ONAFHANKELIJKE POST EN TELECOMMUNICATIE AUTORITEIT

Market vision
Annual report 2003

OPTA

Market vision
and annual report 2003

Instructions

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- **Measured regulation is a key priority in 2004:**
- **Firm where necessary and flexible where feasible**

OPTA stimulates sustainable competition in the electronic communications and post markets. That is to say: a lasting situation in which private individuals and business end-users can choose between providers and services in such a way that the price and quality supply in the various constituent markets is created by effective market incentives. In the event of insufficient choice OPTA protects end-users.

These documents have been compiled on the basis of Section 17 of the Independent Post and Telecommunications Authority Act. The annual report contains the elements specified in Section 12 of the Information Statute.

Disclaimer

This translation is an unofficial and therefore non-binding translation of the original Dutch document. The Dutch text is the leading version. OPTA accepts no responsibility whatsoever for misunderstandings arising from any discrepancy or as a result of mis-translation. In such circumstances reference will be made to the original Dutch text Dutch document title, a copy of which is available upon request.

Foreword

OPTA is pleased to present its vision of the developments in the postal and communications markets, together with the results of the Market Monitors Post and Communications and the Commission's 2003 Annual Report. The visions also discuss OPTA's top priorities and objectives for the coming year.

The markets for electronic communication services are highly dynamic. In particular, developments on the markets for broadband (internet) services constitute a powerful driver. An increasing number of companies and individual consumers are utilising fast broadband services. Broadband internet via the cable television network and KPN's telecommunications infrastructure (DSL) is experiencing strong growth. The distinction between the markets for classical telephony and data services is fading. This is evident in the emergence of new technologies for telephony via the internet. In addition, an increasing number of consumers are replacing their fixed telephone connection with a mobile telephone.

Competition between infrastructures is finally emerging, in particular due to the huge popularity of broadband internet. This is good news for end-users: greater choice from a wide variety of services, from a variety of providers and from competing networks. Infrastructure competition is working well in mobile communications in Europe, and now this is also becoming evident in broadband markets.

As consumer demand for more broadband services increases, providers are stimulated to implement technological innovations in order to satisfy that demand. This also includes fibre optic connections. Providers make rational investment decisions based on the demand for specific broadband services. This market discipline also determines the speed at which innovations become opportune, ensuring that consumers do not pay too much for underdeveloped quality.

The shift from the use of classical fixed telephony to mobile and internet telephony could in time result in higher tariffs for the remaining users of the classical telephony service. After all, costs will have to be covered by fewer users. However, increased competition can put pressure on prices and result in increasingly greater choice in the telephony products available to users. For the time being, the shift is taking place at a low speed, enabling providers of classical fixed telephony to respond in a timely fashion. Once the shift gains speed, political attention will need to be devoted to the universal service of classical telephony and to the requirement of affordability.

The development of electronic communications markets requires a more economical and competition-oriented regulatory framework. The new Telecommunications Act, which is expected to be effectuated before the summer of 2004, will provide this. The premise of the new rules is the customisation of the regulatory approach to the large players on relevant markets, e.g. by guaranteeing access to networks or regulating prices. Measured regulation is of prime importance: strong when necessary and flexible where possible.

OPTA is faced with the challenge of implementing the new structure for market regulation in the next year and a half. At least eighteen markets must be defined and analysed in terms of possible positions of market power and competition problems. Issues that must be addressed by means of appropriate, proportionate measures. The decisions in which this will be determined will be preceded by national and international consultation organised by OPTA. This also serves to achieve the strongly desired European harmonisation.

The Vision gives a brief glimpse of the working method OPTA applies in defining and analysing markets. The dilemmas for which solutions must be found are explained, along with the economic themes that must be taken into account.

In addition to this special task within the framework of market regulation, OPTA will of course continue to devote attention to consumer affairs. It will actively utilise public information campaigns to reduce the lack of transparency in a number of markets. Where possible, consumers will be protected from fraud and abuse. Attention will be devoted to issues including unrequested provider changes (slamming) and unrequested e-mail (spam) in the Netherlands.

In the postal sector, market mechanisms are only functioning in niche markets for the time being. This is closely related to the structure of the postal market. In anticipation of the full liberalisation of this market after 2007, it would seem wise to introduce access obligations in certain market segments that are difficult to enter: an obligation for TPG to allow access to specific parts of its postal infrastructure. In order to ensure that competitors retain an incentive to invest, this access obligation should be temporary.

A number of European countries established cooperation in the postal sector early in 2004. As a result, a certain level of harmonisation of the growing liberalisation trend can also be achieved in this sector.

The commission is thankful to OPTA's management and staff for their efforts during the past year.

The Hague, March 2004

J.C. Arnbak, *chairman*
L.Y. Gonçalves - Ho Kang You
H.A. van Karnebeek

Reading instructions

Vision

The vision on the market for electronic communications and the vision on the postal market reflect the Commission's views on important trends and competition developments in the market, as well as on the position of the end-user. The vision on the market for electronic communications also sketches the working method used to define and analyse markets under the new Act, as well as the dilemmas involved. Both visions reflect OPTA's top priorities and objectives for the coming year.

Monitors

The market monitors for the electronic communications and postal markets present a detailed analysis of the developments in these markets. Focus is placed on competition developments. The analysis is motivated by means of graphs and tables.

Annual report

OPTA's regulatory activities are described here with references to OPTA's main objectives. This section also sketches the modification of the organisation to suit the new legislation. Account is given of matters including the working method used and OPTA's external communications. The annual report also presents a summary of key figures, OPTA's legal tasks and competencies, and a detailed glossary. The last part of the report consists of OPTA's annual accounts.

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1 Market vision

electronic communication

From OPTA's tasks

The settlement of disputes **between businesses**

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1 • Market vision electronic communication

Converging infrastructures and services are becoming a reality...

The distinction between the markets for classical telephony and data services is fading rapidly. The dynamic developments being seen on the market for broadband internet are accelerating this process. This is evident in the emergence of new technologies for telephony via the internet: Voice over IP and Voice over DSL[1], as well as in the decisions being made by a growing number of consumers to replace their fixed telephony connection with a mobile telephone (known as fixed-mobile substitution).

More broadband

An increasing number of companies and individual consumers are opting for fast broadband services. Broadband internet via the cable television network and KPN's telecommunications infrastructure (DSL) is experiencing strong growth. National coverage can now almost be achieved via KPN's network. Cable operators have been offering broadband internet via their regional networks for quite some time.
A surge in price competition in 2003, meaning that consumers can choose from increasingly less expensive and better broadband internet products. These products are also the driver of the parallel market development of increased bundling of services. Examples include: a broadband internet subscription combined with mobile telephony (I-mode), or with a low-budget subscription on the fixed telephony network or a cable television subscription. Bundling discourages switching between individual services, thus making it possible for providers to win consumer loyalty. Bundling can often render advantages for consumers, but often at the expense of transparency.
A growing number of consumers of fixed telephony connections are switching to mobile telephony. KPN asserts that this type of substitution is now seen among 7 percent of consumers[2]. This number is expected to gradually increase in the years to come. As a result, the market for classical telephony may experience pressure. The emergence of internet telephony this year[3], i.e. voice over broadband networks, will result in intensified competition. Other substitution trends will also play a part in this respect, for instance telephone calls being replaced by electronic messaging (e-mail and SMS/MMS).

Classical telephony market is on the move

The primary causes of the gradual reduction in the number of classical call minutes on KPN's telephone network are as follows:

- the decrease in internet dial-up traffic (narrowband internet) in favour of broadband internet. When a shift is made within KPN's network to a different internet service provider (ISP), the use of the network in terms of minutes does not change. A shift from narrowband internet via KPN's network to broadband internet via the cable results in a reduction in the number of minutes on KPN's network;
- the increased popularity of carrier (pre-)selection (CPS)[4]. This means that other providers offer telephony minutes to consumers via KPN's network.
  In this case, the use of the telephone network does not change because these providers purchase their minutes from KPN. What KPN experiences is a shift from retail sales to wholesale, where margins are smaller;
- substitution of the fixed telephone by the mobile telephone. This substitution is gradually increasing. An evident decrease in traffic on the public fixed telephony market is expected over a period of 5 to 7 years[2];
- substitution of classically switched telephone minutes by packets of call minutes via the internet. The consequences within the telephone network need not be significant; see under 1). Use of the telephone network decreases when a switch is made to the services of other network providers.

Less classical telephony

A decrease in the use of the fixed public telephone network could result in higher tariffs for users of classical fixed telephony services on that network. After all, the costs are then covered by fewer users. However, increased competition can put pressure on prices and result in increasingly greater choice in the telephony products available to users. For the time being, the speed of the shift is low, enabling providers of classical fixed telephony to respond in a timely fashion. Once the shift gains speed, political attention will need to be devoted to the universal service of classical telephony and to the requirement of affordability. This development not only affects the fixed telephony services provided by KPN, but also those of CPS providers. All providers of classical telephony can be expected to consider expanding their service portfolio

1 Voice over IP is the generic name for voice over the IP protocol; Voice over DSL is its implementation in the DSL technology. In principle, users do not notice a difference; sometimes the technology used can determine the quality of the service.
2 Source: KPN. From "Fixed Mobile Substitution in the Netherlands", Market research and high level strategic analysis for OPTA, OVUM (2003)
3 Third/fourth infrastructure providers are already offering VoDSL services; some ISPs and cable operators have publicly announced their intention to commercially offer this service in 2004.
4 The market monitor shows a limited increase in the use of CPS in 2003. To date, the strongest growth was seen in 2002.

with VoIP/VoDSL services. CPS providers will also study scenarios in which fixed telephony is bundled with internet and mobile telephony.

All in all, the fierce competition on the broadband internet market also results in more competition on the telephony market. Bundling with mobile services and substitution trends will cause the traditional lines between the various markets to fade.

... and infrastructure competition is on the rise

On the level of infrastructures, competition is primarily seen between the cable networks and KPN's telecommunications network for the time being. Over time, these networks are developing into what are known as vertically-integrated fixed network platforms, each of which provide not only telephony but also broadband and television, called the triple-play scenario. The key factor in this competition is ownership of the local loop. Other parties with their own infrastructure have not yet achieved this, but are rolling out their own networks at this time up to these local loops. Examples include BBNed and Versatel. With access to KPN's local loop, these providers can also serve their customers. Initially these providers focus primarily on small business customers in order to achieve sufficient scale. In some areas of the country, these providers have already expanded their activities to service private consumers.

Infrastructure competition

Convergence and innovation are driving market developments in the communications sector. The increasing competition between infrastructures is important in this respect. The technologies applied (cable, DSL via the telephone network) are not relevant to strong competition. The only thing of importance to the end-user is the opportunity to choose between a wide variety of services available from competing companies over competing platforms.

Infrastructure competition has functioned well in the mobile markets: there are now five network providers with a complete range of services. These markets no longer need extensive regulation. The greatest problem areas are related to termination of traffic on other mobile networks (mobile termination). The market mechanisms do not work here. This will therefore require continued regulation. Infrastructure competition is also taking shape in the fixed markets: in broadband markets end-users are already benefiting from the competition between KPN and the cable operators. These developments are more advanced in other European countries; for example in Denmark.

The emergence and effect of infrastructure competition in Denmark

Denmark has three competing infrastructures: telecommunication networks, cable networks and, especially in thinly populated regions, networks that combine fixed and wireless connections (referred to as fixed-wireless access). There are virtually no areas in which only one infrastructure serves end-users. Notably, Denmark is also the country in Europe with the highest penetration of broadband internet (10.4%[5] in 2003). This shows that infrastructure competition is not only possible despite a low population density, but that it also stimulates the demand for broadband products.
The top four countries in Europe in terms of broadband penetration are Denmark, Belgium, Sweden and the Netherlands. In three of these countries, including the Netherlands, this is primarily due to infrastructure competition. Sweden originally had only one dominant infrastructure provider that held the public telephone network as well as a large part of the cable television network. As of early 2003, the cable network and the public telephony network are no longer controlled by a single party. The market dynamics have since improved, with a significant increase in the use of unbundled local loop lines by other providers instead of through resale.

Providers of electronic communication employ rational economic considerations when making the make-or-buy decision with reference to infrastructure. Their investments are proportionate to the demand for certain services, to the levels of quality (e.g. connection speed), and are based on prices that cover the costs. This is also evident in the studies that are being performed with reference to the construction of new fibre-optic local loops and/or replacement of the existing local loop by fibre-optic cable[6]. Various municipalities have announced that they are interested in fibre-optic connections for every inhabitant. KPN advocated[7] a single, national fibre-optic local loop. Cable operators argue that fibre optic is an evolutionary development being driven by competition. It is also emphasised that due to pressure from competition and via private initiatives a revolution is occurring in the utilisation of existing infrastructures, which appear

5 This penetration was calculated as broadband connections per inhabitant. See the market monitor for more information regarding penetration levels and infrastructure roll-out.
6 More extensive replacement by optic fibre is only relevant for local loops such as KPN's copper local loop, the cable operators' coaxial networks, and the expectation that alternative network providers will have their own fibre-optic local loops.
7 www.kpn.com, KPN en maatschappij, Deltaplan Glas (KPN and society: Fibre-optic Delta Plan) (October 2003)
8 Platform Nederland Breed, Breedband, Economie en Maatschappij (Platform Nederland Breed, Broadband, Economy and Society) (January 2004)

to be able to do more and more when it comes to bandwidth and speed.[8]

Not a natural monopoly

Current infrastructure developments show that there is no natural monopoly in large parts of the networks[9]. Local loops demonstrate the largest number of characteristics of a natural monopoly, but these characteristics appear to be gradually decreasing as technological developments continue.
The user reaps more benefits from competing network platforms. The price and quality of the services are established through market discipline, in which the threat of potential third and fourth competitors also plays a part.
As consumer demand for more broadband services increases, providers are stimulated to implement the relevant technological innovations needed to satisfy that demand, including fibre-optic local loops. The actual demand and the rational investment decisions made by the market based on that demand determine the speed at which these innovations become opportune. It remains to be seen whether and, if so, when intervention by the government will be needed. Further development of competition infrastructures must not be obstructed. Companies make technology choices, and do so better than the government. The market itself is the party best capable of selecting the winners.

The dynamics in the communications markets will soon be accelerated by the arrival of wireless broadband internet and alternative providers of television services, such as Digitenne. The trend of bundling fixed and mobile services in a wide variety of ways will continue. This will present consumers with a broad range of new services at competitive prices.

New Telecommunications Act strengthens instrumentation...

The development of electronic communications markets requires a more economical and competition-oriented regulation framework. The new Telecommunications Act, which is expected to be effectuated before the summer of 2004, will provide this. The premise of the new rules is customisation of the regulatory approach to the large players on relevant markets, for example in providing access to networks or regulating prices. Measured regulation is of prime importance: strong when necessary and flexible where possible.

Market definition

Based on the new Act, OPTA's task is to define eighteen relevant markets. Each market will be analysed as to the extent that competition actually occurs. If a position of significant market power (SMP) is identified on a market, there is no effective competition. The ensuing market problems will be identified and OPTA will take decisions to formulate appropriate measures (remedies).
Consultation will be organised regarding the draft findings on a national level (with market parties and interested parties) and on an international level (with regulators in other countries and the European Commission). The European Commission will also determine whether the content of the decisions is in keeping with the European rules. This system is intended to result in improved predictability and transparency in the actions of regulators as well as in harmonisation of regulation in Europe.
Once the new Telecommunications Act has been effectuated, OPTA can effectively start its work on the market definitions, analyses and relevant decisions. Many preparations have already been made[10]. The decisions, however, will not be ready immediately. A vacuum must be prevented. The existing rules and obligations will remain in force during the transition period. OPTA will continue to address issues with these rules but will also anticipate the new regime in so far as possible.

... and will bring customisation

The new regime will bring customisation to the various sub-markets in electronic communications. Each market has its own characteristics. The national regulators will be faced with many dilemmas while defining the markets and considering possible measures. These dilemmas may pertain to defining the relevant markets, to analysing the extent of competition on those markets, and to determining whether, and if so which, obligations are applicable, fitting and effective. Many economic themes will play a part in this respect.
Examples of these economic themes are: infrastructure versus services based competition; taking innovation into account; how to deal with bundling of services and price discrimination. OPTA recently established an Economic Analysis Team[11] that has already published an initial consideration of the steps that could be taken from an economic perspective in the attempt to find a balance between infrastructure and services based competition.

9 An economic situation in which the consumer can best be served in terms of price and quality by a single infrastructure because the average costs per unit decrease as the scale increases.
10 See www.opta.nl under Market Analysis
11 OPTA's Economic Analysis Team (EAT) studies relevant economic issues and publishes its findings in Economic and Regulatory Policy Notes.
For more information see www.opta.nl.

Issues when considering the balance between infrastructure and services based competition:

1 What is the objective/objectives of the access measure?
2 Why is an access measure the best instrument for achieving this objective?
3 Considering the type of access, can the imposition of obligations be unequivocally explained?
4 Substantiate why the infrastructure cannot be (easily) replicated and what the consequences are on the tariff structure.
5 Substantiate if the infrastructure in question is new or old and what the consequences are on the tariff structure.
6 Apply a start-up scenario to address the asymmetrical position of new entrants.
7 Indicate the conditions/market situations in which the asymmetrical regulation will be removed.
8 If the considerations result in conflicts with the past, this must be explicitly addressed. The deviations must be logical and explainable on the basis of principles. Principles may not be deviated from without good reason.

Source: EPN01,Economic Considerations on Balancing Infrastructure and Services Based Competition

Harmonisation

Also on the international level, effort is being devoted to a harmonised approach to competition issues. The European Regulators Group (ERG)[12] has published a remedy paper regarding the approach to proportionate remedies.[13] This document is an important guideline in analysing markets, competition issues and possible remedies. These efforts emphatically focus on anti-competitive behaviour.

Competition issues

A short summary of the major competition issues identified in the market analysis is given below, along with the major parts of the repertoire of possible remedies. The remedies cannot be linked to the competition issues on a one-to-one basis because each individual case requires a seperate, most appropriate remedy. This summary is therefore not exhaustive.

Working method

The new Telecommunications Act introduces a new system for imposing obligations on parties with significant market power. The obligations must be based on an analysis of the markets. The market analyses are performed on the basis of the principles of general competition law. The working method is explained below. To give an example, the dilemmas involved in the analysis of two major markets are then discussed.

Table 2 **MARKET BEHAVIOUR**
problems and remedies

Market behaviour	Competition issue[14]	Repertoire of remedies
Vertical leveraging of market power	Refusal to deal	Information transparency
	Excessive prices, predatory prices	Non-discrimination, often in combination with transparency and/or accounting separation
	Bundling of services	Accounting separation in order to make internal settlement prices transparent and to enable verification of non-discrimination or unreasonable cross subsidising
	Delay tactics	Access, including a wide range of different remedies for access or interconnection or use of specific network elements
	Abuse of information	Price control and tariff control system, with the objective of combating excessive or squeeze prices and/or preventing price squeeze
Horizontal leveraging of market power	Bundling	
	Anti-competitive cross subsidising	
Exercising market dominance	Blocking access, forcing competitors from the market	
	Abusive pricing such as excessive prices and price discrimination (allocation inefficiencies)	
	Productive inefficiencies related to investment levels, quality and costs	
Terminating traffic (two-way access)	Access refusal	
	Price discrimination	
	Refusal of interconnection	
	Excessive wholesale prices	
	Provider collusion	

12 The ERG is a cooperative organisation between European regulators as affiliated in the International Regulators Group (IRG) and the European Commission.
13 See www.erg.eu.int
14 The objective of this behaviour is to substantially reduce competition and/or force competitors from the market.

Working method for market definition, market analysis and imposition of proportionate obligations

A market analysis consists of two phases: the definition of the relevant product and geographic market, and the identification of any parties with significant market power on the relevant market. If such parties are identified, the fitting and proportionate obligations for these parties are determined during a third phase.

During the phase in which the relevant market is defined a study is made of those services that compete with one another and those which do not. In fact, the borders of the playing field in which the competition takes place are drawn. For example, the extent is determined to which mobile telephony is an alternative for the buyers of fixed telephony in an economic sense (demand substitution) along with the extent to which providers of mobile telephony can quickly provide fixed telephony services without significant investments (supply substitution).

Once the relevant market has been defined, a study is undertaken to determine whether parties with significant market power are present on that market. Are there parties that, based on the strong position they hold on the market, can behave independently of their competitors and buyers? In determining significant market power, various economic criteria are considered including market shares, development of market shares, economies of scale and scope, any buyer power, entry barriers and potential competition. These criteria are considered in their interrelationships. The dominance analysis is also intended to identify any (potential) competition problems in the market.

If significant market power is identified, ex-ante obligations can be imposed. In this respect, a motivated choice must be made from the 'menu' offered by the Telecommunications Act. This menu includes obligations such as access, non-discrimination, transparency, administrative separation, cost orientation, and other types of price regulation. The obligations must be based on the (potential) competition issues identified in the market analysis, and must be proportionate to the lack of competition as identified.

Dilemmas and research issues in regulating markets for electronic communications

The following two examples discuss possible dilemmas and research issues that pertain to the studies and analyses described above. This is purely intended to give insight into the main lines of the working method used for market definition and analysis. Only after the analysis can the way to address these dilemmas be determined. These examples are explicitly not intended to anticipate the final outcome. No rights may therefore be derived from the contents of these examples.

The market for broadband services

1 • The starting point is defining the broadband product market for end-users

Analysis of demand substitution and supply substitution

A distinction can be made between narrowband and broadband services *based on product characteristics*. In comparison to narrowband (internet), broadband (internet) is distinctive on the basis of the following characteristics: a larger capacity (speed), always on, and a flat rate tariff. The tentative conclusion is that a separate market for broadband exists.

A distinction can be made between *various types of end-users*. Think in this respect of the distinction between (large) business customers, small and medium-sized businesses, and consumers. It may also be possible that complete products, for example a combination of voice telephony, data communication and internet access in a single package represents a separate market for large business users with multiple branches. The analysis must determine whether a distinction can be made between, for example, a business market for broadband internet access and a consumer market for broadband internet, or – again for example – whether there is a separate market for large companies.

End-users in the Netherlands can acquire access to broadband internet services via a variety of infrastructures. Via DSL technology on KPN's local loop, for example, or via the cable television networks, or via satellite or Wifi. At this time, broadband internet services via Wifi, satellite and UMTS do not appear to be a viable substitute for end-users. However, broadband internet via the cable and broadband internet via DSL do appear to be substitutes for one another. An important issue in this respect is whether the services provided by means of these technologies are the same for all types of end-users. If this is the case, they may be substitutes.

An analysis should also be performed of the possibilities of each of the technologies to satisfy the growing demand for more bandwidth. As the divergence in the technical possibilities for supplying more bandwidth grows, separate relevant markets may exist.

2 • Analysis of the geographic market for end-users

The conditions for competition are comparable all over the Netherlands. The number of DSL connections is rapidly growing. KPN expects, for example, a roll-out to all number exchanges, thus to about 95% of all households in the Netherlands in the course of 2004. Cable networks traditionally have a higher penetration: more than 90% of all households are connected to a cable network. However, not all of these networks are suitable for broadband services. Because KPN has national coverage and to date has not differentiated its tariffs based on region, the cable operators experience indirect price pressure through, for example, the pricing system applied by KPN and other DSL providers that have a relatively high level of coverage. It would appear that there is a single, national market.

3 • Analysis of significant market power

A tentative analysis indicates that as of the end of 2003, the number of DSL connections was higher than the number of cable connections. KPN is responsible for 80 percent of these DSL connections; other parties for 20 percent. The market share held by KPN is at least 40 percent if the end-user market is considered to include cable connections. If regulation is not included in the considerations, the market structure appears to be oligopolistic.

The analysis will take developments in the near future into account. It is being determined whether other technologies and networks will present serious alternatives in the next two to three years. This specifically pertains to satellite, wireless local loops and fibre-optic networks. This analysis renders an estimation of potential competition.

4 • Analysis of the wholesale market

The European Commission has defined two wholesale markets:

- unbundled access to the local loop, by means of either unbundling or shared access;
- wholesale broadband access for providing broadband transmission capacity between the end-user and the access requestor's interconnection point.

The *product characteristics* of unbundled access to the local loop differ from those for wholesale broadband access. Unbundled access is only effective for telecommunication providers who invest heavily and there are five hundred potential access locations. Unbundled access is a type of infrastructure competition. In that sense, unbundled access and wholesale broadband access do

not appear to be substitutes. Unbundled access takes place on the local level. Access at this (local) level in the network hierarchy is not made available to third parties by cable operators, which means that there is no competitive pressure from the cable. The tentative conclusion is that a separate relevant market exists for unbundled access.

Wholesale broadband access can be offered at various points in the network. Because wholesale broadband access is available at the regional level in the network hierarchy and because this involves access to existing facilities, fewer investments will be needed than for unbundled access. Wholesale broadband access appears to complement unbundled access, and offers the possibility of product differentiation in the end-user market. Resale of the DSL service does not offer this product differentiation because entrants can as yet add very little. Thus the tentative conclusion is that wholesale broadband access is a separate relevant market.

Whether access for ISPs to cable networks can be a serious competitor for wholesale broadband access must be determined. At this time, cable operators do not offer access to their networks to ISPs other than their own. However, a certain amount of competitive pressure may be exerted by vertically integrated cable operators on the providers of wholesale broadband access. The extent of this competitive pressure must be studied. Also relevant is a survey of the differences in the quality of access to the cable as compared to the quality of wholesale broadband access, as well as a study of whether access to the cable can be complementary to unbundled access to the local loop.

If competition via the cable is part of the same relevant market, it must be determined whether the regional dominance of cable operators is a determinant factor in defining the geographic product market.

5 • Dilemmas involved in significant market power and proportionate remedies

If unbundled access to the local loop is a separate relevant market, KPN holds significant market power amounting to one hundred percent. Combined with the growth of a dominant position in the end-user market, this may necessitate appropriate remedies in the market for unbundled access.

If a party with significant market power is identified on the market for wholesale broadband access, OPTA will also have to impose appropriate remedies. Important in this respect is the question of whether regulation of the wholesale market for unbundled access is sufficient to solve actual and/or potential competition problems in the market for broadband access.

Other competition characteristics must also be considered in the analysis: wholesale broadband access is more a type of services based competition, and unbundled access is more a type of infrastructure competition. After all, in the case of wholesale broadband access, entrants need to invest much less for rolling out their own networks and facilities. In finding a balance between these types of competition the considerations may result in the conclusion that lighter measures are more fitting for wholesale broadband access than those needed for unbundled access. Economically justified and consistent regulation is therefore dependent on the extent of regulation of unbundled access and the extent to which investments in alternative infrastructures should be stimulated.

This could mean, for example, that an access obligation is imposed for wholesale broadband access, but that the price regulation will be lighter than price regulation based on cost orientation if the latter proves appropriate for unbundled access.

Future developments

Potential developments must also be considered in the analysis. Examples include the emergence of direct internet access without the intervention of an ISP, and thus the positions of ISPs in the longer term, and the introduction of internet telephony (Voice over DSL). Initiatives for implementing a new fibre optic local loop may also affect the definition and analysis of the broadband market. Last but not least, the consequences that these developments will have on the classical telephony market must be analysed.

The market for call termination of mobile services

1 • The market definition from the perspective of end-users

End-users do not actually purchase call termination as a separate service. Call termination is an essential part of the mobile telephony service. The provider is the mobile operator that provides termination of a call to an end-user on its own mobile network for another provider of (fixed or mobile) telephony. Call termination is a wholesale service. In evaluating the characteristics of the market, the mechanisms in the retail trade market for mobile and fixed telephony must be analysed as well.

Analysis of demand substitution and supply substitution

Based on product characteristics, no other services can be identified that are the same and that therefore can serve as a substitute for the service 'call termination on individual mobile networks'. Each network is connected to separate, unique destinations and thus distinguishes itself from other mobile networks.

