million outside the EU
- Aggregate forecast slightly down compared to last year
 - Continuing strong progress in Eastern Europe– Baltics, Bulgaria, Russia, Turkey, Ukraine
 - Better year in Western Europe, with good progress in France, Netherlands, Portugal, Spain, Sweden and Switzerland
 - Balanced by continuing slow progress in Germany, Italy, UK, possible slowdown to come in Netherlands
- Gap between best and worst performers is still widening
 - Some Western European countries are over 10 years behind the leaders in terms of FTTH penetration
 - At 2018, we expect household penetration to vary from less than 5% to more than 40%.

How The Forecast Is Created

- In order to avoid inconsistencies, we agreed to use IDATE data from its Panorama as the starting point for the forecast
- A forecast is created for each of 21 countries individually, and in less detail for 23 other countries, and aggregated to create the overall forecast
- Forecasts are based on a set of “leading indicators” which affect likely market development

Some Leading Indicators Are Common, Some Not

- Most demand-side indicators are common to all countries, and drive our overall view
- Demand-side indicators are not generally at a point where telcos feel **compelled** to supply FTTH connections
- Most supply-side indicators are unique to each country, and drive the [big] differences between countries
- This makes it impossible to generalize about the prospects for “European” FTTH

Demand-Side Indicators

LEADING INDICATOR	DEVELOPMENTS OVER THE PAST 12 MONTHS	POTENTIAL DEVELOPMENTS OVER THE NEXT 12 MONTHS
Marketing and take-up of third generation broadband services (at 20Mbit/s +)	Positive: Average speed per household continues to rise rapidly, paving the way for FTTH. Speedtest showed average European downstream speed at the end of 2013 around 22Mbit/s, up around 30% on the year	Positive: We expect the rise in average speed will continue in 2013, pressurizing those still reliant on ADSL and first-generation VDSL
Consumer electronics—PCs, digital cameras, HDTV, etc	Negative: 2013 was a slow year for PCs and TVs, though the growth in devices per home, in “connected” TVs and in new-generation games machines have contributed to growth	Negative: number of devices per home will continue to multiply, but no hardware is likely to require FTTH in the near future
Services that drive higher-speed broadband	Neutral: downstream services based on VDSL can support all current services, but the rise in uploading of photos, videos and Cloud services is driving a need for more symmetrical bandwidth	Neutral: although there is no killer app for FTTH in sight, the rise in upstream demand will likely continue.

Supply-Side Indicators

LEADING INDICATOR	DEVELOPMENTS OVER THE PAST 12 MONTHS	POTENTIAL DEVELOPMENTS OVER THE NEXT 12 MONTHS
Stated attitudes and plans of incumbent telcos	Positive: a clear improvement in 2013 with stronger performances from Rostelecom, Telefonica, KPN, Turk Telecom, TeliaSonera among others.	Positive: Market share of incumbents will continue to rise as confidence in the FTTH business case grows
Competitive and entrepreneurial telco plans and their impact	Positive: New entrants have had a big impact in Russia, Turkey, Bulgaria, Romania and many of the most dynamic markets, and growth in these countries will continue	Positive: we expect continuing good growth through the next few years in these countries, and some others
Muni and utility plans and their impact	Neutral: Good progress in Denmark and Norway and some progress in Germany, but in general the game is tending to shift towards incumbents.	Neutral: while there will continue to be growth in existing projects, we do not expect major new projects in other countries.
Impact of cable MSOs	Neutral: Cable MSOs had a big impact in 2011 and 2012 with 50-100Mbit/s+ products; many incumbents have responded with VDSL, but it is pushing others to FTTH	Neutral: the VDSL build-out continues for now in many cable-rich territories, but ultimately cable MSOs may force more incumbents to build a true FTTH network
Impact of mobile broadband	Neutral: Some substitution of fixed broadband, and diversion of capital, but counterbalanced by need for fiber backhaul	Neutral: No major change in current situation is foreseen

Other Indicators

LEADING INDICATOR	DEVELOPMENTS OVER THE PAST 12 MONTHS	POTENTIAL DEVELOPMENTS OVER THE NEXT 12 MONTHS
Impact of equipment cost and construction trends	Neutral: Although cost of both construction and electronics continues to fall slowly, it is only having a modest impact on decision-making	Neutral: Costs will continue to fall, but without having a major impact on network builder behavior
Impact of copper-based DSL developments	Negative: DSL vectoring, bonding and other developments are leading some operators to consider DSL anew and postpone FTTH	Neutral: Vectoring has still to deliver on its promise to make a real impact here
Regulatory and political changes at European and national level	Neutral: Positive moves at both regional and national level, but Euro-regulation has failed to have a continent-wide impact yet,	Positive: despite limited impact of EU reforms to date, the barriers that have held back many plans are steadily being removed at national level
Macro-economic environment	Neutral: Despite the poor outlook, operators in some badly affected territories like Portugal and Spain have continued to build	Positive: many countries are beginning to emerge from recession.
FTTH development outside Europe and its political & commercial impact	Neutral: although some European countries are falling far behind other world regions, it has had only a muted effect on European politicians and the public to date	Neutral: little sign yet that this is about to really explode as a political issue

Positive Leading Indicators In 2013/2014

- Continuing large-scale build-out in major countries in East, with more builds likely over the next few years: FTTH is the default technology here
- More incumbent involvement in Western European countries including Finland, France, Netherlands, Portugal, Spain, Sweden, Switzerland
- Broadband line speeds continue to rise strongly, up about 30% on average in 2012; connected devices per home also rising
- FTTH capex cost and opex cost continue to fall steadily, improving the business case
- Slowly improving macro-economic environment

