FTTH situation in Europe

The number of FTTH subscribers is steadily growing in Europe, as major operators are now entering the Very High Speed challenge

---

As the previous years, IDATE has been commissioned by the FTTH Council Europe to give an overview of the FTTH deployments in Europe (EU 25 + Norway, Iceland & Switzerland) at mid 2006. To date, IDATE has identified **139 FTTx[1] projects** in Europe of which **20 are new initiatives** since mid 2005.

Significant new deployments

Countries	Players		Home/Building passed (end 2006)
Denmark	EnergiMidt	Power utility	40 000
Finland	Verkko-osuuskunta Kuuskaista	Municipalities	2 500
France	CiteFibre	Alternative operator	Nearly 10 000 (passed or signed)
	Iliad/Free	Alternative operator	4 M Home Passed in 2012
	Erenis	Alternative operator FTTB+VDSL	85 000
	France Telecom	Incumbent/FTTH	1 M Home Passed (end 2008)
Iceland	Reykjavik Energy	Power utility	17 000
Ireland	Magnet Networks	Alternative operator	8 000
	Smart Network	Alternative operator	5 000
	Eircom	Incumbent/VDSL	500 000 (end 2007)
Austria	Vienna	Municipalities	50 000 (3 years target)
Germany	Deutsche Telekom	Incumbent/VDSL	10 major cities i.e 2.9 M Homes
Switzerland	Swisscom	Incumbent/VDSL	50% of Swiss Households (end 2007)
Belgium	Belgacom	Incumbent/VDSL	Objective of 60% of Home Passed at end 2007
Netherlands	KPN	Incumbent/VDSL	Deployment should come in 2007
	Portaal	Housing Association	55 000 (target)

Source: IDATE

As it was the case in 2005, in June 2006 the majority of the projects (66%) were initiated by Municipalities or Power utilities:

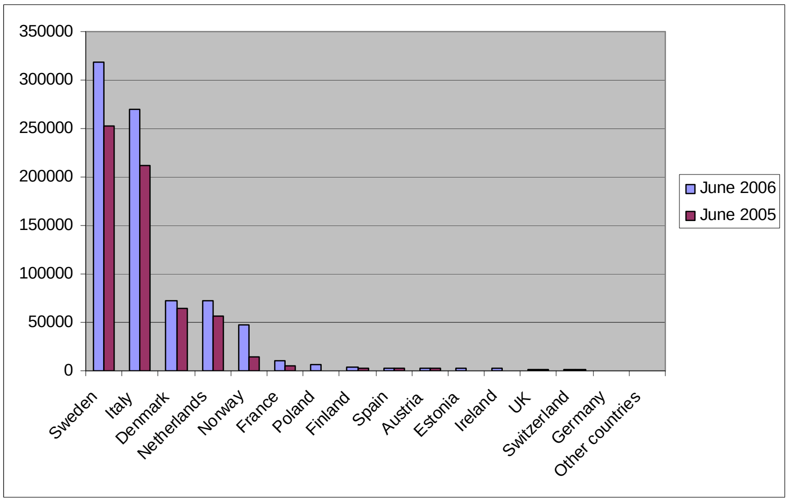
- By the end of June 2006, there were approximately **820 000 FTTx subscribers** in EU 28[2] and around **2.74 millions Homes/Building passed**. As the overall **number of homes and buildings** passed progresses slowly in 2006 (**+13% since mid 2005**, whereas growth was +26% in 2005 compared to mid 2004), **penetration rate has increased to 29.8%,** as well as the **number of FTTx subscribers (+32% since mid 2005)**.
- As the majority of subscribers is still concentrated in 5 countries (**96% of FTTx subscribers** are located in Sweden, Italy, Denmark, the Netherlands and Norway), 2006 has been the year of confirmation by some major European operators to launch their own FTTH network: France Telecom and Iliad/Free in France.