No distinction can be made between different types of end-users. Each type of end-user has the same demand: that their mobile call is terminated at its destination. That is always the individual network to which the party receiving the call is connected. Demand substitution and supply substitution are not possible.

The conclusion is therefore that a separate relevant market exists for call termination on an individual network. Each network is a separate relevant market.

2 • Analysis of the geographic market for end-users

The relevant geographic market is the entire Netherlands (national). Both legally (via the license for the provision of national services) and literally, all five mobile network providers have national coverage.

3 • Analysis of significant market power

Because each individual network is a separate relevant market, by definition the operator of each network holds significant market power of one hundred percent. For call termination, the operator can behave independently of its competitors to a significant extent.

4 • Analysis of the wholesale market

The wholesale market for call termination is created when fixed and mobile networks are connected. This is in part a consequence of the legal obligation of safeguarding the interoperability of mobile telephony services. This obligation will remain in force under the new Telecommunications Act.

There are no distinctive product characteristics for call termination on individual mobile networks. The networks cannot compete against one another on a service that best reaches the destination that the caller wants. This is because that destination is unique for that one individual network to which the party being called is connected. Thus there is no competetive pressure. Each provider is a monopolist on its own network.

Entering the market for call termination is not possible without a license to operate a mobile network. The market consists of five mobile network providers. No new licenses will be available in the foreseeable future. Mobile virtual network operators (MVNOs) enter the market by acquiring access on a commercial level to one of the five mobile networks, but they do not exercise competitive pressure on the individual markets for call termination.

Here, too, the geographic product market is national. It is a derivative of the geographic product market for end-users.

5 • Proportionate remedies

The characteristics of the market offer neither room nor stimuli for sustainable competition. Each network operator will retain one hundred percent significant market power. This means that appropriate remedies must be imposed. In any case, the interoperability of the individual mobile networks must be safeguarded.

The individual mobile network operator can behave independently of its competitors to a significant extent. The opposite of this is the possibility of tacit collusion, in which the market parties attune the tariffs for call termination amongst themselves. Because calling end-users, on mobile as well as on fixed networks, do not have a choice, both types of behaviour can result in excessively high end-user tariffs. Both types of market behaviour must therefore be considered in the analysis[15].

Because each mobile network operator is a monopolist for call termination on its own market, the relevant wholesale tariff needs regulation. The lack of choice weighs heavily. A strict type of cost orientation could be the most proportionate remedy for regulation of terminating tariffs.

15 At this time, there are no specific indications of tacit collusion. The results of studies performed by the NMa will be considered and the NMA will cooperate closely with OPTA.

The mobile providers reduced these tariffs on 1 January 2004. Additional steps will follow in the course of 2004 and 2005. The market analysis will determine whether a further reduction of the tariffs after 2005 is necessary and appropriate.

The analysis of horizontal themes, that is themes that cover multiple markets, is also necessary. Important themes include:

- Vertical Integration: to what extent does vertical integration of companies result in specific problems on the markets? Think in this respect of anti-competitive bundling of various services, or price discrimination.
- Innovation: when does innovation truly occur and in what way should remedies be formulated in order to avoid discouraging innovation? A related theme is the analysis of emerging markets for new services.
- Leveraging of market power and horizontal integration: when can market power be considered leveraged with the objective of forcing competitors out of the market or keeping them from the market? What are the short-term and long-term effects?

The following example illustrates the relevance of these questions.

Emerging services and future regulation

The emergence of internet telephony demonstrates how important it is that regulation be technologically neutral. To what extent is the choice of technology the determinant factor for the service? The service itself determines the way in which the market is determined. If technology gives a service its own specific character, making it impossible to substitute it for a different service, a separate market could be derived from this. However, if a new technology ensures that an existing service can be provided more efficiently, this need not be the case. If consumers consider the service to be a substitute for another service, then the two services often belong to the same market.

It is therefore important to determine what is actually changed by new technology. And how the changing provision of services affects consumer behaviour. Thus new technology cannot always be equated with a new, emerging market. In an emerging market, in which everything is new, it is wise to be careful in imposing rules. In such markets, the initiator is the dominant provider in the beginning, and also the party that takes the highest risk by investing in the new service. If the service becomes popular, competing providers will enter the market and the initiator's dominant position will diminish. Thus that position may be temporary and in fact necessary in order to earn back the initial investments. Immediately imposing access obligations for example, would be unreasonable in that respect because it would create a heavy obligation whereas the fact that the chance of continued dominance is small. Moreover, this actually discourages parties from taking innovative initiatives.

In a market in which services are offered in another technical and often less expensive way, refraining from imposing an access obligation is not self evident. This also means that the competition regulator must keep a close watch on the situation. A problem could occur if a company uses technology to create entry barriers. Linking infrastructure and technology could exclude others. Another possible problem is what is called 'leveraging of market power'. This means that a company that holds a position of power on an existing market also attempts to acquire the same position of power for the new technological variant. In itself, this is logical entrepreneurial behaviour. However, a possible competition problem is created if the manner in which the company attempts to retain its position of power is oriented towards keeping or forcing other providers from the market, or preventing them from entering the market. In that case, the regulator must take action.

Market study and analysis is needed to determine what the relevant market is. This is not only true for internet telephony, but also for other future services. Either outcome is possible. If the analysis of the effect of technology is performed correctly, this will safeguard technology-independent, sustainable regulation.

Consumers must have sufficient information to make a choice...

OPTA's objective is to offer end-users the long-term advantages of properly functioning market mechanisms. At the same time, OPTA ensures that in reaching this goal the end-user is not impeded along the way. Key factors of consumer protection are the active provision of information for the public and measures directed at the prevention of fraud and abuse.

Less transparency

More and more services are available to end-users. The developments of converging networks and technologies as sketched above make the possibilities seem endless: fast broadband internet, telephony over the internet, television over the internet, all services via the cable, etcetera. More choice in terms of availability, quality and price is certainly a gain. However, on the other side, the transparency of the available electronic communications services is decreasing, giving more cause to worry about fraud and violation of privacy. The end-user must also be able to make optimal use of the enhanced freedom of choice. Unnecessary transaction costs must be prevented.

It is important that end-users are not frustrated in their choice by a lack of information, lack of transparency, or lack of comparability of the information. Consumers must be well informed about the diverse and sometimes complex choices available. OPTA believes it bears part of the responsibility for enhancing this transparency, for example with reference to tariffs or quality. This is why OPTA will undertake measures to inform the public more actively, for example by publishing tariff comparisons on the OPTA website.

Switching

There are also obstacles when consumers want to switch providers. It is now relatively easy for a consumer to take his existing number with him to a different provider, but in 2003 the rules for number portability needed to be tightened. When consumers want to change to another broadband internet provider, switching is more difficult. Methods employed by providers to retain consumers by creating obstacles when switching, the so-called 'consumer lock-in', are in violation of the law. OPTA will combat such methods.

Last but not least, informing the public will also be done to help consumers utilise their freedom of choice, by giving them information about where and with which parties obstacles for switching can be expected and also where this is not the case. If consumers are more aware of their options, they themselves can play an active part in removing switching obstacles. Some consumers can already be seen to opt for providers who do not obstruct switching. This development exerts effective pressure on all providers.

...and protected against fraudulent practices

Providers can abuse the lack of information for end-users and the lack of transparency in the market. One of the more sizeable problems is that of spam. This is not only a problem for consumers, but also for the network operators and ISPs. OPTA's options for addressing this problem are limited to providers in the Netherlands. However, most unrequested e-mail originates in other countries. Because the majority of the problem of spam goes beyond national borders, OPTA will work with other national regulators to determine an international approach.

In the Netherlands, OPTA will do more than enforce the law. It will actively inform the public to show to reject spam, for example by using spam filters. Actively supplying information can also stimulate consumer awareness of individual responsibility, for example for thoroughly reading general conditions before registering or purchasing on the internet.

Spam

ISPs must and can ensure that consumers protect themselves from spam as well as possible. It is not per se necessary to regulate this. Perhaps an economic approach to spam is more effective. Currently, it costs virtually nothing to send and receive an e-mail message. Sending (hundreds of) thousands of messages is more than worth the effort for the spammers. Even one response out of a million renders a profit. It could be possible to implement digital 'postage' for the types of e-mails that spammers distribute. The postage price need not be high to discourage senders of spam. This would make it possible for ISPs to distinguish bona fide messages from organisations, e.g. mail order companies, from spam. Another method is requesting a deposit for the delivery of messages to the individual users. If numerous complaints are received from users, the deposit could be forfeited.[16]

Slamming

OPTA will also keep a close eye on the practice of unrequested telecom provider switching (slamming).[17] Although this phenomenon diminished in 2003 for fixed telephony, OPTA will remain alert to ensure that it does not become a problem again or for other services. OPTA also continues to ask constant attention for preventing and combating abuse and fraud, for example by means of mobile call numbers.

Choice

The end-user's choice of a certain service provider is now often determined by the characteristics of the service with which calls or messages are sent. The end-user does not yet choose on the basis of the characteristics of what is received. However, a number of the problems discussed

16 Source: Economist, 14 February 2004

above are experienced at the time of receipt (spam, telephone soliciting, receiving costly SMS messages). Some end-users will change their choice as a result. They will opt for providers who ensure that they only receive what they want to receive. Examples are providers that offer good spam filters for e-mail users, or providers that actively frustrate telephone soliciting.

While providers were initially encouraged to employ self regulation in order to better protect consumers, the situation must be monitored. If self regulation does not offer the desired safeguards, OPTA will advocate rules. Rules that can be enforced in actual practice so that consumers truly benefit.

Interoperability

Lastly, OPTA will watch the interoperability of the services available over the various networks. This is always necessary for telephone services, and sometimes for other services too. A lack of interoperability may create obstacles for consumers, e.g. when changing to a different provider. This is important in telephony. For other services, this may have a distinguishing effect if a service is only interoperable within a certain network or with other selected networks. This promotes competition. In such cases, it is wise to hold back.

17 The definition of slamming is: a provider of voice telephony services delivers the end-user's outgoing traffic while the end-user has not given permission to do so.

OPTA priorities

A number of the themes discussed above are included in OPTA's list of top priorities:

Market-oriented priorities and priorities with respect to content

Priority	Objective
Sub-market decisions: make decisions that define sub-markets and designate parties with significant market power. Impose proportionate remedies.	The market definitions and dominance analyses will be ready at the end of 2004, so that the remedies to be imposed per market are clear. OPTA will also respond to notifications in time.
Unrequested e-mail (spam)	The trouble caused by spam is decreasing, thanks not only to focused law enforcement but also to cooperation with other regulators and actively informing consumers. Where possible, these problems will also be addressed internationally.
Unrequested or pressured provider switching (slamming)	The number of cases of slamming is visibly decreasing. The same applies to the number of complaints.
Transparency of terms and tariffs	Cloudy situations for end-users are alleviated by means of actively informing the public
Interoperability policy	Policy rules for interoperability will be ready and transparent by the end of 2004. The policy rules are clear and attuned at the European level. Disputes will be limited to matters of principle.
Auctioning numbers	New task: the internal organisation will be ready on schedule and applications will be processed free of errors.
Strengthening of legal foundation	The substance of the legal foundation of decisions will be intensified.
Improved internal and external communication policy	The internal and external communication has been improved. Transparency of work in progress has been enhanced.

Organisational priorities

Priority	Objective
Adequate processing of consumer complaints and disputes	The organisation is capable of settling disputes within fixed periods. The procedures are transparent. Clear agreements are made with the Foundation for Consumer Complaints[18].
Attune internal organisation to new activities.	Fully implemented in 2004.
Improve policy processes and increase transparency	Plan-oriented working method is reinforced. Service agreements and competence management are enhanced.

18 The Foundation for Consumer Complaints (Stichting Geschillencommissie) will still be expected to process the majority of consumer disputes. A consumer needs transparency in terms of which organisation he must adrress in case of complaints.

2 Market vision

post

From OPTA's tasks

Imposition of fines

Where relevant regulations are not observed

2 • Market vision post

Effective market mechanisms in the postal market require patience...

The effectiveness of market mechanisms on the postal market will be limited in the coming years to those segments of the market that have long been liberalised, such as outgoing international post, the distribution of direct mail and delivery of newspapers and magazines. The existing monopoly held by TPG Post for letters up to 100 grams will be reduced to letters up to 50 grams in 2006. With this measure six percent of the existing 100 gram monopoly will be liberalised. As from 2007 further liberalisation of the market is expected, parallel to similar measures in Germany and the United Kingdom.[1]

The Market Monitor Post shows that TPG Post holds a market share of virtually 100 percent on the consumer market. On the business market, TPG Post holds a market share in all segments of at least 90 percent, with the exception of unaddressed printed matter, magazines, newspapers (2 percent), parcels sent from businesses to consumers (56 percent) and parcels sent from business to business (26 percent). In the liberalised parts of the postal market, TPG often still holds a position of power. TPG possibly profits from the advantage of being able to bundle its services in the liberalised part with the services in which it holds a monopoly. Market mechanisms are primarily effective in the categories of unaddressed printed matter and magazine deliveries.

Niche competition

For unaddressed printed matter, the market shares (measured in terms of volume) are held by TPG Post and its subsidiary Netwerk VSP (45 percent collectively), Interlanden SG (23 percent, part of Deutsche Post), and the Alfa Groep (15 percent). The other 17 percent of this market is highly fragmented.
For magazines the market shares are held by TPG Post (45 percent) and Media Expresse (52 percent), with only 3 percent for other providers.[2] Thus here exists actually a duopoly. After acquisition of the contracts that Media Expresse had with VNU (Sanoma), the market share held by TPG Post is expected to increase to 97 percent.
Thus existing market mechanisms are primarily effective in specific segments of the postal market. What can be seen is actually niche competition. This type of competition specifically emerged because deliveries can be efficiently organised de-centrally via franchise holders. The causes of niche competition include (the lack of sufficient) scale, the (in)ability to duplicate the finely meshed collection and distribution networks that already exist, the (im)possibility of increasing delivery frequencies and the (in)ability to make deliveries at unusual times (newspapers).

Substitution

The total physical postal market is slowly but surely experiencing the effects of competition from electronic message traffic (substitution of physical messages by electronic messages). TPG expects the volumes to have decreased by 20 percent in 2010 as compared to 2002. This represents a few percentage points each year. The emergence of digital signatures can enhance this substitution trend. However, a strict approach to unrequested electronic messages can have a favourable effect on direct mail and unaddressed post. To a certain extent, physical post and electronic message traffic appear to be communicating vessels.

... and may be stimulated by a (temporary) access obligation to existing infrastructure

Not only liberalisation of the entire market is important to further development of competition but also other entry barriers must be done away with. One of these entry barriers is the extent to which a competitor can develop its own postal infrastructure in a manner that is economically viable.

In finding a balance between infrastructure competition and services competition, a number of economic issues must be included in the considerations. These include the degree of difficulty in duplicating existing infrastructure, whether or not access obligations are imposed, and whether access to existing or to new infrastructure is involved.[3]

Temporary access obligation

The Market Monitor Post shows that the value chain of post deliveries consists of four separate links: collection, sorting, transport and distribution. TPG's postal infrastructure includes all of these. The difficulty of duplicating these links is one of the determining factors in the emergence of competing postal networks. This is not a problem for most of the links. Duplication difficulties are primarily seen in the collection and delivery links for consumer post. A study performed for the Ministry of Economic Affairs indicated that these parts of the postal infrastructure reflect characteristics of a natural monopoly.[4] This is not so much the case with sorting and transport.

1 See also the Memorandum Post , Ministry of Economic Affairs, www.minez.nl
2 Source: TNO STB-03-30, Basic data post deliveries 2003: volume shares and size of postal categories (2003)
3 See also OPTA, "Economic Considerations on Balancing Infrastructure and Services Based Competition", Economic Policy Note no. 1, December 2003
4 SEO, Tante Pos krijgt concurrentie, Effecten van de liberalisering van de postmarkt (Competition for the Mail Man: Effects of the liberalisation of the postal market), September 2003

Where duplication of the infrastructure is difficult or even impossible, an access obligation can be the most economically efficient solution for enabling consumers to fully profit from the disciplinary effect of market mechanisms on prices and the quality of services provided by businesses. When the market structure makes national coverage necessary and gradual roll-out of the own infrastructure is the only economically responsible path, a temporary access obligation can stimulate this roll-out. The access obligation must be temporary so that the new provider retains an incentive to invest in its own network.[5]

In fully liberalised markets such as Sweden, Finland and New Zealand, competition is emerging with some difficulty. In the early years of liberalisation, the relationships between the market parties remain highly asymmetrical. In the UK and Germany – countries that want to fully liberalise quickly – ex-ante access regimes have already been implemented. This is explained in the Market Monitor Post. Current access obligations would significantly shorten the transition period to fully effective competition after 2007. The above-mentioned Memorandum Post from the Ministry of Economic Affairs supports this notion.

Access obligations require a proper definition of conditions...

The most recent amendment to the BARP[6] makes it possible for competitors to enter the market lower in the value chain. This relates to the possibility of submitting pre-sorted post to a regional sorting centre[7]. This type of access is the same as the type used by large-sized business end-users. Thus competitors do not have access on a wholesale basis. Based on the existing access possibilities, providers can compete if they are more efficient in earlier links in the value chain (collection, sorting). Large-sized business customers and the small and medium-sized business segment are more accesible thanks to this possibility.

In the parts of the postal network in which access obligations can be economically rational (delivery network, letter boxes), reasonable rates and conditions are needed. Experience gained in the communications sector indicates that effective access tariffs are established on a wholesale basis and are close to the actual costs incurred by the company. That is not the same as determining non-discriminatory access rates on the same level as end-user tariffs. After all, TPG incurs lower costs for part of the entire delivery link. What is more, TPG also only charges the costs it actually incurs to its own clients. The access possibility will only be a realistic alternative for competitors if the purchase price enables them to compete on the level of the end-user tariffs. At the same time, the incentive to invest in the competitor's own roll-out must be retained. This is why the access obligation must be temporary. The investment stimulus can be enhanced by allowing the wholesale rates to increase over time to the level of the end-user tariffs.

Collection bottlenecks (number of collection points for business mail, access to letter boxes/installing own letter boxes), for example, obstruct the emergence of second-class postal services (48-hour delivery) for consumers. Temporary access obligations lower that barrier and stimulate roll-out. Differentiation in the universal services obligation can also be functional in this respect.

... and bundling issues must be addressed

The niche nature of the existing competition on the postal market also gives rise to the question of whether the transition to large-scale competition is obstructed by the lack of realistic possibilities for entrants to offer bundled services to clients. For certain (business) market segments, the ability to offer one-stop shopping can be an important condition for competition. Business clients often achieve the highest discount by having a single provider handle all of its mail. However, this also establishes what is called 'lock-in'. This is because a business user will only opt for multiple providers if the loss of discount possibilities with one provider is compensated by the lower rates offered by the other provider. This gives the dominant provider an additional advantage.

Clients can choose in sub-markets...

Business users in particular have obtained more choice in the niches in which other market parties are active. The freedom of choice varies for the various types of end-users: the private end-user (single pieces of mail) does not yet really have any choice. The small and medium-sized enterprises (direct mail and smaller bulk quantities of post) have a limited choice. Large-sized business users enter into individual contracts and thus they have a choice.

... at a price

Price developments in recent years paint a mixed picture. Here, too, the developments differ per type of end-user.

5 RBB Economics, Entry Barriers in the Dutch Postal Market, A Report for OPTA, February 2003
6 General Postal Guidelines Decision (BARP), 20 November 2002
7 See Market Monitor Post for a detailed discussion of the value chain of the postal infrastructure

The Market Monitor Post shows that for private users in the Netherlands, prices of letter mail have on average lightly dropped between 1999 and 2003.[8] In many other EU Member States, letter mail in fact increased in price during that same period. Small business users in particular were faced with increased prices for parcels (TPG + 13 percent since 2002).

The collect and deliver services, parcels and printed matter have increased in price for large-sized business users. This despite the fact that large-sized business users are responsible for some seventy percent of the postal market in the Netherlands and relatively more competition can be seen in the business segments. Users of this type can usually negotiate discounts in their individual contracts.

All in all, significant price reductions did not occur. From the perspective of limited increasing liberalisation, these are not expected in the future, either. This could change if electronic substitution trends gain strength.

When there is no choice, consumers benefit from strict regulation

In the monopoly market, consumers do not have a choice for the time being. It is for this reason that the tariffs and quality of services must be monitored.

The tariffs are expected to remain constant in the years to come. Because of inflation this means that the end-user will experience a slight price decrease in real economic terms.

Worries from the past regarding the quality of the services provided have been alleviated for the most part: the number of post offices and the measuring system for the delivery speed are essentially no longer a source of concern. Monitoring will continue to take place.

Attention for switching barriers continues to be necessary in those parts of the market in which choices exist but market mechanisms are not yet effective. Market mechanisms have little effect as yet, for example, in the niche market 'parcels from consumers to businesses' even though in itself this should be possible. Causes for this may also lie in matters that are difficult to measure, such as unfamiliarity with alternative providers, TPG's good reputation (reliability), and the large societal function of the post office.

International developments
Early this year, Germany, England, Ireland, Sweden and the Netherlands established a collaborative framework for postal regulation in order to exchange information and where possible, to arrive at a collective approach to regulation of postal markets. See the Market Monitor Post for the latest developments in European liberalisation.

OPTA objectives

OPTA wants to maintain its existing level of regulation and therefore applies the following objectives:

- preventing improper cross subsidising
- non-discriminatory tariffs
- tariff transparency
- maintaining quality of the number of branches and of the letter deliveries, and maintaining sufficient letter boxes
- access to post office boxes based on reasonable, non-discriminatory conditions
- transparency of the universal service provision and improvement of the supply of information.

8 Corrected for consumer power parities.

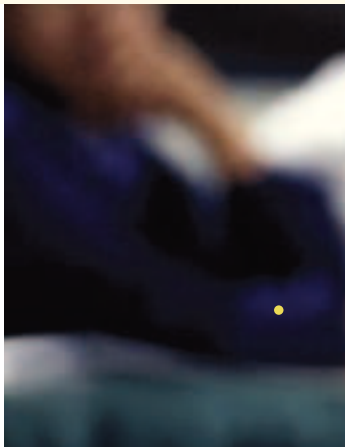
3 Market monitor

electronic communication

From OPTA's tasks

The approval and disapproval **of the tariffs**

companies take into account



3 • Market monitor electronic communication

This market monitor[1] sketches the competition developments in the electronic communications sector during the past year. The electronic communications market is on the verge of change. Traditional services such as classically switched fixed telephony, dial-up internet and leased lines are under pressure. At the same time, a further shift to broadband applications can be seen, in particular to xDSL. Moreover, the traditional distinction between voice and data networks is fading.

Competition developments in the fixed communications sector intensified in 2003. On the market for fixed telephony, providers of carrier (pre-) selection (CPS) won some market share. An increase in competition resulted in sharp price decreases and more variation in the available broadband internet services. Competition between infrastructures was fierce, in particular between KPN and the cable operators. Competition also continued to increase on the market for mobile telephony. T-Mobile, Orange and Telfort gained some ground in comparison to KPN and Vodafone.

1 • Convergence, substitution and bundling

The electronic communications sector has experienced rapid development since 1997. Liberalisation of this market not only contributed to lower rates and improved choice, but also to rapid innovations to both the infrastructure and the services. The dynamics of this market made it possible to offer certain services on multiple infrastructures. This trend continued strongly in 2003. These developments resulted in more choices for consumers. In 2003, more demand substitution between the services available on the various infrastructures was seen. This development was seen in terms of mobile and fixed telephony, internet via xDSL, the cable, the telephone line and wireless applications, as well as in terms of broadcasting via the cable, satellite and the ether. Convergence also gave market parties the possibility of offering bundled services. Market parties offered a bundle of mobile or fixed telephony, for example, combined with a broadband internet subscription. Moreover, broadband internet subscriptions were available that offered the possibility of telephoning via the internet. *Table 1* shows the choices available to end-users for telephony, internet and television, both now and in the future.

2 • Fixed telephony

Decrease in traffic volume on fixed telephone network
Decrease in traffic volume on fixed telephone network
The volume on KPN's fixed telephone network decreased by some twenty percent in 2003. The increase in the use of mobile telephony, substitution of dial-up internet by broadband internet, and use of carrier (pre-) selection (CPS) all contributed to this decrease. Use of CPS, however, does not result in a different use of the telephone network because CPS providers purchase their call minutes from KPN. The substitution by broadband internet witnessed a shift in the use of the telephony network from packets of call minutes to data packages. Substitution by mobile was primarily seen at the call level: 7 percent of all consumers terminated their KPN telephone connection.

Market share CPS providers increased
Consumers need a fixed connection with KPN if they want to utilise the services of a CPS provider. In part because calling via a CPS provider was also made possible for local calls in August 2002, the use of CPS increased in the second half of that year. The market position held by CPS providers improved in 2003, but not as strongly as in the previous year. A consumer survey performed by Heliview indicated that when consumers used C(P)S, nearly 80 percent chose for Tele2. Other large CPS providers were

Table 1 **ELECTRONIC COMMUNICATIONS**
now and in the future

Telephony		Internet		Broadcasting	
now	**future**	**now**	**future**	**now**	**future**
KPN	KPN	Dial-up internet	Dial-up internet	Cable	Cable
CPS	CPS	xDSL	xDSL	Satellite	Satellite
Mobile operators	Mobile operators	Cable modem	Cable	Digitenne	Digitenne
Mobile service providers	Mobile service providers	GPRS	GPRS		xDSL
	Voice over IP and/or DSL		UMTS		UMTS
			Wifi		

1 The phrase "market" in the Market monitor Telecom does not refer to a "relevant market" as defined in the new framework.

Scarlet/OneTel and Pretium Telecom. The major reason for consumers to switch from the former monopolist to a CPS provider was the lower rates for local and international calls. KPN's annual figures indicate that its market share for local telephony decreased from more than 80 percent at the end of 2002 to between 75 and 80 percent in 2003. KPN's market share in national telephony decreased from more than 65 percent in 2002 to more than 60 percent in 2003. For telephony from fixed to mobile a decrease was seen from more than 65 percent to between 60 and 65 percent. Alternative providers already held a relatively strong position for international telephony. In 2003 KPN's share in this area decreased a few more percentage points to between 45 and 50 percent.

Table 2 **MARKET SHARES KPN FIXED TELEPHONY**

2002-2003, in percent

	2001 Q1	2002 Q4	2003 Q4
Local	85-95	80-85	75-80
National	70-80	65-70	60-65
Fixed > mobile	70-80	65-70	60-65
International	60-70	50-55	45-50

Source: Q4 2003 and Q4 2002, KPN 4th quarter report 2003; Q1 2002, SMP report OPTA, December 2002.

Similar developments were seen in other European countries. Here, too, consumers opted for CPS providers, resulting in a decrease in the market share held by the former monopolist for fixed telephony. On average, 25 percent of the end-users in the European Union used a new entrant to the market for local calls. For national and international telephony, this percentage was 33.

Competition in fixed telephony via alternative providers with a fixed infrastructure, e.g. UPC, Essent and Multikable, did not really take off in 2003. With some 160,000 subscribers in the second quarter of 2003, UPC's number of subscribers had decreased by nearly nine percent as compared to the same period in the previous year.[2] Other infrastructure providers, including Versatel, MCI, Enertel and BT Nederland, focused almost entirely on the business end-user market. Moreover, these infrastructure providers also carry traffic for some of the CPS providers. KPN now intends to (voluntarily) introduce the Rent-a-Switch service on the market. This wholesale service gives parties without their own telephony infrastructure the opportunity to 'rent' KPN's infrastructure.

