



Bundesnetzagentur

Notes on margin squeezes

as defined by section 28(2) para 2 TKG

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0. Summary

The current practice for determining margin squeezes has raised a number of questions, in particular in view of increasing flat rates and product bundles. The following paper is therefore intended to help establish a common understanding of the underlying problems and present guidelines for the application of margin squeeze tests.

It is generally assumed that the testing of margin squeezes should be geared to an efficient competitor and thus only optionally to internal calculation for the dominant company. Pricing is not allowed accordingly if efficient competitors are not or only locally, i.e. not nationwide, able to realize a squeeze that allows a reasonable return on capital deployed. This does not mean, however, that the rates of the dominant company must be reproducible for each individual business model, but only that efficient competitors – based upon various access services - have to be able to compete with the provider dominating the market on a nationwide basis.

The competitor perspective generally implies taking differences from the established network provider into account, such as the realization of (provisionally) small economies of scale and scope, competitor-specific costs and differences in the customer structure. It must be assumed, however, that efficient competitors can provide their services at least as efficiently as the established provider in the long run. Therefore, it can be assumed that competitor-specific (additional) costs are generally transitional and the estimated costs in a margin squeeze test of the efficient competitor do not exceed those of the dominant company.

The test shall be based – if possible – on (approved) upstream service rates. On the other hand, it is extremely difficult to draw conclusions about the cost situation of competitors by comparing competitor bids on the same market, since there are marked interdependencies between retail prices charged by new providers and those imposed by the dominant company. Apart from this, performing a qualified comparison in a competitive environment influenced by an increasing bundling of products turns out to be highly complex.

In terms of the starting point of the margin squeeze test, it should be mentioned firstly that less emphasis should be placed on individual rate elements than on complete rates, as this is the only way to make sure that 2-part rates and (partial) flat rates are adequately taken into account. Testing should focus mainly on the expected user characteristics of a future average customer. The question as to whether margin squeeze tests should be restricted to individual markets or applied to rates across various markets can only be answered by considering the prevailing competitive conditions. Since we are talking about the reproducibility of specific rates here, the starting point

for margin squeeze tests mainly depends on the relevant business models of the efficient competitive companies that can be taken as a reference.

Both legal and economic considerations generally mean looking at individual rates, however, combined rates may also be permitted under certain conditions. However, the operationability of the margin squeeze test must not be called into question as a result. In addition, all efficient competitors that can be used as a reference must (be able to) offer combined rates.

In terms of bundling products that include both regulated and non-regulated services, a margin squeeze test cannot be readily performed according to section 28(2) para 2 TKG, since the market power of the SMP provider does not apply to all upstream services the package offer is based upon. With regard to the issue of objectively unreasonable bundling, it must be checked whether efficient competitors of the SMP undertaking are able to offer the bundling product at comparable terms and conditions. It should be pointed out, however, that no information on corresponding upstream services and usage characteristics is generally available to the regulating authority for non-regulated products and product components, which is why narrow limits must be set for a dedicated calculation of efficient costs for providing these services. The two-week deadline means that this applies in particular to the transparency review that requires considerably lower standards than testing under the ex-post procedure.

1. Introduction

According to the Telecommunications Act, dominant companies are generally not allowed to substantially affect the competitiveness of other undertakings on a telecommunications market. Abuse in this sense is presumed in the case of a cost-price squeeze. The current practice of determining the conditions under which a margin squeeze exists raises a number of questions. The following paper is therefore intended to help establish a common understanding of the underlying problems and present guidelines for the application of margin squeeze tests.

Against this backdrop, a paper on margin squeezes as defined by section 28(2) TKG was put to discussion on 20 December 2006 as publication 441 in the Official Gazette 24/2006 and on the website of the Federal Network Agency. A total of 13 statements were received from telecommunications companies and other organizations that were published on the website of the Federal Network Agency. They have been consolidated and evaluated. The evaluation of the public consultation will be published simultaneously. Additional information was subsequently incorporated into the paper on this basis by way of explanation.

According to section 28(2) para 2 Telecommunications Act (TKG), abuse is presumed as defined by section 28(1) para 2 TKG if the margin between the price the SMP public telecommunications operator charges competitors for an access service or facility and the corresponding retail price is not enough to enable an efficient undertaking to achieve a reasonable return on capital employed in the retail market (margin squeeze).

Margin squeezes are therefore explicitly embodied in the TKG as grounds for suspecting abusive action on the part of a dominant company. The reason for this is likely to be the fact that there is still considerable potential for abuse due to the vertical integration of the former monopolistic undertaking even 10 years after opening the market up fully. This, in turn, is mainly due to the specific relationship between the incumbent and its competitors, as the liberalization meant that a number of providers were able to set themselves up on the various retail markets, but their dependence on the upstream services provided by Deutsche Telekom AG has only reduced gradually. The revenue share that alternative fixed-network providers had to pay for upstream service to Deutsche Telekom AG in 2006 amounted to almost 40%. From the perspective of alternative network operators, this entails a risk of not being able to realize an adequate return on investment if the gap between upstream service charges and retail rates becomes too small.

The very first instances of the cases suspected here have shown that a number of questions arise when it comes to determining the conditions under which a margin squeeze can be assumed. Against this backdrop, the aim of the following paper is to help establish a common understanding of the problem of margin squeezes in the field of telecommunications and present guidelines for the application of margin squeeze tests.

To this end, chapter 2 includes a short overview of the characteristics and competitive impact of margin squeezes. This also deals with the question of which perspective should be used as a basis for a test of this kind. The term “efficient undertaking“ is of key importance here.

On this basis, several test approaches for determining the costs of an efficient competitive undertaking are then discussed in chapter 3. Focus is placed on a general analysis of several concepts, although conclusive and detailed discussion is not possible at this stage. While these considerations deal with the cost side of things, chapter 4 looks at the service aspect and thus the question of an appropriate starting point for margin squeeze tests at product and rate level. Finally, the core issues and any resulting consequences are consolidated in chapter 5.

2. Characteristics and competitive effects of margin squeezes

2.1 Basic principles on the perspective to be taken

In order to determine a margin squeeze, it must first be clarified which costs are relevant. The legal standard is aimed at “enabling an efficient undertaking to achieve a reasonable return on capital employed in the retail market“. Notwithstanding the fact that only an alternative provider and not the dominant company runs the risk of being subject to a margin squeeze, the wording does not clearly state whether the margin between the upstream service charge and the retail rate must be big enough to enable an efficient competitor to achieve a reasonable return on capital or if the dominant company itself can be considered an “efficient undertaking“ under this rule.

This differentiation is of prime importance, since network sectors are frequently characterized by high economies of scale and scope that – under certain conditions - cannot be fully implemented simultaneously by several undertakings. It can therefore not be general ruled out that different – in terms of their chosen business model and based on their market penetration at least economically – efficient undertakings can have different costs, and that the perspective to be taken can impact the result of a margin squeeze test. Therefore, the following paper should look at how the term “efficient undertaking“ can be suitably interpreted in this context.

If you take the wording of section 28(2) para 2 TKG, according to which abuse is assumed “if the margin between the price the SMP public telecommunications operator charges competitors for an access service or facility and the corresponding retail price is not enough to enable an efficient undertaking to achieve a reasonable return on capital employed in the retail market,“ it is clear that this relates to the costs that a competitor is charged by the dominant company for an access service. Since the vertically integrated dominant company does not (similarly) charge itself such

costs, it can be concluded from this wording alone that the competitive perspective is the decisive factor in this sense.

This is also supported by the legal basis for section 26 TKG-E, which states with regard to preventing margin squeezes: “This must not apply for each individual rate; it must, however, be ensured that these rates can be reproduced by efficient competitors of the undertaking with significant market power“ (underscored here only).

This statement is further supported by the system in section 28(2) TKG. On the one hand, the case suspected in para 1 (dumping) is aimed at the domestic perspective of the dominant company, which is not allowed to levy rates for retail customers that are below its long-term incremental costs, including a reasonable return on capital employed. If the case suspected in para 2 (margin squeeze) was also based on internal calculation of the dominant company, excessive redundancies would result.

On the other hand, the case suspected in para 3 (bundling of products in an objectively unreasonable manner explicitly refers to “efficient competitors“. The suspected case of abuse, however, has a direct connection with and thus sort of complements margin squeeze issues. As already demonstrated in the notes on objectively unreasonable bundling as defined by section 28(2) para 3 TKG, a particularly major problem is “mixed bundling“, which poses the risk of anticompetitive discounts being granted on bundle products that are compensated later (when competitors have been eliminated) with excessive prices.¹

To avoid such problems in competition, a major task of the regulatory authority is to ensure that bundled products offered by the dominant company can be reproduced by efficient competitors. It must therefore be checked according to section 28(2) para 3 TKG “whether efficient competitors of the SMP undertaking could offer the bundled product on comparable terms.“ This means that the Federal Network Agency can prohibit “mixed bundling“ if it is not certain that it can be reproduced by efficient competitors. In this case, it must be done from the perspective of an efficient competitor.

Against this background, it would not generally seem plausible to the calculation of the dominating company to be taken as a basis instead of that of an efficient competitor to test for a margin squeeze. For the competitor’s inability to reproduce a bundled product due to the margin squeeze could be addressed under section 28(2) para 3 TKG, but not under para 2, although it is essentially a case of abuse in the form of a margin squeeze. Following this interpretation would, under certain conditions, result in inconsistencies that contradict section 27(2) TKG. Furthermore,

¹ See also the notes published by the Federal Network Agency in August 2005 on objectively unreasonable bundling as defined by section 28(2) para 3 TKG (can be downloaded from the website of the Federal Network Agency at *Sachgebiete* ⇒ *Telekommunikation* ⇒ *Regulierung Telekommunikation* ⇒ *Konsistenzgebot*), page 5.

there is no objective justification for testing for margin squeezes differently for bundled products than for other rates is not obvious and this could prove difficult in practice, since clearly demarcating bundled products can raise a host of other questions.

Ultimately, the interpretation must also consider aspects of consistency with regard to defining resale charges according to section 30(5) TKG. According to this, charges levied during resale shall „be calculated on a retail minus basis to allow an efficient provider of telecommunications services to achieve a reasonable return on capital employed in the retail market.“ (underscored here only). According to the monopolies commission, this regulation is aimed at the business model of an undertaking seeking access, which is why ”the efficiency criterion should also be geared to the cost situation of such an undertaking. Accordingly, the fact that the competitor cannot benefit to the same extent from economies of scale as the incumbent should be taken into account when determining the discount.“²

Assuming that this interpretation of resale charges is used, there would be a substantial risk of inconsistencies if the competition perspective was disregarded in a margin squeeze test, since (as yet) unrealized economies of scale would be taken into account to determine the reseller margin, but not with regard to an alternative network provider that is dependent upon upstream services of the dominant company. Unequal treatment of this kind to the detriment of infrastructure-based providers' competitive options could hardly be justified.

There are thus many reasons for applying the perspective of an efficient competitor when testing a margin squeeze. Apart from the systematic considerations described here and the difficulties likely to be encountered in terms of ensuring consistency particularly in terms of applying section 28(2) para 3, 30(5)TKG, the underlying objective of protecting competition also supports this perspective. This is about maintaining competitiveness by means of an adequate margin between the SMP undertaking's retail customer charges and the alternative network providers' upstream costs. It is not a matter of protecting individual competitors, but systematically promoting sustainable competition on the various markets as defined as a regulatory target in section 2 para 2 TKG.

The monopolies commission is of the same opinion, stating the following in its latest special report:

„The monopolies commission concludes from the regulations specified that it shall be geared to the cost and profit situation of competitors. Cost benefits of DTAG/T-Com, in particular cost benefits resulting from their position as a former monopolist, should not play a part in testing whether an efficient undertaking can achieve a reasonable return on capital

² See also Monopolkommission (Monopolies Commission, Development of Competition in the Telecommunications Sector in 2005: More Dynamics under New Framework Conditions, Special Report 43, Bonn 2005, page 128 f.

employed from the given constellation of access and retail charges. By way of justification, it was pointed out all of the regulations specified are aimed at promoting competition on the retail markets.³

This corresponds to the approach described by the Dutch regulatory authority OPTA together with the national competition authority NMa in its "Price Squeeze Guidelines" published in February 2001. Regarding calculation of the margin between upstream and end customer charges, it reads as follows:

„In calculating the retail increment (this being an increment on top of the network costs enabling efficient providers to realise an acceptable profit) the Commission and the dg-NMa will base themselves on the costs of an efficient alternative provider" (underscored here only).⁴

This argument is also supported by the discussion paper on the application of competition regulations stipulated in Article 82 of the Treaty published by the European Commission in December 2005. As regards the considerations in this paper, it states:

„(...) it may sometimes be necessary in the consumers' interest to also protect competitors that are not (yet) as efficient as the dominant company. Here too the assessment does not (only) compare cost and price of the dominant company but will apply the as efficient competitor test in its specific market context, for instance taking account of economies of scale and scope, learning curve effects or first mover advantages that later entrants can not be expected to match even if they were able to achieve the same production volumes as the dominant company."⁵

2.2 Considerations concerning the application of the efficiency criterion

While the statements made in section 2.1 have shown why margin squeeze tests should generally be geared to efficient competitors, the second step analyses the importance of the efficiency criterion and thus deals with the extent to which cost considerations can differ between an efficient competitor on the one hand and an (efficient) dominant company on the other hand. For this purpose, the definition of the term "efficient competitor" shall be outlined as already specified in the notes to section 28(2) para 3 TKG (section 2.2.1). Subsequently, the main starting points for

³ See also Monopolkommission (German Monopolies Commission, Development of Competition in the Telecommunications Sector in 2005: More Dynamics under New Framework Conditions, Special Report 43, Bonn 2005, page 78 f.

