DEUTSCHE TELEKOM'S POSITION

ON

ERG DRAFT COMMON POSITION

ON GEOGRAPHIC ASPECTS OF MARKET ANALYSIS

(DEFINITION AND REMEDIES)

Introduction

Deutsche Telekom welcomes the initiative of the European Regulators Group to assess the increasingly important topic of geographic aspects of market analysis. For today's stage of telecommunications markets development, the approach of delineating markets at the sub-national level marks an important step in reducing regulation to its necessary minimum.

As pointed out by the ERG, market definition is not an end in itself but the first step in a chain of analysis to determine whether ex-ante regulation is (still) required or not. In this respect, this Common Position is a valuable step towards a more targeted and thus better regulatory approach, contributing to the overall aim of phasing out ex-ante regulation over time and governing the sector by means of general competition law only.

The approaches by OfCom in the UK and RTR in Austria have shown two examples of applicatory cases on geographic assessment within the market analysis procedure. From Deutsche Telekom's point of view, geographic aspects play an important role for the upcoming market analysis on market 5 (wholesale broadband access) in competitive markets like Germany.

For example, competition in telecommunications in Germany is affected by strong presence of regional access network operators. There are more than 30, covering the densely populated regions and, in some cases, rural areas, along with a couple of nationwide operators such as Arcor or Versatel.
Since 1998, regulation in Germany was intended to foster LLU-based competition. One of the results is the booming of local loop unbundling:

- Since 2005 the number of ULLs has risen from 3.1 million lines up to 6.4 million in the end of 2007.
- The total growth in ULLs continues: An increase of 1.3 million lines in 2005, 1.4 million in 2006 and even 1.7 million in 2007!
- Unlike other EU Member States, in Germany, less than 150,000 lines are based on carrier line sharing. The majority of ULLs are fully unbundled.

Besides this, fully independent infrastructures like broadband cable, satellite etc. reached 1.1 million lines at the end of 2007, and continues to grow. According to BNetzA, alternative operators gained a market share of more than 50%, largely based on LLU on the retail level for broadband.

In most EU-Countries, wholesale products for competitors were based on resale in the beginning and later on bitstream. In the last three years, Member States such as France and the UK shifted as well their regulatory focus on fostering LLU-competition. Since then, LLU-based competition has been growing remarkably within these countries.

OfCom now implemented a geographic segmentation of market 5, taking into account the fast developing market 4. So if the UK is ripe for such an approach, the implementation of geographic aspects is reasonable in market 5 in Germany.

We agree with the ERG that the strongest argument to differentiate regulation geographically can probably be made in regions where the established operator competes with one (or many) alternative networks. In those areas as a rule of thumb the default setting for further analysis should be set on “no further regulation” to take account of the fact that no monopolistic bottlenecks exist any more.

So far the most prominent examples of geographical segmentation were to be found in the legacy copper networks. Although a targeted approach for regulation of the legacy network is of course of utmost importance, Deutsche Telekom believes that the importance and the implications of geographic segmentation are even greater with regard to Next Generation Access Networks (NGA). The deployment of NGAs requires enormous investments which will make it likely that different players in different regions will start rolling out NGAs and thus significantly altering current market structures. Geographic segmentation is one important aspect taking into account the changing competitive landscape and allows complete deregulation in those areas where infrastructure competition can evolve, while at the same time maintaining access regulation in those areas where a single telecommunications infrastructure (still) persists and will continue to do so.

The key to successful segmentation of different geographic markets lies in the correct application of adequate criteria. Deutsche Telekom supports the ERG in its assessment, that “barriers to entry” (first criterion of the three criteria test) constitute one of the most important criteria. However, Deutsche Telekom would like to point out that the question of whether the first criterion has been met cannot be judged on empirical grounds only. Especially in regard to the investment in new Next Generation access lines, the empirical fact that third party market entry has not yet happened so far is in itself no proof that the market is not contestable and that entry is by no means possible. Instead of an empirical approach, an analytical approach is needed to assess whether entry might or might not be possible. Furthermore, the discussion should not only focus on the question whether barriers to entry actually might be overcome but should also address the question of how barriers to entry can be lowered in order to facilitate entry. The ERG should design access to ducts on a strict symmetrical basis. Furthermore, duct access should not be limited to telecommunications ducts but should encompass all available ducts, e.g. electricity, sewage, water, gas, etc. in order to lower barriers to entry and to allow more infrastructure and further investments.
In the following, Deutsche Telekom comments on the draft of ERG, taking the structure of the document into account.