Telephony via the internet on the move

The emergence of telephony via data networks, using the Voice-over Internet protocol (VOIP) and Voice-over DSL (VoDSL) may intensify competition on the market for fixed telephony in 2004. Voice-over IP had not achieved sufficient quality in the past, but as of 2003 it is a true alternative. There are various types: over the internet from one PC to another PC using a microphone and an audio card, for example. But also from one telephone to another. The user first connects to the internet, and then back to the telephone network to reach another telephone. It is also possible to call from a computer to a telephone, and vice versa. When this is done, a connection is established between the package-switched internet and the circuit-switched telephone network.

Internet providers can also offer VoDSL to end-users with a DSL connection. The company bbned announced that it will start marketing this service through a number of its internet providers. VoDSL (in the sense of VoATM) is an alternative way to connect a telephone subscriber to the telephone network in which use is made of a broadband DSL connection rather than a regular narrowband telephone connection.

The arrival of VOIP and VoDSL on the consumer market will have consequences not only for KPN, but also for the competitive position of CPS providers. It is expected that CPS providers will look for ways to broaden their range, for example by bundling with mobile telephony and broadband internet, or by offering VOIP or VoDSL themselves.

Tariffs for fixed telephony increased

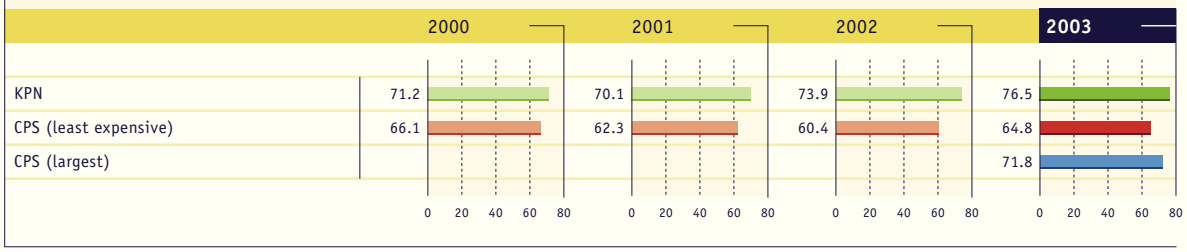
Figure 1 shows a call profile for the average user with a 'belbasis' subscription. Based on this profile, the bi-monthly costs were calculated for calling with KPN and with CPS. The table indicates that expenditures for fixed telephony via KPN increased for an average caller in 2003 as compared to 2002. Under the tariff system that protects end-users from excessive price increases, KPN is allowed to increase its tariffs by no more than the previous year's inflation percentage. This tariff regulation system was eased as from 2002, partly because end-users have a choice; as from August 2002 local telephony via CPS became possible. The inflation in 2002 was 3.5 percent, which means that KPN was allowed to increase its tariffs by no more than 3.5 percent in the subsequent year. KPN utilised all of this space.

The costs for calling via CPS are also shown. For the period 2000-2003, these costs were calculated on the basis of the

2 Networks in figures quarter report November 2003, TNO. Figure pertains to consumer market in particular.

Figure 1 **COSTS FOR FIXED TELEPHONY**

per 2 months for an average caller via KPN and via CPS, 2000-2003, in euros

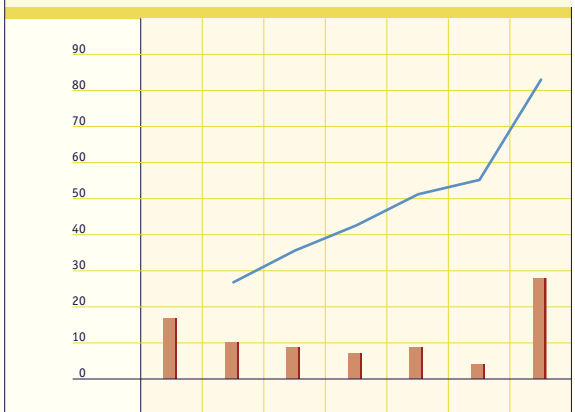


Source: Market monitor Electronic Communications, OPTA Discount number and other discounts not included. CPS providers (largest): tele2, Scarlet, Budget phone and Pretium telecom.

average tariffs of the five least expensive providers. The increase seen between 2002 and 2003 is striking. This may indicate that the tariffs applied by CPS providers are moving closer together and that the bottom tariff has been reached. The average costs for calling via the four largest CPS providers in 2003 are also shown. The largest providers, however, are not always the least expensive.

Figure 2 shows the costs for fixed telephony (including subscriptions) per two months. The bars reflect the percentage of consumers in the various cost categories. The conclusion is that nearly 20 percent of households have a telephone bill of less than 50 euros per two months while nearly 30 percent has a bill of more than 100 euros per two months. The average is about 85 euros per two months.

Figure 2 **DISTRIBUTION OF COSTS FOR FIXED TELEPHONY – per 2 months for consumers,** 2003, in percent



euros	<50	50-60	60-70	70-80	80-90	90-100	>100
Normal	16.7	10.1	8.8	7.0	8.6	4.0	27.8
Cumulative	16.7	26.8	35.6	42.6	51.2	55.2	83.0

Source: Heliview, processed by OPTA.

Figure 3 shows an international summary of the costs for local, national and international calls with fixed telephony in 2003. The tariffs for these calls are still relatively low in the Netherlands. This is specifically the case for traffic outside of the region and international telephone traffic, and to a somewhat lesser extent to traffic inside the region. In 2003 the decrease in the tariffs for fixed telephony in Europe continued to slow.

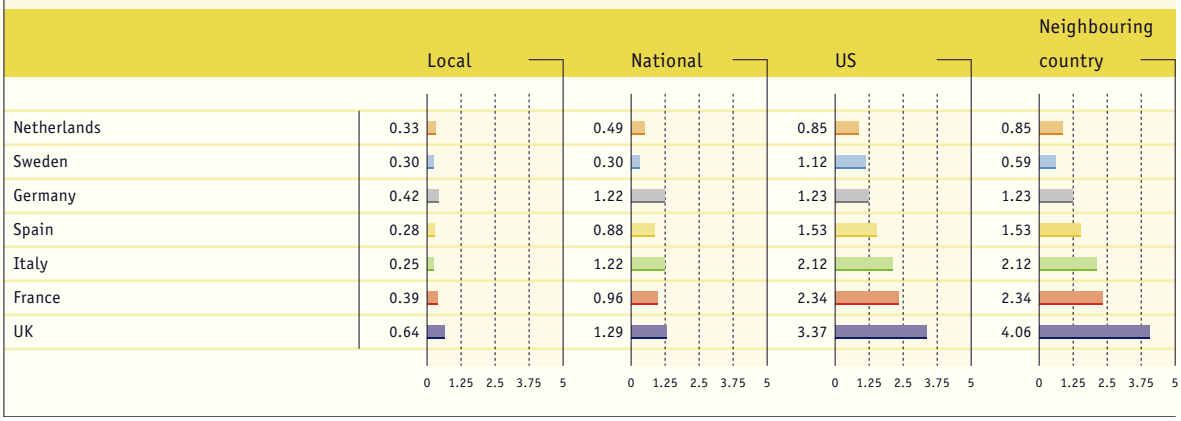
Calls from fixed to mobile less expensive

Under supervision of the NMa and OPTA, the five mobile operators agreed in 2003 to lower their tariffs for delivery of incoming telephone traffic on a mobile network by fifty percent over a period of two years. The first decrease was effectuated on 1 January 2004. Decreases will follow in December 2004 and December 2005. The decrease in the terminating tariffs in January 2004 resulted in a sharp decrease in the tariffs for calling from a fixed to a mobile telephone via KPN. The tariff reduction is highly concentrated in peak hours. This has caused the difference between costs for calls in peak and off-peak hours to virtually disappear. KPN's largest competitors, Tele2 and Scarlet/OneTel, lowered their tariffs on 1 February and 1 March 2004, respectively.

The differences between the terminating tariffs among the mobile operators remained the same. Calling with a fixed telephone via KPN to KPN Mobile and Vodafone was slightly less expensive than calls to other operators as of 1 January 2004. Research indicates that there is virtually no competition in this respect. Subscribers of the fixed network often do not know what network the person they are calling is connected to, and in selecting a mobile operator, consumers almost never take the costs of the caller into consideration.

Before the tariff decrease, the Netherlands was the country with the second highest terminating tariffs in Europe. As indicated in *Figure 4*, even after the first tariff decrease

Figure 3 **COSTS FOR FIXED TELEPHONY in an international perspective,** 2003, 10 minute call, in euros

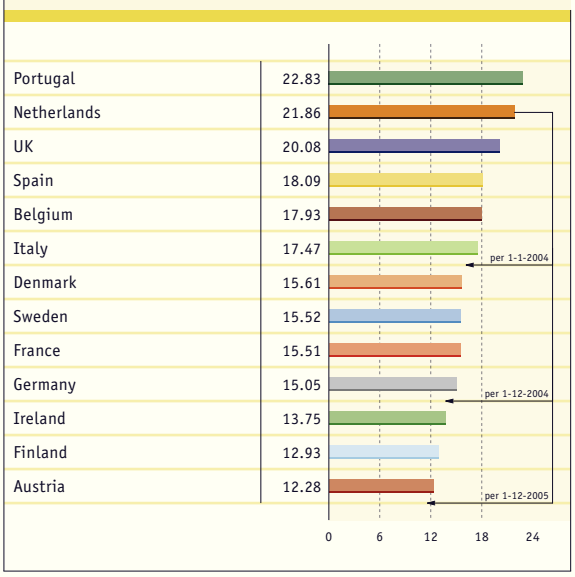


the Netherlands is still above the European average for 2003. The arrows in *Figure 4* indicate where the Netherlands will end in the benchmark in 2004 and 2005 in the hypothetical situation in which the terminating tariffs in the other countries remain unchanged. It is expected, however, that the terminating tariffs in other countries will also continue to decrease.

No additional discount space KPN due to risk of price squeeze

The end-user tariffs for KPN's fixed telephony are regulated. These tariffs have both a lower and an upper limit. The upper limit was eased in 2002. This was possible because a number of barriers were removed that obstructed KPN's competitors from entering the market. One example is the introduction of CPS for local telephony. KPN is now allowed to increase its end-user tariffs each year to a maximum of the inflation percentage. The lower limit regulation pertains to KPN's minimum tariffs and is intended to prevent a price squeeze from occurring. This happens when a provider that does not have its own complete network is squeezed between the price KPN charges for access to its network and the end-user tariffs that this provider can charge its customers. The competitor then has insufficient margin to market its own service.

Figure 4 **AVERAGE TERMINATING TARIFF – incoming traffic on mobile network[3], international perspective,** 2003, average all national operators, in eurocent per minute



Source: EC, processing by OPTA.

OPTA determined in 2003 that the competition situation was not yet strong enough to allow KPN to offer extra discounts on its tariffs, e.g. calling for a fixed fee per month. This would once again put a number of parties in a price squeeze situation.

Figure 5 reflects the tariff margin of a competitor calculated for various European countries. This figure is based on the worst case scenario. This means that the competitor has an extremely limited own network and needs interconnection twice on the geographic network above the former monopolist's regional network in order to establish a connection between two end-users. It is striking that the tariff margins have grown narrower, and have reached a stable level.

3 • (Broadband) Network access

Figure 6a gives a simplified indication of the broadband internet market. A distinction has been made between the market for network access, the market for internet access, and the market for internet services. New entrants request

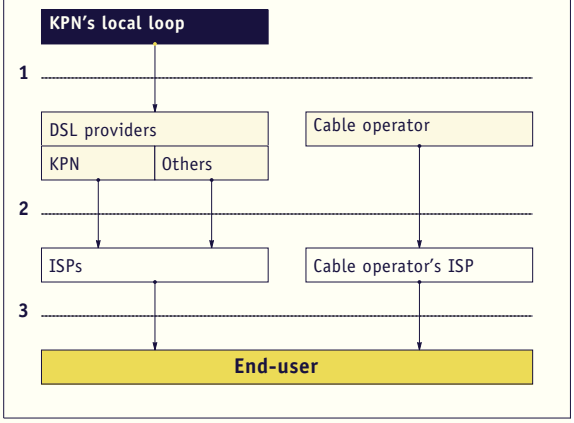
3 The arrows indicate the tariff decrease in the Netherlands. For the sake of simplification, the tariffs in other countries were kept unchanged at the level of September 2003. However, the tariffs in other countries are also expected to decrease in 2004 and 2005.

Figure 5 **TARIFF MARGIN – of a competitor with its own limited network needing *double* transit interconnection twice,** 1999-2003, in euros per minute

	1999 Q1	1999 Q4	2000 Q4	2001 Q3	2002 Q4	2003 Q4
France	0.093	0.055	0.050	0.011	0.029	0.030
Finland	0.027	0.030	0.053	0.026	0.016	0.016
Germany	0.108	0.053	0.108	0.020	0.023	0.016
Netherlands	0.019	0.027	0.008	0.012	0.014	0.015
Sweden	0.000	0.013	0.002	0.007	0.014	0.014
UK	0.063	0.071	0.069	0.012	0.014	0.009

Source: Market monitor Electronic Communications, OPTA.

Figure 6a **STRUCTURE OF THE BROADBAND MARKET**



access to the local loop from KPN *(part 1)*. These entrants then offer internet access to internet service providers (ISPs) together with KPN and the cable companies *(part 2)*. ISPs offer a broadband internet service to the end-user *(part 3)*. This section discusses access to KPN's local loop *(part 1, Figure 6a)*. The section 'Internet' addresses parts 2 and 3. *Figure 6b* is a simplified representation of the various types of infrastructure (fixed, wireless) that reach the end-user.

In the Netherlands, two broadband infrastructures have been rolled out to (almost) all homes: KPN's xDSL network and the cable network owned by the local cable companies. The broadband network access market showed strong growth in 2003, in particular as a result of the rapid growth in the number of xDSL connection lines. Their number more than doubled and surpassed the number of cable internet connection lines for the first time late in 2003.

New parties entering the market have not nearly rolled out as extensively as KPN and the cable companies, which means that they need access to at least one of the two broadband networks in order to provide their services. Entrants only have a limited choice in terms of regulated access to the broadband local loop. Access to the cable network is not regulated at this time. Access to KPN's connection network is regulated in terms of access to the local loop.

Figure 7 shows the increase in the number of broadband connection lines in 2002 and 2003. A distinction is made between KPN, entrants via network access to KPN's local loop, and cable companies.

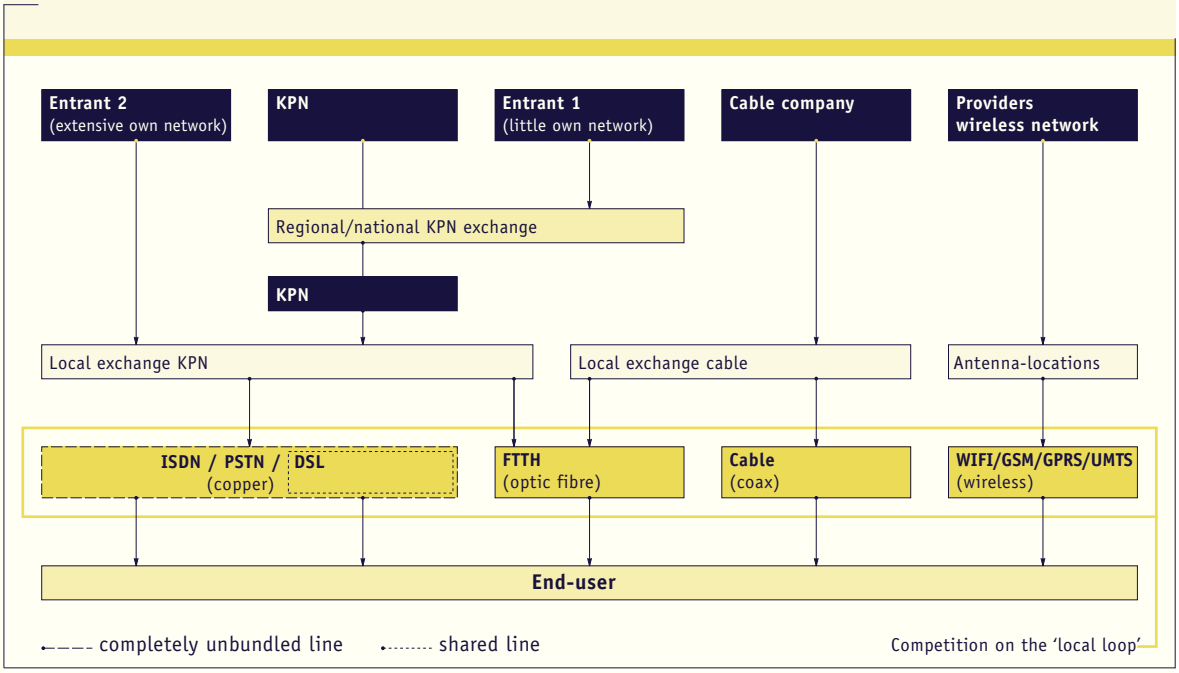
Slight increase in the percentage of unbundled local loop lines held by entrants

New entrants with their own infrastructure, e.g. Versatel, bbned and Tiscali, use a KPN unbundled local loop line for the last section from the local exchange to the homes (part 1 in Figure 6a and Figure 6b). This may be done via a fully unbundled line or a shared line. With a shared line, the telephony service remains with KPN and only the xDSL service is provided by the competitor. Fully unbundled lines were solely used to serve the (large) business market.

At the end of 2003, 20 percent of the unbundled local loop lines were held by new entrants; KPN held the rest. Late in 2002, this percentage was fourteen; late in 2001 it was six. The Netherlands has the highest percentage of unbundled lines held by entrants, together with Finland and Denmark.

The increase in the number of unbundled local loop lines held by entrants was primarily a result of strong growth in the number of shared lines. These are primarily used to

Figure 6b **INFRASTRUCTURE COMPETITION AND ACCESS**

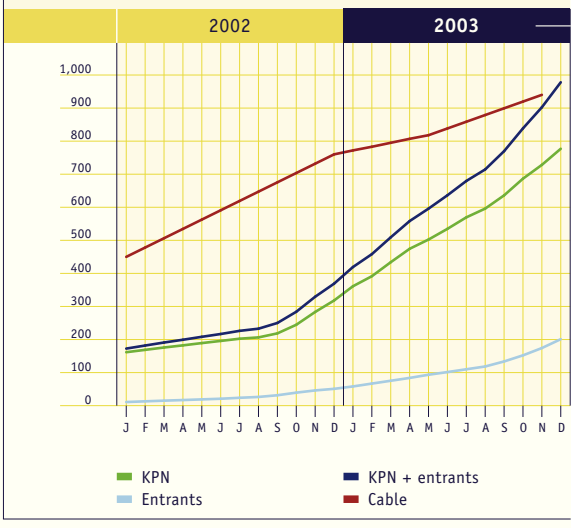


offer ADSL access. The ratio between the number of shared lines and the number of fully unbundled lines increased significantly. Late in 2002, 50 percent of the unbundled lines were fully unbundled. At the end of 2003, this was only 17 percent. Another striking fact is that in absolute numbers, the number of fully unbundled lines held by entrants also decreased during the last months of 2003.

Tariffs for unbundled local loop line decreased

Figure 8 shows the regulated monthly tariffs for renting an unbundled local loop line. As in most of the countries in the European Union, these tariffs decreased in the Netherlands in 2003. However, the decrease was stronger in the Netherlands than in other countries[4]. The average tariff decrease in Europe for a shared line was greater than that for a fully unbundled line. The Dutch monthly tariffs for renting a fully unbundled line and a shared local loop line are among the lowest in Europe. The one-off connection tariffs also decreased by one-half in the Netherlands in 2003 as compared to the previous year. This is because KPN has completely automated its administrative processing. Entrants must purchase collocation in KPN's local exchange in order to acquire network access by means of an unbundled local loop line. Collocation is a type of shared use of areas in KPN's telephone exchanges. The investments this requires soon renders this step unprofitable for locations with a small sales potential. An alternative type of network access is access via Bitstream. Bitstream is a leased line with variable capacity linked to an unbundled local loop line (xDSL) with which data and voice traffic can be transmitted between two locations. Bitstream access is established on the regional or national level in KPN's network. Bitstream access enables entrants to reach their customers in areas where the entrant has not yet rolled out its network to the local exchanges.

Figure 7 **INCREASE IN XDSL LOCAL LOOP LINES AND CABLE MODEM CONNECTIONS** 2002-2003 (x 1,000)

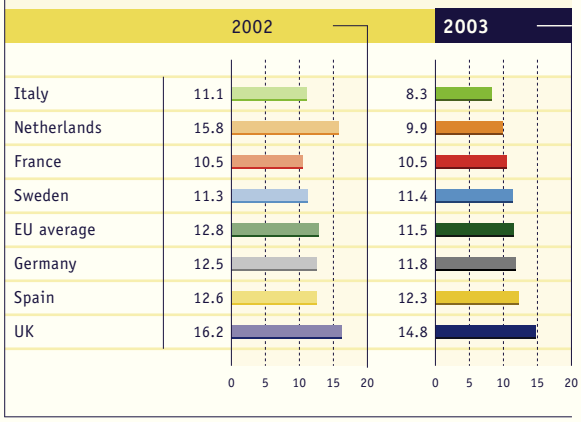


Source: OPTA.

4 The decrease was primarily a result of volume effects (because the number of local loop lines increased, the tariff per line decreased).

Figure 8a **RENTING A FULLY UNBUNDLED LINE**

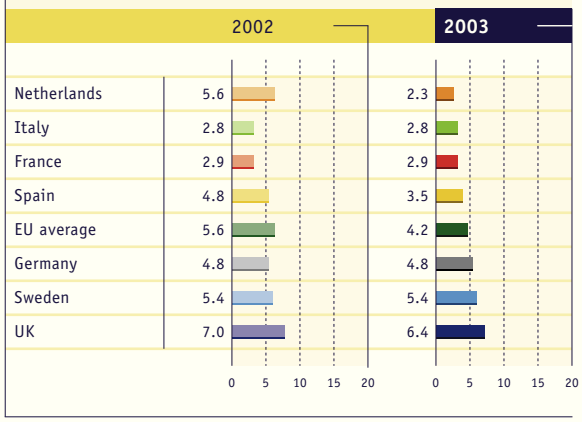
2002-2003, monthly tariff in euros



Source: Market monitor Electronic Communications, OPTA.

Figure 8b **RENTING A SHARED LINE**

2002-2003, monthly tariff in euros



Source: Market monitor Electronic Communications, OPTA.

There are two types of Bitstream access. One is intended for the consumer market, the other for the business market. In 2002 KPN placed a wholesale offer for Bitstream access on the business market. In 2003 the court determined that KPN is no longer obliged to supply Bitstream intended for consumers to entrants.[5] After this decision was taken, some entrants decided to roll out their networks to more local exchanges.

Further roll-out infrastructure

The number of exchanges in the Netherlands made suitable for broadband internet increased in 2003. KPN itself was able to offer broadband internet to 87 percent of the households in the Netherlands in 2003. The company has indicated its intention of increasing this coverage to 97 percent in 2004. This enables KPN to offer national services such as internet and voice over xDSL. Entrants acquire an unbundled local loop line from KPN (collocation). This allowed bbned to achieve 75 percent coverage and Versatel 50 percent. Versatel has announced that it will roll out to 65 percent in 2004. Tiscali had coverage of approximatelyimately 25 percent with its own infrastructure. The cable companies had about 75 percent broadband coverage last year, representing a slight increase as compared to 2002. Local initiatives, often stimulated by municipal subsidies, in which fibre-optic cables were installed up to the homes were seen for the first time in 2003.

Infrastructure competition in an international perspective

Figure 9 shows the market share held by the former national monopolist (in the Netherlands: KPN) based on the number of xDSL local loops and based on the total number of broadband local loop lines. Although network access via unbundled local loop lines is relatively high in the Netherlands, there is little network access via Bitstream. Austria, Italy, Ireland, France and Portugal in particular have a high level of network access via Bitstream. As a result, the market share held by KPN for xDSL local loops is relatively high from an international perspective: a little more than 80 percent in September 2003.

The market share held by KPN on the total national market for broadband access is lower when viewed from a European perspective. This is because the Netherlands has a relatively high number of broadband internet connections via the cable. Other countries with a relatively high number of broadband internet connections via the cable are the United Kingdom, Portugal, Spain, Denmark and Belgium.

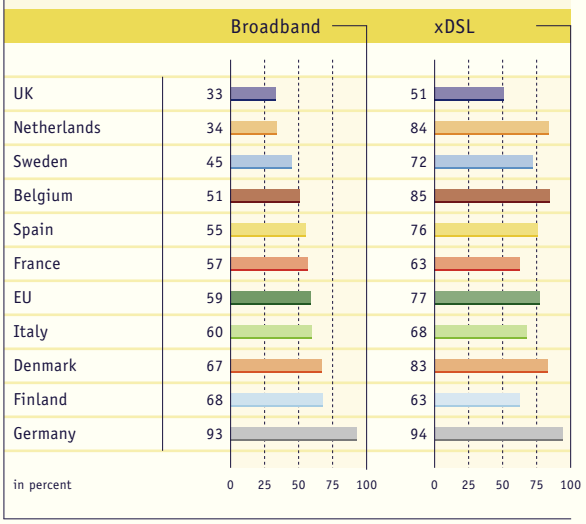
Infrastructure competition in Denmark

The Netherlands, Belgium, Denmark and Sweden have the highest penetration of broadband internet in Europe. In three of these countries, this was established by means of infrastructure competition from the very beginning. Sweden initially had only one dominant infrastructure provider, but the former monopolist sold its interest in the largest cable company in the first half of 2003. In the past twelve months infrastructure competition via unbundled access to the local loop has increased significantly on the Swedish consumer market. Before then, resale of the former monopolist's xDSL offer was virtually the only option.

Compared to the Netherlands, Denmark has a relatively low population density, but it takes the lead in Europe in

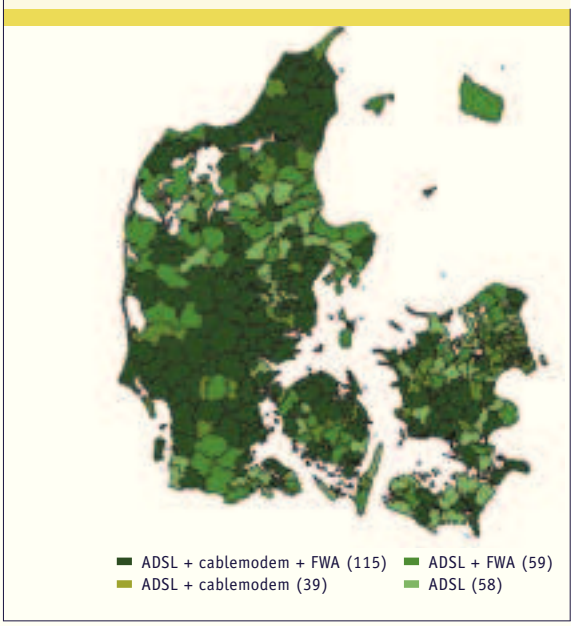
5 OPTA has appealed this court decision. The appeal decision has not yet been made.

Figure 9 **MARKET SHARE FORMER MONOPOLISTS – for xDSL local loops and for total number of broadband local loops,** September 2003, in percent



Source: EC.

Figure 10 **INFRASTRUCTURE COMPETITION in Denmark**



Source: Danish Ministry of Science, Technology and Innovation, November 2003.

terms of infrastructure competition. As shown in the figure below, Denmark has few regions in which end-users do not have a choice between infrastructures. In addition to ADSL and cable, end-users often also have the option of fixed wireless access. The former monopolist has announced that it will increase its ADSL coverage from 95% to 98% by the end of 2005.

