

Creating a brighter future

Fibre to the Home: Taking your life to new horizons!

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Fibre to the Home
Council **Europe**

www.ftthcouncil.eu



FTTH Council Europe

Photo by Nicolo Baravalle

FTTH Council Europe

Our Vision: A sustainable future enabled by Fibre to the Home

Our Mission

- To accelerate FTTH adoption through information and promotion in order to enhance the quality of life, contribute to a better environment and increased competitiveness

Organisation

- Founded in 2004, non-profit industry organisation
- More than 150 member companies

Europe in the slow lane?

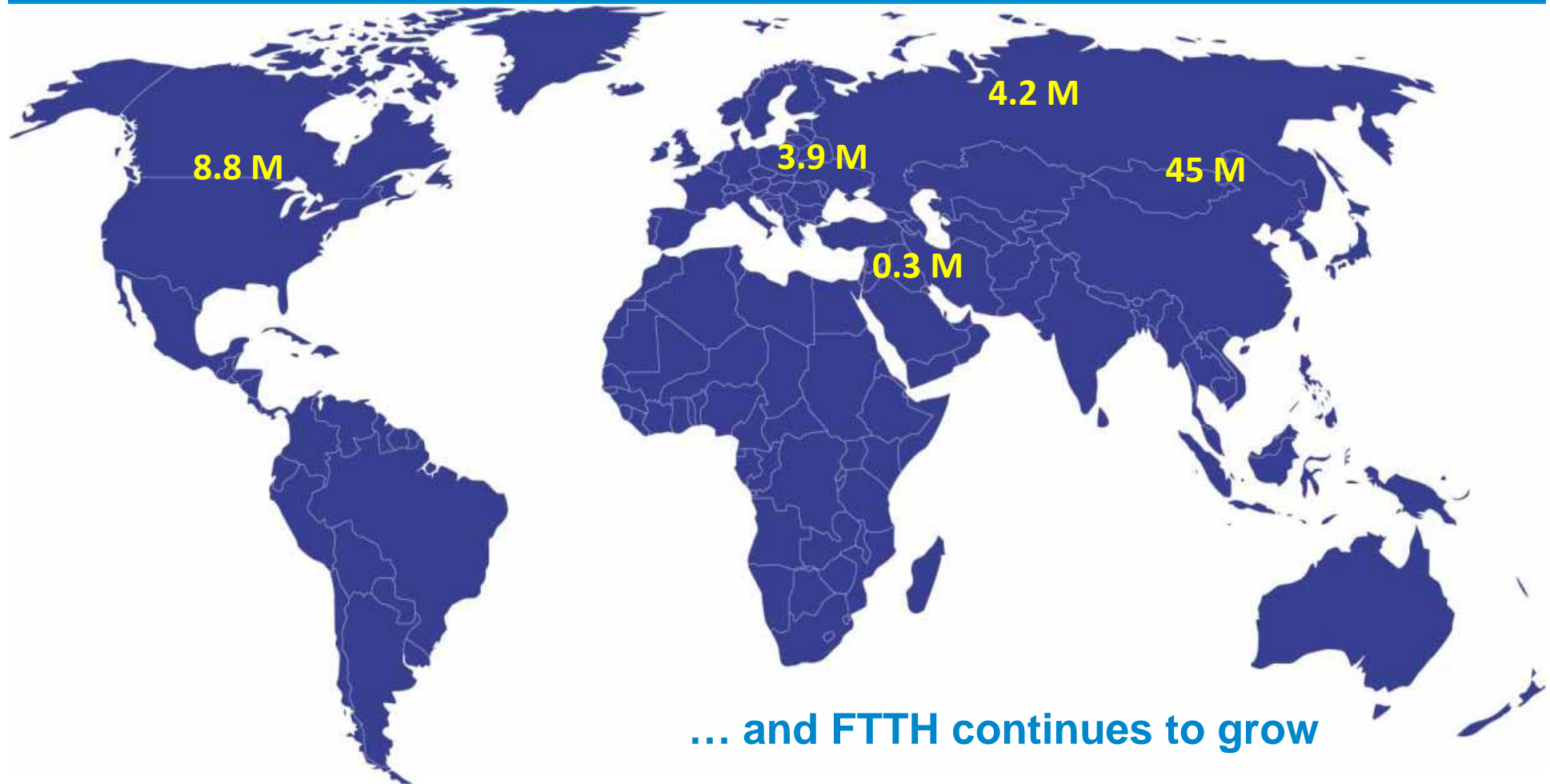
Photo by Nicolo Beavalle



Fibre to the Home
Council Europe

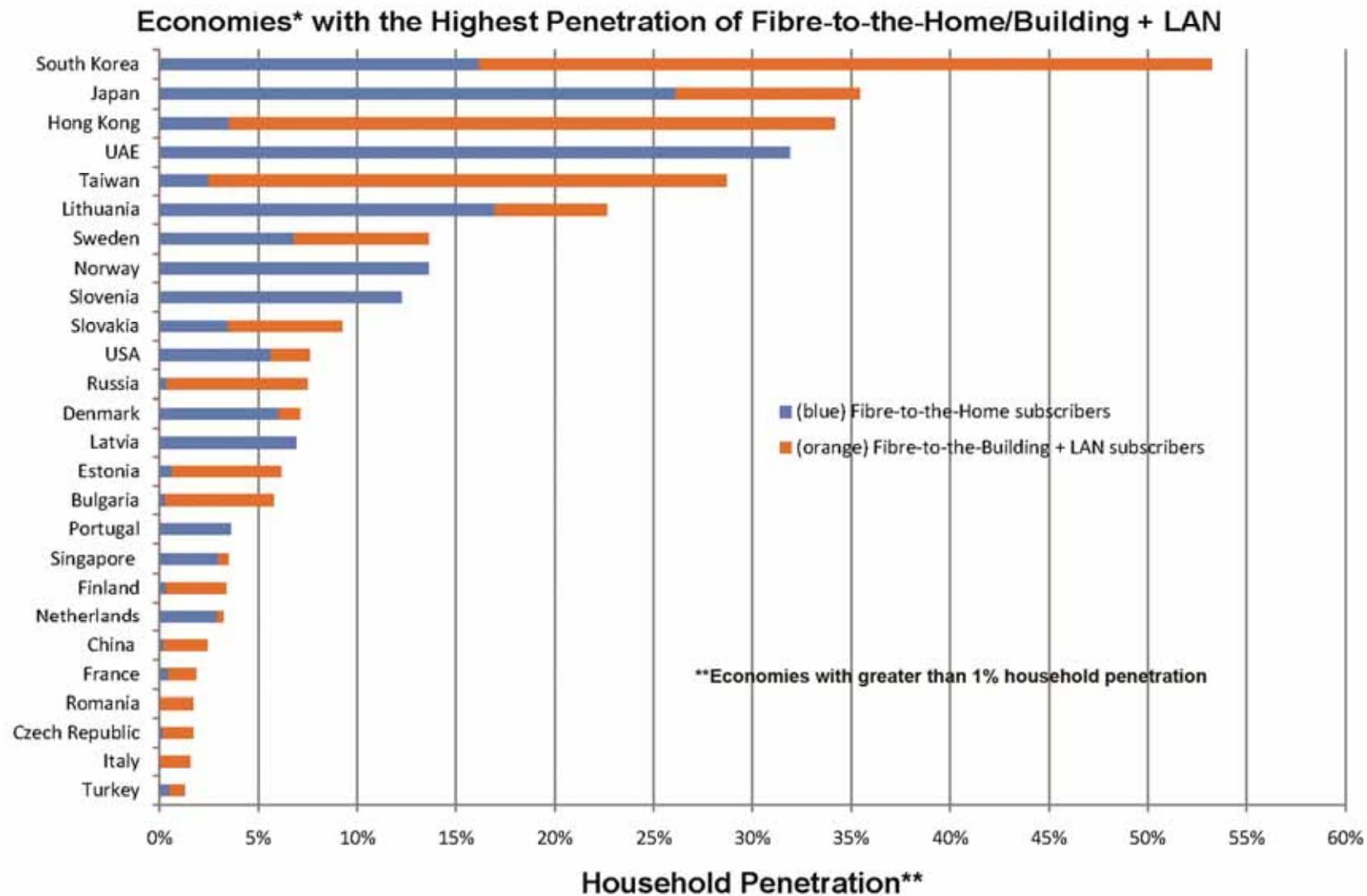
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FTTH Global panorama end-2010 – Total subscribers



