Price Squeeze Consultation Document

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Non-binding English translation
(Dutch version is leading)

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Summary

1. Due to increasing competition, the end-user tariffs of a number of KPN's services are under pressure. If end-user tariffs decrease, but the interconnection tariffs do not or only slightly, price squeeze can occur: the margin between KPN's purchasing and sales tariffs becomes so low that (efficient) competitors are no longer able to provide their services profitably. This situation hampers the development of lasting competition in the long term. In this consultation document, OPTA's commission proposes that a lower limit be set to end-user tariffs, in order to guarantee lasting competition.

2. In accordance with national legislation, KPN's tariffs should be cost-oriented. The price cap system sets an upper limit to end-user tariffs. OPTA's commission believes that the lower limit of KPN's end-user tariffs can be determined by the so-called price squeeze test.

3. When developing this test, the commission worked in line with Dutch and European legislation and regulations. Particularly the European's Notice of 28 August 1998, regarding the application of the competition rules to contracts in respect of access to the telecommunication sector, is of importance here. In this Notice, it is indicated that if the dominant company's own downstream segment would not be able to operate profitably on the basis of the price required by its upstream segment from its competitors in a certain market, price squeeze exists.

4. The proposed price squeeze test entails that the margin between KPN's end-user tariffs and the costs that KPN would incur if it were to purchase network capacity from itself, against the same conditions as others, must be such that efficient service providers are still able to achieve an amount of profit. In addition to this, allowance should also be made for other costs that are not included in the interconnection tariffs, such as those costs incurred for billing, marketing and overheads.

5. If the price squeeze test is applied to KPN's current tariffs, then it is evident that price squeeze effects occur in the 'regional' traffic. These price squeeze effects can largely be attributed to differences in taxation structure: the interconnection tariffs are based on the amount of network used, while the tariffs for end-users services are based on calls made within or outside a region. A number of solutions are suggested, varying from an administrative adjustment, to the division of the 'regional' traffic into local and regional traffic.

6. The attachment discusses in brief how other countries deal with price squeeze.

7. Interested parties may express their views until 15 November 2000 at the latest. A public hearing will take place on 8 November of this year. The commission hopes to be able to determine a definitive price squeeze test by the end of this year.

1. Introduction

8. Competition for the fixed public telephone service is increasing slowly but surely. As a result, KPN's end-user telephone tariffs are under pressure. International tariffs in particular have dropped considerably in recent years. The tariffs for calls made within the Netherlands are also dropping, albeit less quickly.

9. The Commission of the Independent Post and Telecommunication Authority (hereafter: the commission) supervises the tariffs charged by KPN for its fixed public telephone service. In the past, emphasis was particularly to prevent that KPN tariffs were too high. The price cap system that was introduced last year should prevent excessive pricing. Because of increasing competition, the commission will also have to pay more attention to the prevention of KPN tariffs that are too *low*. The price cap system is not suitable for this purpose; this concentrates solely on pricing that is too high.

10. Given the interconnection tariffs charged, if KPN's end-user tariffs are too low, this could lead to price squeeze, or predatory pricing, for KPN's competitors. This entails that the margin between their sales and purchase price becomes so low that services can no longer be provided profitably. In a situation such as this, it is imaginable that alternative providers will, eventually, leave the market.

11. A number of market participants have indicated to the commission that KPN's pricing of the end-user and interconnection services are such, in parts, that it is almost impossible for others to compete with KPN without incurring a loss. This is particularly true of local traffic (including Internet dial-up calls) and may possibly also occur in respect of national traffic, where, partly as a result of the introduction of carrier preselection, the trend is for the tariffs to fall.

12. For some time now, the commission has been subjecting KPN's tariff proposals to a price squeeze test before KPN is able to implement them. Given its increasing importance, the commission has decided to formalise the manner in which it tests whether or not price squeeze exists.

13. The price-squeeze problem is described in this consultation document, and also examines the manner in which the commission intends to test future tariff proposals for price squeeze aspects. The commission welcomes the opinions of interested parties on this subject, and they are particularly requested to react to a number of issues described in this consultation document. These issues are printed in bold type in this consultation document. It is expected that the commission will determine a definitive price squeeze test at the end of December 2000, partly on the basis of the reactions it receives from interested parties.

14. Given that a dominant economic position might be abused if pricing is too low, the commission has asked the Dutch Competition Authority [Nederlandse Mededingings-autoriteit] for a reaction to the position it has

taken. Where necessary, this reaction will be discussed in this consultation document.

15. The structure of this consultation document is as follows: in the following chapter, the price squeeze concept will be looked at in more detail, and an indication given of its effect on the development of competition. In Chapter 3, the legal framework is examined, and its relationship with the price cap system is discussed. In Chapter 4, considerations in respect of the legal framework are discussed. In Chapter 5, the manner in which the commission wants to structure the price squeeze test is described. In Chapter 6, the consequences that might result from application of the price squeeze test now will be discussed. Finally, in Chapter 7, the further procedure in respect of the consultation will be discussed.

2. Price Squeeze

16. Because most users subscribe to KPN's fixed network, most of the Netherland's telephone and Internet traffic is executed via KPN's network. Much of the telephone and internet traffic that other providers execute is commenced by means of carrier (pre)selection, and/or terminates on the KPN network. Other providers pay an interconnection fee to KPN for the use of the KPN network. They purchase, as it were, the co-use of the network from KPN.

17. Increasing competition is putting the end-user tariffs under pressure. If purchasing tariffs (namely, KPN's interconnection tariffs) rise, remain the same, or drop less sharply, a KPN competitor's margin decreases. A situation such as this, in a market opening up for competition, is not, in itself, unusual: margins that are too high are brought back to normal proportions. It is a different matter when the margin falls to below the normal level. If this occurs in this market, the development of competition could be threatened.

18. Price squeeze occurs if the margin between the tariffs for end-users (private and business consumers) and KPN's interconnection tariffs becomes so small that alternative providers are no longer able to provide the service profitably: if the end-user tariffs fall faster than the interconnection tariffs do, the margin to be achieved is, so to speak, gradually squeezed out. This phenomenon is also known as price squeeze. If the margin is so small that other efficient providers are no longer able to cover their costs (for their own network and organisation), the question may be asked whether the end-user tariffs and the interconnection tariffs charged by KPN are still in correct proportion to each other.

19. In this consultation document, the term 'price squeeze' is understood to mean the following: 'a margin between the end-user tariffs of KPN's telephone service and the interconnection tariffs corresponding to this service, that is so low that efficient service providers are unable to provide their own telephone service profitably'.

