

Market Monitor 2011

The Market Monitor for 2011 describes the trends in the electronic communications and postal markets. OPTA publishes this monitor every year with the goal of providing an objective view of trends in the markets that OPTA regulates.

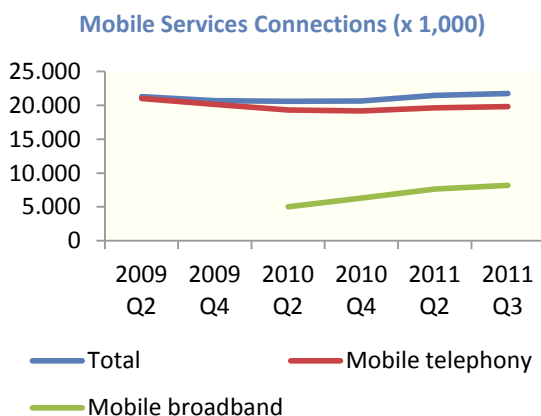
The Market Monitor is largely based on public information in OPTA's Structural Market Monitor. The Structural Market Monitor contains information that the major parties operating on the electronic communications markets periodically supply about their activities. OPTA validates this information. This enables OPTA to keep a finger on the pulse in terms of the trends in various markets. These figures constitute an important starting point for the market analysis conducted by OPTA every three years.

Mobile services

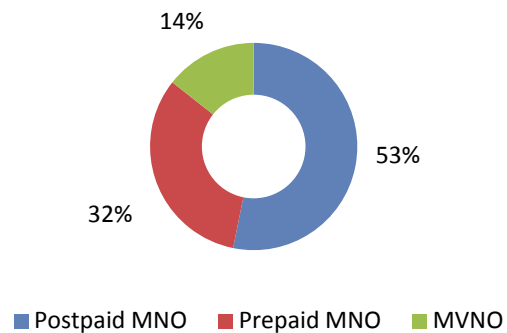
Growth in mobile-broadband connections

The total number of mobile-telephony connections rose slightly in 2011, from 19.2 million at the end of 2010 to 19.8 million in the third quarter of 2011. The number of subscribers of providers with their own mobile network, MNOs, rose from 9.8 million to 10.6 million during this period. The number of prepaid connections of these mobile providers stayed approximately the same at 6.4 million. The number of connections of providers without their own network, MVNOs, rose from 2.7 million to 2.9 million connections.

Including mobile-broadband connections, the total number of mobile connections rose from 20.6 million at the end of 2010 to 21.8 million in the third quarter of 2011. While the number of mobile telephony connections only rose slightly, the use of mobile-broadband connections took off, showing an increase of as much as 30 per cent in nine months - from 6.3 million to 8.2 million.



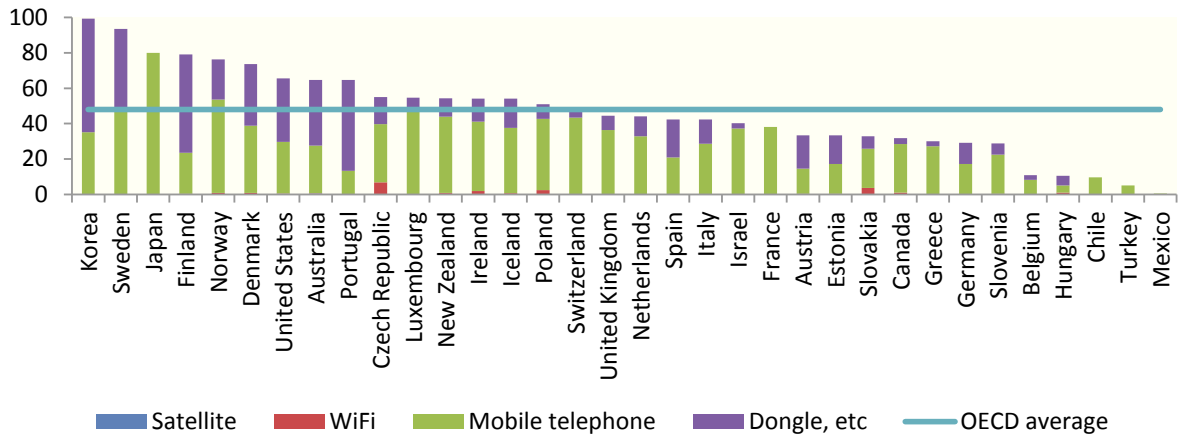
Distribution of Mobile Telephony Services 2011 Q3



International

While the Netherlands tops the international rankings when it comes to the use of fixed broadband, in mid-2011, it only ranked eighteenth in terms of mobile broadband with 44 connections for every 100 residents. For mobile-Internet access, 11 per cent of Dutch residents use a dongle, while approximately 33 per cent uses a mobile telephone.

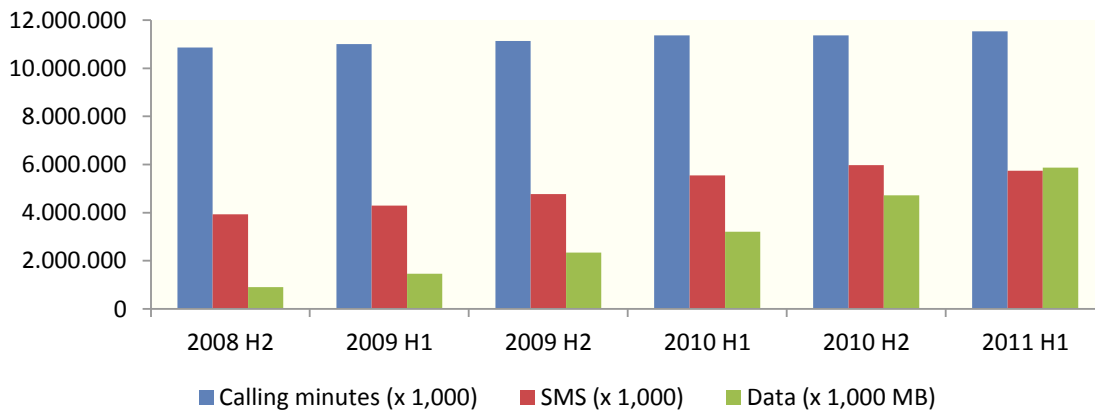
Mobile broadband connections per 100 residents within OECD countries – 2011 Q2



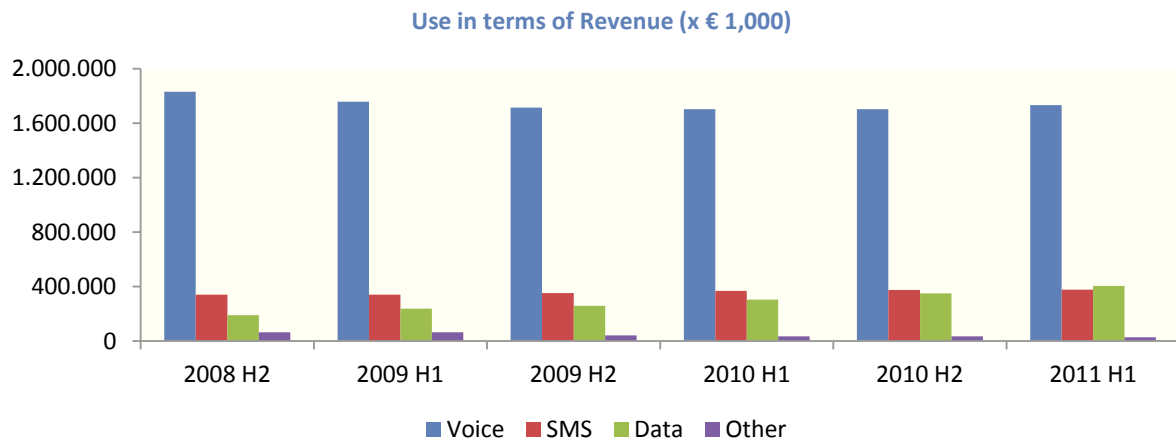
Fewer SMS messages

Mobile Internet is increasing in popularity. This is evident from the number of mobile broadband subscriptions and the increase in data use per subscription. The total mobile data use more than quadrupled over a two-year period. While consumers over the past period make somewhat more calls in comparison to the previous period, the number of SMS messages they are sending decreased for the first time.