Ad 1: Introduction

Deutsche Telekom agrees with the view of ERG on the necessity of assessing the relevance of geographic aspects within the Market Analysis Procedure. Compared to the situation of the markets before the implementation of the current regulatory framework, competition developed rapidly and differently in different regions. Deutsche Telekom therefore encourages the approach of using geographic segmentation as a means for better targeting regulation and for reducing regulatory interventions to the level necessary.

ERG states that it sees a "need for more guidance on how to proceed" with approaches on geographic market definitions. From Deutsche Telekom's point of view, NRAs should be encouraged to take a geographic approach, whilst taking national characteristics directly into account.

Ad 2: Is there a need for detailed geographic analysis?

Deutsche Telekom sees a strong indication for the need to significantly strengthen the role of geographic aspects within market analyses. Geographically segmentation can pave the way towards

- better targeted regulation,
- limited regulation as far as possible,
- delineation of regions in which competitive conditions are homogenous,
- accounting for the changes in markets' competitive environment,
- ensuring an investment-friendly climate with regard to technological progress.

The strongest argument to differentiate regulation geographically probably can be made in regions where the established operator competes with one or many alternative networks. In those areas as a rule of thumb the default setting for further analysis should be set on "no ex-ante regulation" to take account of the fact that no monopolistic bottlenecks exist any more.

Although a targeted approach for regulation of the legacy network (e.g. market 5) is of course of utmost importance, the importance and the implications of geographic segmentation are even bigger with regard to Next Generation Access Networks (NGA).

The deployment of NGAs requires enormous investments which will make it likely that different players in different regions will start rolling out NGAs and thus significantly altering current market structures. Geographic segmentation is one important aspect taking into account the changing competitive landscape and allows complete deregulation in those areas where infrastructure competition can evolve, while at the same time maintaining access regulation in those areas where a single telecommunications infrastructure (still) or continues to persist.

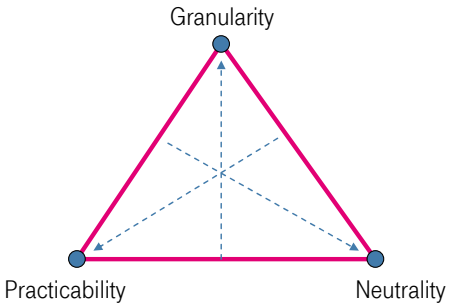
In accordance with the SMP Guidelines, ERG sees the SSNIP test as a starting point. Deutsche Telekom agrees with the findings of ERG stating that the SSNIP test alone cannot adequately identify proper market delineation. This already is recognized in the SMP Guidelines: It only works with unregulated prices. In many wholesale markets, NRAs still link to a cost-based price control with the need of NRAs to confirm prices in advance.

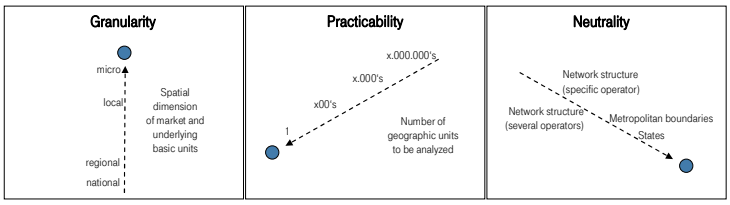
Therefore, a more detailed geographic analysis is always needed to assess whether a market has a national or regional scope.

Ad 3: Choosing an appropriate geographic unit

It is appreciated that ERG supports the view that the choice of the geographic unit is one of the most fundamental elements of the analysis to determine the spatial dimension of markets. Most items elaborated by the ERG are valid and constitute a proper basis for further specifying the methodology to identify in-homogeneity of competitive conditions.

Similar to the ERG draft common position Deutsche Telekom identifies at least three groups of factors that need to be taken into account when choosing the geographic unit: 1) granularity, 2) (technological) neutrality and 3) practicability.





As illustrated in the figure above, these factors are not independent of each other. For example, delineating a market following the national boundaries of a Member State is speciously practicable but surely not granular enough to account for differences in the homogeneity of competitive conditions within the respective national market. This has been demonstrated amongst others in recent analyses of the wholesale bitstream access market in Austria and the UK. Rather, every market analysis should be subject to all of these factors and consideration of only one single factor would not be sufficient.

