Market Vision

Independent Post and Telecommunications Authority

Foreword

Before you is OPTA's analysis of the state of affairs in the telecommunication and postal markets. This analysis is based on our experiences and activities throughout the year 2000, as described in the annual report, and the overview of the Dutch telecom and postal markets – the market monitors – which are also included.

The analysis, market monitors, and the annual report, published separately, provide a picture of the competition developments in fixed and mobile telephony, internet, cable, and postal services. It gives a concise impression of OPTA's area of work, whose mission is to create durable competition and protect the freedom of choice of end-users.

Competition in 2000 generally increased, prices for end-users (companies, consumers) fell, investment and employment rose, and new services were introduced. With the imposition of access obligations and the settlement of disputes between providers, the competition in both services and networks was able to develop further.

A few examples: the introduction of carrier pre-selection (CPS) in 2000 meant that end-users found it easier to switch to a competing telephone operator. Number portability – being able to take a telephone number with you to a different telephony operator – has already been a success for some time. This measure also makes choosing easier.

Nonetheless, there are still important areas which need to be looked at carefully. For example, competing providers are increasingly threatened by too small a margin between end-users tariffs, which have dropped across the board as a result of increased competition, and rising interconnection tariffs – the so-called price squeeze. A solution urgently needs to be found to this problem, and OPTA will be providing one. Direct access to the local loop of KPN is crucial for competition, for example in terms of being able to provide fast access (via ADSL). This requires greater low-level access. Measures aimed at ensuring this have been prepared and are now being implemented, so that all competitors will be given equal opportunities.

Further liberalisation of the postal market from a European perspective will take some time. In the Dutch market, however, a relatively large proportion of letter traffic has already been opened up to competition. The exclusive concession of TPG for the delivery of letters up to 100 g is still a monopoly. This is somewhat limited by the new rules for access to post office boxes, for which guidelines have been drawn up by OPTA. The service provided by TPG, such as the effective delivery rate, will be looked at further in 2001.

The performance of OPTA in the initial years of its existence has now been evaluated. Independent researchers have established that OPTA more than satisfies the requirements concerning the creation and monitoring of competition. Over the coming year, greater clarity will be created about the new European telecommunication regulations. If anything has become obvious from the evaluation and the proposed European policy, it is that stringent rules and regulations will still be necessary for the time being to make sure that all the benefits of competition are preserved and extended even further. In the short term – 2001 – OPTA will make further efforts to make sure that access is provided at a faster rate, so that, quickly, equal opportunities are realised for competitors, and so that end-users have more freedom of choice.

The Commission would like to thank the management and staff for the efforts they have made in 2000 to increase effective competition and freedom of choice.

The Hague, 31 March 2001

Mrs. mr. L.Y. Gonçalves – Ho Kang You
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Prof. dr. J.C. Arnbak, Chairman

OPTA mission statement

OPTA stimulates sustained competition in the telecommunications 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.

Disclaimer
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Contents

1 Vision on the telecommunication market

Market climate and stock market climate
The year 2000 was a watershed for the telecommunication sector in terms of stock market climate. Expectations which had risen to unrealistic levels, saw a correction halfway through the year. This happened after the first UMTS auction, during which the national governments extracted relatively large amounts from the market. This had significant consequences for share prices throughout the entire ICT sector. The situation described here is an international one: it is clear that both the financial markets and the telecommunication markets are highly internationalised and that international developments affect the situation in the Netherlands.

This change of climate has not yet been reflected in the actual situation in the telecommunications market. Competition has increased. Consumer prices have dropped considerably. New services and technologies are being developed, such as ADSL. The level of investment is rising, as is employment. The market monitor has produced clear indicators of these trends.

Nevertheless, as will be discussed later, there are indications that the stock exchange climate has had a knock-on effect in terms of the investment climate, and as a result this might affect the development of competition in the telecommunication market. Under these circumstances, the continuing challenge for OPTA, as in previous years, will be to create and maintain the conditions for effective competition.

Markets operate better but are vulnerable
Large market players are working hard to maintain their old positions, and at the same time to acquire shares in new markets. Their strategy is to achieve an international scale of such proportions that they are able to achieve the maximum benefits of scale in these network markets. They are faced with the need to radically transform their internal culture, which is linked to their objective of transferring their strong market positions to new markets, for example UMTS or fast internet.

New market players experience competition in a completely different way. They have to acquire an acceptable business case in a short period of time, while competing against large established companies in the market. As well as using their leading position in the market to maintain or expand their position in the sector, these companies also use their position to present any new market party with a hard battle. In this area, regulation of the sector is vital. However, the appropriate authorities must be in place for such. This is not always the case.

Fixed telephony
Investment, which serves as the driving force for further developments in the sector, increased in 2000. This was in respect of both investment in the traditional services (fixed telephony) and investment in the future technology platform. KPN has been trying to make up lost ground since the end of the 1990s; in the period after the stock exchange flotation in 1994, KPN invested far too little in fixed telephony, falling behind international developments. Increasing competition has caused the situation to change. Competitors in the market for fixed networks have also made big investments in this segment, as is apparent from the market monitor.

Old and new networks
Network capacity is an issue that has to be monitored carefully to protect consumer interests. There is extremely rapid growth in the demand for capacity. An obvious example is the exponential growth in internet traffic. The introduction of broadband – fast – internet has added an extra impulse. The introduction of new pricing and tariff systems – telephone calls and internet access without call units – has led to extra demand for capacity.

New services require new networks and new technologies. A large proportion of investment in the market is in that direction. Above all, competitors are concentrating on the roll-out of networks for broadband services, however, new services are also being provided via the old access routes. The most obvious example is the local loop – the copper telephone line from the local exchange to the domestic user. The incumbent – KPN – has to invest to make these old networks suitable for new services. In a certain sense, this is a legacy problem: old networks have to be maintained and improved for as long as the majority of users continue to use them. Other operators are also investing heavily in new networks.

A precondition in any situation is that the traditional telephone traffic functions properly. This means that not only KPN, but also its competitors have to have sufficient network capacity to satisfy demand. Consequently, the incumbent has to invest both in the old networks and in new networks.

In a competitive environment, the level of investment is the sum total of a variety of decisions taken by market players. The rules concerning interconnection, supply, and access to networks have an influence on that investment climate. An evaluation of OPTA's performance, carried out by independent researchers, showed that an attempt had been made to achieve a good balance between competition in services and infrastructure. This picture is also apparent from a recent study into the effect of regulation on the investment climate.

Sufficient network capacity is an important precondition for providing telecom services. The same applies to the development of competition in the telecom markets. Despite excellent incentives for the investment climate, there is nonetheless the risk of under investment. It is therefore also recommended that a 'last resort' provision be included in the statutory regulations on this issue. This might be performed analogous to the approach taken in the energy market where liberalisation regulations include an allocation authority concerning investment in networks.

Prices fall

Competition in the market for fixed public telephony received an impulse in 2000 with carrier preselection, which KPN was required to introduce. As a result, more competition was created in the market for fixed telephony. KPN has taken an aggressive price-leader position in terms of local and regional retail prices. The system of price capping introduced in 1999 required KPN to allow consumer prices for a range of various services to fall over a three year period. Generally speaking, the prices for this range of services had to fall by about 15% in real terms over three years.

Carrier selection and particularly carrier pre-selection providers compete in the market for national and international traffic. Local calls are always cheaper with KPN. Carrier pre-selection operators who nonetheless offer local telephony do so at a loss. There is therefore little competition in the local telephony market.

Brunel University study: investment behaviour influenced by access regime

This study, commissioned by the Ministry of Transport, Public Works and Water Management and OPTA, showed that although the tariffs for end-users fell even further in 2000, this had not prevented the operators from making investment. It appeared that investment was driven by long-term strategic motives, and that short-term price developments were of little influence. Access rules did, however, affect investment behaviour. A policy of cost-orientated tariffs in the long term (based on an LRIC model) is essential so that infrastructural competition will produce sufficient levels of investment. For the short-term, it was recommended that incentives be introduced for service competition, so that new market players would be encouraged to roll out their own networks by a gradual increase in access tariffs. OPTA has introduced this type of regime for access to the unbundled local loop of KPN in the form of access tariffs that increase annually for market parties over a period of five years.

Price squeeze threatens competition development

Retail tariffs have fallen at a much faster rate than interconnection tariffs. As a result, the profit margins for competitors – the difference between retail and wholesale tariffs (interconnection) – are minimal, and sometimes negative. This price squeeze threatens the development of healthy competition in the long term as it prevents new operators entering the market. It is particularly damaging for regional carrier selection and pre-selection operators.

In order to solve the problem, OPTA and the NMa have introduced guidelines to assess any proposed KPN tariff reductions for cost-orientation. If it becomes apparent that KPN is offering services below their cost price, either retail tariffs have to go up or wholesale (interconnection) tariffs have to go down.

Squeeze has to be resolved before 1 July 2001

The squeeze test will be used to assess whether or not KPN is charging retail tariffs at lower than the cost price. The test means that KPN must offer network access to third parties on the same conditions as those it offers to itself (non-discrimination). In any case, the price squeeze in local telephony will have to be resolved by 1 July 2001. On that date, the new system of interconnection tariffs comes into force. The reduction that this will introduce should ease the price squeeze. If there remains a problem, even bigger reductions in interconnection tariffs will be imposed temporarily. Furthermore, OPTA will aim to provide a structural solution to the price squeeze problem. An assessment will be made as to whether or not retail tariffs also need to be restructured. As far as that is concerned, the fact that prices do not necessarily have to continue falling will show that the telecom market is becoming an increasingly normal market. It should not be characterised by a forced reduction in prices by the incumbent. Changes in market conditions can lead to price fluctuations, and therefore sometimes to increases.

In order to prevent a structural price squeeze, measures will have to be taken to improve the cost allocation system, and to improve the correlation between tariff structures for retail services and interconnection. This may mean that the traditional structure of internal and external basic tariffs has to be reviewed. OPTA's policy for resolving the price squeeze is also aimed at ensuring prices give the right incentives to all telecom operators when making make-or-buy decisions.

New model for interconnection tariffs

In July 2001, OPTA will introduce a new method for assessing interconnection tariffs for parties with significant market power. The current tariff model does not make a distinction between originating access tariffs and tariffs for terminating access. However, competition is not necessarily the same in both market segments. In a situation of much competition in originating access – see the operators for carrier selection and pre-selection and mobile telephony – a less stringent regime would be needed than for terminating access. There is hardly any competition in this market segment: the end-user making the call is in principle not able to choose which telecoms operator terminates the call. This choice lies with the end-user being called. Much stricter tariff regulation is therefore required for terminating access in order to create sufficient efficiency conditions in this market segment.
The switch to the new interconnection model will take place with the aim of reducing the cost for new entrants in the market. At the same time it will give adequate incentives for infrastructure competition, for parties that originate a lot of traffic, to roll out their own networks.

Quick access

Competition is not only limited to prices and tariffs. It also concerns the quality and innovation level of services. Competitors should not be artificially put at a disadvantage in this area. For a balanced development of competition it is essential that all players have equal opportunities and that disproportionate market power is not created in new markets from their very inception. This further means that OPTA has to make sure that existing power relationships are not reproduced in new markets, which would create adverse conditions for competition.

ADSL – fast internet
ADSL is an example of innovation that has significant implications for the market. Broadband services have already become essential for commercial customers. The market for high-capacity leased lines has grown for several years now at a quite exceptional rate, and there are several market parties with a reasonable market share. Nonetheless, there are significant problems in the leased line market in terms of prices and availability. There are long lead times for leased lines and prices are still high in comparison with other countries. OPTA is working to solve this problem in 2001, and to remove any significant differences with practices in other EU countries.

Fast internet is also an important new service for the consumer market, however, developments in 2000 were behind expectations. This was also the case in most European countries. The next couple of years will be decisive for the further development of ADSL, and for competition relationships in this new market. A new European Directive was introduced on 1 January 2001 to regulate this process, which specifically increased the regulator's authority for monitoring and intervening where necessary.

A crucial element in the development of new services is the unbundling of the local loop. This is one of the reasons for the delay in the introduction of ADSL. OPTA has been taking action on this issue since 1998. In 2000, the tariff was set for unbundling. Guidelines for collocation – the placing of competitors' equipment in KPN's exchanges – were also established. OPTA dealt with a number of disputes in 2000 primarily concerning operational problems (often capacity problems) for special access to the KPN network. It is important that sufficient investment is made quickly to make collocation possible. The guidelines contain rules for a balanced allocation of rights and obligations between the incumbent and the access seeker, with the focus on making sure access is provided quickly.

The grooming of internet traffic to data networks will also lead to a reduction of the capacity scarcity in the fixed telephone network. Moreover, grooming also means that the operator can maintain the relationship with the end-user itself. In this way, impetus is given to innovative tariffs - internet without call units. Tariffs not based on call units are expected to become more important in the future, for example if different services are bundled within one package and supplied at a fixed price.

In order to create a balanced development of competition, it is important that KPN's competitors are allowed access to consumers under exactly the same conditions as KPN itself. The basic principles of non-discrimination will be applied in such a way that KPN will not be able to prevent others gaining access to its exchanges simply because KPN itself is not ready for such. The incumbent should not be allowed to control developments in the market, although it should however, be compensated for its investment in infrastructure.

FRIACO
Any new system of tariffs should also prevent the incumbent obstructing innovation by other market players. For example, OPTA has ruled that Worldcom must be supplied interconnection capacity at a fixed tariff so as to offer new services to end-users. This is also an example of the previously identified problem of new services being provided via old networks. It can lead to capacity and investment difficulties. These have to be resolved otherwise there will be insufficient impetus for competition. OPTA is therefore of the opinion that extra regulatory competencies should be introduced where necessary.

Mobile market
The monitor indicates that the mobile market grew rapidly once more in 2000. There are now circa 10 million mobile telephone users in the Netherlands. A more even distribution of market shares has also developed. Due to the introduction of number portability, it has become easier to switch to a different operator in 2001. This has also contributed to the growth of three new operators in mobile telephony. When the market eventually becomes saturated, number portability will become an even more important stimulus for competition.

Good competition?
The mobile market is often referred to as an example of a telecom market where a high level of competition has been achieved. However, this is only partially true. Although tariffs have fallen, one should remember that the market has gone through such enormous growth that the fixed unit costs have also fallen by an equally large amount. It is therefore only logical that this should benefit end-users. The market is therefore not yet automatically competitive in all areas. There is still significant differentiation.

Intense competition can, however, be clearly seen in the market for new subscribers. Above all, competition is expressed in discounts on handsets. It is unclear whether or not there is competition in terms of subscriber tariffs and call unit costs. There is an unsatisfactory level of transparency in the mobile market. The Commission has the definite impression that there is an overemphasis on gadget competition – attracting new clients (increasingly clients switching from other operators) by offering the latest handset model. Applying huge discounts prevents more rational consumer choices, and is ultimately undesirable.