20. When determining whether or not price squeeze exists, the relationship between the end-user and interconnection tariffs, and the role that KPN and the market participants play in these, should be given further consideration. Given that KPN, as a vertically-integrated provider, plays various roles in the service provision process, a distinction will be made between the KPN 'Wholesale' segment (Carrier Services) and the KPN 'Retail' segment. The extent to which other providers are dependent on both KPN segments also plays a central role here.

21. If they are to be able to compete with KPN, alternative providers must distinguish themselves from KPN. In practice it appears that hardly any of the alternative providers are able to distinguish themselves from KPN, other than by supplying telephone services against a lower end-user tariff than that charged by KPN Retail. This leads to a dependency on KPN: if KPN Retails lowers its end-user tariffs, others

are forced to follow, in order to bring their tariffs under that of KPN Retail again. In this manner, KPN Retail is able to influence the pricing of other providers' end-user services.

22. On the purchasing side, KPN competitors are dependent on the interconnection services offered by KPN, and the pricing of these services. The other telecom companies that provide telephone services in competition with KPN, also use KPN's fixed network when setting up calls. Given that KPN has the most subscribers, most national calls are terminated on the KPN network (terminating access). Competitors pay terminating access tariffs for this to KPN Wholesale. Competitors without any, or a limited, infrastructure of their own, such as carrier (pre)select providers, also purchase the start of a call from KPN Wholesale (originating access). The first part of the call is then also occurs via the KPN network, such as, for example, carrier (pre)selection calls. For this, the carrier (pre)select provider pays KPN Wholesale an originating access fee. Thus, when providing their services, competitors are to a greater or lesser extent dependent on the level of the interconnection tariffs charged by the KPN Wholesale segment.

23. As a result, KPN can influence its competitors' business cases via both its end-user tariffs and its interconnection tariffs. Also of importance is the fact that KPN, as a telephony provider, occupies a special position in respect of other providers. KPN Retail does not purchase capacity from itself, as other providers do (from KPN Wholesale), but is instead allocated costs for the use of the telephone network, via the fixed telephone service's cost allocation system. Given the fact that this does not result in actual payments being made to KPN Wholesale, KPN does not, in contrast to its competitors, experience any immediate hindrance from the fact that interconnection tariffs do not keep pace with the drop in the end-user tariffs.

24. It has been customary for some time now, in respect of KPN's tariff proposals for end-user services, for OPTA to assess whether the proposed amendments to the end-user tariffs result in a price squeeze. In order to improve the transparency of the assessment process, the commission has decided to formalise its price squeeze test. In the following chapter, the legal basis for a test such as this will be discussed in more detail.

3. Legal Framework

3.1 Introduction

25. This chapter will discuss the legal provisions, from a European and national perspective, relating to cost-orientation, and the place of the price squeeze test in respect of them. Its relationship with the price cap system[1] will also be indicated.

3.2 European Legislation

ONP Framework

26. At the end of the eighties in the European Union, the establishment of a common market for telecommunication services was put into progress. This was to be achieved by liberalisation of the telecommunication sector on the one hand, and harmonisation of the conditions for access to and use of telecommunication networks and services, on the other hand. The sector was gradually liberalised, with 1 January 1998 as the preliminary expiry date. On this date, all member states were to have removed all legal obstructions relating to the provision of public telecommunication networks and services. In its pursuance of a common market for telecommunication services, the conditions for access to and the use of telecommunication networks and services were also harmonised. The so-called condition for Open Network Provision (ONP) form the basis for this. The ONP framework guidelines[2] contain the fundamental principles for the ONP framework. The principle of cost-orientation when pricing plays an important role in these.

27. When assessing proposals for price squeeze, the actual organisation of the tariff structure plays an important role. The ONP framework guidelines (90/387/EG) state, for example, that various tariffs may be used to take into account a lot of traffic during peak hours and little traffic during off-peak hours, on the condition that the various tariffs are commercially justified, and not contrary to the basic principles of ONP.

European Commission Publication

28. In a Publication dated 28 August 1998, on the subject of the application of the competition rules in contracts relating to telecommunication sector access (98/C265/02) (hereafter: Publication), the European Commission examined the price squeeze phenomenon. Articles 117 up to and including 119 in the Publication are of particular importance for the price squeeze problem:

29. Article 117. Where the operator is dominant in the product or services market, a price squeeze could constitute an abuse. A price squeeze could be demonstrated by showing that the dominant company's own downstream operations could not trade profitably on the basis of the upstream price charged to its competitors by the upstream operating arm of the dominant company. A loss-making downstream arm could be hidden if the

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[1] Decision of 27 September 1999, OPTA/EGM/99/7526

[2] Guideline 90/387/EEG from the Commission dated 28 June 1990, No. L 192. This guideline was later amended by guideline 97/51/EG, to enable functioning in climate characterised by competition.

dominant operator has allocated costs to its access operations which should properly be allocated to the downstream operations, or has otherwise improperly determined the transfer prices within the organization. The Commission Recommendation on Accounting Separation in the context of Interconnection addresses this issue by recommending separate accounting for different business areas within a vertically integrated dominant operator. The Commission may, in an appropriate case, require the dominant company to produce audited separated accounts dealing with all necessary aspects of the dominant company's business. However, the existence of separated accounts does not guarantee that no abuse exists: the Commission will, where appropriate, examine the facts on a case-by-case basis.

30. *Article 118. In appropriate circumstances, a price squeeze could also be demonstrated by showing that the margin between the price charged to competitors on the downstream market (including the dominant company's own downstream operations, if any) for access and the price which the network operator charges in the downstream market is insufficient to allow a reasonably efficient service provider in the downstream market to obtain a normal profit (unless the dominant company can show that its downstream operation is exceptionally efficient).*

31. *Article 119. If either of these scenarios were to arise, competitors on the downstream market would be faced with a price squeeze which could force them out of the market.*

    Whether and when predatory pricing exist will be discussed in the next chapter.

ONP Revision

32. A comprehensive revision of the ONP framework and the corresponding ONP guidelines is currently under way. In July 2000, the European Commission sent six proposals (five guidelines and one regulation, COM(2000) 384 up to and including 392)) to the European Parliament for its consideration. It is proposed that the guidelines be implemented nationally by 31 December 2001 at the latest. It has been proposed that the regulation takes effect on an earlier date, namely 31 December 2000. However, given the fact that decision-making by the European Parliament and the Commission is still to take place, it is possible that the anticipated implementation period and the contents of the proposals could still be amended.

33. In the Commission's current proposals, the principle of cost-orientation in respect of the pricing of those providers with a substantial influence in the market applies unimpaired. In view of Article 16 of the guideline proposed by the European Commission, in respect of the universal rendering of services, and users' rights, cost-oriented end-user tariffs are necessary in order to prevent tariffs that are too high or too low, as a result of which access to the market is hampered, competition is limited, special tariffs apply to certain users, or tariffs are used for an unreasonable bundling of services.