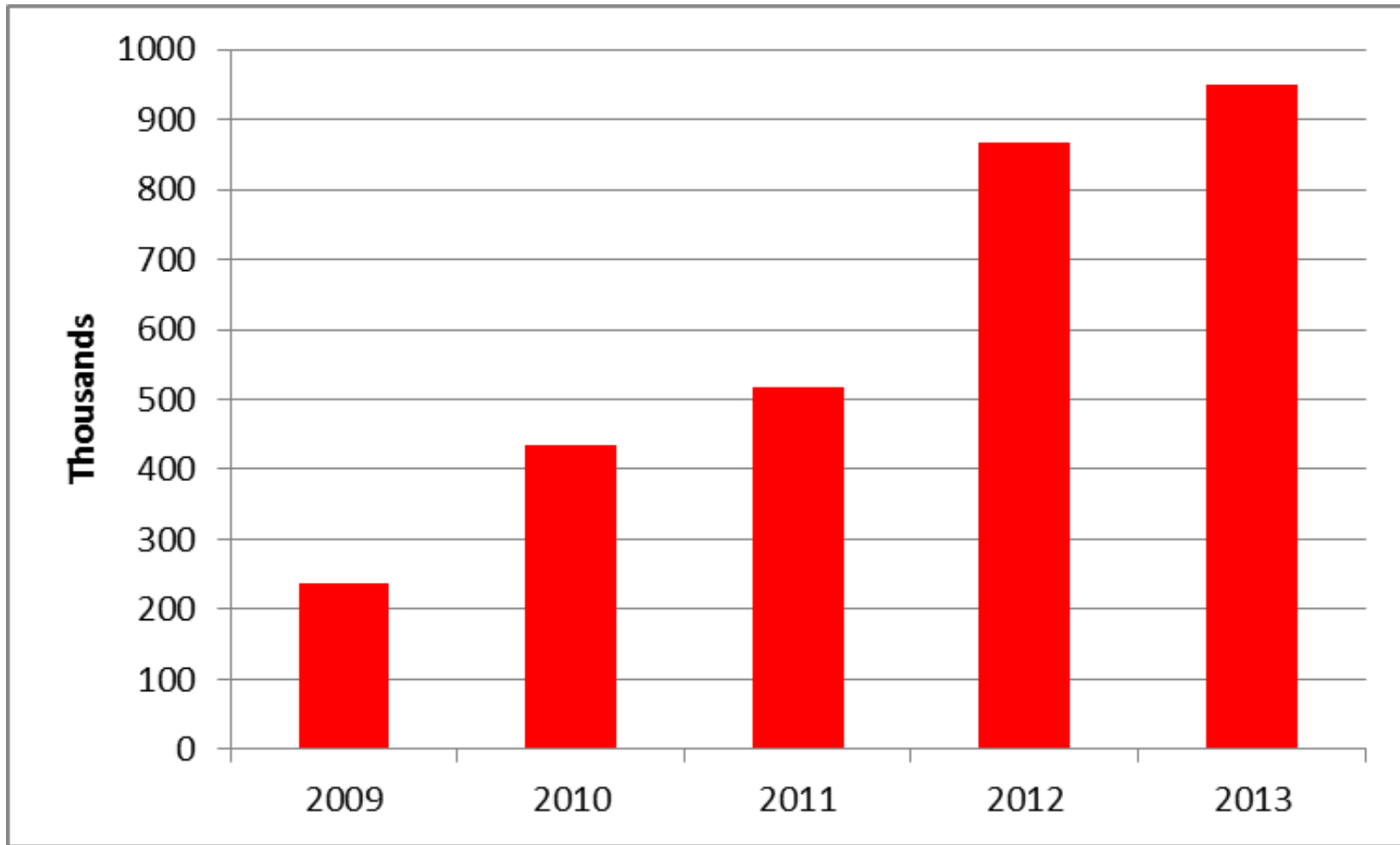
Secrets of Success: The Ten Percent Club

COUNTRY	H-HOLD FTTH PEN, END 2014 (EST)	FACTORS DRIVING SUCCESS
Bulgaria	15.4%	Strong entrepreneurial E-LAN sector; limited DSL; low deployment costs; more recently, large-scale private sector investment
Denmark	16.1%	Strategic decision by regional electricity utilities to invest in FTTH
Estonia	14.2%	Incumbent (owned by TeliaSonera) took strategic decision to shift to FTTH
Latvia	27.9%	Incumbent took strategic decision to shift to FTTH
Lithuania	33.1%	Incumbent took strategic decision to shift to FTTH; multiple other players also building rival fiber networks
Norway	22.8%	Alternative utility-owned telco created highly successful high ARPU triple-play model
Portugal	16.1%	Early entry by two CLECs impelled major shift to FTTH by incumbent; successful build model based on low deployment costs
Russia	19.5%	Very low cost build model based on FTTB and cheap Ethernet switches; little DSL; multiple well-funded entrepreneurial builders
Slovakia	14.2%	Strong competition between incumbent and a well-funded rival
Slovenia	15.4%	Strong competition between incumbent and rival
Sweden	30.7%	Led by municipalities and housing associations, as well as some early entrepreneurial builds, and more recently TeliaSonera