... and FTTH continues to grow

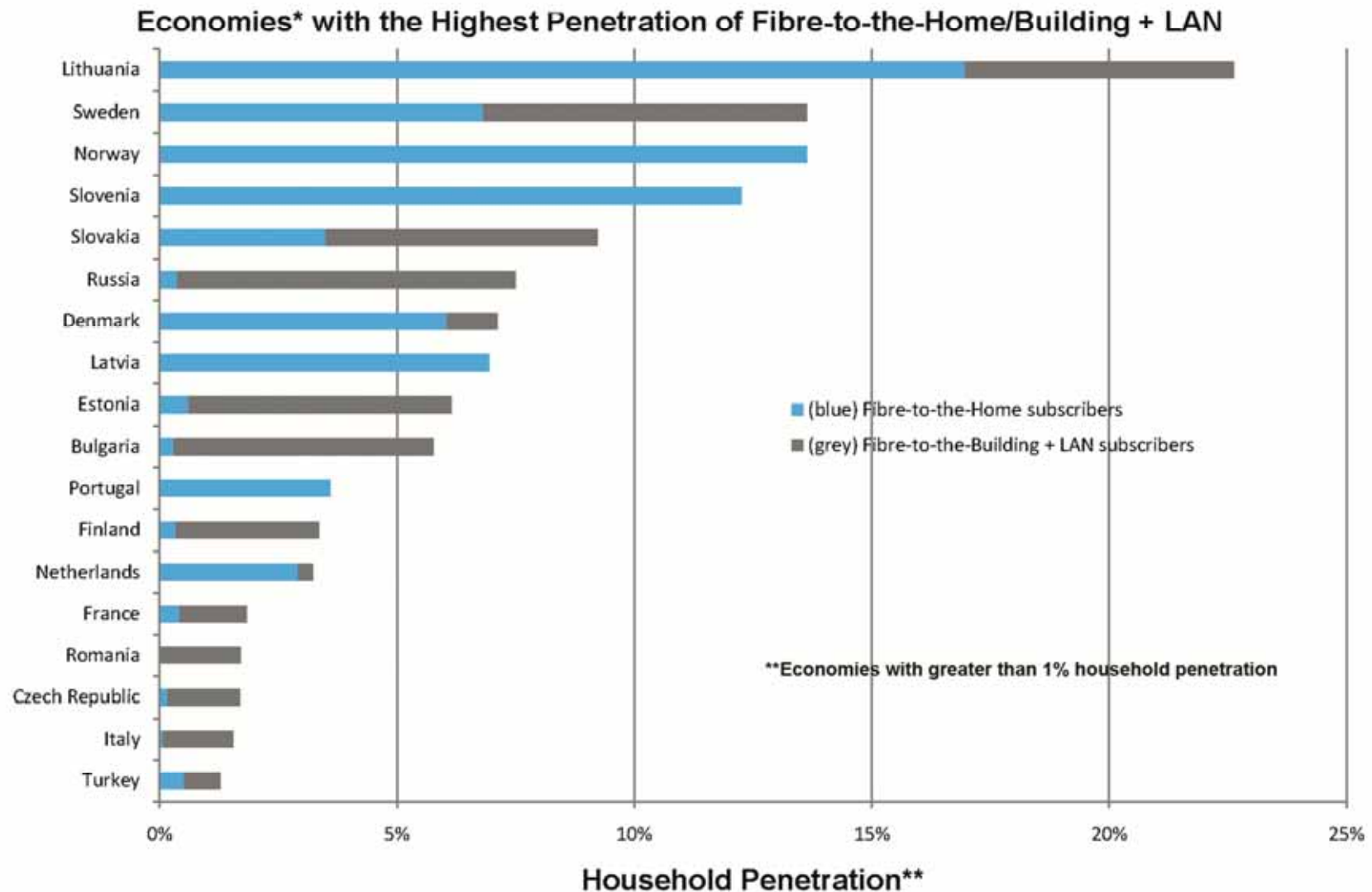
FTTH Global Ranking – end 2010



December 2010 Ranking
 Source:
 Fibre-to-the-Home Council
 February 2011

*Economies with at least
 200,000 households

FTTH European Ranking – end 2010



December 2010 European Ranking

Source:

FTTH Council Europe

February 2011

*Economies with at least
200,000 households

FTTH European Ranking – end 2010

Highest progressions (>1%) in the European Ranking during 2H2010

| | |
|-------------|--------|
| ▶ Latvia | +4.4% |
| ▶ Portugal | +2.2% |
| ▶ Lithuania | +2% |
| ▶ Slovenia | +1.8% |
| ▶ Russia | +1.6% |
| ▶ Norway | +1.6% |
| ▶ Turkey | +1.26% |