⁴ See also OPTA and NMa: Price Squeeze Guidelines, 28 February 2001, text line 28.

⁵ See also DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses, December 2005, S. 21, text line 67.

deviations between the various perspectives are explained (section 2.2.2) before the consideration of competitor-specific costs and their limits is dealt with (section 2.2.3).

2.2.1 The term “efficient competitor”

The various business models that can be observed on the market are not assessed by the Federal Network Agency, but by the competition, which results in a differentiation between successful and less successful business models. Hence, the term “efficient competitor” cannot be interpreted in the sense of an efficient type of competitor or an efficient business model. Instead, market neutrality requires all business models on the market to be treated equally. Efficient and inefficient competitors are only differentiated on the basis of their productivity and efficiency with the selected business model.

According to section § 28(2) para 2 TKG a margin squeeze cannot be avoided for any competitor but only for efficient companies.. The test does not generally require an assessment of individual undertakings in terms of the level of efficiency achieved, but only an abstract assessment of efficient behaviour. The profile and product range determined is to be used as an expression of the market position.

This means that, in view of avoiding a margin squeeze, it is questionable whether a competitor with business model A (e.g. providers of broadband accesses and Internet access services by line sharing) can be alerted to the general possibility of changing or extending the business model (e.g. by additionally supplying narrowband access and connection services by leasing the subscriber access line).

Following on from this, it should be discussed whether the requirement defined in section 28(2) para 2 TKG is given due consideration if there are any (types of) competitors that are able to reproduce specific rates without getting into a margin squeeze. According to section 27(2) TKG, the respective rate regulatory measures must be checked as to whether they are suitably proportionate to the objectives defined in section 2(2) TKG. This means that the issue of a margin squeeze must be assessed in view of the objective of safeguarding competition based on equal opportunities and promoting sustainable competitive markets. It can, in turn, be concluded that a margin squeeze is not permitted if it conflicts with this objective. But precisely this is to be expected if only individual efficient competitors were able to realize a margin that allows a reasonable return on capital employed to be achieved.

Vice versa, this means that an adequate margin between retail and upstream service charges can only be assumed if this is ensured on a nationwide basis and can be realized by a sufficiently high

number of competitors.⁶ Otherwise, there would be the risk of substantially thwarting the objective of promoting competition and the dominant company being able to evade the existing market forces and the intended competitive pressure by specifically marketing rates that can only be partially reproduced.

This potential threat must be considered particularly critical in wired sectors and the field of telecommunications, since the competition structures are far less stable than in other economic sectors and the vertically integrated incumbent is able to put competitors in a difficult situation by applying specific pricing measures at upstream and retail level. Against this background, comparatively strict standards must be applied to any displacement strategies by means of margin squeezes.

The above statements on nationwide reproducibility must not be taken to mean that a provider operating at nationwide level will be used as a basis for an efficient competitor. The requirement for the rates of the company dominating the market to be reproducible does not directly mean that this must be ensured for each individual business model on a nationwide basis, but only that efficient competitors – based upon various access services - must be able to compete with the operator dominating the market on a nationwide basis. For this regulation does not aim at protecting individual (types of) competitors, but at promoting competition and thus at subjecting the dominating company to competitive control by alternative providers – also in terms of pricing margins.

As such, these notes should not be interpreted to mean that efficient competitors must be able to reproduce retail products offered by the dominant company on a nationwide basis with any business model or based on any upstream service. This incidentally does not apply to every access service the dominant company is required to offer either. For this would mean that the Federal Network Agency would have to check when imposing an access obligation whether companies requiring the respective access service would be able to operate nationwide on this basis. According to section 21(1) sentence 1 TKG an access obligation can be imposed if the development of a sustainable competitive downstream retail market would otherwise be hindered or this development would run counter to the interests of end users. This means, however, that an access obligation can be imposed if competitors are expected to submit offers on this basis (only) in partial market segments and thus contribute to more intense competition. The example of the fully unbundled subscriber line clearly demonstrates that this approach has been successfully implemented since the start of liberalization.

⁶ The note on the requirement of an "adequately high number" of competitors is not intended to lead to the impression that this is a quantity that can be determined more exactly. It shall instead be made clear that only local competition would not adequately take into account the objectives of the Telecommunications Act. With this in mind, it must be ensured that the incumbents' rates can be reproduced on a nationwide basis and by as many competitors as is required to comply with the objectives of promoting competition. Since the question on the required number of competitive undertakings cannot be clearly answered, neither in general nor individually, the quoted stipulation has to be interpreted in a way that it is primarily aimed at the intensity of competition with regard to quality and only informally addresses the quantitative component of competition that is only promoted locally.

The fact that the Federal Network Agency is generally not able to determine the degree of coverage that can be realized by efficient competitors based upon individual access services also supports this approach. This also results from the fact that the question as to how many main distributors can be developed in an economically sustainable manner not only depends on technical but also market-related aspects, such as the development of broadband penetration and the respective competitor's market share.

When imposing a margin squeeze test, nationwide activity should not necessarily be assumed, but rather market-specific conditions considered. This does not mean, however, that the business plans actually implemented by specific competitive undertakings should be taken as a reference. For this could result in circular reasoning – as is sometimes brought forward by market participants. Nevertheless, the calculation should, in view of the legal efficiency consideration, contain findings on which threshold values can be achieved with reference to customer numbers, market shares and traffic volumes to be able to economically establish and operate specific infrastructure elements.

In view of the operationability of this approach, some market participants call for an independent regulatory normative determination of the efficient competitor from the authority. It must, however, be noted in this respect that the attempt to provide a general definition of the term “efficient” company would raise a number of questions. A generally valid definition of an efficient competitor would require normative determinations for which theoretical justification and clear derivation from market trends would seem problematic. On the other hand, it would be difficult to neither remain so abstract that a benefit would not be obvious in terms of operationability nor be so specific that the approach would only be feasible for a limited number of markets and a particular time frame.

As such, it seems problematic to establish a general definition of an efficient undertaking with all its commercial characteristics (such as network size, number of customers) in a regulatory stipulation. It is agreed that the required efficiency must be determined independently of individual company conditions. But this should not be done without referring to real market conditions, since these best reflect efficient conditions of competitive undertakings that can actually be realized

Sometimes it can be necessary for normative directives to be applied to regulatory decisions. However, normative definitions made by the authority generally involve two major problems:

- On the one hand, a very strict determination can require it to be modified at relatively short intervals in view of dynamic market trends.
- On the other hand, longer-term determinations would be far more susceptible to misjudgement, due to uncertainties about future market trends. This, in turn, involves a

substantial risk, since the establishment of long-term sub-optimum regulatory framework conditions may result in distortions of competition as is the case for determinations that are limited to the period that must be covered.

Against this background, there are many indications that normative determinations will be restricted to the foreseeable future because this is the best way of ensuring that the current competitive situation and expected trends are adequately taken into account.

If the decision requires a standard in terms of the assumed extension of the infrastructure, this means that it is less a matter of what an efficient competitor may achieve in the long run and more a question of which investment can actually be expected from an efficient undertaking in the foreseeable or relevant period. If, for example, development of all local loops is conceivable and – under specific framework conditions – economical, but does not appear realistic in the foreseeable future for efficiency reasons, the latter must be taken into consideration when determining the parameters to be applied.

2.2.2 Specific cost and profit situation of an efficient competitor

It can generally be assumed that an efficient undertaking is able to provide its services just as efficiently as the established provider. This indicates that new providers are able to optimize their network and production structures, their organization and their process flows right from the outset with the latest technology available on the market.

The competitive perspective also implies a number of differences compared to the calculation of the established network provider, however. This particularly includes

- competitor-specific costs (e.g. collocation),
- the realization (provisional) of less economies of scale and scope than the dominant company
- disadvantages in terms of learning curve effects and so-called *first mover advantages* of the incumbent.
- higher risks due to the lack of a historically grown customer base and reputation as well as increased capital costs; and
- differences in the customer structure that may affect relevant usage profiles, price flexibilities and average contract durations.

All of the above mentioned aspects raise the question of whether these are inevitable effects resulting from the transition from a monopolistic to a competitive environment or inefficiencies

for which there is no room within the competitive environment. It can be assumed that – apart from access-specific costs – this is mainly a transitional issue, the importance of which will be substantially reduced over the course of time. This applies both to the realization of efficient economies of scale and scope and particularly to learning curve effects and the compensation of *first mover advantages* of the established provider.

The (potential) reputation, customer base and customer structure of former monopolistic undertakings and their competitors should also converge gradually. While new providers were mainly only able to compete for price-sensitive customers willing to change provider after the opening of the market⁷ and had to clearly undercut the prices of the dominant company to compensate the goodwill edge of the incumbent, it can meanwhile be assumed that some of the competitors have also been successful in establishing themselves on the market and attracting customers with a stronger tie. Notwithstanding the fact that some competitor are associated with financially solid and internationally acting undertakings, the risks and problems involved in procurement of capital should have been gradually reduced for other providers with the increasing strengthening of the market position.

In addition to this, competitors have to bear specific costs that did not arise during monopolistic times. These include costs for the required network interconnection with the established provider. Subscriber line network providers have to bear specific costs, such as installation and lease of collocation rooms at the main distributor.⁸ With regard to these factors, it should be pointed out, however, that their importance has been substantially reduced during the implementation of scale profits following increased market penetration.

Specific costs (for example for implementing the interconnection) will indeed arise for infrastructure competitors. Since an efficient undertaking has to hold its own in competition in the long run, it will have to develop strengths of its own, i.e. long-term cost benefits outside the sector of purchased upstream services from the dominant company. A short-term analysis where competitors could be faced with higher costs compared to the reference charges of the SMP undertaking cannot be – from a local point of view – a reasonable justification for raising the end customer charges imposed by the SMP undertaking. If it is geared towards the costs of efficient

⁷ More than 5 years after the opening of the market, only 42% of households and 30% of undertakings had made use of the newly possibility of changing provider in the fixed network (change of subscriber line, Preselection, Call-by-Call), see activity report of the Reg TP 2002 / 2003, page 49.

The monopolies commission also sees differences in terms of costs and profit possibilities between existing monopolistic undertakings and other telecommunications companies that result from the fact that „the customers show a differing tendency to change providers and that customers with little interest to change providers and/or high costs involved have been more faithful to the former monopolistic undertaking, i.e. DTAG/T-Com“, see also German Monopolies Commission, Development of Competition in the Telecommunications Sector in 2005: More Dynamics under New Framework Conditions, Special Report 43, Bonn 2005, page 78 f.

⁸ See also WIK-Consult, a brief expert report on the topic „Consistent rate regulation system in connection with provider (pre-)selection in the local network“, November 2002, page 11.

competitors, the long-term costs must also be taken into account. It can therefore be assumed that (incremental) competitor-specific costs are generally of a temporary nature.

2.2.3 How to consider competitor-specific costs

The next stage deals with conclusions about regulatory treatment of (additional) competitor-specific costs. The extent to which these must be considered when determining margin squeezes must be assessed. It must be taken into account in this connection that considering (incremental) competitor-specific costs tends to widen the gap required between upstream service charges and end customer charges. It follows from this that, in order to avoid a margin squeeze, the dominant company – based on cost-oriented access rates – would have to increase its end customer charges to a level that would be above the costs of efficient service provision.