---

[1] Fiber The Home of Fiber To The Building (not FTTN+VDSL)
[2] EU 25 + Norway + Iceland + Switzerland

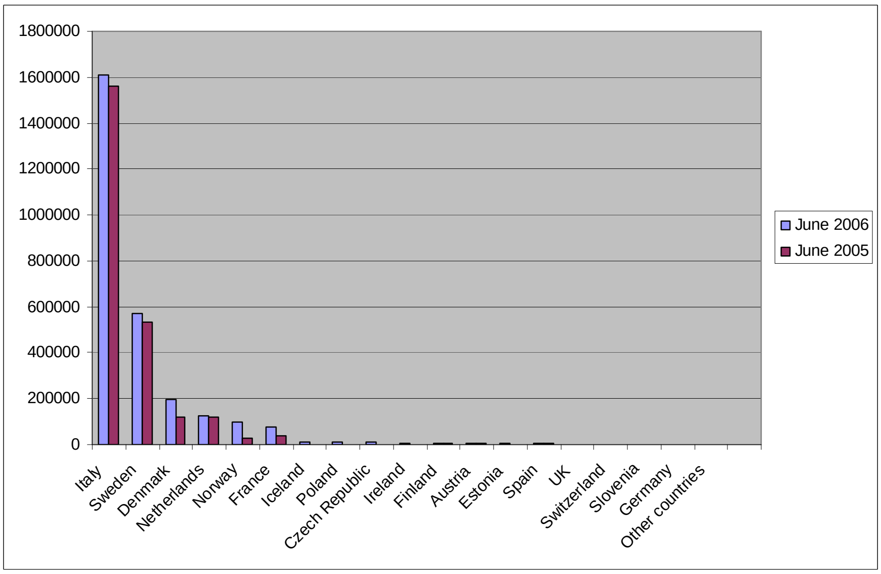
- In 2006 also majors European incumbents confirmed their choices of FTTN+VDSL architectures: Deutsche Telekom (Germany), Belgacom (Belgium), Eircom (Ireland), KPN (Netherlands), TDC (Denmark) or Swisscom (Switzerland).

Number of subscribers in Europe (June 2005-June 2006)



Source: IDATE

Number of houses/buildings passed in Europe (June 2005-June 2006)



Source: IDATE

Penetration Rate Subscribers/Houses passed (June 2006)	
Sweden	55.79 %
Italy	16.72 %
Denmark	37.60 %

Source: IDATE

In terms of Homes/Building passed, countries like Denmark and Norway showed a strong growth of respectively 65% and 246% between June 2005 and June 2006, consolidating the dominating position of Scandinavian countries in the FTTx market. France is starting its migration to FTTH technology with a 113% growth in 2006 in terms of home passed as Iliad/Free and France Telecom announced their deployments. On the contrary, the Netherlands, Sweden and Italy, countries that gather more than 80% of FTTx subscribers in Europe, showed a much slower growth, from 3 to 7% (home passed), but resulting in the increase of their penetration rate. Interesting to notice is the development of municipality or local bodies-driven deals in countries like France, Sweden or Eastern Europe. Precisely in Eastern Europe, countries like Poland, Czech Republic or Estonia lead the way in FTTx deployments but major build outs are still rare.

Concerning technical architectures, Ethernet still dominates European FTTx deployments instead of PON. Indeed a player like Free / iliad announced a deployment based on Ethernet of 4 million homes passed through 2012. However we must notice that significant new deployments are using PON technologies: EnergiMidt and SEAS-NVE in Denmark (BPON), the Government of Asturias in Spain (GPON). The Parisian trial France Telecom carried out in the midst of 2006 with a GPON architecture was confirmed late 2006 by the launch of a pre-commercial FTTH offer. This FTTH network will be deployed throughout 2007 with the aim to cover 10 major cities by the end of 2008.

The panorama on FTTx deployments in Europe at mid 2006 shows that, after the slow growth that occurred in previous years in terms of homes passed and subscribers, things are now warming up with a better penetration rate and the announcement of significant FTTH network deployments in Europe. Furthermore other announcements have been made in particular by Public players as the Amsterdam's project (more than 40 000 Homes passed by the end of 2006), the regional Government of Asturias in Spain (30 000 Homes covered by 2006) or the Yorkshire project in the United Kingdom.