The markets are not yet working satisfactorily. The competition in the market for new subscribers is still being financed by excessively high tariffs for fixed-to-mobile calls. This creates a situation of cross-subsidisation. This could probably have been justified in the early stage of development, but definitely not at this point in time. Tariffs for fixed-to-mobile calls should be brought more in line with actual costs. This would also prevent gadget competition and so improve the quality of the market operation.

The problem is the delivery charges of mobile operators. The market structure for fixed-mobile calls provides little incentive for cost efficiency. This imperfection is a result of the 'caller pays' convention. When consumers are deciding whether or not to purchase a subscription or a pre-paid handset from a particular operator, they do not take into account the price that other users pay to call them. The measures taken up until now – the designation of KPN and Libertel as the parties with significant market power in the mobile market – have not yet had the desired effect. Neither has the stimulation of tariff differentiation in this market had any great effect, both as a result of the 'caller pays' principle and possibly also because it does not seem to increase market transparency.

Access to mobile markets
This issue will be an important question for OPTA in 2001. An assessment will be made of the measures that can improve healthy competition, which includes competition in all relevant market segments and competition in call units, and thus not in handsets. An evaluation will be made of whether or not a more strict regulation – for the fixed and mobile markets jointly – would have this effect. An assessment will also be made of whether or not broader access should be given to independent service providers to mobile networks, so-called mobile virtual network operators. If that is required in order to create good competition at a service level, OPTA will take measures to create broader access.

Another indication of a deficiency in the mobile market is the extremely high tariffs for international roaming – calling to and from other countries. This is an international problem. It therefore also requires an international solution. Initiatives will therefore be taken in 2001 by the association of European regulatory authorities to resolve this problem, however, this will also probably require changes in the legislation.

Antennas
Another problem area in the mobile market concerns antennas. There is a shortage of locations where antennas can be located, and there are problems in obtaining local government permits for locating antennas. A possible solution for this problem is to make better use of existing antennas (site sharing). This remedy would also be commensurate with the policy outlined in the Fifth Policy Document on Spatial Planning on more intensive use of space. Newcomers to the market were having problems with the conditions and the periods for which site sharing was supplied by KPN Mobile and Libertel. As a result, OPTA drew up regulations about the shar-

ing of antenna sites at the beginning of 2000. However, the courts ruled that this exceeded OPTA's authority (OPTA cannot impose guidelines for antennas on roofs). It is now expected that a proposal to change the Telecommunications Act on this point will be passed in 2001 so that OPTA is better able to further improve competition in the mobile market. Such authority is important, especially since new problems are expected with the roll-out of new UMTS networks regarding the placing and sharing of antennas. One possibility is a joint network for the five UMTS operators based on facility sharing. This would not affect competition between the operators.

UMTS

As well as resolving the location shortage, site sharing might also be a way to limit the cost of investment in the new networks for the development of third generation mobile telephony, UMTS. Against the background of the prevailing investment climate, it is also currently of importance to find out whether or not it is possible or desirable for operators to set up networks together. In the opinion of the Commission, such an arrangement might be contrary to the underlying concept of infrastructure competition. It is precisely the existence of side-by-side networks that provides dynamic competition, structural incentives, and technological innovation. The creation of a single UMTS network would present a direct threat to competition. It would therefore be essential to create good access guarantees, and to regulate such. This means that specific rules concerning structure will be necessary for such a scenario.

Cable

The core business of cable companies is still the transmission of television programmes. Cable companies are required to satisfy reasonable requests by broadcasting companies for access to the network. OPTA dealt with several disputes in 2000 concerning cable access for television companies. The role of TV cable companies in terms of telephony is still limited. Cable companies are, however, playing an increasingly important role in terms of fixed rate internet access. Nonetheless, the position of cable companies is exceptional in this respect. Cable companies still do not have to provide access to their networks for other telecom companies or internet providers. This means that they often have a regional monopoly when it comes to providing broadband and/or non-call unit services. In connection with the government's intention to require cable companies to also provide access for other parties (particularly internet providers), OPTA and the NMa are currently consulting the market about their analysis of the market for narrowband and broadband internet access services. The provisional indications are that the broadband internet access market is a separate relevant market.

OPTA's policy, the regulations, the future of regulation

The monitor shows that considerable progress has been made in terms of achieving a competitive market in the telecom sector. The evaluation by Twynstra Gudde, commissioned by the State Secretary for Transport, Public Works and Water Management, characterised OPTA's performance in the telecom market as good, and said it had made a considerable contribution towards creating a competitive market; that there had also been a change in the investment climate and that, furthermore; market structures in the different sectors were still oligopolistic and it was doubtful whether this would change in any fundamental way. This means that OPTA will continue to work hard to create durable competition.

Timely access

A significant problem area is the delay new providers experience when entering the market for new services. New entrants need access to the old networks of the incumbent. Without it they cannot reach any clients. Furthermore, access must be obtained quickly. The incumbent invariably has an interest in delaying access. The exact opposite applies to new entrants: the sooner the better. The leading principle for OPTA's intervention is therefore to make sure that the incumbent and other parties have equal access, even if this means the incumbent has to introduce the new services of other parties before those of its own. First-mover advantages play a key role in acquiring market shares in the dynamic telecom market.

Timely access also has consequences for the activities of the regulatory authority. The number of disputes has increased sharply, and arbitration often involves long legal procedures which ultimately put back the supply date of the service being requested. The possibility of submitting disputes for arbitration is essential to create a competitive market. However, this requires a thorough approach by OPTA. The disadvantage of this is that in some cases newcomers end up introducing new services on the market later than existing parties due to long dispute procedures, and are therefore not in a position to achieve first-mover advantages. This is why OPTA has adopted 'quick access' as the focus for its internal policy in 2001. This means attention will be given to the possibility of using enough resources to expand the range of arbitration measures for a more efficient process. As a result, the procedures would be completed more quickly. This would keep delays in the supply of services to a minimum. OPTA will look at ways of streamlining internal processes to create a more efficient and effective decision making process in 2001.

Regulations

The evaluation carried out by OPTA showed that a review of the current regulations is needed to identify areas that can be improved. This should go further than the review of the European regulations, expected to be completed this year, but which do not have to be introduced by the member states until the end of 2002. OPTA has frequently pointed out gaps and deficiencies in the legislation and regulations in recent times. For example, the Commission is not able to act on its own initiative, but instead has to wait until a dispute has been put before it. This places a considerable limitation on the impact and speed of its activities. Furthermore, for example, the introduction of a new interconnection model is being delayed by the statutory requirement that the incumbent must first make a proposal, after which it is assessed by OPTA. It would be quicker and more effective if the regulatory authority were able to take a leading role in this process so crucial in terms of the development of competition. These are just a couple of examples of unnecessary limitations to the effectiveness of the Dutch regulatory authority, certainly in comparison with other countries that are also looking to take a leading role in the new economy.

This is an unsatisfactory situation, not only in terms of developments in the Dutch market, but also in terms of the desire to achieve a level playing field within Europe. This will become increasingly important as more pan-European markets and market players appear. Consequently, cooperation between the European regulatory authorities is increasingly important. With this in mind, OPTA is playing a leading role within the Independent Regulators Group (IRG), the association of independent European regulatory authorities.

Future of regulation

Following OPTA's evaluation, an assessment will be made about how sector-specific regulation can be introduced. The analysis presented here indicates that there are still considerable specific measures required to maintain the development of competition. This is also apparent from the extensive package of reform proposals currently being negotiated at a European level. The Commission is of the opinion that specific measures will need to be taken to ensure effective regulation, where it will be important to bring together expertise, to create a logical range of regulatory activities, and to introduce sufficient resources and regulations to guarantee effective intervention.

2 Vision on the postal market

Competition and monopoly

The Postal Act divides the Dutch postal market into three areas: the concession (exclusive concession), designated services, and free services. The designated services and the concession are also known collectively as 'the assignment'. Although the market for postal services in the Netherlands is gradually being opened up to competition, TPG still retains a monopoly in a large section of the market, namely the market for letter delivery up to 100 g.

Competition in the free section is slowly developing in certain areas. Where the market share of TPG in traditional free services (letters above 500 g, parcels, and express delivery services) is less than 40% – which is still a significant market presence – the situation with the recently privatised services is completely different. For the delivery of letters between 100 g and 500 g, TPG has a market share of about 95%. For printed matter, privatised in 1988, its share is still 85%. The market power of TPG is therefore quite considerable. Nonetheless, there are new providers of postal services, both for postal and courier services. The development of competition has had little effect on tariffs up until now. TPG has hardly altered any of its tariffs over the last period. In fact, the tariff for direct mail has risen. However, the development in the quality of service in the free section of the market indicates that new market forces are at work.

Competition is therefore gradually increasing in the free section, but the position of TPG remains strong. This would seem to be a barrier to the rapid development of competition in this section of the market. It should also be noted that in terms of volume, only a small proportion of the total market for letter delivery is open to new entrants. The greater proportion of the market, letter delivery up to 100 g, is still the exclusive concession of TPG.

The above analysis is based on the results of the Postal Monitor. This was introduced for the first time in 2000. Just as with the telecommunication markets, the Postal Monitor reveals developments in competition in the postal market. Moreover, the Postal Monitor evaluated the performance of TPG as a monopoly in large areas of the postal market. The monitor indicated that TPG's performance, and competition in the Dutch postal market, is quite satisfactory compared to the situation elsewhere in Europe. This is seen by the Commission as an important conclusion. It is also important that European liberalisation of the postal market proceeds at a much slower pace than that in the telecommunication markets. Nonetheless, an assessment still has to be made of whether or not, and in which way, market performance could be further improved. This does not only involve the relative performances of European postal markets as there is also an opportunity to compare the norms and regulatory competencies currently present in telecommunication markets. Furthermore, it is important that TPG provides the best possible service to consumers with limited freedom of choice owing to its monopoly. This approach has led to clear objectives being set out in the analysis below. Naturally, it is up to the policymakers and legislature to provide the room for these objectives as they see fit.

Tariffs: soft targets and regulation

TPG's concession is regulated by OPTA. However, it is subject to the limiting conditions imposed by legislation. That particularly applies to tariffs, which have to conform to certain rules – the tariff control system. The system of price caps for postal services does not include any efficiency incentives. Whereas retail tariffs in the telecom market have to drop by a total of 15% over a period of three years, no reduction whatsoever has to be introduced in the postal market. The introduction of an efficiency measure is required as this concerns a monopoly market. The efficiency pressure created by regulation would therefore replicate the function that competition fulfils in normal markets.

The separation between policy and regulation can also be improved. The price caps are set by ministerial regulation. This is unlike the situation in the telecommunication market where the regulatory authority sets the tariffs. There are lessons to be learned from the experiences in the telecom sector.

In 2001, OPTA will prepare recommendations for the evaluation of the tariff control system.

Quality of service provision
The quality of service provision in the concession section of the market has gone down over the last few years. For example, the effective delivery of letters to the general public with a lead time of 24 hours fell between 1998 and 1999 from 93% to 89%. Under the new regulations, TPG is required to deliver 95% of these types of letters within 24 hours. TPG measures this percentage using a system it developed itself. OPTA will evaluate this system in 2001 and demand adjustments where necessary. An assessment will then be made of whether or not the norm is being achieved.

Furthermore, in 2001 OPTA will develop regulation for the postal services policy of TPG. TPG will reorganise its outlets in 2001, so that each branch will offer a differentiated package of services and the number of branches offering the total range of concession services will fall. It is important that the efficiency improvements TPG achieves in doing so lead to benefits for the consumer via investment in further improvement of the service provision.

The justification for the monopoly in the postal market is not the protection of the market position of the most important national player, but the need to provide consumers with an optimal service. This means the proper provision of a public service (universal service), such as a uniform and low letter tariff, and the maintenance of the post office network. Any cuts in the current service provision should be prevented in areas where it is incorrectly assumed that market forces will ensure an adequate level of service. OPTA will be assessing the quality of the service provision in 2001. It will aim at ensuring TPG provides an optimal service in the concession section of the market within the terms of the statutory provisions.

Separate accounts and cross-subsidisation
Profits in the concession section of the market can lead to cross-subsidisation between the concession section and the free section of the market. This affects competitors of TPG in the free section. Moreover, any cross-subsidisation would be paid for by the 'captive' consumers of the monopoly services. OPTA has limited authority to intervene against cross-subsidisation. TPG has a statutory obligation to organise its accounts to reflect its activities in the concession, the designated services, and the free activities

The aim of this accounting system is to make sure that income and expenditure is allocated in the correct way to the concession, the designated services, and the free sections of the market. This system makes it possible to identify cross-subsidisation between the assignment and the free section. In 2000, OPTA assessed the accounting system of TPG, and gave it conditional approval. TPG objected to these conditions. The system approved by OPTA has to be introduced by TPG in 2001. Within the current institutional division of tasks, it is now up to the NMa to act against market distortions in the free section of the market. Naturally, OPTA and the NMa will work together in this area. However, the Commission is also of the opinion that it is impractical – from the perspective of effective regulation – and far from ideal that two separate authorities are responsible for regulation. Integration of all tasks required for effective sector-specific regulation would seem more appropriate.

Access to networks
The postal sector is a network sector. TPG has its own highly sophisticated service distribution network in the Netherlands. Having such a network is an advantage for the former monopoly in the free section of the market. New entrants do not usually have their own distribution network straightaway. Although the roll-out of a new network in the postal market is not the same as in the telecommunication markets, it still requires considerable investment ('embedded costs').

Similar to other network sectors, access to certain points on the network is important if competitors are to be able to provide services to consumers. 'Third party access' rules therefore play a key role in liberalisation processes, as the Open Network Provision does in telecommunication. The Postal Act – as a result of European rules in this area – does not include such rules. This is a consequence of the slow pace of liberalisation in this market. An important exception is access to post office boxes. The Postal Act states that TPG has to provide access to post office boxes to competitors on the basis of reasonable, objectively justified, and non-discriminatory conditions and tariffs. Policy regulations for this were established by OPTA in 2000. These policy regulations will be used in 2001 to settle any disputes that arise.

Access to post office boxes was the first step towards more service competition via access to TPG's network for competitors. For the development of competition – similar to the situation in the telecom market – it is desirable that broader access opportunities are created, based on certain rules established beforehand. Also, similar to the situation in the telecom market, access to the network will not simply be achieved by the application of the general competition rules, since this would already have happened if such were possible.

The discussion about how, and if so in which way, the former monopolies should grant access for competitors to the distribution networks for the free services is also taking place internationally. In Germany, extensive access to the network of the former monopoly has been introduced. It is also important for the Dutch postal market to assess the various possibilities for 'third party access'. OPTA will analyse the effects of extensive access to the network of TPG in 2001.