Source: IDATE for FTTH Council Europe,
February 2011

Note: FTTH/FTTB definitions by the
Global FTTH Councils

FTTH in Europe - end 2010

> 3.9 million FTTH/B subscribers

(+ 4.2 million in Russia)

> 22.3 million Homes Passed⁽¹⁾

(+ 10.6 million in Russia)

Average penetration rate : 17,5%

Source: IDATE for FTTH Council Europe, February 2011

Note: FTTH/FTTB definitions by the Global FTTH Councils

Growth rates 2H2010 (excluding Russia)

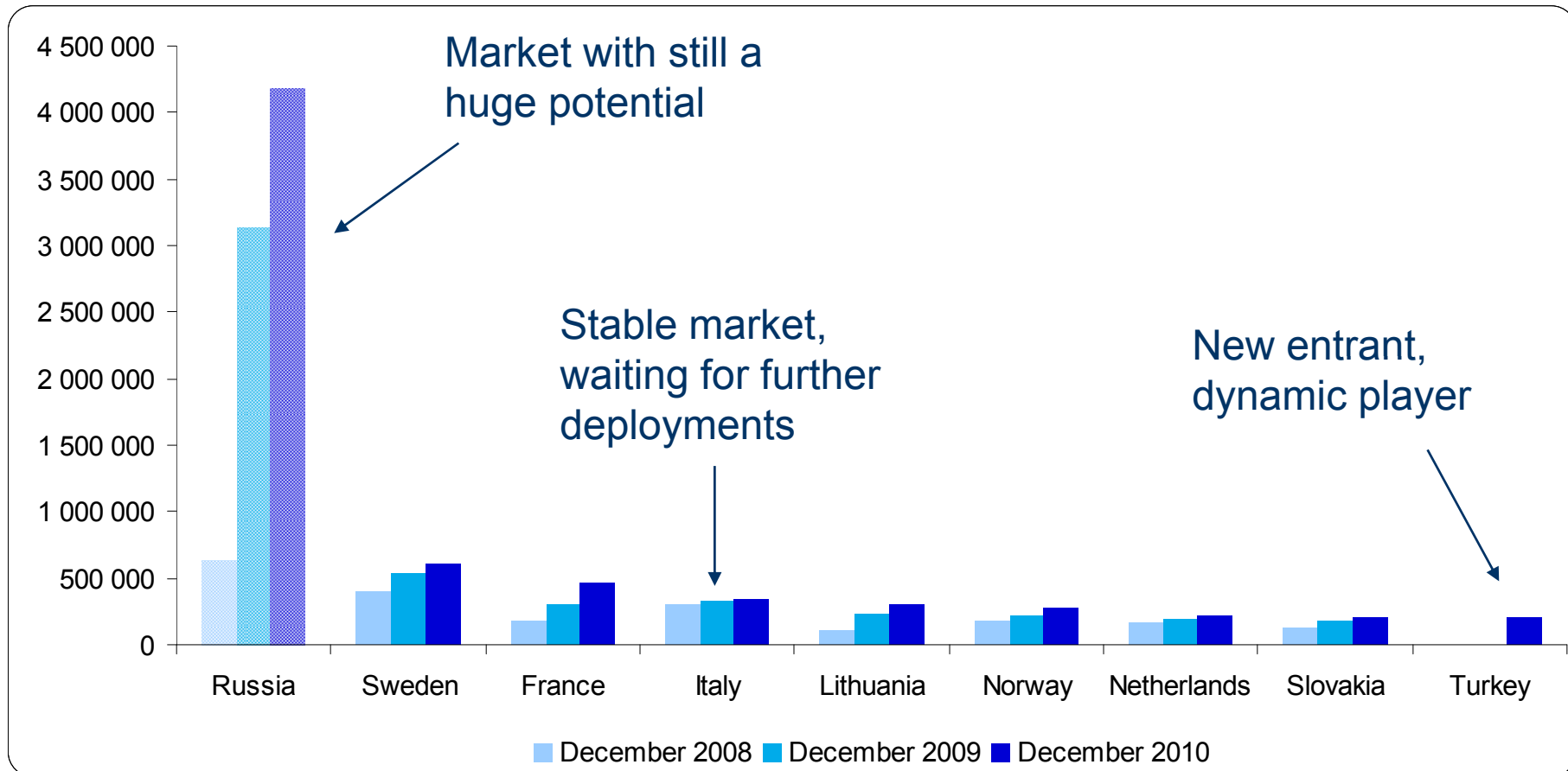
+18% FTTH/B Subscribers (vs 19% 1H2010)