Granularity

With respect to granularity it is useful to distinguish between granularity of markets and granularity of the basic geographical unit. As described below, granularity of markets is related to the question of how small or how large a regional market shall be such that inhomogeneous competitive conditions are adequately identified. The granularity of the basic geographic unit is to some extent a pre-condition for the ultimate determination of the regional market: Smaller geographical units, such as access areas served by a main distribution frame or areas served by local exchanges, can be grouped to form a whole regional market in which the competitive conditions are sufficiently homogenous. Larger areas such as sub-national states might also be candidates for this purpose but likely with much less accuracy.

Up to now, numerous if not most market analyses came to the conclusion that the spatial dimension of the market equals national borders ("national markets"). But past years' developments towards now highly competitive, but also regionally differentiated markets render a national market more and more unreasonable. To adhere rigidly to declaring markets as national would not reflect the existing competitive landscape of today's European telecommunications markets. Rather, this would aggregate different areas where the competitive conditions differ significantly. This seems also to be the view of the ERG.[1] Consequently, the idea that the geographical market should be in many cases smaller than national coverage should be supported.

This view is also explicitly supported by Ofcom within the recent analysis of the wholesale broadband access market. According to Ofcom, taking nations as the geographic unit "[…] *would face the same problems associated with the level of aggregation and would not provide an effective means to test differences in competitive conditions.*"[2]

The other extreme would reflect markets that are defined too narrowly. From a theoretical point of view and following the HMT as a 'standard' approach, it could for example be concluded that each single household or premise does form a separate market due to the obvious limits demand side substitution is faced with. It is unlikely that customers see themselves triggered to move their home following a SSNIP and it remains disputable whether such a micro-level is appropriate.

But the potential inappropriateness of small units cannot justify jumping directly to the national level as the one and only alternative. As will be described in more detail below, a couple of basic geographical units are available that constitute potential candidates for adequate analysis of the competitive conditions. However, it should be assured that the resulting geographical markets should be sufficiently granular in such a way as to homogeneously reflect the immanent competitive conditions.

Since large areas likely lead to the undesired effect of aggregating areas with divergent competitive conditions the question arises which basic geographical unit is most adequate? According to ERG two categories of basic geographical units are to be distinguished: Network related units and political or administrative units.

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[1] ERG Draft Common Position, p. 10.

[2] Ofcom, "Review of the wholesale broadband access markets 2006/07", Consultation document, 15.11.2007, page 57.

	Basic geographic unit
Network related	Premises
	Area served by street cabinets
	Area served by main distribution frame
	Exchanges / Points of presence
Political / administrative	Postcodes / postal areas
	Communities
	Cities
	Metropolitan areas
	Residential areas
	Central business districts
	Electoral districts

The choice of the geographical unit should take into account that it needs to

- be adequate for matching the criteria for assessing the homogeneity of the competitive conditions.
- be easily understandable by all market parties
- be sufficiently robust over time
- be capable of adequately addressing risk sharing for NGA deployments.

Practicability

It is sometimes argued with respect to practicability that efforts needed to conduct a regional market analysis must be kept within reasonable limits. The trivial reason behind this is that the analysis of regional markets becomes more and more complex the more granular the geographic unit and resulting geographical markets are defined.

But this argument may fall short of adequately balancing the need for a proper disaggregation because it is too global. The analysis of markets (not only in the course of conducting a geographical segmented analysis) has from the beginning had to be based on a procedure that naturally generates a certain degree of complexity. Market analyses need to face the trade-off between the size and hence the quantity of the units on the one hand and the resulting degree of complexity for identifying the competitive conditions such as existing competition, barriers to entry, pricing and marketing on the other hand. Refraining from conducting an accurate analysis may lead to unjustified simplifications which in turn could then bear the risk of missing the primary objective that is to better target regulation.

With respect to the question of the extent to which upcoming complexity constitutes an effective hurdle, it makes sense to distinguish between the following three procedural steps of the regional market analysis:

Procedural steps
Obtaining accurate data
Conducting the analysis
Specifying and implementing the findings

It is to be expected that both complexity and practicability are slightly different for each of these modules. First, the NRA needs to obtain accurate data from market players and other sources. Data queried from operators could be related to

- the geographical area that is served by the business,
- the factual and/or planned spatial dimension and coverage of the network,
- the geographical location of important network sites, such as exchanges, main distribution frames, street cabinets,
- the number and types of customers served in certain areas,
- the extent to which wholesale services are bought and offered,
- the extent to which retail services and products are offered etc.