OPTA's policy

Liberalisation of the postal market is proceeding slowly. There is still a monopoly in the greater part of it. Monitoring of the postal market has shown that the Dutch postal market does not perform badly in comparison with other countries. This does not take away the requirement that the service for consumers and users should be as good as possible. In this situation, OPTA sees its task as ensuring that the best possible performance level of the monopoly is achieved. Furthermore, the Commission will identify more areas in the statutory regulations that can be improved than it has done to date.

The European regulations appear to be less focused on further liberalisation of the national and European postal markets than on controlling the behaviour of the former monopolies. In order to create more competition, there needs to be the introduction of greater liberalisation measures and the associated competencies so that the regulatory authority can quickly intervene where distortions in the development of competition occur. Effective measures should be introduced to create broader access opportunities for competitors, a tariff control system based on efficiency and cost-orientation, and the monitoring of cross-subsidisation of the free market section.

3 Telecommunications market monitor 2000

Developments in 'fixed' telecommunication in 2000

In 2000, the competition in the telecommunication market for fixed connections was further strengthened compared to 1999. Some important developments in 2000 were the growth in the use of *carrier pre-selection*, the unbundling of the *local loop* and the development of *price squeeze*. Investments made by providers in new and existing networks were relatively high, largely so as to satisfy expected increased demand for broadband services.

The market for 'fixed telecommunication' consists of three sub-sectors, namely those for:
- fixed public telephone networks
- fixed public telephone services and
- leased lines

Both voice and data traffic are included in the above.
New parties in the market are gradually achieving a somewhat stronger position, but the incumbent, KPN, remains the dominant player in terms of market share (turnover). In the fixed telecommunications market, in the sub-sectors for fixed telephony as well as for leased lines, KPN was therefore once again designated as a provider with 'significant market power' in 2000.

The competitors in the fixed public telephone market consist of companies that build their own networks, or offer carrier selection or carrier pre-selection services, or operate cable television networks. In addition, there are companies that offer broadband (ADSL) services whereby telephone services are also included in the service package.

In the leased line market there are clearly more, as well as larger, active competitors. The types of companies that compete in this market are cable telephony companies and other operators who roll out *(backbone)* networks themselves. For both sub-sectors, the companies that are active are often (subsidiaries of) large international companies.

In 2000, competition was stimulated by two forms of special access: *carrier (pre)selection* and *MDF-access*. These services originated because KPN was designated as a party with significant market power. KPN is therefore obliged to comply with requests for (special) access to its networks, under reasonable, non-discriminatory and transparent conditions.

Pre-selection group is growing
'Carrier pre-selection' means that customers do not first have to dial the code of a carrier select company in order to dial directly via a provider other than KPN. Many carrier select companies are already offering carrier pre-selection. By the end of 2000, over half of the twenty active providers also offered carrier pre-selection. A survey conducted by OPTA at the start of 2001 showed that, as was the case in the previous year, about 17% of consumers use carrier selection or carrier pre-selection. A striking aspect is that in 1999 only a fifth of this group used carrier pre-selection, whereas at present more than half of this group has already set their favourite carrier select company as their standard choice. These consumers therefore conduct the majority of their telephone communication via a KPN competitor, as a result of which the intensity of use for the carrier select company has increased significantly.

Unbundling: an open market

Another stimulus for the development of market competition is the implementation of MDF access (Main Distribution Frame access), which refers to unbundled access to the local loop. This means that companies can lease the last piece of the network between the local exchange and the consumer and therefore acquire direct access to the consumer without having their own connecting network. MDF access will be used primarily for offering broadband (internet) services such as ADSL. As a result, without new cables being rolled out, competition in the 'local loop' will increase in a market where at present only a few cable television operators are active players, besides KPN.

The European Commission decided that, as of 1 December 2000, unbundled access to the networks of providers with significant market power would be required in all European countries. In 2000, various ADSL providers had already presented themselves on the market, but initial enthusiasm was less than expected. As in most of the other countries, the utilisation of unbundled access is therefore still in its infancy.

The unbundling can have effects both for the consumer market and the business market. In the consumer market, a wider range of broadband services is also expected to stimulate the range of *content*. In the business market, unbundling can cause competition in the market for leased lines to increase greatly, especially in the market for low-capacity leased lines where KPN still has a very solid position.

In 2000, market parties who wanted to purchase MDF and collocation services (shared access to exchange facilities) from KPN lodged several complaints with OPTA. The result of OPTA's handling of these disputes was that KPN is being required to supply the services requested at a significantly faster rate than the company had originally indicated was possible – in a few months rather than in over a year. As there were differences of opinion and a lack of clarity between the market parties regarding various matters, particularly technical matters, at the end of 2000 OPTA published policy guidelines on collocation, on one-off charges and on its draft positions regarding spectral management to prevent disruptions and interference between connections.

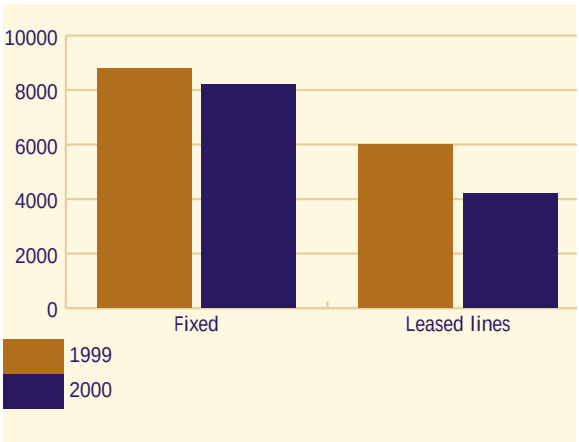
Competition increases in markets for fixed telephony and leased lines

The Hirschmann-Herfindahl index (HHI index) is an indicator for the degree of concentration in the market – the lower the index, the more competition there is. According to the Competition Authority in Great Britain, the limit for an effectively functioning market is 1800. Figure 1 shows that both in the market for fixed telephony and for leased lines the degree of competition in 2000 increased.

Fixed telephony

The market for fixed public telephony in particular is still very concentrated. In 2000, the market share of KPN was still 85-95%*, even though they lost market share – in 1999 their market share was 90-100%. At the end of 2000, there were only two competitors with a market share of 1-5%; the other companies had a share of less than 1%.
If market share is measured in terms of the amount of telephone traffic generated, then competition has increased more strongly. The carrier (pre)-select companies do not realise any revenues from subscriptions. Measured in this way, KPN has five competitors with a market share of 1-5%.

Figure 1
Hirschmann Herfindahl Index fixed telephony and leased lines



* Market shares are given in intervals of 5% to protect commercially sensitive information.

The carrier (pre)-select companies compete primarily in the sub-sectors for regional calls and international calls. There is hardly any competition in the local market – only three cable companies offer local telephone service.

Leased lines

There is quite a bit more competition in the market for leased lines than in the market for fixed telephony. Over twenty companies are active players in this market. KPN's market share in 2000 decreased to 60-70%, whereas it was still 70-80% in 1999. At the end of 2000, two competitors had a market share between 5-15%; the other providers had a share less than 5%.

The market for leased lines is generally divided, according to the capacity of the line, into a market for lines under 2Mb/s and for lines of 2Mb/s and higher. At present, competition is greatest in the market for leased lines with a capacity of 2Mb/s and higher. In the market for leased lines with a capacity of less than 2Mb/s – which also includes analogue leased lines – KPN has few competitors and at the end of 2000 its market share here was still over 95%.

The position of providers of leased lines with a relatively high capacity (>2Mb/s) has by now become quite strong: at the end of 2000, the market share of KPN here was 10-20%. At the end of 1999, it was still 30-40%.

Two important developments can further strengthen competition in the market for leased lines, namely unbundled access (MDF access) and the *wireless local loop* (WLL). In 2001, the Ministry of Transport, Public Works and Water Management will organise an auction of WLL frequencies. This auction is very significant for the competitive situation, as it will then no longer be necessary to roll out cables in order to realise a broadband connection with the *backbone networks*.

Number portability, connection costs and switching risk

Low switching costs for fixed telephony, benefits often interesting

In order to achieve a competitive market, consumers must have the option of switching from one provider to another without incurring much expense. In the fixed telephony market, whilst switching costs do exist they are relatively low. An example of switching costs is provided by the costs involved in changing one's telephone number and the connection costs.

The present obligation to cooperate in ensuring number portability, which refers to the option of being able to retain one's existing phone number when changing providers, is an important factor in limiting the switching costs for consumers. For business customers, number portability is even more important than for consumers – after all, a change in telephone number results in high costs for a company, such as costs for new business stationery, marketing media etc. As there is a very limited number of providers with their own connecting network, number portability for consumers in the fixed telephony market plays a primary role in switching to cable companies with their own local loop. Businesses generally have a greater choice of operators. In 2000, over 145,000 numbers were switched from one provider to another in the fixed telephony market, for both consumers and businesses. Switching costs consist of the installation of a cable modem and the connection costs. With the new providers of telephone services, both of these items are often free of charge and are therefore not an obstacle to switching.

Finally, a third type of cost is significant. This is the risk run by the consumer if they become dissatisfied with the switch, for example because the quality provided by the new provider is worse than expected. In that case, the costs resulting from the conditions agreed upon (usually a minimum subscription of one year) and the costs involved in

Table 1 **Difference in telephone costs for the average caller, incumbent compared to CPS providers at the end of 2000**

Country	% difference; incumbent – CPS provider
The Netherlands	7.1
Germany	10.0
United Kingdom	10.4

switching back to KPN or to another provider (whereby connection costs will generally be charged) should also be considered part of the switching costs. This risk (or the perception of it) decreases when more consumers are successfully connected to other operators and the public image of the various parties is good.

Smaller price differences in a transparent market

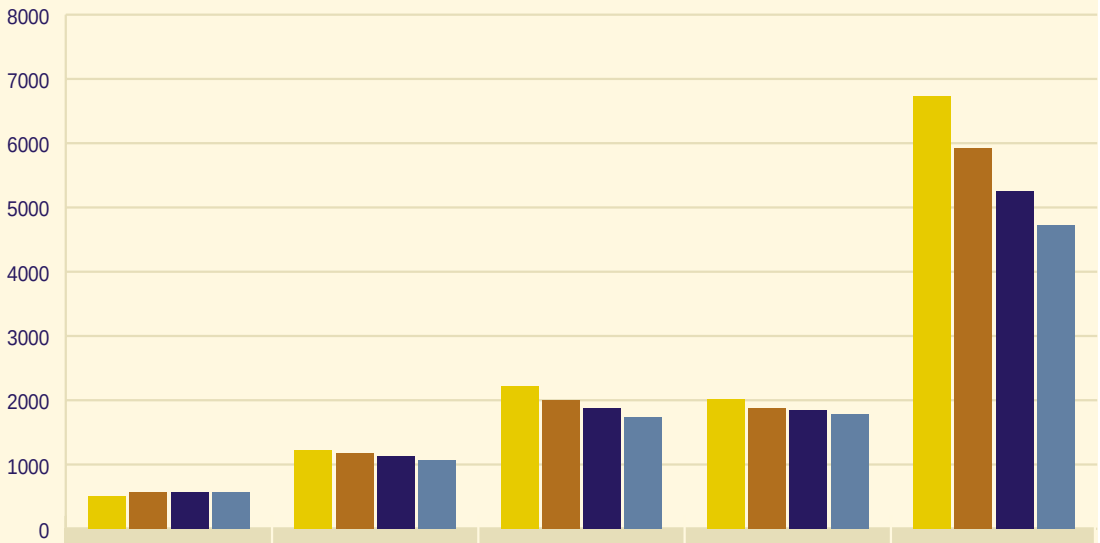
A substantial price difference between similar services or products from different providers (besides giving the impression that competition is perhaps not yet well developed) indicates that the market is not yet sufficiently transparent, and/or that switching costs exist for moving from one provider to another. In a competitive market, consumers have a large range of choices in looking for the service or product with a price-quality ratio that best suits their needs. If the market is sufficiently transparent, the purchasing behaviour of consumers will ensure that large price differences for the same product do not persist.

At the end of 2000, the 'average caller' in the Netherlands paid about 7% less when using carrier (pre)-selection than when only calling via KPN. A year earlier, that difference was still about 8%. Depending on calling behaviour, the differences for individual consumers can be larger or smaller.
In Germany and the United Kingdom, the price difference between the former monopolies and the new providers was about 10% at the end of 2000.

Call profiles and pricing developments

Figure 2 shows how the prices charged by KPN have developed during the last four years for different types of callers: infrequent, average and frequent callers, internet users and small business users. A comparison using Table 2 shows how much benefit each type of caller can gain from switching to a new provider.

Figure 2 **Consumer profiles, Telephony with KPN (in NLG)**



	Infrequent caller	Average caller	Frequent caller	Internet user	Small business
1998 Q1	512	1223	2224	2014	6725
1999 Q1	576	1168	1999	1873	5917
2000 Q1	572	1123	1880	1844	5258
2001 Q1	564	1067	1732	1787	4716

Table 2 **Telephone costs for different call profiles; KPN versus carrier (pre)-selection (in NLG per year)**

	Fixed telephony via KPN					Fixed telephony with carrier (pre)-selection	
					difference		difference
	1-1-1998	1-1-1999	1-1-2000	1-1-2001	2001-2000	1-1-2001	with KPN
Infrequent caller	512	576	572	564	-8	558	-6
Average caller	1,223	1,186	1,123	1,067	-56	996	-71
Frequent caller	2,224	1,999	1,880	1,732	-148	1,527	-205
Internet user	2,014	1,873	1,844	1,787	-57	1,739	-48
Small business customer	6,725	5,917	5,258	4,716	-542	3,662	-1,054

Source: Market monitor OPTA, 2000

The above comparison shows the differences in annual costs between consumers who call only via KPN and those who make use of carrier (pre)-selection. The price charged by carrier selection companies was based on the average of the five cheapest providers.

It is clear that all types of callers benefited in 2000, with the small business user, who calls only during peak rate hours, benefiting the most. This is also the group that still stands to gain the most by calling via a carrier select company, namely over NLG 1000 per year. The frequent caller can also save a lot by calling via carrier select companies, namely 12% of the total bill. The internet user, who primarily places local calls, can save less on costs, which is also true of the infrequent caller.

Table 2 and figure 2 show that the infrequent caller had costs in 1999 that were slightly higher than in 1998. The reason for this was the re-balancing of KPN's price structure. In the monopolistic market situation, the fixed rates were artificially kept at a relatively low level in order to guarantee, as much as possible, the availability of telephone services for everyone. In a market with competitors, however, the price structure should be in line with the cost structure. The result was that the fixed rates were increased and the variable rates were decreased. For infrequent callers, this resulted in a one-off (1998 to 1999) increase in the telephone bill. After 1999, infrequent callers also benefited somewhat.