Such a scenario highlights the fact that applying the regulation discussed here to avoid margin squeezes may require conflicting objectives to be weighed up. The general consideration of the competition perspective justified above takes into account that competition based on equal opportunities is ensured, but could in exceptional cases result in the prohibition of specific rate reduction measures or even to an increase of prices of the dominant company, thus temporarily affecting the interests of the user at least. Since the promotion of sustainable competition-driven markets is associated with positive effects for the overall economy and user benefit in the medium and long-term, the conflicting objectives outlined here are put into perspective. It would, however, ultimately be necessary to make a prognosis of static and dynamic efficiency aspects in the case of doubt. According to this, welfare losses could only be justified from a static aspect following regulatory intervention, to the extent that it could be assumed that these would be very likely overcompensated from a dynamic point of view.

In terms of the regulatory objectives according to section 2(2) para 1, 2 TKG this means that only a short-term impairment of user interests would have to be tolerated when measures to avoid a margin squeeze are applied. It could be assumed that this impairment would be overcompensated by positive effects to be benefit of the user, however, following the deliberate promotion of competition over the course of time. Since uncertainties would be likely in the prognosis, narrow limits are in place for the prohibition of price reduction measures or imposition of a price increase to ensure an adequate margin between upstream service and end customer charges.

This also results from the fact that the dominant company would otherwise make profits due to official decisions that could exceed the extent of a reasonable return on capital employed. These additional profits could be strategically used by the SMP undertaking to finance potential predation activities in other markets. Although subsidized prices can generally be prohibited by

the regulatory authority for SMP undertakings in the case of dumping, it has generally proved beneficial in practice to contain such cross-subsidizing threats at an early stage.

Given the fact outlined here that consideration of competitor-specific costs could result in increased profits for the SMP undertaking and a (short-term) impairment of user interests, it can be concluded that such a procedure requires a very resistant (data) basis. This, in turn, means that the persons lodging a complaint are faced with high demands when submitting an adequately substantiated justification of their abuse suspicion. Alternative providers must furnish proof of any specific differences compared to the calculation of the established provider taken as a reference. This particularly means that they have to furnish proof of those cost components that are not included in the calculation of the established provider, i.e. the so-called market access costs or access-specific costs. The Federal Network Agency will compare the data submitted to determine the extent to which the cost rates of competitors differ from those assumed for the dominant company. In addition, competitors that consider themselves to be threatened by a margin squeeze due to specific (incremental) costs must set out the reasons why it is not reasonable to assume that the disadvantages can be compensated by efficiency advantages.

The perspective of the efficient competitor also implies, after all, that all efficiency potential must be exploited before access-specific costs can be estimated. This means that competitors have to fully disclose and substantiate their calculation, since this is the only way in which the efficient (starting) level can be determined to which access-specific costs can then be added.

As such, the measure for considering the cost disadvantages due to non-existing learning curve effects, insufficient economies of scale and scope and an asymmetrical risk allocation due to the obligation for alternative providers to furnish proof is likely to be very high. For almost 10 years after the total opening of the markets, it is very likely that the calculatory disadvantages for efficient undertakings have become more relative compared to the former monopolistic undertaking and should generally be compensated by the extensive implementation of efficiency potentials. Considering the facts on a nationwide basis, no competitor has been able to establish a similarly extensive infrastructure nor achieve a comparable number of customers as the former monopolistic undertaking. Nevertheless, the development of the competition shows that the competitors were able, at least locally, to achieve significant market shares and thus economically sound economies of scale. This is accompanied in some cases with increasing market awareness and a better reputation, which is demonstrated in particular by similar opportunities to acquire new customers.

The argument that (sub-optimum) economies of scale must be taken into account to protect new undertakings entering the market does not seem very convincing since it applies here just the same as in other economic sectors that competitive disadvantages are quite usual in the beginning and that business plans are often set up with a medium to long-term perspective. As such, the objective

of promoting sustainably competitive-oriented markets cannot be taken to mean that each competitive undertaking will be given the opportunity by regulatory measures to directly imitate each offer of the dominant company without any start-up losses. It is far more important to enable efficient competitors to compete with the incumbent on an equal footing in the long-run.

In addition, it must also be pointed out in this connection that competitor-specific (incremental) costs due to low economies of scale and scope can be considered as long as they cannot be otherwise compensated by efficiency advantages. The costs of the efficient undertaking are the basis for any addition that can be lower than the costs of the former monopolistic undertaking due to optimized process and network structures. This is why it can be assumed, particularly after the realization of substantial learning curve effects and economically sustainable market shares, that no additional costs can be justified for the efficient undertaking compared to the established provider by the argument of having entered the market at a later point in time.

Against this background, the same calculatory rate of interest can generally be assumed for competitors as was determined for the dominant company. This results from the fact that the interest rate granted to the dominant company was not derived from a company-specific interest in view of the return on equity. It is based far more on a long-term analysis of the investment return that can be achieved in the stock markets. In terms of the return on external capital, it can be noted that competitors frequently act as subsidiaries of a financially solid parent company. Parent companies frequently have a comparable credit rating to the former monopolistic undertaking, which results in a similar interest rate on borrowed funds. Charging the same interest for both the dominant company and efficient competitors is therefore feasible.

The justification of other calculation differences, on the other hand, is expected to be submitted in a more substantiated manner. An example of this is the different customer characteristics or user profiles competitors are generally faced with. The monopolies commission points out in this connection that the average turnaround times of end customers with alternative network providers would systematically differ from those with the former monopolistic undertaking. The reason for this is that there is no or only little competition for local loops in rural areas and thus most end customers of Deutsche Telekom AG are not able to change to another provider. On top of this is the fact that most end customers of the established provider continue to use analogue subscriber lines for which there is little competition on the market. On the other hand there is a permanently high level of competition for customers of alternative providers of subscriber lines from both Deutsche Telekom AG and other alternative providers. While the average turnaround time of seven years with the same provider assumed by the Federal Network Agency seems to be quite plausible for Deutsche Telekom AG, this is definitely too long for a competitive environment with

alternative providers as actors according to the monopolies commission. For the margin squeeze test, this means that the costs of the subscriber line would be underestimated for competitors.⁹

These statements again show that the monopolies commission also firmly advocates the consideration of competitor-specific costs when testing margin squeezes. If it is generally not possible for efficient competitors to amortize non-recurring provisioning and takeover costs over a period that is just as long as for the incumbent, then the reproducibility of a Deutsche Telekom AG rate is questioned by its competitors if such aspects cannot be used in the calculation when determining the required margin between upstream service and end customer charges. The differences in cost and profit options possibilities resulting from the asymmetry between the former monopolistic undertaking and its (efficient) competitors that can ultimately be considered in specific margin squeeze tests remains to be clarified individually following a precise evaluation of the information submitted. A decision about the abuse of rate measures by a dominant company can only be made on the basis of an assessment of whether the evidence submitted is adequate to furnish proof of a margin squeeze and an assessment of the potential consequences for the competition and consumer interests.

As a result, it can be assumed that (incremental) competitor-specific costs are generally of a temporary nature. Therefore, the (long-term) costs of the efficient competitor should generally not be higher than those of the dominant company

2.3 Relation between suspected cases as defined by section 28(2) para 1 and 2 TKG

Firstly, it can be noted that both suspected cases are intended to specify abuse on the part of the SMP undertaking that is aimed at substantially affecting the competitiveness of other providers through (predatory) pricing measures. While, in this case, the focus is generally on the market development effects of anti-competitive discounts, the suspected cases of a margin squeeze reflect a sector-specific feature since this predation potential results from the vertical integration of the dominant company. Once the access services provided by the former monopolistic undertaking that are required by alternative providers have been subjected to sector-specific rates regulation under the cost principle of efficient provisioning of services during the liberalization of the telecommunications market, the pricing margins on the upstream side – at least in the narrowband area – were mostly limited for the dominant company. As a result both suspected cases actually have strong similarities, since they both deal mainly with the question of whether the competition is substantially affected by rates measures of the dominant company in the retail market without reasonable justification.

⁹ See also Monopolkommission (German Monopolies Commission, Development of Competition in the Telecommunications Sector in 2005: Dynamics under New Framework Conditions, Special Report 43, Bonn 2005, page 77

There are also material differences between both cases, which will be explained in the following to provide a clearer definition of the topic dealt with here. A differentiation must first be made between retail markets on which the same undertaking has substantial market power and dominates the market in terms of upstream services and retail markets on which alternative providers can use competitively provided upstream services (section 2.3.1). It must then be discussed how the intervention thresholds between both suspected cases differ. This addresses the question of the relation between the long run incremental costs as the relevant price floor defined in section 28(2) para 1 TKG, and the costs of efficient service provision (by a competitor) as the main starting point according to section 28(2) para 2 TKG (section 2.3.2). In this regard, it must also be discussed whether both standards have to be applied to the same parameter or if a differentiation is required (section 2.3.3). Finally, it must be analyzed with regard to the upstream service charges taken as a basis what the consequences are of margin squeeze tests being based on the perspective of an efficient competitor, but the dumping test on the internal calculation of the dominant company (section 2.3.4). There is also a difference in that the dumping test as part of sector-specific rates regulation has to be geared towards the local perspective of the dominant company, whereas the margin squeeze test can only be applied when competitors are both facing competition on the end user prices of the SMP undertaking and are partly dependent on the provision of its upstream services. Under these conditions, competitors run the risk of a margin squeeze. Therefore, the competition perspective has to be taken here to ensure the competitiveness of an efficient competitor against the vertically integrated SMP undertaking on retail level. In terms of any possible resulting differences between the reviews of the cases suspected according to section 28(2) para 1 and 2 TKG, reference is made to the descriptions given in section 2.2.

2.3.1 Differentiation between retail services based on regulated or competitively provided upstream services

The two suspected cases to be defined here also differ in that the dumping test during sector-specific regulation of rates can generally be applied to all rates, whereas a margin squeeze test can only be performed when the undertaking dominating the market on retail level is also an SMP undertaking in view of upstream services. Otherwise, if the relevant upstream services are fully offered in functioning competition structures, potential abuse cannot be assumed for upstream services and the corresponding charges.

This means that a margin squeeze has to be considered a special case of predatory pricing strategies, which requires a vertically integrated dominant company. In these cases, it can be usually be assumed that the relevant upstream services (and/or parts thereof) are also (potentially) subject to sector-specific regulation. The main of avoiding a margin squeeze is thus to keep the margin between (regulated) upstream and the corresponding end customer charges sufficiently large to achieve a reasonable return on capital. On the other hand, the dumping test is aimed

particularly at retail services that are mainly based upon competitively provided upstream products, where the risk of abuse is focused on retail level.

2.3.2 Different intervention thresholds

Another difference between the cases suspected in section 28(2) para 1 and 2 TKG are the differently defined intervention thresholds. Whereas the long run incremental costs (including a reasonable return on capital employed) of the dominant company are the main reference quantity for the dumping test, a margin squeeze should be performed regularly if the end customer charge of the SMP undertaking falls short of the costs of the efficient provision of services (KeL). This is due to the fact that it should not be possible for efficient competitors in these cases to compete profitably with the vertically integrated SMP undertaking based upon the upstream services for which the charges are regulated according to KeL standard.¹⁰

This also reflects the specific approach of the margin squeeze test, which substantially differs from the concept of long run incremental costs as the competitive price floor. The consideration of long run incremental costs including a reasonable return on capital employed is designed to determine that individual rates or partial services of a multi-product undertakings are free of subsidies. This requires the charges for each individual service to correspond at least to the long run incremental costs and the earnings from the subset analyzed to the overall costs. This ensures that the subset of services analyzed is not subsidized by other sectors and that there is no cross-subsidization within the subset, since at least the incremental costs are covered by each individual service. Applying this concept also provides scope for breaking up overhead costs.¹¹

Ensuring an adequate margin between upstream and end customer charges requires the overhead costs charged to determine an upstream service product regulated according to the KeL standard to also be considered when determining the price floor, since the calculation of an efficient undertaking that depends on upstream services of the dominant company also includes these overhead costs. This difference is only of relevance, however, when both test concepts are applied to individual rates. However, if the so-called modified incremental costs test outlined above is applied to a subset of services, from which the earnings must cover their total costs, i.e. also their overhead costs, the differentiation made for the intervention threshold described here also loses its importance. This may at best result from the fact that - as discussed in detail in section 2.2 - the margin squeeze test is based upon the competition perspective and thus on other costs than in the incremental costs test, which is geared towards the national perspective and the resulting calculation of the dominant company.

¹⁰ This applies especially if the relevant upstream service charges are not regulated at all or only according to the abuse standard, since in either case they are generally not lower than the costs of the efficient provision of services.

¹¹ See Groebel, in Säcker (editor): Berlin Comment on the Telecommunications Act 2006, section 28, marginal note 42f.