+23% FTTH/B Homes Passed (vs +5% 1H2010)



Expanding FTTH/B coverage is still an issue for players

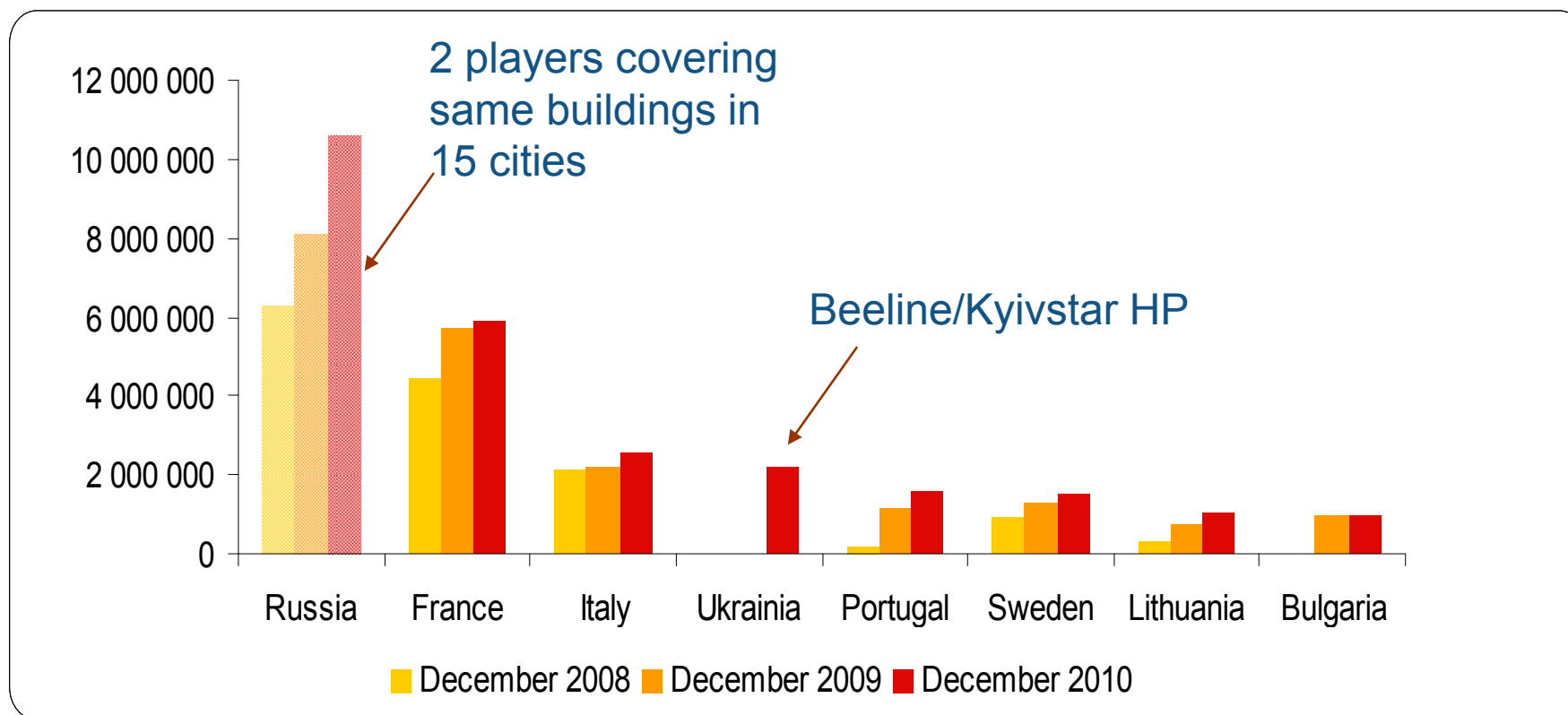
Countries with more than 200,000 subscribers