International comparison of prices: in the Netherlands, the prices of telephone services for consumers are very reasonable

The price comparisons at the end of 2000 make it clear that the average consumer price per minute (fixed public telephony) is relatively low in the Netherlands. The prices for consumers are lower only in Germany, the United Kingdom, and Sweden.

The low prices are an indication that the market in the Netherlands is quite competitive. However, this hides another danger: the prices charged by the incumbent can become so low that it is no longer attractive for competitors to enter the market. This seems to play a role in the sub-sector for local telephone services in the Netherlands. If such a situation persists, there is a danger that existing competitors may be pushed out of the market while at the same time newcomers are discouraged from entering the market, resulting in a return of the previous monopolistic situation. In the article about interconnect rates, you can read about the policy implemented by OPTA to prevent this from happening.

In the business market (for national fixed telephony), the rates in the Netherlands are also relatively inexpensive. For a business user, Sweden is the only place where the price per minute is even lower.
If we consider these prices (excluding fixed-to-mobile calling, which was added later to the basket) over time, it turns out that there has been a steady decrease in rates in the countries being compared. Due to the greater competitive pressure, rates in the business market dropped more sharply than in the consumer market.

Figure 3 **Price per minute basket national telephony, consumers (in cents)**

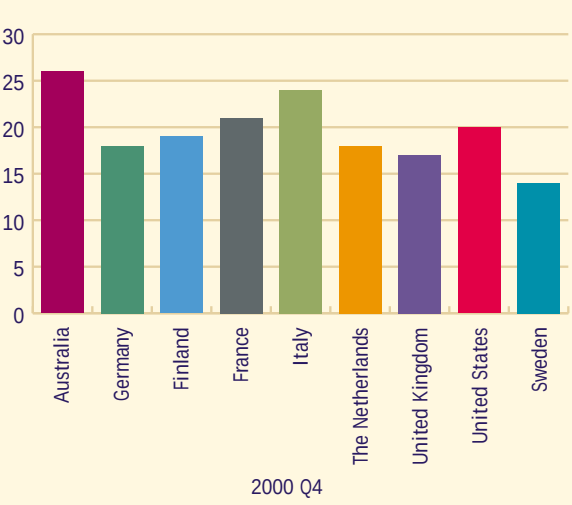
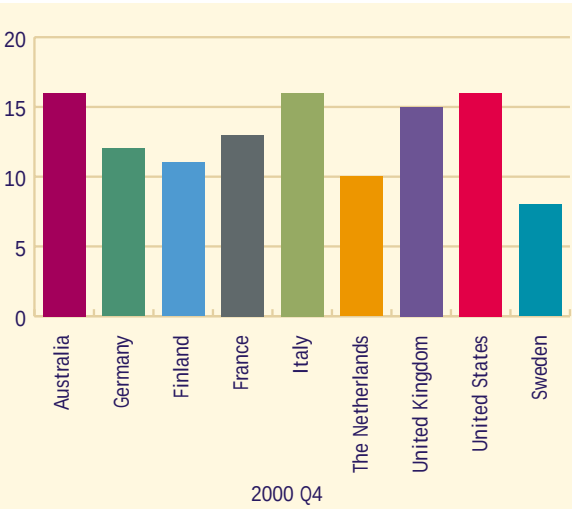


Figure 4 **Price per minute basket national telephony, commercial (in cents)**



In order to obtain a set of comparative prices for *average consumers* and *average business users*, the OECD put together 'baskets' with a mixture of telephone rates for the different types of users, after which an international comparison took place for average rates per minute.

Leased lines: customer still has a lot to gain

It is clear that this type of leased line in the Netherlands is much more expensive than in the countries being compared. Whereas at the end of 2000, in Germany NLG 3.7 million was being spent on this type of leased line, the Dutch business user paid almost NLG 6 million for it.

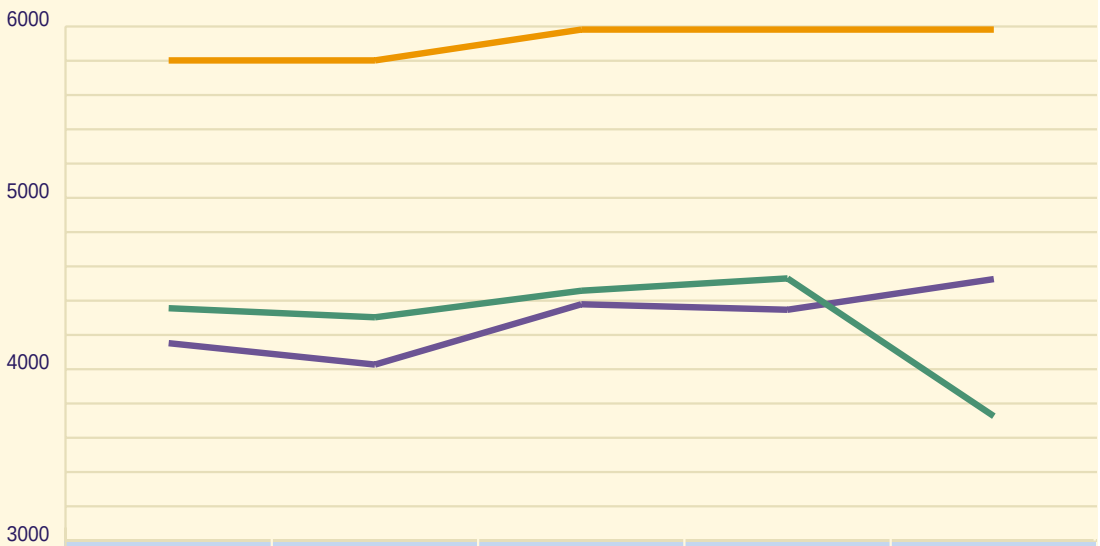
The prices of leased lines are especially important for business telecommunication users. Figure 5 shows the average price for leased lines of 2 Mb/s in the last quarter of 1999 and the four quarters of 2000. In the Netherlands, this is the sub-sector where the biggest number of competitors are active. It is also striking that the costs of leased lines during the measurement period have hardly decreased at all. The strong growth in the number of users entering the leased line market has therefore hardly put any pressure on prices. In addition, a survey of Dutch users of leased lines showed that the prices asked for comparable services varied considerably, which indicated that the market is not yet very transparent. Analogue leased lines in the Netherlands are relatively inexpensive when compared to other countries. Prices for this type of leased line are regulated.

Interconnection rates: too high for new entrants

The prices paid by a telecommunication company for picking up and delivering traffic via the network of other operators are called interconnection rates. OPTA regulates the rates for access to the network of providers with significant market power. Although the range of choices for telecom providers with regard to purchasing capacity on *backbone* networks continues to increase, there is still little competition present in the local network *(local loop)*. The interconnection rates that apply here (for picking up or delivering traffic from or to a KPN subscriber) are relatively high, even on an international level. In particular, the *local* and *single transit* rates, which are important for interconnection to the *local loop*, are rather high in the Netherlands.

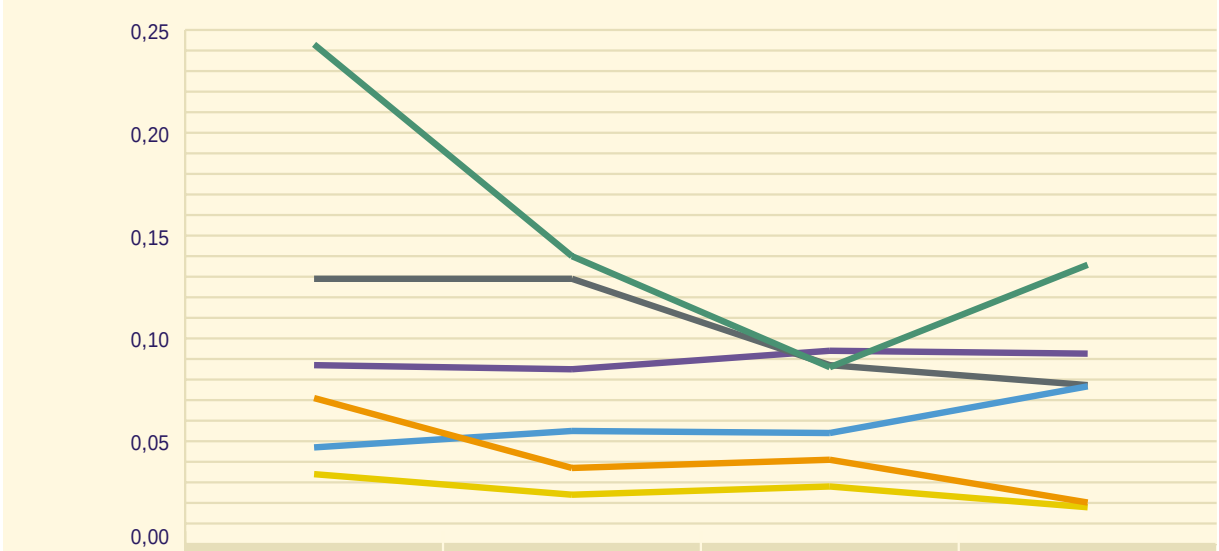
Relatively high interconnection rates, combined with sharply reduced end-user prices, mean that the margin remaining for providers of telephony in the Netherlands is small. Figures 6 and 7 illustrate this point. The margin between end-user prices and interconnection rates indicates the maximum profit competing providers can make when providing telephony services.

Figure 5 **Annual costs leased lines 2Mb/s (in NLG ppp x 1000)**



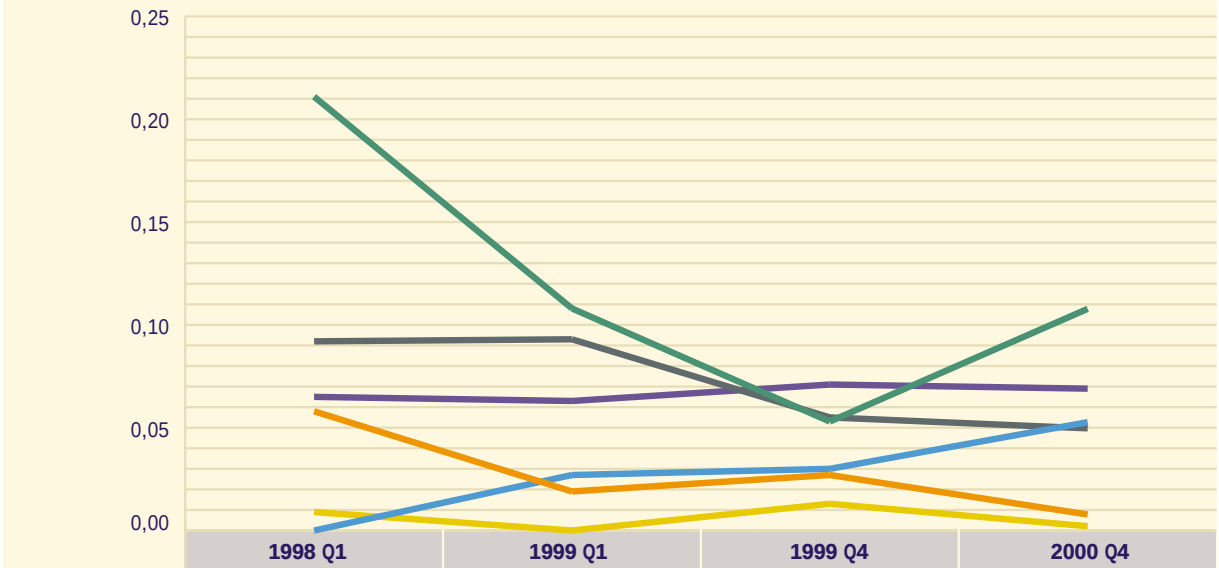
	1999 Q4	2000 Q1	2000 Q2	2000 Q3	2000 Q4
Germany	4356	4303	4458	4530	3726
The Netherlands	5802	5802	5982	5982	5982
Un. Kingdom	4152	4027	4379	4347	4526

Figure 6 **Best case scenario for interconnection (in eurocents)**



	1998 Q1	1999 Q1	1999 Q4	2000 Q4
The Netherlands	0,0710	0,0370	0,0410	0,0202
Germany	0,2430	0,1400	0,0860	0,1358
Finland	0,0470	0,0550	0,0540	0,0767
France	0,1290	0,1290	0,0870	0,0773
Un. Kingdom	0,0870	0,0850	0,0940	0,0926
Sweden	0,0340	0,0240	0,0280	0,0179

Figure 7 **Worst case scenario for interconnection (in eurocents)**



	1998 Q1	1999 Q1	1999 Q4	2000 Q4
The Netherlands	0,0580	0,0190	0,0270	0,0078
Germany	0,2110	0,1080	0,0530	0,1078
Finland	0,0000	0,0270	0,0300	0,0527
France	0,0920	0,0930	0,0550	0,0497
Un. Kingdom	0,0650	0,0630	0,0710	0,0690
Sweden	0,0090	0,0000	0,0130	0,0021

(0,0000 is not available)

Figure 6 represents a scenario in which an alternative provider does have its own large (regional) network and only requests local interconnection (twice). In other words, the regional traffic is taken care of using its own network. As a result, the interconnection costs are relatively low. On the other hand, these providers have relatively high (fixed) costs of their own (best case scenario). Figure 7 shows the margin for a provider with or without its own minimal network, which twice requests double transit interconnection (worst case scenario).

Price squeeze

In theory, a small price margin can indicate that competition is well developed, meaning relatively low end-user prices. More competition can mean that all the providers only achieve a small profit margin. A negative or very small margin can also mean that the end-user prices are lower or almost the same as the marginal costs. In such a case, it can then be lucrative for a dominant party to lower prices, perhaps temporarily, to such an extent that competitors can no longer survive (price squeeze).

In the Netherlands, there was a discussion in 2000 about the existence of such a price squeeze. Initial calculations indicate that such a situation does exist. Various carrier (pre)-selection providers have indicated that they are losing money on some of the products or services they are offering. OPTA and the NMa have since developed and published a method of measurement (February 2001), which compares the prices charged by KPN against a minimum level. OPTA will in future use this 'price squeeze' test to evaluate whether the price proposals of KPN comply with the principle of cost orientation. The test determines whether the prices are less than the interconnection purchase price plus a reasonable margin for retail-specific costs. OPTA will not approve the rate cuts if the results of this test are negative.

Calling from fixed to mobile: KPN prices vary per provider

Starting 15 June 2000, KPN differentiated the rates for calling from a fixed to a mobile telephone in the Netherlands. By modifying its terminating prices, a mobile operator can now directly influence the rates charged to fixed callers for calling the operator's mobile subscribers.