Importance of leased lines decreasing

Leased lines are primarily used by businesses with various branches that need to be interconnected. KPN has been designated as party with significant market power for national leased lines with a capacity of up to 2 MB. The market for leased lines with a larger capacity and the international market for international leased lines shows sufficient competition, which means that KPN does not hold significant market power in these markets.
The number of providers as well as the number of traditional leased lines sold decreased in 2003. The increasing popularity of xDSL was one of the causes of this. A further shift towards Internet Protocol Virtual Private Networks (IP-VPN) was seen. IP-VPN is a network based on the internet protocol. It is a good alternative for businesses when setting up their own private company network, especially because it is less expensive than the relatively expensive leased lines. IP-VPN is often used at smaller locations in combination with xDSL technology for local access. Services based on Ethernet over optic fibre are also gaining importance, in particular connections with large capacities.

In the past five years, the tariffs for digital leased lines have decreased. The tariffs for leased lines longer than fifty kilometres have dropped more than those for shorter leased lines. This development has resulted in a flatter tariff structure. The only type of leased line for which tariffs increased was the analogue leased line. This is a result of the fact that sales figures of these leased lines have dropped significantly, remaining many times lower than those for digital leased lines.

4 • Internet access

This section discusses parts 2 and 3 of *Figure 6a*.
For internet access via the telephone line (dial-up internet) and via ADSL, end-users can choose from a variety of internet providers (ISPs). For internet via the cable, there is only one ISP per region, being the cable company's own ISP. For internet via ADSL, the ISPs usually purchase their internet access service from their own ADSL provider. In the second quarter of 2003, for example, KPN sold 69 percent of its ADSL connections via its own ISPs.[6] The other 31 percent were sold via other ISPs. Some ISPs offer their internet services via a different ADSL provider when their own ADSL provider does not have coverage in a certain area. A number of ISPs, including Chello and Wanadoo, offer internet via the cable and via xDSL.

6 Source: TNO 2003.

Last year, KPN's and the cable operators' ISPs also held a strong position on the market for broadband internet services. The market share held by KPN's ISPs (Planet, XS4ALL and Het Net) and by those of the cable companies (including Chello, Wanadoo, @home and Multikabel) amounted to nearly 80 percent.

Shift to 'always-on' internet services

2003 showed a further shift from connecting to the internet by means of placing a call via the telephone (dial-up) to 'always-on' internet services via broadband connections, ADSL and cable. The number of internet dial-up minutes dropped by more than 20 percent in 2003 as compared to the previous year[7]. Despite this decrease, the number of internet dial-up numbers issued by OPTA increased in 2003 as compared to 2002.

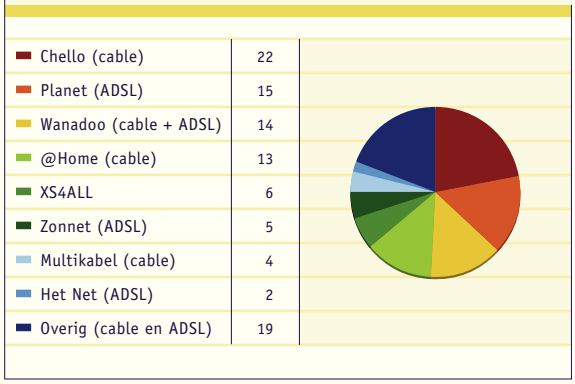
In 2003, there were some 10.5 million internet users in the Netherlands. This amounts to a penetration per member of the population of nearly 65 percent. Approximately 60 percent of the households in the Netherlands had an internet connection last year. This puts the Netherlands in the lead group in the European Union, together with Sweden (76%) and Denmark (63%). In the European Union, the number of broadband connections doubled in the period from September 2002 to September 2003. In the Netherlands this number increased by approximatelyimately 65%. The number of xDSL connections increased by an average of 40,000 per month, from 370,000 at the end of 2002 to 978,000 at the end of 2003. The number of cable internet connections grew by an average of 15,000 per month from 760,000 at the end of 2002 to 940,000 at the end of 2003 *(see Figure 7)*.

The penetration of broadband internet, measured on the basis of the number of connections per member of the population of the Netherlands, was high in 2003 as compared to other countries, at more than ten percent. Measured according to the number of households, the Netherlands had a broadband penetration of more than 20 percent at the end of 2003. Here too, the Netherlands is in the lead together with Denmark, Belgium and Sweden.

Competition in broadband internet services

Fierce competition was seen on the market for broadband internet services in 2003. Particular effort was devoted to winning end-users who were switching from a dial-up internet connection. This development resulted in more choice and lower tariffs for end-users. Many ISPs doubled their speed and halved their prices in 2003, as is shown in Table 3. The aggresively competetive pricing was initiated by the ISPs of new market entrants, after which the ISPs of KPN and the cable operators followed suit. As a result of this competition, the ISPs' profit margins were put under pressure. ISPs are expected to attempt to increase their margins in 2004 by offering broadband internet bundled with other services. The first signs of this trend were already seen in 2003.

Figure 11 **Market shares ISPs for broadband internet,** 2003, in percent



Source: TNO, 2003.

Table 3 **MONTHLY COSTS FOR A BROADBAND INTERNET SUBSCRIPTION – with various ISPs,** 2002-2003, in euros

	2002		2003			
Download speed	**512**	**1024**	**384**	**768**	**2048**
Tiscali	51.20	80.00		24.95*	39.95*
Zonnet	50.20	83.90		34.00*	
Wanadoo adsl	52.30	88.20	24.95		
Planet	52.30	88.20	34.95		
Demon		86.20			55.00

Source: Market Monitor Electronic Communications, OPTA, based on figures supplied by Webwereld. * = with data limit.

7 Source: KPN facts and figures, Q4 2003. Sum of the internet minutes Business Unit Fixed telephony and 'originating' internet minutes Business Unit Carrier Services.

Obstacles still frustrate switching
The number of end-users that switched from ADSL to cable and vice versa was still relatively low last year. On the market for broadband internet services, a seamless switch to a different ADSL provider was still not possible. A code of conduct intended to ease migration between ADSL providers did not come about in 2003.

Wireless internet gets off the ground
Using the internet via a wireless application got off the ground in 2003. At certain public locations, internet access via wifi – wireless fidelity – was already possible. Wifi is a technology that enables end-users to access the internet via local contact points called hot spots. However, wifi is not a large-scale alternative for internet access via a fixed connection. The range of the hot spots is still only a few dozen metres. An additional problem is their sensitivity to interference. What is more, the available capacity is shared by the number of active users at the hot spot, which means that the capacity decreases when it is busy. Improved wifi variants are expected to be introduced on the market in 2004 with a reach of a few kilometres.

The frequencies for the wireless local loop (WLL) were auctioned in 2003. Providers who acquired a frequency may use these to launch fast wireless internet on the market. This is expected to happen in areas where no fast internet via ADSL or cable is available, as well as in areas with a temporary demand for broadband.

5 • Mobile market

Number of connections continues to increase
The number of active mobile connections increased significantly in 2003, in particular during the last quarter. At the end of 2003 there were more than 13 million mobile connections, amounting to a penetration level of more than 75 percent. With this development, the Netherlands made a slight move from the last group in the European Union towards the European average.

Sales achieved by mobile operators grew in 2003. The operators succeeded in increasing their average sales per user in 2003 by achieving a more favourable ratio between pre-paid and post-paid customers. An average pre-paid customer generates much less revenue than a post-paid customer. The number of post-paid customers grew in 2003 in comparison to the number of pre-paid customers. Approximatelyimately 60 percent of the users were pre-paid customers in 2003. T-mobile had proportionately the highest number of post-paid customers in 2003. Telfort had the relatively largest number of pre-paid customers.

Competition increases on the mobile market
The market shares held by the five mobile operators converged in 2003. KPN and Vodafone lost ground while the other three operators saw their shares grow. Between October 2002 and September 2003, the collective share held by KPN and Vodafone among purchasers of new mobile telephones decreased from 67 percent to 36 percent. This trend continued during the last months of 2003.

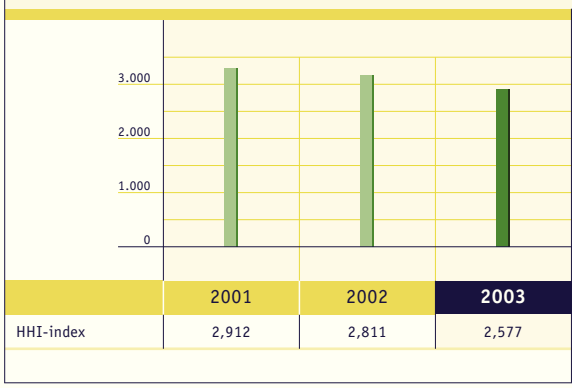
Because the market shares held by the various mobile operators converged, the concentration on the mobile market as expressed in the Hirschman Herfindahl Index (HHI) decreased. On a market with effective market mechanisms, the HHI is no more than 1,800; a monopoly has an HHI of 10,000. *(See Figure 12)*

Table 4 **NUMBER OF CUSTOMERS in millions AND MARKET SHARES in percent OF MOBILE OPERATORS**
2001-2003

	2001	%	2002	%	2003	%
KPN Mobile	5.2	43.5	5.0	41.8	5.2	39.0
Vodafone iZi	3.2	26.9	3.3	27.1	3.2	24.4
Orange (Dutchtone)	1.2	9.6	1.0	8.5	1.2	9.3
Telfort (O_2)	1.3	10.7	1.3	10.7	1.6	12.1
T-mobile (Ben)	1.1	9.2	1.4	11.8	2.0	15.1
Total	**12.0**		**12.1**		**13.2**	

Source: 2001 and n 2002 Market monitor Electronic Communications, OPTA; 2003 BTG.

Figure 12 **HIRSCHMANN HERFINDAHL INDEX mobile telephony,** according to market share, 2001-2003[8]



	2001	2002	2003
HHI-index	2,912	2,811	2,577

Source: Market monitor Electronic Communications, OPTA.

More mobile service providers and international alliances

The number of service providers on the mobile market increased significantly in 2003. Telfort in particular distinguished itself as an operator that offers wholesale access to its network for service providers. Some providers are more independent than others. Tele2 mobile, which uses Telfort's network, is the only true virtual mobile network provider. Unlike the other service providers, it has its own SIM card. Less independent service providers are Versatel, Debitel, AH-Mobile, ID&T and Scarlet/OneTel.

All providers in the Netherlands with the exception of Telfort are part of an international group of operators. Two large international alliances were formed in 2003 with the objective of competing against market leader Vodafone.

Obstacles for switching on mobile market not yet removed

When switching to a different provider, increasing use is being made of the option of retaining one's mobile number. A total of nearly 95,000 mobile numbers were switched in this manner in 2001, while this number increased to approximatelyimately 185,000 in 2002. This number nearly doubled in 2003, to about 352,000. This is still relatively low compared to the number of users that change to a different provider each year. This 'churn rate', as it is called, varies around 25 percent, translating to about three million users.

In October 2003 OPTA formulated new policy rules for number portability that lowered the obstacles for switching between providers. Not all operators complied with these new policy rules, which determine matters such as the possibility of taking an existing number to a new provider within ten days, even if the end-user still has a contract with the former provider. Another obstacle making switching difficult on the mobile market is the use of SIM locks, as a result of which a mobile telephone will not work with a SIM card from a different provider. This is caused by the trend of subsidies from operators for mobile telephones. The trend seen in 2003 was that the level of these subsidies is falling.

Mobile tariffs no longer falling in Europe; high SMS tariffs in the Netherlands

The tariffs for mobile telephony are relatively low in the Netherlands if viewed from an international perspective. In many European countries, the tariffs for mobile telephony even increased in 2003. The arrival of networks with a higher capacity, GPRS and UMTS, may result in a further tariff decrease because the costs for operators per unit of capacity on these networks are lower. Unlike the tariffs for mobile telephony, the SMS tariffs in the Netherlands are relatively high: approximatelyimately 23 euro cents per message. In many European countries, the tariffs for SMS messages vary between 5 and 15 cents.

Growth in mobile data lower than expected

Operators achieved a greater share of their revenue from data-related services in 2003, such as SMS, MMS or GPRS services. The growth in mobile data, with the exception of SMS, was lower than expected in 2003. In 2003, an estimated 10 percent of the revenue per user came from data in 2003. SMS was responsible for approximately 90 percent of this figure.

Strong growth was seen, however, in the sale of GPRS telephones in 2003. GPRS is also called the 2.5G generation because it has a higher bandwidth than GSM (2G generation). The step beyond GPRS is UMTS, or 3G. As of 1 January 2007, operators that have acquired a frequency must have established coverage for all municipalities with more than 25,000 inhabitants. UMTS is already (partially) available in at least four countries in the European Union, namely: Italy, the United Kingdom, Sweden and Austria. The first UMTS experiments in the Netherlands are underway. Vodafone and KPN have announced that they will launch their first UMTS services for small business users and possibly for consumers in 2004.

6 • Wholesale market

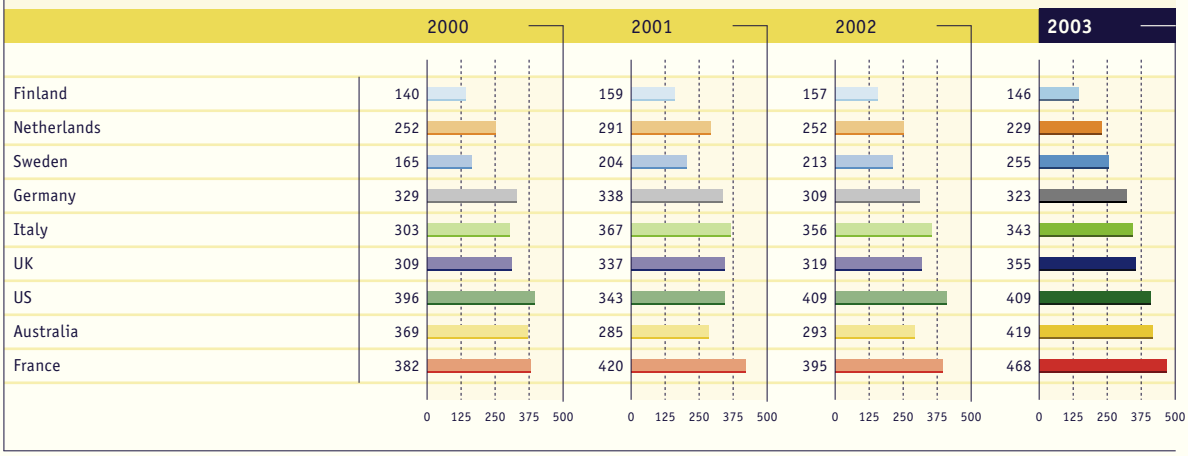
Wholesale tariffs decreased significantly

The introduction of a multiple-year wholesale tariff system was postponed in 2003. The wholesale tariffs applied by

8 Absolute values cannot be compared to figures in the market monitor Telecom 2002 because its calculations were based on turnover figures for the entire mobile market.

Figure 13 **MOBILE TELEPHONY SERVICES PACKAGE – international comparison, residential consumer**

2000-2003, US dollars at purchasing power parity, annual expenditures, including VAT



Source: Market monitor Electronic Communications, OPTA.

KPN were evaluated by OPTA last year. The most important tariffs are those for originating and terminating. Originating tariffs are paid by CPS providers to KPN for collecting customers' traffic from the local loop. The terminating tariffs applied by KPN are more closely regulated than the originating tariffs because no competition is possible for call termination. In order to determine the level of the terminating tariffs, OPTA, like other European regulators, calculates what the costs would be if the network were operated in a sufficiently efficient manner under pressure from market mechanisms. This is known as the BULRIC model. In this way, needlessly high or inefficient costs, whether inherited from the monopoly era or not, may not be charged to competitors.

The originating and terminating tariffs decreased significantly in 2003. The originating tariffs in the Netherlands are still relatively high from a European perspective. As shown in *Figure 13*, the Netherlands rates among average in Europe in terms of the level of the terminating tariffs. *Figure 14* shows the single transit terminating tariffs. These are the costs for co-use of KPN's regional network. This is the network that is one level higher than the local network. Under pressure from the various national regulators, the tariffs in the European Union have converged in recent years. The lowest tariffs are seen in the United Kingdom, Denmark *(not shown in the figure)*, and Sweden.

7 • Broadcasting

Digital television on the move

Last year the cable companies completed a large share of the investments required for digitising their networks. Digital cable television is now slowly being launched. Harmonisation of decoders between the various cable companies and the distribution of these decoders via local dealers will contribute. Cable companies now offer digital television for about fifteen euros per month, with which the consumer can gain access to more than fifty additional channels.

Figure 15 shows that developments in digital television vary throughout Europe. The United Kingdom is clearly in the lead with a penetration of more than ten percent. In the Netherlands, digital television via the ether (Digitenne) is emerging, but this type of broadcasting still has limited coverage. It is estimated that Digitenne's customers amount to tens of thousands at this time. In other European countries, television via the satellite and the ether holds a larger market share than in the Netherlands *(see Figure 16)*. This is because cable television has (nearly) complete coverage in the Netherlands. The cable holds a market share of approximately 89 percent in the Netherlands.

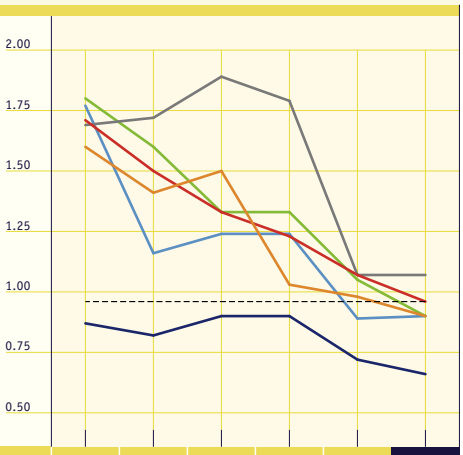
At the end of 2003, cable companies attempted to increase their subscription tariffs for cable services. As compared to other European countries, these costs are relatively low in the Netherlands.

8 • Consumer

Consumer also experiences the down side of rapid communications developments

The stormy developments in the various markets for electronic communications, offering consumers more

Figure 14 **TERMINATING TARIFFS – incoming traffic on a fixed network, single transit,** from an international perspective, based on a three-minute call during peak hours, 1998-2003, in euro cents

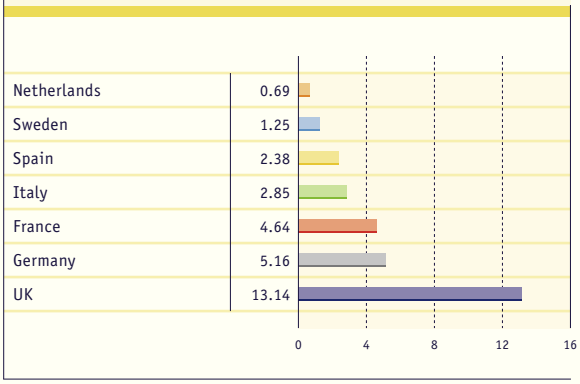


	1998	1999	2000	2001	2002	2003
France	1.71	1.50	1.33	1.23	1.07	0.96
Germany	1.69	1.72	1.89	1.79	1.07	1.07
Italy	1.80	1.60	1.33	1.33	1.05	0.90
Netherlands	1.60	1.41	1.50	1.03	0.98	0.90
Sweden	1.77	1.16	1.24	1.24	0.89	0.90
UK	0.87	0.82	0.90	0.90	0.72	0.66
EU av. 2003	0.96	0.96	0.96	0.96	0.96	0.96

Source: EC.

and more choices, also have a down side. One issue is the fact that communications markets are insufficiently transparent. The survey 'Ruis op de lijn' (Noise on the line) performed by the Dutch Consumer's Association indicated that consumers want independent information about tariffs, conditions, and the quality of services. This would enable them to make a more-informed choice. The survey performed by the Dutch Consumer's Association showed that 37 percent of all consumers do not understand the tariffs offered by the various CPS providers. With reference to mobile telephony, 42 percent of consumers find it difficult to compare tariffs.

Figure 15 **HOUSEHOLDS WITH DIGITAL TV international comparison,** 2003, in percent



Source: EC.

Some providers abuse the ignorance and vulnerability of consumers. E-mail spam increased significantly in 2003, for example. A survey performed by the OECD indicated that 50 percent of all e-mails are identified as being spam. Under the new Telecommunications Act, an opt-in regime will be effectuated for use of electronic messages. This will mean that advertising messages may only be sent to individuals who have explicitly given permission in advance. A limitation of the regulations is that this rule only applies to spam originating from within the European Union. OPTA will start to enforce this regime in 2004. Premium rate information numbers used to establish a dial-up connection with the internet are also being abused. These are called plug-ins. Consumers sometimes received high telephone bills because the costs were not transparent or were itemised incorrectly, or because dial-up lines automatically remained open (auto diallers). More than 80 percent of the complaints received in 2003 regarding information numbers involved these problems.

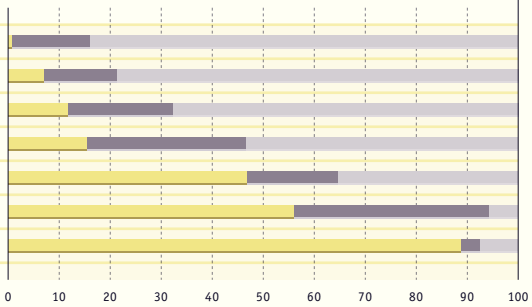
Providers also abused SMS services. In 2003, OPTA received many complaints about unrequested SMS messages supplied in the form of SMS subscriptions and, to a lesser extent, SMS spam. When messages are received on the basis of an SMS subscription, the recipient also pays a relatively high tariff per message received. The providers involved have compiled a code of conduct with reference to SMS subscriptions.

In 2003 OPTA reached agreements regarding modification of KPN's computer system, so that the number of administrative errors when switching end-users to a different provider, known as slamming, was minimised. OPTA also compiled guidelines that were to result in a code of conduct between providers. However, this did not occur. OPTA therefore decided early in 2004 to take additional measures against slamming. Slamming continues to be a small but persistent problem.

Figure 16 **MARKET SHARES OF CABLE, SATELLITE AND ETHER – international comparison**

2003, in percent

	Cable	Satellite	Ether
Italy	0.3	15.5	84.2
Spain	7.1	14.3	78.5
France	11.9	20.5	67.6
UK	15.6	31.3	53.2
Sweden	47.1	17.9	35.0
Germany	56.3	38.3	5.4
Netherlands	89.0	3.8	7.2



Source: EC.

4 Market monitor

post

From OPTA's tasks

Ensuring the compliance

with legal obligaties for postal delivery

4 • Market monitor post

This Market Monitor Post 2003 analyses the developments in the postal market in the past year. A focus is placed on the development of competition and the quality of services available on the postal market in the Netherlands compared to developments in other countries in the European Union.

In compliance with the Postal Act, the postal market in the Netherlands is divided into services that are the exclusive right of the concession holder[1] (the concession), and other services that have been assigned to the concession holder. The combination of these services comprises the assigned services to be provided. The Universal Services (US) requirement applies to these services, with the intention of guaranteeing a minimum level of services for end-users. OPTA ensures that TPG adheres to the rules that relate to its assigned services. Other providers are allowed to offer services that fall under the US obligation but that are not part of the concession. In addition to the services that are part of the concession holder's assignment, there is a liberalised section of the postal market. Where possible, OPTA strives to remove barriers to entry for new entrants in the liberalised section in order to stimulate sustainable competition in the postal market.

The postal services regulated by the Postal Act

Exclusively reserved

Domestic letters and letters from other countries weighing no more than 100 grams and transported at a tariff that is equal to or lower than three times the basic tariff for letters weighing between 0 and 20 grams (€ 1.17)[1]

Universal services

Domestic post:

- letters weighing no more than 100 grams
- letters weighing between 100 grams and 2 kg and all domestic printed matter (addressed and unaddressed) weighing up to 2 kg in so far as this is submitted at the single item tariff
- parcels weighing up to 10 kg in so far as these are submitted at the single item tariff,
- registered post or post with stated value, as well as court documents
- post office box service

post to and from other countries:

- letters and addressed printed matter weighing up to 2 kg
- parcels weighing up to 20 kg

1 • Liberalisation

European liberalisation gradually continues

Over the course of time, the European Union has taken a number of steps towards harmonising and liberalising the postal market. The intention is to fully liberalise the postal market in the European Union in 2009. In 1997, for example, the European Postal Guideline[3] determined that the maximum monopoly was limited by law to letters weighing up to 350 grams. Later, in the 2002 Guideline, the monopoly was limited as of 1 January 2003 to a maximum of 100 grams. As of 1 January 2006, traffic of letters weighing more than 50 grams will be opened to competition.[4]

These European agreements do not mean, however, that liberalisation will take place at the same speed in all EU Member States. The postal markets in Finland and Sweden, for example, are already fully open to competition, and the United Kingdom and Germany have decided to liberalise their markets before 2009. In the United Kingdom the market will be opened to competition in three steps: up to 31 March 2005 30 percent of the market, from 1 April 2005 to 31 March 2007 60 percent, and the entire market as from 1 April 2007. The German government intends to open the entire market to competition in 2007.

Liberalisation in the Netherlands linked to developments in Germany and England

From a European perspective, the postal market in the Netherlands is already relatively far advanced in terms of liberalisation. Based on a market that includes addressed post (individual items and batches, magazines and direct mail), approximately 50 percent of the postal market in the Netherlands (measured in terms of volume) is open to competition.[5] Based on a market that includes addressed post and parcel post, approximately 30 percent (in volume) is included in the monopoly. On a market that includes addressed post and parcel post, as well as unaddressed items, 13 percent (in volume) of the post is included in the monopoly.[6]

In the Post Memorandum, the Minister of Economic Affairs[7] indicated that further liberalisation of the market in the Netherlands is desired. The liberalisation is linked to progress in the United Kingdom and Germany. Taking into account the European competitive relationships on the postal market, earlier liberalisation could mean that: '…post firms from other countries would be free to operate on the market here without firms in the Netherlands having the same possibilities in other countries'.[8]

1 On 1 June 2000 the Postal Guideline 97/67/EG was implemented in the Postal Act , the Postal Guideline and the General Postal Guidelines Act (BARP). The authorisation act defines appointment of the concession holder. It appoints TPG as the concession holder.
2 TPG also has the exclusive right to install letter boxes on or alongside public roads and to issue postage stamps with an image of the King/Queen or that state 'Nederland'.
3 Directive 97/67/EU of the European Parliament and the Council of 15 December 1997 setting out joint rules regarding the development of the internal postal service market in the European Union and service quality enhancement.
4 Directive 2002/39/EG modifying Directive 97/67/EG of the European Parliament and Council of 10 June 2002 regarding further liberalisation of the postal market in the Community for competition.

Access regimes differ

The United Kingdom and Germany are the leaders of the liberalisation process in Europe. Both of these countries have an ex-ante access regime that goes beyond that of the Netherlands. Non-discriminatory, cost-based access is available to all parts of the postal network, for example. This makes it possible for new parties to establish the required economy of scale.

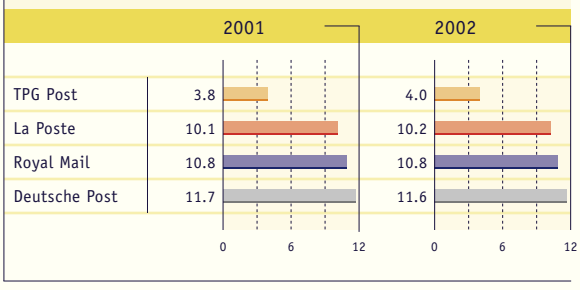
At the end of 2002, the General Postal Guidelines Act (BARP) was modified.[9] This modification effectuates non-discriminatory end-user access for new entrants to TPG's network. This means that entrants also have the possibility of entering into individual agreements with TPG for special tariffs for concession post.
TPG already offers parties with large batches of mail (banks, for example) the possibility of supplying post to one of the six regional sorting centres at a reduced tariff. The level of the tariff reduction is determined by the costs that TPG does not incur as a result (avoided costs).
This scheme applies to bulk letter post.