34. In consideration 14 of the proposed guideline in respect of access and interconnection, the European Commission also takes the emphatic position that predatory pricing must be prevented. Predatory pricing exist if the difference between the end-user tariffs charged by the provider that has a substantial influence in the market, and the

interconnection tariffs that it charges to its competitors, that provide the same end-user services, is not sufficient to guarantee lasting competition. With this in mind, Article 11 of these guidelines proposes that if it appears that a provider that has a substantial influence in the market is providing wholesale services (upstream market) that are essential for other providers, while it is competing with these other providers in the same retail market (downstream market), national supervisors will be able to oblige this vertically-integrated provider to make its wholesale tariffs (interconnection tariffs) and internal transfer prices transparent. In Article 13.1 of this proposed guideline, it is also emphatically indicated that if a market analysis shows that a provider is able to charge extremely high end-user tariffs, or predatory pricing, to the disadvantage of end-users, the national supervisor may impose price supervision, including the obligation for cost-orientation and cost allocated systems, on it.

35. The above-mentioned accounting measures lead to a strict division between the upstream and downstream segments of a vertically integrated provider with substantial influence in the market. This model already exists in the United Kingdom. British Telecom's downstream segment (hereafter: BT) must purchase from BT's upstream segment against the same conditions and tariffs as its competitors.

3.3 National Legislation

36. In accordance with Article 35 of the Decision ONP lease lines and telephony (hereafter: the DOLT), KPN should determine cost-oriented end-user tariffs for the use of its fixed public telephone network and the fixed public telephone service. Cost-orientation is understood to mean that the end-user tariffs must reflect the underlying costs, including a reasonable profit surcharge.

37. Since 1 July 1999, the end-user tariffs of a number of services provided by KPN's telephone service have been regulated by a price cap system, which places an upper limit on end-user tariffs. The price cap system does not provide for the lower limit. OPTA does not, therefore, supervise any of KPN's tariffs that are possibly too low via the price cap system. The lower limit, below which end-user tariffs may not fall, must be assessed by interpreting the cost-orientation requirement in accordance with Article 35 of the DOLT. The commission has always taken the position that the lower limit of the end-user tariffs can be traced back to the basis of the cost-orientation concept, namely that the underlying costs, at the very least, must be charged.

38. Although the DOLT does not dictate any regulations for the interpretation of the cost-orientation requirement, the commission has taken the position, in the ONP voice decision of 2 September 1998 (reference OPTA/98/2190), that the cost-orientation requirement does, in any event, apply at the level of the various services offered by KPN's telephone service. This means that the costs and income connected with this traffic are, in principle, assessed per service.

39. As regards tariff structure, the commission has taken the position (for example in the above-mentioned voice decision), in line with the above-mentioned ONP framework guideline, 90/87/EG, that KPN must have the freedom, within reasonable limits, to maintain a certain peak/off-peak structure in the framework of an

efficient network planning. The extent of the reasonable limits are particularly determined by the question of whether other providers are not disadvantaged by the structure chosen.

4. Considerations in Respect of the Legal Framework

40. In the above-mentioned Publication, dated 28 August 1998, relating to the application of the competition rules to contracts regarding access to the telecommunication sector, the Commission has determined that pricing may form a problem, from the viewpoint of competition, if a dominant party charges so-called 'predatory prices'. In the proposals of July 2000 for the ONP revision, the Commission considers the price squeeze concept.

41. In view of Paragraph 117 of the above-mentioned Publication, it can be supposed that predatory pricing exist if it can be demonstrated that the dominant company's (read: KPN 'Holding') own downstream segment (read: KPN 'Retail') would not be able to operate profitably on the basis of the price that the upstream segment (read: KPN 'Wholesale') requires from its competitors in a certain market. The commission concludes from the above that KPN's tariffs must, in any event, be higher than the purchase price that KPN Retail would experience if it had to purchase network capacity from KPN Wholesale against the same tariffs as its competitors.

42. On the basis of Paragraph 118 of the same Publication, predatory pricing also exist if the margin between KPN Retail's end-user tariff and the relevant purchase price is not high enough to enable a reasonably efficient provider to secure a normal profit. In illustration of the above, reference is made to an earlier decision of the Commission in respect of the Napier Brown-case[3]. This means that when the commission determines a lower level to KPN's end-user tariffs, it should base this on the above-mentioned purchase price, but also make allowance for a certain surcharge over and above this purchasing price, in order to enable efficient providers to secure a normal profit. This surcharge should cover the other costs that other providers must incur in order to be able to provide their services (such as billing, marketing & sales and personnel costs). When preparing the profit and loss account, allowance must also be made for these costs if it is to be possible to determine whether or not the company is profitable.

43. In Competition law, the Akzo ruling from 1991 (European Court of Justice) plays an important role in the assessment of pricing that is too low. The Court's judgement entails that price dumping is the case when a dominant party charges prices that are so low that its variable costs are not covered, or when its variable costs are covered, but the average costs are not, and where the dominant party intends to force other participants out of the market (in order to be able to increase its prices at a later date, unhampered by competition). In short,

[3] Decision 88/518/EEG made by the Commission Brown Napier/British (PB L 284, dated 19.10.1988, page 15): the margin between the industrial prices and the retail trade prices had dwindled to the point at which the wholesale buyer was unable to serve the retail trade market in a profitable manner with packaging activities that were equally efficient to those of the wholesale supplier.

a dominant participant may only provide services under the cost price under certain conditions.

44. The Publication and the proposals for the ONP revision from the European Commission, in respect of predatory pricing, provide a more detailed explanation of the effect of the Akzo ruling and later legal precedents, to be able to assess the abusive nature of prices that are too low. One difference with the situation that underlies the Akzo ruling is that in network sectors such as the telecommunication sector, new providers that are competing with the traditionally dominant company for the provision of their services are also usually dependent on purchasing from said dominant participant. This dependency entails that if a dominating participant is charging prices that are too low, this should be examined with even more care. Abuse of its dominant position could already be the case if predatory pricing is demonstrated. Evidently, a dominant participant is, in that event, considered to have the intention of forcing other providers out of the market. In other words, if the dominant participant operates in a situation where the ability of its competitors to provide their services depends on purchasing from him, the dominant party is not permitted to provide its products under the cost price.