This measure has not led to mobile telecom providers advertising these rates, and it has also not led to overall price decreases or stronger price differentiation. But the prices have moved closer to each other. KPN mobile remains the cheapest mobile operator when calling from the fixed KPN network, particularly on the basis of the standard and weekend rate. Earlier in 2000, KPN had, however, already sharply lowered its rates for calling from fixed to mobile, from 75 cents to 49 cents per minute (peak rates, including VAT).

Table 3 gives an overview of the rates for calling from a fixed to a mobile connection (in cents per minute) from the beginning of June 2000 to the start of 2001 (excluding VAT, due to the change in rates in 2001).

Table 3 **Tariffs for calling fixed to mobile with a KPN subscription, per operator, in cents per minute, excluding VAT**

Calling to:	Standard		Reduced rate		Weekend	
	June 2000	February 2001	June 2000	February 2001	June 2000	February 2001
KPN Mobile	42	50	42	38	21	21
Telfort	54	57	37	39	37	39
Ben	57	57	39	39	39	39
Dutchtone	56	56	38	38	38	38
Libertel	57	57	38	39	38	39

Source: KPN

Growth in size and effectiveness of telecom companies

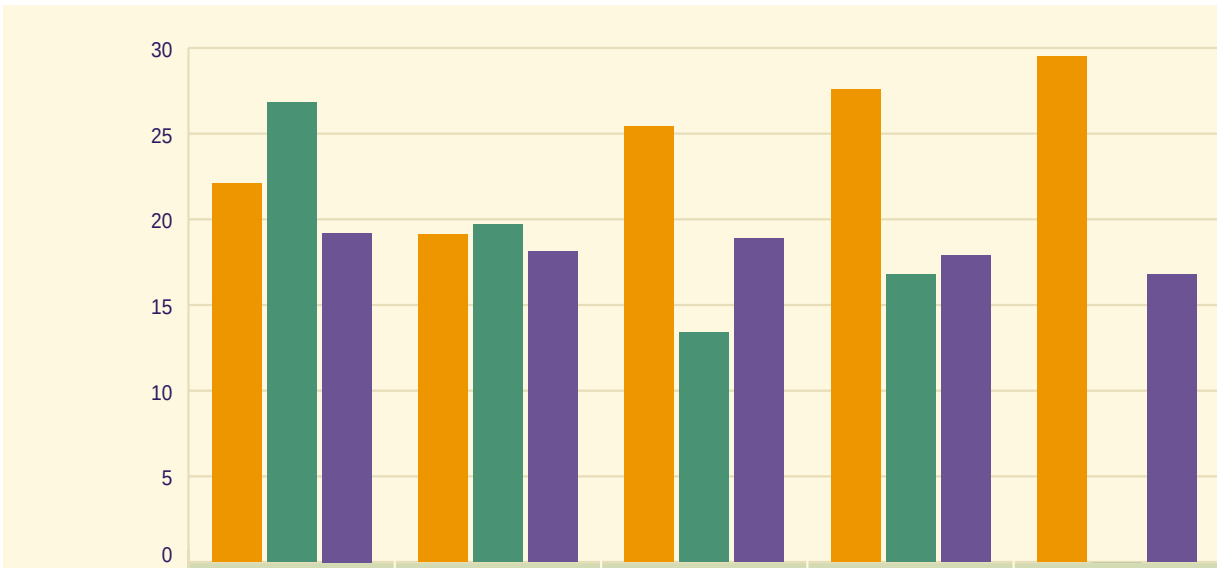
Since its liberalisation, the telecommunications market has grown very rapidly. The number of jobs at KPN as well as the new parties on the market has grown every year. In addition, the resulting competition has led to higher productivity at the ex-monopolist. The market grew so rapidly that KPN has been able to more than absorb the growth in productivity and the pressure to cut costs, and has been able to hire new personnel, resulting in an increase in the number of jobs last year by 15% to 41,000.
Competitors in the fixed telephony market have actually achieved even stronger growth – their number of jobs having increased by over 40% in 2000, to almost 7000 employees. The percentage of jobs accounted for by KPN in the fixed telephony market has therefore decreased from about 92% in 1998 to about 86% in 2000.

Investments

Large investments are needed to realise the many new opportunities provided by the telecommunication market and to end the scarcity of capacity that is still typical of several markets in the Netherlands. Much has been said and written about the effects of the various intervention measures used by the telecom supervisory authorities on the size of investments. For example, (excessively) low interconnection prices supposedly discourage investment in networks by competitors and the price-cap policy, it is said, ensures that the incumbents (ex-monopolists) do not make sufficient investments. However, KPN as well its competitors are investing large amounts in the Dutch market. In 2000, KPN invested an estimated NLG 5.7 billion. The investment ratio, the percentage of net revenues represented by investments (see figure 8), of KPN has steadily increased over the last few years. Since 1998, KPN has made up for its lack of investments in previous years in comparison with the incumbents in the United Kingdom (British Telecom) and Germany (Deutsche Telekom). KPN's investment ratio is therefore relatively high.

Exact measurements of the amounts invested are not possible due to the often confidential nature of the information involved. Only a few estimates are available, which give an indication of the upper and lower limits for the total investments in infra structure in the Netherlands in 2000, as well as the extent to which these have been made by KPN or its competitors. The available information indicates

Figure 8 **Investment ratios of the incumbents** (investments in % of net revenue)



	1996	1997	1998	1999	2000
KPN	22,1%	19,1%	25,4%	27,6%	29,5%
Deutsche Telekom	26,8%	19,7%	13,4%	16,8%	n.a.
British Telecom	19,2%	18,1%	18,9%	17,9%	16,8%

that there is already much competition particularly in the market for international networks (continental and intercontinental). In this area, new providers invest more than KPN. Relatively large investments are taking place in the markets for local and national networks.

Interconnection prices after 2001 not completely based on historical costs

Until now, OPTA used the EDC model (Embedded Direct Costs) to monitor the interconnection costs charged by KPN. The starting point for this model was the historical cost. In 2001, a partial transition will take place to the LRIC model (forward looking Long Run Incremental Costs). This model is based on the idea that in determining the costs of a particular service one takes into account the development of information and communication technology. The argument for this transition, recommended by the European Commission, is that interconnection prices charged by the operators with significant market power will be based on the costs of an efficient operator.
The LRIC model will not actually be applied to all interconnection prices, but only for the delivery of traffic (terminating access). There is almost no competition at present in this market as a result of the indirect relationship between the purchaser (the telecom operator) and the party paying (the consumer). The prices charged for picking up traffic (originating access) will continue to be regulated according to the EDC model.

Just over 10 million subscribers, above the EU average

The mobile market in the year 2000

At the end of the first year of the new millennium, about 60% of the Dutch population owned a mobile telephone. This puts the Netherlands above the average for the European Union, where penetration is 55%. As a result, the Netherlands has more than made up for the relatively weak position it occupied in 1998. At the end of 2000, just over 10 million people, 10.06 million to be more exact, were mobile with a mobile telephone.

After the breakthrough in the number of mobile telephone subscriptions in 1999, the number of subscriptions continued to rise steadily during 2000. Although the increase of 42% over 2000 was less than the 100% increase experienced in 1999, the three million new subscriptions taken out in 2000 was a healthy addition for the sector.
In the coming years, the degree of penetration will reach a saturation point. Nevertheless, there will still be quite some room for growth, also due to the fact that the uses and functions of mobile telephones continue to change rapidly. Whereas in 2000 the use of SMS saw explosive growth, during the coming years mobile internet use is expected to gain a solid footing. This is not all that surprising, as mobile telephony, due to the sharp decreases in prices charged, has become a more attractive alternative to fixed network telephony.

Market share: the largest players are losing a little, the smallest gain
The total number of subscriptions grew by 48% in 2000. The number of mobile users via KPN also dropped to less than half the total number of mobile users for the first time in 2000. Libertel has just under 30% the total number of mobile users in its customer base. At the end of 2000, the three smallest parties serviced about 23% of the market.

In comparison with the situation at the end of 1999, the growth in the number of subscriptions

Table 4 **Subscriptions for mobile telephony in the Dutch market, 1998-2000 (at year end, in thousands), market shares are given between brackets**

Provider	1998	1999	2000	Change in number of subscriptions '99/'00
KPN Mobile	2220 (64.3%)	3500 (51.5%)	4.702 (46.8%)	+ 34%
Libertel	1180 (34.2%)	2180 (32.1%)	3.005 (29.9%)	+ 38%
Ben	0	300 (4.4%)	600 (6.0%)	+100%
Dutchtone	0	360 (5.3%)	900 (8.9%)	+150%
Telfort	50 (1.5%)	450 (6.6%)	850 (8.5%)	+ 89%
Total (100%)	**3450**	**6790**	**10,057**	**+ 48%**

Source: Market monitor OPTA, 2000

over the last year for KPN-Mobile was 34% and for Libertel 38%. The competitors Ben, Dutchtone, and Telfort were all busy catching up, with Dutchtone showing the strongest growth of the three.

Increasing competition in a field with two powerful players

The figures in table 4 make it clear that the three newcomers in the mobile telecommunication market are slowly gaining market share. The fact that these companies have been able to expand their networks and have achieved greater consumer recognition, and as a result also gained the confidence of more consumers, has certainly played a role in the above. Another factor is the fact that the costs of switching from one operator to another have decreased, due in particular to the number portability system working better than in 1999.

In spite of the relatively low degree of concentration in the market for mobile telephony in comparison to the market for fixed telephony, the mobile market does contain market parties with 'significant market power'. On the basis of the Telecommunications Act, both KPN and Libertel have been designated by OPTA as providers with significant market power. This means that both parties must comply with requests from other operators for special access to their networks. An example could be parties without a mobile network of their own that wish to offer mobile voice services.

In 2000, it was in principle possible for newcomers to enter the mobile market via the auction of UMTS frequencies by the Ministry of Transport, Public Works and Water Management. UMTS (Universal Mobile Telecommunication System) will be the third generation of mobile telecommunication, with which mobile broadband services can be offered. In the end, the successful parties did not include any new faces. The licences were acquired by the five existing mobile network operators.

Figure 9 **HHI-index fixed telephony and leased lines**

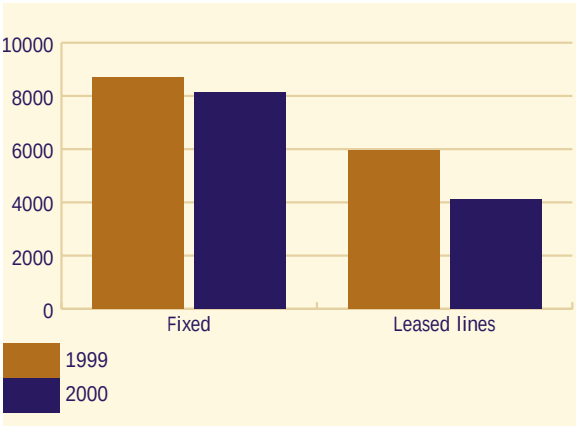
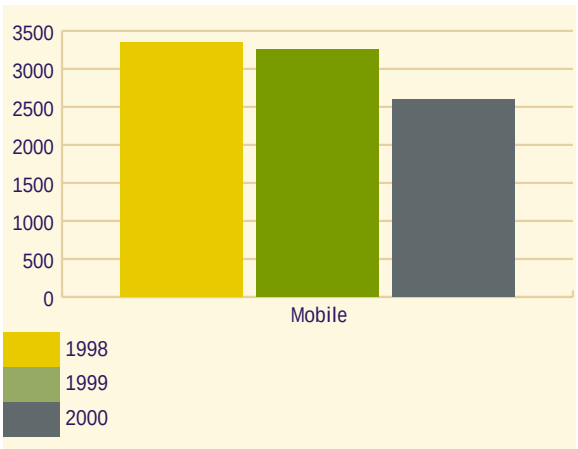


Figure 10 **HHI-index mobile market**



The increase in competition in the mobile market is also reflected in the Hirschmann Herfindahl Index (HHI index), which decreased more rapidly in 2000 than in 1999. This index tracks the way in which the degree of concentration in the mobile telephony market changes over time – the lower the index, the more the competition.
A comparison of the two figures (fixed and leased lines and mobile market) shows that the degree of concentration in the mobile market is lower than in the market for fixed telephony and the market for leased lines. Competition is thus greatest in the mobile market.

Employment in the mobile market

The growth in the market for mobile telephony resulted in an increase in employment in 2000 as well, even though the growth percentage was clearly lower than in 1999. In that year, 3150 new jobs were created. In 2000, the total number of jobs in this sub-sector increased by about 2400 to a total of 10,600 employees. The largest part of this increase in jobs occurred at the competitors of KPN (1800 full-time jobs), who together already account for 70% of the jobs in the mobile market.

Special access to mobile networks stimulates innovative services

In the fixed telephony market, the designation of a party as a party with significant market power (SMP) means that other parties can request special access to that party's network. Special access can, for example, involve carrier selection. In the mobile market, where two players (KPN and Libertel) have been designated as players with SMP, there is also a demand for special access by the competition. It should be noted that KPN has filed a protest against the continuation of its designation as such and Libertel has appealed against its designation as such.

As parties without a licence cannot enter the market by building a network of their own – frequencies have already been distributed – there is only one way for a provider without a network to profit from the rapid growth of this market, and that is to operate as a 'Mobile Virtual Network Operator' (MVNO). Such companies actually do the same as the carrier pre-select providers in the fixed market. In the United Kingdom, MVNOs are already active players. The number of 'normal' mobile service providers who buy and resell call units from existing operators is, however, decreasing further, as in other countries.

For the further development of competition in the mobile telecommunications market and especially for a more rapid introduction of new services, it is important that special access takes off. In that respect, the designation of dominant parties as parties with significant market power creates the necessary pre-conditions for the above to happen.

Market becoming more transparent, primarily due to more flexible approach to number portability

In order for market competition to develop, it is important that consumers are able to switch easily from one provider to another. Switching usually involves costs. Switching costs can consist of 'hard' costs, such as the money that must be paid for a connection, but they can also consist of 'less hard' costs, such as the way in which the consumer subjectively experiences aspects such as uncertainty or even irritation regarding the quality offered by the competition. The manner in which the consumer subjectively experiences a switch from one provider to another can therefore be an indicator of the transparency or lack of transparency of the market.

One indicator of market transparency is the ease with which prices charged by competitors can be compared. A survey carried out by Heliview in the beginning of 2001 at the request of OPTA showed that 14% of Dutch consumers were not satisfied with the availability of comparative information on prices charged by mobile operators. The average rating given for the availability of comparative price information was 6.3. This, by the way, is an improvement compared to 2000 (5.9) and 1999 (5). The price comparisons placed on the internet by various organisations and private individuals appear to play an important role in increasing market transparency.

