



## Next-Generation Broadband in Europe: The Need for Speed

### EXECUTIVE SUMMARY

Is there such a thing as a "European" broadband market? It's become a cliché of the conference circuit to say that there is not. Conventional wisdom holds that Europe is a collection of national markets in which the differences are more important than the similarities.

At best, this is a half-truth. Although there are big differences in some specific respects, European national markets are on the whole more like one another than they are like major markets elsewhere, such as the U.S., Japan, or China.

**Next-Generation Broadband in Europe: The Need for Speed** catalogs and analyzes Europe's emerging residential broadband environment from the perspective of both the wider region and the individual national markets. By charting the current status and projected progress of residential broadband initiatives, the report offers a clear and compelling view not only of which technologies are likely to drive the expansion of residential broadband services in Europe, but also which service providers are best positioned to deliver those services to Europe's broadband users.

The report focuses on the broadband service deployment strategies of nearly three dozen national and pan-European network operators in these national markets:

- Austria
- Belgium
- Denmark
- Finland
- France
- Germany
- Greece
- Ireland
- Italy
- Netherlands
- Norway
- Portugal
- Spain
- Sweden
- Switzerland
- United Kingdom

**Next-Generation Broadband in Europe: The Need for Speed** offers a detailed analysis not only of the current state of Europe's competitive broadband services landscape, but also of how that landscape is likely to change over the remainder of this decade. Based on in-depth interviews with network operators

and a thorough analysis of deployment and market data, the report provides realistic projections for broadband development in Europe through 2010 and identifies the strategies that incumbent telcos, competitors, and cable network operators are taking to secure their positions in the broadband market.

## Key Findings

Key findings of the report include the following:

**Broadband adoption is surging throughout Europe, but there is still plenty of room for future growth.** Total broadband lines grew by more than 65 percent in 2004, with the U.K., France, Switzerland, and Italy registering the highest growth. For the countries included in this report, overall broadband penetration by household is 21 percent, but there is wide variation, with Belgium, the Netherlands, and Switzerland all above 30 percent, and Ireland and Greece below 10 percent. Among the largest countries, Germany has the lowest penetration at 16 percent.

**Total broadband access lines in the region will nearly quadruple over the next five years.** *Heavy Reading* projects that broadband subscribers in this region will grow from 38 million at the end of 2004 to 128 million at the end of 2009, representing a penetration rate of 69 percent. Growth is following a classic S-curve trajectory; our forecast assumes that over the next decade, growth will rise to 90 percent of households as incumbent telcos replace their existing networks with all-broadband networks.

**A bandwidth race has begun to develop in many countries, with broadband frequently sold on a simple speed/price formula.** Speed leaders in early 2005 include TeliaSonera, B2, Free, France Telecom, Tiscali Italy, and Noos, all with a top downstream speed offer of 10 Mbit/s or more. Although these leaders are using a mixture of DSL, cable modem, and direct fiber access, DSL offers based on ADSL2+ are beginning to predominate.

**The broadband service triple play of voice, data, and video will become strategically important in the battle for European market share.** Almost every major broadband provider in Europe is either offering triple play or is planning to do so within the next 12 months.

**Despite the race to higher bandwidth and the implementation of triple play, most operators do not believe they will need to implement fiber in the next three to four years.** Among the reasons: shorter local loops in Europe; lower interest in HDTV; high costs of deploying fiber; lack of regulatory relief for deploying fiber; and a widespread belief that ADSL2+, VDSL, and current-generation cable modems can supply most user needs through the rest of this decade. Most telcos have already deployed ADSL2+ or will do so this year; VDSL is attracting less attention but is likely to see more significant deployments in the 2006 to 2008 timeframe.

