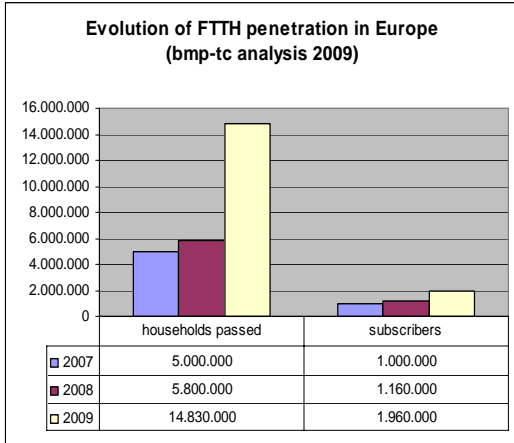


The European FTTH market has been showing high dynamics, rapidly growing. The total number of **households passed** which has nearly tripled in one year, from **5,8 to more than 18 million!**. Today some **400 projects** in Europe encompass **2,4 million FTTH subscribers**.

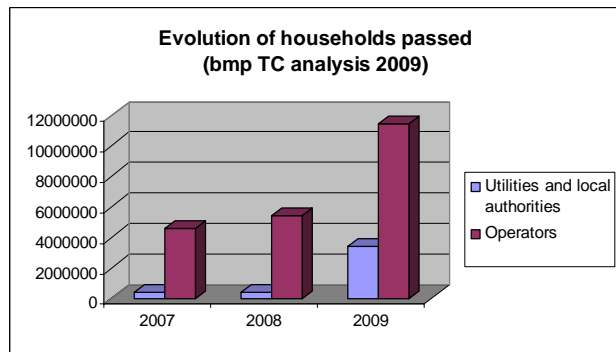


The market is however differing from country to country **Nearly 64% of FTTH/B subscribers** are located in 6 markets: **Sweden, Italy, France, Norway, the Netherlands and Denmark**.

When it comes to FTTH/B penetration rate, the top 3 are Sweden, Norway and Slovenia. **Sweden** remains the country with the highest FTTH penetration, **13 %** of the total households (**1,2 M HH passed**) and nearly **500.000 FTTH subscribers**, **Norway** has a FTTH penetration of **11 %** of the households and **235.400 FTTH subscribers**.

Smaller countries such as **Slovenia** demonstrate high penetration rate as well **12%**.

These developments are due to the competitive forces within the markets, but **public owned entities** are taking over an increasing market share, representing half of the projects (44%). Beneath impulse coming from public authorities and utilities, **the regulatory policy** is essential and of major impact on the specifics of each national FTTH market, even if embedded within the European framework.



FTTH in Europe 2010: Facts, Trends and Key Success Factors

**Newest relevant trends and analysis with a focus on the Scandinavian markets
A joint study by leading expert consultants Greenfield and bmp TC**

**Multi-client study tailored to the central issues of the FTTH market.
Scandinavian model confronted to European wide trends**

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bmp TC and Greenfield have joined forces and studied the development in 33 European countries. Overall, some 400 referenced projects are being detailed. "FTTH in Europe 2010" reveals the dynamics inherent to FTTH deployments according to the country and each individual actor.

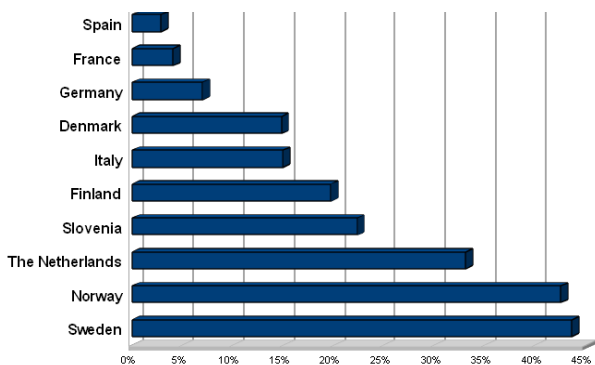
Based on Scandinavian return of experience enhanced by dedicated analysis of other significant markets it enables to get an in-depth understanding of the business models and market dynamics.