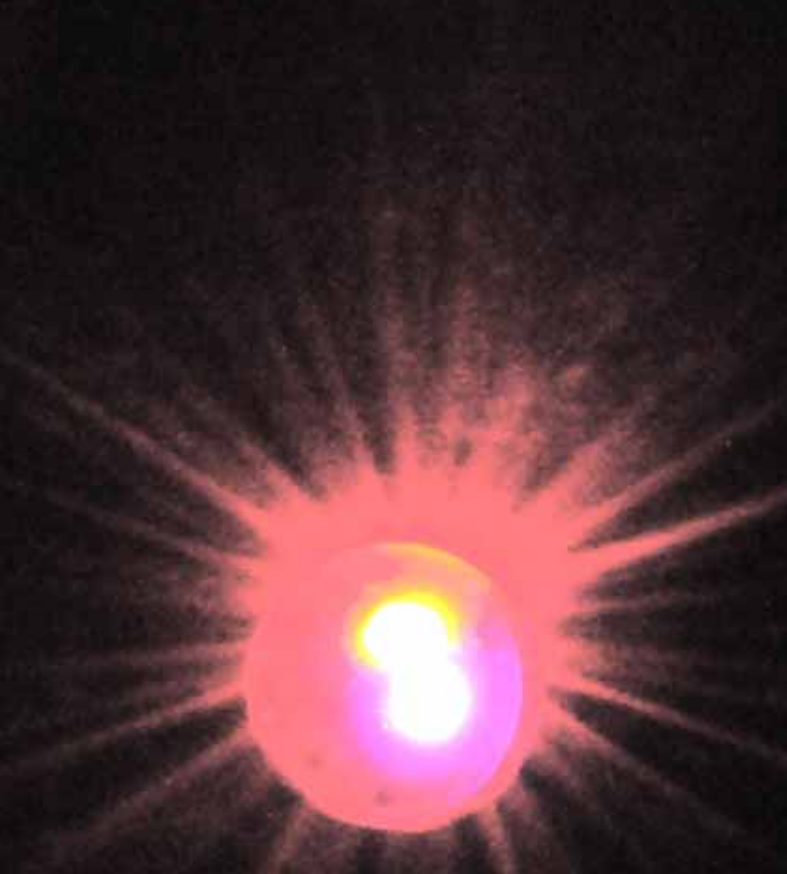
Source: FTTH European Ranking, IDATE for FTTH Council Europe, February 2011
Note: FTTH/FTTB definitions by the Global FTTH Councils

FTTH homes passed in Europe – mid-2010

Countries > 1 million FTTH/B Homes Passed at end 2010



Source: FTTH European Ranking, IDATE for FTTH Council Europe, February 2011
Note: FTTH/FTTB definitions by the Global FTTH Councils



FTTH Panorama Methodology & Conclusions

Photo by Nicolo Baravalle

FTTH Panorama - Methodology

- Deliverable:
 - Comprehensive overview of FTTH deployments in Europe 36 (EU 27 + Norway, Iceland, Switzerland, Andorra, Russia, Ukraine, Croatia, Serbia and Turkey) and in 14 Middle East countries
- Methodology:
 - Desk research
 - Direct contacts with FTTH players
 - Information exchange with FTTH Council Europe members
 - Direct contacts with IDATE's partners in several European countries

FTTH Definitions

INCLUDED

- **FTTH**Home – Complete Fibre Path to Home
 - in-building cables: house copper or fibre or wireless
- **FTTB**Building – Fibre to Apartment/Office Building
 - in-building cables: building copper or fibre regarded as a transitional stage to FTTH
- Both defined in global FTTH Councils, FTTH Definitions Document www.ftthcouncil.eu/documents/studies/FTTH-Definitions-Revision_January_2009.pdf

NOT INCLUDED

- **FTTC**urb / **FTTN**ode – Fibre to Street Cabinet
 - distribution and drop cables using telco copper (DSL) or new copper
 - categorised as DSL technologies.

FTTH players

▶ 3 main categories involved in FTTH/B deployments

Municipalities & Utilities

More numerous

Local deployments only

8% of total FTTH/B
Homes Passed at
end 2010

Alternative operators / MSOs

Most dynamic

National or local
deployments

73% of total FTTH/B
Homes Passed at
end 2010

European incumbents

Challenged on BB

National deployments

19% of total FTTH/B
Homes Passed at
end 2010

FTTH Players

- Decrease in Homes Passed by Municipalities & Utilities
- Projects getting aggregated in Northern European countries:
 - Stedenlink in Netherlands, Netixopen in Finland, Waoo in Denmark
- Several objectives
 - Knowledge sharing
 - Improvement in operating FTTH/B networks
 - Respect of coverage targets
 - Branding & mutualisation of services offers to end users (Waoo)