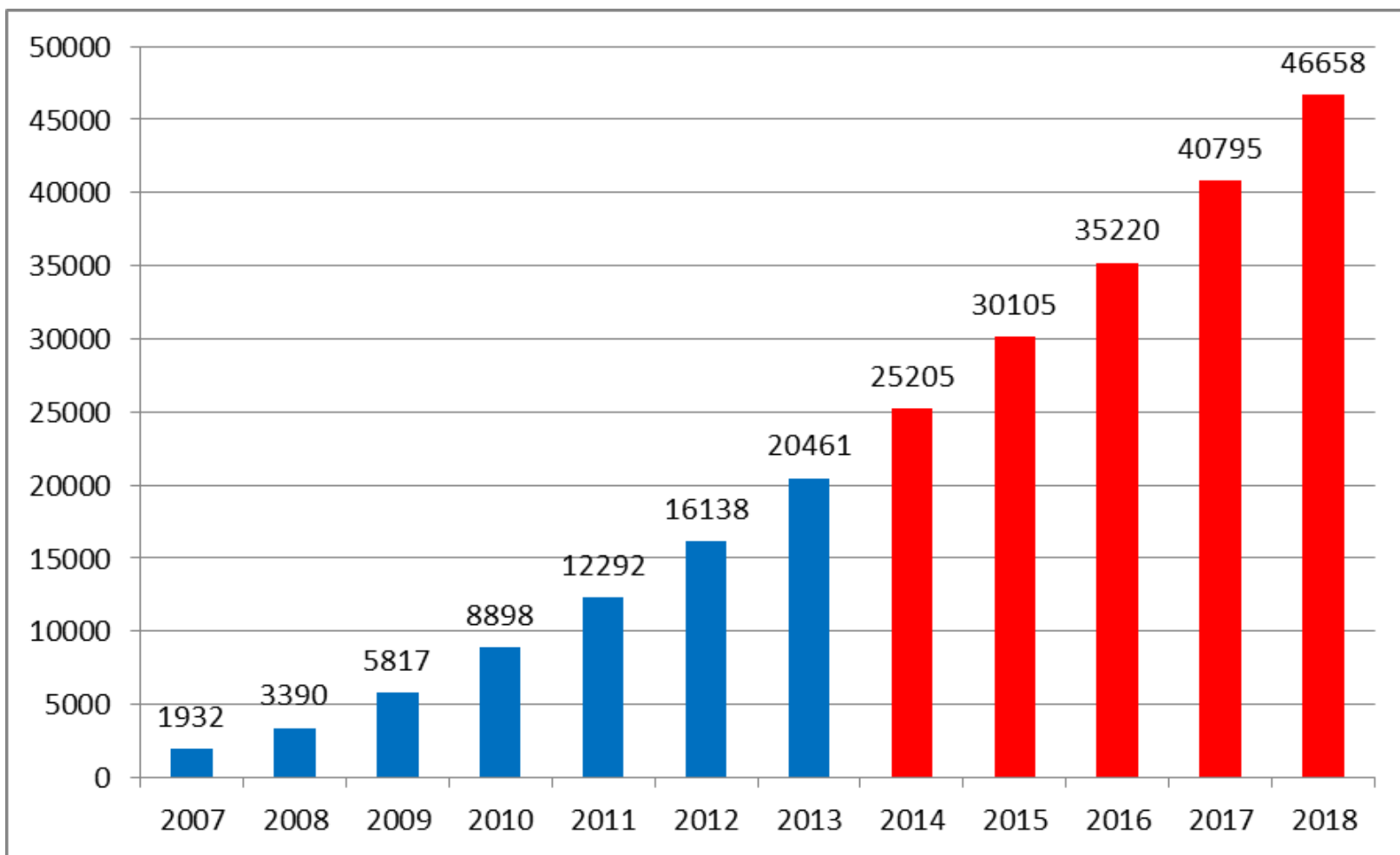
Negative Leading Indicators In 2013/2014

- No single application requires FTTH– and there's little sign of such an application is emerging
- Incumbents, especially in Western Europe, looking to vectoring and G.fast as medium-term (even long-term) solutions
- In many countries, alternatives to the incumbent are not deploying FTTH, or lack sufficient capital to do so
- Municipal and utility movement restricted to a few countries in the region
- Little likelihood of major public funding to support builds