Number portability for mobile telephony improving

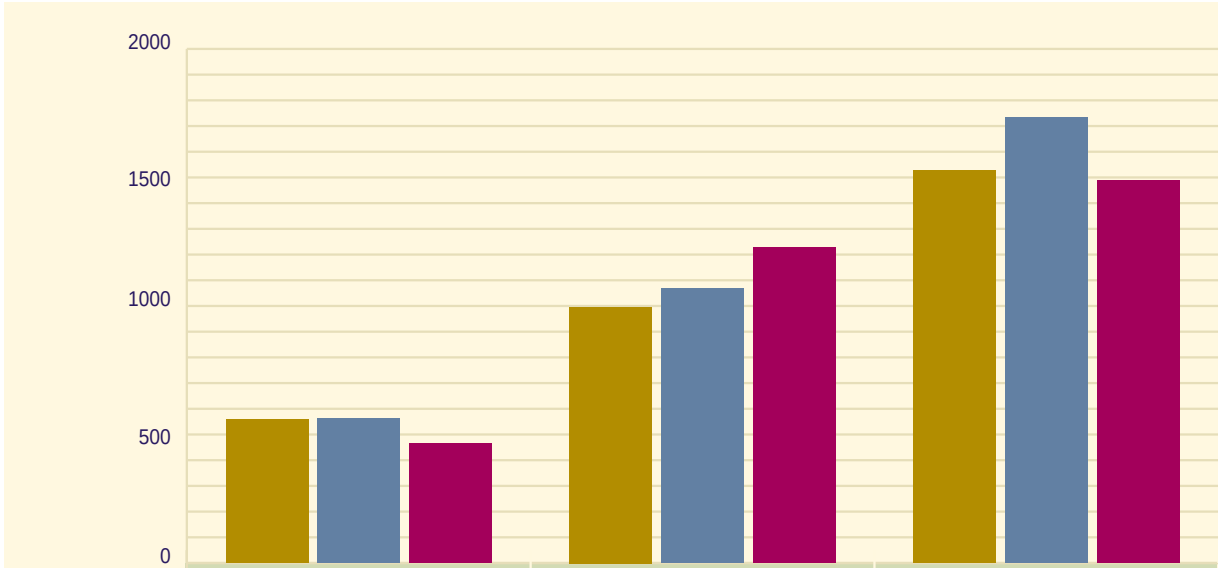
The ability of a subscriber to keep their telephone number when switching to another provider is an important precondition for the development of the market. In 2000, the five providers implemented a total of almost 95,000 telephone number transfers. In the course of the year, the rate at which this occurred clearly increased: in January just over 5000 transfers took place, and in December this number was over 10,000.

OPTA has formulated quality standards regarding number portability. Rapid and inexpensive number portability makes it easier for the consumer to switch to a competitor. Reports from the providers of mobile telephony indicate that they all meet the quality standards set out by OPTA. This means that since April 2000, at least 95% of the number transfers have been realised within the time frame agreed upon with the consumer. At the beginning of 2000, there were still relatively many problems: service provider Debitel even had to pay compulsory penalties as a result of not complying with its obligations.
The decreasing number of complaints received by OPTA during the last year regarding number portability also indicates that such requests have been dealt with more rapidly, although one should note that not all complaints reach OPTA.

More competition for fixed telephony from mobile telephony

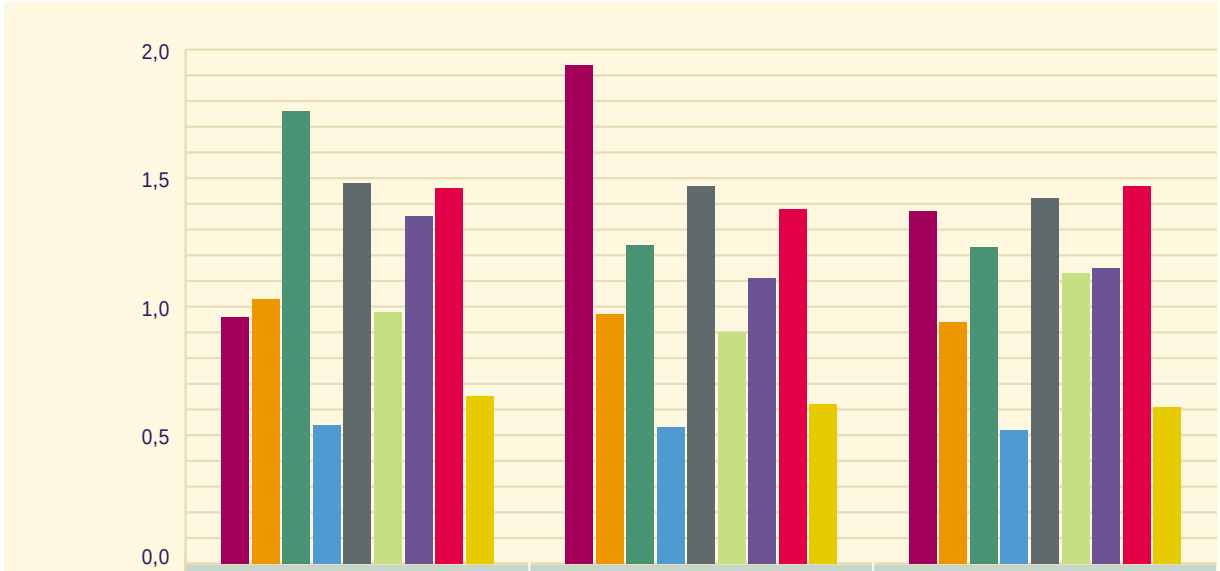
In 2000, the growing and increasingly competitive market for mobile telephony also witnessed a further fall in average pricing. Price differences between different mobile telephone providers have narrowed further. In addition, there was a further increase in the differentiation of subscription types and rates.
The fall in the price of mobile telephone calls contributes to a further narrowing of the price gap between the providers of fixed and mobile telephony. Consumer profiles for the 'infrequent', the 'average' and the 'frequent' caller have been used to calculate the annual telephone charges incurred by each type of user. Mobile callers were assumed to have exactly the same calling behaviour as the fixed users. For each type of caller, the most inexpensive type of subscription was used in the calculation. This may not be exactly realistic. Mobile callers may, for example, call other mobile users more frequently than do fixed users, and in general they probably use the mobile telephone differently than does the average user with a fixed connection.
The results are, however, relevant, as they show that the costs for mobile telephony, for 'infrequent' callers as well as for 'frequent' callers, are less than the costs associated with calling via a fixed access telephone.

Figure 11 **Consumer profiles mobile telephony 2001 (Q1) (in NLG)**



	Infrequent caller	Average caller	Frequent caller
CPS-fixed	558	996	1527
KPN-fixed	564	1067	1732
Mobile	464	1227	1490

Figure 12 **Basket for mobile telephony, price per minute (in NLG ppp)**



	2000 Q2	2000 Q3	2000 Q4
Australia	0,96	1,94	1,37
Netherlands	1,03	0,97	0,94
Germany	1,76	1,24	1,23
Finland	0,54	0,53	0,52
France	1,48	1,47	1,42
Italy	0,98	0,90	1,13
UK	1,35	1,11	1,15
US	1,46	1,38	1,47
Sweden	0,65	0,62	0,61

International price comparison: price reduction trend continues in the Netherlands

Figure 12 shows that prices in the mobile market in 2000 are mostly low in countries where markets have been liberalised for a longer period of time, with higher degrees of mobile phone penetration. Compared to other countries, the prices in Sweden, Finland and the Netherlands are among the lowest. In addition, the price trend in these countries shows a decreasing trend, in contrast to other countries such as Italy, the United Kingdom and the USA, where prices rose in the last quarter of 2000. In these countries, where the market is already showing signs of saturation, competition is starting to focus more on services with increased added value. The prices in these countries probably include a larger quality component.

Consumer-interest groups pay more attention to quality of service provided: no covenant yet

Although the market has become more transparent and number portability has also improved, the increasing use of mobile telephony is accompanied by an increasing number of complaints about the quality of services provided. The consumer association (Consumentenbond) publicised complaints about the poor quality of connections provided, in particular by the new operators. Complaints were also heard from the business user sector, the Dutch Associa-tion of Large-Scale Business Telecommuni-cation Users (BTG) and the Dutch Association of Telecom users (sTN).

The main complaint was that the mobile operators did not fulfil the promises they made regarding the quality of the networks. In addition, there is dissatisfaction because (international) services that are technically feasible are not on offer. The survey taken by Heliview at the beginning of 2001 for OPTA shows that the consumer rating for the quality of the mobile telephone connections is 7.2. At the beginning of 1999, the average rating number was 6.9.
Efforts made by interest groups in the past year to establish a quality forum failed. The planned signing of a quality covenant was aborted in October. At that time, mobile telephone providers did not see the use of working together to implement and pay for measurements on the quality of services provided. The information that would have been gathered about the networks was meant to measure aspects such as how often the connection was interrupted, the waiting times for telephone help desks and determination of the ease with which it was possible to switch from one provider to another.

Internet: The Netherlands, as others, experiences significant growth

Around the middle of 2000, according to an estimate by the European Commission, 40% of the Dutch population used the internet. The number of subscribers at that time was 4 million. The USA and Sweden (with respectively 52% and 59% internet users) have a higher percentage of internet users than the Netherlands, as can be seen from figure 13. In coming years, the increasing demand for connections of recent years is expected to transpose to a demand for a better quality of services. The speed of the connections and the variety of services provided will increase. Network companies are preparing for this transition by offering innovative pricing structures and ensuring that their customer base continues to increase.

The growth of internet use can be illustrated by the increase in the number of 'internet hosts' since 1995. An internet host is a domain name with an internet protocol address. Although this indicator has some disadvantages, it is often used to compare internet use in different countries and to make the growth of internet use visible. The following figure shows that in the course of the past years the increase in visits to sites has accelerated. Around the middle of 1995, there were 10 'hosts' per 1000 inhabitants. By the beginning of 2000, that figure had increased to 85. The Netherlands belongs to the group of most active internet countries, but Sweden, the USA and Finland (the latter with 148 hosts per 1000 inhabitants) clearly have higher rates of internet use.

Competition in the internet market

Internet providers, or ISPs (Internet Service Providers), offer internet access to business and/or non-business users. There are various types of internet access, in respect both of the technology used and the type of subscription. In both areas, changes are taking place.

From narrowband to broadband internet services

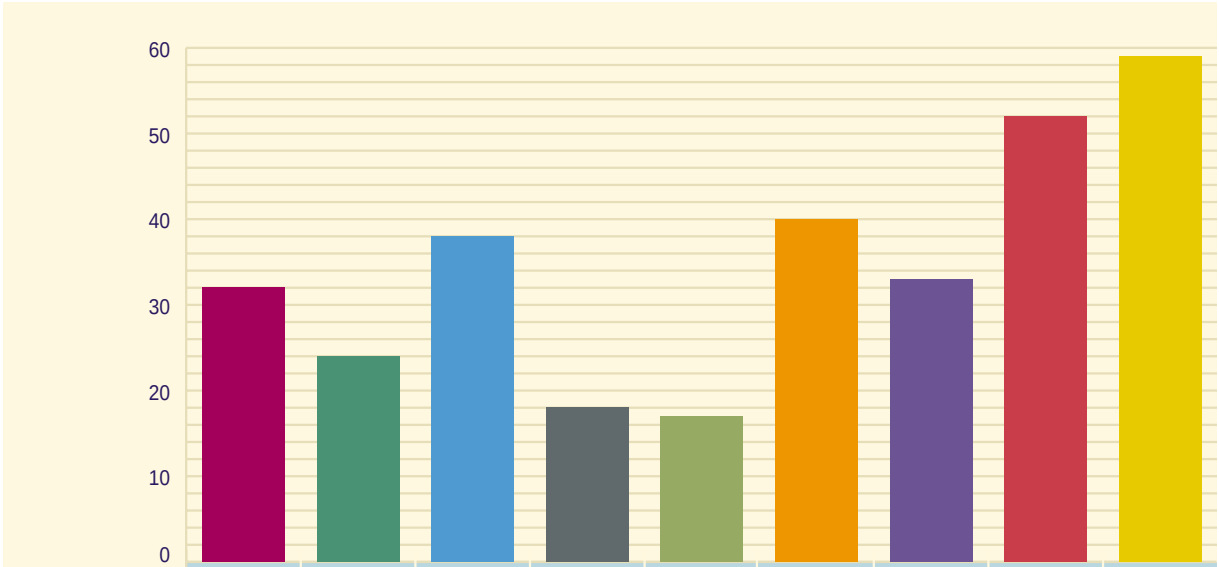
Technically speaking, a distinction can be made between narrowband services and broadband services. The difference refers to the speed of the connection provided. According to the definition of OPTA and the NMa, broadband access connections are connections that are faster than 128 kbits/s (the speed of an ISDN connection). All connections that are slower are called narrowband connections. For most broadband services, such as video-on-demand, speeds of at least 500 kbits/s are actually needed.

At present, broadband services in the Netherlands are still being offered primarily by the TV-cable operators, but 2000 also saw the start of the rollout of an ADSL network. This network makes use of the standard telephone line to offer broadband services. At the end of 2000, there were about 360 thousand internet subscribers via the cable. This number is growing rapidly: around the middle of 2000 there were still only about 230 thousand subscribers, of whom slightly more than 150 thousand had a broadband connection. Cable subscribers are primarily private users. At the end of 2000, the number of ADSL subscribers was estimated at just over thirteen thousand, most of whom were business users. Internet access via the mobile telephone network (also called WAP: Wireless Application Protocol services) is on the rise, although remains limited at present. The rollout of the UMTS networks, for which frequencies were auctioned off in 2000, will speed up the development of mobile internet use.