Key topics by “FTTH in Europe 2010”:

- Analyse the role of public actors as key players within the FTTH market,
- Show the regulatory approaches and explain how it impacts investments and competition within the market.
- Understand the attitude of incumbents regarding the open access initiatives and the regulator’ measures (Partnership, shared infrastructures
- Describe strategies related to CAPEX and efficient deployment strategies
- Show the development of services and offers (HDTV, Triple play, VoD,VoIP)
- Understand technologies’ choices between GPON, PtoP...
- Analyse the Scandinavian return of experience for FTTH

In the European FTTH market, Scandinavian countries have a preponderant role, having been pioneers in this sector. Sweden has seen deployments appearing by the two major competitive telcos Bredbandsbolaget (B2) and Bostream since 1998 or by Stokab, issued from the City of Stockholm which started FTTH implementation as early as 1994. Being ahead of the European activities, **Scandinavian countries** are leading the FTTH European market in terms of penetration per households but also of return of experience.

Home Passed Vs Subscribers in Europe 2009 by bmp-TC



Indeed these markets have been among the first to launch open access business models, which nevertheless have not met objectives as expected. While in many European countries, **local authorities and public utilities** are at the forefront of the deployment and management of FTTH infrastructure and networks, the issue is if the Scandinavian model of Open Access is meeting expectations or doomed to fail as such.

The business model of FTTH – especially the ones impulsed by public entities- encounters quite some hurdles and is diverging from simple passive infrastructure provider to info-structure provider with active services. **The FTTH in Europe 2010 Study** will address these issues in order to understand the specific FTTH dynamics within Europe extended to the

analysis of various strategies undertaken by the players (incumbent, altnets), of the services differentiation and definition of viable business models. Indeed end of **2009 Dong Energy** was selling its Fibernet FTTH Open Access Network to the Danish incumbent TDC. **TDC bought the entire network and operations.** This sale shows clearly that private actors, foremost incumbents, are gaining direct interest for the utilities and public initiatives within the FTTH segment.

Other incumbents are also stepping into the open access arena. In early days, Telenor has acquired Bredbandsbolaget and Bostream ,KPN has got to be a shareholder in Reggefiber, himself being a partner for the Amsterdam Citynet project. Swisscon has stepped into many **partnerships with the public municipalities or public utilities** for a joint development of the FTTH infrastructure.

Incumbents are major players regarding FTTH, these strategies are being observed with care. Indeed quite some regulators have decided to define strong measures. Thus the Dutch regulator.... .the Danish is expected to undertake specific analysis around the takeover of Dong by TDC; France has experienced a regulator ARCEP which has been stepping dedicatedly into the FTTH market.

All these factors and elements of the FTTH market have been studied by bmp TC’s and Greenfield’s consultants to enable to better apprehend the current dynamics of the market and to grasp on the opportunities to see many countries benefiting from FTTH (such as in Finland which ahs set 100Mbps access as universal service by 2015) and competitive Ultrabroadband offers.

Study

Sponsored by leading industry associations :



As key promoters within Norway and Sweden as independent association of professionals and experts promoting open & neutral FTTH networks or city networks. as well as for operators, service providers and other stakeholders within ultra broadband market.

Scope of the study:

33 countries analysed! More than 400 FTTH projects described!

Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, the Netherlands, the United Kingdom and Andorra, Croatia, Iceland, Norway, Switzerland and Turkey

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 - a. Best practice- Scandinavian examples
 - b. Specific market developments

- II. Market Status and developments**
 - a. Evolution of the market (Norway, Sweden, Denmark in focus and in general statistics on the European market status: with a detailed presentation of projects and dynamics of each country—(expected growth- strategies-...)
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 - a. Description of positioning of the services
generic triple play services
 - b. Additional services against broadband
health, security etc...
 - c. Business case, tariffs elements

- V. Description of the FTTH markets**
 - a. Detailed description of each of the 33 national market and their projects
 - b. Detailed description on each project (operator, location, passed households, subscribers, forecasts, comments)

*_preliminary version

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