Total FTTH Adds by EU Incumbents, 2009-2013

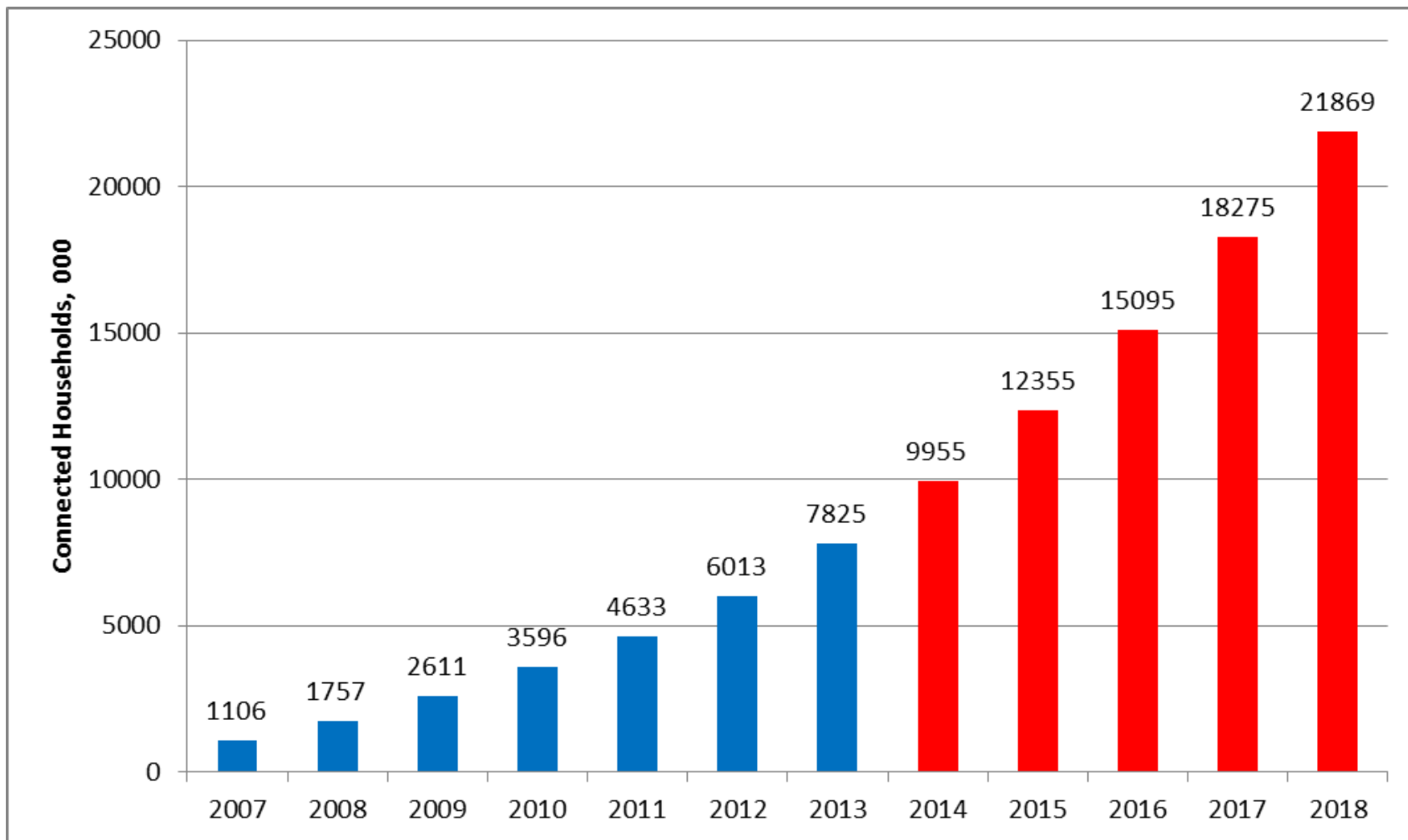


European Region FTTH Forecast

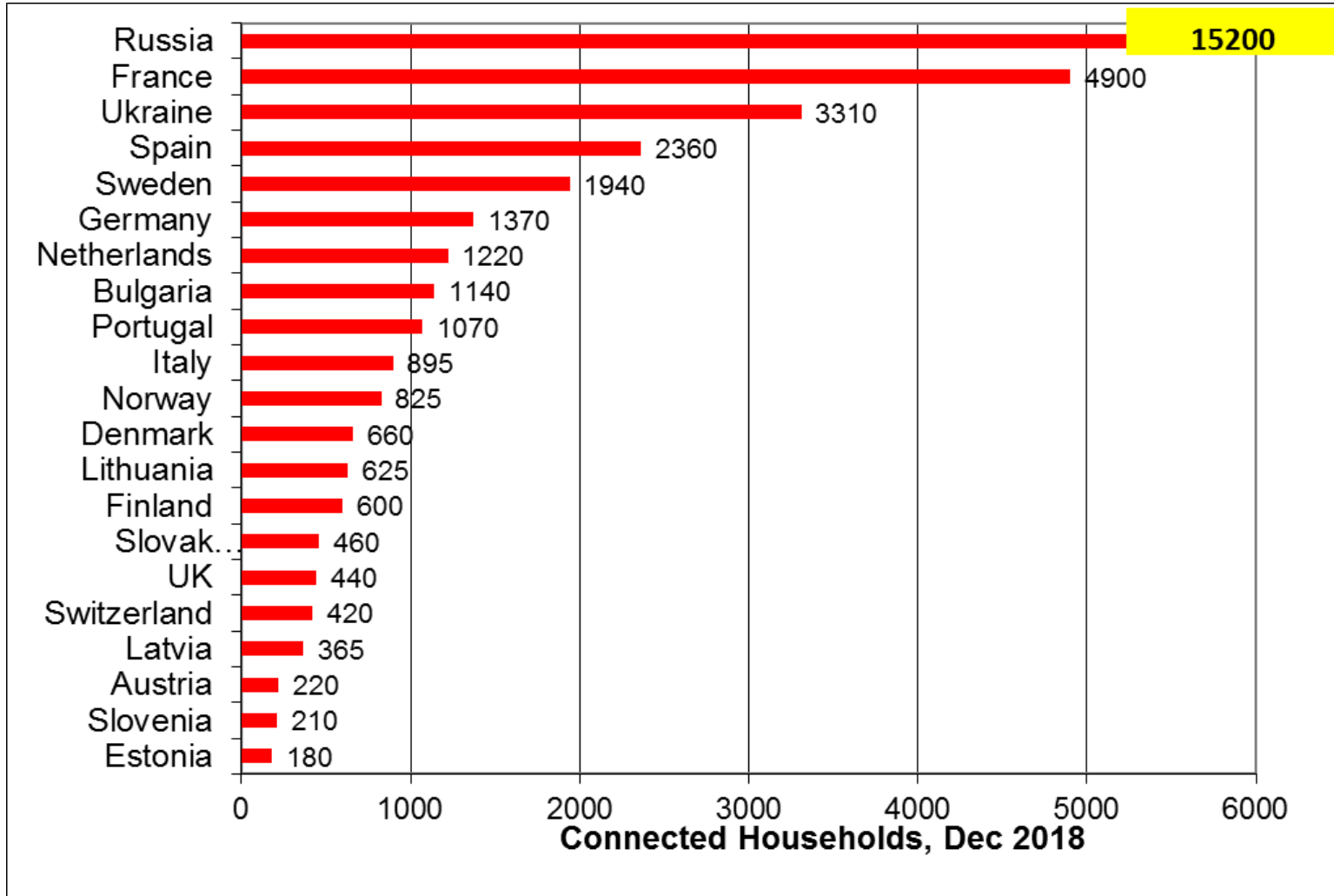


Note: Households connected directly to fiber and apartment connected via basement fiber termination (FTTB)