Price structures: variable and 'flat'

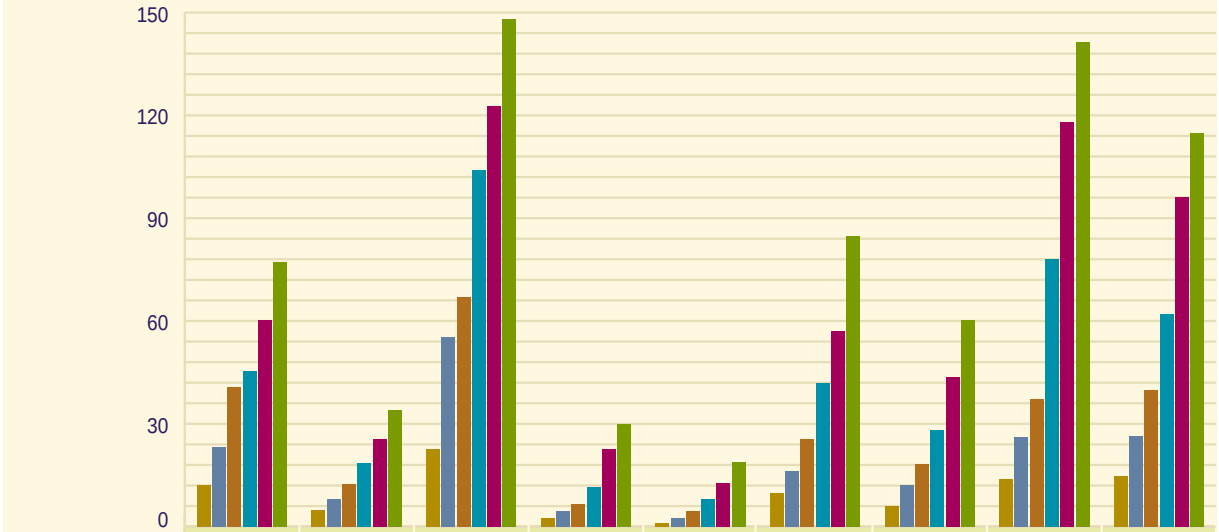
One can also make a distinction according to the manner in which the consumer pays for internet access. Traditionally, the internet provider asks for subscription fees, in addition perhaps to a variable amount dependant on the amount of use. In addition to these subscription and variable costs, which the consumer pays to the ISP, there are also costs for the use of the telephone line, which are paid to the telephone network provider. More and more internet providers are not asking any subscription fees at all, in which case the customer pays only the telephone time costs (free ISPs). For internet via the TV cable, the internet user pays only subscription costs, and/or sometimes a variable amount

Figure 13 **Internet users as % of the total population in 2000**



	Australia	Germany	Finland	France	Italy	Netherlands	UK	US	Sweden
Total	32	24	38	18	17	40	33	52	59

Figure 14 **Internet hosts per 1000 inhabitants**



	Australia	Germany	Finland	France	Italy	Netherlands	UK	US	Sweden
July 95	12,2	4,8	22,5	2,5	1,1	9,9	6,0	14,0	14,6
July 96	23,3	7,9	55,3	4,4	2,6	16,3	12,1	26,2	26,3
July 97	40,6	12,4	67,1	6,6	4,6	25,5	18,1	37,2	39,7
July 98	45,5	18,4	104,0	11,4	8,0	42,0	28,2	78,1	62,1
July 99	60,2	25,6	122,7	22,7	12,6	56,9	43,7	118,0	96,0
Jan. 00	77,3	34,0	148,1	29,8	18,9	84,8	60,3	141,5	114,8

to the ISP depending on the amount of use. As is the case with the cable, it is also possible to choose for a flat fee subscription via the telephone line. In that case, the user does not pay for the duration of the telephone connection but pays a fixed amount, regardless of the amount of use. For this type of offer, it is important to look at the background price structure for interconnections.

Internet providers

The following table presents estimates of the number of companies presently offering internet access. A survey taken by Heliview at the beginning of 2001 indicates that 48% of all internet users have a 'free' internet provider, and that 41% had a paid one. Of the persons interviewed, 2% indicated they had both. The remaining 9% gave no answer.
Of those interviewed, 11% turned out to connect to the internet via the cable, whereas 21% had an ISDN internet connection. On average, consumers indicate that about 20% of their telephone use is accounted for by internet.

Table 5 Indicative number of internet providers by type (absolute numbers)

Type of ISP	Number at the end of 2000
ISPs with subscriptions, via telephone network	50
ISPs without subscriptions, via telephone network ('free' ISPs)	35
ISPs via the TV cable	21
ISPs via ADSL	16

Tariff structures for network access

In order to understand the pricing developments in the end-user market for internet access, one must be familiar with the network access market. Around the middle of 2000, KPN made it clear that the internet was the most important stimulus for the growth of local telephone traffic: no less than 40% of local traffic via the KPN *backbone* was generated by internet traffic. The rapid increase of internet access traffic and changes in demand called for new price structures to be offered.

In the following, attention will be paid to the different price structures for network access, the *terminating* and the *originating* model, as well as the grooming of internet traffic in relation to price differentiation.

The terminating model versus the originating model

There are two ways in which operators can settle the costs of internet traffic, the *terminating* and the *originating* model. The terminating model is the model that has been most used until now.
In the *terminating* model, the customer pays KPN for the duration of the telephone connection (assuming the customer is connected to KPN). KPN directs the telephone traffic to the network of another provider, who can then deliver the traffic to an ISP. A competitor of KPN therefore terminates the service and receives a terminating fee for doing so. In order to handle more traffic, and as a result generate higher revenues from terminating fees, an operator can try to 'bind' ISPs to itself via payments. This can take place through the payment of a so-called kick-back compensation by the ISP to the operator. The ISPs in their turn wish to attract more customers in order to generate higher payments to the operator.
In the *originating* model, the customer needs, in principle, only to settle accounts with the ISP or the other operator. In contrast to the above model, the customer no longer has any contact with KPN. The ISP pays a fee to a competitor of KPN, and this

competitor then pays KPN for the originating services provided by KPN. The KPN fee for the originating service is regulated.

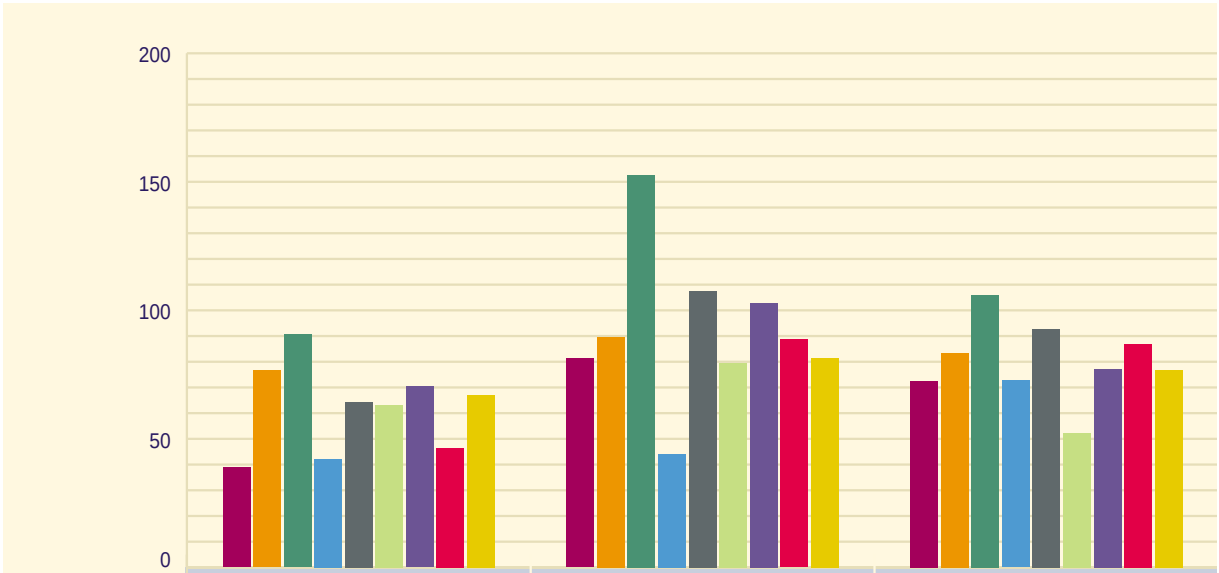
Price comparison for internet access

In the following bar chart, the price for internet use (example of calculation: 20 hours per month in reduced rate hours) is compared for different countries. In the Netherlands, the price for such use amounts to just over ƒ 83 per month: the Netherlands thus belongs to the more expensive half of the countries in this comparison.

Grooming data traffic and price differentiation

Internet traffic has generated such an increase in telephone traffic that scarcity has developed on KPN Telecom's fixed telephone network. In order to alleviate this scarcity, KPN Telecom has made use of separate dial-up numbers (06760 numbers). This enables KPN Telecom to recognise internet traffic and to groom or separate it out from voice traffic at an early stage and thereby route it via data networks (internet grooming).
KPN also wants to implement rate differentiation for terminating prices. The *terminating* model results in the *terminating* prices not being directly visible to consumers, which means that these prices cannot exert any direct competitive pressure. The end result is that these prices can remain relatively high. On the one hand, this is positive for the providers, as it results in relatively high margins. The disadvantage, however, is that the provider has no direct contact with the customer. This is a handicap for the growth potential of the company as it cannot then work on building a customer base.
The result of the *originating* model is that the *originating* price charged by KPN, which is regulated, takes over the role of the *terminating* price: after all, there is no direct relationship between the customer and the service provider. The *originating* model is therefore expected to result in lower internet rates. In addition, it also allows competing

Figure 15 **Price per month for 20 hours off-peak internet access, fixed plus variable tariff (in NLG)**



	1996	1998	2000 Q1
Australia	38,85	81,23	72,56
Netherlands	76,60	89,68	83,45
Germany	90,63	152,54	106,01
Finland	42,07	44,07	72,71
France	64,32	107,62	92,79
Italy	63,14	79,47	52,43
UK	70,34	102,92	77,04
US	46,50	88,65	86,78
Sweden	66,94	81,58	76,73

operators to build up a relationship with customers themselves, which in turn can lead to new services being offered.
For KPN, the only difference between the two models is that in the originating model KPN can lose its direct relationship with its customer base. To prevent the originating model, as a result of grooming, from replacing the terminating model in one go, (which would also result in KPN's customer base migrating to its competitors), it makes sense for KPN to first try to put pressure on the prices in the terminating model via price differentiation.

Consumer profiles: the basis for the defined groups

In order to be able to determine the effects of competition for consumers of telecommunication services, it is necessary to realise that there are different categories of consumers. A fairly simple division for fixed telephony consists of five categories of callers: the infrequent caller, the average caller, the frequent caller, the internet user and the small business user.
Next, for each type of caller a 'probable number of minutes called' is chosen for different times of the day and week. The profile that is used in OPTA's market monitor was developed in this manner to enable discussion of the consequences of developments in the telecommunication market.

The following gives an overview of the number of minutes ascribed to the various categories (infrequent caller: 115 minutes per month, average caller 430 minutes per month, etc.)
The profiles were formulated in 1999 by OPTA and modified in 2000 so as to also be able to include Sunday rates.
All calculations were based on the basic telephone subscription with KPN.
The calculations for the different profiles were also carried out for calling with carrier (pre)-selection providers. In that case, average rates for the cheapest five providers were used as a basis.

Table 6 **Definition of Consumer profiles (in minutes called)**

		Minutes									
		Local		National			International		To mobile		
Type of caller	Number of calls	peak	off-peak	sunday	peak	off-peak	peak	off-peak	peak	off-peak	Total no. of minutes called*
Infrequent	55	34	34	17	13	13	0	0	0	4	115
Average	200	85	85	65	85	85	0	0	13	13	430
Frequent	300	60	60	102	187	187	0	0	43	43	680
Internet user	400	106	1360	302	60	170	0	0	4	13	2015
Small business	610	500	50	0	500	50	60	0	300	30	1495

Source: Market monitor OPTA, 2000

* rounding-off differences may occur when adding up the numbers of minutes

4 Postal market monitor 2000

The postal market: still in an early stage of liberalisation

Liberalisation of the postal market is taking place at a slow tempo in all European Union countries. To a large extent there remains a monopoly in large areas of the national postal market. In certain sub-sectors, however, competition has been allowed.

Under the Postal Act, the Dutch market for postal services is divided into the following three segments:
- the exclusive concession,
- the designated services, and
- the free services.

The designated services and the exclusive concession are together known as the assignment. Although the market for postal services in the Netherlands is gradually being opened up for competition, the TNT Post Group (TPG) still has a monopoly position in the largest market segment, namely the market for letter traffic up to 100g.

An analysis of the market shows that the Dutch postal market is reasonably competitive compared to other countries. Liberalisation in the Netherlands has made a certain amount of progress, also shown by the fact that in terms of the level of market liberalisation within Europe, the Netherlands is second only to Sweden. Nonetheless, this does not mean that there is a high level of competition in all areas of the postal market. The comparison with other countries also shows that there are big differences in the degree of development of the postal market. This difference in development of the various markets is usually an indicator of the degree of liberalisation of the postal sector in each country.

Market developments in the free part of the market

Development of competition in the free sub-sectors is gradually taking off. However, new market players entering a particular segment are only gradually increasing their market share. The quality of the services of competing providers does nonetheless provide an incentive for TPG to improve the quality of its own services and to adjust its tariffs for these sub-sectors accordingly.

Although the part of the market for letters between 100g and 500g has been opened up for competition with the introduction of the new Postal Regulations, services in the segment are still only gradually being developed. With regard to competition in the

OPTA monitor for the postal market

For an analysis of the Dutch postal market, use has been made of the development of a monitor of the postal market commissioned by OPTA. This market monitor, first carried out in the year 2000, aims at creating an insight into the development of the postal market and the degree of competition therein, and also towards an objective assessment of TPG's performance in this environment. In the monitor, three different areas are looked at: segments where competition is possible, the exclusive concession, and regulation of the postal market. For this monitor use was made of a system of indicators and overall figures to give an accurate picture of the market. For each area of the market identified in the monitor, the various issues relevant in each sub-sector are analysed. These are given quantitative and qualitative scores, on a scale of 0 to 10, a three-point scale (0-5-10), and on a scale of low/medium/high. The monitor for the postal market was based on publicly available sources.

traditional liberalised services (letters above 500g, parcels, and express services), TPG only has a limited market share compared to the situation in other countries. The diagram below shows that TPG has a market share in the free section of the market of less than 40%.

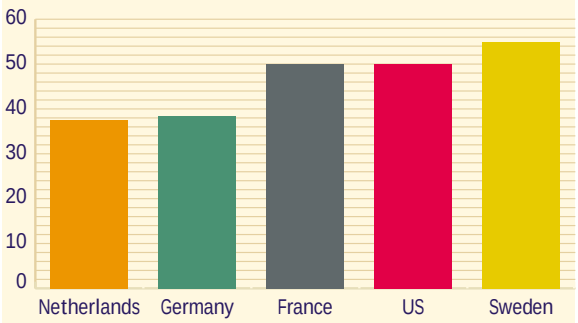
Market share of sub-sectors

The market share of TPG in the recently liberalised services is apparently still quite considerable.

Table 1 below gives the figures for the recently liberalised services for the delivery of letters between 100g and 500g. It shows that TPG, similar to the other former monopolies in the comparison countries, has a considerable market share of recently liberalised services in the Netherlands. The main reason for this high market share of TPG lies in the fact that this segment of the market was only opened up in June 2000.
Table 2 deals with the sub-sector for printed matter distribution. TPG's market share is high here as well. With a market share of 85%, TPG still has an extremely dominant position. This is of some concern because this segment of the market in the Netherlands has been open to competition since the introduction of the Postal Act in 1988. The widespread collection and distribution network of TPG has played a large role in this process.

