Europe in the slow lane?

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FTTH Council Europe

NextGen 10 Birmingham, 22 November 2010
Agenda

• FTTH Council Europe
• FTTH Worldwide market
  o Europe in the slow lane?
  o What next?
• Why FTTH?
  o FTTH for an enhanced experience
  o FTTH for a better quality of life
  o FTTH as a key economic driver
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
FTTH Middle East Conference 2010
30 Nov & 1 Dec – Beirut, Lebanon
www.conference.ftthcouncilme.org
Europe in the slow lane?
FTTH Global panorama mid-2010 – Total subscribers

... and FTTH continues to grow

* Including Russia
FTTH Global Ranking mid-2010

Economies* with the Highest Penetration of Fibre-to-the-Home/Building + LAN

- South Korea
- Japan
- Hong Kong
- Taiwan
- Lithuania
- Sweden
- Norway
- Slovenia
- Slovakia
- Denmark
- USA
- Estonia
- Bulgaria
- Singapore
- Finland
- Netherlands
- Latvia
- China
- Russia
- Romania
- Italy
- France
- Portugal
- Czech Republic

Household Penetration**

June 2010 Ranking
Source:
Fibre-to-the-Home Council
October 2010

*Economies with at least 200,000 households

**Economies with greater than 1% household penetration
FTTH European Ranking mid-2010

Economies* with the Highest Penetration of Fibre-to-the-Home/Building + LAN

- Lithuania
- Sweden
- Norway
- Slovenia
- Slovakia
- Denmark
- Estonia
- Bulgaria
- Finland
- Netherlands
- Latvia
- Russia
- Romania
- Italy
- France
- Portugal
- Czech Republic

Household Penetration**

- (blue) Fibre-to-the-Home subscribers
- (grey) Fibre-to-the-Building + LAN subscribers

**Economies with greater than 1% household penetration

June 2010 European Ranking
Source: IDATE and FTTH Council Europe
October 2010

*Economies with at least 200,000 households
### FTTH European Ranking – mid-2010

<table>
<thead>
<tr>
<th>Countries</th>
<th>Households</th>
<th>FTTH/B subs June 2010</th>
<th>Penetration June 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithuania</td>
<td>1,357,000</td>
<td>284,400</td>
<td>20.96%</td>
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<tr>
<td>Sweden</td>
<td>4,400,000</td>
<td>569,000</td>
<td>12.93%</td>
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<tr>
<td>Norway</td>
<td>2,000,000</td>
<td>240,689</td>
<td>12.03%</td>
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<tr>
<td>Slovenia</td>
<td>670,000</td>
<td>75,000</td>
<td>11.19%</td>
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<tr>
<td>Slovakia</td>
<td>2,200,000</td>
<td>192,000</td>
<td>8.73%</td>
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<tr>
<td>Denmark</td>
<td>2,500,000</td>
<td>195,900</td>
<td>7.84%</td>
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<tr>
<td>Estonia</td>
<td>582,000</td>
<td>31,000</td>
<td>5.33%</td>
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<tr>
<td>Bulgaria</td>
<td>2,900,000</td>
<td>144,000</td>
<td>4.97%</td>
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<tr>
<td>Finland</td>
<td>2,476,500</td>
<td>79,390</td>
<td>3.21%</td>
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<tr>
<td>Netherlands</td>
<td>7,000,000</td>
<td>211,500</td>
<td>3.02%</td>
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<tr>
<td>Latvia</td>
<td>896,916</td>
<td>22,200</td>
<td>2.48%</td>
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<tr>
<td>Russia</td>
<td>55,869,494</td>
<td>1,200,000</td>
<td>2.15%</td>
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<tr>
<td>Romania</td>
<td>7,600,000</td>
<td>120,000</td>
<td>1.58%</td>
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<tr>
<td>Italy</td>
<td>22,300,000</td>
<td>347,000</td>
<td>1.56%</td>
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<tr>
<td>France</td>
<td>25,500,000</td>
<td>371,312</td>
<td>1.46%</td>
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<tr>
<td>Portugal</td>
<td>3,900,000</td>
<td>52,500</td>
<td>1.35%</td>
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<tr>
<td>Czech Republic</td>
<td>3,800,000</td>
<td>50,000</td>
<td>1.32%</td>
</tr>
</tbody>
</table>

Source: FTTH European Ranking, FTTH Council Europe & IDATE, September 2010
Note: The Ranking covers all countries with at least 200,000 households where FTTH/B penetration has reached 1% of the total number of homes.
Evolution of FTTH Subscribers in Europe - mid-2010

Source: FTTH Council Europe & IDATE, September 2010
Note: FTTH/FTTB definitions by the Global FTTH Councils
New subscribers per country in H1/2010

New FTTH/B subscribers between December 2009 and June 2010

Source: FTTH European Ranking, FTTH Council Europe & IDATE, September 2010

Note: FTTH/FTTB definitions by the Global FTTH Councils
Evolution of FTTH homes passed in Europe - mid-2010

Evolution of FTTH/B (*) Homes Passed in Europe

Source: FTTH Council Europe & IDATE, September 2010
Note: FTTH/FTTB definitions by the Global FTTH Councils
Taking into account countries where there are at least 50,000 FTTH/B homes passed.