Use in Terms of Volume

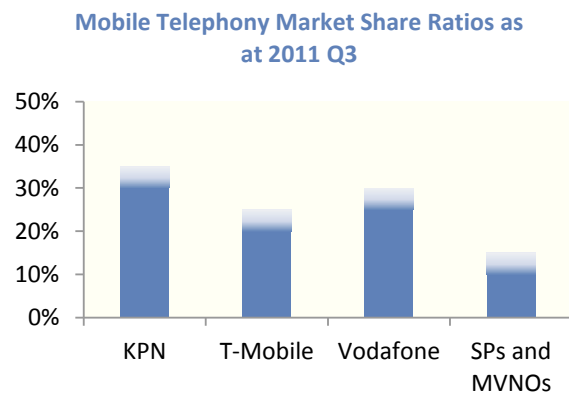
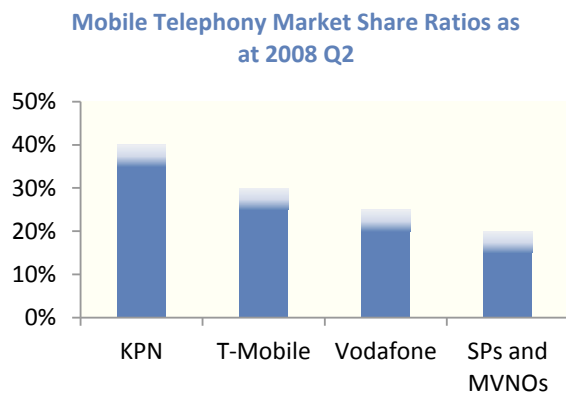


Revenue from the various services has not changed as much. However, revenue from mobile-data use has increased by about 70 per cent over the past two years. Revenue from SMS messages displayed minimal growth over the last six months.



Market share ratios

The competitive positions between mobile players have changed over the past three years. The market shares of KPN, T-Mobile and that of MVNOs and service providers declined, while Vodafone's share rose.



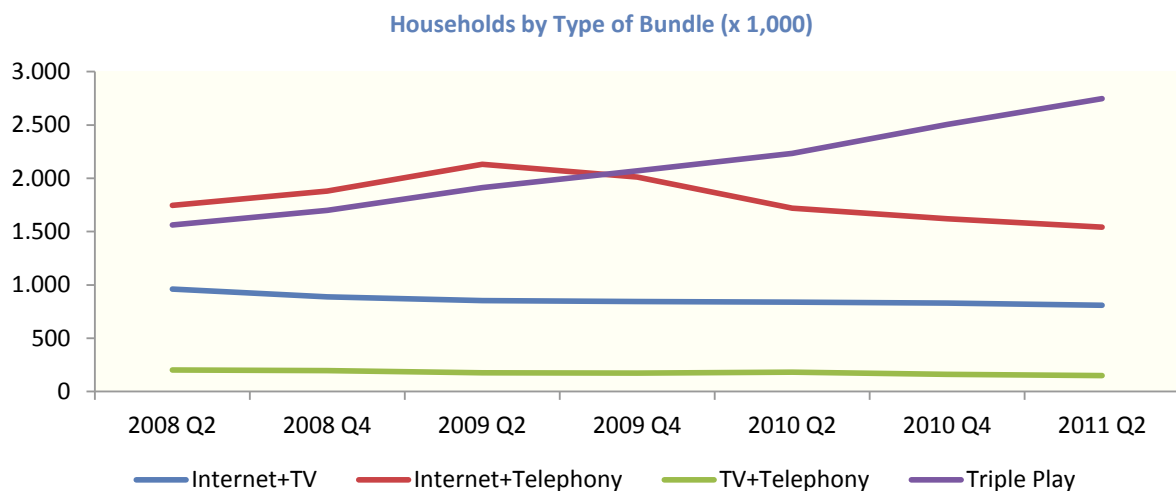
Bundles: Triple play continues to grow, more providers

The bundling of telecom services has been an important trend for years. Triple play has been the most popular bundle among consumers since 2009. Providers are also primarily focusing on bundles.

Bundles are becoming the standard

The number of households purchasing multiple services from a single provider grew from 5.0 million to over 5.2 million between mid-2010 to mid-2011. This represents approximately 70 per cent of the 7.5 million households. Approximately 37 per cent of households (over 2.7 million) subscribed to triple play by mid-2011; broadband Internet, fixed telephony and television as a single package. By mid-2010, this was still 30 per cent. This means that over a period of one year, half a million new households opted for triple play over cable, DSL or fibre optic.

Up until 2009, consumers opted more often for Internet + telephony than for triple play. Since the end of 2009, this proportion has switched. By mid-2011, approximately 20 per cent of households (over 1.5 million) still subscribed to Internet + telephone from a single provider. Other combinations have also declined over the past few years.



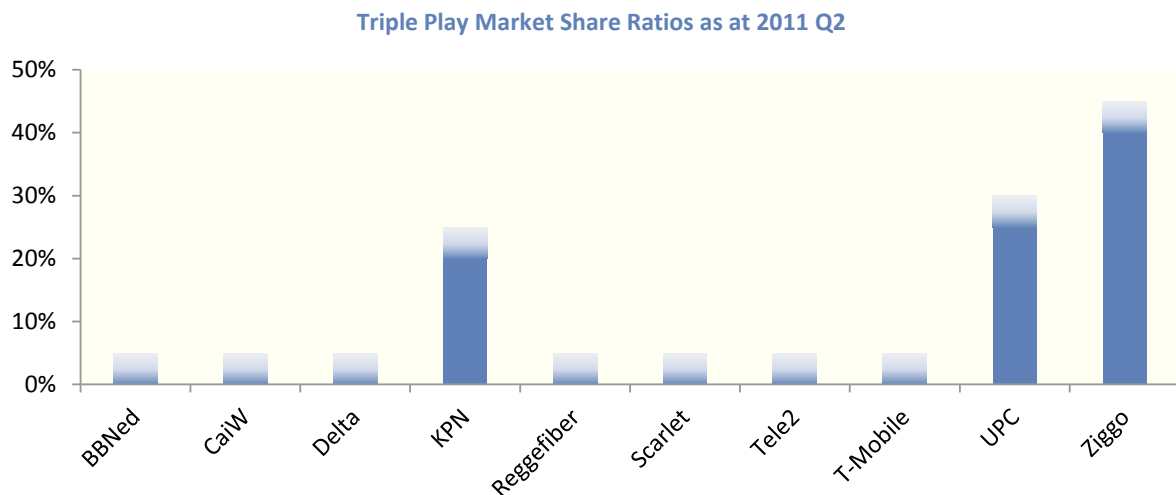
All services are more often purchased in a bundle in 2011 than before. While by mid-2010, Internet was purchased as part of a bundle by 80 per cent of consumers, this number rose to 83 per cent by mid-2011. For fixed telephony, its share rose from 58 per cent to 62 per cent, while television grew by 5 per cent to 49 per cent. This means that only half of all consumers still purchase a 'separate' TV subscription.