2 • Overview of the postal market

European relationships

The postal market is becoming increasingly international. There are four large parties that dominate the postal market in Europe : Royal Mail, Deutsche Post, La Poste and TPG.

Figure 1 **REVENUE OF THE POSTAL DIVISIONS – of large European players**[10], 2001-2002, in billions of euros



Source: Market Monitor Post, OPTA, based on annual reports.

As shown in *Figure 1*, TPG is the smallest of these four. As the liberalisation of the national markets continues, more competition can be expected between Deutsche Post, Royal Mail and TPG. These three parties are already active on each other's home markets. La Poste is less internationally oriented.

Structure of the market

The Postal Act distinguishes between services. The postal market can also be divided into four different segments. These are:

- **C2C (Consumer to Consumer):** post from one consumer to another (this primarily consists of letters weighing no more than 100 grams and small parcels);
- **C2B (Consumer to Business):** post from a consumer to a business (these are generally financial items – bill settlements, for example – forms and response cards to businesses and organisations and returned post such as clothing that does not fit that is returned to a mail order company);
- **B2C (Business to Consumer):** post from a business to a consumer (this includes a wide range of post flows, including addressed and unaddressed printed matter, personal letters from businesses and organisations, and parcels ordered by the recipient);
- **B2B (Business to Business):** post from one business to another (this is the post flow with the largest volume and includes all types of mail).

Value chain post

The delivery of post is a complicated logistical process. *Figure 2* shows a number of general steps. Post is collected (collection) and transported and sorted (transport and sorting). It is then transported again (transport) and ultimately delivered to the addressee (delivery). Separation of regional post and other post ensures that sorting takes place only once in a regional sorting centre.

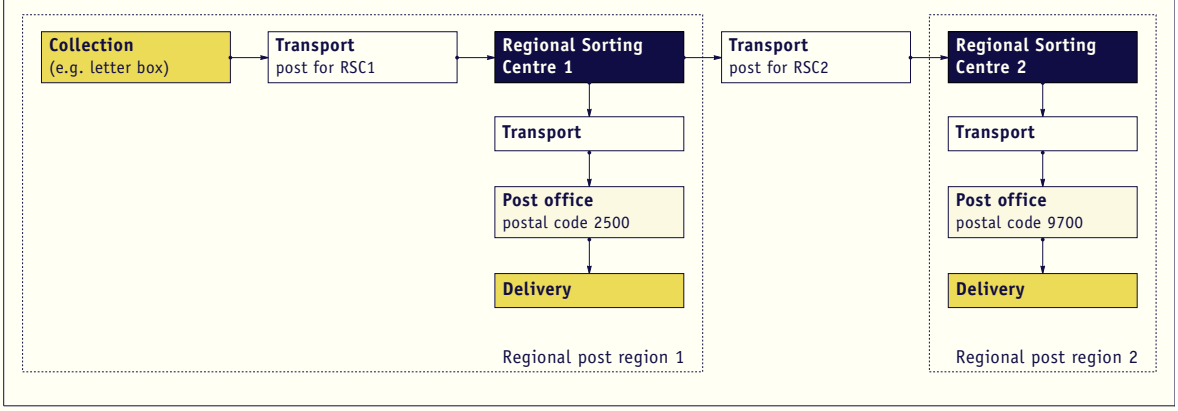
A small part of collection consists of individual items that are supplied via the red letter boxes. This may be either consumer post or (small) business post. What is more, a large part of this mail is supplied in December (Christmas cards). Business users can supply their post to the letter boxes, can have it collected, or can bring it to the post office or to business points. TPG's competitors, however, may not use the public letter boxes or the post office for collection. They establish their own business points and/or organise their own collection routes.

Sorting

The first general sorting takes place at one of TPG's regional sorting centres (RSC) or at a third party's own sorting centre. Sorting is based on postal code. If the post is regional, it is then finely sorted in a regional sorting centre. Non-regional mail is sorted in the closest RSC and then sent to the RSC in the right region. Business users

5 SEO, Tante Pos krijgt concurrentie, Effecten van de liberalisering van de postmarkt (Competition for the Mail Man: Effects of the liberalisation of the postal market), September 2003
6 Estimates are based on TNO basic data post deliveries 2003 (as ordered by the DGTP), September 2003.
7 Ministry of Economic Affairs, Notitie Post, January 2003.
8 Ministry of Economic Affairs, Notitie Post, January 2003, p. 2.
9 Amendment General Postal Guidelines Act with reference to Guideline 2002/39/EG, 20 November 2002.
10 Royal Mail reports its results over a broken financial year. Corrected for exchange rates.

Figure 2 **GENERAL VALUE CHAIN POST**
for regional post and other post



often supply their post pre-sorted, so that it requires less capacity from the sorting network and is therefore less expensive. Sorting of mail is primarily automated.

Delivery

After the fine sorting, the items are transported and delivered to a post office, where it is sorted according to mail route. Then the actual delivery takes place.
In delivery, unlike sorting, no significant scale advantages can be gained by means of automation. The post is delivered to home addresses (both businesses and consumers) or to post office boxes. By far the largest delivery network is held by TPG, but there are parties with their own delivery staff for other types of post. The costs of the delivery network are highly dependent on salary costs, the volume to be delivered and the delivery frequency.

Entry barriers in the various segments

In addition to insight into the logistical chain, entry barriers play an important part in competition. The largest entry barriers on the postal market after the legal restrictions is scale. New players often focus on segments in which the economies of scale are less important. These are the segments with a relatively small volume in which high revenue can be achieved and that do not require a finely-meshed network for collection and delivery.[11]

Table 2 shows the four segments described above, indicating the type of services offered, the share of the total postal market in the Netherlands that the segment represents, and how finely-meshed collection and delivery are.

Competition in C2C

TPG holds nearly the entire segment Consumer to Consumer. There is some competition from Municipal Postal Companies, which deliver to consumers in certain regions. The major barriers here are TPG's monopoly on letters up to 100 grams, TPG's collection network (red letter boxes and post offices), the volume needed for sorting, and the necessary delivery frequency.

Competition in B2C and C2B

In the Business to Consumer segment, individual post items such as direct mail and catalogues are sent to consumers. The entry barriers here are not so much in the 'sorting' link of the value chain because most businesses supply large quantities of post that are pre-sorted by computer. The highest entry barrier here is in the 'delivery' link in which (with a network with national coverage) a relatively large volume is needed in order to operate at a profit. In C2B, the entry barrier lies in the finely-meshed collection in particular, and less in the 'delivery'.

Competition in B2B

In the Business to Business segment (e.g. parcels sent from one business to another), the economies of scale are less important than in other segments because both collection and delivery are less finely-meshed. This makes it easier for entrants to compete in this segment, creating competitive pressure on the prices charged by existing providers. Here, too, the delivery network creates an entry barrier, although access to delivery to TPG's post office boxes has been possible since June 2000.

11 SEO (2003)

Table 2 **SEGMENTS IN THE POSTAL MARKET in the Netherlands,** 2003

	C2C	C2B	B2C	B2B
Size as % of entire market	4	4	58	34
Of which batch shipments (%)	0	0	77	60
Collection	finely-meshed	finely-meshed	less finely-meshed	less finely-meshed
Delivery	finely-meshed	less finely-meshed	finely-meshed	less finely-meshed
Type of services in segment	letters < 100 grams and small parcels	returned mail, letters	addressed and unaddressed printed matter, letters (items and batches), magazines, direct mail	all types of post: including direct mail, catalogues, letters, parcels, magazines

Source SEO (2003).

Table 3 **DIVISION OF LETTER POST according to weight classes,** 2003, in percent

Weight classes	% of total quantity of letters	% letters of monopoly	% of total revenue for letters
0 - 20 gram	56.7	81.1	53.2
0 - 50 gram	66.4	95.0	67.9
0 - 100 gram	69.9	100.0	71.5
> 100 gram	30.1	-	28.5

Source: TNO (2003).

3 • Competitive relationships

Influence of monopoly will remain extensive even after further liberalisation

In 2006 the monopoly will be reduced to letters up to 50 grams. As can be seen in Table 3, letters up to 50 grams represent 95% of the total number of letters in the concession. Thus it is expected that even after liberalisation in 2006, the influence the monopoly will have on the competitive situation in letter mail will still be strong.

Competition only in a limited number of segments

Although the number of alternative providers in segments including parcel post and unaddressed post is relatively large, TPG is the dominant party in most parts of the postal market. Striking, for example, is the fact that in the market segment of letters weighing more than 100 grams (that was removed from the monopoly in 2000) TPG still holds a market share of nearly 100%. Because national parties do not have a network of collection points with national coverage, a high entry barrier exists.

Table 4 shows the major parties in the postal sector in the Netherlands. Netwerk VSP is owned by TPG. All contracts of Media Expresse (magazines) will be owned by TPG. If the parent companies are considered, only Deutsche Post (with its companies DHL/VGL, Selektvracht, Interlanden and Selektmail) is a competitor of any size at this time.

Niche competition

Letter post comprises only a small part of the entire postal market. *Figure 3* shows an estimate of the percentage size of a number of segments in the postal market in the Netherlands, in terms of volume and revenue. Striking is the fact that the volume of letters up to 100 grams is large, but that the revenue involved is relatively low. Although the share of unaddressed post is large in total volume, its share based on revenue is much smaller. The number of market parties active in this market segment is relatively large compared to other market segments. This can be explained by the low entry barriers for new parties. Local delivery staff will usually suffice. Moreover, leaflets are often delivered in bundles. This limits the delivery costs per leaflet significantly.

Table 4 **MARKET PLAYERS**

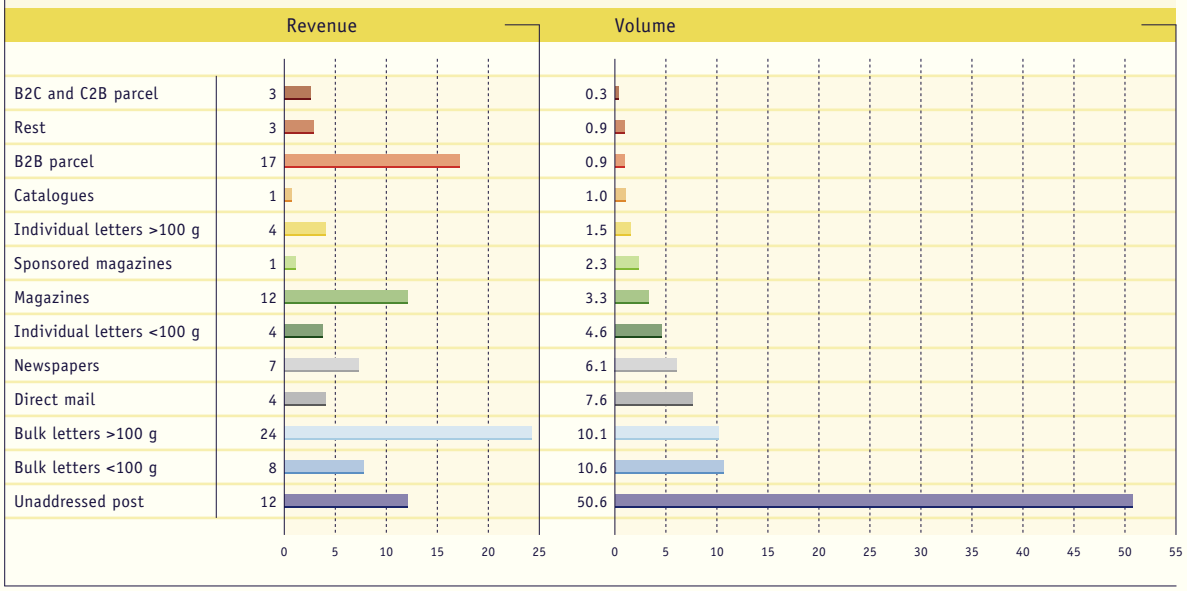
in the postal market in the Netherlands, 2003

	Small volume	Large volume
All-round player		TPG Post
Semi-all-round player	SandD, Selekt mail (Deutsche Post)	
Niche player	MailMerge, Businesspost, RM Netherlands, Interlanden (DP), Alfa Groep, PMGN, NDC, Geopost	Netwerk VSP (TPG), Media Expresse, Telegraaf/DistriQ, PCM, Wegener-dagbladen, Selectvracht (DP), DHL/VGP (DP), GLS-Netherlands

Source: TNO (2003).

Figure 3 **VARIOUS TYPES OF POSTAL SERVICES – on the market in the Netherlands**

2003, in percent according to revenue and volume



Source: TNO (2003), revenue figures are estimations by OPTA, based on TNO.

As an indicator of the extent of competition in a certain segment, the number of relatively large players active in that segment can be used. The number of market parties is relatively large in the market segments parcel services (B2B parcels) and unaddressed post. In the B2B parcel segment, TPG holds a relatively small market share of approximately 26 percent. DHL/VGL (Deutsche Post subsidiary) holds the largest market share in this segment. *(see Figure 4)*.

In other market segments, TPG's dominance varies. For individual domestic items, for example, TPG holds a market share of 100%. On the business market, TPG Post holds a market share in all segments of at least 90 percent, with the exception of unaddressed printed matter (17 percent), newspapers (2 percent), parcel post from businesses to consumers and vice versa (56 percent) and parcel post from business to business (26 percent). In the market for magazines, TPG currently holds a market share of 45 percent. However, TPG will take responsibility for the contracts between Media Expresse and Sanoma, which will increase its market share in one year to about 95 percent.

Although competition in the B2C/C2B and B2B segments for parcel post is relatively strong *(see Figure 4)*, in recent years the tariffs for the delivery of parcels to consumers and small business users have increased *(see Figure 5)*. These increases for various parcel post items were greater in 2003 than in other years. Thus more competition does not guarantee that TPG's prices will decrease. Large business users, including banks and insurance companies, often receive targeted volume discounts Approximately 70 percent of the postal flow originates from users of this type.[12]

12 CTCon (1998) and SEO (2003).

Figure 4a **UNADDRESSED PRINTED MATTER**

market share in 2003, in percent

Netwerk VSP	35
Interlanden SG	23
Alfa groep	15
TPG Post	10
Others	17

Figure 4b **ADDRESSED PRINTED MATTER – newspapers**

market share in 2003, in percent

DistriQ	31
Wegener	30
PCM Distributie	30
NDC	7
TPG Post	2

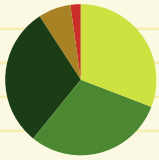


Figure 4c **B2C AND C2B PARCELS**

market share in 2003, in percent

TPG Post	56
Selektvracht	37
GLS-Netherlands	2
Others	5

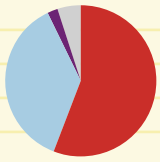
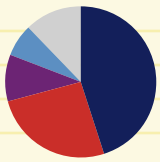


Figure 4d **B2B PARCELS**

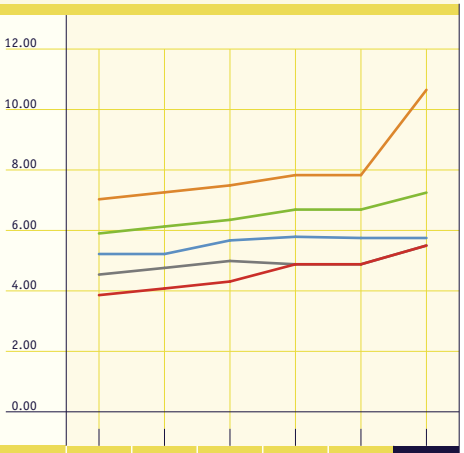
market share in 2003, in percent

DHL/VGL	45
TPG Post	26
GLS-Netherlands	10
Geopost	7
Others	12



Source: TNO (2003), processed by OPTA.

Figure 5 **TARIFFS TPG PARCELS – for consumers and small business users,** 1998-2003, in euros



	1998	1999	2000	2001	2002	2003
Parcel 0-1 kg	3.86	4.08	4.31	4.88	4.88	5.50
Parcel 1-5 kg	4.54	4.76	4.99	4.88	4.88	5.50
Parcel 5-10 kg	5.90	6.13	6.35	6.69	6.69	7.25
Parcel 10-20 kg	7.03	7.26	7.49	7.83	7.83	10.65
Registered delivery 0-1 kg	5.22	5.22	5.67	5.79	5.75	5.75

Source: Market Monitor Post, OPTA.

Emergence of alliances

In many market sectors, forming alliances is a way to bundle strength. Alliances make it possible to achieve cost advantages or the critical scale. What is more, alliances can be a weapon against the dominance of large market parties.

Selekt Mail Nederland and MailMerge announced an alliance in October 2003. These companies want to be able to deliver to both post office boxes and street addresses. RM Netherlands also uses its partner Businesspost to deliver to post office boxes.

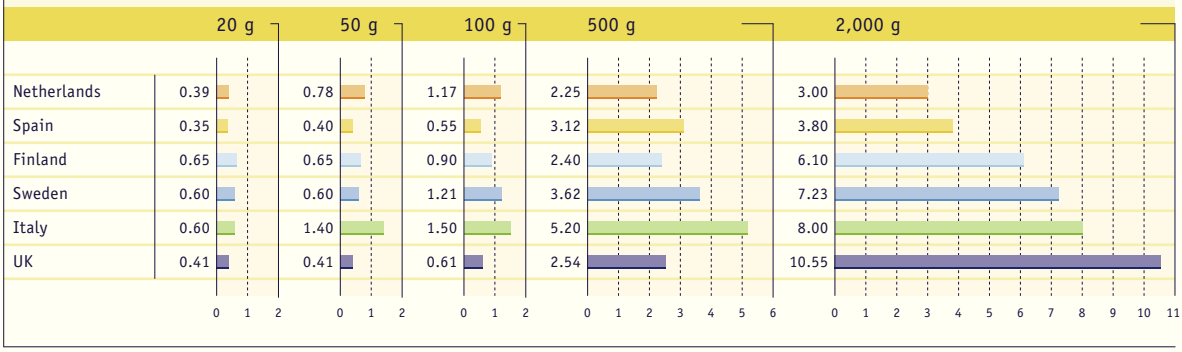
Alliances between various competing parties could grow into a means for initiating infrastructure competition in parts of the postal market that are difficult to duplicate.

Postal tariffs in the Netherlands

The tariffs for the various types of post deliveries in the Netherlands are among the lowest in Europe. In the lowest weight class (up to 20 grams), Spain is still the least expensive country for sending letters. The differences have decreased, however: a letter of up to 20 grams in Spain cost 0.25 euro in 2001 but is now 0.35 euro. For letters up to 50 grams, the tariffs in the United Kingdom, Spain, Sweden and Finland are lower than those in the Netherlands. The comparison shown below has not been corrected for population density in the various Member States, for example; a correction of this type would result in a different outcome, i.e.: the tariffs in the Netherlands are not among the lowest in Europe.

Figure 6 **NATIONAL LETTER TARIFFS – for various weights**[13]

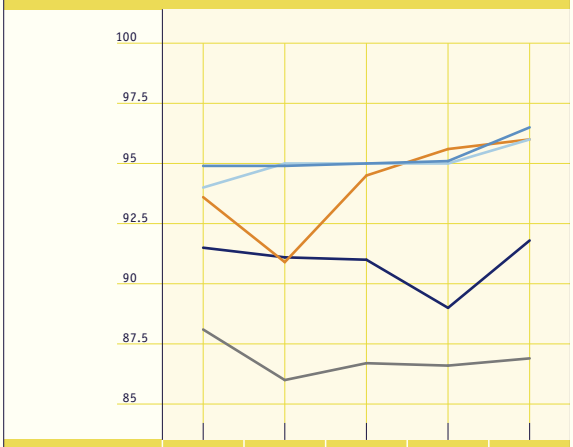
in EU Member States, January 2004, in euros (including VAT)



Source: Market Monitor Post, OPTA.

Figure 7 **NATIONAL POST – delivered within 24 hours**

in EU Member States, 1998-2002, in percent[14]

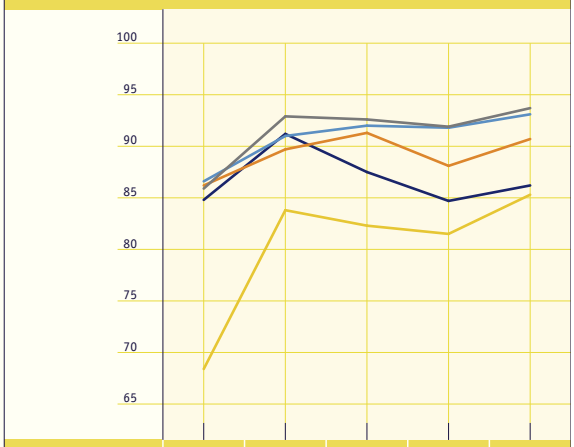


	1998	1999	2000	2001	2002
Germany	88.1	86.0	86.7	86.6	86.9
UK	91.5	91.1	91.0	89.0	91.8
Finland	94.0	95.0	95.0	95.0	96.0
Netherlands	93.6	90.9	94.5	95.6	96.0
Sweden	94.9	94.9	95.0	95.1	96.5

Source: Market Monitor Post, OPTA, based on annual reports and information from regulator.

Figure 8 **NATIONAL POST – delivered within 3 days**

in EU Member States, 1998-2002, in percent



	1998	1999	2000	2001	2002
Spain	68.4	83.8	82.3	81.5	85.3
UK	84.8	91.2	87.5	84.7	86.2
Netherlands	86.2	89.7	91.3	88.1	90.7
Sweden	86.6	91.0	92.0	91.8	93.1
Germany	85.9	92.9	92.6	91.9	93.7

Source: Market Monitor Post, OPTA, based on figures IPC (2002).

4 • Universal Services

Each year TPG reports to OPTA regarding its performance within its assignment. OPTA imposes quality requirements on TPG's services with reference to the delivery period and the numbers of post offices and letter boxes.

Delivery period post items

National

TPG is required by law to achieve a high quality of post deliveries. For domestic post, in 95 percent of the cases delivery must be made within 24 hours. Recent years have seen discussions with TPG because OPTA believes that the measurements used were not sufficiently reliable. This resulted in modifications to the measuring system. As a result, OPTA determined last year that sufficient (measurable) certainty exists regarding the quality of post

13 Tariff comparisons between countries may be distorted due to deviating weight classes. This comparison is based on exact weights and has been corrected for exchange rates.
14 A direct, one-on-one comparison of delivery periods is not always possible because EU Member States have varying post classes.

Table 5 **OBJECTIVES DELIVERY PERIOD FIRST CLASS OR PRIORITY domestic post,** 2003, in percent

	D+1 (1 day)	D+2 (2 days)	D+3 (3 days)	D+4 (4 days)	D+5 (5 days)
Austria	95	98	-	100	-
Belgium	92	97	-	-	-
Denmark	97	-	-	-	-
Germany	80	95	-	-	-
Greece	82	-	93	-	-
Spain	-	-	90	-	98
France	84	98	-	-	-
Ireland	94	-	99.5	-	-
Italy	87	98	99	-	-
Luxembourg	95	99	-	-	-
Netherlands	95	-	-	-	-
Portugal	93.2	-	-	-	-
Sweden	85	-	97	-	-
Finland	95	-	-	-	-
UK	92.5	-	-	99.9	-

Source: Market Monitor Post, OPTA, based on figures from WIK. [15]

deliveries. TPG satisfied its legal obligation in 2002; 96 percent of the domestic mail was delivered within 24 hours. In comparison with a number of other EU members, TPG performed well in terms of the delivery quality for domestic mail. Bets performance for on time delivery is to eb found in Sweden and the Netherlands.

Table 5 shows that not all Member States apply the same standard for the delivery period. 92.5 percent of the domestic post in the UK must be delivered within one day, but 99.9 percent of this post must be delivered within four days. Only Germany places a higher requirement on post deliveries than the Netherlands: 97 percent within one day. Unlike in the Netherlands, other Member States also place requirements on the delivery period for other types of post. This is the case for domestic parcels in eight of the Member States.

International

There is also a standard for the delivery of letters within Western Europe: 85 percent must be correctly delivered within three days.
As indicated in *Figure 8*, TPG satisfied this standard and scores better than the national post companies in the United Kingdom and Spain. International post sent from Germany or Sweden arrives at its destination within three days even more often. Compared with 2002, the percentage of international post delivered within three days in the European Union improved to an average of 93.5 percent. The average delivery period was 2.2 days.[16]

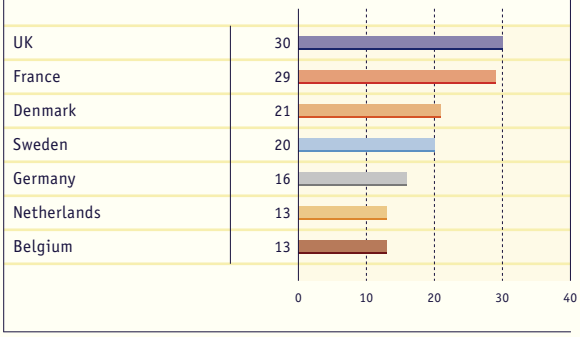
Post offices policy

The BARP determines that every inhabitant of the Netherlands is entitled to a post office within a radius of five kilometres. In residential areas with more than five thousand inhabitants, this must be an office that provides all services. In October 2003, OPTA confirmed that TPG satisfies this requirement to a significant degree. As shown in Figure 9, the number of post offices per hundred thousand inhabitants is not high when viewed from an international perspective.

The BARP also places requirements on the availability of letter boxes. A letter box must be available within a radius of 500 metres in municipalities with more than 5,000 inhabitants; in smaller municipalities a letter box must be available within a radius of 2.5 kilometres. As shown in Figure 9, the number of letter boxes per hundred thousand inhabitants is not high when compared to other countries in Europe. The number of letter boxes increased last year, while this was often not the case in other countries (Spain, Italy and the UK, for example).

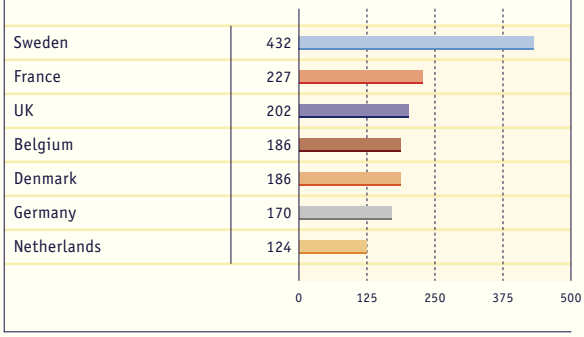
15 WIK, Study for the European Commission Directorate-General for Internal Market, Quality of Service Objectives, Performance and Measurement in Relation to Community Universal Postal Service, August 2003
16 WIK (2003).

Figure 9a **NUMBER OF POST OFFICES**
per 100,000 inhabitants
from an international perspective



Source: Devoteam Columbi (2003).[17]

Figure 9b **NUMBER OF LETTER BOXES**
per 100,000 inhabitants
from an international perspective



Source: Devoteam Columbi (2003).

17 Devoteam Columbi – Benchmark postal market, August 2003 (on behalf of the Ministry of Economic Affairs)

5 • Annual report

• over the year 2003

From OPTA's tasks

Supervising **the providers**

of electronic signatures

1 • Promoting sustained competition

OPTA's main objective 'promoting competition' involves ensuring that new providers have sufficient access to the markets and the removal of obstacles for competitors. If a market is to be competitive, it is essential that consumers can easily switch to other providers. Moreover, OPTA must ensure that telephone numbers are issued quickly and efficiently, taking the desires of the users of those numbers into account.