Source: FTTH European Ranking, FTTH Council Europe & IDATE, September 2010

Note: FTTH/FTTB definitions by the Global FTTH Councils
Conclusions – FTTH leaders

• Strong growth of FTTH/B subscribers: > 50% in one year incl. Russia

• Growth of the FTTH/B market is led by Eastern European countries
  • Bulgaria, Slovakia and Romania are showing their dynamics in terms of coverage and subscriptions
  • Lithuania is leading the EU Global Ranking with 21% penetration

• However, most FTTH/B subscribers, in volume, are still concentrated in Western and Northern Europe (incl. mature markets in Sweden, Norway, France, Italy and Denmark)

• Efforts are to be made in order to increase penetration rates, which are still low
  • This penetration rate can be high in small economies where FTTH/B deployment has been necessary to compensate lack of Broadband offers and where migration has been quite rapid
Conclusions – FTTH players

- There are still more Municipalities and Power utilities than any other kind of FTTH/B players at mid-2010

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<td>Incumbents</td>
<td>28</td>
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<td>26</td>
<td>22</td>
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<tr>
<td>Municipalities / Power Utilities</td>
<td>&lt;134</td>
<td>136 &gt;</td>
<td>135</td>
<td>131</td>
<td>136</td>
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<tr>
<td>Alternative operators / ISPs</td>
<td>82</td>
<td>70</td>
<td>70</td>
<td>61</td>
<td>61</td>
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<tr>
<td>Housing companies &amp; Other</td>
<td>10</td>
<td>10</td>
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Source: IDATE for FTTH Council Europe

- Alternative operators are still the most dynamic and represent at mid-2010, including Russia, 72% of total European FTTH/B Homes Passed

- Incumbents are getting more and more involved: they represent more than 17% of FTTH/B homes passed at June 2010 compared to 15% six months earlier
What next?
European Region FTTH Forecast

Source: Heavy Reading, December 2009

Note: Households connected directly to fibre (FTTH) and apartments connected via basement fibre termination (FTTB)
Top 12 FTTH countries in 2014, by number of subscriber households

Source: Heavy Reading, December 2009
FTTH countries in Europe, 2014, by household penetration

Source: Heavy Reading, December 2009
## Europe in Context: the Race to Fibre Maturity

### Europe in Context: the Race to Fibre Maturity

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Source: Heavy Reading, December 2009
Summary

- Over 23 Mil households will be connected to FTTH or FTTB at the end of 2014 in the countries covered by this forecast—this is about 8% of all homes in the region.
- In the EU only, the total will reach 16 Mil, or 8.3% of all homes.
- Six of the 21 nations individually analysed should achieve “fibre maturity” (20% penetration) by 2014—Slovenia, Sweden, Denmark, Norway, Netherlands and Slovakia.
- On current trends, seven of those nations will still be under 10% penetration at the end of 2014—UK, Belgium, Poland, Spain, Greece, Italy and Germany.
- Unlike most other regions, incumbents are not currently the major providers of FTTH, and this will likely remain the case through the next five years.
- The dominance of FTTB and municipal build-outs means that P2P Ethernet is the main technology in use, though the proportion of PON will gradually increase.

European Commission Digital Agenda: 50% of European households connected to 100 Mbps by 2020.
FTTH for an enhanced experience
Fibre to the Home is an enabler

FTTH allows access to enhanced content & services:

- **Real speed**
  
  Download of 6.5 Gbyte DVD-film:
  
  - 10 Mbit/s DSL: 1.44 hours
  - 100 Mbit/s FTTH: 8.6 min

- **Symmetry**

  Upload of 300 holiday-photos (700 Mbyte):
  
  - 1 Mbit/s Upstream: 92 minutes
  - 10 Mbit/s Upstream: 9 minutes
  - 100 Mbit/s Upstream: 56 seconds

\[ \text{Download} + \text{Upload} = \text{INTERACTIVITY} \]

FTTH improves the way people live and work
FTTH for a better quality of life

eEntertainment

eHealth

eGovernment

eBusiness

eHome

eLearning

Teleworking

Web 2.0

Societal

Environmental
FTTH for a better quality of life

Study by Ovum 2008 in Sweden for FTTH Council Europe
Study by Yankee Group 2009 in Bulgaria for FTTH Council Europe

• FTTH enables users to benefit from real broadband applications, content and services
• FTTH-users are ready to use new services for teleworking, eLearning, etc.
• FTTH-users are more satisfied
• Highest impact in rural areas

Study by PriceWaterhouseCoopers/Ecobilan 2008:
• Using FTTH and FTTH services can save up to CO² equivalent of driving a car for 4,600 km per year – for every household!
FTTH is a key economic driver
FTTH is a critical driver for the knowledge economy

- Deployment of FTTH creates jobs
- New services create GDP growth, not only from ICT industry (entertainment industry etc.)

FTTH creates business opportunities & competitiveness

- Operators: increased ARPU (30%!), lower churn-rate, Opex savings
- Businesses: new ways of working, reduced travel & office rental costs, better time management, more innovation, better competitiveness
- Regions/Municipalities: retain and attract more businesses & investment, offer cost-efficient services to the community, increase local competitiveness
FTTH for a better environment
• Usage of FTTH services has positive impact on environment
  - Less commuting and therefore less traffic
  - Less business travel
  - Less long distance transport of patients
• Key results of a study PricewaterhouseCoopers/Ecobilan:
  - The environmental impact of the deployment of a typical FTTH network will be positive within less than 15 years in average
  - Intelligent deployment (e.g. using sewers and existing ducts) can even improve the positive impact of FTTH
  - Using FTTH and FTTH services can save up to CO$_2$ equivalent of driving a car for 4,600 km per year – for every household!
Conclusions

• FTTH has a positive impact on the environment: 1 million users connected - at least 1 million tons of CO2 saved

• FTTH is a key sustainable utility driver to low carbon economic development.

• FTTH can help nations, regions, municipalities, operators to meet their carbon reduction objective.
Conclusion

• FTTH improves the quality of life

• FTTH is a key economic driver

• FTTH contributes to a better environment

• With FTTH, let’s build a sustainable future!
Thank you for your attention!

www.ftthcouncil.eu