2.3.3 Relevant reference point

Another means of differentiating between the two cases suspected could be the different reference points. This results in the question of whether the dumping or margin squeeze test should refer to entire rates or individual rate elements (e.g. time intervals). Questions also arise in this connection about the treatment of budget and (partial) lump sum rates as well as whether the individual tests should cover individual charge measures or a multiple number of rates.

Notwithstanding the fact that an analysis of these issues is included in chapter 4, it can generally be assumed that this should result in a differentiation between the dumping test and the margin squeeze test. Since both cases are intended to identify substantial impairment to competition and consequently exclude this with regulatory measures, it is highly favourable to select the reference point that takes this objective optimally into account. It is not apparent why - in the same matter - the dumping accusation was based on specific time frames or budgets, but an overall customer-related consideration was chosen for the margin squeeze test. A uniform, economically sound application procedure should be established for this purpose, in particular given the consistency requirement.

2.3.4 Differentiation of the upstream service charges to be taken as a basis depending on the chosen perspective

Finally, the question arises as to what extent a differentiation occurs for the upstream service charges to be taken as a basis for the test so that a margin squeeze test is geared towards the perspective of an efficient competitor, while the dumping test is based on the internal calculation of the dominant company. In terms of the margin squeeze test, a clear answer to this question can be given under the requirement outlined above for regulated access charges, since the calculation of an efficient competitor that is dependent upon the corresponding upstream services is based directly upon the approved access charge. A dumping test according to section 28(2) para 1 TKG on the other hand raises the question of the extent to which the charges for a service covers its long run incremental costs including a reasonable return on capital employed. This consideration typically addresses the calculation of the dominant company so that it would be feasible to discuss making the costs recurrent that the network provider asserts as (efficient) costs.

2.4 Possible competitive effects of margin squeezes

According to section 28 TKG, a margin squeeze is considered grounds for suspecting substantial impairment of the competitiveness of other undertakings on a telecommunications market. This matter is characterized by economic, technical and historic features of the sector. A decisive factor

for the occurrence of margin squeezes is the transition from monopolistic to competitive market conditions that involve a complex relationship between established providers and new providers entering the market. Contrary to other economic sectors, a specific competitive situation has originated with a vertically integrated undertaking on one side that has substantial market power in the field of upstream services and on most of the retail markets. The other side consists of various types of competitors, almost all of whom depend on the upstream services of the dominant company, albeit in different ways.

This constellation, which was similarly encountered all over Europe after the liberalization of the telecommunications markets, results in the former monopolistic undertaking competing on retail level with precisely those undertakings that require upstream services from it. This means that the dominant company – unlike other sectors – can abuse its market position not only with isolated measures on retail customer level but in various ways. In addition to the possibility of ousting competitors from the market or keeping them from entering the market with retail customer prices below the long run incremental costs, there is also the option of charging higher rates for upstream services from their competitors than (implicitly) from their own sales department. There are generally three different combinations of upstream and end customer charges that may result in a margin squeeze:

- (a) The dominant company charges an increased rate for upstream services from its competitors and calculates its retail prices in a cost-oriented manner,
- (b) the dominant company offers its upstream services at an efficient rate but lowers its retail prices to a level that does not cover costs,
- (c) the vertically integrated dominant company combines both of the above behaviour patterns, which correspond to cross-subsidization of the retail business through upstream services.

Contrary to other sectors, this is a situation in which the vertically integrated provider is generally able to make use of its market power both on retail customer and on upstream service level in a way that would constitute a margin squeeze for its competitors. This risk is substantially less in practice due to the charge regulation for major access services. If a regulatory access obligation has been imposed for the relevant upstream service product and the charge is regulated according to the cost standard of an efficient provision of services, options (a) and (c) are no longer open to the dominant company. Potential abuse is restricted to variant (b) in these cases.

In addition, an effective upstream service regulation in a sector that is marked by high sunk costs substantially helps make any predatory price strategies seem unprofitable from the outset. The fact that alternative providers can always enter the market based upon regulated upstream services and accepting relatively little irreversibility means that the costs that would accrue to the dominant

company due to prices that do not cover costs during dumping practices could not easily be amortized later. In addition, it must be taken into account that competitors have made considerable investment in recent years. In the case of a market exit, this investment cannot usually be used otherwise and therefore constitutes sunk costs. The risk of sunk costs can delay market exits for providers with high market entry costs and thus make successful predatory competition more difficult.

Nevertheless, the risk of predatory pricing strategies cannot be excluded by an effective entry regulation. It is in the nature of things that the regulation of upstream service on the one hand represents a crucial basis for competition and opens up competition options for alternative providers. On the other hand, however, it only offers conditional protection against anti-competitive practices of the dominant provider. It is true that the incentives for market predation strategies are reduced by a functional entry regulation for the dominant company. However, it is not only the required investment and costs for infrastructural measures that matter for the level of market entry barriers, but also endogenous sunk costs of market entry as well as its relation to any profits that can potentially be achieved. If this relation is unfavourable, for example because consumers react rather hesitantly to the market entry due to the costs of changing provider and because those undertakings already on the market can quickly adjust their price strategies, which affects new competitors' chances of success.

The relevance of these considerations for the telecommunications sector is obvious. The telecommunications sector relies very heavily on advertising, which means that endogenous market entry costs play an important role. Costs arising for customers changing provider are also of substantial importance for the competitive environment.¹² In view of the fact that prices have clearly fallen since the opening of the markets, the narrow margins – related to the endogenous market entry costs – can be considered market entry barriers in a way. In this respect, particular consideration must be given to the fact that competitors of the former monopolistic undertaking can only gain market shares in the price-sensitive customer segment. This means that the standard charges are less relevant than the incumbent's optional offers as reference prices. To compensate disadvantages in terms of reputation and branding, most new providers are forced to offer significantly lower prices than the reference prices of the established provider.

The likelihood of predatory strategies also depends on company financing issues. The European Commission states the following:

¹² See monopolies commission (2001): Development in Competition at Posts and Telecommunications 2001: Uncertainty and Standstill, Special Report 33, text line 26 – 29.

“However, predation is certainly not impossible, for instance in case of multiple markets where reputation effects are important and in case the dominant company is less dependent on external financing than (potential) entrants.”¹³

The result is that an efficient regulation of upstream services – in the narrowband area with the obligation to (pre-)select providers – can reduce the risk of price abuse, but alone, i.e. without an accompanying effective control of anti-competitive strategies by the dominant company such as margin squeezes, they are inadequate for permanently ensuring that competitive structures that have not been adequately protected continue to exist and subsequently the objective of competition based on equal opportunities.

It must be emphasized in this connection that the objective of margin squeeze tests according to section 28 TKG does not call for general protection of the *competitor* but of the *competition*. It is mainly a question of protecting efficient competitive undertakings that can help ensure sustainable competition structures on the telecommunications markets from the risks of a margin squeeze.

In this respect, the European Commission stipulates the following with regard to possible market predation effects:

„The concern is to prevent exclusionary conduct of the dominant firm which is likely to limit the remaining competitive constraints on the dominant company, including entry of newcomers, so as to avoid that consumers are harmed. This means that it is competition, and not competitors as such, that is to be protected.”¹⁴

The Commission makes it clear that market predation effects even exist if competitors are not forced to exit the market completely by the behaviour of the dominant company but are only hindered in their competitiveness:

„By foreclosure is meant that actual or potential competitors are completely or partially denied profitable access to a market. Foreclosure may discourage entry or expansion of rivals or encourage their exit. Foreclosure thus can be found even if the foreclosed rivals are not forced to exit the market: it is sufficient that the rivals are disadvantaged and consequently led to compete less aggressively. Rivals may be disadvantaged where the

¹³ DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses, December 2005, page 29, text line 97.

¹⁴ See DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses, December 2005, page 17, text line 54.

dominant company is able to directly raise rivals' costs or reduce demand for the rivals' products."¹⁵

3. Discussion of various test approaches to determine the costs of an efficient competitor

As described in section 2.1 the perspective of an efficient competitor is generally relevant when testing a margin squeeze as defined by section 28(2) para 2 TKG. This means that it is necessary to make an assessment of the cost situation of an efficient competitor for which various systematic approaches are generally a possibility. Two different methods have played a role in the discussion so far: On the one hand the comparative analysis particularly called for by Deutsche Telekom AG that is based on competitive offers on the same market (see section 3.1); on the other hand the application of a compensation rule (e.g. IC+25 %) with reference to relevant upstream service charges that have already been applied by the Federal Network Agency in the past during the approval obligation of end customer charges of the dominant company (see section 3.2). The fundamentals of both approaches will be presented in the following and discussed afterwards.

3.1 Reference to competitive offers on the same market

In view of testing for abusive price discounts and margin squeezes, focusing on price comparisons first is sometimes suggested. Then the question must be raised as to whether there are other providers in Germany in addition to the dominating undertaking offering a corresponding product at comparable prices. If this is the case, no further analysis is required.

Accordingly, Deutsche Telekom AG has regularly submitted a comparison with offers of alternative providers as part of the rates measures indicated according to section 39(3) TKG and concluded that the lower rates of their competitors would directly refute any presumption of potential abuse.

However, this argumentation disregards the strong interdependencies between the prices of the dominant company and its competitors on the same market. For this reason, there is also substantial doubt about the significance of a comparison with alternative offers on the same market. The following section looks at the considerations that are decisive for this assessment (section 3.1.1) and deals with the practical problems of price comparisons (section 3.1.2). It will then be discussed which consequences are to be drawn from the legal priority for comparative market analyses and whether the method discussed here is indeed a comparative market concept as

¹⁵ See DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses, December 2005, page 18, text line 58.

defined by section 35(1) para 1 TKG (section 3.1.3). Prerequisites will finally be derived from the specific framework conditions and objectives of the notification procedure described in section 3.1.4 under which a comparison can be performed during the transparency review. Section 3.1.5 deals with the reliability of the possibilities available to the dominant company for reacting to lower offers from competitors.

3.1.1 Interdependencies between the prices of dominant companies and new providers

It can generally be assumed that alternative providers can only be successful on a retail market that lacks effective competition if they (significantly) undercut the prices of the dominant company. This applies even more given a fully homogenous service and increased (subjective) costs incurring to the customer when changing the provider. From the competitor point of view, the price of the established provider thus represents a benchmark in the sense of an exogenous parameter that is of decisive importance for their own sales strategy.

On this basis, it becomes obvious that a clear interpretation of competitor prices turns out to be problematic. In particular the fact that competitors have to follow the logic of price undercutting does not mean that this can be done while covering costs or without tolerating a margin squeeze. It is far more likely that new providers are or will be ready during the phase of market development to accept (start-up) losses.

It can, however, be argued that competitors have to at least break even in the medium and long term. This assumption does not eliminate the problem, however, that those companies that have turned out to be the most favourable providers at a specific time during the rate comparison can be in a situation in which they try to tie customers with offers that do not cover their costs.

Regardless of the fact that the question about the relevant reference point for a margin squeeze test (individual charge or combined rates) will not be discussed in detail until section 4.3, it should be pointed out here that the method of a comparative analysis hardly seems suitable for a portfolio analysis. Deutsche Telekom AG has always submitted comparative values in the past with reference to individual rate measures. The significance of the lowest offers for individual services is obviously very limited by the fact that even in the event that the evaluated companies always cover their entire costs, a margin squeeze with reference to individual services or rates cannot be excluded. This, in turn, makes it obvious that a situation may even occur in the long run in which the lowest offers for individual services are not calculated to cover costs – despite profitable providers. It is far more likely for rate-related temporary deficits to occur in the competition that have to be compensated with contribution margins from other products or product combinations or with long-term strategies through future pricing scope based on increased customer loyalty.

It can be concluded from this that a separate consideration of individual rate measures of competitors during a comparative analysis is generally not useful, because any mixed calculations of the competitors are not taken into account. If these providers are not SMP companies, however, such mixed calculations are neither unusual nor anti-competitive and should therefore not be objected to. Irrespective of whether such mixed calculations are of relevance to the matter discussed in this paper, it must be noted that comparative analyses do not seem appropriate for generating any indications of margin squeezes with reference to specific service portfolios. This would require comprehensive quantity structures and weighting schemes and a number of questions would be raised in a dynamic competitive environment that could hardly be solved by means of an operationable comparison.

The opinion held here that the competitors of the dominant company are "forced" by economic aspects to undercut their prices would involve the risk of the dominant company "pushing" its competitors if the abuse were mainly assessed based on comparison with national competitor offers. For then the dominant company would generally be able to reproduce any price cut made by its competitors and thus "force" them to lower their prices to a level at which breaking even is no longer ensured and a margin squeeze would exist.

