



## **Tele2's response to the ERG Broadband market competition report**

November 2006

As Europe's leading alternative operator, Tele2 AB ("Tele2") is devoted to contribute to a telecommunications sector that aims at taking the best interests of Europe's consumers into account. Tele2 welcomes the opportunity to comment on ERG's Broadband market competition report.

Tele2 welcomes ERG's conclusions regarding the ladder of investment and agrees with ERG's finding that the more complete the chain of available access products is, the higher the competitive dynamic. According to Tele2's opinion, it should however be highlighted that in order to achieve the positive results generated by a well-functioning ladder of investment it is important to make sure that improvements are carried out to secure that all necessary levels of the ladder are accessible simultaneously. This will be further discussed below.

### **The broadband market**

Broadband is considered crucial to European competitiveness and the Commission has been particularly active in promoting broadband developments. According to the i2010 initiative adopted by the EC, the broadband take-up is considered an important factor for the emerging digital economy and competitiveness.

In her speech at the ECTA conference on November 16, 2006, Commissioner Reding pointed out that even though the presence of alternative infrastructures, in particular cable, is considered most significant factor enabling broadband growth, regulation does play a very important role in the investment ladder, especially in Member States with no or weak alternative infrastructures. Further, Reding also noted that in Member States where there has been more effective implementation of the framework, including enforcement of full or shared access rules, there has also been more progress up the

investment ladder. Conversely, ineffective regulation leads to continued dominance of the retail market by incumbents.

The more relevant access forms that are actually available, the better the competitive situation is in the market. This has been established particularly in relation to the national broadband markets. The current dominant technology used to offer broadband access to end-users is the use of the incumbents' metallic loops and the growth of new broadband access lines is dominated even more by the xDSL technology in a major part of the Member States (the DSL share of fixed broadband lines in 2005 was 80.4%<sup>1</sup>). In this context, it should be highlighted that the access network in reality never will be replicated on a nation-wide basis, since that would be far too expensive and since there is simply no possibility that an operator would recover its investment within a reasonable time, if ever. The incumbents' access networks were built during a monopoly situation during a long period of time and were to a certain extent financed by public funds. Hence, as the access networks will play a vital role for broadband service offerings on the retail level for many years ahead, it is of utmost importance that alternative operators achieve access to the incumbent's access networks on equal and competitive terms in order to obtain nationwide competition in the broadband market.

If this is not secured, the situation seen already today, where competition exists merely in highly populated areas where broadband services are available not only through the copper network but also through local infrastructures such as CATV and LAN networks, will develop even further and create a digital divide on national levels. This is of course detrimental to the end-users that would not be able to benefit from comprehensive national competition, but are subject to a very fragmented broadband market with some undeveloped areas where competition is not made possible at all. This means that we may experience a situation where competition will force prices down in the urban areas while a de facto monopoly situation will prevail in the rural areas, allowing the incumbent to charge considerable higher prices due to lack of competition. In order to avoid such uneven competitive prerequisites in the future, it is of utmost importance to secure that alternative operators achieve access to the incumbent's legacy networks on equal and competitive terms with the aim of obtaining nationwide competition in the broadband market.

Further, in order to allow alternative operators to compete with the incumbents it has to be ensured that simultaneous access to *all* necessary levels (i.e. ULL incl. sub-loop ULL, BSA and resale products) of the investment ladder are made available at consistent and reasonable costs and hence give the alternative operators the right incentives to invest by climbing further up the ladder, one step at a time.

The situation in the majority of the Member States is however far from satisfactory in this regard. In practice, in many countries ULL and/or BSA are simply ineffective, and this is evidenced by low take-up and lack of a robust competitive dynamic. It is therefore important that the framework ensures that the regulatory structure delivers sufficient powers to the NRAs in order to promote effective competition provided all across the

---

<sup>1</sup> Commission Staff Working Document, SEC(2006) 837, p. 27.

value chain. In many countries it has however turned out to be hard for alternative operators to achieve access to the local loop. Serious problems, such as incorrect pricing, lack of information in order to make risk evaluations and market analysis, denial of the necessary co-location due to e.g. an allegation of lack of space, the inclusion of unclear additional charges in the offers for ULL and co-location, defective ordering processes and delaying tactics, have a detrimental influence on investments and the possibilities for alternative operators to compete under equal conditions as the incumbents on the retail market around Europe today. For example, this has been experienced by alternative operators in Sweden, see [Annex 1](#). These kinds of problems are also experienced in Portugal.