Tariffs adjusted and numbers made portable

1 • Telephony

1.1 • Wholesale tariffs

One of the most important issues about which OPTA made a decision in 2003 was the reduction of the wholesale tariffs[1]. KPN charges these tariffs to companies that use KPN's network for telephone traffic, data traffic and leased lines. OPTA was faced with its yearly task of evaluating KPN's cost structure and thus indirectly the prices that the company is allowed to charge for its wholesale services. OPTA had to decide which costs would be allocated to which of KPN's activities and which risk margins and profits are reasonable. After its study, OPTA concluded that KPN's tariffs were too high and needed to be reduced. The Rotterdam District Court rejected a request from KPN to suspend OPTA's decision. KPN asserted that it was being forced to apply wholesale tariffs that were lower than the cost price. The appeal submitted by KPN against OPTA's decision is being reviewed at the time of writing this report.

1.2 • Bitstream access

Broadband provider Tiscali submitted a dispute to OPTA regarding the supply of Bitstream access and the relevant tariffs that KPN may charge for this service. Internet providers need Bitstream access; this is access to KPN's infrastructure in order to supply fast broadband internet connections. However, KPN only allowed access to its broadband infrastructure via its own ADSL service. This means that internet providers effectively must resell KPN's ADSL service to their clients. Some internet providers agree with this because they are affiliated with KPN. However, this is not the case with Tiscali. This company requested access to KPN's infrastructure but did not want to have to sell KPN's ADSL service.
According to Tiscali, Bitstream access is a regular type of access to the telecommunications infrastructure. Thus KPN should be required to allow this access for every market party if it allows itself access. KPN argued that Bitstream access is something entirely different than the wholesale services for telephony to which the Telecommunications Act applies. Thus KPN should not be obliged to make Bitstream access available to other parties. These companies could very well lay the cables and install the other facilities required for broadband internet traffic themselves. OPTA determined that KPN must allow Tiscali Bitstream access.[2] However, the Rotterdam District Court

1 OPTA/IBT/2003/202395, 24 july 2003.

determined that OPTA is not competent to make that decision under the existing Act3. OPTA submitted an appeal against this decision with the Trade and Industry Appeals Tribunal. This issue is of vital importance to further development of the internet market because it contributes to determining how quickly, on what scale and under which conditions broadband will be made available in the Netherlands.

1.3 • Expansion of carrier selection

KPN subscribers on the fixed network have been able to have their calls processed by a different telephone company since a few years ago. These companies – carriers – purchase bulk telephone capacity from KPN and sell it to consumers. This service is known as carrier selection (CS) and, in its automated form, carrier pre-selection (CPS). The service is important for introducing competition on the fixed telephone network.

The C(P)S service does not yet work for particular numbers, such as 0800 (toll-free information numbers) and 0900 (paid information numbers). OPTA brought the C(P)S companies and KPN together in a round table conference to determine how this service can be expanded to include these numbers. It was decided that OPTA would not impose a certain type of implementation but would leave this task to the market parties. If disputes arise between the market parties and KPN, OPTA can take a decision.

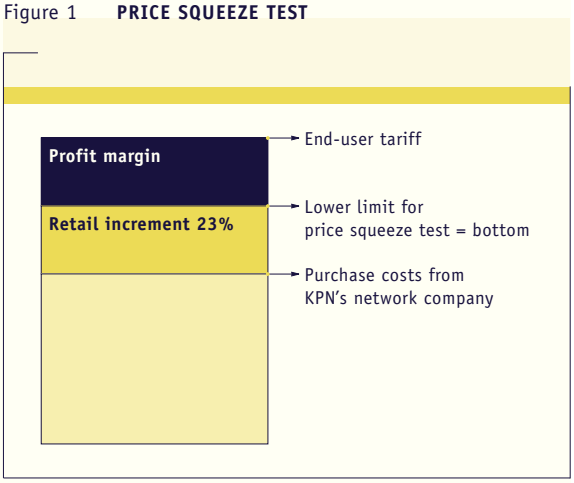
Slamming

Consumers are highly interested in C(P)S. However, things have gone wrong when some KPN clients switched to alternative providers. Some subscribers suddenly called via a different provider without asking to do so. As a result, the consumer sometimes received invoices from companies with whom no contract had been established. This phenomenon is known as slamming.
With reference to a dispute with KPN that CPS providers submitted to OPTA, it determined new guidelines Special Access and Slamming on 27 November 2003 to make it possible to settle such disputes. Telephone companies must provide better information to consumers regarding the way in which they can switch to a different provider and which sanctions will be imposed if slamming occurs. OPTA rejected KPN's request that telephone companies be solely allowed to use written contracts with their customers. OPTA believes it is important that consumers are able to quickly and easily respond to offers made by telecom companies. Consumers appear to benefit most from competition in countries in which verbal agreements are also allowed.

1.4 • Price Squeeze and discounts

OPTA wants to make sure that competitive telephone companies are not faced with a price squeeze. A price squeeze occurs when a telecom company is caught between the wholesale price that KPN charges for use of its network and the end-user tariffs that it charges its own customers. It is also important that KPN be able to offer discounts within certain limits. As a provider with significant market power, the former monopolist has considerable influence on pricing in the market. Expanding KPN's discount possibilities could result in competing companies being forced from the market. In the case of a price squeeze, KPN's competitors have little or no room to achieve sufficient margin to make competition possible in the longer term.
The price squeeze test defines the bottom price, which is the minimum level for KPN's retail tariffs. The following figure shows the function of the bottom price.

Figure 1 **PRICE SQUEEZE TEST**



OPTA ensures that efficient providers are truly given the opportunity to compete without being caught in a price squeeze. In 2003 OPTA's regulatory activities focussed on the issue of discounts given by KPN. This issue arose during the evaluation of the regulation of the lower limit of KPN's end-user tariffs, and pertains not only to discounts for large scale business users but also to discounts for consumers that use preferred numbers or that purchase inexpensive call bundles.

In May 2003, KPN's competitors urged OPTA to ensure that KPN would not obtain additional room to offer discounts and bundles. This would place them in a price squeeze. These companies requested that OPTA revises its method for the price squeeze test. According to KPN's competitors, the existing test does not take their costs sufficiently into

2 OPTA/IBT/2003/201727, 1 may 2003.
3 TELEC 03/2570-NAV, 25 july 2003.

account. As a result, they believe that this test does not ensure that they can achieve sufficient margin – in comparison to the end-user tariffs applied by KPN – to profitably offer services. OPTA asked these companies to motivate their request with figures. The information subsequently submitted by the market parties convinced the Commission that inequality exists between the starting position of KPN and that of companies that offer CPS. The documentation submitted indicated that KPN, partly due to its size and its position as a vertically integrated company, incurs lower costs than its competitors and therefore is able to charge lower tariffs without losing its profitability. As a result, competitors have little room to compete with KPN in terms of price. However, under the existing legislation, OPTA does not have the authority to change this situation. This could change under the new legal framework because customised measures can be imposed in defined markets. The Commission determined in mid-2003, however, that it would not pre-empt the new framework. OPTA did decide that it would not allow KPN to expand its discount space because of the possible damaging effects this could have on the development of sustained competition (due to the risk of a price squeeze). Because KPN's prices increase each year with the rate of inflation and competition in the various types of telephone traffic is developing slowly, OPTA believes it would not be justifiable for KPN to be allowed to offer its customers more discounts in 2004. This could price other market parties right out of the market.

1.5 • Issue of numbers

OPTA is responsible for issuing regular and special telephone numbers. It is important that the available numbers be used as efficiently as possible. Only then can a shortage of numbers be prevented. OPTA has therefore urged market parties to use numbers carefully and to turn in numbers that are no longer used even though this requires additional effort or manpower and therefore also expense.

Auction business numbers

A new phenomenon is what is known as a business number. This is a single number with which various branches of a company can be reached. Customers therefore need to know only one number, with which their call is directed to the desired branch. These numbers have the prefix 088. In 2003 OPTA made preparations for the issue and use of business numbers, which is expected to start in the course of 2004. An auction can be organised for these numbers if more than one company is interested in the same number. OPTA will formulate guidelines for these auctions and define the auction rules. The revenue from any auction goes to the State.

Three week period

The business sector needs special numbers to be made available quickly, for instance information numbers. Last year it was decided on the European level that the processing period for a number request would be reduced from six to three weeks. OPTA implemented this three-week processing period in 2003.

Shortage of numbers

At this time, there is no shortage of numbers. OPTA ensures that allocated numbers are actually issued and put into use by the business sector. This helps to ensure that there are always sufficient numbers available for issuing. The demand for information numbers has grown. In 2003 OPTA issued nearly 19,000 information numbers and withdrew more than 15,000. The total quantity of numbers issued in 2003 was nearly 4.6 million, the largest share of which was issued in blocks. These figures do not substantially differ from those for 2002. However, a qualitative shortage frequently occurs. A number of times each year, businesses or organisations request a certain 'prestige' number. Because these numbers are easy to remember for consumers, they have a certain market value. There are often two or more applicants for these numbers. It will also be possible to auction these numbers in 2004 in addition to the normal issue process based on the 'first come, first served' principle.

1.6 • Selectability

OPTA also safeguards the 'selectability' of numbers. Selectability means that individuals who want to call a certain number are actually connected to that number when they dial it. Not all telecom providers ensure that all numbers that have been officially issued can actually be selected. This is partly due to the fact that some numbers, e.g. internet dial-up numbers, require technical modifications that subject telecom companies to additional costs. However, providers are required by law to take every effort required to establish selectability. OPTA consulted with the market parties about this issue last year. Based on the consultation outcome, a report was compiled that thematically discusses the problems involved in selectability and how OPTA could deal with these problems.
The new Telecommunications Act also places high demands on selectability and thus on interconnection and interoperability. It must be possible to connect providers' networks and services (interconnection) without difficulty

and to offer access to services so that networks can seamlessly work together on the level of the services offered (interoperability). Based on the experience gained in selectability, OPTA will formulate guidelines for settling disputes and thus give market parties more clarity with reference to their interoperability rights and obligations.

1.7 • Number portability

To ensure sustained competition, it is essential that consumers can easily change providers. This means that there must not be any high thresholds for switching from one telephone provider to another.
Since 1999 the Telecommunications Act has prescribed that a mobile caller must be able to take a number with him when switching to a different mobile telecom provider. It was learned in 2003 that the telephone companies are not readily complying with this legal obligation. The number of complaints regarding the period of time it took to transfer a number increased significantly. OPTA subsequently formulated more stringent rules.[4]
It must be possible for a mobile caller to switch to a different provider and transfer his number within ten working days. In its dispute decision, OPTA also concluded that the Telecommunications Act prescribes resistance to contract terms that make number portability dependent on long notification periods. In the Commission's view, such terms undermine the number portability that is essential to competition. However, the court did not share OPTA's view in this matter. In a dispute filed by KPN Mobile, the Rotterdam District Court determined that telephone companies cannot be forced to cooperate in number portability during the course of a valid contract.[5]
A study was performed in 2003 of the manner in which number porting must be reported to OPTA and of possible improvements. The results of this study will be used in 2004 during a market consultation.

1.8 • Interconnection

No revision of KPN's reference interconnection offer was performed this year. This reference offer is the catalogue that KPN must publish listing all wholesale products.
After consulting with the market, OPTA determined in mid-2003 that it would be better to wait for the modified legislation.
Policy regarding the registration and publication of interconnection agreements was continued in 2003.
The new Telecommunications Act no longer prescribes this registration.

1.9 • Regulation mobile telephony

The requirements imposed in the licenses for providers of mobile telephony, including requirements with regard to the level of coverage and quality, are reviewed each year. OPTA has determined that mobile providers satisfy these requirements.

1.10 • Adequate registration of providers

The total number of companies active on the telecommunications market decreased last year. This trend was seen for virtually all products and services. The quantity of numbers issued for carrier selection services and internet access, however, increased. The complete overview is as follows: *(See table 1)*

1.11 • KPN's Reporting

KPN reports each year in May regarding the tariffs applied in the preceding calendar year for its telephone and leased line services along with the cost orientation applied.
If OPTA determines that a tariff is not cost oriented, the Commission can give KPN directions. The cost orientation evaluation will be concluded in 2004.

Table 1 **CHANGES IN THE REGISTRATION of providers, in 2003**

	1-1-2003	Entrance	Exit	31-12-2003
Owners or providers of a public telecommunication network	127	22	31	118
Providers of a public telecommunication service	259	44	51	252
Owners or providers of leased lines	75	5	20	60
Owners or providers of a broadcasting network	80	2	8	74
Providers of conditional access systems	6	1	0	7
Total quantity of carrier selection numbers	**83**	**16**	**3**	**96**
Total quantity of numbers issued for internet access	**379**	**89**	**5**	**463**

4 OPTA/EGM/2003/201642 en OPTA/EGM/2003/204353.
5 VTELECO3/3349-MESK, 18 December 2003.

2 • Post

2.1 • Letter or printed matter

Rectification

In response to the civil court proceedings initiated by TPG Post regarding the decision about the postal status of tax return forms as published by the OPTA Commission on 24 April 2003, the District Court of The Hague ordered the Commission to publish the following rectification in a manner that would attract attention:

"The District Court of The Hague determined in its decision of 17 March 2004 that the transport of tax return forms – in so far as each individual form weighs no more than 100 grams and states not only a name and address but also one or more additions, such as the social-fiscal number or return number, date of birth, account number and an EAN code – must be qualified as 'letters' as referred to in the postal regulations."

An issue arose in 2003 regarding access for a new market party. The large postal shipments sent by the Tax Department are attractive for new market parties. A question was submitted to OPTA whether the Tax Department's tax return forms should be regarded as letters or as printed matter. Only TPG is allowed to deliver letters weighing up to 100 grams, but printed matter may also be delivered by other market parties.

OPTA determined that a tax return form should be qualified as printed matter because the automated additions (e.g. social-fiscal numbers) must be considered a supplementary type of addressing. This does not make the empty form into a personalised written message. TPG did not agree and commenced proceedings on the merits of the decision. The rectification stated above reflects the decision rendered in this procedure.[6] The Court also determined that with the publication of its viewpoint, OPTA did not exceed its legal authority and did not act unjustly against TPG. At the time of writing this annual report, the Commission was still deciding whether to appeal this court decision.

A market party has also requested that OPTA determine the status of voting cards for elections. OPTA considers these cards to be letters because they state a unique serial number and because individuals cannot vote without the cards.

2.2 • Assessment of tariffs in relation to regulations

The assessment, which is intended to determine whether TPG's contracts satisfy the legal requirements for conditions and tariffs, will be concluded in 2004.
OPTA studied the non-discrimination of the contracts that TPG establishes with large market parties. TPG objected to this evaluation in interlocutory proceedings but did not win the case[7]. The Court determined that the company must supply the relevant information to OPTA. TPG has filed an objection against the obligation to supply the information[8] and has since filed an appeal with the court.

2. 3 • Cross subsidising

In order to prevent unjustified cross subsidising between parts of the company, TPG is required to define an allocation system for income and expenditures. In this respect, OPTA has placed requirements on TPG's financial accounting. However, the postal company questions the regulator's authority to impose these requirements. After a court decision in TPG's favour regarding this manner, OPTA has made a new decision following the objection.[9]
In 2003 TPG had to adjust one item (cost drivers) of its allocation system.

2.4 • Concession report 2002

Concession reports are intended to safeguard the quality of the universal services and the affordability of these services. A complete assessment of this report has not yet been completed. The reports were received from TPG later than expected. This was due to the appeal against the regulation pertaining to approval of the cost allocation system referred to above. The report will be assessed in 2004.

3 • Cable

3.1 • Tariffs

On 6 December 2003, the Trade and Industry Appeals Tribunal rendered a final decision in a series of disputes that have been ongoing since 1999 regarding the tariffs that UPC may charge for transmitting Canal+ programmes on the cable in Amsterdam. These disputes pertained to the fees that Canal+ was required to pay to UPC for transmission of Canal+ programmes in the Amsterdam region. OPTA made a number of decisions regarding these tariffs that were based on standards of transparency, non-discrimination and cost orientation. Canal+ and UPC objected to these decisions and initial proceedings with the Rotterdam District Court resulted in decisions in their favour.[10] The Rotterdam District Court determined that OPTA was not authorised to base its determination of the

6 03/1991, 17 march 2004.
7 03/2146 HRK, 25 july 2003.
8 OPTA/JUZ/2003/203616, 15 October 2003.
9 OPTA/JUZ/2003/203185, 16 September 2003.

transmission tariffs on the principle of cost orientation. However, in an appeal the Trade and Industry Appeals Tribunal determined that cost orientation is a useful principle for determining whether the price charged to the programme provider by the cable operator as an infrastructure provider is reasonable.[11]

3.2 • Cable access

With reference to access to the cable, OPTA collaborated with the NMa by order of the Ministry of Economic Affairs to start a study of the implementation of a fixed fee model on the cable. *(in Dutch: vastrechtmodel)*
A fixed fee means that an end-user pays separate fees for the network and for the services. It was learned in mid-2003 that the major cable companies did not want to cooperate in this endeavour. The order was subsequently returned to the Ministry.

4 • Dispute settlement and administrative enforcement

All disputes submitted in 2003 were processed by OPTA within the applicable periods prescribed by law. This is the result of the internal procedure 'efficient dispute settlement' in combination with a plan-oriented approach. After consulting with the market, OPTA formulated guidelines for dispute settlement and for tolerating cable installation. The modifications and adjustments to the questionnaire on the website give the market more clarity in this respect. OPTA performed various administrative enforcement activities, in which fines were imposed in three instances.[12] KPN was fined twice for violating the principle of non-discrimination. These fines pertained to the supply of XTL and ASL lines and of collocation facilities. The reason for the third fine was a violation discovered by OPTA of the rules in the Telecommunications Act and the European ordinance regarding unbundled access to the local loop. In particular, the violation involved violating the discrimination prohibition by favouring KPN's own unit Internet Protocol Services, the unit that provides KPN's ADSL services.

10 TELEC 99/2658 RIP, TELEC 99/2712 RIP, TELEC 00/509 RIP, TELEC 00/1910 RIP, TELEC 02/894 RIP, TELEC 02/1070 RIP, 26 February 2003.
11 AWB 03/406, 03/418 en 03/425, 3 December 2003.
12 OPTA/IBT/2003/201837, 11 March 2003 en OPTA/IBT/2003/204596, 19 December 2003.

2 • Protecting consumers

OPTA's second main objective is protecting consumers on the markets for telecommunications, post and cable. Consumers are quite vulnerable in monopoly situations.

Calls from fixed to mobile less expensive

1 • Telephony

1.1 • Tariffs

For years, it was significantly more expensive in the Netherlands than in other countries to make calls from a fixed to a mobile telephone. This was due to the high tariffs that mobile telephony providers charged for calls that reached them via fixed networks. The mobile telephone providers were able to charge high tariffs because the calls had to be terminated via one of these providers. Mobile telephone companies are monopolists on their own network for these services. In effect, the high tariffs meant that 'fixed' callers were subsidising the mobile providers.
After OPTA ran into questions regarding its authority when attempting to intervene in this matter, the Dutch competition authority (NMa) became involved in this issue. It appeared that a position of economic power was being abused. Both regulators initiated studies and legal proceedings against the mobile telephony providers. The NMa is authorised to impose extremely high fines in such matters, amounting to many millions of euros. During the last months of 2003 the market parties compiled a proposal for voluntary reduction of the tariffs for terminating fixed-to-mobile calls. As of 1 January 2004, this resulted in the first reduction of the costs for calls from a fixed to a mobile telephone. Callers calling from a fixed to a mobile telephone will pay a total of 200 million euros less. A second reduction will be effectuated on 1 December 2004.
With the exception of one market party, all mobile providers have implemented the reduction.

OPTA is happy with these reductions but will continue to monitor developments. The same issue is current elsewhere in Europe. Under chairmanship of OPTA, the European Regulators Group (ERG) reached agreement regarding the manner in which the national regulators will evaluate the tariffs for termination of calls to subscribers of mobile networks. These agreements include the principle of 'cost-oriented prices'.

1.2 • Selective number blocking

KPN is required to offer its clients the possibility of blocking certain categories of numbers. KPN currently offers possibilities that include blocking paid numbers, such as 0900 and 0906 numbers. However, OPTA believes that from the perspective of cost management, it should also be possible for end-users to block mobile numbers and numbers for personal assistance services.
KPN has indicated that it has no wish to satisfy OPTA's request. OPTA is considering its next step.

1.3 • Itemised invoice

OPTA made agreements with KPN regarding the requirements to be satisfied by itemised invoices, which must be available to all subscribers free of charge. This facility became available on 1 October 2003.

1.4 • SMS code of conduct

At the end of 2002 the number of complaints about paid SMS subscriptions grew. These are subscriptions with which mobile callers regularly receive a certain type of message, e.g. about the weather, the stock exchange, a popular television programme or personal contacts. OPTA took inventory of the problem in cooperation with the Ombudsman foundation and the Consumers' Association. Subscribers often had no information about how much and how often they would be required to pay, who was providing the subscription and how it could be terminated. Under chairmanship of OPTA, the market parties and the consumer organisations collectively sought a solution. This resulted in a code of conduct requiring providers to give sufficient and easily accessible information to their customers regarding these items. The code was effectuated in the spring of 2003.
The number of complaints quickly diminished thereafter. If problems arise again in the future, OPTA will hold the telephone companies to the agreements as made. The application of the code of conduct will be evaluated.

1.5 • Queries and complaints

OPTA has significantly improved its website for consumers. The site now offers direct answers to frequently asked questions. Contact information is given for the organisations that can deal with questions and complaints for which OPTA is not authorised.
The number of queries and complaints that are submitted to OPTA has increased significantly: 4,000 complaints in 2003 as compared to 3,300 in 2002. Many of the complaints were related to the mobile market and difficulties in number portability. Civil law issues and complaints regarding general conditions are passed on by OPTA to the Telecommunications Disputes Committee.

With fixed telephony, a relatively large number of complaints were related to CPS. Topics of complaint included the accuracy of invoices, failure to continue CPS settings after a relocation, and slamming (unrequested use of a different provider). Some twenty complaints about slamming are received each month. There is no evidence of the intended decrease in these complaints. OPTA therefore intensively addressed this problem in 2003. *(See Chapter 1.)*

With reference to internet, most complaints were related to the delivery period for ADSL. OPTA is not authorised to demand national availability (complete roll-out) or to accelerate administrative processing when consumers want to switch to a different provider. In response to numerous complaints, OPTA urged market parties to develop simple and fast administrative procedures.
OPTA receives some 6,000 calls each year with questions and requests regarding the use and issue of numbers. OPTA's complete availability by telephone was converged at a single point in 2004. This has resulted in a specialised front office for anyone wanting to contact OPTA by telephone.

1.6 • Transparency

For market mechanisms to function as desired and for the protection of consumers, it is vital that the telecommunications market be sufficiently transparent. This does not mean that OPTA itself must supply consumers with information in every instance. This is considered per topic. Only if market initiatives prove ineffective or insufficient in solving a certain transparency problem is consumer information an option for OPTA. An example in this respect is the situation in which the market parties themselves created a solution by compiling an SMS code of conduct, after pressure from OPTA and the consumer organisations.

1.7 • Regulation projects

In 2004 OPTA had to respond to market developments more often than expected in its position as regulator. It took action last year against abuse of the 066 number used for semaphony. It was learned that euro 1.15 was being charged for calls even though no services are provided via this number. Abuse was also being made of numbers that start with 084 and 087. These numbers are intended for personal assistance services, e.g. an electronic mailbox or call divert services. Series of these numbers were withdrawn for this reason.
OPTA also had to intervene in 2003 in the abuse of mobile numbers for the supply of paid – usually erotic – services. Services of this type must be offered in the series of numbers that start with 0906. KPN does offer the option of blocking 0906 numbers, but this option is not yet available for 06 numbers. The Information Services Code foundation (STIC) and the Independent Information Services Commission (OCI) deal with 0906 numbers and they are authorised to enforce a code of conduct for information numbers.
There is no code of conduct for 06 numbers. A number of mobile telephone providers had designed a financially-attractive construction by offering certain erotic services

under a normal 06 number. These were terminated under OPTA's authority.

1.8 • Privacy

In virtue of the Telecommunications Act, it is forbidden to call someone using an automated telephone system that only plays a pre-recorded message. Nevertheless, consumers did receive calls during which only a tape with advertising was played for several minutes. OPTA ensured that the providers of these systems terminated their activities.

1.9 • Universal services

One market party asked OPTA to render a decision because KPN refused to supply subscriber information for the purpose of compiling a universal subscriber information service. In its viewpoint, OPTA indicated that KPN must supply this information. The parties subsequently settled the matter together.

2 • Post

Quality of deliveries

TPG is required by law to guarantee a certain quality of post deliveries, and to maintain a network of post offices so that, as a basic rule, inhabitants of the Netherlands have access to a post office within a radius of 5 kilometres. Recent years have seen discussions with TPG regarding the measuring system used to assess these quality requirements. OPTA believed that the measurements were not sufficiently reliable. It was determined in 2003 that the measuring systems have been significantly improved, now given improved certainty regarding the quality, albeit that other improvements are still necessary. The measurements indicated that TPG satisfied the requirements to a significant degree with reference to both delivery and the number of post offices.

3 • Internet

Electronic signatures

It is important that consumers and businesses that do business via the internet know who they are actually dealing with. The electronic signature plays a crucial role in this traffic. Because legislation for electronic signatures was effectuated last year, these signatures have the same legal status as a handwritten signature under certain conditions.
A number of companies are offering services with which verified electronic signatures can be exchanged. It is OPTA's task to monitor compliance with the requirements that these providers of electronic signatures must satisfy.
Two parties identified themselves in 2003 that want to become active in the issue of electronic signatures, as Trusted Third Party (TTP).
In addition to assisting these new market parties, OPTA also devoted effort to establish European policy regarding the use of this technology. These efforts resulted in a number of best practice documents compiled by the Forum of Electronic Signatures Supervisory Authorities (FESA), an organisation of European regulators with reference to electronic signatures. Input from the Netherlands to the European Commission defining areas of attention for the evaluation of the EU Directive electronic signatures served as a model for FESA's documents.
Both European and Dutch policy and the relevant legislation will be evaluated by the Ministry in 2004. OPTA will contribute to both of these evaluations from its experience in regulation practice.

3 • Effective and efficient regulation

OPTA's third main objective is effective and efficient regulation. This includes matters such a processing objections and appeals, advising the Ministry and analysing the market. These last two activities are performed in close cooperation with other regulators, on both the national and the international levels.

OPTA ready for the new Telecommunications Act

1 • Legislation and regulations

1.1 • Telecommunications Act

With the new Telecommunications Act, which is expected to be effectuated in the course of spring 2004, a number of European directives will be implemented in the Netherlands. Because of the increasing convergence of the telecommunications, media (broadcasting) and information technology segments, a collective, uniform regulatory framework has been established for all transmission networks in these segments. In virtue of the new Telecommunications Act, OPTA will regulate the electronic communications networks. This term has a wider scope than the existing term 'telecommunications network'.

During preparations for the new Act, the Ministry of Economic Affairs regularly consulted OPTA. The regulator emphasised the importance of fines that are sufficiently high to effectively discourage violations, the need for a clear information obligation for companies, and the need for shorter legal procedures. The new Telecommunications Act makes OPTA more effective and places higher requirements on the motivation of its decisions, because these must be more strongly based on competition-economic analyses. For this purpose, the new Act requires that OPTA's regulation be based on careful market analyses of eighteen sub-markets.

1.2 • Procedure periods

In virtue of the new act, parties need not file an objection against OPTA decisions before submitting a dispute to the courts. In most cases, the court appeal is also passed over, which means that the parties can turn directly to the Trade and Industry Appeals Tribunal. This modification of the Act satisfies the desire expressed by market parties to significantly reduce the throughput periods for procedures so that a final decision in a dispute is available faster. Competition will benefit from these shortened periods.

2 • Market

2.1 • Market analyses

Under the new Act, OPTA must analyse the competition on eighteen electronic communication sub-markets. These analyses involve three stages: definition of markets, determination of dominance within these markets, and imposing fitting remedies. For this purpose, OPTA must perform market analyses of each of these sub-markets.