If it were sufficient according to the above argumentation for a single provider to offer a specific product at comparable prices, this would ultimately make it possible for the established provider to model itself on individual (introductory) offers and offer prices that are lower than those of the majority or a significant proportion of its competitors.

3.1.2 Problematic nature of a "qualified" rate comparison in view of complex rate structures and bundle practices

Irrespective of the general doubts expressed here about the significance of a comparison with alternative offers on the same market, the actual application of the method discussed here would raise a number of questions. It would turn out to be problematic because of bundling practices that can be increasingly observed on the market. Since the lowest telephone offers are frequently part of packages at present and also include broadband subscriber and Internet access services, comparability with isolated telephone rates is only ensured to a very limited extent.

The documents submitted by Deutsche Telekom AG during its rate notification for „Call XXL Fulltime“ can be used as an evidence here according to which comparable services were offered by numerous competitors at less than half the price. A cursory test of the data submitted had already shown that these were usually conditioned offers that were by no means suitable for direct comparability. They included prices which were linked to the acquisition of higher-grade line options, the purchase of additional (broadband) services or the payment of a significantly

increased basic charge. If however – as is sometimes the case – the basic charge already includes an off-peak flat rate and the price given only relates to the delta from the full flat rate, comparing the products is out of the question.

These considerations highlight the fact that the validation of the data submitted by the dominant company and their evaluation seems to require a relatively large effort so that the feasibility of a "qualified" comparison as addressed here must be doubted even during an ex-post procedure.

In addition, the rate notification of „XXL Fulltime“ by Deutsche Telekom AG revealed another problem that illustrates the complexity of such rate comparisons. If specific services are not offered by competitors in the same way as the established provider, i.e. unconditioned, unbundled and in connection with various types of access, it has to be asked what the comparison is to be based upon. In this case, for example, a comparative list was submitted by Deutsche Telekom AG according to which the prices of a variety of alternative offers were (clearly in some cases) lower than its own.

By modifying the question and asking from which provider a customer can obtain the total package consisting of an (analogue) connection and a telephony flat rate, a totally different view would have resulted, because the favourable competitive telephony flat rates could generally only be obtained in connection with additional services or higher-grade types of access.

This example also shows the problems that are associated with the preparation of a sound rate comparison and that – apart from other aspects – there is much to be said for dealing the instrument of a comparative analysis, at least in the form discussed herein, with utmost caution.

Intermediate result

Since the prices charged by new providers depend to a large extent on those of the dominant company and there is thus uncertainty about the relation between prices and the costs they are based upon, it is extremely difficult to draw sound conclusions from a comparison with competitor offers on the same market as far as covering costs or margin squeezes are concerned and consequently abuse of rate measures by the established provider. Apart from the general concerns described above, performing a qualified rate comparison in a competitive environment influenced by an increasing bundling of products turns out to be highly complex. Nevertheless, comparing rates should not be categorically excluded if market peculiarities regarding an abuse review are taken into account.

3.1.3 Importance of various methods of ex-post abuse control

As part of the follow-up rates regulation according to the standards stipulated in section 28 TKG, the Federal Network Agency can proceed in accordance with section 38(2) sentence 3 TKG as defined by section 33 TKG if an investigation according to the comparative market principle as defined by section 35(1) para 1 TKG is not possible. From this, a primacy of the comparative market analysis can be derived with reference to the method to be applied. This explicitly refers to the price cap control in the legal basis, however. (section 26(1) para 1 TKG-E). In addition, it is pointed out that a possible dumping accusation can also be made by investigating the costs. The legal basis does not include any firm statements in terms of the methods to be applied for margin squeeze tests.

In this respect, the view could be taken that it is legally stipulated to first focus on price comparisons before performing a price dumping or margin squeeze test

The following must be stated in this respect:

On the one hand, price comparisons as submitted by Deutsche Telekom AG cannot be characterized as comparative market analyses as defined by section 35(1) para 1 TKG. It is stipulated there that the authorities „refer, for the purpose of comparison, to the prices of undertakings that offer like services in comparable competitive markets“. Prices from alternative providers on the same market are not addressed here and are, according to the statements made in section 3.1.1. and 3.1.2, only partially suitable under both theoretical and practical aspects for deriving any substantial conclusions.

On the other hand, the regulation should not be interpreted such that a comparative market analysis takes priority over the price dumping and margin squeeze tests, but is rather intended to start by referring to the comparative market principle when testing the abuse standards and cases suspected in section 28 TKG. As the preamble shows, this might apply particularly to the investigation of price cap abuse.

The application of comparative market analyses for margin squeeze tests is generally problematic, however. Because it is necessary to refer to the costs of an efficient competitor in this case, international retail markets should hardly be taken into account, since the upstream costs might differ from local conditions at international level in terms of amount and structure. In addition, it would hardly be possible to take into account the peculiarities of foreign retail markets while allowing for the respective competitive situation.

To take into account the general legal primacy of the comparative market principle in terms of margin squeeze tests, two main options remain: On the one hand international comparative values

could be taken into account when determining suitable incremental rates for sales costs, for example. On the other hand it seems conceivable to consider the compensation rule method that has been applied so far as a type of comparative market analysis. After all, the cost analysis of the efficient competitive undertaking is mainly based upon the charges imposed in the field of upstream services. Since the upstream service markets are competitive markets and the network capacity offered there mainly corresponds to that also offered to retail customers, the application of the „IC+25 % approach“ could fulfil the legal prioritization of comparative market analyses.

3.1.4 Consideration of comparative analyses during the transparency review

The above statements have made it clear that a comparison with competitor offers on the same market is considered problematic during ex post abuse control. The decisive arguments generally also concern the application of this approach during the transparency review. Nevertheless, the question arises as to how to proceed in cases where a cost analysis is not possible due to a lack of information, such as the costs of non-regulated product components (see also section 3.2.3 for details), and there is therefore no alternative to a comparative market analysis.

On this basis, no valid statements can be made about the existence of a margin squeeze within the time frame of 2 weeks given for the notification procedure. In order to make at least an initial assessment in terms of abuse of the notified rate in these cases, reference can be made to (national and international) competitor offers under specific conditions. This requires, on the one hand, the ability to actually compare the competitor offers referred to terms of the prerequisites associated with the rate. On the other hand, the information must refer to several offers of competitors that are typical for the market situation and not only temporarily valid.

In spite of the general concerns shown, this procedure seems to be useful for the notification procedure as the soundness of a rate measure must not be certified after the two-week period, but only any obvious abuse identified. For a prohibition according to section 38(1) sentence 2 TKG non-compliance of the standard set forth in section 28 TKG must be obvious at the time of the decision. If this is not the case, the rate cannot be prohibited during the two-week transparency review. The Federal Network Agency has the possibility, however, of automatically initiating an ex post abuse review directly after the transparency review if there are doubts after the transparency review on the non-abuse of the rate; during this review the rate can be thoroughly reviewed and prohibited, if appropriate. This also includes the problems addressed by the commentators. On the one hand, it is difficult to withdraw rates that have already been offered on the market because the contracts would have to be reprocessed. On the other hand, the dominant position might already have been abused while the rate was already on the market. This problem should not be overrated, however, if the rate was offered on the market for just short period.

Whereas the statements made in sections 3.1.1. and 3.1.2 show why it is problematic to draw sound conclusions from lower competitor offers on the same market in terms of non-existence of a margin squeeze, it is quite plausible on the other hand to assess the lack of competitor offers at comparable prices as an indication of abuse. The rationality outlined above clearly indicates that competitors of the dominant company will try to (significantly) undercut the reference price of the established provider, if possible.

3.1.5 Possible reactions by the SMP undertaking to competitor offers

It is sometimes claimed that an SMP undertaking must be allowed under anti-trust standards to react to price cuts of its competitors with price cuts of its own irrespective of its competitors' specific cost situation. It must be stated in this connection that comparable lower market offers cannot result in a review of the cases suspected defined by section 28(2) being dispensed with right from the outset. This means that a margin squeeze test must be performed if there are some indications that are not based on comparable competitive offers on the same market according to the statements made in section 3.1.1 to 3.1.3. Notwithstanding this fact, the law provides the opportunity to objectively justify behaviour defined by section 28(1) para 2 TKG (substantial impairment of the competitiveness of other undertakings) and para 3 (discrimination). Lower (not only temporarily) competitor offers may be taken into account here as a conceivable starting point to prove an objective justification of this kind.

This indicates that it must generally be possible for the SMP undertaking to protect its own business interests if they are threatened by competitors. This behavioural scope for the SMP undertaking is limited by the fact, however, that the undertaking is not allowed to expand its dominant position and abuse its market power. Similar arguments are used by the European Court of Justice and the European Commission in the case of Wanadoo:

„It should be recalled that, according to established case-law, although the fact that an undertaking is in a dominant position cannot deprive it of the right to protect its own commercial interests if they are attacked and such an undertaking must be allowed the right to take such reasonable steps as it deems appropriate to protect such interests, such behaviour cannot be countenanced if its actual purpose is to strengthen this dominant position and abuse it.” (EuG, decision taken on 30 Jan 2007, T-340/03 – France Télécom/Kommission, marginal note 185)

“Whilst it is true that the dominant operator is not strictly speaking prohibited from aligning its prices on those of competitors, this option is not open to it where it would result in its not recovering the costs of the service in question.” (European Commission, Decision taken on 16 Jul 2003, COMP/38.233 – Wanadoo Interactive, marginal note 315)

Finally it should be pointed out that the promotion of competition based on equal opportunities requires competitors, in their relation to SMP undertakings, to have all possibilities including lower rates in order to be successful on the market compared to the SMP undertaking. In addition, users whose interests must also be protected according to section 2(2) TKG do not have a long-term interest in a ruinous price struggle at the end of which only the SMP company remains on the market, which could then raise the rates again.

3.2 Reference to approved rates for upstream services

As described in section 3.1, there are strong interdependencies between the retail market prices of new providers and those of the SMP undertaking. As such, valid statements about the relationship between prices and costs can hardly be made, which is why it is principally difficult to draw valid conclusions from a comparison of competitor offers on the same market in terms of covering costs and margin squeezes and thus abuse of rates measures by the established provider.

Therefore, it is generally necessary to pursue an alternative approach in view of margin squeeze tests. A procedure should generally be favoured where the costs of an efficient competitor are determined, as far as possible, on the basis of (approved) rates for upstream services. This is also supported by the fact that the rates for access services that alternative providers depend upon are directly included in their calculation. On the other hand, the approved rates for partial services that are determined by the competitors themselves (such as transit services on wide-area network level) represent a good approximation for its efficient costs because they are determined according to the KeL standard.

This approach has been applied a number of times in the past with the so-called „IC+25 % rule“ for reviewing abusive price discounts in the case of optional offers for connection services provided by the dominant company. With reference to its provision, several questions have been raised that will be presented briefly in the following and discussed against the background of the new legal regulations. A difference must be made here between issues about the upstream services to be taken as a basis (section 3.2.1) and questions about the amount of incremental costs or incremental rates as well as their determination (section 3.2.2). Finally, section 3.2.3 deals with the limits of a cost analysis based upon upstream service charges. This particularly includes the problems of product bundles, which also include non-regulated components as well as specific restrictions during the transparency review.

3.2.1 Upstream services to be taken as a basis

First, it should be clarified which upstream service products are taken as a basis and are best suited to reflect the cost situation of the efficient competitor. A decision has been made in the field of narrowband access and subscriber services during various procedures that will be explained in sections 3.2.1.1 and 3.2.1.2. It turns out, however, that the execution of margin squeeze tests in the broadband area has proved much more complex due to a variety of co-existing upstream services (section 3.2.1.3).

3.2.1.1 Narrowband access services

Calculations to determine an access cost deficit have been made with regard to narrowband access services in a ruling chamber procedure that primarily serves to determine the amount of an access cost contribution.¹⁶ In addition to the subscriber line, three other cost items have to be charged, i.e. recurring and non-recurring product and offer costs resulting from pro-rata provisioning and termination costs as well as (average) costs for a switching unit.

3.2.1.2 Narrowband subscriber services

When reviewing optional rates of the dominant provider, the so-called „IC+25 % rule“ has been regularly applied in recent years. The price floor for retail offers is derived on the basis of approved interconnection charges. In this approach, the network utilization costs of a subscriber service are approximated by means of the interconnection charges determined according to the cost standard of the efficient service provision and then an extra charge of 25% is imposed. This extra charge serve is intended to take into account the efficient sales costs, i.e. the costs for product management, advertisement / acquisition and customer care, including the cost for collection / billing and del credere.¹⁷

Proper approximation to the efficient costs of network utilization is achieved by means of an element-based determination of interconnection charges. However, the costs for various call types cannot be determined directly. On the one hand this is due to the fact that Deutsche Telekom AG makes a distinction between regional calls and long-distance calls in the case of domestic calls, whereas competitors frequently differentiate between local and long-distance calls. On the other hand, the way in which the network is utilized depends on the traffic management system in place. A local call, for example, can be represented by two local subscriber services in terms of the network utilization used as a basis, if two subscribers are connected at the same network node on

¹⁶ See also Decision BK 4a-03-009 / E 19.02.03 as of 29 Apr 2003, page 26.

