



Broadband Europe: A Tale of Many Markets

A Parks Associates White Paper

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Published by Parks Associates

© October 2006 Parks Associates
Dallas, Texas 75230

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Printed in the United States of America.

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1.0 European Broadband Market Overview

Europe is a large and diverse broadband market with great growth potential. At the end of the first quarter in 2006, there were more than 64 million broadband subscribers in Europe, a 45% growth over the 44 million subscribers reported a year earlier. Among the top broadband markets based on total broadband subscribers, the Nordic countries have the highest penetration rates. In Western Europe, France and the U.K. are catching up quickly, with penetration rates approaching 20% per capita. Germany, Spain, and Italy, the laggards in broadband penetration, have also registered respectable growth rates in the last 12 months. Poland is the only Eastern European country with more than one million broadband subscribers, but with a 3% penetration rate and 13% annual growth, its market is far from reaching its potential.

| Overview of Top European Broadband Countries (with More than 1 Million Lines) | | | |
|--|---|--------------------------------------|-----------------------------------|
| | Total broadband connection (Q1/06) | Penetration rate (per capita) | Growth rate (over Q1 2005) |
| Germany | 11,666,202 | 14% | 61% |
| UK | 11,051,967 | 19% | 52% |
| France | 10,819,301 | 18% | 41% |
| Italy | 7,381,612 | 13% | 42% |
| Spain | 5,362,119 | 13% | 48% |
| Netherlands | 4,360,121 | 27% | 27% |
| Sweden | 2,053,895 | 23% | 49% |
| Belgium | 1,981,482 | 19% | 14% |
| Denmark | 1,584,026 | 29% | 64% |
| Portugal | 1,290,367 | 12% | 32% |
| Poland | 1,265,187 | 3% | 13% |
| Finland | 1,254,588 | 24% | 41% |
| Austria | 1,249,952 | 15% | 38% |

Source: ECTA
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Figure 1 Overview of Top European Broadband Countries (with more than one million lines)

2.0 Competitive Dynamics

Most European countries do not have robust intermodal competition. DSL is the predominant broadband access technology in Europe, accounting for 82% of total broadband subscribers.

Cable and other access technologies have significant market share in only a handful of countries, notably the Nordic countries. In Europe, competition stems mainly from the growth of simple resale, bit-stream access, and local loop unbundling (LLU). Different countries have adopted different approaches to open up competition. For instance, at the end of December 2005, there were more than 2.8 million LLU lines in France but only 210,000 in the United Kingdom, where competitive operators rely primarily on bit-stream access agreements with British Telecom.

The level of competition in different countries correlates directly with broadband adoption and quality of services. Among the top five broadband markets, France and the U.K., which have adopted more pro-competition regulatory policies, have higher broadband penetration than Germany, Italy, and Spain.

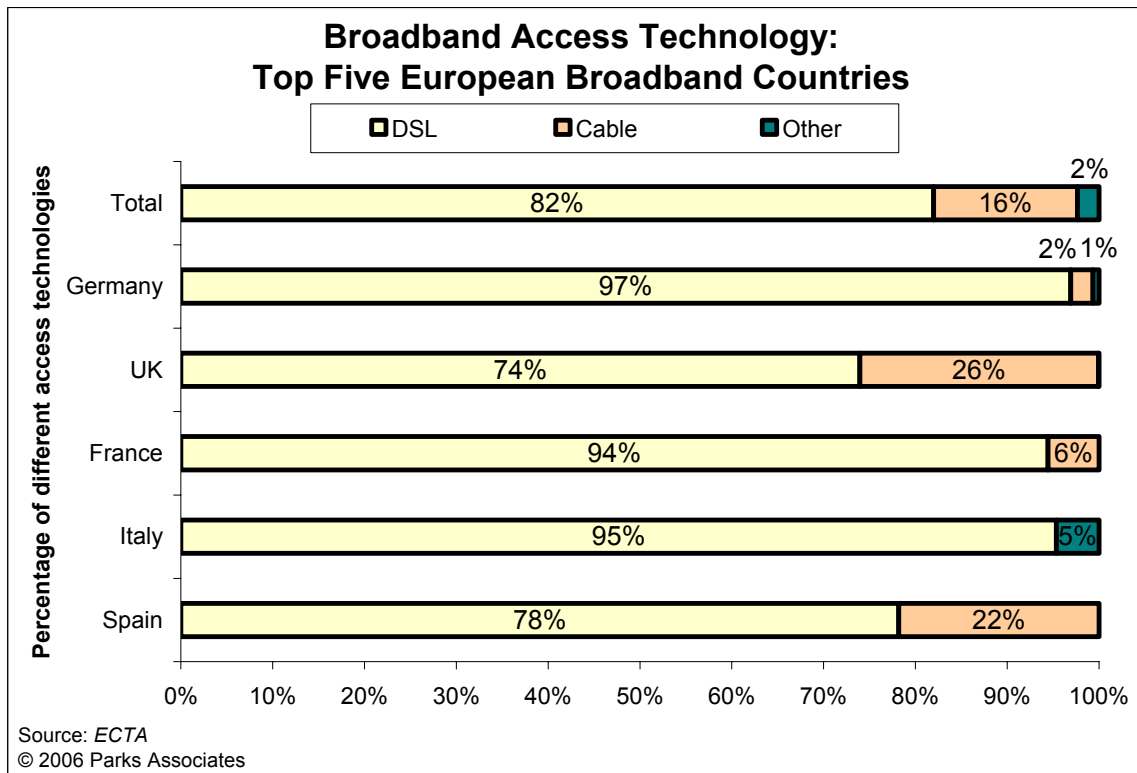


Figure 2 Broadband Access Technology: Top Five European Broadband Countries

Despite the different approaches, opening up the incumbent networks has allowed both new market entrants and incumbents seeking Greenfield opportunities to offer broadband services without significant infrastructure investment or lengthy network construction. Several competitive service providers have emerged as a result and are now poised to move up the ladder of investment to build out their own infrastructure. At the end of the second quarter in 2006, four

of the top twelve broadband service providers in Europe were independent Internet service providers. In addition, United Internet (Germany), Free (France), and FastWeb (Italy) are now building out their own fiber and advanced xDSL networks in order to offer differentiated services.