More providers

There are several reasons why consumers opt for bundles, including reduced prices / economics, and the convenience of a single bill. The possibility of offering bundled services therefore is increasingly more important for providers to enable them to retain and attract customers. Nevertheless, all services are also offered and purchased separately and in different types of bundles.

Most market players have since become active in the area of telephony, broadband and television. In some cases, providers work together in this respect, such as T-Mobile (Online) and CanalDigitaal which offer bundles of ADSL Internet and satellite television. Various new, minor players are starting to offer bundles over fibre.

By far the largest providers in the triple play category are Ziggo, UPC and KPN.



At the end of 2011, KPN and Ziggo were offering additional television services especially for their subscribers purchasing multiple services. For example, these consumers can watch wireless television on their tablets and smartphones via a wireless router.

Bundling of fixed and mobile services

In mid-2011, mobile provider Vodafone started offering bundles over fibre. Tele2 and Ziggo/UPC have set their sights on a joint mobile network. T-Mobile has incorporated the fixed network activities of its subsidiary, Online, and since the end of 2011 has been offering a 4-in-1 bundle for fixed and mobile-telecom services. The smaller provider Scarlet has been doing this for some time. There are an increasing number of providers that offer all fixed as well as all mobile-telecom services. However,

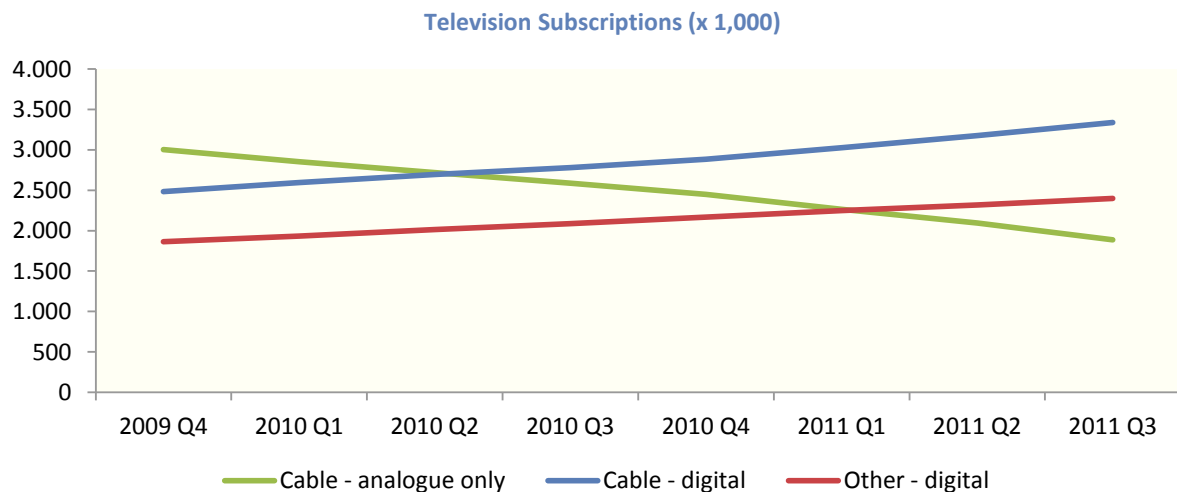
consumers are not yet enthusiastic about fixed and mobile-services bundles in view of the limited number of subscribers.

Television: growth in competition, digital TV and new services

Multiple trends on the television market persisted in 2011. Cable companies remain the largest providers; however, competition with other infrastructures is growing. Three quarters of the Netherlands watches digital television, the number of providers is increasing, and new services are being offered.

Consumers opt for cable, DSL or fibre

There were over 7.6 million television subscribers in the third quarter of 2011. At 5.2 million, cable subscriptions account for the largest share. This number declined by 3 percentage points over a twelve-month period. The number of DSL television subscriptions displayed the largest growth, a trend that began in 2010. Television over fibre also grew in 2011, although this still represents a small portion of the market. After years of growth, the number of Digitenne (digital ether television) customers declined.



The share of digital television subscriptions rose from 65 per cent in the third quarter of 2010 to 75 per cent in the third quarter of 2011. Consumers are also frequently opting for digital television for their second and third television sets. As a result, digital television is being watched via more than half of all television sets.^{1,2}

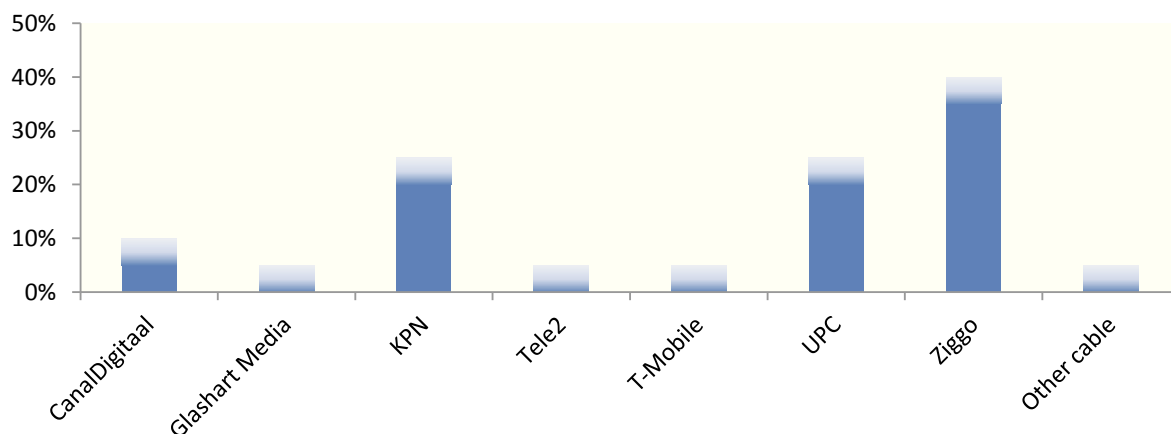
¹ Veldkamp, *Afnemers van televisiediensten (Consumers of Television Services)*, 2011.

² Stichting KijkOnderzoek, *Persbericht TV in Nederland (Press Release: TV in the Netherlands)*, 11 August 2011.

Increased competition

In terms of television over cable or satellite, consumers usually do not have a choice of providers, while there is such a choice for television over fibre or DSL. Approximately 11 per cent of households switched to a different television provider over the past year. From the third quarter 2010 to the third quarter 2011, the regional market share of the largest cable providers, Ziggo and UPC, declined from approximately 75 per cent to 72 per cent and from approximately 69 per cent to 66 per cent, respectively, within their cable markets.³ From a national perspective, Ziggo's market share decreased to less than 40 per cent and UPC's market share declined to less than 25 per cent. KPN by contrast grew strongly in 2011, to more than 20 per cent of all television subscriptions, and has announced its intention of acquiring cable provider CaiW in order to realise further growth. Various small providers are acquiring customers over DSL, digital ether and fibre. Vodafone in the summer of 2011 announced its intention to start offering bundles with television over fibre. CanalDigitaal still serves a significant customer segment with satellite television.