45. Perhaps the best way to prevent the dominant participant from being able to abuse its dominant position in the field of access activities by charging predatory pricing, is to divide this participant up (legally) into a separate network company and a separate services company. As such, the network company sells network capacity to all participants requiring it, including its own service company, against non-discriminatory conditions and tariffs. In this manner, telephony providers are able to compete with each other on an equal footing. A strict division such as this between a network and a service company has only rarely been implemented anywhere in the world, and was also abandoned when the PTT was privatised in 1989. This situation is simulated in a number of other countries by obliging the incumbent to completely separate its network and service activities in its accounts. In the United Kingdom, BT must keep separate accounts for its network and service activities. As a telephony provider, BT pays internal transfer prices to BT Network Company for its use of network capacity; these prices are identical to those paid by other providers for their use of the BT network. If allocation of the costs to the Network Company occurs in the correct manner, in the sense that costs that must, in principle, be allocated to service activities, are not mistakenly allocated to network activities, separate accounts can also create an equal footing for all competitors. Separate accounting of network and service activities is recommended by the European Commission, in order to facilitate the transparency of the internal transfer prices. It is not unlikely, partly due to the revision of the ONP framework, that separate accounting will also be implemented in the Netherlands.

46. In the Netherlands, KPN's network costs, insofar as they are being used for wholesale or retail services in the field of telephony, are currently being allocated, pro rata the actual claim made on the network, to all wholesale and retail call minutes together. Allocation occurs according to the principle of integral cost allocation, on the basis of historical cost prices. Then a correction of the network costs

allocated to wholesale occurs within the EDC system for the determination of the interconnection tariff; *current costs* are assumed instead of historical costs, and, on the basis of a number of *forward looking* elements, allowance is made for future (cost) developments. Besides this, this system also determines which parts of the other services connected with the telephone service (for example, marketing, billing, sales, automation costs, overheads etc.) have a direct relationship with the wholesale activities. Only when such a relationship is present may such costs also be allocated to the wholesale activities. It is in this manner that the interconnection tariffs charged by KPN to third parties are calculated, but not, currently, to itself in its capacity as telephony provider. In the Dutch situation, there are, thus, no actual internal transfer prices. Neither do actual payments take place between KPN Retail and KPN Wholesale for use of the network. All this entails that it is not clear what the actual costs are that KPN Retail is charged for use of parts of the network for which other providers, using the same parts, are charged interconnection tariffs.

47. The assessment of the lower limit of the end-user tariffs proposed in this consultation document must prevent a situation in which the lack of clarity referred to leads to a situation where the difference between KPN's end-user tariffs and the interconnection tariffs that are charged to its competitors that offer the same end-user services, are not sufficient to guarantee lasting competition. When applying the purchasing test, it is thus considered whether KPN Retail would also be able to operate profitably if it had to purchase from KPN Wholesale at the same price charged by KPN Wholesale to its competitors.

48. A price squeeze test which takes into consideration both the purchase price that KPN would have to pay if it had to purchase from itself, and a surcharge to cover the other costs, can be regarded as a first step in the direction of a stricter division between KPN Retail and KPN Wholesale. The purchasing assessment now intended by the commission is, therefore, in line with the current point of view of the European Union and the proposed future regulations.

49. The commission would be pleased to hear the opinions of parties in respect of the aspects that should play a role in the assessment of price squeeze.

50. Under its fixed public telephone service, KPN presently supplies various services to which various tariffs components are linked. An example: for its local, national and fixed mobile traffic traffic services, KPN charges set-up, peak, off-peak and night/ weekend tariffs. It appears, however, that a number of tariff components are so low within this tariff structure that (practically) no margin remains for other providers. This applies particularly to the night and weekend tariffs for traffic within the basic tariff area (hereafter wiba traffic). This subject will be returned to later in this document. It is the commission's preliminary opinion that tariff differences such as this are contrary to the basic principles of ONP. In view of this and the future European regulations, the commission considers a purchasing assessment of the above-mentioned KPN services necessary.

5. Price Squeeze Test

5.1 Introduction

51. The situation described above leads to the conclusion that, when assessing KPN's end-user tariffs, OPTA should, if price squeeze is to be prevented, assure itself that a certain margin exists between KPN's purchase price (as if KPN were a participant that had to purchase from itself just as alternative providers do) and the end-user tariffs. To achieve this, a test should be developed in which a comparison between the tariffs becomes possible. In order to be able to make this comparison between the interconnection and end-user tariffs, the following should be determined:
    - what the relevant end-user tariffs are,
    - what the relevant purchase price is, and
    - what a reasonable retail surcharge should be.

5.2 Assessment Level of the End-user Tariffs

52. The end-user tariffs are determined in different ways, and are used for different purposes. KPN charges various tariffs for its end-user service: a fixed set-up tariff, and a variable trunk tariff. How much the trunk tariff amounts to depends on the time at which calls are made, the length of the call, and the destination of the call (within the basic tariff area or outside the basic tariff area). The interconnection tariffs are calculated differently, as they, in contrast to the end-user tariffs, have a direct relationship with the claim made on the network underlying the interconnection services. It is for this reason that it is not possible to make a direct comparison between them. If this comparison is to be made, the following question is, first, of importance: On the basis of the cost-orientation requirement, at what level should OPTA assess the end-user tariffs? This could be effected at three different levels, each increasing in degree of detail:

A. at the level of the service in its entirety (are the tariffs for national traffic, for example, cost- oriented?),

B. at the level of the various time periods (do the peak, off-peak and weekend time period tariffs comply with the cost-orientation requirement?), and

C. at the level of the various tariff components (this is the above-mentioned Level B, plus an assessment of the other separate tariff components, such as the set-up tariff)[4].

53. In the past, KPN's tariffs were always assessed at the level of the service in its entirety (sub A), on the condition that the differences between the various tariff components are commercially justified and not contrary to the ONP regulations.

54. If the tariff is assessed at service level alone, this entails that the average interconnection tariffs of this service should be lower than the average end-user tariffs. Insofar as this is permitted by competition rules, this assessment version allows KPN to compensate a low end-user tariff in off-peak hours, with a high end-user tariff during peak hours. It is also even possible that the end-user tariff in the off-peak hours is so low that the interconnection tariffs in the off-peak period are higher. If this is the case, alternative

[4] This level also applies to the interconnection tariffs.

providers are not able to compete with KPN during off-peak hours without making a loss. This while some provider might be concentrating on users who call particularly in the off-peak period. The commission is of the opinion that if providers choose to focus on a certain market segment, the various KPN tariff structures should not be allowed to hinder this. An assessment at this global level will not be able to remove hindrance such as this. That is why assessment must take place at a more detailed level.

55. If the assessment is carried out at the level of the service (local traffic, for example), bearing in mind the various time periods (peak, off-peak, weekend), then the interconnection tariffs for that service are compared, per separate time period, with the respective end-user tariffs. In this version (sub B), it is no longer possible for KPN to compensate a negative margin in one period with a positive margin in another time period. Because averaging of the network element tariffs remains, the problem does not, however, disappear. Even if the end-user tariff is assessed according to the various time periods, tariff averaging of call set-up and trunk tariffs still occur: although the end-user tariff for the various time periods is, on average, higher than the average interconnection costs for the respective time periods, the possibility exists that the end-user trunk tariffs during short and/or long calls are lower than the trunk interconnection tariffs. An example of this is a margin on the trunk tariff that is so low, or even negative, that profit can only be made on very short calls, because of the profit contribution of the set-up tariff. As a result, competitors focusing, for example, on 'long callers' (Internetters, users who call in the off-peak period) may be in trouble. A test at this level removes most price squeeze effects, but does not solve the problem of calls deviating from the average call duration.