¹⁷ See also Decision BK 2-1-99/035c as of 16 Feb 2000, pages 20f.

the lowest network level.¹⁸ A local call between two different districts of a large city can be roughly described as a local and a „single transit“ service.

There are all the more uncertainties about efficient network utilization as regards regional and long-distance calls. Depending on the traffic management, calls that go beyond the borders of a local area network can be mapped as a local and „double transit“ or a local and „single transit“ service. In an extreme case, two local services can be the best approximation. On the other hand, it can be argued that long-distance calls that are not made from or to a local service area in which there is also a trunk exchange can best be described by adding „single transit“ and „double transit“.¹⁹

A more differentiated calculation based on these considerations would mean first determining what share of local and regional calls remains within a local area service and is thus only based on two subscriber services of rate I (local) and what share of local calls (particularly in bigger cities) exceeds the boundaries of a local service area. Connections where a call is made between two local service areas of the same local area network (at least from a schematic perspective) via a switching node located in a third local service area would also need to be considered. In these cases the connection would be based on two services of rate II (single transit). In addition, there are regional calls that exceed the boundaries of a basic service area and thus include a service of rate III (double transit).

A differentiated analysis of long-distance calls seems to be just as complex, since it is of importance for schematized network use if the source or sink of the call are located in a local service area in which a trunk exchange is also located. This only applies to 23 of the 475 local service areas. However, these are usually local service areas with customer numbers that are well above average.

It becomes obvious here that a detailed differentiation for all connections would entail high requirements in terms of the data about the exact traffic distribution to be taken as basis. If the Federal Network Agency has no appropriate information available it seems to be reasonable to continue applying an approximation for margin squeeze tests where the network utilization costs for local and regional calls are calculated by adding a „local“ and „single transit“ charge and for long-distance calls by adding a „local“ and „double transit“ charge.

¹⁸ This does not refer to the actual network structure of the established or alternative provider but to an efficient network structure for which 474 subscriber exchanges are taken as a basis according to the maximum number of interconnection points.

¹⁹ It must be taken into account, however, that calls from each local service area must be terminated at a „double transit“ rate. This consideration suggests that each long-distance call is based upon a „local“ and a „double transit“ service. A termination service from a local area service without trunk exchange would be a type of „triple transit“. Since this service does not exist as an individual rate, however, it can be assumed that this is reflected by the charge for a „double transit“ service.

This procedure is a simplified approach as opposed to determining the precise network costs. This, however, appears to be quite justified given the obvious uncertainties and the additional regulatory effort required otherwise. This is also supported by the fact that the interconnection charges determined according to the KeL standard only serve as an approximation for the calculation of an efficient competitor during the margin squeeze test with sound information about the actual costs not having been available.

This ultimately also applied to date to the question of the specific incremental costs of an efficient competitor, which should essentially be taken into account in the calculation, but only when adequately substantiated data is available. See also the comments made in section 2.2.3.

3.2.1.3 Broadband access and subscriber services

Compared to the narrowband area the following aspects must be taken into account for the margin squeeze analysis in the broadband area:

Unlike as is the case for narrowband products, the same broadband service can be provided on the basis of various upstream services that cover different value creation levels.

Broadband upstream subscriber services can require a very high level of own added value by the entity requesting upstream services, such as unbundled access to the subscriber line and line sharing; contrary to the narrowband area, an alternative access product is offered at the same time with access resale, which only provides little added value without the requirement of investment in own infrastructure. In addition, bit stream access products are offered in the broadband area. These broadband upstream services include access and wholesale services for which there are no analogue services in the narrowband area. Bit stream access products require greater infrastructural value added by the requesting company than access resale and less value added than subscriber lines or line sharing. Depending on which business model the test is based upon (e.g. subscriber lines or resale), the cost share of the retail product that is not included in the upstream service product varies significantly. For this reason and also given the fact that only part of the upstream service products are regulated in the broadband market, it is assumed only in rare cases that the entire upstream share is continuously calculated bottom up based upon the costs of efficient service provision. This means that additional surveying and testing effort is required as well as determining sales costs. Additional parts of the production costs of the (non-regulated) service must frequently be determined (e.g. DSLAM/collocation costs, fault clearing costs etc. with line sharing).

In the case of broadband wholesale services, where several options with a differing level of value added can be obtained as in the case of access products, price models differ from those in the

narrowband area. Rates for wholesale services are not charged according to minutes in the broadband area but according to capacity used. Wholesale products can also include quantity discounts and regional price differences. Margin squeeze tests based upon such upstream products do not only require comprehensive cost analysis but consumer profiles or average consumers (bandwidths used, user behaviour, regional coverage) must also be defined to be able to determine the rates for upstream services.

Regulated and non-regulated upstream service products co-exist in the broadband area. Subscriber lines and line sharing are regulated products within local loops. Ex-ante regulation was imposed for one product (IP bit stream access) among the bit stream access products. In the case of ATM bit stream access, charges are reviewed ex post. The non-regulated upstream service product Online Connect is offered alongside the wholesale product ZISP in the wholesale area. Apart from that, providers of broadband services can – contrary to the narrowband area – make use of a third non-regulated wholesale product: ISP GATE, which comprises IP backbone services in addition to the concentrator network services included in ZISP. A margin squeeze test becomes very complex if several business models are included in the analysis the calculation of which is based upon regulated and non-regulated upstream service products.

The margin squeeze test acquires an additional dimension in the broadband area due to the fact that there is a considerably greater variety of broadband products, particularly for broadband services in the retail market than there is in the narrowband area. Apart from different access products, there are different services such as Internet access, VoIP, Video on Demand, IPTV. The rates for these products can be determined in three different ways: minute-based, volume-based or as a flat rate. In addition to a decision about the representative product portfolio, a decision about the appropriate rates portfolio must also be taken, which requires a comprehensive analysis of the market conditions.

It can be concluded that the margin squeeze analysis in the broadband area is frequently of a multi-dimensional nature.

- Several upstream products comprising different levels of value creation are available for the same services.
- Different price models that must be based on usage profiles exist for broadband services.
- Regulated and non-regulated upstream products co-exist.
- A high number of retail services exist in the broadband area.

As such, it seems important to develop the most general indications possible for using the term “efficient competitor” given the multi-dimensional nature of the margin squeeze test for broadband services.

3.2.2 Discussion of extra charges or extra rates for sales costs

Following the question of the upstream services to be taken as a basis for the approximation of competitor costs, it must now be discussed how the overall costs of an efficient competitor can be derived. It must first be noted that the constellations can differ considerably. As outlined above, it is possible for narrowband subscriber services to map the required network services completely through regulated upstream products, while the share of regulated upstream products in the broadband area is markedly reduced. Product line sharing is indeed an upstream service that is relevant for the provision of DSL lines. But to calculate the total costs of an efficient provider, additional components (e.g. DSLAM, collocation costs, costs for network-sided splitters) must be taken into account. Only once a comparable basis has been established by estimating the costs for all infrastructural service components can the question of a proper extra charge for approximating the required sales costs be raised.

Since a final analysis of the exact amount of an appropriate extra charge or extra rate cannot be performed based on the general considerations in this paper, only some of the central aspects are outlined in the following. The question arises as to whether lump sum extra rates such as the so-called „IC+25 % rule“ are an appropriate approximation for the relevant sales costs or if absolute costs rates should be favoured. This depends particularly on the assessment of the extent to which the sales effort generally correlates with the value of the marketed (telecommunications) service. In addition, the question has arisen in a specific case in the past of whether it is necessary to adapt the extra rate following the reduction of interconnection charges or if similar productivity progress rates must be taken as a basis for both sectors.

In addition, the question arises as to differentiating the extra rate according to the nature of the service in question. It could be argued for example that marketing and in particular advertisement for new products would regularly be associated with significantly higher costs than for established products. This leads on to the question of the extent to which the efficient sales costs of specific products are modified over the course of time and depending on the market phase and whether a dynamic consideration would therefore be better than a time-related consideration.

The argument that market-specific publicity expenses could only be taken into consideration in an itemized calculation and not for a lump sum approach cannot be denied, but it can also be used as an argument against a case-related calculation. Determining the costs of the efficient competitor does not have to be based on the costs actually incurred – even if the competitor furnished proof of

these. It is far more important to consider the situation in terms of efficiency, which raises the question, however, of how efficient publicity expenses could be determined in a market-specific and market phase-specific manner and at what intervals they would have to be modified if the marketing intensity was subjected to substantial changes in dynamically developing markets over the course of time.

It cannot be directly concluded from the problems outlined here that market phase-related differentiations for the publicity expenses to be included in the calculation of the efficient competitor should not be taken into consideration. They indicate however, that it would hardly be possible to provide an exact product and time-related definition of efficient publicity expenses and that an approach independent of market phases with a long-term and more general perspective should be favoured. This does not mean, however, that the real market conditions or the market environment in which all competitors operate can be taken into account with an approach of this kind.

Finally, the synergies estimated to be resulting for the sales sector can be taken into account with regard to the reproducibility of specific pricing measures by efficient competitors. It can generally be assumed that the average costs reached for sales measures to be achieved can differ depending upon the product portfolio used as a basis. Nonetheless, it cannot be generally assumed that *only* one wholesale and retail provider with maximum economies of scale and scope can be considered efficient, since this would not take account of the different business models and competitive structures that are actually encountered on the market. Depending on the customer group addressed, competitors do have various options for organizing their sales activities, such as converting to electronic billing.

There are, in theory, various ways of determining efficient sales costs, the implementation of which would help make the approach more precise compared to lump sum approaches. Since this, however, requires substantial effort, the monopolies commission rightly points out cost-benefit aspects must also be taken into account in this connection. Its latest special report deals with its concerns about the „IC+25 % rule“, but then states the following;

„A cost review relating to individual cases would generally be preferable; this, however, would require an exact knowledge of the costs on the individual value creation levels. Alternatively, a top-down approach would be conceivable that calculates the costs of individual value creation levels based upon the overall costs of the company with the help of analytic cost models. The monopolies commission does not underestimate, however, that both types of cost determination related to individual cases are associated with substantial regulatory efforts. The benefit of a lump sum regulation as in the case of the IC+25% rule is that the regulation costs are substantially lower compared to a cost review based on individual cases. Against this background, the monopolies commission calls for cost-benefit

aspects to be taken into account when imposing the consistency requirement. It may indeed result in the benefits of a cost review based individual cases being lower than their costs. A lump sum regulation should be favoured in this case.²⁰

3.2.3 Limits of a cost analysis based upon upstream service charges

Irrespective of the fact that an approach should be advocated for margin squeeze tests in which the costs of an efficient competitor are determined based upon (approved) upstream service charges, the limits of such an approach and any associated practical problems must be highlighted. These particularly result from the fact that product bundle offers of dominant companies increasingly include components that are not subject to regulation individually. No information about the upstream service costs and usage characteristics is regularly available to the regulating authority for these services. It should be pointed out in this respect that the authorities also have to rely on cost information provided by competitors for package offers with non-regulated components in the case of ex post procedures. Even if the appropriate data is submitted, it must, however, be assumed that strict limits are imposed for a firm calculation of efficient provisioning costs of non-regulated products and product components (see also section 4.4).

These limits to operationability must be generally conceded, but they are only of relevance if the deadlines for any reviews to be performed are subject to special restrictions. As such, it must be pointed out that in view of the review depth – due to the 2-week deadline applicable to the notification procedure – clearly less stringent standards are set for the transparency review than for an ex-post review. Thus, there are hardly any possibilities for comprehensive cost analysis. A plausibility check could be performed at best in this connection. Since requesting specific data within the given 2-week deadline is generally out of the question, their validity mainly depends on the quality of the information already available at the time of notification.

Particular problems crop up with product bundles comprising products that cannot be characterized as telecommunications services. An example of this is broadband entertainment products such as TV broadcasts that are distributed as part of so-called „Triple Play“ offers in connection with telecommunication services. The principle also applies to product bundles of this kind that they can be used by the dominant company to strengthen its market power in local loops. But the actual possibilities of a margin squeeze test, for example due to a lack of information about cost structures used as a basis for IPTV offers are very limited.