EU-only Forecast

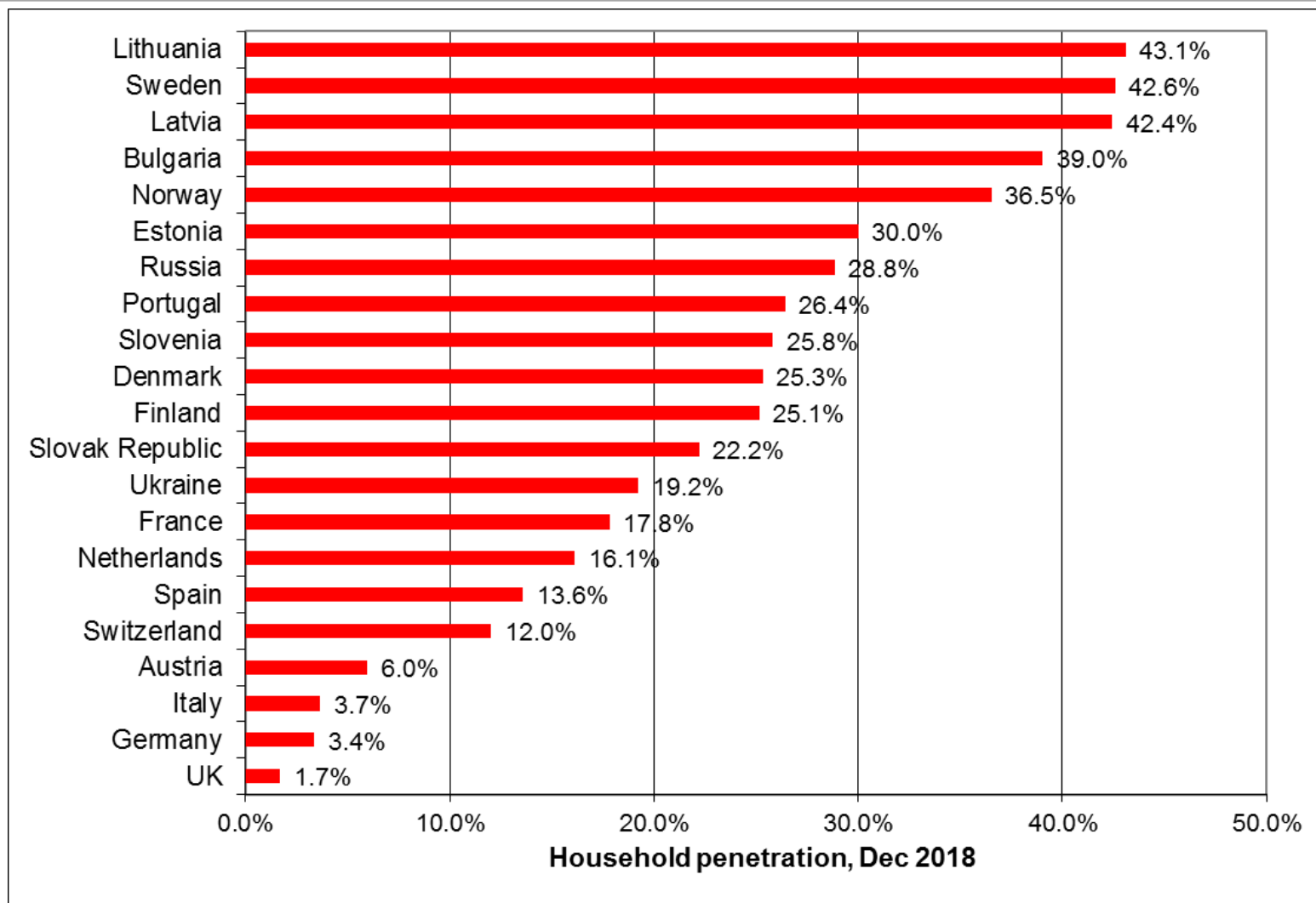


Top FTTH Countries In 2018*, By Connected Households



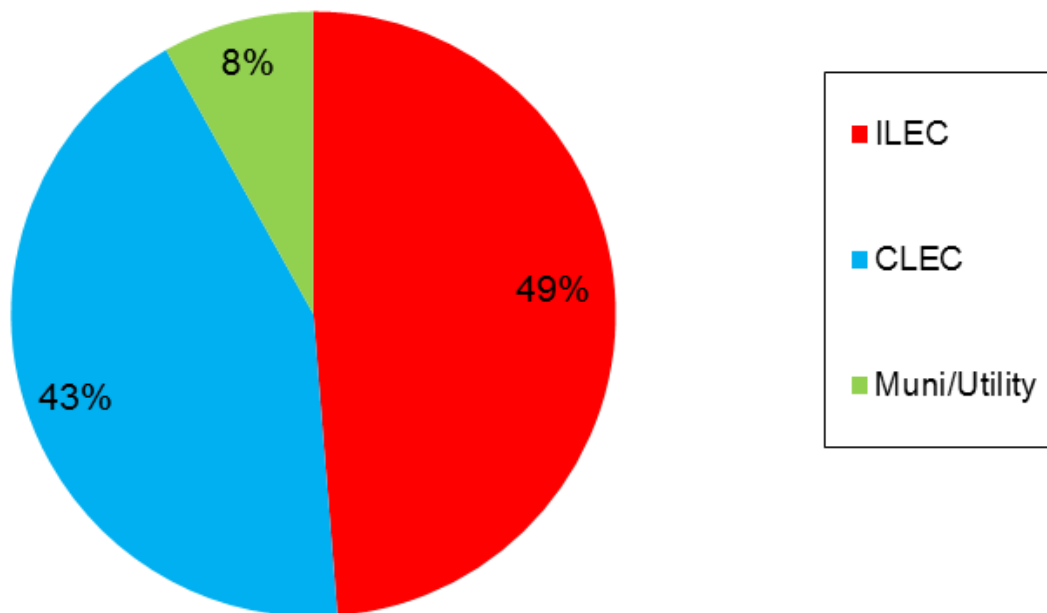