56. It might also be decided to opt for an assessment at the level of the service, bearing in mind all of the various tariff components. The advantage of this version (sub C) is that alternative providers are, in principle, able to compete at an equal level with KPN for all end-user call profiles. A disadvantage of this approach is, however, that the commission would have to make an extremely detailed assessment of each tariff proposal. In addition to this, other providers compete with KPN to offer services (for example, calling during off-peak hours) for which, as regards the tariff, both fixed and variable trunk tariffs apply. Testing per tariff component would then seem too drastic in this context.

57. Given the above, testing at a deeper level than the level of the entire service (Level A) is unavoidable; however, the commission does not consider it desirable that each individual tariff component be assessed for the extent of cost-orientation (Level C). The commission intends, therefore, to assess KPN's tariffs and tariff proposals at the level of the service in the various time periods (peak, off-peak, weekend) (Level B). In order to overcome the disadvantage of not being able to prevent the occurrence of price squeeze effects for call profiles with end-users that have a different average call duration, OPTA will take into consideration calls with an average call duration, as well as 'short' and 'long' calls.

58. The commission wishes to include three types of call in the price squeeze test for wiba and ouba traffic, namely short calls, average

length calls and long calls. For these types of call, the commission will, for the time being, assume a respective call duration of one, four and thirty minutes.

59. The commission requests that interested parties indicate whether they are able to agree with the level at which the commission wishes to test KPN's tariff proposals for cost-orientation.

60. The purchase price and the surcharge determine the final total costs that are relevant for the price squeeze test. These must be compared with KPN's current end-user tariffs. On the basis of the Discount Number arrangement [VoorDeelNummer-regeling] (hereafter: DN arrangement), end-users are able to obtain a discount on these tariffs, regardless of their call pattern. In addition to this, the end-user can obtain a ten percent discount on the set-up and trunk tariffs for a maximum of ten numbers. The use of this arrangement is free, besides a one-off deduction of ten guilders for administrative costs. Given the generic character of the DN arrangement, the commission considers it reasonable that the DN arrangement be taken into consideration when determining which end-user tariff to charge. This does not apply to other forms of discount, such as the CallPlus tariffs [BelPlus-tarieven] and the discounts that apply if calls are made for a minimum amount each month.

61. Given that the discount that the DN arrangement gives applies to a maximum of ten numbers, the effective discount that an end-user receives is lower. The effective discount will, therefore, be less than ten percent. The commission assumes that the effective discount will be approximately five percent. That is why, when assessing the extent of KPN's cost-orientation, the tariffs that apply for a CallBasis subscription [BelBasis-abonnement] will be used as the basis for the end-user tariffs, minus five percent.

62. The commission requests that market participants react to the discount proposed for the end-user tariffs and the level of the discount.

5.3 Determination of the Purchase Price

63. It appears, from Paragraph 118 of the Publication that the price charged for access to KPN's network, or the purchase price applicable to competitors, plays an important role when determining whether or not price squeeze exists. In addition to this, the question arises of whether KPN's costs should form the basis of the calculation, or the costs of the 'reasonably efficient service provider' referred to in Paragraph 118 of the Publication.

64. The purchase price is formed by the interconnection tariffs, which are, in turn, determined by the use made by an alternative provider of the KPN network. An alternative provider's purchase price depends, thus, on the extent to which the provider has rolled out its network. In this manner, the possibility exists, on the one hand, for a provider to interconnect to the KPN network almost without a network of its own, on only one exchange, at the level of a Regional Access Point (hereafter: RAP). The purchase of interconnection from KPN is then maximal. On the other hand, the possibility exists of interconnecting to all RAPs, and only having

part of the incoming and outgoing traffic executed by KPN. In this version, the interconnection costs to be paid to KPN are lower, but the costs involved in the provider's own network are higher.

65. On the basis of the costs involved for the alternative provider, it may be asked what 'reasonably efficient' is. Efficiency cannot be viewed separately from the quantity of call minutes that are made, for other network requirements are involved for higher call volumes than for lower call volumes. The choice of how many RAPs the service provider wishes to interconnect also depends on the volume of calls. What is plausible is that a starting service provider will limit itself to one RAP, and only decide whether it is more efficient to be interconnected to more RAPs when the call volume grows. In the event of extremely high volumes, roll out at local exchange level may appear to be efficient[5]. So the extent of efficiency cannot be deduced from the extent of roll out: roll out to one RAP may be efficient for one provider, for another, this might be roll out to twenty RAPs. This has repercussions for the interconnection to be purchased. The provider that interconnects to one RAP must often purchase national terminating and/or national originating, corresponding to the completion of traffic at a high level, while the provider that interconnects to all of the RAPs can suffice with regional originating or terminating, corresponding to the completion of traffic at a regional level. Although the costs involved for the interconnection to be purchased are lower in the second case, the costs incurred in the provider's own network are relatively higher.

66. Given the above, it does not seem obvious to proceed on the basis of the costs involved for an alternative provider. After all, the purchase price of an efficient provider that only interconnects to one RAP are higher than the purchase price incurred by an efficient provider that has rolled out to all of the RAPs. As a result, an objective measurement of the purchase price amount is not possible. That is the reason why, when determining the extent of cost-orientation, the commission will proceed on the basis of the network claim that applies for *on-network* calls on KPN's own network.

[5] The commission observes that, in this context, efficiency is determined by KPN's concrete network, and is, thus, not an absolute term.

FRAMEWORK I: Local Versus Wiba, National Versus Ouba

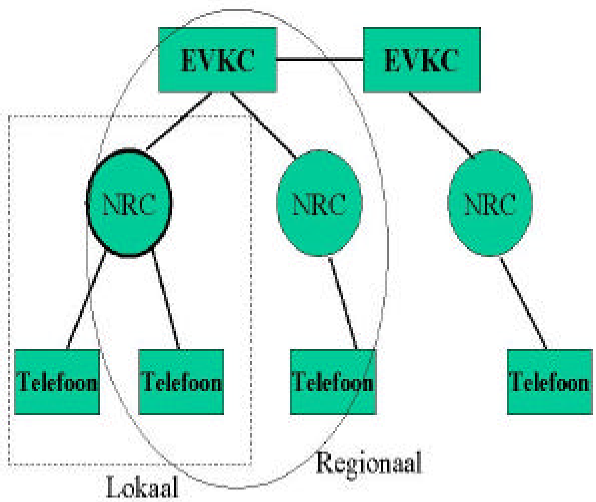
The various tariff structures for interconnection and end-user services have led to the use of different terms. In this framework, an explanation of these terms, as used in this consultation document, is given. For the end-user services, a distinction is made, as regards tariffs, between wiba calls and ouba calls. For the interconnection services, by contrast, a distinction is made between local, regional and national calls.