Television Market Share Ratios as at 2011 Q3

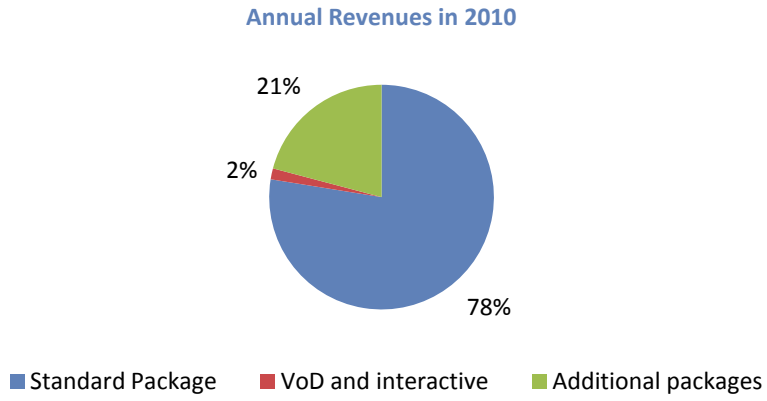


Growing revenues and expansion of services

The annual revenue from television subscriptions rose from €1.27 billion in 2009 to €1.36 billion in 2010. The share of additional packages and video-on-demand (VoD) included in this grew from 19 per cent to 22 per cent. Providers expanded their offer of additional services in 2011, to include things such as larger video collections and wireless television on tablets. Furthermore, players are adding the BBC channels over DSL, digital ether and fibre. Ziggo is reducing its analogue package and is including HD channels in its basic package. KPN has been supplying two decoders as the standard in its basic package. UPC

³ Ziggo and Liberty Global Inc. Quarterly Figures 2011 Q3.

makes it possible to use CI+ modules as well for its digital signal, thereby making the use of a decoder redundant.

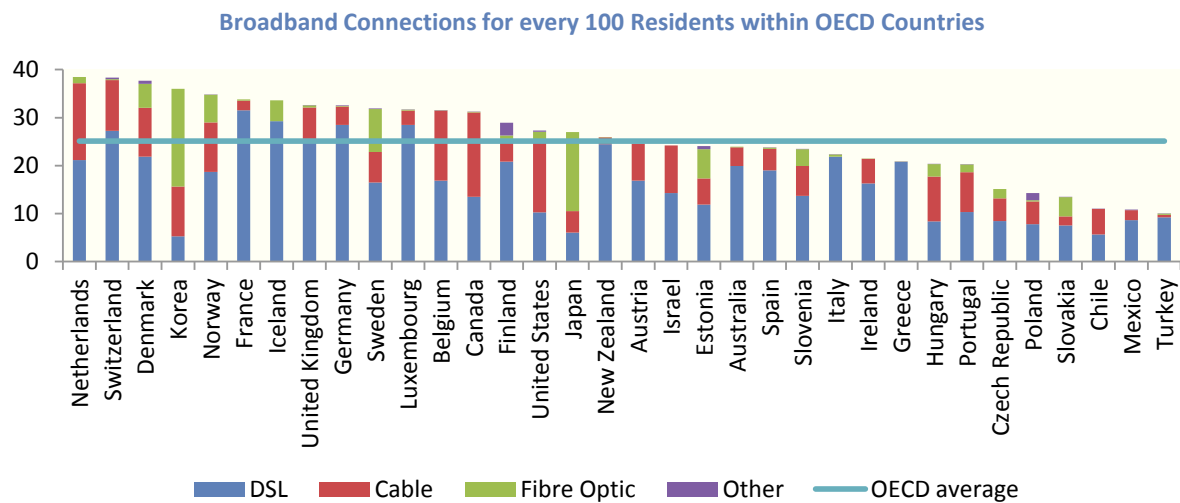


Broadband

As in previous years, the Netherlands in 2011 topped the international broadband rankings. Consumers enjoy higher speeds and often purchased cable as well as fibre. While the share of cable companies is rising, KPN's share is declining.

The Netherlands maintains its lead position, growth levels off

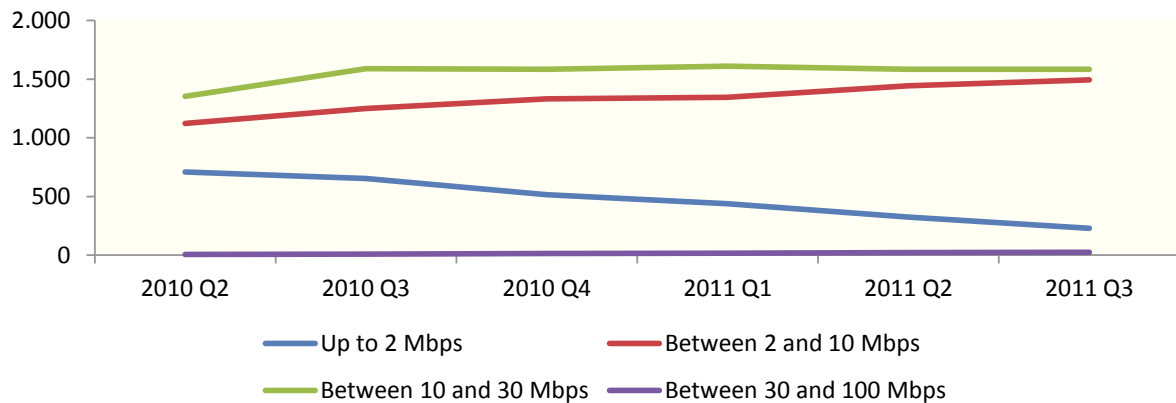
In 2011, the Netherlands still maintained its lead in terms of broadband among OECD countries. At 38 broadband connections for every 100 residents, the Netherlands, like it did in previous years, has the highest rate of broadband penetration. The number of fixed broadband connections grew to 6.4 million in the second quarter of 2011. In comparison to the end of 2010, this represents a flattening growth rate of 2 per cent, which indicates market saturation. Korea, Japan and Sweden are in the lead in terms of the number of fibre optic connections, while the Netherlands occupies a mid-range position.



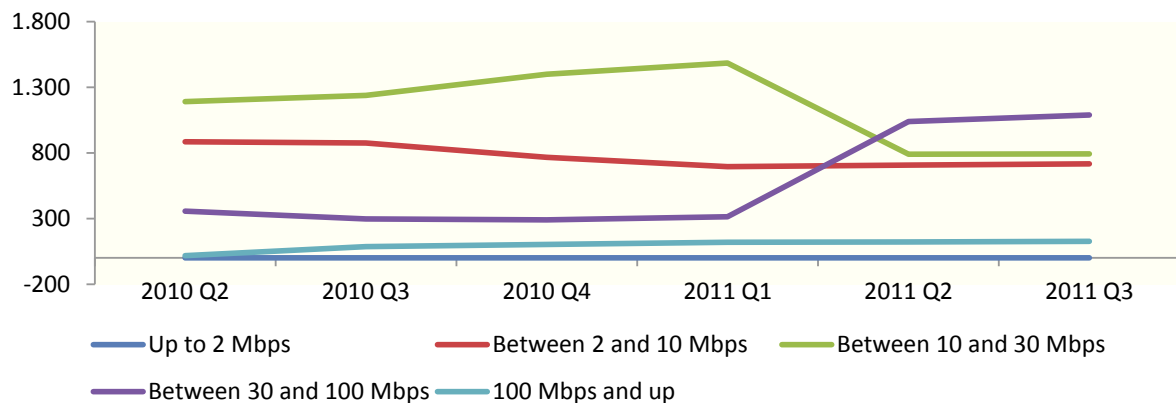
Increase in broadband speeds

The increase in broadband speeds continues at a steady pace. As such, the percentage of connections with a download speed of more than 30 Mbit/s rose from 7 to 20 per cent. The leading role in this respect lies with the cable providers that are able to realise higher speeds with their networks than KPN is able to realise over its copper network for the time being. KPN has announced that it will invest in its copper network over the coming years, so that broadband speeds over DSL will also increase.