FTTH Technologies

- In December 2010, the main architecture deployed is still FTTB
- Regarding technology, players have mainly chosen Ethernet
- MDUs are still the principal target for Fibre deployments in Europe

| Main architecture deployed (homes passed segmentation) | Dec 2010 | June 2010 | Dec 09 |
|---|----------|-----------|--------|
| FTTH | 37% | 34% | 33% |
| FTTB | 63% | 66% | 67% |

| Main technology deployed (homes passed segmentation) | Dec 2010 | June 2010 | Dec 09 |
|---|----------|-----------|--------|
| PON | 27% | 26% | 24% |
| Ethernet | 73% | 74% | 76% |

| Dwellings deployed (homes passed segmentation) | Dec 2010 | June 2010 | Dec 2009 |
|---|----------|-----------|----------|
| MDU | 77% | 76% | 75% |
| SDU | 23% | 24% | 25% |

Main conclusions for FTTH

- ▶ Steady growth of European FTTH/B market (+40% in subscribers Y2010)
- ▶ Future growth to be led by Eastern European countries (incl. Russia)
- ▶ Turkey new entrant in the European Ranking
 - Italy, France & Russia are no more the only large economies in the EU ranking
- ▶ European incumbents getting more concerned by FTTH
 - Nearly all have a plan for FTTH or are deploying
 - 73% of Homes Passed by Alternative operators & MSOs
- ▶ National plans take over local initiatives and trigger players' announcements