According to KPN, wiba calls are those calls that an end-user makes within his dialling code area, plus all neighbouring dialling code areas. In its advertising, KPN refers to the neighbouring dialling code areas as 'petals on the flower'. Ouba calls are calls to geographical numbers that do not occur at wiba level (outside the 'flower').

The purchase tariff that an alternative provider has to pay for interconnection is based on a call's claim on the network, and depends particularly on the number and type of exchanges that a call passes. A distinction can be made between two types of exchanges here: a local exchange at low (district) level (also referred to as NRC and a traffic exchange (also referred to as EVKC) at a higher level. Via so-called Regional Access Points (RAPs), other providers can interconnect to KPN traffic exchanges.

Local traffic is all the traffic that passes from a network termination point to a local exchange, and is terminated at the same local exchange. In the following diagram, this is depicted as the call that occurs within the rectangle. Regional traffic is that traffic that passes through both a local and a traffic exchange (EVKC) surrounded in the diagram by an oval. National traffic also passes through a second traffic exchange. In the diagram, this could be a call between the connection in the bottom left hand corner and the connection in the bottom right hand corner.

This three-way purchase tariff division does not correspond with the two-way tariffs for the end-user services: a wiba call may be classified by an alternative provider as a local, regional or national call; an ouba call may be classified as either a regional or a national call. Depending on the amount of network claimed, a wiba call with one end-user tariff may, thus, entail different purchase prices.



67. The interconnection tariffs for ouba traffic corresponding to the amount of network claimed are formed by purchasing 1 x national originating and 1 x regional terminating (or the other way round), except for ouba calls which return and end in the same trunk exchange to which the alternative provider interconnects. The commission assumes, amongst other things on the basis of information provided by KPN, that the latter is the case in *w*[6] percent of the calls. In this case, regional originating and regional terminating are purchased. The commission is aware that this assumption may underestimate the actual total network costs involved for an alternative provider, for the alternative provider's own network costs (= total network costs minus interconnection) may be higher than the section of network not purchased from KPN.

68. No alternative provider is rolled out at local exchange level for local traffic at the present time. For local traffic too, the amount of network claimed, as this applies for KPN, will be assumed. The average amount of network claimed will also be taken into consideration (see Framework I).

69. The commission requests that interested parties react to the point of view that the amount of network claimed, applying to KPN, should be used to determine third party purchase prices.

70. On the basis of the above-mentioned assumptions, the purchase price is determined as follows. For wiba calls, the purchase price for the peak and off-peak tariffs is determined on the basis of the sum of the CallSetUp (CSU) tariffs and the conveyance (CO) tariffs of a call with a duration of one minute, four minutes and thirty minutes. Given that a wiba call can be completed as local, regional or even national traffic (see Framework I), averaging occurs on the basis of the actual relationship between the various levels at which these calls are completed.

71. For ouba calls, the purchase price for the peak and off-peak tariff is also determined on the basis of the sum of the CallSetUP tariffs and the conveyance tariffs of a call with a duration of one minute, four minutes and thirty minutes. Given that a ouba call can be completed as regional or national traffic, averaging occurs on the basis of the actual relationship between the various levels at which these calls are completed. Only a limited part of a ouba call occurs at regional trunk level.

72. In formula form, the purchase price for wiba is determined by the sum of call set-up costs and conveyance costs as follows:

CallSetUp costs:

$x*[LO_{CSU}+LT_{CSU}]+y*[RO_{SU}+RT_{CSU}]+z*[RO_{CSU}+NT_{CSU}]$

+

Conveyance costs:

$\#min*[x*[LO_{CO}+LT_{CO}]+[y*[RO_{CO}+RT_{CO}]+[z*[RO_{CO}+NT_{CO}]]$

In formula form, the purchase price for ouba is determined by the sum of the call set up costs and the conveyance costs:

Call set up costs:

$w*[RO_{CSU}+RT_{CSU}]+(1-w)*[RO_{CSU}+NT_{CSU}]$

+

Conveyance costs:

$\#min*[w*[RO_{CO}+RT_{CO}]+(1-w)*[RO_{CO}+NT_{CO}]]$

[6] Concerns confidential information.

The following symbols are used in the formulas:
x, y and z: proportion of locally, regionally and nationally executed wiba calls, respectively (x+y+z=1)
w and (1-w): proportions of respectively regionally and nationally executed ouba calls
LO = Local Originating
RO = Regional Originating
LT = Local Terminating
RT = Regional Terminating
NT = National Terminating
CSU = Call Set Up
CO = Conveyance
#min = number of minutes (1, 4 or 30)

5.4 Determination of the Retail Price

73. As described above, the purchase price is based on the current interconnection tariffs. In principle, these tariffs only include the direct costs and those costs that must necessarily be allocated to interconnection. However, in addition to the purchase price, other costs are also incurred in order for it to be possible to provide the telephone service (such as billing, marketing & sales and personnel expenses; see Chapter 4). When determining the purchasing tariff, the commission intends to use one fixed surcharge (in percent) which includes these costs.

74. When determining the level of the above-mentioned surcharge, the assumption should, once again, be that of a 'reasonably efficient' provider. This concerns the costs incurred by this provider for the completion of telephone communications, excluding the complete network claim purchased from KPN. Based on the information provided by KPN, the commission considers a surcharge of 25 percent reasonable for the relationship between interconnection tariffs, including network costs and the total retail price of KPN, for the time being.

75. The commission requests market participants to express their views about the proposed surcharge. A different view should be accompanied by a quantitative foundation in respect of the surcharge percentage that should be applied in the price squeeze test.

FRAMEWORK II: Example.

Imagine that KPN submits a tariff proposal to the commission, that entails that the ouba off-peak tariff (evenings) is dropped to 3.5 cents. What does the price squeeze test then look like?

End-user Tariff

The end-user tariffs that apply to this example for the CallBasis subscription (ouba, between 19.00 and 08.00 hours) are as follows:

Tariff per minute incl. VAT (cents)	Tariff per minute excl. VAT (cents)	Test tariff (tariff minus 5%)
3.5	3.0	2.9

The call set up tariff amounts to 8.5 cents. Corrected for discount numbers (five percent), this is 8.1 cents.
For a call lasting one minute, the price then amounts to 11 cents. For a call of four or thirty minutes, the price amounts to 19.7 and 95.1 cents respectively.