DSL Broadband Connections by Speed (x 1,000) (excluding wholesale)



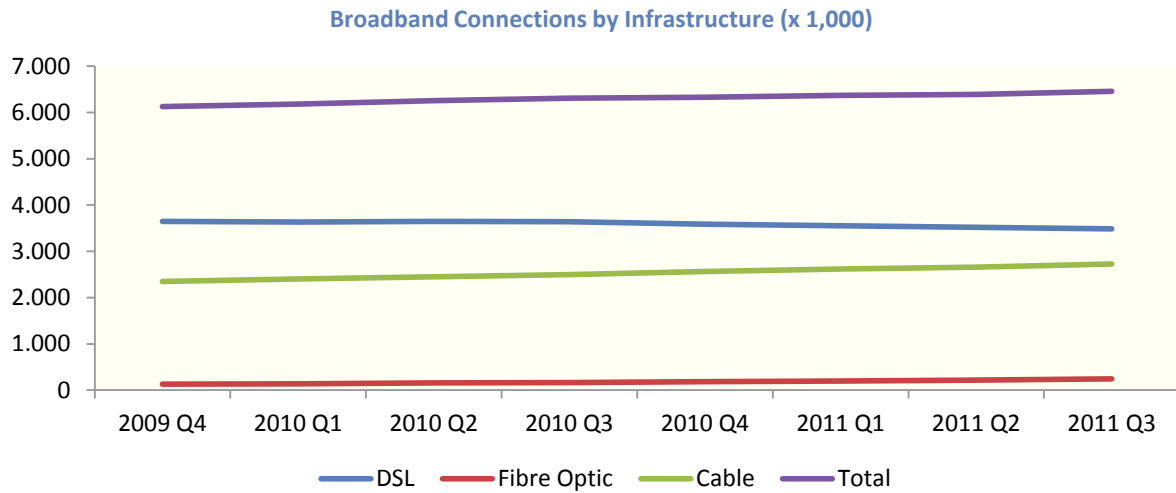
Cable Broadband Connections by Speed (x 1,000)



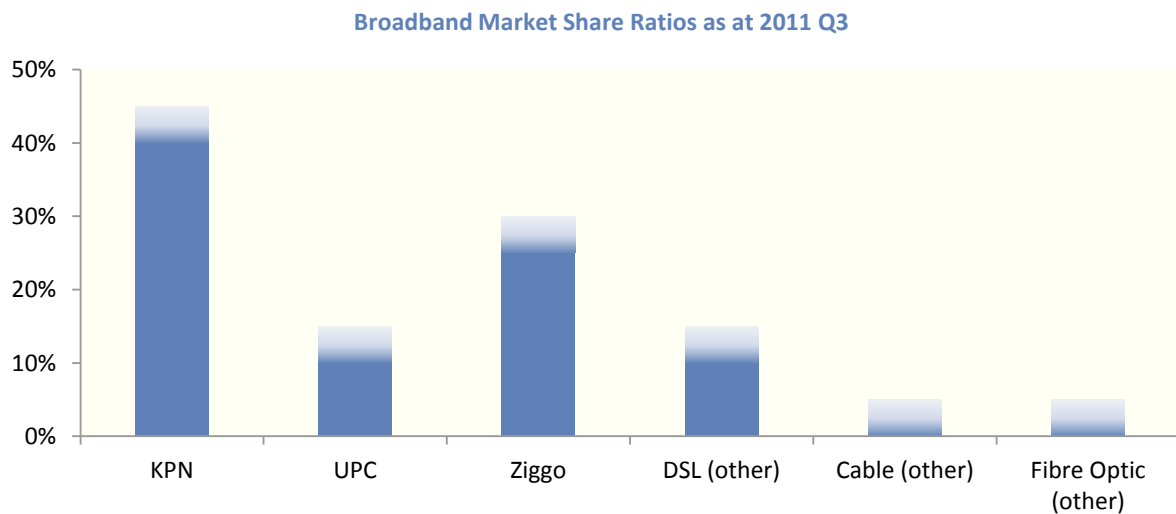
Cable is slowly gaining on DSL

In 2011, DSL, at 3.5 million connections, still remained the most used network. From the third quarter in 2010 through the third quarter in 2011, the number of DSL connections decreased by about 155,000 in favour of cable providers and fibre optic connections. During this same period, cable providers grew by

about 229,000 connections to a total of 2.7 million, while the number of active fibre connections grew by about 75,000 to 242,000 connections.

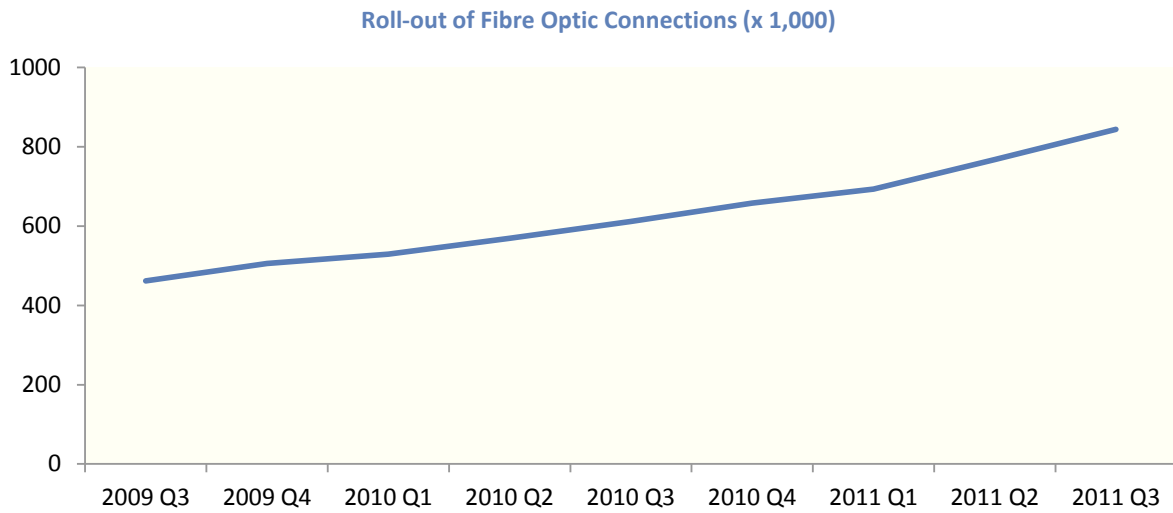


KPN has a market share of 40 to 45 per cent, followed by Ziggo at 25 to 30 per cent and UPC at 10 to 15 per cent. Aside from KPN, the joint market share of DSL providers was 10 to 15 per cent, while the share of the other providers over cable and fibre each was between 0 and 5 per cent. In comparison to mid-2008, KPN's market share declined, while that of the cable providers increased. The market share of the other DSL providers, such as Tele2 and Online, is fairly stable.



Growth in the rollout of fibre

Fibre optic companies continued to roll out their networks in 2011. Reggefiber, which provides virtually all fibre optic connections in the Netherlands, reported 844,000 connected households in the third quarter of 2011. The rollout accelerated in the second and third quarters and ultimately resulted in almost a doubling of the number of installed fibre optic connections over a period of two years.