²⁰ See also Monopolkommission (German Monopolies Commission, Development of Competition in the Telecommunications Sector in 2005: More Dynamics under New Framework Conditions, Special Report 43, Bonn 2005, page 100 f.

4. Starting point for margin squeeze tests

The question of an appropriate starting point is of prime importance for performing a margin squeeze test. Various alternatives can be taken into account in this connection: The test can refer to individual rate elements such as specific time intervals or lump sum components (e.g. so-called „minute budgets“) but also to full rates (section 4.1); the question must be raised here as to what extent rates must be considered entities if they comprise products that must be assigned to different markets, e.g. access and subscriber services (section 4.2).

In addition, the question arises of whether the test should cover individual rates or a combination of rates. If the latter is favoured, the criteria according to which an appropriate selection of combinations could be taken would then have to be discussed. Finally, the extent to which margin squeeze tests can be applied in view of bundled offers that comprise both regulated and non-regulated retail services must be discussed. This is directly bound up with the basic question of what is a useful procedure in the case of product bundles that have substantial market power only with individual components.

4.1 Application to individual time intervals or (connection) rates as a whole

Cost coverage reviews for optional rates have closely focused on individual time intervals in the past. They assumed that the retail prices for each interval had an adequate margin from the corresponding upstream service charges. A procedure like this no longer seems adequate against the background of changing rate structures with an increasing proportion of lump sum elements. The increased complexity in the rate structure on the telecommunications markets instead requires an approach that focuses less on individual rate elements than on the rate as a whole, since this allows 2-part rates in particular to be adequately taken into account.

This means that monthly fixed charges that are associated with reduced usage-dependent charges must be taken into account for margin squeeze tests. In the case of lump sum charges this is inevitable. But this procedure ultimately has no alternative either in the case of partial lump sum charges. Determining a margin squeeze should hinge on whether the margin between the charges to be paid by the customer and the upstream service charges taken as a basis is adequate to achieve a reasonable return on capital employed.

Since the charges to be paid by a customer per service unit used in the case of (partial) lump sum charges depend, however, on usage behaviour, this approach is bound up with the question of the relevant usage profile to be used as a basis. In view of the function of the margin squeeze test as an indicator of impairment of the competitiveness of other undertakings, it does not appear to be useful to focus on (extreme) usage parameters of individual customers. Despite the associated

forecast instabilities, it is still useful to estimate the average usage of the customer (group) addressed. For it must be generally assumed that, given the same rate structure, usage of (potential) customers of competitors does not differ substantially on average from the usage of customers of the established provider, meaning that the reproducibility of a specific rates measure is ensured by taking an average analysis as a basis.²¹

This means that the test, irrespective of any practical problems involved, mainly refers to expected usage characteristics of an average customer. This does not only apply to (partial) lump sum charges, but also so-called „budget rates“. The existence of a margin squeeze must not be checked on the basis of individual rates such as the „budget“ rate - the entire average usage profile of the customer must be taken into consideration.

This should, however, be qualified by saying that this usage-related analysis of a total (connection) rate (including fixed and variable charge components) makes no statement about the extent to which a rate has to be considered in its entirety if it comprises products attributed to different markets. The following section looks at this aspect.

4.2 Application to individual markets or even to rates as a whole across several markets

The question as to whether margin squeeze tests should be restricted to individual markets or applied to rates across various markets cannot be answered in general, but only following consideration of the prevailing competitive conditions. In this connection the efficient competitor(s) to be taken as a reference is (are) given central importance as illustrated briefly in the following.

Since the central issue in a margin squeeze test is the reproducibility of specific rates by efficient competitors, the starting point of margin squeeze tests mainly depends on the relevant business models of efficient competitors as well. Since the different business models established on the market cannot be assessed due to the market neutrality required, it is frequently necessary to include various competitor types in analyses. For the narrowband area, this currently means with regard to the fact that alternative subscriber network operators, for example, cannot exert the same competitive pressure on a nationwide basis as defined by section 2(2) para 2 TKG as interconnection network operator can that a (connection) rate offer of the dominant company must be reproducible not only by subscriber network operators but also by interconnection network operators.²² This, in turn, means that a combined analysis of access and subscriber services cannot

²¹ If proof is furnished in individual cases, however, that the customers of efficient competitors have a structurally deviating usage profile, this would have to be taken into account in a margin squeeze test.

²² With reference to structural reproducibility by other network operators of the rate families currently marketed by Deutsche Telekom AG, see also the notes published by the Federal Network Agency in August 2005 on objectively unreasonable bundling

currently be considered adequate because a margin squeeze test could only be performed on the basis of a mixed calculation of both market segments. This would only be appropriate, however, if only the business model of the subscriber network operator were taken as a reference. However, as long as major importance is attributed to interconnection network operators in view of ensuring sustainable competitive markets on a nationwide basis, these must be taken into consideration in terms of the concept of the efficient competitor and must be ensured that there is no margin squeeze with regard to their business model, as would be the case if cross-subsidization of connection charges occurred due to excessive connection charges in a mixed calculation.

The reverse case, where reduced connection charges are covered by additional gross margins in the interconnection sector, appears rather uncritical in terms of potential margin squeezes, because the interconnection network operators would not be directly affected by this and the alternative subscriber network operators would also be generally able – assuming similar usage profiles of their customers – to apply a mixed calculation. As a result, no efficient (type of) competitor would be directly affected by a margin squeeze.

Similar could be argued for broadband access and subscriber services. For as long as efficient competitors used as a reference for testing a combined T-Online offer would also be able to use a mixed calculation for access and subscriber services, it would seem highly feasible to consider it the relevant reference point for a margin squeeze test as well if broadband access and subscriber services can be attributed to different markets.²³

These three examples may illustrate why no general statement can be made about the appropriate reference point, but why the specific competitive conditions must be taken into account when determining it to ensure purposeful application of margin squeeze tests.

In this connection, reference is sometimes made to the fact that a strictly market-related margin squeeze test would also correspond to the practice of the EU Commission in its TAL decision dated 21 May 2003 against DTAG (COMP/C-1/37.451, Official Gazette EU 2003, No. L 263, page 9). The Commission stipulates as follows:

„DT forces its competitors that are interested in ordering unbundled local loops in order to offer access services to its customers, to offset its losses on access services out of higher revenue on telephone calls, as DT itself does. But in recent years call charges have fallen substantially in Germany, so that competitors often have no realistic possibility of offsetting one price against another.“ (Text line 103)

as defined by section 28(2) para 3 TKG (can be downloaded from the website of the Federal Network Agency at *Sachgebiete* ⇒ *Telekommunikation* ⇒ *Regulierung Telekommunikation* ⇒ *Konsistenzgebot*), page 10 f.

²³ Aspects of lacking operationability addressed in section 4.3 could, however, argue against this.

In addition, the Commission considered the arguments of DTAG not convincing, „as such offsetting has clearly not allowed the majority of the complainants to cover their costs or offered them the prospect of profits“ (Text line 183).

Irrespective of the fact that the above decision of the Commission includes indications that the local loop should be analysed separately during margin squeeze tests, the text passages quoted show that the Commission, too, thought about the question of the extent to which competitors are able to imitate DTAG’s mixed calculation of. This procedure has obviously not been rejected for methodical reasons. The Commission instead performed an approximation that led, in material terms, to the result that such a mixed calculation would often not have allowed competitors a cost-covering calculation under the conditions at the time. It was obviously only decided on the basis of this specific price development not to deal with this argument in more detail.²⁴ It can be concluded that the Commission does not confine itself to a narrow view, but also (alongside at least) takes the reproducibility of combined rates from access and subscriber services into account.

In addition, it must be taken into account that the Commission started its examination at a time when there was substantially reduced competition and the competitors’ calculation options were still more difficult to assess. It cannot automatically be concluded from the fact that mixed calculations were not very common at that time that such a restrictive application of margin squeeze tests must be required based on current market conditions. The government memorandum on section 28 TKG, according to which it must be ensured that efficient competitors of SMP undertakings can reproduce its combined rates without running a deficit, supports the fact that a less narrow understanding of reproducibility used as a basis (see also following section 4.3)

4.3 Application of individual rates of combined rates (within a market)

The next step is to consider whether margin squeezes must refer to individual rates or to combined rates. This discussion is based upon the wording in the preamble that stipulates in view of avoiding margin squeezes:

“This must not apply for each individual rate; it must, however, be ensured that these rates can be reproduced by efficient competitors of the undertaking with significant market power without running a deficit“ (underscored here only).

In addition, individual cases argue that this is also supported by the wording of section 28(2) para 2 TKG according to which „an efficient undertaking shall be enabled to achieve a reasonable

²⁴ For these considerations, the Commission – as documented in footnote 101 – explicitly referred to the development of retail prices for subscriber services described in the annual report of 2001 prepared by RegTP. If the Commission wanted to confine its test only to a comparison of subscriber charges on upstream and retail level, a reference to the reduced call rates would not have been useful.

return on capital employed in the retail market“ (underscored here only). This means that an adequate margin must be ensured not for each individual rate, but that the possibility of a reasonable return on investment shall be ensured on the retail market.

This is contradicted, however, by the wording of section 28(2) para2 TKG, which is based on „the margin between the price the (...) charges competitors for an access service and the corresponding retail price“ (underscored here only). If the lawmaker had wanted to address all upstream and retail prices, this could easily have been done using the plural form. As such, however, it must be assumed that the margin between individual upstream and retail prices was meant here.

This is also supported by the fact that this suspected case is specifically anchored. For abuse by an SMP undertaking with the intent of predation is not generally done by dropping their charges below break even or having too low a margin to the corresponding upstream service prices, but by implementing individual rates measures that affect the competitiveness of efficient competitors. In view of the overall portfolio, however, it must generally be assumed that the dominant company will always realize an adequate margin. This is supported by the option of realizing drastically increased margins with customer (groups) with a relatively low desire to change provider.

It is therefore obvious that the determination will most probably be unsuccessful based on a comprehensive combination of rates. In addition, performing a margin squeeze test for a combination of a variety of different rates hardly seems feasible due to the data basis required and the fact that it is unclear which conclusions would have to be drawn if a single rate with relative little competitive importance resulted in a margin squeeze in a comprehensive combination of rates. Would, in this case, only the most recent rate have to be prohibited or the one contributing most to the a margin squeeze. Both aspects, i.e. the actual inefficiency of considering all rates and the lack of operationability, clearly indicate, in terms of the intended purpose, that operationability should be interpreted such that its application does not conflict with difficulties that can hardly be overcome.

The considerations presented here generally favour an analysis of individual rates, but also allow an opening for combined rates if, on the one hand, the operationability of margin squeeze tests is not called into question and, on the other hand, the charges to be taken as a reference can also be offered by all efficient competitors in combination.

The joint analysis of different connection types can be considered an example for this kind of combination of rates. Since the required calculations are not made any more difficult by using the mixed calculation as a basis given the low number of connection variations and competitors are able to gain at least as many ISDN customers as the established provider, the criteria derived here can be considered met in this case. In addition, the wording of the law does not argue against this procedure if it is based on *one* access service, because the different connection types are mainly

based on the access to the subscriber line even if this access service is technically offered in several variations.

Another example for considering combined rates during margin squeeze tests is the joint analysis of regular and special offers. This is significant if the regular rate includes collecting provision charges, which is generally done to a far lesser extent in practice due to the great importance so-called promotional rates, especially with regard to offers by the dominant company. Taking only regular rates into account would not be reasonable in this case, since it would result in an excessive margin between upstream and retail prices. The decisive factor for the mixed calculation in this example would generally be the extent to which efficient competitors are able to generate the corresponding provision charges from their customers.

4.4 Application to product bundles from regulated and non-regulated services

The application of margin squeeze tests to product bundles that comprise regulated and non-regulated services raises several general and practical questions. A test according to section 28(2) para 2 TKG is based on an adequate margin between the price the dominant operator of a public telecommunications network charges its competitors for an access service and the corresponding retail price. If individual components of a package offer are based on competitively provided upstream services, however, which are not even provided by the operator of a public telecommunications network (e.g. terminal units, hardware), this provision obviously cannot be directly applied to product bundles from regulated and non-regulated services.

According to section 28(2) para 3 of the Telecommunications Act, however, abuse has to be presumed as defined by section 28(1) para 2 TKG if the company offers include product bundling in an objectively unreasonable manner. To find out if this is the case, it must be checked whether the product bundles can also be offered by efficient competitors of the SMP company at comparable prices. Since this explicitly refer to a competitive offer at comparable prices, this test not only deals with the question of structurally unjustified bundling, but is also a question of whether product bundles of the dominant company can be reproduced by efficient competitors in terms of their pricing. According to the current state of knowledge, the requirement for an access obligation cannot be based solely upon section 28(2) para 3 TKG, i.e. services cannot always require corresponding upstream services. In addition, the basic theory above that a competitor must generally achieve at least the cost level of the dominant company in the long run must also be taken into account.