It should be highlighted that the broadband market is currently in a phase of dynamic growth around Europe with possibilities for suppliers to attract customers. Consequently, there is a risk that the market shares that are established during this phase will endure for a long time into the future. The limitations for the development of competition during the growth period therefore risk creating serious consequences for end-users and society also in the long-term. Thus, it is of utmost importance that obligations imposed on the incumbents are enforced immediately and hence that alternative operators in the market are provided with access to the incumbents' access networks by means of a correct application of the investment ladder.

### **The Ladder of investment**

One main objective of the new regulatory framework is to enable for alternative operators to compete for customers on equal terms in relation to former monopolists. As regards the goal of achieving long-term sustainable competition, there are in *theory* many advantages to competition with several competing infrastructures compared to pure service based competition. However, owing to the high risk involved in investment requiring a large element of sunk costs, which is often the case in connection with investments in local access infrastructure, the infrastructure competition should be regarded as a long-term goal that may be achieved through a dynamic regulation designed to secure that the operators are being given an opportunity to accumulate their infrastructure investments gradually over time through climbing up the ladder of investment. Hence, the NRAs have to consider service-based competition, and thus service-based investments, being at least as valuable as infrastructure investments, as the general starting point.

Availability of a range of access products with varying levels of refinement at reasonable prices and conditions is necessary for the ladder of investment to be able to function in practice. As has been stated above, it is important to make sure that the alternative operators achieve simultaneous access to all necessary levels (i.e. ULL incl. sub-loop ULL, BSA and resale products) of the investment ladder and that each level of the ladder is reasonable in terms of costs and hence gives an incentive for an operator to climb further up the ladder, one step at a time. Further, it is important to secure that the migration processes, i.e. making it possible for an operator to invest in the next level of

the ladder without disturbing the relation to the existing customer base, are well prepared. It is also extremely important to secure that there is consistent pricing (incl. low if any one-off fees when upgrading a customer) between the different levels in order to give the alternative operators the right incentives to invest.

In order to be consistent with the theory of the ladder of investment, the various services offered higher up in the value chain shall be progressively more expensive. More value bought should lead to higher cost. Otherwise, there is a risk of taking an erroneous approach leading to a situation where climbing the ladder of investment is virtually impossible due to that certain wholesale services are offered at a lower price than other, more basic services. In practise, this would mean that alternative operators buy more services/network elements from the incumbent and pay less. This approach, which has been experienced in many countries, also leads to the fact that the incumbent is being overly compensated for its costs to own and maintain the access network. This over compensation results in a gigantic transfer of funds from the end-users and competitors to the incumbent through a higher than reasonable cost for services.

The German situation is a good example of how inadequate regulatory control of consistent pricing can be exploited by the incumbent. The strategy of the German incumbent, i.e. to promote the resale products by decreasing the price of such products without adjusting the ULL price, has resulted in a defective ladder of investment where wholesale competition is systematically suppressed by the former monopolist. In addition, there is still no BSA product available in the German market.

Another example of such a strategic behaviour by the incumbent is in Hungary where theoretically all the wholesale products are available (and by now regulated). The regulator has however not taken into account the distortion of the market structure. Almost the entire DSL penetration is based on the incumbents' wholesale DSL product, the contracts of which have a binding period of at least one year. Furthermore, alternative operators have in practice used neither bitstream access nor shared ULL, which are too expensive compared to wholesale DSL, but rely instead on wholesale DSL or full ULL. Consequently, the elements of the ladder of investment exist but some of them are not used for the above mentioned reasons.

It shall also be pointed out that the ladder of investment has a corresponding "ladder of wholesale services bought", i.e. every step up the ladder of investment must correspond to a step down on the ladder in relation to wholesale services bought. Every step down in wholesale cost must be sufficiently large to support the increased cost of climbing to the next rung on the investment ladder plus include the possibility of an at least slightly higher profit. It is the outlook of a higher profit that provides the incentive to invest.

This means that the cost for renting the copper and co-locate in the SMP's facilities must be substantially lower than the cost for bitstream, which in turn has to be substantially lower than the cost for the resale product. Any pricing that shows signs of a different relation leads to the wrong incentives where the incumbent can strengthen its position in the market.