It is likely that such detailed network-related data are already broadly used by almost all operators for the purpose of e.g. network planning, monitoring or marketing. Further, NRAs already base their work to a large extent on such business data. The following could serve illustrative examples:

- **Analytical cost models**: Where tariffs are ex-ante regulated according to the cost standard of long-run efficient costs, NRA's often use software-based bottom-up models which rely extensively on this kind of data. Moreover, analytical cost models – subject to further discussion about accuracy - are widely available and referred to by regulatory bodies not only within the telecommunications sector but also within the electricity and gas markets. Many of those models are based on numerous, detailed, geo-coded information about the type and location of network nodes such as main distribution frames, switches, base stations, transformers, gas tanks, customers' premises etc. Obviously, this quickly covers several thousands of elements. In addition to this, significantly more complexity is generated when approximating the complete network structure. For this purpose, NRAs are trying to implement some type of optimisation routines and algorithms, the objective of which shall be to derive the underlying 'efficient' infrastructure and transmission layer.
- **(Political) initiatives and co-operations to increase broadband coverage**. To further bring forward the roll-out of broadband coverage in Germany, DT is extensively cooperating with all stakeholders. For this purpose DT recently

decided to make all information about the locations of its main distribution frames publicly available. This support puts communities and municipalities in a position to get more detailed knowledge and an important technical insight into the conditions for the deployment of broadband infrastructure within a particular geographic area.

- **Existing regionalised analyses of market 5 in Austria and the United Kingdom**: It is likely that the Austrian and British NRAs have relied on data such as MDF-access-areas to conduct their recent analyses of the wholesale broadband access market in Austria and the UK.

All this indicates that a broad range of network related data exists that are potentially supportive to the process of obtaining accurate data. Consequently we do not see that obtaining the necessary network-related information constitutes an insurmountable hurdle.

Conducting the analysis, specifying and implementing the findings: The next step is to conduct the concrete analysis. As described above, the major objective of the analysis should be to identify those regional areas between which the immanent competitive conditions are not sufficiently homogenous. Having identified the set of criteria (e.g. the number of operators and the size of the area in terms of household density etc.) that determines the level of competition within a geographical unit it should be possible to flag those areas which are characterised by similar competitive conditions and those which are not.

Regional markets will then be built by grouping areas which are equally flagged, as has been done by OFCOM for "Zone 3" for example which consists of those competitive access areas (out of 5,587 in total) where SMP will not be found anymore. Such a procedure also has been accepted by the EC.[3] As a result of this analysis, there will be a set of regional markets which will then be subject to the SMP and remedy analysis.

Neutrality

The choice of geographic unit should be sufficiently neutral in the sense that all relevant issues required for the analysis of regional markets can be adequately analysed. For example, segmentation should be conducted in such a way that units should reflect current and future developments with respect to NGA deployment or cable networks.

[3] EC, "UK/2007/0733: Wholesale Broadband Access in the UK", 14.02.2008 , page 11: "*The Commission therefore finds that Ofcom's analysis would have been clearer if it had defined each of the 5 587 exchanges as a separate relevant geographic wholesale broadband access market. However, the Commission also recognises the practical difficulties in carrying out a detailed SMP analysis for each of these 5,587 geographic markets. It therefore accepts the general principle that, where there is robust evidence, those exchanges which display similar or sufficiently homogenous conditions of competition can be grouped together in order to carry out the SMP assessment.*"

Ad 4: Assessing the homogeneity of the competitive condition

We welcome, that ERG makes a first proposal on how the homogeneity in competitive conditions is to be assessed. When segmenting different geographic regions with the overall aim of differentiating between those areas where ex-ante regulation will still be justified and those areas where general competition law will be sufficient, It is conceptually questionable to focus on criteria "which are also of importance in the SMP analysis" (p. 12). Instead, utmost care has to be applied to the fact that the framework follows a two-step approach in trying to justify ex-ante regulation. First the Three-Criteria-Test (TCT) must be fulfilled and second SMP must be found on the respective market. Only if both tests are positive is ex-ante regulation justified.