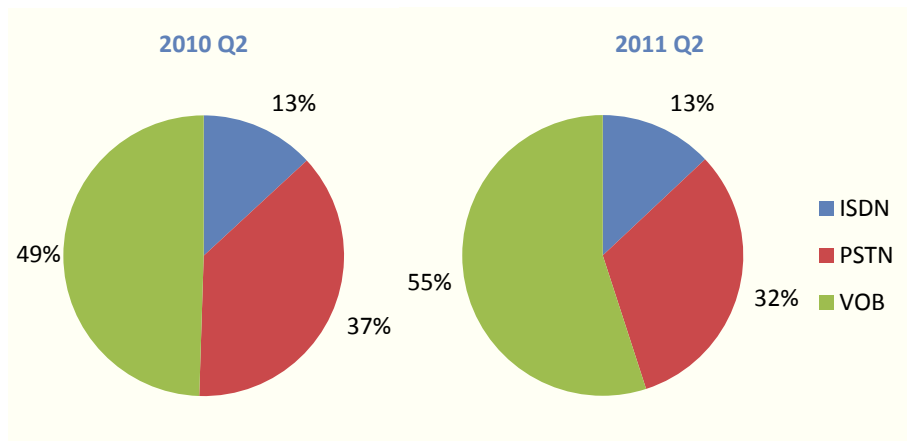
Source: Reggefiber, January 2012

Fixed telephony

While the share of ISDN connections stayed the same in 2011, the share of digital telephony connections (VoB) rose and the share of traditional telephony connections (PSTN) declined. Trends, such as a decline in the number of calling minutes per line, a decline in the number of WLR connections and a decline in the number of C(P)S subscriptions persisted. This was paired with a decline in KPN's market share in the low-capacity segment, while UPC and Ziggo managed to garner a larger market share.

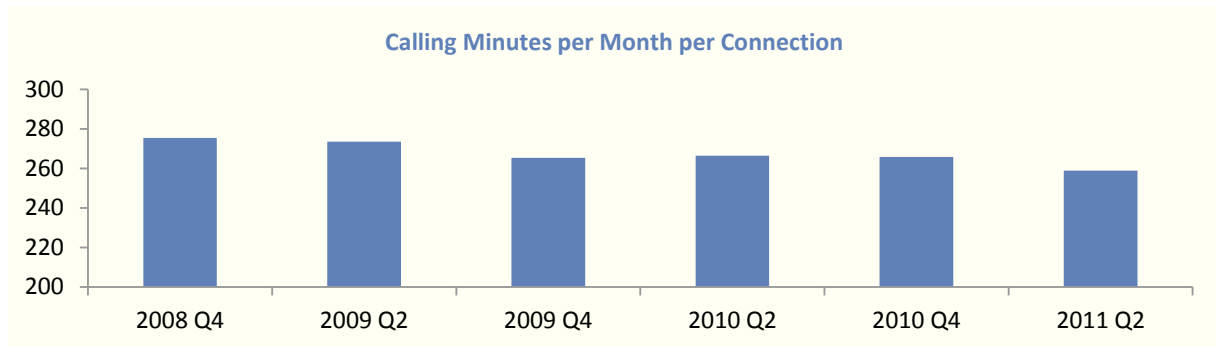
ISDN connections not affected by digitisation

While the share of digital connections was 49 per cent in mid-2010, it rose to 55 per cent by mid-2011. By contrast, PSTN connections showed the opposite trend and its share declined from 37 to 32 per cent over the same period. The share of ISDN-based connections stayed the same at 13 per cent. The total number of connections declined by approximately 35,000 connections to 7.16 million over the same period.



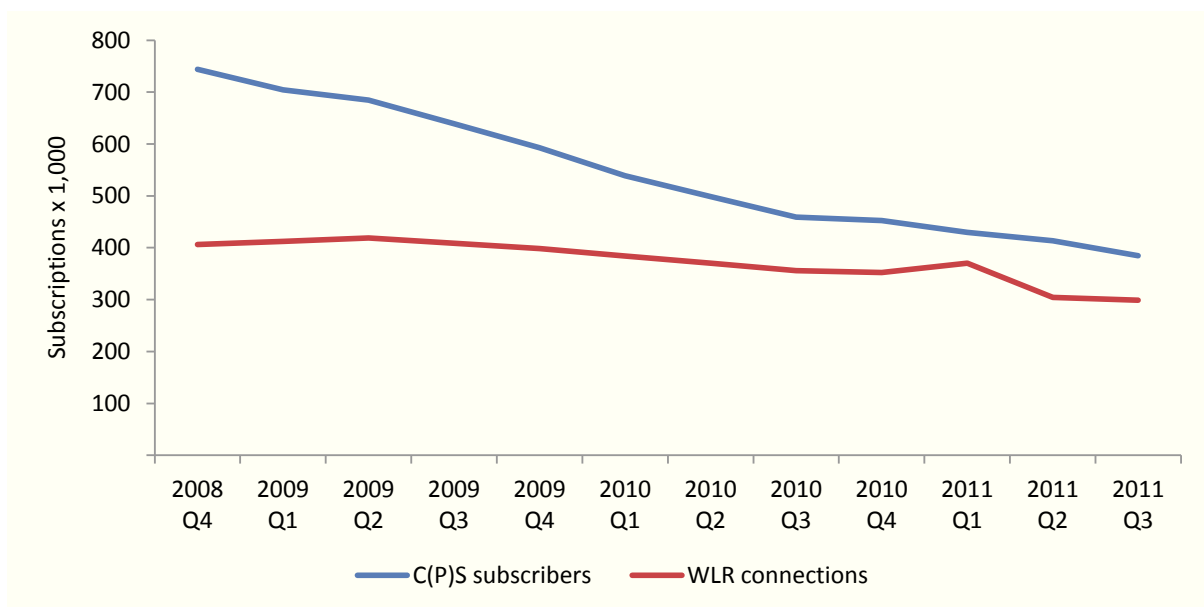
Calling patterns

The declining trend in the number of calling minutes per fixed connection persisted in 2011. 7 per cent fewer calls were made in the first half of 2011 in comparison to the previous year, for a total of 11.0 billion calling minutes. The average number of calling minutes per fixed connection per month declined slightly from approximately 267 in 2010 to approximately 259 in 2011.



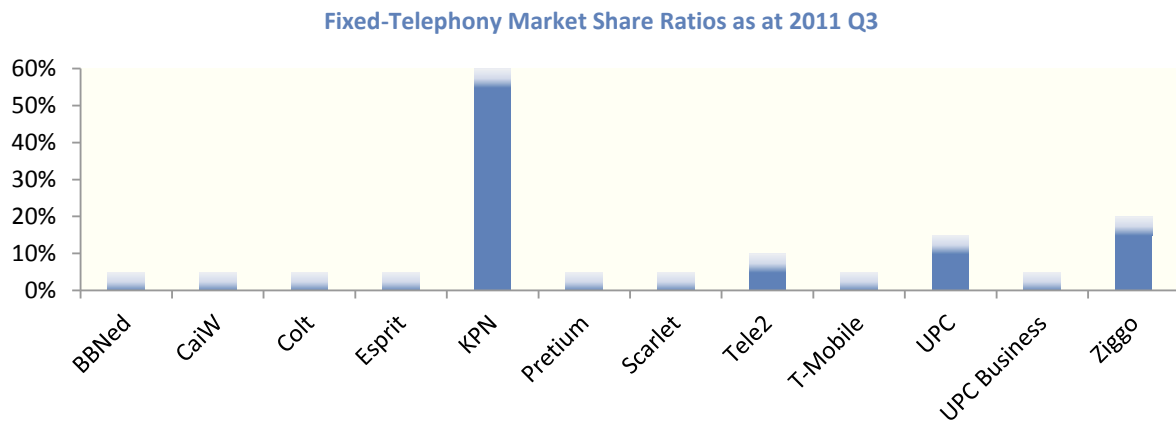
Regulated services

To promote competition, OPTA in the past introduced WLR and C(P)S as regulated services. The number of WLR-based connections, as well as the number of C(P)S subscriptions, is declining. In case of WLR, market players resell KPN's connections to consumers, while calling minutes are resold in case of C(P)S. While the decline traditionally was most severe in relation to the number of C(P)S subscriptions, a stronger decline in the number of WLR-based connections was evident last year. In the third quarter of 2011, there were 385,000 C(P)S subscriptions and 299,000 WLR connections. The decline in the number of traditional PSTN-based connections is consequently reflected in the number of C(P)S subscriptions and the number of WLR connections.