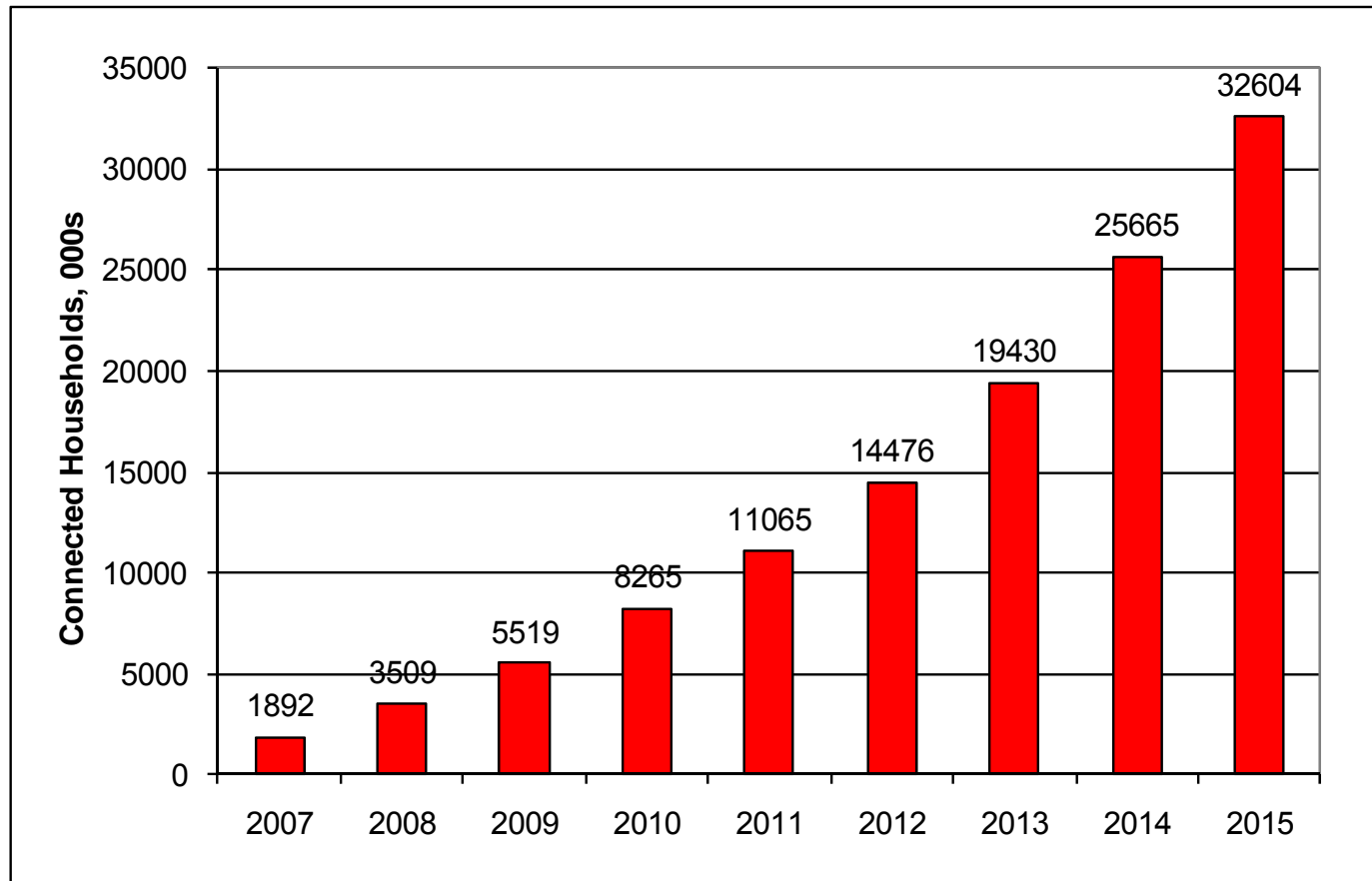
Main challenges for FTTH

- ▶ FTTH benefits are not perceived by Consumers / Businesses
Especially in Europe: low penetration rate!
 - At mid 2010: Japan at 39%, USA at 34%
 - And Europe at end 2010: 17.5% ... France: 8% !!
- ▶ Property Managers: interest to arouse
In Europe: 63% of FTTB Homes Passed at end 2010
- ▶ FTTH business: sometimes too complex to run for Municipalities/Utilities
Main Danish regional Power Utility (Dong Energy) resold its FTTH activity to the incumbent TDC
- ▶ Co-investment: the key for large scale national roll-out?
Announcements by main players in Italy, Switzerland, France
One objective: covering non dense areas

What next?

Photo by Nicolo Baravalle

European Region FTTH Forecast



Source: Heavy Reading for FTTH Council Europe, February 2011

Note: Households connected directly to fibre (FTTH) and apartments connected via basement fibre termination (FTTB)

Europe in Context: the Race to Fibre Maturity

| Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | After 2020 |
|----------------|--------|------|--------|------|------|------|------|------|------|--------|--------|------|--------|------|------------|
| Japan | Yellow | | | | | | | | | | | | | | |
| Korea | Yellow | | | | | | | | | | | | | | |
| China | | | | | | | | | | Yellow | | | | | |
| Taiwan | | | Yellow | | | | | | | | | | | | |
| Australia | | | | | | | | | | | Yellow | | | | |
| India | | | | | | | | | | | | | | | Yellow |
| USA | | | | | | | | | | Yellow | | | | | |
| Canada | | | | | | | | | | | | | Yellow | | |
| Brazil | | | | | | | | | | | | | | | Yellow |
| Russia | | | | | | | | | | Blue | | | | | |
| France | | | | | | | | | | Blue | | | | | |
| Germany | | | | | | | | | | | | | Blue | | |
| Italy | | | | | | | | | | | | | Blue | | |
| UK | | | | | | | | | | | | | | | Blue |
| Spain | | | | | | | | | | | | | Blue | | |
| Sweden | | | | | | | Blue | | | | | | | | |
| Netherlands | | | | | | | | | | Blue | | | | | |
| Portugal | | | | | | | | | | Blue | | | | | |
| Switzerland | | | | | | | | | | Blue | | | | | |
| Denmark | | | | | | | | Blue | | | | | | | |
| EUROPEAN UNION | | | | | | | | | | | | Red | | | |
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | |

Source: Heavy Reading for FTTH Council Europe, February 2011

Summary

- Over 32m households connected to FTTH/B at end-2015 in countries covered by this forecast = about 11% of all homes in the region
- In the EU only, the total will touch 19m, or 10% of all homes
- Seven of the 21 nations analyzed should achieve “fibre maturity” (20% penetration) by 2015: Slovenia, Sweden, Denmark, Norway, Finland, Portugal and Slovakia. Five more should reach this figure by 2016
- Seven of the 21 nations still under 10% penetration at end-2015: Greece, UK, Poland, Belgium, Spain, Germany, Italy and Czech Rep
- Unlike most other regions, incumbents are not currently the major providers of FTTH, and this will remain the case
- The most striking feature of the market through the next five years will be its fragmentation across every dimension

European Commission Digital Agenda: 50% of European households connected to 100 Mbps by 2020

Thank you for your attention!

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