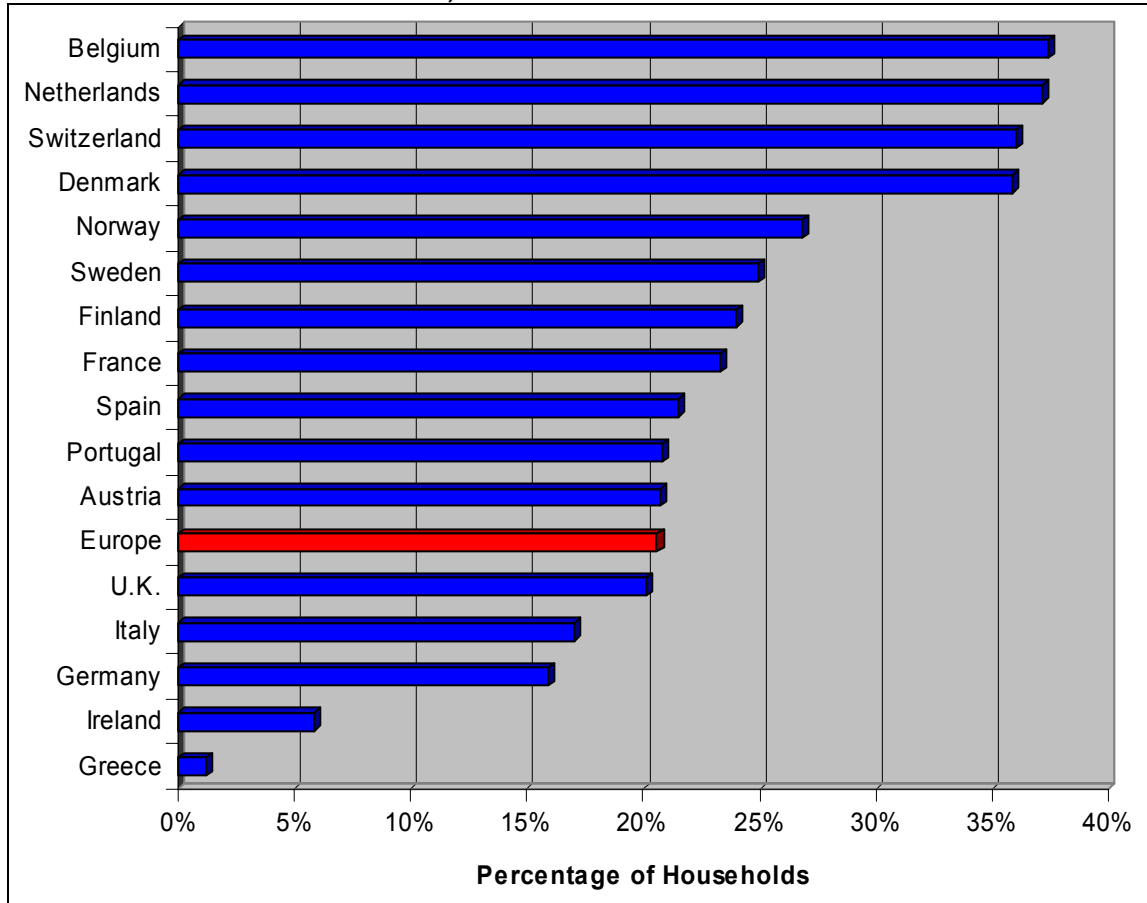
**The current mix of broadband technologies will not change significantly for the foreseeable future.** Although DSL has rapidly overtaken cable over the past three years, a revived European cable industry has begun to fight back and will hold its ground in terms of market share. Meanwhile, direct fiber connections will begin to gain a foothold at the end of the forecast period, reaching just over 4 percent of homes, or over 5 million connections, at the end of 2009.

**There will be a big change in the average downstream speed provided to customers.** In 2004, less than 10 percent of Europe's broadband subscribers had a downstream connection of 2 Mbit/s or more. By 2009, almost 80 percent will be receiving 2 Mbit/s or more, and almost 30 percent will be receiving more than 10 Mbit/s.