Interconnection Tariff

The interconnection tariffs (in cents, excl. VAT), applicable on 9 October 2000, are as follows:

	set-up			Conveyance		
	peak	off-peak	Sun.	peak	off-peak	Sun.
NT	3.2	2.4	2.4	2.7	1.5	1.5
RT	3	$\boxed{2.2}$	1.9	2.3	$\boxed{1.2}$	1

	set-up			conveyance		
	peak	off-peak	Sun.	peak	off-peak	Sun.
NO	3.4	$\boxed{2.5}$	2.5	2.8	$\boxed{1.6}$	1.6
RO	3.2	2.4	2.1	2.5	1.2	1.1

For the purpose of this example, it is assumed that an ouba call is always executed over two trunk exchanges. The National originating (NO) tariffs are thus relevant for the incoming section; the regional terminating (RT) tariffs are relevant for the outgoing section.

The call set up costs are as follows: $NO_{CSU} + RT_{CSU} = 2.5 + 2.2 = 4.7$ cents.
The communication costs for the execution of the call amount to $NO_{CO} + RT_{CO} = 1.6 + 1.2 = 2.8$ per minute. For a one-minute call, the interconnection costs are then 7.5 cents. For a four-minute or thirty minute call, the interconnection tariff amounts to 15.9 and 88.7 cents respectively.

Surcharge

With a twenty-five percent surcharge, the total purchase price is as follows:
Interconnection costs plus 25 percent

1	4	30 minutes
9.4	19.9	110.9 cents

Test

Number of minutes	1	4	30
Revenue	11.0	19.7	95.1
Costs	9.4	19.9	110.9
Difference	>0	<0	<0

Conclusion

The test makes clear that the tariff proposal results in a price squeeze. The proposal is rejected.

5.5 Application

76. The squeeze test entails that KPN cannot offer any end-user tariffs, which lead to squeeze effects. It might be asked whether it is reasonable to oblige KPN to adhere to the above under all circumstances. It is, after all, possible that alternative providers opt to offer tariffs under the limit determined by the squeeze test, or even under their own cost price, for example to increase their share in the market. Should it not be possible for KPN, in these circumstances, to follow the lower tariffs charged by the alternative provider?

77. When answering this question, KPN's position as a participant with significant market power plays an important role. This position of telecom operators with a certain market share in a prescribed market, gives them more obligations than operators that have not been appointed as the participant with significant market power, that has the goal, amongst others, of promoting competition. One of those obligations is to charge cost-orientated tariffs. This obligation does not apply to other operators. KPN is not permitted, therefore, not even as a price follower, to charge tariffs that results in price squeeze. Only if the telecommunication market for fixed telephony has sufficient competition, in the opinion of the commission, and if KPN was no longer a party with significant market power, would KPN be permitted to offer tariffs that would not stand the proposed squeeze test, at least insofar as general competition rules are not broken.

78. **The commission requests interested parties to react to the above-mentioned view.**

79. In the attachment, you will find an overview of the manner in which the lower tariff limits are regulated in other countries.

6. Related Subjects

80. When the price squeeze test described in Chapter 5 is applied to the current tariffs for KPN's wiba and ouba traffic, this produces the following results: the ouba tariffs will pass the price squeeze test in all periods of the day and week. Price squeeze is not currently an issue with this type of traffic. The wiba tariffs are a different matter. The price squeeze test is unfavourable for longer calls and calls made during the evening hours and in the weekend.

81. Parties who are particularly disadvantaged by this are those that offer services to their clients on the basis of indirect access, such as carrier (pre)select providers (hereafter: C(P)S). When they set up a telephone call or an Internet session for their clients, they need to purchase both the incoming section as well as (in most cases) the outgoing section (in most cases) from KPN. However, providers that have connected their clients with their own connections to their networks (such as cable companies that offer telephone services), are less effected by the above-mentioned price squeeze. They are only dependent on KPN's fixed network for the outgoing section. They pay KPN a terminating access payment for this. They use their own network for the outgoing section. The costs incurred in doing so must be earned back from the income generated by the various services that they offer over their network. For them, it is the case that each positive margin between their end-user tariffs and the terminating access payments to be paid to KPN, is a contribution towards the costs incurred in the use of their network. At the present time a positive margin such as this does, indeed, exist.

82. There are a number of developments that may decrease the price squeeze experienced by C(P)S providers. In the context of its decision-making in respect of the transfer from interconnection tariffs determined on the basis of the EDC system (Embedded Direct Costs) to their determination on the basis of a LRIC-system (Long Run Incremental Costs), the commission will, shortly, have to make a decision about the tariffs that will apply instead of the current bridging tariffs, for the period from 1 July 2000 until 1 July 2001. It is expected that these tariffs will be lower than the current interconnection tariffs. In this manner, the effects of the price squeeze will be somewhat lightened. How much exactly depends on the actual development of the interconnection tariffs. Of importance, furthermore, is the fact that some of the Internet traffic will, in the future, be separated via the 06760 code. Internet traffic that was previously established via the wiba traffic, will, in this manner, be withdrawn from the C(P)S-service. With this, the current loss-making offer for Internet traffic would seem to lapse, partially.

83. When the price squeeze experienced by C(P)S providers when providing wiba traffic is looked at in more detail, the principle question arises of whether KPN's current wiba service lends itself to be offered via C(P)S. A large proportion of the wiba calls (slightly less than 50%) are, namely, executed at a low level in KPN's network, at local exchange level or lower, where other providers are not currently present with their own infrastructures. It would not appear to be economically attractive for other providers to further roll out their

networks to such an extent that they gain access to a substantial part of the lower exchanges in the KPN network. Because C(P)S providers are unable to complete the wiba traffic low in their networks, as KPN does, they always incur more costs for this than KPN does. It would, thus, appear that competition on strictly local calls cannot be offered profitably via C(P)S, but is only possible for those providers that offer direct access via their own local networks.

84. A greater proportion of the wiba traffic (slightly more than 50%) is, presently, however, completed at a higher level in the KPN network, and passes through at least one trunk exchange. Providers, who are interconnected to all of the RAPs in the KPN network, can provide this traffic on the basis of almost the same network claim as KPN does. The costs involved for C(P)S providers and KPN cannot, then, vary considerably. In principle, C(P)S providers should be able to compete with KPN for this section of the wiba traffic. This is, however, hampered by the fact that KPN always charges the same end-user tariffs for both wiba traffic, that is executed both high and low in the network, while the underlying costs do vary considerably. Other providers are unable to offset the higher costs involved in the completion of wiba traffic high in the network with the lower costs incurred for the completion of wiba traffic low in the network. The question may be asked, whether the charging of one and the same tariff for different types of traffic that vary considerably in cost price leads to anti-competitive pricing, contrary to the cost-orientation principle.