By starting with the second step (SMP) analysis and thus de facto bypassing the first step (TCT), the results will be heavily biased towards regulation. This is due to the fact that SMP is a competition law concept and as such not applicable for justifying ex-ante regulation. It analyses the state of competition and asks whether one or more undertakings have the ability to limit the intensity of competition. But the existence of SMP as such is not decisive for applying ex-ante regulation. Ex-ante regulation is only justified in case of market failure tested by the TCT. This is in line with the logic of the two-step approach which makes passing of the TCT a prerequisite for ex-ante regulation. Therefore Deutsche Telekom calls on the ERG not to mix the two concepts of SMP and TCT and to make the three criteria test the analytical starting point when assessing different competitive conditions.

Important Criteria for assessing homogeneity of competitive conditions	
Barriers to entry	Economies of Scale
	Economies of Scope
	Economies of Density
	Availability of duct capacity
	Planned or announced market entry
Number of operators	Operators with own infrastructure
	Operators using wholesale
Other	Pricing and price structures
	Product differentiation
	Marketing strategies

In the view of Deutsche Telekom, there are some *additional* aspects to be considered with the proposed criteria:

Barriers to entry
In addition to the above described importance of the TCT it should be made clear, that NRAs should also analyse, whether wholesale inputs from other markets are available without restriction. This is to be done to avoid double regulation between markets when the upstream market is already regulated.

Number of suppliers
This criterion should be extended to “Number and structure of suppliers”. OfCom’s analysis revealed the importance of competitors being infrastructure-based. An access obligation on bitstream is a severe intervention into a company’s economic activities. It is even more severe, when there already is LLU regulation and sufficient LLU competition to compete

ERG suggests a relation on size of the operators for the purpose of excluding “niche operators”. However, regional based operators have to be considered when analyzing regional based competition. There is no argument given by ERG, why the exclusion of smaller operators should be necessary or the inclusion of them would distort an adequate analysis. Regarding the example of Germany the high number of regionally based competitors might lead to such a distortion. NRAs should not consider ALL competitors and their corresponding impact on the segmented markets.

Pricing and pricing differences
Deutsche Telekom agrees with ERG’s finding that national uniform price does not necessarily imply a national market. This is especially the case when the pricing is set by regulation.

It might even be the case, after deregulation of some regional markets, that the uniform pricing of the operator does not change. ERG states a “trade-off” for companies on a national scale always which has to weigh up between benefits and losses of uniform und regional pricing. However, this might still lead to a uniform pricing, even though there is regionally differentiated competition.

When investigating on regional aspects and analysing pricing on respective markets, this can only be assessed with the closely linked consideration of the development of market shares over time. More important for a geographic analysis is whether there are different market shares in different regions. This is a clear indication that these regions are distinctive markets. So uniform or regional pricing is not a conclusive indication of the nature of competition and no precondition for a delineation of markets. It should be left to the competition as to how the pricing on the market develops over time.

Ad 4.2: Which areas should be aggregated?

ERG is discussing a consideration for each NRA striking a balance between “errors” of regulation or deregulation. In Deutsche Telekom's view, NRAs should always prefer to reduce regulation. Incorrectly imposed regulation in competitive markets always is more detrimental for the development of competition than refraining from regulation.

Ad 4.3: Changes in geographic market boundaries over time

Changes in market structure are not only limited to (geographic) boundaries. In the course of time, new products might be included in or excluded from the market. In these cases, NRAs have to adopt these changes and have to adjust their findings. Some changes might be predictable to a certain extent in the future. Some might only be indicated. But none of these possibilities may lead to postponing the necessary actions in today’s analysis. An NRA must not argue to delay further action just because there might be another change after two years. Such a hands-off approach would lead to a distortion of market development, because necessary deregulation efforts are not anticipated.

Ad 5: Local geographic markets or differentiated remedies?

Segmenting different local geographic markets and defining one national market with differentiated remedies do not constitute two equivalent alternatives. As described above, the priority should be to define local geographic markets where justified, i.e. where competitive conditions are not sufficiently homogenous. It would be contradictory to put areas in which the competition differs significantly into a single geographic market.

When competitive conditions differ between areas, the differentiation of remedies within a single (“national”) market may only be an option, if sound and objective reasons exist which render the geographic segmentation into different local markets inappropriately.

Conclusion

Deutsche Telekom supports the approach to raise awareness of the need to add geographic aspects to the proceedings of the market analysis. Today’s level of competition postulates geographic segmentation as a means for better targeting regulation and for reducing regulatory interventions to the extent necessary. Especially in market 5 (wholesale broadband access), the implementation of geographic segmentation has already been proven to be adequate and necessary.