| Top European Broadband Service Providers | | | | |
|--|---------------------------------|-------------|-----------------------|----------------------------------|
| Rank | Operator (home country) | Type | Q2/06 Subs (M) | % of subs in home country |
| 1 | France Telecom (France) | Incumbent | 8.5 | 61% |
| 2 | Deutsche Telekom (Germany) | Incumbent | 7.4 | 86% |
| 3 | Telecom Italia (Italy) | Incumbent | 6.8 | 76% |
| 4 | Telefonica Europe+Latin (Spain) | Incumbent | 5.9 | 55% |
| 5 | NTL+Telewest (UK)* | Cable | 2.9 | 100% |
| 6 | British Telecom (UK) | Incumbent | 2.8 | 100% |
| 7 | Tiscali (Italy) | ISP | 2.1 | 19% |
| 8 | United Internet (Germany) | ISP | 2.0 | 100% |
| 9 | Free/iliad (France) | ISP | 1.9 | 100% |
| 10 | KPN (Netherlands) | Incumbent | 1.8 | 100% |
| 11 | TeliaSonera (Sweden) | Incumbent | 1.7 | 46% |
| 12 | Neuf Cegetel | ISP | 1.4 | 100% |
| * NTL is incorporated in the US but operates in the UK | | | | |
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Figure 3 Top European broadband service providers

3.0 Bundled Services Driving Future Growth

New market entrants are also stirring up the bundled services market, which is putting more pressure on incumbent broadband service providers. FastWeb enjoys the highest ARPU among all European service providers, thanks to its integrated voice, Internet, video, and value-added services package. Free, a major disruptive force in France, recently announced an aggressive plan to offer a quad-play bundle for €29.99 per month, which will include a 50 Mbps broadband connection and HDTV services. Orange, the French incumbent, was forced to counter such offerings with its own low-priced service bundled. In the U.K., several new entrants, including Carphone Warehouse, Orange, and BSkyB, are providing qualified mobile and TV subscribers with free broadband access as part of a bundle and NTL, which recently acquired Virgin Mobile UK, is selling a quad-play package that includes TV, mobile voice, fixed voice, and HSD services for £40 per month.

Such competitive dynamics are driving incumbent European service providers to revisit their strategies, invest aggressively in new network infrastructure, provide innovative value-added services, and enhance service bundles.

- **France Telecom** has rebranded its entire portfolio of services (except for landline voice services) under Orange in an effort to become a bundled service provider of broadband communication and entertainment services. It is offering an innovative residential gateway called the Livebox (now in more than three million households), which can provide an *a la carte* package of entertainment and communication services including digital TV, VoIP telephony with FMC features (fixed-mobile convergence), electronic surveillance, wireless photo transfer, and Internet music services. The company has also launched FTTH pilots in several markets in an effort to build out its next-gen access network. In addition, Orange is focusing heavily on media content, with plans to generate 400 million Euros in end-user media content revenue by 2009.
- **British Telecom** is investing in its 21CN next-generation networks, which will make BT the first incumbent operator in the world to switch off the PSTN and migrate all of its customers onto an all-IP network. BT has also begun offering innovative services such as BT Fusion, an FMC VoIP phone service, and BT Vision, an IP video service. Interestingly, BT is planning to sell its BT Vision services to non-BT broadband subscribers, indicating its willingness to offer both bundled and unbundled services.
- **Deutsche Telekom**, faced with growing competition, cut its broadband prices by 50% in 2005 and subsequently saw its first-half 2006 broadband revenue declining by 7%. To fend off competition, it is planning to invest more than three billion Euros for a VDSL network (up to 50 Mbps) that will cover 50 cities by 2007.
- **Vodafone**, a leading mobile service provider, recently announced that it would start offering fixed-line broadband services in the U.K. and Italy through partnerships with BT and FastWeb, in an effort to offer its own service bundles. It plans to gain 10% of the total revenue from fixed-line Internet, office, and home communication services in three to four years.

About the Author:

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About Parks Associates: Parks Associates is a market research and consulting firm focused on all product and service segments that are “digital” or provide connectivity within the home. The company's expertise includes home networks, digital entertainment, consumer electronics, broadband and Internet services, and home systems.

Founded in 1986, Parks Associates creates research capital for companies ranging from Fortune 500 to small start-ups through market reports, multiclient studies, consumer research, workshops, executive conferences, and custom-tailored client solutions. Parks Associates is also a reliable resource for industry, local, national and international press, providing data, analysis, and insight on all aspects of the “digital living” markets.

Parks Associates hosts several fall events and co-hosts CONNECTIONS™ and CONNECTIONS™ Europe (in partnership with the Consumer Electronics Association) each year. In addition, Parks Associates produces the publication Industry Insights two times per year in conjunction with the CONNECTIONS™ Conference series.

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