85. A rigorous solution for the above-mentioned problem would be for KPN to divide the current wiba traffic into strictly local traffic and regional traffic, and to tariff these as such. If this were the case, C(P)S providers could, in principle, compete with KPN for regional calls. Such a fundamental change to the retail tariff structure does, however, has far-reaching consequences, particularly for companies that now profit from the fact that calls can be made to neighbouring dialling code areas at the wiba tariffs. An example of this is call centers that are located in areas where many can call against wiba tariffs, or to ISPs (Internet Service Providers) that have chosen their dial-up numbers so that people from almost anywhere in the Netherlands can dial up to use the Internet against wiba tariffs. In addition to this, division of this traffic will lead to decreasing transparency. Where it currently is the case that calls within a dialling code area are always made against the local tariff, as soon as wiba traffic is split up into local and regional traffic, this unambiguous situation is lacking. For large dialling code areas (020, for example) the possibility even exists that three different end-user tariffs would apply.

86. Other less rigorous solutions are also imaginable. Providers could, for example, request KPN to exclude wiba traffic to a neighbouring dialling code area from carrier preselection. Although this would mean that traffic at a low level would decrease for alternative providers, this solution does not remove the cause of the low margin on wiba traffic.

87. This would be the case if the call set- up and conveyance tariff for wiba traffic were to be *rebalanced*. This could mean an important lightening of the price squeeze problem. In addition to this, the weekend/night tariff, and probably also the off-peak tariff, would increase, and the call start-up and the peak

tariff would drop. However, this does not offer any structural solution for the offsetting of the costs that KPN currently charges within the wiba traffic either.

88. A third solution could be that KPN would only be allowed to charge C(P)S providers any more than the local terminating payments for the execution of wiba traffic that KPN itself would have executed low in its own network. The disadvantage of this is that it does not stimulate C(P)S providers to roll out their networks to a local level, where necessary, for large traffic volumes.

89. The commission would like to hear whether interested parties are in agreement with the above-mentioned analysis in respect of the extent to which competing providers are disadvantaged by the price squeeze on wiba traffic. The commission would also like to hear to what extent Internet separation via 06760 numbers offers relief in the price-squeeze problem. Finally, the commission would like to hear the views of interested parties with regard to what has been described above, and other possible solutions for the price squeeze detected in wiba traffic.

7. Further Procedure

Interested parties may express their views in writing to the commission until 15 November of this year. Reactions (in the Dutch language) should be addressed by letter and in electronic form (floppy or e-mail) to:

The Secretariat
OPTA, Department of Retail Market
P.O. Box 90420
2509 LK THE HAGUE

e-mail address: SecrEindgebruikersmarkt@opta.nl

referring to: squeeze consultation document

After expiry of the above-mentioned time, all reactions will, in principle, be published on the OPTA website. Parties who wish sections of their remarks to be treated as confidential are requested to explicitly indicate this with a further motivation of why confidentiality is necessary. Confidential information will not be published.

As part of the consultation, a public hearing will be held from 09.30 hours until approximately 12.00 hours. This will take place on 8 November 2000 at the OPTA offices:
Babylon Complex, Tower B, Third floor
Koningin Julianaplein 30
The Hague

The Babylon complex is situated close to the Central Station in The Hague.
People, who are interested in attending the public hearing, are requested to indicate this by letter or e-mail by 1 November 2000 at the latest (referring to participation in price squeeze public hearing), directed to the above-mentioned address. Parties should also indicate whether they wish to speak.

This document is also available from OPTA's website:
http://www.opta.nl (option: 'End-user', 'Consultation documents').

Attachment: Price Squeeze Test in IRG Countries

90. For the purposes of this consultation OPTA has researched the situation in respect of the squeeze problem in the countries of the other members of the International Regulators Group (IRG). Further to this research, OPTA has received information from its colleagues in Sweden, Ireland, Belgium, Portugal, Denmark, the United Kingdom, Spain, Switzerland and Luxembourg. From the reactions it received from most countries, it appears that squeeze problems occur there to a greater or lesser extent. In most cases, the cause lies in the declining end-user tariffs, under pressure from competition and interconnection tariffs that are not falling as quickly. Predatory pricing may also be the result of accumulating discount arrangements over and above the end-user tariffs. A number of countries also indicate that squeeze problems occur due to the fact that the interconnection tariff structure does not correspond with the current end-user tariff structure of the provider that has been appointed as party with significant market power.

91. As described in the legal framework in Chapter 3, the rules are applied by a number of the IRG members (Ireland, Portugal and Denmark). These IRG members base their assessment of predatory pricing on the ONP principle of cost-orientation. In a number of other IRG countries (Sweden, for example), the cost-orientation principle only applies to interconnection tariffs; there is no legal basis for the assessment of end-user tariffs. In yet other IRG countries (Switzerland and Luxembourg), no supervision on tariffs exists at all.

92. In Ireland, Spain and the United Kingdom, end-user and interconnection tariffs of the provider with significant market power are being compared, in order to assess whether predatory pricing exist.

93. In the United Kingdom, a so-called 'stack test' is being conducted. In this test, the end-user tariff concerned is compared with a 'stack of costs'. For each test, it is first investigated whether company 'V', against whom the complaint has been made, can be regarded as a vertically integrated provider with significant market power. Other providers on the relevant downstream market (retail) are collectively regarded as 'C'.

94. The 'stack of costs' consists of:
wholesale services, priced as if the downstream segment of V had to purchase these services itself from the upstream segment of V against the same tariffs as paid by C to the upstream segment of V, and other costs related to the upstream segment of V, such as retail price, that is ideally based on incremental costs.

95. The principles for cost allocation are diverse within the IRG member countries. In most IRG countries, the accounting basis for the end-user and interconnection tariffs vary. As a result, it appears from the research that the

surcharge charged on the interconnection tariff also varies. Portugal and Germany do, in any event, charge a surcharge on the interconnection tariffs (in Germany, approximately twenty-five percent).

96. Finally, the IRG members were asked whether the supervision of predatory pricing should concentrate on the 'average' service ('local calls' for example) or whether a distinction should be made between a service's tariff component ('local calls: peak, off-peak, set-up', for example). From the reactions received, it appears that most IRG members are still researching this issue. In the United Kingdom, individual tariffs are assumed, including peak and off-peak tariffs, as, according to Oftel, the relevant market consists of both peak and off-peak traffic; both types of traffic are offered by providers of fixed public telephone services. If a possible price squeeze should occur as a result of one of the tariff components, it would have to be determined what its effect on competition is. In Spain, for example, a comparison is made between a national end-user tariff with a single or double transit and terminating payment. A comparison such as this is based on an identical time and duration.