***Among the 21 countries
analyzed in detail**

Top FTTH Countries In Europe, 2018*, By Household Pen



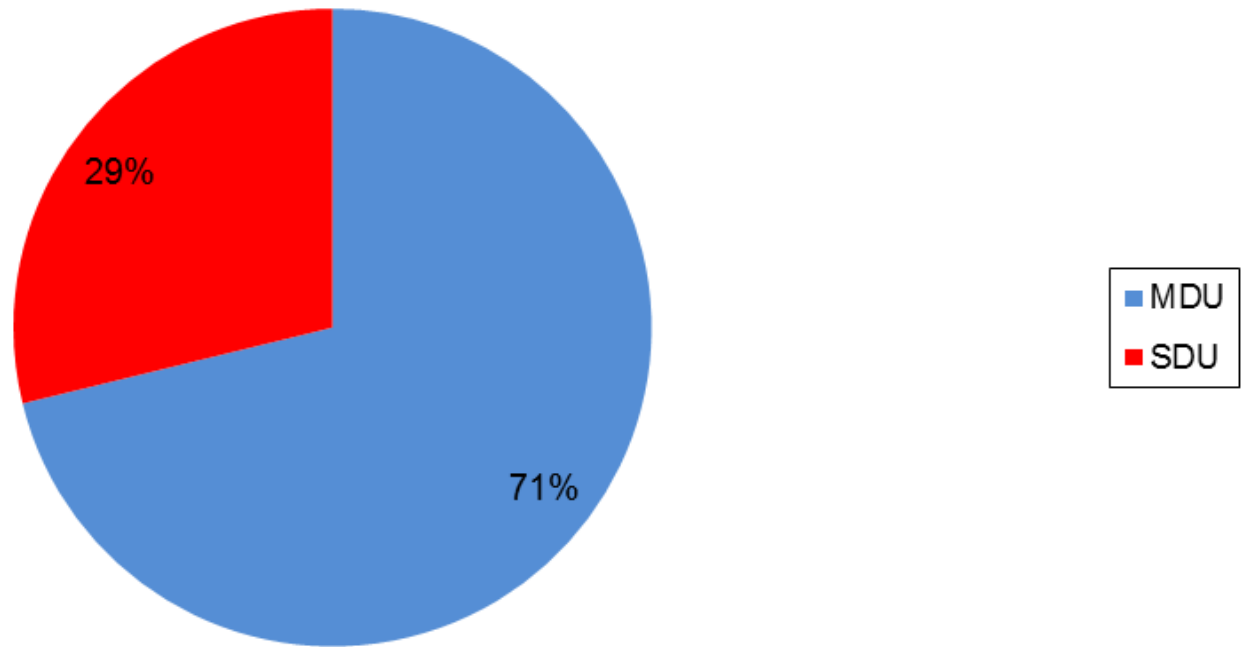
*Among the 21 countries analyzed in detail