Market share ratios

With the growth in the number of digital telephony connections, KPN's share of the low-capacity segment declined, while UPC's and Ziggo's share increased. KPN's market share in the third quarter of 2011 was between 55 and 60 per cent, while its share in the year before that was between 60 and 65 per cent.



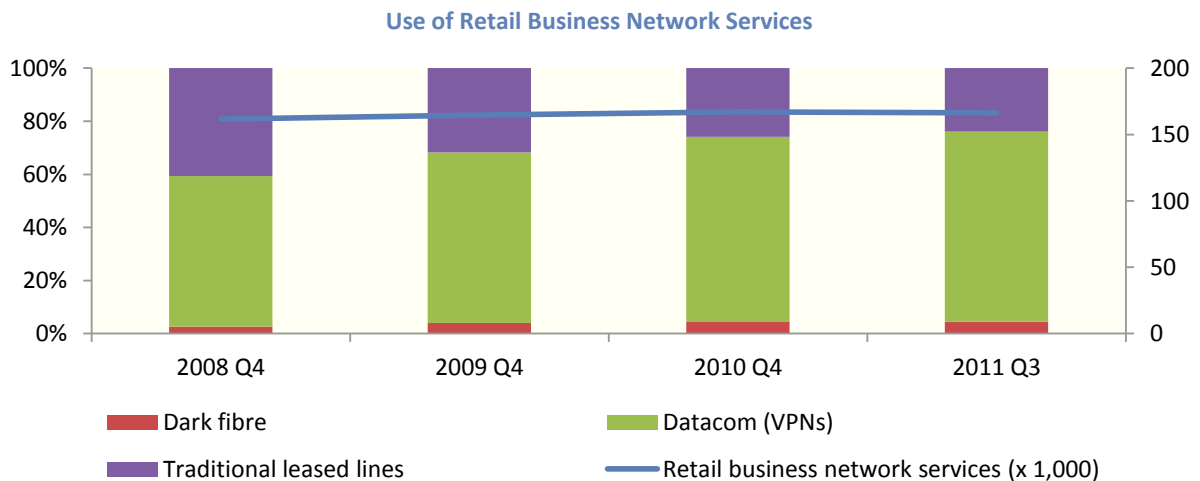
Retail business network services

Businesses make use of retail business network services, such as leased lines, virtual private networks (VPN) and dark fibre, for their secure internal data communication and telephony links between different sites or offices. In the past, businesses primarily acquired leased lines. However, providers barely provide leased lines any longer and are phasing this service out, step by step. For example, KPN will be terminating its analogue leased lines service on 1 January 2013.

Use of retail business network services

Businesses nowadays primarily opt for VPN. These services are priced lower than leased lines due to the use of cheaper IP and Ethernet technologies. Furthermore, their additional benefit is that network management is included as part of the VPN service so that businesses incur lower internal IT costs. All of the company's sites and offices can be provided with access to the VPN service. This also applies to at-home workplaces.

Larger businesses sometimes decide to manage their network internally, so that they have greater control over its quality. In that case, they purchase an unused fibre optic connection (dark fibre) and use it to create their own network services.

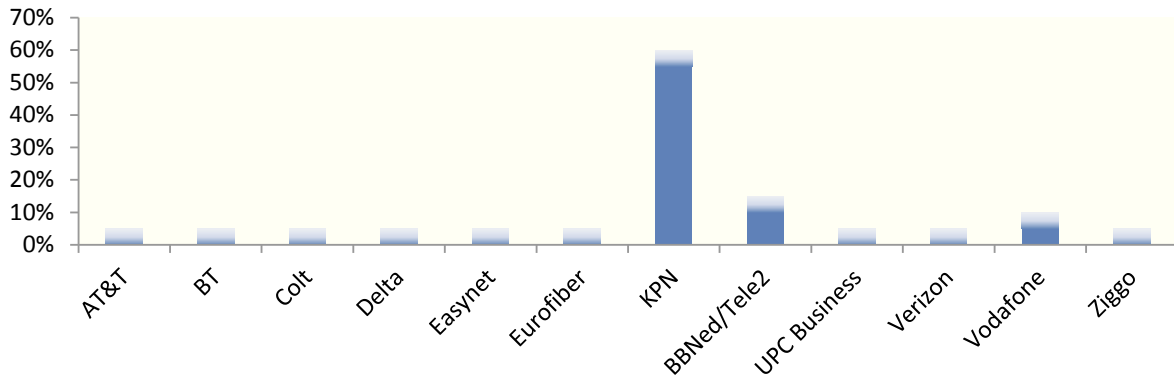


Competitor trends

KPN in 2011 had the highest market share of retail business network services at between 55 and 60 per cent. However, KPN's market share has declined slightly in recent years in part due to the fact that there is greater competition in the area of VPN services than there is in the area of leased lines. In addition to

KPN, there is a large number of competitors with a relatively small market share. Of these, Tele2 and Vodafone are the largest. Moreover, these players for the most part make use of the (regulated) access to KPN's network to enable them to supply retail business network services.

Retail Business Network Services Market Share Ratios as at 2011 Q3



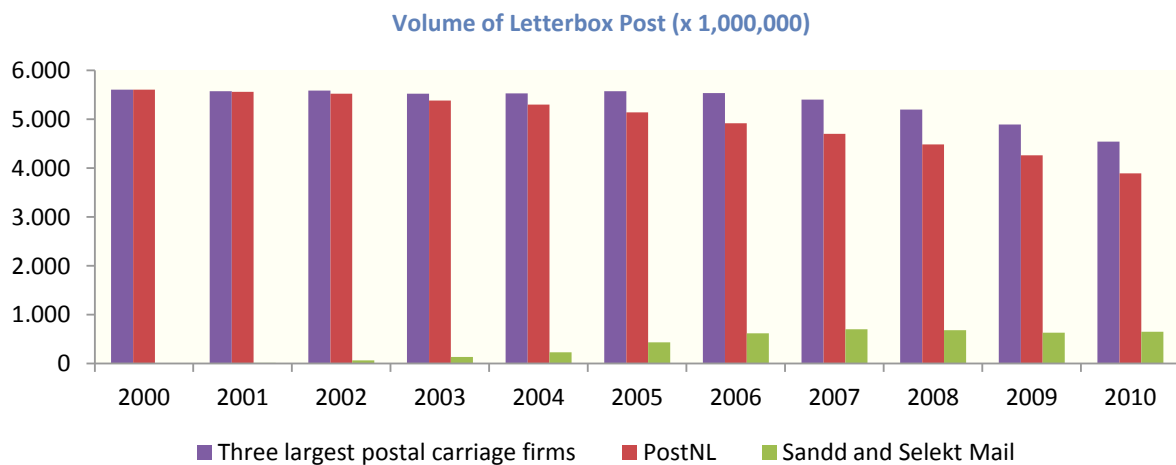
Retail business network services are supplied over various infrastructures. For example, a relatively large business establishment or a data centre may have a fibre optic connection, while smaller business establishments with lower broadband needs may still be connected over copper. At the end of 2010, approximately one third of all retail business network services were fibre optic-based. This share increased further in 2011. Aside from a retail business network service, businesses often purchase Internet access or external fixed telephony over their connection.