Despite the large market shares of TPG in the competing sub-sectors shown here, new players are entering the Dutch postal market. Table 3 clearly shows the development of the number of market players for post and courier services. The main growth has occurred in the number of market players in the courier services sub-sector. The number of national and local post companies has grown less considerably over the last few years.

Figure 1 **Market share of the former monopolists in traditional competitive services (in The Netherlands: letters over 500g, parcels, and express services) (1998)**



Source: Market monitor OPTA, 2000

Table 1 **Market share of largest provider in recently liberalised services (in the Netherlands, letters between 100g and 500g) as a percentage of turnover (2000)**

Country	Market share (%)
France	98
Germany	87
The Netherlands	95
Spain	98
Sweden	95
United Kingdom	n.a.
United States	100

Source: Market monitor OPTA, 2000

Table 2 **Market share of largest provider in recently liberalised services (printed matter) % of turnover (2000)**

Country	Market share (%)
France	95
Germany	95
The Netherlands	85
Spain	95
Sweden	50
United Kingdom	n.a.
United States	n.a.

Source: Market monitor OPTA, 2000

Table 3 **Number of post and courier companies in the Netherlands**

Year	All post and courier companies	National post-companies	Locale post-companies	Courier services
1993	330	135	35	130
1994	905	60	40	805
1995	1070	55	40	975
1996	1500	80	55	1365
1997	1880	95	60	1725
1998	1795	80	65	1645
1999	2030	75	70	1885

Note: National post services include collection (via post office boxes or post offices), transport and delivery of national and international letters and parcels. Local postal services include collection (via post office boxes), local transport, and local delivery of letters and parcels. Courier services include transport of documents and parcels, with the emphasis on speed of delivery, reliability, and point-to-point transport.

Source: Market monitor OPTA, 2000

Tariffs and quality of service provision in newly liberalised sub-sectors

Although the postal tariffs of the liberalised services have not fallen by normal standards the majority of tariffs have nonetheless not increased. This means that in real terms (i.e. taking into account inflation), the tariffs have actually fallen. On a three-point scale of 0 (no improvement), 5 (slight improvement), and 10 (considerable improvement), the score of the Netherlands for tariff development was somewhere in the middle (5).

The quality of services was also measured using this three-point scale. The analysis looked at the improvement of quality in the services and the growth of the number of the services offered by the exclusive concession holders in the various countries. These developments have also taken place in the Dutch postal market. The table below shows there was an improvement in the quality of services in all the countries looked at, where a score of 5 indicates minor improvement and a score of 10 indicates considerable improvement in the quality of services. The Netherlands therefore achieved an excellent score.

Table 4 **Indicator value of development in tariffs for the free part of the market (2000)**

Country	Score indicator for tariff development
France	0
Germany	0
The Netherlands	5
Spain	0
Sweden	0
United Kingdom	n.a.
United States	5

Source: Market monitor OPTA, 2000

Table 5 **Indicator value of quality of services in the liberalised part of the market (2000)**

Country	Score indicator quality of service
France	5
Germany	5
The Netherlands	10
Spain	5
Sweden	5
United Kingdom	n.a.
United States	10

Source: Market monitor OPTA, 2000

Sub-sector of the exclusive concession and designated services

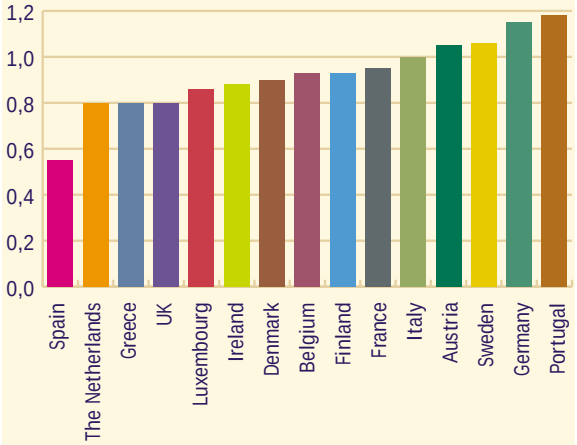
The market for the exclusive concession of TPG includes letters up to 100g, for which a tariff limit has been set which is less than three times the basic tariff (i.e. equal to or less than NLG 2.40), and the letter traffic from other countries. The size of the monopoly was reduced with the introduction of the new Postal Act on 1 June 2000 from 500g to 100g. Nonetheless, the greater part of letter traffic is made up of letters under 100g. The turnover of TPG in the exclusive concession is still a considerable proportion of the total turnover of the market. Development of tariffs and quality of services are also the most important competition indicators that were looked at for the concession services and designated services of TPG.

Tariffs

The Dutch postal market has relatively low tariffs for services in the lowest weight class of letters (less than 20g). The diagram below shows the tariffs for national letter traffic in the lowest weight class in a number of countries. Except for the tariffs in Spain, the tariff of NLG 0.80 that is charged in the Netherlands, Greece, and United Kingdom is the lowest tariff for this type of letter traffic in the EU. These figures should, however, not be given too much significance since they only deal with a section of the exclusive concession of TPG (letter traffic up to 100g).

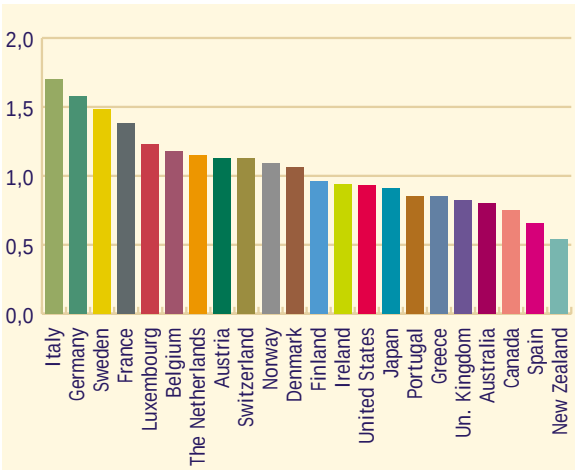
Another way of analysing tariffs for letter traffic is given in the diagram below. This shows an international comparison of the tariffs for a wider range of services. RegTP, the regulatory authority for the telecommunications and postal market in Germany, has carried out research into the average tariff for a selection package which included letters of various weight. This selection included the following types of post: a letter under 20g, a letter under 50g, and two letters under 200g.

Figure 2 **EU tariffs for national letter traffic in the lowest weight class (< 20g), corrected for PPP (Purchasing Power Parity), Dec 1999 (NLG)**



Source: Market monitor OPTA, 2000

Figure 3 **Weighted average tariff for several letters in various weight classes (< 20g to < 200g), June 1999 (in DM)**



Source: Market monitor OPTA, 2000

Table 6 **Quality of services – score for concession service, 2000**

Country	Concession service
France	10
Germany	10
The Netherlands	10
Spain	n.a.
Sweden	5
United States	10

Source: Market monitor OPTA, 2000

Table 7 **Information about the quality of service provision for the concession service of TPG**

Category	1998	1999
Public letter traffic in 24 hours (%)	93	89
Commercial letter traffic in 24 hours (%)	95	93
Commercial letter traffic in 48 hours (%)	96	95
Post delivered correctly in one go (%)	99,8	99,8
Customer satisfaction - public (%)	86	84
Customer satisfaction – commercial (%)	87	85
Number of post offices and agents	2239	2214
Number of letter boxes	19,437	19,599
Number of disputes submitted to the Postal Arbitration Board	73	68
Disputes settled in favour of TPG	37	41
Disputes settled in favour of clients	3	2
Number of disputes settled amicably	18	14

Source: Market monitor OPTA, 2000

This study showed that postage tariffs for the same selection of letters in the Netherlands was average to high by relative comparison to the tariffs in most of the other countries included in the analysis.

Quality of service provision

The quality of service provision for a product such as post is very important for both market parties and consumers. The relationship between better quality service provision and competition in areas of the market would seem obvious. Apart from helping to keep tariffs down, intensive competition usually has an effect on the quality of service provision. The quality of the service provision of TPG scored highly compared to other countries. Table 6 shows this in somewhat more detail using the three-point scale. A score of 0 represents a low quality level of service provision, 5 indicates a reasonable level, and 10 represents a high level.

Table 7 gives a breakdown of the figures for the Netherlands in relation to activities in the exclusive concession that were analysed for each country. The figures for the quality of service provision are calculated using a system that TPG developed itself. Since June 2000, the General Post Guidelines Decree (BARP) has included the requirement that 95% of the concession commercial and consumer post has to be delivered to its destination within 24 hours. OPTA is responsible for regulating this. The worsening delivery rate of the letter traffic (both public and commercial) that was measured in the period 1998-1999 is, according to TPG, a result of a cut in the number of sorting offices from 12 to 6, a step that TPG took a number of years ago. Furthermore, TPG sees the unforeseen growth in the amount of post as a reason for the drop in the rate.

Regulation, more measures needed for effective stimulation of competition

The effectiveness of regulation can be measured by a number of indicators. The regulatory authority must have the appropriate competencies to be able to guide the market in the right way, above all in light of the fact that liberalisation is still in an early stage.

For effective regulation, it is essential that certain conditions are implemented in practice. A binding *price cap* gives the former monopoly efficiency incentives that would otherwise be absent due to the lack of competition in certain sections of the market. The introduction of *separate accounts* for the exclusive concession, the designated services, and the free section of the market makes it possible to identify cross-subsidisation. Finally, the requirement to provide *third party access* (TPA) will create opportunities for more competition in areas of the market where new entrants do not have their own networks.

Table 8 **Quality of the price cap (2000)**

Country	Quality of the price cap
France	0
Germany	10
The Netherlands	5
Spain	5
Sweden	10
United Kingdom	0
United States	0

Source: Market monitor OPTA, 2000

Table 9 **Presence of separate accounts (three-part as opposed to two-part)**

Country	Separate accounting system
France	No
Germany	Yes
The Netherlands	Yes
Spain	Yes
Sweden	Yes
United Kingdom	No
United States	No

Source: Market monitor OPTA, 2000

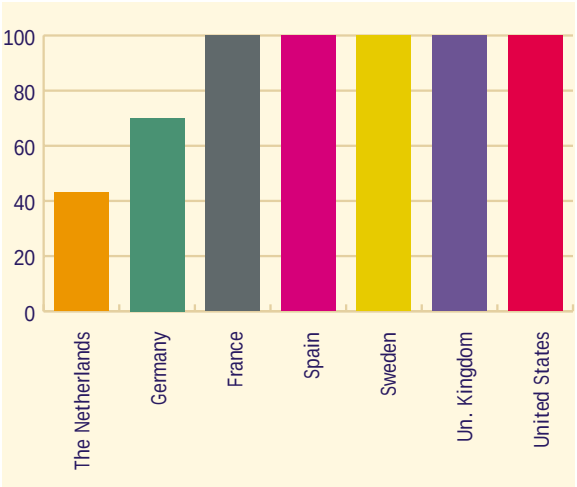
Price cap regime

The price cap regime in the Netherlands postal sector covers a larger section of the market other than the exclusive concession. The Dutch price cap system is based on two selections of service packages. The first deals with consumer services, while the second deals with services for commercial customers. The type of price cap system that has been introduced in the Dutch postal sector for TPG is based a value of 0 for X (the productivity factor). In this system, the average price of a selection of various services must not increase more than the earnings index. This value has been used for the X-factor since the introduction of the price cap in 1988. It should therefore be asked whether or not the price cap in its current form creates sufficient incentives for efficiency. Efficiency and productivity improvements do not necessarily have to be passed on to users. However, OPTA does not have the authority to review the level of the price cap in order to give TPG incentives for efficiency. Table 8 shows a comparison of the quality of the price cap in various countries. A score of 0 means that no price cap had been introduced. A score of 5 indicates a price cap has been introduced, but which does not create sufficient efficiency incentives for the former monopoly. A score of 10 indicates the introduction of a binding price cap.

Separate accounts

Separate accounts make it possible to identify any cross-subsidisation in the postal market. Totally separate accounts have been introduced in the Netherlands for the concession, designated services,

Figure 4 **State ownership indicator in % (2000)**



Source: Market monitor OPTA, 2000

and the free section of the market. In comparison with other countries, the Netherlands scores highly in terms of separate accounts, as can be seen in table 9.

Access to the network (Third Party Access)

One advantage TPG has over other market players when providing its services is the widespread collection and distribution network it has at its disposal. An international comparison of the level of access to networks of the former monopolies highlighted the access regime in Sweden where all market parties are allowed access under the same conditions to each other's networks. This arrangement also includes access to post office boxes. In the Netherlands, the access regime means that TPG has to provide access to post office boxes on non-discriminatory terms. This is a step in the right direction, but nonetheless it is still only a limited form of access to the network of the former monopoly.

Government participation

The level of government participation (share of ownership) in the former monopoly is a good indicator for the effectiveness of regulation in the postal sector. A high level of government participation restricts the independence of regulation, particularly in countries where the regulatory authority is a department of a government ministry. However, this is not the case with the Dutch postal market. OPTA is an independent organ of the Ministry of Transport, Public Works and Water Management. Figure 4 compares government participation in the former monopolies of various countries.

TPG was the first monopoly to be privatised. At the end of 2000, the national government still had a participation of 43.4% in the company as well as a 'golden' share, which means the government can veto decisions taken by TPG it does not approve of. Figure 4 shows that the privatisation of the former monopoly has progressed much further in the Netherlands than in the comparison countries. In these other countries, with the exception of Germany, the government still has a participation of 100%.

Size of exclusive concession in EU member states

The table below shows that the exclusive concession of TPG is relatively small in international terms. The European Directive has been implemented at a much faster rate in the Netherlands than in most other countries within the EU. Nonetheless, it is significant that the greater part of the concession for the postal market is still for the traffic under 100g, namely in the weight category of 0 to 20g.

Table 10 **Size of exclusive concession in EU member state markets**

Member State	Letters – weight limit	Direct mail – weight limit	Concession for letters sent abroad
Sweden	None	None	No
Finland	None	None	No
The Netherlands	100g	None	No
Italy	350g	350g	Yes
Spain	350g *	None	Yes
Germany	200g	50g	Yes
Austria	350g	350g	Yes
France	350g	350g	Yes
Denmark	250g	250g	No
Belgium	350g	350g	Yes
United Kingdom	350g	350g	No
Portugal	350g	350g	Yes
Greece	350g	350g	Yes
Ireland	350g	350g	n.a.
Luxembourg	350g	350g	Yes

* Local letter traffic not in the concession

Source: Market monitor OPTA, 2000

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