## Report Scope and Structure

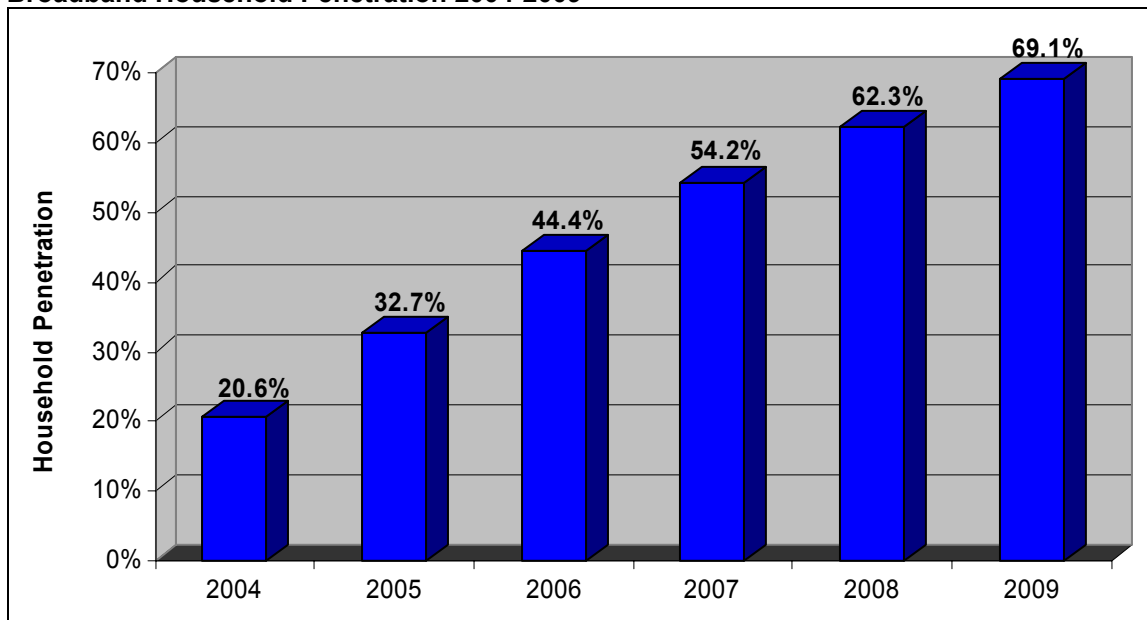
Together, the nations covered in this report make up the world's largest residential broadband market, covering 387 million people and 163 million households. Broadband market penetration averages just over 20 percent, which means the region is poised for a significant growth in broadband service use over the next five years.

**Broadband Household Penetration, December 2004**



Source: Heavy Reading

**Broadband Household Penetration 2004-2009**



Source: Heavy Reading

**Next-Generation Broadband in Europe: The Need for Speed** includes detailed breakouts of residential broadband usage in key national markets, along with analysis of how those markets are being addressed by incumbent and competitive providers of DSL service, cable modem data service, and alternative broadband access options such as satellite and powerline services.

#### U.K. Broadband in Brief

Total broadband subscribers	5,980,500 (Dec. 2004)
Household penetration	20.1% (Dec. 2004)
Year-on-year growth	100% (Dec. 2003 to Dec. 2004)
Incumbent retail share	19% (Dec. 2004)
Cable MSO share	29% (NTL and Telewest)
Largest providers	Wanadoo, BT, Bulldog, NTL, Telewest, Pipex, Virgin
ULL lines	31,000 (Jan. 2005)
Highest-speed mainstream offer	8 Mbit/s (Bulldog, various others)

Source: *Heavy Reading*

The report is structured as follows:

**Section I** provides a complete overview and full key findings of the report.

**Section II** assesses the current shape of Europe's broadband market, analyzing current penetration, recent growth, cable and DSL access, and other basic metrics. It then details provider strategies regarding next-generation broadband, looking in particular at the technologies being considered to deliver higher-speed, multimegabit broadband services.

**Section III** provides a detailed forecast for the European broadband market through 2010, segmented by provider, country, and service speed.

**Section IV** offers a country-by-country examination of the major drivers for broadband at the national level for the region's biggest markets, including France, Germany, Italy, the U.K., Spain, the Netherlands, Sweden, and Switzerland, with briefer discussions of developments in Austria, Belgium, and Denmark.

The report is essential reading for a wide range of industry participants, including the following:

- **Technology suppliers:** Which network operators are aggressively expanding their broadband service rollouts in Europe? Which technologies are emerging as the key enablers of next-generation broadband services? How do your products fit into carrier broadband deployment plans? Which incumbent and competitive operators present the most promising opportunities for you to gain important market share?
- **Incumbent and competitive network operators:** How do your broadband deployment plans match up against other carriers in the region? Which competitors are likely to present the biggest challenges to you? How do your broadband service forecasts match up to independent forecasts made by *Heavy Reading*? What is the likely timeframe for improvements in data rates offered by broadband operators?
- **Investors:** Which network operators are in the best position to gain market share in the drive to next-generation broadband services in Europe? Which broadband technologies are most likely to be chosen by network operators? How vulnerable are incumbent carriers to competition from smaller national operators or pan-European providers?

**Next-Generation Broadband in Europe: The Need for Speed** is published in PDF format.