FTTH Connections In Europe, 2018, By Type Of Builder

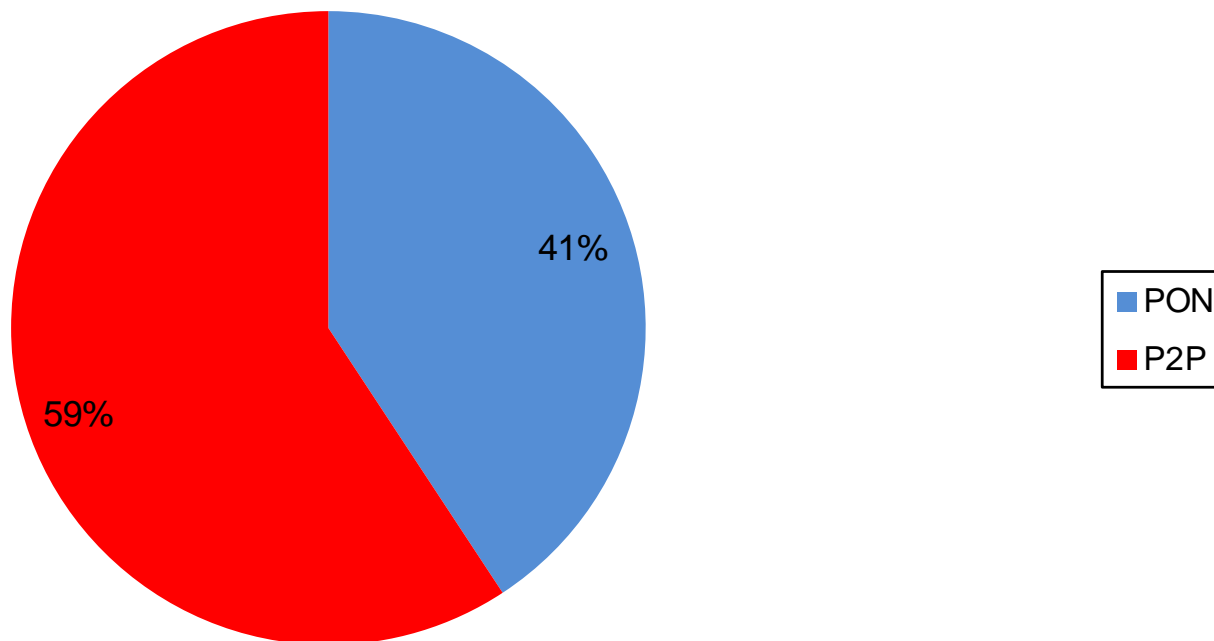


Note: ILEC = former incumbent monopoly telco (PTT). CLEC = competitive or alternative telco or broadband provider. Muni/Utility = network built by municipal local authority or by a power utility

FTTH Connections in Europe, 2018, By Type of Dwelling



FTTH Connections in Europe, 2018, By Technology



Changes in Country Forecast This Year

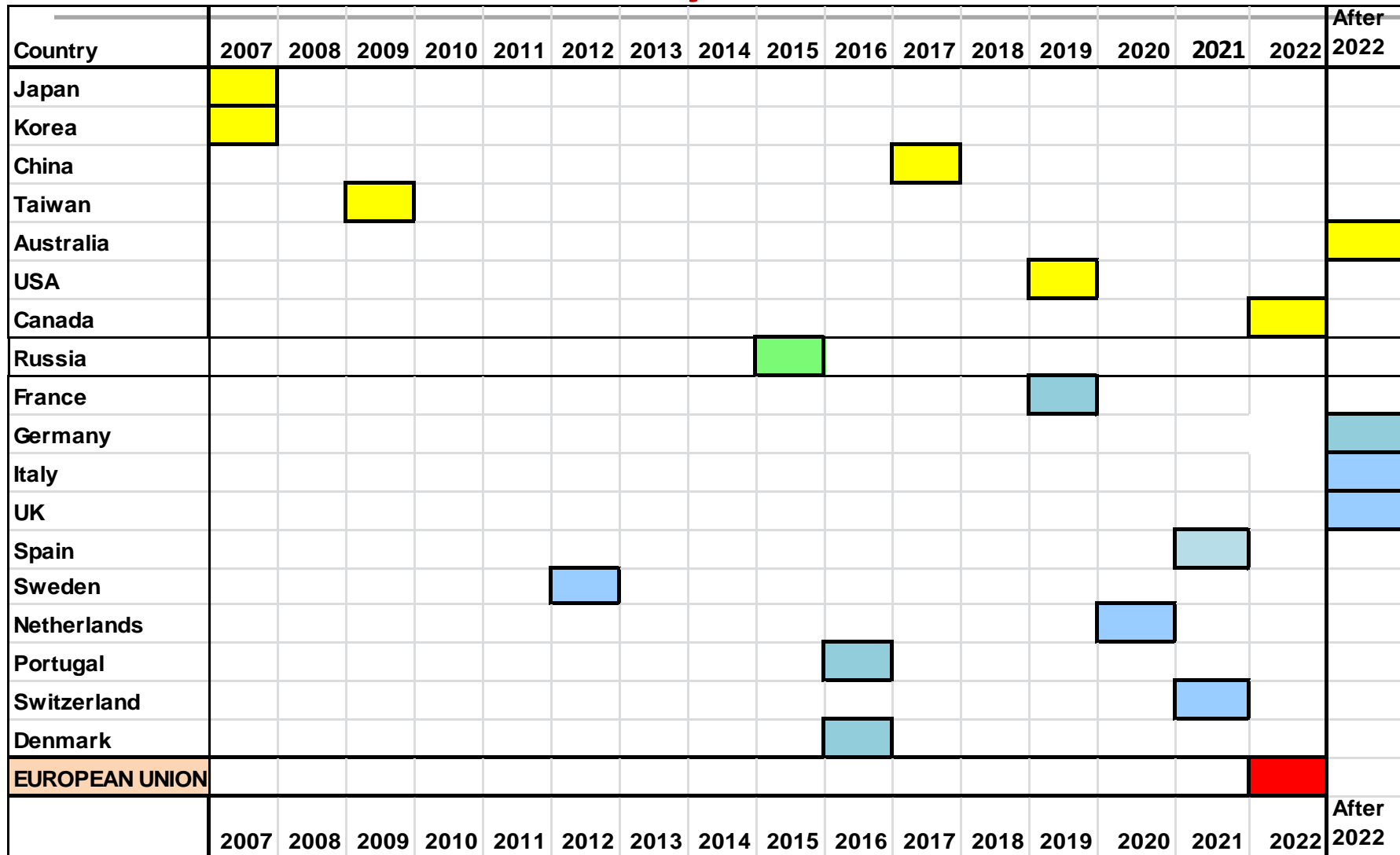
- This year, forecasts were substantially increased in several countries. Specifically, we substantially increased the forecasts for Latvia (because of new information) and Spain (because of faster than anticipated progress).
- At the same time, we substantially lowered the forecast for Germany and UK due to lack of commitment by incumbents, and the uncertainty around other potential builds, and in the Netherlands due to KPN's announced reduction in FTTH investment.
- The forecast was also more modestly increased in Finland and modestly lowered in France.
- The forecast largely stayed the same for other countries.