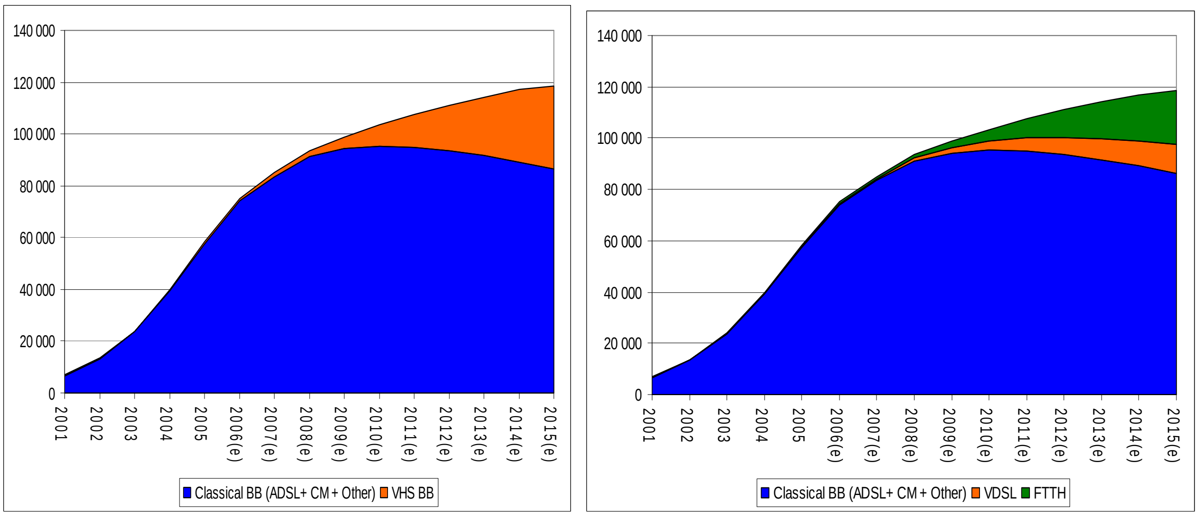
All these recent announcements, as incumbents are entering the very high speed challenge, are now triggering the launch of a new generation of broadband access for European subscribers and surely appropriate regulation for FTTH will ensure further deployments.

Based on different assumptions IDATE developed a model forecast concerning FTTx market towards 2015. Results are available on country bases. To build this model we took into account different characteristics as:

- Countries Features: Urbanisation, State policy (Local Bodies involvement in ICT) and Consumer demand,
- Players' strategies: Broadband penetration level in the country, Incumbent market share, LLU development level, cablecos level of competition and new players activities (Power companies, Housing companies,…),
- Access Network topology: Local Loop Length, number of Local Exchanges in the country.

Consolidated results at European level (EU 18) shows that replacing classic Broadband with VHS will begin in earnest in 2010/2012. Very High Speed (VHS) will represent around 27% of Western Europe's total Broadband base by 2015. According to our model, among those 27%; FTTH will the first VHS technology, with on average 18% of Europe's total Broadband base by 2015. FTTN+VDSL should represent 9% of Europe's total Broadband base by 2015.

Very High Speed forecasts for Europe (subscribers in thousands)



Source: IDATE

Roland Montagne
Head of Broadband Practice
IDATE
r.montagne@IDATE.org

About IDATE

IDATE is one of Europe's foremost study and consulting centres, specialised in analysis of the information and communication technologies industries, and offering the following services:

- **Consulting**: an operational consultancy: reports and expert missions.
- **DigiWorld**: Digital World Observatory. A singular tool for understanding and monitoring the telecom, internet and media sectors, the markets and the players' strategies: market reports, databases, strategic monitoring services.
- **Forum**: a prominent centre for debate: IDATE's annual International Conference, the COMMUNICATIONS & STRATEGIES review, the IDATE corporate Foundation, the ENCIP European research network…

Founded in 1977, IDATE is based in France (Montpellier).
Under the guidance of our President, Mr. Francis LORENTZ, and our General Manager, Mr. Yves GASSOT, our centre employees a staff of over 60 people specialised in telecommunications, networks, the internet and the audiovisual industry. For over 25 years now, IDATE's International Conference has been a benchmark event for industry professionals working in information and communications technologies. It is one of Europe's largest conferences devoted to analysis, debate and forecasting.