The ladder of investment principle should be reflected through:

- Provision that regulators should ensure that in mandating access they address the need to provide a mechanism to facilitate gradual investment by competitors and allow nation-wide coverage for both business and residential consumers.
- Non-discrimination should be a requirement at all levels of the value chain to ensure consistency of pricing and prevent margin squeeze between rungs.
- Accounting separation should reflect the ladder of investment and support the non-discrimination requirement by showing transfer pricing between each step on the ladder.
- Notifications and/or publication should facilitate the undertaking of an ex ante price squeeze test between rungs.
- Secure that a consistent pricing exists between the different rungs of the ladder, i.e. the necessary investment to climb from e.g. BSA to ULL has to be reflected in the price that alternative operators have to pay to the incumbents in order to get access to the services in question. Further, as a starting point, the copper has to be realistically priced (i.e. not with a premium as an incentive to a never occurring full replication of the access network). This has an impact on all services provided on the legacy network.
- Option to step down the ladder if required by new wholesale products (e.g. ULL replacement by bitstream products).

It shall also be pointed out that the geographical aspect influence the possibilities for alternative operators to invest in equipment needed to provide broadband services based on ULL. In order for alternative operators to compete against a dominant incumbent, and hence to allow competition to arise in areas where ULL is not a realistic option, simultaneous access to a resale as well as to a wholesale bitstream product, which can be diversified, is vital. These products also constitute a very important step in the ladder of investment in relation to areas with large local exchanges, in order to achieve long-term sustainable competition. In countries where the incumbent does not provide any satisfactory bitstream product, “gaps” in the ladder of investment are created. Such “gaps” result in lack of access to competing broadband services on the retail level and the operators’ opportunities of successfully increasing their investments in infrastructure by climbing the ladder of investment are substantially restricted. These “gaps” tend to be fairly large, creating an unnecessary barrier-to-entry to the next rung on the ladder.

For example, the current situation in Sweden illustrates this problem. The former monopolist is still effectively in total control of the ADSL market in Sweden, preventing alternative operators from competing on equal conditions on all levels. In order for alternative operators to achieve a reasonable geographical coverage and hence be able to offer access to broadband services on a nationwide basis, an alternative operator needs not only access to ULL but also to a bitstream service. The fact that the Swedish BSA decision has been stayed in court, means that there is no wholesale BSA offer available in the market but on the contrary a great deal of legal uncertainty stalling progress. In

addition to this the ADSL resale product has been altered by the incumbent, which means that the wholesale service will not be further developed and no further investments will be made for this product. This means that two important levels of the investment ladder are considerably limited and even missing and hence there is neither any well-functioning investment ladder, nor competition, in the Swedish broadband market in practice. This is of course detrimental to the Swedish end-users that are not able to benefit from comprehensive national competition in this regard, but are subject to a very fragmented broadband market with some undeveloped areas where competition is not made possible at all.

Thus, the fact that ULL is the only form of access practically available in Sweden today implies that there is likelihood that competition in the broadband market will fail to come at all. This is due to the high initial investments required in relation to ULL as well as serious problems, described above, being faced by alternative operators in their ambition to achieve access to the local loop. These circumstances, which have been confirmed and underlined by the Swedish NRA in a report regarding broadband competition in Sweden<sup>2</sup>, are a real threat to competition in the broadband market.

In Belgium, regulated offers exist for both bitstream and ULL services. However, since the wholesale prices are not cost oriented, alternative operators have difficulties to enter the broadband market. ULL is almost made inaccessible through the pricing of tie cabling which is more than 100 EUR/line. This is 5 to 10 times more expensive than in other EU countries. As a result, after more than 5 years of ULL, less than 0.1% of the lines are unbundled.

### **Next Generation Networks (NGN)**

As has been mentioned above, broadband services in densely populated areas are available not only through the copper network but also through local infrastructures such as CATV, MAN and LAN networks, the providers of which are able to satisfy the market pressure towards higher speeds. Hence, competition from such network providers constitute one of the driving forces behind the NGN rollout that is currently ongoing and will develop gradually all over EU within the coming years. By rolling out fibre to the curb or to the home, the incumbents will be able offer triple/quadruple play services and hence meet competition from the above mentioned network operators.

One of the most serious consequences that derives from the NGN rollout is that the investments in ULL (own DSLAM equipment at the MDF), which have been promoted by the NRAs and already made by alternative operators, become less, or even not at all, useful in the future. As various incumbents most likely will carry out NGN rollouts in different ways ahead, the market will experience a majority of various access-related problems around Europe.

---

<sup>2</sup> "Preconditions for sustainable competition in the broadband sector", by Post- och Telestyrelsen, REPORT NUMBER PTS-ER-2005:39 ISSN 1650-9862, December 8, 2005.