The markets include sub-markets for wholesale fixed telephony, broadband services and leased lines, and retail trade in fixed telephony and leased lines. OPTA started making preparations for these market analyses in 2003. Because parliament had not yet passed the legislation, OPTA was not yet authorised to request information. As a result OPTA was not able to prepare the market analyses as progressively as it hoped.
Based on the market analyses, viewpoints regarding the relevant sub-markets will be compiled. OPTA will involve the market parties, the experts and the international regulators in its assessment of the draft viewpoints. OPTA wants to share its lines of reasoning, regulation views and decisions with the market parties in this manner.

In preparation of the analyses, OPTA ordered KPN to compile segregated financial recordkeeping for the eighteen sub-markets in 2003. The market was consulted regarding the principles to be applied in this segregation. Once the segregated financial records for these markets are established, it will be much easier to reliably compare the purchase and sales prices of wholesale services in order to determine whether price squeezes exist. The system of segregated financial records will be implemented as from 2004, so that the first report can be compiled in 2005.

2.2 • Economic Analysis Team (EAT)

OPTA makes many decisions that affect the complex telecommunications and post sectors. A chief economist was appointed in 2003 who will manage a new Economic Analysis Team (EAT). This team's task is to ensure that OPTA's decisions have a sound economic and competition-technical foundation. The team will compile economic policy notes and regulatory policy notes. Because of this team's international orientation, it will primarily publish in the English language. These working documents are intended to deepen content and initiate discussions with interested parties.

2.3 • Market monitoring

In 2003, the market monitors Telecom and Post were extended with new competition, price and quality indicators. The information was used to compile the market analyses that are published each year, together with the Annual Report and the Vision of the Market. The first two OPTA Trend letters were also published: one about the internet market and another about the mobile market. Discussions with market parties have improved insight into market developments and trends.

2.4 • Market developments

VoIP

A new development in the market is the possibility of using the internet for telephone calls based on the Voice over Internet Protocol (VOIP). This new technology may have consequences on the utilisation of the fixed telephone network and on the increase of broadband connections. With VoIP, the issues include what type of numbers should be made available for this new type of telecommunication. Should these be geographically-based numbers, so that the person being called can see where the call is coming from? This technology also gives rise to questions in the area of tariff and access regulation. OPTA is in the process of compiling guidelines for answering these questions.

SMS via the fixed network

Another market development is the possibility of sending SMS messages from and to the fixed telephone network, which was internationally approved last year, partly based on an OPTA initiative. Until this development came, SMS messages could only be sent to and from mobile telephones.

Broadband market

In 2003 OPTA took detailed inventory of the situation on the broadband market and performed an analysis. The market parties were also consulted regarding possible problem areas in the broadband market. OPTA published its tentative viewpoint regarding the supply of broadband free of charge for schools in 2003.

3 • Objections and appeals

Work in progress

A striking increase was seen in the number of objections and appeals processed last year. The increase was seen both in the cases that were concluded and in the number of new cases received by the Legal Affairs department. There are two reasons for the increase. To begin with, apparently parties think to an increasing degree that it never hurts to try. Another development is the sharp competition between market parties caused by narrower profit margins, tempting the parties to object or appeal earlier.
In mid-2003, the increasing line resulted in a large amount of work in progress that had not been anticipated. Resources were freed to hire external capacity. This enabled OPTA to conclude 72 percent of the objection cases received in 2003 within the period prescribed by

law. One and a half times as many cases were ultimately concluded in 2003 as compared with 2002. The budget for 2003 was based on the assumption that 100 objection cases would be concluded. In reality, 176 were concluded. The number of new objection cases received last year was 156. As a result, the total number of objections decreased only slightly last year.
The same development was seen with the appeals received. Here, too, the expected number was exceeded. The budget anticipated 50 new appeals cases; a total of 78 (including final appeals) were received.
The increase in objections and appeals had consequences not only on the work pressure within OPTA. The courts were also confronted with an increase in the number of cases submitted. The number of cases currently being processed in the court totals 54.
With reference to temporary measures, the number of cases anticipated in the budget was also exceeded. Ten of the cases submitted were expected to request temporary measures. This number was actually 22. These are primarily the cases which, considering their urgent nature, significantly increased work pressure.
OPTA publishes the roll for cases in progress in disputes, objections and appeals on its website, giving market parties more insight into who is dealing with the cases, where the process stands and the periods remaining.

4 • Cooperation

4.1 • OPTA and the Dutch competition authority (NMa)

Late in 2003 the Minister announced to the Commission that he wishes to postpone the decision regarding the merger with the Dutch competition authority until the end of 2004. The Minister promised parliament to publish an integrated vision in the course of 2004 regarding the cooperation between the market regulators in the Netherlands. OPTA and the Dutch competition authority work closely together on the market analyses under the new Telecommunications Act.

4.2 • OPTA and the Data Protection Board (CBP)

In cooperation with OPTA, the Data Protection Board rendered a decision regarding KPN's private number policy. This decision includes the determination that KPN must inform its subscribers regarding the use of address information for direct marketing purposes and the manner in which they can object to this.

4.3 • European cooperation

The European dimension of the working method under the new Telecommunications Act is prepared in the European Regulators Group (ERG), a new EU forum of national regulators in which the European Commission also participates. The ERG's first full year was chaired by OPTA chairman J.C. Arnbak. The ERG is a formal advisory body for the European Commission.
In the ERG agreements were made regarding measures that the national regulators may take and the margins to be applied in their enforcement activities. Agreements of this type are important in creating an even playing field in the European sub-markets. Agreements were also made regarding the manner in which the national regulators will notify the Commission about their proposed measures. The national regulators will give one another the opportunity to comment on a proposal before it is effectuated.
OPTA is also a member of the Independent Regulators Group (IRG), a wider forum of European regulators in which non-EU member states also participate. This body was also chaired by Mr. Arnbak in 2003.
Late in 2003 the ERG compiled a draft 'remedy paper' together with the expert commission that is intended to achieve harmonisation in the area of measures that can be imposed by the national regulators on parties with significant market power.
The IRG publishes PIBs: Principles of Implementation and Best Practice. These are publications in which the members of the IRG take a collective viewpoint with reference to a certain regulation issue.
OPTA and its IRG partners published three PIBs in 2003: one on harmonisation of the approach of the tariffs for calls from fixed to mobile, one about the facility selective number blocking, and one about the conditions under which subscribers can be cut off. PIBs are relevant from the perspective of end-users. In determining its policy on these topics, OPTA emphatically takes the premises formulated in the PIBs into account in so far as possible.

5 • Other legislation and policy recommendations

Together with the NMa OPTA compiled recommendations for the Ministry of Economic Affairs regarding the auction of the WLL (wireless local loop) frequencies. Recommendations were also made regarding the division of NOZEMA into an infrastructure company and a service provider. OPTA recommended that the land, buildings and antenna points be assigned to the infrastructure company and that the antenna system go to the service provider.
Various draft administrative measures were assessed, including the universal services decision, the interoperability decision, the conditional access decision and the disputes committee decision. In these assessments, OPTA considered whether effectuation of the decisions was

feasible and what the effectuation effort would involve. The number of recommendations (and effectuation assessments) requested by Economic Affairs was higher than expected because a number of amendment notes were submitted to the Commission. Agreements were made with the Ministry of the Interior regarding regulation of the quality of the emergency services 112.
In cooperation with the Directorate General Telecommunications and Post (DGTP), the issue of terminating SMS traffic on the fixed network was put on the European agenda. This resulted in a proposal in the International Telecommunications Union. Recommendations were also made to the DGTP regarding various number plan modifications.

6 • External communication

OPTA made more visits to companies than in previous years. This proved useful in order to exchange views and experience with market parties. In addition to these visits, OPTA utilised other instruments to keep in touch with market parties and consumers, including relationship management, market information, 'antenna sessions', and signals received from the front office.

OPTA representatives participated in an international post conference and held a presentation during the 11th Conference on Postal and Delivery Economics.
The website was further developed and modified for the purpose of external communication. One of the changes made involved the list of work in progress. These lists provide information about the state of affairs regarding objections, appeals, disputes and consultation. The hearing dates are now included in the lists, for example. This part of the website also provides information about OPTA Commission decisions, business complaints and enforcement requests.
burger@overheid, a platform that strives to improve digital services offered by government bodies, nominated OPTA for the best government website 2003.

4 • Internal organisation

OPTA's fourth main objective pertains to how the organisation functions internally as an effective, efficient unit that is transparent and that applies a sound personnel policy.

Internal monitoring makes adjustments possible

1 • Management

1.1 • Reports

When OPTA was established in 1997, its budget and administrative organisation was structured to estimate and account according to market categories. It has been determined by law that the organisation must cover its costs and that these costs must be charged to the market parties in the telecommunications and post sectors, which are regulated by OPTA. Depending on their activities, these parties are registered with OPTA in one or more market categories. Each year these parties receive invoices from OPTA for the costs of regulation.
For the year 2003, OPTA switched for the first time to using the main lines of the VBTB system[13] in terms of content in its budget and annual report. In a financial sense, however, the budget and annual accounts must, as determined by law, be compiled according to market category. In the course of the year, in its process of directing its activities, OPTA takes the division of costs and revenue according to market categories into account.
OPTA now also applies the VBTB system for management of content by determining each quarter whether the proposed objectives have been achieved and whether processes need acceleration or adjustment.

1.2 • Information security

In the area of information security, activities were initiated with reference to the Government Service Information Security Regulation (VIR). These regulations are based on a properly-functioning planning and control cycle on the strategic, tactical and operational level. OPTA is working at ensuring that all of its business processes and information systems satisfy the VIR requirements.

2 • Personnel

2.1 • Integrity

The Integrity Code of Conduct defines the commonly-accepted standards and values that OPTA staff members must apply in performing their duties. Two integrity consultants advise the staff members regarding matters of integrity, e.g. accepting a position in the postal or telecommunications market, and are also responsible for uniform definition and enforcement of the code of conduct. The integrity advisors were consulted thirteen times in 2003. The integrity of OPTA staff members was not brought into question.

2.2 • Working conditions year plan

In response to the risk inventory and evaluation performed in 2002 and the subsequent recommendations, a working

13 From business budgeting to business accounting

conditions year plan was compiled. Implementation of this plan can be divided into two parts: on the one hand a plan of approach is compiled in order to minimise work-related complaints that could result in absenteeism. Think in this respect of changes to work stations and to the building as a whole in order to ensure safety.
On the other hand, well-being within the organisation is addressed in conjunction with the corporate culture. OPTA assumes that each individual is responsible for his or her own performance. It is important that employees communicate with their superiors about this at regular intervals. In order to put this process into sharper focus, a study was performed to investigate how feedback to management works and how employees receive directions. The study indicated that in general, these processes are satisfactory. Nevertheless, continued attention will be devoted to the communication between management and employees.
Staff members were carefully informed about the new collective labour agreement applicable to the organisation and about their legal position. Formal and informal discussions were frequently held with the Works Council.

2.3 • Absenteeism due to illness

The absenteeism level is seven percent. This relatively high figure was partly caused by a number of cases of lengthy sick leave and pregnancy leave. The absenteeism rate excluding these cases was three percent. Implementation of the Gatekeeper Act made the Personnel department more actively involved in the process of reintegrating employees who have been ill. A more strict regime for reporting illness was implemented, and close contact is maintained with the absent employee. A new-style Social Medical Team was launched in 2003, which centres on intensive contact with the working conditions physician. More so than in the past, alternative tasks were sought for employees with health problems.

2.4 • Education and training

In order to quickly and adequately familiarise (new) employees with OPTA matters and keep their knowledge up to date, a two-year training cycle started in 2003. Courses including a plan-oriented approach, General Administrative Law, telecom technology, Insight in Influence, and Personal Development Plan training were followed by most employees.
Moreover, all new employees that started before October 2003 followed an introductory course developed by OPTA. The second part of the cycle, which will be organised in 2004, includes courses such as Advanced telecom technology, telecom law, and industrial organisation.
In order to keep the content of the training cycle up to date, continuous attention is devoted to modifying and adjusting it.
Another objective was to train all advisors, cluster coordinators and departmental heads in the application of the rules under the new Telecommunications Act. This objective has not yet been achieved; approximately two-thirds of the target group has completed this training. A new course will be offered in the spring of 2004.

2.5 • Competence management

Competence management is an instrument for enhancing the professionalism of staff members, for personnel development and for stimulating better performance. OPTA implemented competence management in 2003. Following its implementation, a survey was held among employees, with the following encouraging results: the support for competence management is above average within OPTA, and a majority of employees believe that competence management has made a positive contribution to the work and their development. On every level, employees generally indicated that they were satisfied with the effects of the new approach.

2.6 • Recruitment and selection

The economic recession and the subsequent over supply on the labour market made it possible to fill almost all OPTA vacancies within a reasonable period of six weeks, while adhering to a critically-applied recruitment and selection policy. Because a specialised organisation such as OPTA must place high demands on the knowledge and skills of its new employees, it took an average of nine weeks to hire personnel for senior positions.

2.7 • Telephone availability

The telephone availability of OPTA employees is extremely important for market parties and consumers, and constant attention is devoted to this aspect of the organisation.

3 • Internal communication and knowledge management

3.1 • Knowledge network

Preparations were made in 2003 for the implementation of an internal knowledge network that is intended to make the knowledge available within the organisation more readily accessible for staff members. A new infrastructure was implemented and new software was operationalised. The library contributed to current and adequate information for projects, disputes, objections, appeals and business operations. In the area of internal communication, a variety of activities were seen: communication

recommendations were given for projects; ten issues of the OPTAter, OPTA's personnel magazine, were published; informal meetings were organised (OPTAlk); newsletters were written and many items were placed on the intranet. Taking the growth of the organisation and the changing legislation and regulations (ONP review, Telecommunications Act amendments) into account, much attention was devoted to collecting and distributing knowledge within OPTA.

3.2 • 'OPTA transparent'

The manual OPTA transparent is being developed to describe and disclose all working processes within OPTA for all employees. This is a prerequisite for the quality and progress management of the work processes. A few key words in this respect: effectiveness, efficiency, productivity, logistical aspects such as throughput time, and standardisation possibilities. Parts of this manual were placed on the OPTA intranet in 2003. The intranet was replaced in February 2004 by the OPTA knowledge network, which includes the descriptions of the department-oriented work processes.

4 • Management

4.1 • Archives

OPTA wants to improve the information flows within the organisation by making the central archives available in digital format and by issuing digital versions of archive documents instead of physical documents. A study was performed in 2003 to gain insight into the feasibility of digitisation of the archive system. The outcome of this study will be detailed in 2004, and OPTA wants to make digitisation of the archive possible. The rules of management of the OPTA archives were also compiled and signed in 2003. This study was necessary to satisfy most of the rules specified in the Archives Act 1995.

4.2 • Building management

In 2004 OPTA will relocate to a new office in the centre of The Hague. This relocation is necessitated by a lack of space at the existing location.
A satisfaction survey indicated that a large majority of OPTA employees are satisfied with their work stations and the cleanliness of the office. Technical malfunctions are remedied within a few days.

4.3 • Service Level Agreements

The Operations department has linked its services to Service Level Agreements (SLAs). Now the organisation knows the terms and periods that apply to the services to be supplied by Operations.

5 • Annual account

Balance sheet

Amounts in thousands of euros	31 December 2003	31 December 2002
ASSETS		
Fixed assets		
Intangible fixed assets:		
Formation expenses	245	327
Tangible fixed assets:		
Tenant's property	505	782
Equipment	143	253
Computer hardware and software	1,132	921
	2,025	**2,283**
Current assets		
Receivable from Ministry of Economic Affairs	756	-
Receivables from debtors	761	532
Other receivables	250	5,723
Liquid assets	8,429	4,604
	10,196	**10,859**
TOTAL ASSETS	**12,221**	**13,142**

Amounts in thousands of euros	31 December 2003	31 December 2002
LIABILITIES		
Shareholder's equity		
General reserve	634	429
Investment reserve	454	342
Tariffs reserve	219	-
Formation expenses capitalisation reserve	245	327
	1,552	**1,098**
Provisions		
Provision for appeals	630	755
	630	**755**
Long-term liabilities		
Loans extended by Ministry of Economic Affairs	327	490
	327	**490**
Current liabilities		
Debts to credit institutions	-	-
Debt to Ministry of Economic Affairs	6,337	7,573
Debts to suppliers	1,361	1,417
Taxes and social insurance premiums	234	90
Other liabilities	1,780	1,719
	9,712	**10,799**
TOTAL LIABILITIES	**12,221**	**13,142**

Profit and loss account

Amounts in thousands of euros	Realised 2003	Budget 2003	Realised 2002
INCOME			
Revenues from market categories	14,999	13,890	13,289
Other income	2,787	2,625	1,980
TOTAL INCOME	**17,786**	**16,515**	**15,269**
EXPENDITURE			
Personnel costs			
Salaries and social insurance charges	8,257	8,582	7,141
Other personnel costs	1,546	2,185	1,681
	9,803	**10,767**	**8,822**
Third-party assignments	3,145	2,420	2,139
Cost of equipment	3,437	2,859	3,260
Depreciation	1,024	746	771
TOTAL EXPENDITURE	**17,409**	**16,792**	**14,992**
OPERATING RESULT	**377**	**- 277**	**277**
Interest income	77	-	29
RESULT	**454**	**- 277**	**306**

Capital expenditure and income account

Amounts in thousands of euros	Realised 2003	Realised 2002
Capital goods expenditure	766	1,020
Repayments	163	163
Result	-	-
TOTAL CAPITAL EXPENDITURE	**929**	**1,183**
Result	454	306
Depreciation	1,024	771
TOTAL CAPITAL INCOME	**1,478**	**1,077**
NET CAPITAL EXPENDITURE AND INCOME	**549**	**- 106**

Cash flow statement

Amounts on thousands of euros	Realised 2003	Realised 2002
Result	454	306
Depreciation	1,024	771
Increase/decrease in debtors and other receivables	4,488	- 4,872
Increase/decrease in provisions	- 125	575
Increase/decrease in current liabilities	- 1,087	9,142
NET CASH FLOW FROM OPERATIONAL ACTIVITIES	**4,754**	**5,922**
Investments in tangible fixed assets	- 766	- 1,020
NET CASH FLOW FROM INVESTMENT ACTIVITIES	**- 766**	**- 1,020**
Decrease in long-term liabilities	- 163	- 163
NET CASH FLOW FROM FINANCING ACTIVITIES	**- 163**	**- 163**
NET CASH FLOW	**3,825**	**4,739**
Liquid assets as at 1 January	4,604	- 135
Liquid assets as at 31 December	8,429	4,604
MOVEMENTS IN LIQUID ASSETS	**3,825**	**4,739**

Notes

to the OPTA balance sheet as at 31 December 2003 and the results for 2003

1 • Principles of valuation

General
The amounts in the balance sheet as at 31 december 2003 are shown in the balance sheet as at 31 december 2002 for the purpose of comparison. The of profit and loss account includes the budgeted amounts for 2003 and the amounts realised in 2002.
Assets and liabilities are shown at face value, unless specified otherwise.

Intangible fixed assets
The intangible fixed assets relate to OPTA's formation expenses. These capitalised costs are shown at historical cost, less depreciation to year-end 2003. Depreciation is on a straight-line basis over a period of ten years. On the basis of the agreements made with the Ministry of Transport, Public Works and Water Management, and the independent OPTA, depreciation costs are passed on to the market parties in the tariffs.

Tangible fixed assets
The tangible fixed assets are shown in the balance sheet at cost, less depreciation to year-end 2003. Depreciation is on a straight-line basis, based on the estimated useful life, which varies from 3 to 10 years. The depreciation periods are as follows:

Tenant's property (= immovables)	5 to 10 years
Equipment (=equipment and office machines)	5 years
Computer hardware and software	3 to 5 years

Receivables
The receivables are shown at face value, less the provision considered necessary for doubtful debtors.

Principles for the determination of the result
Revenues and cost are stated in accordance with the income and expenditure system. The full costs are charged on to the market parties in the pricing, except for the costs for appeals and of advising the Minister.

Revenues from and costs of market categories
The grounds for market parties' tariffs are laid down in the Telecommunications Act, the Telecommunication Fees Decree, the Postal Act and the Postal Act Remuneration Decree, as well as the Independent Post and Telecommunications Authority Act.

The cost-covering tariffs to be charged to the market parties are approved each year by the Minister of Economic Affairs, and are published annually in the State Gazette as the "OPTA fees regulation". Tariffs are determined on the basis of the profit principle. The costs of objections and appeals and the costs of advising the Minister are borne by the Ministry of Economic Affairs on a subsequent costing basis.

2 • Intangible fixed assets

OPTA's formation expenses are shown in the balance sheet as intangible fixed assets.
Movements in formation expenses can be analysed as follows (x € 1,000):

	Formation expenses
Cost to year-end 2002	817
Depreciation to year-end 2002	- 490
Book value as at 31 December 2002	**327**
Depreciation 2003	- 82
Book value as at 31 December 2003	**245**

3 • Tangible fixed assets

Movements in tangible fixed assets can be analysed as follows (x € 1,000):

	Tenant's Property	Equipment	Computer hard- and software	**Total tangible fixed assets**
Cost to year-end 2002	1,144	722	3,158	**5,024**
Depreciation to year-end 2002	- 362	- 469	- 2,237	**- 3,068**
Book value as at 31 December 2002	**782**	**253**	**921**	**1,956**
Investments 2003	-	22	744	**766**
Depreciation 2003	- 277	- 132	- 533	**- 942**
Book value as at 31 December 2003	**505**	**143**	**1,132**	**1,780**

An amount of € 198,000 was entered as accelerated depreciation due to the relocation to the Zurichtoren in 2004.

4 • Current assets

Receivable from Ministry of Economic Affairs

Receivables can be analysed as follows (x € 1,000):

	31 December 2003	31 December 2002
Settlement advance payments Ministry:		
Appeals	806	-
Advice	- 50	-
	756	**-**

Receivables from debtors

Receivables can be analysed as follows (x € 1,000):

	31 December 2003	31 December 2002
Receivables from debtors	1,284	998
Provision for doubtful debtors	- 523	- 466
	761	**532**

A provision calculated as follows is included for receivables from debtors (market categories) older than two months: in the case of receivables older than 12 months a 100% provision is formed; in the case of receivables between 2 and 12 months old and for amounts in excess of € 4,500, a specific evaluation is carried out and, if necessary, a provision formed

Other receivables

Other receivables can be analysed as follows (x € 1.000):

	31 December 2003	31 December 2002
Pre-paid amounts	168	107
Costs to be charged on in respect if disputes	-	146
Amounts still to be invoiced regarding SMP	-	5,361
Miscellaneous	82	109
	250	**5,723**

Due to a decision rendered by the Rotterdam District Court on 4 February 2003, the costs to be passed on regarding dispute settlement will henceforth be charged to the relevant market category, and therefore amount to naught as of 31 December 2003.

OPTA charged the amounts to be invoiced for significant market power (SMP) as yet in 2003 to the market parties, which is why these amount are shown as naught as at 31 December 2003.

Liquid assets

Liquid assets can be analysed as follows (x € 1.000):

	31 December 2003	31 December 2002
Cash	1	1
ING-bank	84	37
Postbank	8,344	4,566
	8,429	**4,604**

5 • Shareholder's equity

Shareholder's equity can be analysed as follows (x € 1.000):

	31 December 2003	31 December 2002
General reserves		
Balance as at 1 January	429	384
Allocation	205	45
Balance as at 31 December	**634**	**429**
Investment reserve		
Balance as at 1 January	342	-
Allocation	112	342
Balance as at 31 December	**454**	**342**
Tariffs reserve		
Balance as at 1 January	-	-
Allocation	219	-
Balance as at 31 December	**219**	**-**
Formation expenses capitalisation reserve		
Balance as at 1 January	327	408
Release	- 82	- 81
Balance as at 31 December	**245**	**327**
Balance	**1,552**	**1,098**

The principles for the formation of OPTA's shareholder's equity were laid down in the memorandum 'Financial principles of privatisation of the Supervision, Networks and Services management.' OPTA and the Ministry of Transport, Public Works and Water Management (and taken over by the Ministry of Economic Affairs) agreed upon some additions to these regulations, allowing OPTA to form appropriated reserves for tariffs and investments. The tariffs reserve serves to process the result of the various market categories for settlement in future tariffs.

General reserves
The policy document 'Financial principles of privatisation of the Supervision, Networks and Services management' provides that € 45,000 may be added to the general reserve annually, to a maximum of € 681,000. However, this allocation depends on the prescribed minimum for the formation expenses capitalisation reserve and on the result for the financial year. The remainder of the total results to the amount of € 454,000 after allocation to the tariffs reserve (€ 219,000) and the investment reserve (€ 30,000) will be allocated to the general reserves (€ 205,000).

Investment reserve
The sum freed in 2003 from the reserve for activation of establishment costs to the sum of € 82,000 has been allocated to the investment reserve. An additional sum of € 30,000 from the results was added, so that the investment reserve has achieved a maximum level of € 454,000.

Tariffs reserve
The balance of € 219,000 established as at 31 December 2003 will flow back to the market categories in future years. This amount consists of the actual results for the market categories in 2003 (€ 307,000) minus the receivables from market parties from previous years (€ 151,000).

Formation expenses capitalisation reserve
OPTA's formation expenses capitalisation reserve was still € 245,000 at year-end 2003. This reserve is maintained at the level of the capitalised formation expenses. In 2003 there was a release of € 82,000 to the investment reserve.

6 • Provisions

Provision for appeals
Provisions can be analysed as follows (x € 1.000):

	31 December 2003	31 December 2002
Appeals		
Balance 1 January	755	180
Allocation	116	592
Release	- 226	- 17
Write off	- 15	-
Balance 31 December	**630**	**755**

This provision pertains to appeal cases concerning contested invoices for supervision and registration and to settlement of disputes.

7 • Long-term liabilities

Upon OPTA's formation, the Ministry of Transport and Public Works extended two interest-free loans, each amounting to € 817,000, in order to finance the transfer of fixed assets. The loans are repayable in 10 equal annual instalments, the seventh of which – amounting to € 163,000 – was effected in 2003. This loan has been transferred to the Ministry of Economic Affairs.

8 • Current liabilities

Debt to Ministry of Economic Affairs
Debts can be analysed as follows (x € 1.000):

	31 December 2003	31 December 2002
Redemption instalment interest-free loan	163	163
Settlement advance payments Ministry:		
Appeals	-	105
Advice	-	26
Short-term interest-free loan ministry	6,174	7,279
	6,337	**7,573**

The annual instalment to the sum of € 163,000 pertains to the eighth instalment for the long-term interest-free loan to be paid in 2004.

The interest-free loan to the amount of € 6,174,000 was issued to OPTA by the Ministry of Economic Affairs because OPTA cannot collect the annual regulation costs for significant market power (SMP), in anticipation of a decision on the appeal submitted by OPTA to the Trade and Industry Appeals Tribunal. After OPTA won this appeal, the amounts due were collected. A repayment scheme will be determined with the Ministry in 2004.

Other liabilities
Other liabilities can be analysed as follows (x € 1.000):

	31 December 2003	31 December 2002
Holiday allowance	290	263
Holiday entitlement	123	155
Reserve relocation costs	727	-
Invoices still to be received	598	354
Turnover invoiced in advance	-	840
Miscellaneous	42	107
	1,780	**1,719**

Provision has been made for holiday entitlement not yet taken up. The item 'invoices still to be received' relates to invoices for third-party activities in 2003, which had not been received prior to the balance sheet date.

An amount of € 727,000 was entered as accelerated depreciation due to the relocation to the Zurichtoren in 2004.

9 • Commitments not shown in the balance sheet

OPTA rents office space in the Babylon building on the Koningin Julianaplein in The Hague. The ten-year lease expires on 31 December 2009 and has been terminated as per 31 December 2004 due to OPTA's relocation to the Zurichtoren in 2004.