The notes published in August 2005 by the Federal Network Agency on objectively unreasonable bundling as defined by section 28(2) para 3 TKG differentiate between one-sided and mixed

bundling.²⁵ Mixed bundling is of particular importance in the context dealt with here, since it is true that product A and B are also offered separately in these cases, but the price of the bundle offer AB is lower than the price that has to be paid when ordering both products individually. This means that a price discount is granted for mixed bundling for which it must be checked according to section 28(2) para 3 TKG whether this discount can also be granted to the same extent by efficient competitors without becoming unprofitable. If this is not the case, it has to be assumed that market development effects are associated with the marketing of such a package offer, which can give grounds for suspecting abuse.

It is obvious here that no margin squeeze test in the narrower sense of section 28(2) para 2 TKG has to be applied to bundle offers that consist of regulated and non-regulated services, but that the reproducibility of corresponding package offers must be reviewed by efficient competitors, including the terms and conditions of the offer, according to section 28(2) para 3 TKG, i.e. particularly in view of pricing. The reason for this, on the other hand, is that there would otherwise be a risk of transferring market power from an area without any effective competition into an area with higher levels of competition and, on the other hand, that bundling and a lack of competitive reproducibility could be used by the dominant company to defend its dominant position in the SMP market.²⁶ It can be concluded that, according to section 28(2) para 3 TKG, each product bundle that consists of (regulated, if appropriate) components belonging to a market for which a dominant position has been determined, can be checked (at least) during the follow up rates control to see whether reproducibility by efficient competitors is ensured.

This approach could be objected to on the grounds that only such retail prices will be subjected to regulation for which substantial market power has been determined. All other services are not restricted in terms of pricing with the result that regulatory control would have to be restricted to testing whether the price for the package offer covers the total amount of charges of regulated services included. So, if bundle offer X includes the services A, B and C from which only services A and B are subject to regulation because of substantial market power, while there is effective competition for service C (including any upstream services it is based upon), abuse cannot be suspected if the price of the product bundle X corresponds at least to the total amount of individual prices for services A and B. Adding product C free of charge cannot be objected to because this is a service that is not subject to regulation or any restrictions in terms of pricing.

But these considerations ignore any impairment of competition that might arise as a result. The customer demanding the product bundle as a whole is less interested in the question of which

²⁵ See also the notes published by the Federal Network Agency in August 2005 on objectively unreasonable bundling as defined by section 28(2) para 3 TKG (can be downloaded from the website of the Federal Network Agency at http://www.bundesnetzagentur.de/enid/00685bec6f6c300f3147189db4d00a47,0/Regulierung_Telekommunikation/Konsistenzgebot_pg.html), page 3f.

²⁶ See *Revised ERG Common Position on the approach to appropriate remedies in the ECNS regulatory framework* as of May 2006, page 32f, as well as the notes published by the Federal Network Agency in August 2005 on objectively unreasonable bundling as defined by section 28(2) para 3 TKG, page 6.

service components are discounted, but rather in the total price for the package offer. If this price cannot be reproduced by an efficient customer, however, this constitutes objectively unreasonable bundling if the price of the bundle offer actually reflects the regulated components, but not the (efficient) costs of the non-regulated service components. To counteract the risk of consolidating or transferring market power between areas with different levels of competition, the price of a package offer must be compared with the entire underlying costs of an effective competitor. This corresponds to a margin squeeze test in the wider sense, which generally also includes the costs of upstream services that are not charged by the dominant company, but can be of central importance for the reproducibility of the product bundle.

The demand by competitors for regulated and non-regulated product components to be treated equally cannot be easily met, since this would extend regulation to areas that do not have to be regulated due to prevailing market conditions. Care must be taken, however, to ensure that regulation of the regulated product components is not undermined by bundling and market power is not transferred or consolidated. This can be done by making sure that the product bundle of the dominant company can be reproduced by efficient competitors as a whole. It is not necessary and also not reasonable to subject the non-regulated product components to regulation separately. The company should be responsible for the price calculation of the non-regulated components – including individual non-regulated components in the product bundle – and for unbundling any retail offers in terms of the non-regulated components as long as the prices can be reproduced as a whole.

This results in the regulatory problem, however, that the Federal Network Agency is not aware of the costs for such non-regulated upstream services in advance. It is true that it is generally possible to analyze the costs of non-regulated products. But this would mean reviewing whether the expenditure required for this would be proportionate to removing any potential impairment of the competition in individual cases. It is generally the case that the risk of transferring market power declines with a growing share (in terms of value) of non-regulated bundle components, whereas the expenditure for testing tends to increase. This, in turn, means that particularly with a high number of bundle components subject to regulation, the relation between the potential transfer of market power and the resulting test expenditure would make intensive testing of abusive behaviour feasible in suspected cases.

5. Summarizing conclusions

This paper is aimed at discussing the central issues that result in connection with the test of margin squeezes as defined by section 28(2) para 2 TKG from the Federal Network Agency's point of view. The study focuses on aspects of fundamental importance. In addition, there are a number of

other issues that could not be discussed in detail here and that need to be addressed separately. For example, this includes specific issues in terms of avoiding margin squeezes when determining resale prices, assessing introductory pricing strategies and dealing with companies that have substantial power in an upstream market, but not on a retail market.

Irrespective of this, the main aspects of margin squeeze tests have been discussed above and the following core statements derived.

1. The interpretation of section § 28(2) para 2 TKG according to which abuse is suspected if the margin between the rate that the dominant company charges its competitors for an access service and the corresponding retail price is inadequate to enable an efficient undertaking to achieve a reasonable return on capital employed in the retail market, must be based on an efficient competitor. When justifying the competitive perspective to be generally used, the following must be emphasized:
 - Only competitors that compete both with the retail prices of the dominant company and rely on its upstream services at the same time run the risk of getting into a margin squeeze,
 - The vertically integrated dominant company must not charge itself upstream costs in the same way as it does its competitors,
 - The preamble stipulates: “This must not necessarily apply to each individual rate; it must, however, be ensured that these rates can be reproduced by efficient competitors of the undertaking with significant market power“ (underscored here only),
 - It can be concluded from the context of the regulations quoted that it must mainly be based on the cost situation of competitors.

2. The various business models that can be observed on the market are not assessed by the Federal Network Agency, but by the competition, which results in a differentiation between successful and less successful business models. Hence, the term ”efficient competitor“ cannot be interpreted in the sense of an efficient business model.

In view of the objective of ensuring competition based on equal opportunities and promoting sustainable competitive markets, pricing is prohibited if efficient competitors would only be able to realize a margin locally that allows a reasonable return on the capital employed to be achieved. More importantly, an adequate margin between retail and upstream prices can only be assumed if these are available on a nationwide basis and can be realized by an adequate number of competitors – with the latter being understood rather in terms of a qualitative measure for maintaining or creating the legally intended competition potential (see also footnote 6). This does not mean, however, that the rates of the dominant company must be reproducible for each individual business model, but only that efficient

competitors – based upon various access services - have to be able to compete with the provider dominating the market on a nationwide basis.

3. It can generally be assumed that an efficient competitor is able to provide its services just as efficiently as the established provider in the long run. If competitors with their own infrastructure also purchase upstream services from the operator of a public telecommunications network with substantial market power, the long-term overall costs should not exceed the costs of the established operator, because otherwise competitors could not survive permanently on the market. As such, it can generally be assumed that specific competitor costs such as the realization of (temporary) lower economies of scale and scope than the dominant company, collocation costs and any differences in the customer structure have to be compensated in another way.

A short-term analysis according to which competitors could be faced with higher costs compared to the reference charges of the SMP undertaking cannot be – from a local point of view – a reasonable justification for raising the end customer charges of the SMP undertaking. Where the costs of the efficient competitors are taken as a basis, long-term costs must also be considered. It is true that section 28(2) para 2 TKG – contrary to section 28(2) para 1 TKG - does not explicitly include the term „long-term“, but a uniform assessment standard should be used for efficiency, namely the long-term perspective or dynamics.

It can therefore be assumed that (additional) competitor-specific costs are generally of a temporary nature. Therefore, the (long-term) costs of the efficient competitor should generally not be higher than those of the dominant undertaking

4. Since the prices charged by new providers depend to a large extent on those of the dominant company and there is thus uncertainty about the relation between prices and the costs they are based upon, it is extremely difficult to draw sound conclusions from a comparison with competitor offers on the same market as far as covering costs or margin squeezes are concerned and consequently abuse of rate measures by the established provider. Apart from the general concerns described above, performing a qualified comparative market analysis in a competitive environment influenced by an increasing bundling of products turns out to be highly complex.

When performing margin squeeze tests, a procedure should generally be favoured where the costs of an efficient competitor are determined, as far as possible, on the basis of (approved) rates for upstream services. This is also supported by the fact that the rates for access services that alternative providers depend upon are directly included in their calculation. On the other hand, the approved rates for those partial services that are determined by the

competitors themselves (such as transit services on wide-area network level) represent a good approximation for its efficient costs because they are determined according to the KeL standard. This procedure seems to be fraught with comparatively small practical problems in the narrowband area in view of existing upstream products. Additional considerations regarding plausibility are frequently required beyond the analysis of regulated upstream products in the broadband area with its often highly complex retail and upstream products and due to the co-existence of regulated and non-regulated upstream products.

Irrespective of the associated practical problems, a margin squeeze test must be performed if there are indications that, according to the above statements, cannot be based on similar competitive offers on the same market. Notwithstanding this fact, the law allows approaches as defined by section 28(1) para 2 and 3 TKG to be justified objectively. Lower (not only temporarily) competitor offers may be taken into account here as a conceivable starting point to prove an objective justification of this kind.

5. While, in the past, testing was sometimes performed closely based on individual time intervals (for example separately according to peak and off-peak rates), such a procedure no longer seems appropriate for margin squeeze tests against the background of dynamically changing rate structures with an increasing proportion of lump sum elements. They should instead be based on individual rate elements rather than on the whole rate because this is the only way of taking 2-part rates into account. Testing should focus mainly on the expected user characteristics of a future average customer. This does not only apply to (partial) lump sum charges, but also so-called „budget rates. The existence of a margin squeeze must not be checked on the basis of individual rates such as the „budget“ rate - the customer's average usage profile must be taken into consideration with regard to the entire rate.

6. The question as to whether margin squeeze tests should be restricted to individual markets or applied to rates across various markets cannot be answered in general, but only following consideration of the prevailing competitive conditions. For central importance is attached to the efficient competitor used as a reference in this respect. Since the central issue in a margin squeeze test is the reproducibility of specific rates by efficient competitors, the starting point of margin squeeze tests mainly depends on the relevant business models of efficient competitors as well.

Both legal and economic considerations generally favour an analysis of individual rates, but also allow an opening for combined rates if, on the one hand, the operationability of margin squeeze tests is not called into question and, on the other hand, the charges to be taken as a reference can also be offered by all efficient competitors in combination. The joint analysis of different (narrowband) connection types can be considered an example for this kind of combination of rates.

It cannot be assumed, however, that the regulated company can require competitors to offer particular combined services on the market in order to avoid margin squeezes.

7. As regards product bundles consisting of both regulated and non-regulated services, the extent to which market power could be transferred or consolidated must first be examined. A margin squeeze test according to section 28(2) para 2 TKG cannot be easily performed in these cases because the market power of the SMP undertaking does not apply to all upstream services on which the package offer is based. With regard to the issue of objectively unreasonable bundling, it must be checked, however, whether the product bundles can also be offered by efficient competitors of the SMP company at comparable prices.. This determination, which addresses the difficult nature of a transfer or consolidation of market power by way of bundling is clearly aimed at making the prices of bundle offers reproducible. Where no other information is available, it must first be checked whether the non-regulated package components cover the costs arising for the dominant company.

However, the regulating authority often does not have information on corresponding upstream services and usage characteristics for these services, which is why narrow limits are set for a dedicated calculation of efficient costs for providing unregulated products or product components. The two-week deadline means that this applies in particular to the transparency review for which considerably less stringent standards are set than for an ex-post review. This is why cases where a cost analysis cannot be performed due to a lack of information, a comparative analysis can be performed as part of the notification procedure. Conclusive statements about the non-existence of a margin squeeze cannot be derived from this. But plausible conclusions can be drawn on this basis in accordance with the prerequisites described above with regard to clarifying a case of obvious abuse with a planned rates measure within the prescribed 2-week period.