Other Countries

- The other 23 countries were not analyzed in as much detail, so the forecasts are more rudimentary
- Forecasts in these cases is based on IDATE information, extrapolation from other countries, and limited research on current plans in each nation
- These countries accounted for about 12% of FTTH connections at the end of 2013, so they do not materially affect the aggregate forecast for the whole region

- **Andorra**
- **Armenia**
- **Azerbaijan**
- **Belarus**
- **Belgium**
- **Croatia**
- **Cyprus**
- **Czech Republic**
- **Greece**
- **Hungary**
- **Iceland**
- **Ireland**
- **Israel**
- **Luxembourg**
- **Kazakhstan**
- **Macedonia**
- **Malta**
- **Moldova**
- **Montenegro**
- **Poland**
- **Romania**
- **Serbia**
- **Turkey**

The Race To FTTH Maturity



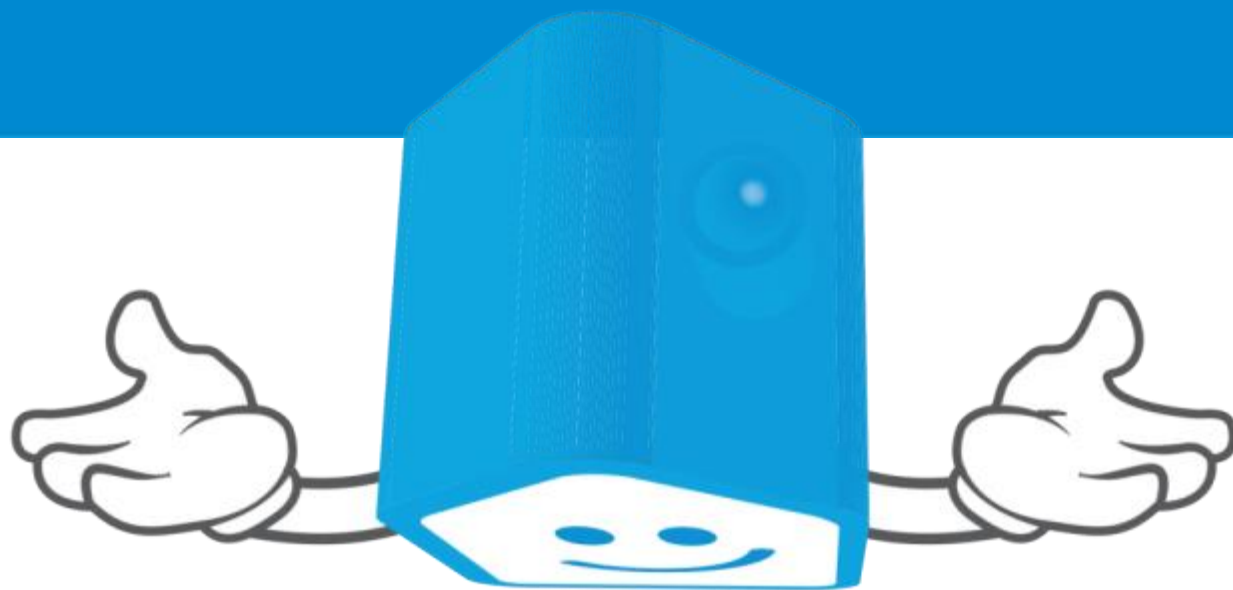
Summary

- 46.7m households are expected to be connected to FTTH or FTTB at the end of 2018 in the countries covered by this forecast– this is about 14.4% of all homes in the region
- In the EU only, the total is forecast to be almost 22m, or 10.6% of all homes in the EU
- 12 of the 21 nations individually analyzed should achieve “fiber maturity” (20% penetration) by 2018– Lithuania, Sweden, Latvia, Bulgaria, Norway, Estonia, Russia, Slovenia, Denmark, Finland, Portugal, and Slovak Republic
- Incumbents will account for almost half of all connections at 2018
 - 70% of connections will be to MDUs
 - 57% will be based on PON
- The gap between the EU and non-EU area, is still widening: in 2013, less than 4% of EU households had FTTH, against over 10% in the non-EU area; by 2018, this gap will hardly have closed

Q&A

Please post your questions in the questions box of the webinar system!





www.ftthcouncil.eu