In The Netherlands for example, the incumbent has come very far in its rollout plans that includes the closure of the buildings housing the MDFs that are used for local loop unbundling by alternative operators. By "cutting off" the original copper lines, which run from the collocation to the concentration points, the alternative operators are not able to use their already made investments in ULL and DSLAMs. As a consequence of this development the local loop unbundling rollouts by alternative operators have significantly decreased.

Also the development in Germany, where the legislator is willing to approve a "regulatory holiday" for the incumbent's VDSL network, is a very serious threat to all infrastructure investment made by alternative operators in the past.

Unless dealt with correctly, there is a risk that the NGN rollout leads to access related problems and hence a reintroduction of a de facto monopoly in the broadband market. By start investing in and using fibre instead of copper ahead, there is a risk that the incumbents will make the copper obsolete by e.g. actually cutting off the copper line as such or keep the copper network but refrain from making updates, take care of maintenance etc. Such behaviour would mean that the incumbents would be able to provide higher speeds, e.g. (VDSL) to the end-users, while alternative operators are effectively limited or even cut off.

Hence, there is a risk that the NGN rollout will have a negative impact on the overall investments in ULL in a country. The reason for this is that the population covered by each site will be significantly smaller and hence it will be more difficult for alternative operators to make viable business cases. This will lead to a decrease of the ULL population coverage (from about 40-60% to approx. 25-50%) and create an increased need for the NRAs to secure the availability of simultaneous access to BSA/wholesale broadband services, as there will be an increased need for BSA in order to retain sustainable competition in the market.

Apart from the access-related problem mentioned above, the NGN rollout also gives rise to both technical and quality related questions. One example caused by the transition is the risk of so-called cross talk, i.e. a disturbance and degradation of speed caused by the fact that the incumbent moves its DSLAM closer to the end-user-premises. This disturbance would be a disadvantage for the alternative operators', as their products will be regarded as being of less quality than the incumbents' equivalents. As is mentioned above, it is not unlikely that the incumbents' first NGN rollout will be followed by a series of further rollouts, i.e. that the equipment will be moved closer and closer to the end-user-premises. This creates further investment uncertainties for alternative operators, as there is a risk that the investments will be affected by an increasing amount of generated cross talk disturbances in the future. Unless dealt with correctly, cross talk would thus mean a risk that investments in infrastructure will decline dramatically and operators will be forced down the investment ladder. It is therefore of utmost importance that this, and equivalent issues, are raised and investigated by the NRAs at an early stage. One way of managing this could be to impose obligations of shaping the output power.

This means that limiting measures are taken (e.g. by installing a filter) in order to minimise the disturbance caused.

It is important to secure that there will be a continuous growth of the technological development seen in the market at present. It is however extremely important that the rollout of NGN is not to the detriment of competition since that would mean a risk of re-introducing a de facto monopoly in the broadband (and thus what we know as the fixed telephony) market. In order to secure the competition in the broadband market, and for alternative operators to be able to move along with the incumbents' rollout of NGN and hence make use of the investments already made, it has to be ensured that access to the incumbents' networks is secured and hence regulated, no matter what technique (fibre, copper etc) will be used ahead.

Further it is of utmost importance that a convenient transition and upgrade to NGN is secured in order for alternative operators to be able to migrate on fair and reasonable terms and that they are allowed sufficient time to do so.

It should be pointed out that NGN must not be considered as an emerging market, subject to a moratorium, but is to be treated in accordance with the harmonised and technology neutral regulatory framework, according to which the same regulatory principles shall apply regardless of which existing or new technology is involved. It is important that the definitions of the relevant markets reflect this approach, e.g. by removing all references to "metallic" so as to allow consideration of all loops which fall into the same relevant market in terms of their capabilities and demand/supply side substitution. It should also be highlighted that not only is regulated access needed in relation to fibre, but also to the sub-loop unbundling as such access is vital in order for alternative operators to be able to offer competitive products to end-users.

Further, it is important that the NRAs are aware of and are able to evaluate the consequences of NGN in order to find sustainable solutions for alternative operators in the market and also that they act promptly in order to ensure stable prerequisites for continuous competition and growth in the broadband market.

A closer study, made by the lawfirm Gibson, Dunn& Crutcher LLP, on the applicability of the electronic communications networks and services (ECNS) regulatory framework to NGN is attached in [Annex 2](#).