

THE ROLE OF CABLE TV NETWORKS IN THE BROADBAND MARKET

In October 2010, the German newspaper *Frankfurter Allgemeine Zeitung* announced that Internet via cable TV networks had overtaken DSL, both in speed and new subscribers. A recent market survey on the German telecommunication market (VATM/Dialog Consult 2010) reported that half of all new broadband subscriptions are realised via cable TV networks. This is a significant change in the structure of the German broadband market which for years has been dominated by Internet access via DSL technology. In 2002, merely 80,000 broadband connections were realised via cable compared to 3.2 million via DSL. But the number has increased dramatically to 2.6 million in 2009, an increase by a factor of 32. At the same time, broadband access via DSL has also increased significantly to 22.4 million connections in 2009, an increase by a factor of seven. Still, the increase of the market share of broadband via cable is large (Bundesnetzagentur 2010).

The crucial feature of broadband via cable TV networks is that it induces infrastructure-based competition in the broadband market. This is in stark contrast to competition on the basis of a single network infrastructure. This kind of competition is dependent on access regulation to those network elements owned by the incumbent network provider that cannot be profitably duplicated, such as the last mile of the pre-existing voice telephony network. Competition via cable TV networks in contrast, by using a

second independent network, allows real infrastructure based competition that does not depend on regulation.

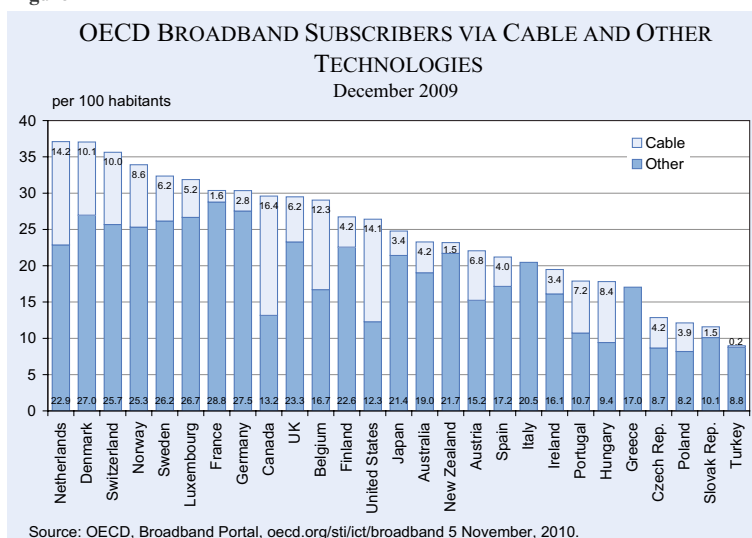
Despite the increase of broadband via cable in Germany in the last years, in an international comparison the share of broadband via cable relative to broadband via DSL is quite low. The Figure shows the number of broadband subscribers per 100 inhabitants for 27 OECD countries divided by technology. It can be clearly seen that, both in relative and absolute terms, broadband via cable does not play an important role in Germany. In other countries broadband via cable is much more widespread and in Canada and the US it is even more common than broadband via DSL.

What determines these differences? One obvious thought would be the extent of cable TV networks. This, indeed, can explain why in Greece and Italy the share of broadband connections via cable is zero: these countries simply do not have a cable network. However, the situation in Germany is different. Germany has a far reaching cable network that covers a large part of German households. Here, the explanation is different and lies in institutional and ownership structures.

The German cable TV network was owned by the incumbent network provider Deutsche Telekom, that offered DSL connections via its existing telephony network. In response to EU pressure, the divestiture of the cable network was realised and only after Deutsche Telekom sold its last shares of the cable TV network in 2003 the cable network was upgraded for the provision of high speed Internet and is

now an important competitor in the market. In other countries the ownership structure was different. The Table gives an overview of the structural changes in 15 EU countries. The main difference among the countries is the ex ante ownership structure of the cable TV network. In countries where the cable TV network was independent, i.e., not owned by the incumbent voice telephony provider, the first broadband connections were typically realised via cable. Also in Canada and the US, the cable TV networks were always independent of the

Figure



Table

Structural changes of the cable market (EU-15)^{a)}

	Year of divestiture of telephone and cable companies or introduction of competition	
Austria	1997	The incumbent Telekom Austria does not own a cable television network. In 1997 high speed Internet was launched by cable companies.
Belgium	1997	Belgium's cable companies introduced cable telephony and cable modem service. In August 1997 high speed internet access via cable was launched.
Denmark	1997	The second largest cable network Stofa is owned by TeliaSonera, which purchased the network in 1997. This marked an important change in the market structure by creating a large competitor.
Finland		The cable companies in Finland are owned by telecommunication companies.
France	2000	In August 2000 France Telecom sold its 49.9% stake in NOOS, France's biggest cable network operator.
Germany	2003	The incumbent Deutsche Telekom used to be the largest cable network operator. The divestiture process of Deutsche Telekom from its cable network started in 2000 and ended with the sale of its last shares in 2003.
Greece		There is no cable network in Greece.
Ireland	1999	The incumbent Eircom owned the majority share in Cablelink. In 1999, during the privatisation process, the Irish government decided to sell Eircom's share in Cablelink.
Italy		There is no cable network in Italy.
Luxembourg		There is no independent cable network operator in Luxembourg.
Netherlands	1997	The Dutch government decided that the incumbent KPN had to sell its cable network. The divestiture took place at the end of 1997.
Portugal	1996	In 1996, Cabovisao, a subsidiary of the Canadian company Cable Satisfaction International, entered the cable television market. It operates the second largest cable network in Portugal.
Spain	1998	In 1998, Spain's cable companies began offering cable television and cable telephony services. The incumbent Telefónica was prohibited from offering cable services; this strategy aimed at developing the cable market by delaying the incumbent's entry.
Sweden	2003	In 2003, the incumbent TeliaSonera announced its sale of ComHem, the largest cable television network. This followed a decision by the European Commission that the company had to divest its cable network as a pre-condition for the merger between Telia and Sonera.
United Kingdom	1998	In 1998, the divestiture of the incumbent British Telecom of its cable networks in Westminster and Milton Keynes took place following concerns on the part of the European Commission.
<p>^{a)} The development of competition between telephone and cable companies is often characterized by a change of the structure of the cable market. In countries where the cable companies have traditionally been independent, the year of introduction of broadband services via cable is indicated.</p>		

Sources: Bundesnetzagentur (2003); OECD (2001); OECD (2003).

telephony providers. In other countries, e.g., France and Finland, the cable TV networks were or still are owned by the incumbent voice telephony provider.

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