In contrast to copper, where KPN is the only provider that has its own connecting network, there is a larger number of fibre optic providers with their own network. If a network provider's network is in proximity to a company's office building, it can connect this company to its fibre optic network at a relatively low cost. Multiple businesses are sometimes also connected at the same time. For example, demand is bundled in business parks where, after a sufficient number of companies have signed up, the provider will install fibre optic lines to all companies that expressed an interest.

In mid-2011, a little less than half of all fibre optic connections to companies were supplied by KPN. The other half is supplied by providers such as Eurofiber, BT, Ziggo and Tele2.

Post

Almost 5.08 billion addressed postal items were delivered in the Netherlands in 2009. This number was approximately 4.76 billion in 2010. This represents a 6.7 per cent decline in volume in 2010 compared to 2009. In the previous, the decline was 4.3 per cent. At €1.6 billion, revenues in the postal market in 2010 were 5.8 per cent lower than they were in 2009. Since providers in the postal sector are obliged to supply data to the OPTA only once a year, no public figures are currently available for 2011.



Letterbox post market segments

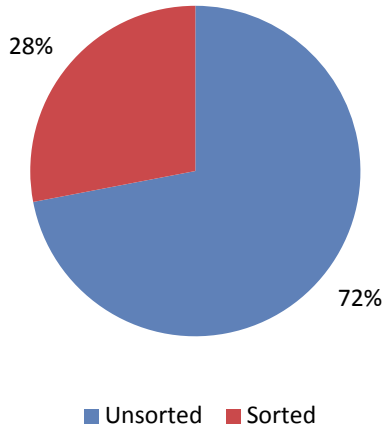
Of all addressed letterbox post, approximately 59 per cent consists of letters. Approximately 20 to 25 per cent is direct mail (addressed printed advertising) and 15 to 20 per cent consists of regular publications. These ratios have not changed in recent years.

Approximately 8 per cent of all letterbox post is sent by consumers. Large business senders (senders with a volume of at least one million postal items) at 60 to 65 per cent represent the largest share. About 30 to 35 per cent of the letterbox post is sent by other commercial senders.

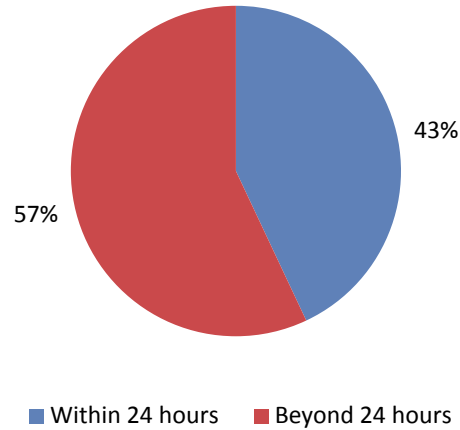
The major share - about 72 per cent - of the letterbox post is supplied unsorted by the sender. The rest - about 28 per cent - is supplied sorted. The percentage supplied sorted has risen slightly over the last few years.

In 2010, approximately 43 per cent of letterbox post was provided with an agreed delivery time of more than 24 hours after it is supplied. The rest - 57 per cent - was provided with agreement to deliver on the day after it is supplied. This ratio has not changed in recent years.

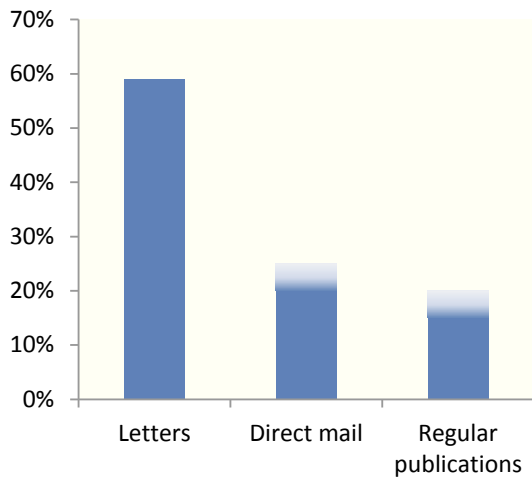
Segmentation by Sorting in 2010



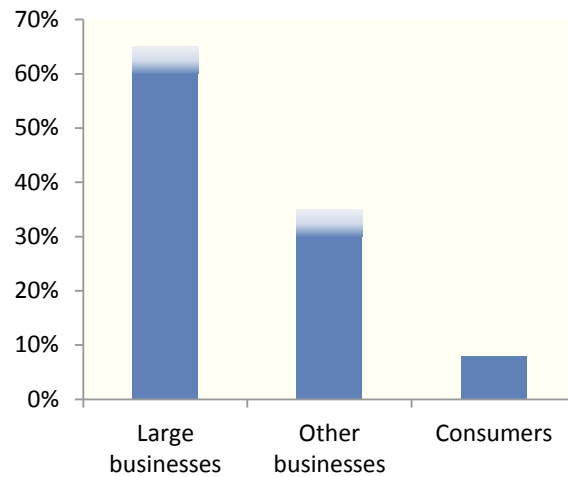
Segmentation by Delivery in 2010



Segmentation by Content in 2010



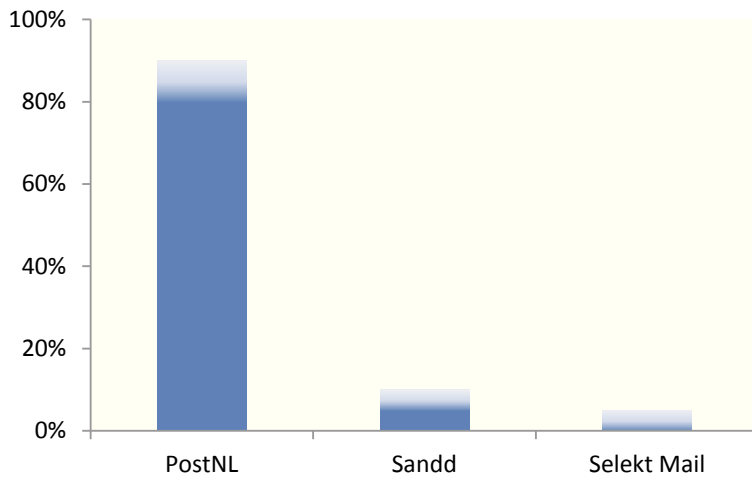
Segmentation by Customer Type in 2010



Competitor trends

PostNL's market share, including its subsidiary, VSP, remained stable in 2010. The collective market share of competitors consequently remained stable as well. As in prior years, competition was primarily focused on the delivery of direct mail and periodicals, such as magazines and papers. With the takeover of Selekt Mail's activities by Sandd, the number of players that is nationally active on the Dutch postal market was reduced to two in 2009.

Postal Carriers Market Share Ratios as at 2010



Postal carriers

In 2010, 62,000 persons were employed as postal carriers. This is more or less the same as it was in 2009. Almost two thirds of postal workers are employed under an employment contract. These postal workers are primarily employed by PostNL. The remaining postal workers are employed by other postal carriage firms, generally on the basis of an agreement of assignment. Of the remaining postal carriage firms only sheltered workshops still employ carriers with a (subsidised) employment contract. Almost 88 per cent of all postal items in 2010 were delivered by carriers with an employment contract. This percentage has declined somewhat in recent years.