The total rental charges (including service costs) amounts to € 415,000 for Babylon for 2004. The housing costs in the Zurichtoren in 2004 amount to € 1,225,000.

Other commitments entered into as at the balance sheet date concern € 344,000 for research and consultancy assignments and € 109,000 for temporary personnel.

Parties have submitted objections to invoices for the annual costs of regulation over 2000, 2001 and 2002 for a total of € 12,010,000. Market parties submitted objections to invoices for annual regulation over 2003 for parties with significant market power to a total of € 6,215,000.

There are also two court cases in which OPTA runs some risk due to the fact that the market parties will submit claims for reimbursement of damages.

10 • Average number of employees

The average number of employees in 2003 was 140 (2002: 132). Costs for salaries, retirement reserves and social insurance charges can be analysed as follows (x € 1.000):

	31 December 2003	31 December 2002
Salaries	6,932	6,027
Retirement reserves	795	594
Social insurance charges	530	520
	8,257	**7,141**

11 • Remuneration of Commission members

The remuneration of the Commission for 2003 can be analysed as follows (x € 1,000):

	J.C. Arnbak	L.Y. Gonçalves-Ho Kang You	H.A. van Karnebeek	**Total**
Salaries[1]	147	110	40	**297**
Fixed expense allowance	16	10	-	**26**
Allowance representation expenses	7	3	2	**12**
Travel expenses	-	3	-	**3**
Retirement reserves	19	13	-	**32**
Social insurance charges	5	3	-	**8**
	194	**142**	**42**	**378**

The remuneration of the Commission for 2002 can be analysed as follows (x € 1,000):

	J.C. Arnbak	L.Y. Gonçalves-Ho Kang You	H.A. van Karnebeek	**Totaal**
Salaries[1]	143	108	40	**291**
Fixed expense allowance	16	10	-	**26**
Allowance representation expenses	6	3	2	**11**
Travel expenses	-	-	-	**-**
Retirement reserves	17	11	-	**28**
Social insurance charges	6	3	-	**9**
	188	**135**	**42**	**365**

12 • Revenues from and costs of market categories and other categories

OPTA's revenues stem from its statutory obligations in relation to registration and supervision. In order to ascertain whether and to what extent the market parties concerned have complied with the statutory obligations, OPTA carries out an enforcement policy. The Annual Report provides an insight into the way in which OPTA carries out its supervisory activities and, therefore, how it obtains assurances of the legitimacy of the market parties' revenues. The actual results were calculated on a subsequent costing basis.

Income and expenditure by market categories is analysed as follows (x € 1.000):

1 This consists of salaries and fixed expenses (see the Integral text Regulation legal position of OPTA permanent members, State Gazette 31 October 2001, no. 211/page 12)

	Realised 2003	Budget 2003	Realised 2002
INCOME			
Revenues from market categories:			
Public telecommunications networks	3,660	2,887	2,722
Leased lines	949	1,050	1,190
Broadcasting networks	945	907	1,559
Public telecommunications services	4,671	4,562	2,886
Systems for conditional access	312	389	728
TTP	139	134	136
Mobile infrastructure licenses	1,014	1,014	787
Numbers	2,384	2,022	2,093
Post and post courier concession	925	925	1,188
Subtotal of market categories:	**14,999**	**13,890**	**13,289**
Other income:			
Costs of appeals	2,630	2,433	1,786
Advice to the Minister	94	192	177
Other income	63	-	17
Subtotal of other income	**2,787**	**2,625**	**1,980**
TOTAL INCOME	**17,786**	**16,515**	**15,269**
EXPENDITURE			
Expenditure on market categories:			
Public telecommunications networks	2,925	2,887	2,722
Leased lines	945	1,050	1,190
Broadcasting networks	965	907	1,177
Public telecommunications services	4,702	4,562	2,886
Systems for conditional access	499	389	422
TTP	147	134	152
Mobile infrastructure licenses	969	1,014	623
Numbers	2,582	2,299	3,029
Post and post courier concession	895	925	828
Subtotal of market categories:	**14,629**	**14,167**	**13,029**
Other expenditure:			
Costs of appeals	2,630	2,433	1,786
Advice to the Minister	94	192	177
Other expenditure	56	-	-
Subtotal of other expenditures	**2,780**	**2,625**	**1,963**
TOTAL EXPENDITURE	**17,409**	**16,792**	**14,992**
BALANCE OF INCOME AND EXPENDITURE	**377**	**- 277**	**277**

6 • Other data as of 31 December 2003

1 • Auditor's report

Assignment
In accordance with your request, we have audited the annual accounts as included in this report of OPTA in The Hague. These annual accounts were drawn up under the responsibility of OPTA's Commission. It is our responsibility to express an opinion on these annual accounts, based on our audit.

Activities
Our audit was conducted in accordance with auditing standards generally accepted in The Netherlands. These standards require that we plan and perform our audit to obtain a reasonable assurance that the annual accounts are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the annual accounts. An audit also includes an assessment of the accounting principles used and significant estimates made by management, as well as an evaluation of the overall presentation of the annual accounts. In our view, our audit forms a sound basis for our opinion.

Assessment
In our opinion, the annual accounts provide a true and fair view of the size and composition of OPTA's capital as at 31 December 2003 and the result for the year then ended in accordance with accounting principles generally accepted in The Netherlands and that the income and expenditure shown in the annual accounts also comply with the applicable provisions of the OPTA Act.

The Hague, 24 march 2004
BDO Accountants

2 • Proposed appropriation of the results

The Commission has decided to appropriate the positive results over 2003 to the sum of € 454,000 as follows:

- € 205,000 is added to the general reserve;
- € 30,000 is added to the investment reserve;
- € 219,000 is added to the tariff reserve;

This decision is incorporated in the annual accounts.

Appendix 1 Terminology list

ADSL: *Asymmetric Digital Subscriber Line*
Method of transporting fast internet traffic in one direction and slower traffic in the other direction. For example: 2 Mbit/s up and 16 Kbit/s down, as a result of which broadband services (e.g. moving images) can be transferred over the telephone line.

Alphanumeric numbers
Also referred to as name numbers – refer, for example, to the name of a company, organisation or brand. Because the digits on the telephones correspond with letters, a word is the same as a certain number.

BARP: *General Postal Guideline Decree*
Regulations under the Postal Act in which the concession holder (TPG) is assigned certain obligations.

Bitstream access
Access to KPN's infrastructure in order to supply broadband internet connections.

Broadband internet access
Access to the internet via cable, satellite or XDSL, e.g. (A)DSL.

BULRIC: *Bottom Up-Long Range Incremental Cost system*
System with which costs for terminating telephone traffic are calculated. The system is based on the costs incurred by an efficient operator.

Carrier selection/pre-selection *(CS/CPS)*
Method by which a telephone subscriber can have a call terminated by an alternative telecommunication provider by selecting four digits. With Carrier pre-selection, this is done automatically.

Churn rate
percentage of people that change providers in a certain period.

Circuit switched network
Physical connection between two points, the entire capacity of which is available for the connection. An example is a telephone call.

Collocation
Providing housing in a local exchange in which parties (other than KPN) can gain access to the local loop to the subscribers.

Competency management
A system that provides insight into the skills and quality of staff members, so that they can be optimally developed.

Concession (holder)
The government has assigned a number of tasks to TPG. The assignment consists of reserved services (concession) and the other assigned services. The concession includes letters weighing up to one hundred grams. Letters and printed matter weighing up to 2 kilograms and parcels up to 10 kilograms are included in the other assigned services.

Consultation document
A document discussing an important telecommunication or postal topic with which OPTA informs interested parties of its opinion, the decisions it intends to make, and the issues it must address, with the request that the parties respond.

Cost-oriented prices
Prices based on actual costs plus a reasonable profit margin.

Cross subsidising
With reference to post: subsidising of commercial activities with revenue from the monopoly.

Delivery tariffs or terminating tariffs
Tariffs charged by a provider for delivering a telephone call on its network.

Directive Information Security National Government
Directive for government organisations for the security of (confidential) information. The main criteria are availability, exclusivity and integrity.

DSL
See ADSL.

Embedded Direct Costs model
System with which the interconnection tariffs for collecting telephone traffic to be charged by KPN, the originating tariffs, are determined. In this respect, the costs actually incurred by KPN are determinant.

ERG: *European Regulators Group*
A Forum of national regulators within the European Union in the area of electronic communications, in which the European Commission also participates.

FESA: *Forum of Electronic Signatures Supervisory Authorities*
Organisation of European Regulators for electronic signatures.

Fibre-optic network
In a fibre-optic cable, information is not sent by means of electric pulses but as light flashes. Fibre-optic networks have a higher bandwidth than coaxial or copper networks, which means that more information can be transmitted in a short period of time.

Forum for interconnection and special access *(FIST)*
Platform established on the basis of an OPTA initiative in which market parties consult with one another regarding interconnection and special access.

GPRS: *General Packet Radio Service*
GPRS is a technique used in the GSM network that makes it possible to send and receive more data than is normally possible using GSM telephones. This is because GPRS does not transmit the data as a single packet over the network, but in pieces. The successor of GPRS is UMTS.

Independent Regulators Group *(IRG)*
Forum of regulators from the Member States of the European Union and the European Economic Area in the area of electronic communication.

Information Service Code Foundation *(STIC)*
Regulates use of information numbers by providers of information services and platform providers.

Interconnection
Coupling of communication networks enabling users of one network to communicate with users connected to a different network.

ISDN: *Integrated Services Digital Network*
Public telecommunication network based on international standards. Enables a provider to simultaneously offer multiple telecommunication services over the network.

ISP *(internet service provider)*
provider that supplies an internet service to end users.

Leased line
A transparent communication connection between two points. A leased line is used, for example, by companies to connect their branches.

Letter monopoly
TPG's exclusive right (concession) to deliver letters weighing up to one hundred grammes.

Line sharing
See unbundled access.

Local loop
The part of KPN's fixed network between the local exchange and the connection in the subscriber's home.

MMS *(multimedia messaging service)*
Like with SMS, MMS allows a user to send messages from one telephone to another. The main difference is that with MMS, photos, images, sound fragments, etc. can be sent along with text.

MVNO *(mobile virtual network operator)*
Independent mobile services provider without its own network that uses the network of another mobile provider to reach its customers.

Netherlands Competition Authority
The Netherlands Competition Authority (NMa) regulates compliance with the general Competition Act.

Number exchange / local exchange:
The last section of telephone line runs from this exchange to the end-users.

Number plan
A number plan from the Ministry of Transport, Public Works and Water Management indicates how (telephone) numbers are divided, their intended use (e.g. geographic numbers) and which series of numbers are available.

Number portability
Taking a number along from one provider to another.

ONP-Review
Revision of the European telecommunications legislation and regulations that commenced in 1999.

Open Network Provision (ONP)
The European ONP directives form a framework with reference to guaranteeing access to and use of generally accessible telecommunication networks and telecommunication services under reasonable conditions. The directives also pertain to guaranteeing the availability of a minimum package of facilities.

Originating access
Collecting a telephone call by one provider from the subscriber of another provider. Collection or originating tariffs apply to this service.

Packet switched network
Network over which the information transmitted is packaged in small packets, in which each packet contains not only the information itself but also information regarding the source and destination. The packet is transmitted until it has reached the desired destination. The advantage as compared to a circuit switched network is that no dedicated capacity exists, making it possible to make more efficient use of the available network capacity. An example of a package switched network is the internet.

PIBs: *Principles of Implementation and Best Practice*
Publications by the IRG in which members take a collective viewpoint with reference to a certain regulation issue.

Post office policy
Obligation imposed on TPG to satisfy requirements including a certain number of post offices in the Netherlands, as well as their distribution over the country.

Price squeeze
Occurs when KPN's end-user tariff is lower than the price that competitors must pay to KPN in order to provide the same service to consumers. When this difference is too small, the company does not make enough profit to compete with KPN. The competitor is literally squeezed.

Reference interconnection offer
Catalogue of the possibilities, conditions and tariffs that KPN can offer to other market parties in the area of interconnection.

Selectability
If a number for connection (B) can be called from connection (A), number (B) is selectable from connection (A).

Significant market power *(SMP)*
OPTA designates a provider as having SMP if the provider holds a market share of more than twenty-five percent on the relevant market. However, exceptions are made. For example: the ability to influence the market or experience in supplying products and services on the market. Designation as a party with SMP brings obligations.

Slamming
Phenomenon in which a subscriber suddenly calls via a different provider without asking to do so.

Special access
Access to communication networks at locations other than local loops that are provided to most users.

Tariff control system
Mechanism that ensures that the postage rates do not increase more than a percentage that is related to the inflation.

Terminating access
Termination of a telephone call by KPN to a subscriber from a different network provider.

Trade and Industry Appeals Tribunal
The highest body to which an appeal can be submitted against OPTA decisions.

Transit service
Indirect connection of networks

Transit tariff
Tariff that a telecom provider is allowed to charge to parties that use its network for transporting traffic to a third provider.

TTP: *Trusted Third Party*
Issues an independent statement about the true identity of an electronic business partner. This is important if parties do business over the Internet and work with electronic signatures.

UMTS: *Universal Mobile Telecommunication System*
Third generation mobile telephony that makes mobile broadband communication possible.

Unbundled access
Method by which a dominant market party can offer competitors facilities a la carte instead of as a complete package, and in which the copper wires from the home connection to the local exchange are operated by a competitor of KPN. In this respect, there may be complete unbundling or shared access, also known as line sharing.

Universal services
The bundle of services that politicians believe must be made available to the general public and that a former monopolist is obliged to supply at a certain rate and of a certain quality.

VBTB system: *From Strategy budgeting to Strategy accounting*
This system is based on the formulation of clear policy objectives that are to be achieved within a year. At the end of the year, the policy must be accounted for. The government is to implement the system no later than 2006.

Voice over IP/DSL/ATM
Ways to call over data networks, e.g. the internet.

Wholesale tariffs
Wholesale tariffs that KPN charges to its customers of telephone traffic, data traffic and leased lines.

WIFI
Wifi is a technique that allows end-users to connect to the internet at certain public sites, for example, via local contact points, which are sometimes called hot spots.

Appendix 2 The organisation in 2003

the OPTA commission is assigned tasks and responsibilities by law. In executing these, the commission members are assisted by the members of the OPTA bureau. The organisation of this bureau can be characterised as 'flat'. Advisors are active in the various relevant fields who must be quickly able to perform independently with a high level of personal responsibility. The markets that OPTA regulates are continually changing. The dynamics of the internal and external environment make OPTA a preferred employer for college and university graduates. The OPTA bureau has six departments. The OPTA commission and bureau are briefly described in this section.

The Commission

The OPTA commission consists of three independent experts appointed by the Minister of Transport, Public Works and Water Management, each with their own area of expertise: L.Y. Gonçalves - Ho Kang You; H.A. van Karnebeek, vice-chairman; J.C. Arnbak, chairman; H.C. Bakker, secretary and also director of the OPTA bureau.

The Bureau

The OPTA bureau's six departments are: End-user market **(EGM)**, Interconnection and Special Access **(IBT)**, Numbers and Registration **(N&R)**, Strategy and Coordination **(S&C)**, Legal Affairs **(JZ)** and Business Operations **(B)**. The bureau is directed by the director and managed by the Management Team **(MT)**, which consists of all heads of departments. The director chairs the MT.

A distinction will be implemented in the internal organisation in 2004 between a department that prepares regulation decisions and a department that monitors compliance with these decisions. The existing departments End-user market and Interconnection and Special Access will be transformed into new departments Regulation and Monitoring.

The **End-user market** department regulates the end-user tariffs (including discount regulations and regional tariff differentiation), obligations for fixed connections and telephony, general rules of service, privacy, universal service, permit conditions, mobile telephony and post. This department coordinates advice to the Minister in the allocation of frequencies for telecommunication.

The **Interconnection and Special Access** department is responsible for processing interconnection disputes, disputes about special access, and disputes about cable access. The department regulates various interconnection and special access aspects and infrastructure issues, e.g. tolerance regulations and site sharing. Access to the cable and conditional access systems are also the responsibility of this department, as is the level of interconnection tariffs.

The **Numbers and Registration** department is responsible for issuing numbers and enforcing correct use of series of numbers by providers. Registers are compiled for this purpose that can be publicly accessed via the website. A new task is regulating the registration of the electronic

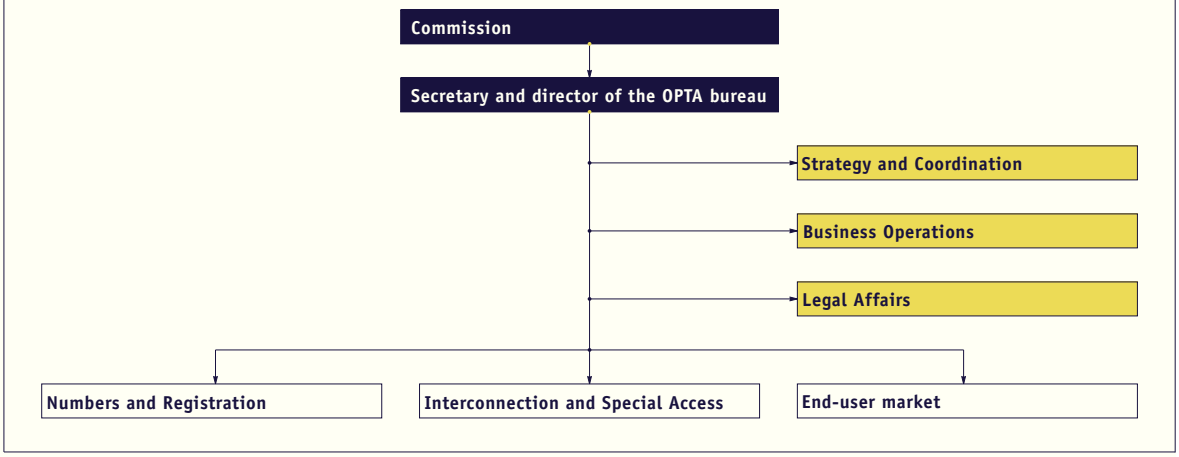
signature. The bureau Number Issuing and Registration Services issues individual information numbers, including 0800 and 0900 numbers and what are known as alphanumeric numbers.

The **Strategy and Communications** department coordinates in matters that go beyond the department level, the coherency of OPTA policy, and consultation with external organisations. It also develops the internal and external communication policy for OPTA. Strategy and Communication also serves as a think tank for the organisation and develops long term strategic insights. The department is responsible for ensuring that decision making by the OPTA Commission is properly prepared and organised.

The **Legal Affairs** department processes objections and appeals, provides legal support to OPTA personnel and Commission members, evaluates proposed legislation and regulations, and monitors the required legal quality standards within OPTA. Legal Affairs serves OPTA as an internal law firm.

The **Business Operations** department is responsible for finance, personnel and organisation, facility management, and automation. Facility management includes housing, the reception desk, mail processing, archive tasks, and all other matters with the objective of contributing to smooth running of the operational processes within OPTA.

Figure 1 **ORGANISATION STRUCTURE of OPTA**



Appendix 3 OPTA

OPTA: independent regulator and referee

OPTA regulates compliance with legislation and regulations in the markets for electronic communications and post. This pertains to the Telecommunications Act, the Postal Act, the relevant regulations at lower levels associated with these Acts, and European regulations. OPTA was assigned this task by the European and Dutch authorities.

OPTA is an independent administrative body. The tasks to be performed by OPTA are determined by law. Political responsibility for OPTA's functioning lies with the Minister of Economic Affairs. The minister can impose general directions but cannot intervene in individual cases. OPTA takes measures when competition problems occur in markets. OPTA also mediates in disputes between market parties. When repeated similar disputes occur, OPTA can formulate general regulations with which the parties must comply. By law, OPTA also has the task of protecting consumers.

The following were OPTA's major tasks in 2003:

- designating parties with Significant Market Power (SMP). These are companies that are so dominant on one or more markets that special obligations can be imposed so that they cannot abuse their position;
- mediating in disputes between companies regarding access to and interconnection between networks;
- approving or rejecting the tariffs charged by these companies;
- issuing telephone numbers;
- protecting privacy;
- regulating certificate service providers for electronic signatures;
- ensuring that TPG satisfies its legal obligations with reference to post delivery;
- imposing judicial penalties and actual fines when relevant regulations are not complied with.

1 • Designating telecommunication companies with Significant Market Power

OPTA determined in 2003 in virtue of the Telecommunications Act of 1998 which providers of telecommunication networks and services hold significant market power (SMP). These are normally parties holding a market share of more than 25 percent on a market pre-defined by law. They are subject to extra obligations, in particular with reference to non-discrimination, transparency and (primarily) cost-oriented tariffs. For example, if a provider with SMP makes a service or product available to itself or its subsidiary, it must also make it available to other parties at the same conditions. Because the markets are defined be law, OPTA may only designate obligations on those markets. This will change when the new European regulations are implemented in legislation in the Netherlands. The major modifications to the Telecommunications

Act are explained at the end of this appendix. The descriptions that follow are based on the tasks performed by OPTA in 2003 under the Telecommunications Act of 1998.

2 • Mediating in conflicts between businesses
OPTA mediates in disputes between providers. These are primarily disputes in the area of interconnection and special access, as well as the conditions and tariffs to be agreed to by the parties.

3 • Approving or rejecting the tariffs charged by these businesses
Providers with significant market power (SMP) must apply cost-oriented interconnection tariffs. In order to verify this, these providers must apply a cost allocation system that makes it possible to determine whether the tariffs are truly cost-oriented. OPTA approves these systems. OPTA also ensures that providers make the conditions under which they provide interconnection transparent. OPTA also regulates the end-user tariffs for fixed telephony and for leased lines. This ensures that providers with SMP do not exercise that power at the expense of the end-user. They can do so by applying high tariffs that are not based on the underlying costs. This measure also prevents these providers from subsidising the competition in market segments with competition from profits ensuing from high tariffs in markets where there is less competition. This is called cross subsidising.

4 • Issuing telephone numbers
OPTA issues regular telephone numbers as well as what are known as information numbers. This is done on the basis of number plans. A number plan indicates the designated use of certain telephone numbers. Existing and new providers can request these numbers from OPTA, often by the thousands. OPTA also reserves numbers for longer-term number requirements. OPTA registers all numbers issued. This register is public, which means that everyone can see which numbers have already been issued and which are still available.

5 • Protecting privacy
An entirely different OPTA task is enforcing certain provider obligations in the area of privacy. It must be possible for a caller to prevent his or her telephone number being made known to the party s/he is calling, for example. That party would then be able to approach the caller with unrequested services. OPTA makes sure that the telecommunication providers comply with these rules.

6 • Electronic Signature
The Electronic Signature Act was effectuated on 21 May 2003. This act regulations the legal consequences of electronic signatures, including their equation with handwritten signatures. In virtue of the Telecommunications Act, OPTA regulates all organisations that want to provide qualified certificates to the public or issue these that are registered in the Netherlands. Organisations need these certificates in order to use electronic signatures. As part of this regulation, the law requires that these certificate service providers be registered with OPTA.

7 • Regulating the post concession
In virtue of the Postal Act, OPTA is responsible for the regulation of the execution of the tasks allocated to the concession holder TNT Post Group (TPG). In particular, this involves regulation of the tariffs and quality of TPG services on markets in which TPG holds a monopoly (the concession). OPTA also regulates the administrative distinction within TPG between activities that are performed in competition and activities in which TPG holds a monopoly position.

In order to exercise its regulation, OPTA has authority to take the following measures:
- requesting that companies supply certain information, for example the costs incurred for a certain service;
- determining the rules on the basis of which disputes between companies are to be settled; these consist of dispute settlement and imposing obligations;
- issuing fines of up to € 450,000.00 if the law is violated;
- imposing judicial penalties to force compliance with the law;
- revoking issued numbers in certain cases.

The OPTA management consists of the Commission, which has three members. The Commission is assisted by an administrative services department. OPTA is a member of the European Regulators Group (ERG), a cooperative EU organisation of national regulators in which the European Commission also participates.

8 • New Telecommunications Act
A new Telecommunications Act will be effectuated in 2004. This effectuation means that the new European framework for regulation of electronic communication will be translated into law in the Netherlands. This will also effectuate a change in OPTA's authority. The system in the new Telecommunications Act is more in keeping with general competition law. OPTA's authority pertains

to matters including the definition of relevant markets, designation of parties with significant market power in a market, and imposing obligations on these parties. OPTA must submit relevant decisions it intends to make to its colleague regulators in the EU Member States and to the European Commission. This is because decisions made by OPTA can affect trade between the Member States.

The primary changes in the tasks and authority assigned by law under the new Telecommunications Act are as follows:

- the law will no longer define standard markets and standard package obligations. The Commission must individually define all relevant markets, analyse these, designate any existing parties with significant market power, and select and impose fitting obligations in order to remedy competition problems;
- there will no longer be a general interconnection obligation but a negotiation obligation with reference to interconnection. In specific cases, the Commission can impose the establishment of end-to-end connections;
- market parties will be obligated to cooperate. This means that they will be responsible for submitting sufficient and correct information on time if OPTA requests it;
- a model for the auction and drawing of telephone numbers will be established. Numbers can be auctioned if they have extraordinary economic value;
- quicker procedures for the protection of rights will be implemented, because for decisions regarding significant market power and for disputes, the objection procedure will no longer apply and appeal will be possible with only one body (the Trade and Industry Appeals Tribunal).

Appendix 4 Key figures Annual Report 2003

Personnel

	per 1-1-2003	per 31-12-2003
Formation	137.50	136.81
Personnel employed	143	141

Formation composition per scale

3:	**2**
4:	**4**
5:	**9**
6:	**8**
7:	**13**
8:	**3**
9:	**7**
10:	**14**
11:	**22**
12:	**25**
13:	**19**
14:	**8**
15:	**4**
16:	**2**
17:	**1**
Totaal:	**141**

Personnel

	per 31-12-2003
Total sum of salaries *including taxes paid, Excluding allowances and Commission (x 1000 euro)*	7,621.73
Average salary in 2003 *(x 1000 euro)*	45.58
Official allowances *(costs) (x 1000 euro)*	26.14
Official allowances *(number)*	2
Dismissal bonuses *(number)*	0
Misc. personnel expenditures *(x 1000 euro)*	347.58
First aid allowances *(costs in euros)*	968.76
First aid allowances *(number)*	9
Remuneration Commission and associated members *(x 1000 euro)*	378.04

Interconnection disputes

	Submitted	Concluded
Special access	20	20
Interconnection	6	16
Tolarance	3	3
Site sharing	1	0
Cable access	**1**	**0**

Appeals

	Being processed per 1-1-2003	Submitted	Concluded	Being Processed per 31-12-2003
Objections	160	157	176	141
Appeals	42	78	53	67
Provisions	3	23	22	4

Appeals concluded

Withdrawn	26
With grounds	16
Without grounds	74
Inadmissible	40
Partly with grounds, partly without	13
Partly without grounds, partly inadmissible	3
Other	1
Not processed	3
Total	**176**
Number of hearings	112
Number of appeals to higher court	16

Communication

	per 31-12-2003
'Connections' (external newsletter)	8
Press releases	23
Press conferences	10

Registrations

	01-01-2003	Entrance	Exit	31-12-2003
Owners or providers of a public telecommunications network	127	22	31	118
Providers of a public telecommunications service	259	44	51	252
Providers or owners of leased lines	75	5	20	60
Owners or providers of a broadcasting network	80	2	8	74
Providers of a system for conditional access	6	1	0	7
Total issued carrier selection numbers	83	16	3	96
Total numbers issued for internet access	379	89	5	463

Numbers

	per 31-12-2003
Applications for information numbers	
Added	6,192
Subtracted	5,932
Average processing period	< 3 weeks
Total numbers issued	18,993
Total numbers revoked	15,097
Applications for other numbers	
Added	150
Subtracted	161
Average processing period (in days)	19.8
Total numbers issued	4,583,632

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