ERG

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Response to ERGs Consultation Document on Regulatory Principles of IP-IC/NGN Core

Tele2 is Europe´s leading alternative telecom operator offering a wide range of products to consumers across Europe. Tele2´s most important products are mobile telephony and broadband but the company also provides fixed telephony in a number of countries. Tele2 welcomes the opportunity to provide its comments on to ERGs Consultation Document on Regulatory Principles of IP-IC/NGN Core.

A.4.1 Separation of transport and service

Considering that according to the ITU definition of NGNs where service-related functions are independent from underlying transport-related technologies, how do you evaluate the concepts of transport interconnection and service interconnection as defined in the document?

NGN will, in a sense, lessen the vertical integration between application and transport. In practice, however, there is still a reasonably high degree of binding between the two, especially with regard to voice calls. Interaction between application and transport will still be needed in order for a service provider to deliver acceptable services. This will mean that control, or guarantee of service level – QoS, in the transport service to some extent will be needed. Given these facts it is questionable whether it is likely to see multiple providers competing on the same conditions, a level playing field, on a common NGN platform.

In the ERG document it is clear that NGN generally results in a high capital investment with relatively low variable costs. Investing in NGN is thus coupled with a higher risk than continuing using the existing, and in most cases depreciated, network. It would hardly be surprising that operators investing in NGN platforms will seek to restrict the functionality open to third parties to provide themselves competitive gain and return on investment.

A.6 Structure of the document

Do you see other issues regarding regulatory principles of IP-interconnection/NGN core that should be dealt with?

Tele2 Sverige AB
P O Box 62, SE-164 94 Kista, Sweden • Tel +46 8 5626 4000 • Fax +46 8 5626 4200 • Office Borgarfjordsgatan 16
Head Office in Kista • Reg No 556267-5164 • VAT No SE556267516401 • www.tele2.se

Tele2 believes that it is very important to lay out regulatory principles that impact the overall issues with regard to network topology and interconnection points as soon as possible. It is crucial to avoid that, in the absence of NGN interconnection regulation, (incumbent) operators make use of a regulatory vacuum to the detriment of its competitors and to the already existing competition.

B.3.3.1 Number of network nodes and points of interconnection (PoI))

Can you make more precise statements on the number of network nodes and/or points of interconnection in NGNs?

In general operators will seek, for efficiency reasons, to use as few POI's as possible. For resilience and traffic load reasons there may of course be some additional design requirements. The optimal number of POI's, however, depend on the costing principles and more importantly the charging principles. In a bill and keep regime there will generally be no incentive to create more than 3 or 4 POI's. In a CPNP regime this may very well be the opposite. It also depends on the set up costs for an interconnection point which an operator may be charged by another operator. Tele2 believes that the principle should be that all operators should bear their own costs for setting up interconnection. Regulation must, however, be in place to solve disputes between operators on the function, location and Service levels of interconnection facilities. If there is a dispute between two interconnecting operators on the required number of POI's, there needs to be a possibility of regulatory intervention – necessitating ex ante regulation or guidelines - to resolve the issue.

B.3.3.2 Definition of local interconnection

a) Is there an equivalent in NGNs to the concept of local interconnection as known from PSTNs?
b) What do you consider to be the locations for the lowest level of interconnection (physical and/or service), e.g. the broadband remote access servers (BRAS)?
c) Could the maximum number of PoI offered be considered equivalent to local interconnection?

a. It is very likely that exchange of traffic in an NGN network can take place on local levels i.e. the MDF/NRC locations. The question is if this is economically viable which to a large extent will depend on the regulatory costing and charging regime.
b. The lowest level of interconnection is the level where exchange of traffic can take place. This is not a predefined concept.
c. In reality most likely yes, in theory see b.

Traditionally operators have through regulatory intervention been rewarded with lower interconnection costs when calls have been handed over closer to the end user. This has been possible due to the fact that the cost has been a factor of the utilization of the network. Less utilization leads to a lower cost. However, cost can only be minimized when the handover is at a point where there is routing flexibility in the underlying NGN

transport layer. Not all platforms are designed to provide IP routing capability. This may lead to a situation where the cost of interconnection actually increases instead of decreases.

It also needs mentioning that the roll-out of NGN's may not automatically create a situation in which the potential benefits of local interconnection can never be used by the OLO's. Simularly NGN´s can also lead to a situation in which already made investments turn into stranded assets before they can be depreciated. In the Netherlands for instance, the situation may arise that, in spite of vast investments in rolling out alternative networks to the MDF networks, investments will never be utilized for local interconnection. This is due to the very reluctant approach of the Dutch regulator to, in an appropriate manor, regulate local interconnection rates. In order to avoid unnecessary investments it is crucial that information regarding roll out and functionality of NGN is given.

C.1 Existing and proposed Framework

How do you assess the proposed Framework in the light of the migration process towards NGNs, their technical characteristics and economic implications? Are the proposals suite to address the specific challenges that these present?

The current regulatory Framework is already suitable to address anticompetitive and other problems arising in an NGN context. One of the fundamental principles is technology neutrality. One of the problems though is the way the NRAs in the different Member States have chosen to interpret and implement the concept of neutrality.

Provided that the proposed Framework is consistently technology neutral it will also allow NRAs to tackle the regulatory challenges of the future. NGN core networks will lead to substantial cost savings in operating expenses. The, in some circles, discussed concept of 'risk sharing' instead of the currently well functioning 'fair return on investment' is misplaced and will probably be a barrier to a competitive development of the market.

An obligation on SMP (incumbent) operators to inform the market regarding its plans for rolling out of NGN technology/interoperability is one key factor in order to secure a continued competitive environment. It needs to be encouraged that the NRA's share relevant technical and operational information and also make sure that there is a high knowledge level within their organizations to deal with the often complex issues.

In general the framework must also facilitate that NGN interconnection can take place in a way such that it does not become a means to obstruct alternative operators position.

C.3.1 Interoperability issues

What type of interoperability requirement do you consider necessary?

Vendor interoperability is a prerequisite for operator interoperability. This means that in line with our response in A6, the overall concepts need to be laid out as soon as possible.

Operators are making decisions today regarding investments etc. into new systems and functionality for the short to middle term. In making these decisions they need to be able to assess what the requirements are for interconnection. It is clear that, at this point in time, these requirements can't be given on a detailed technical level. But there must be guidelines for the risks in this situation. In these guidelines the responsibilities have to be clarified and overall principles have to be published.

7) C.3.2 Impact of charging mechanism on transport bottlenecks

How do you assess different wholesale charging mechanisms in the light of the transport-related bottlenecks?

It is clear that if bill and keep, as a charging principle is applied, there is no need for regulators to set the termination rates. A prerequisite though is that other parts of the market are sufficiently competitive. Bill and keep has an advantage in that it is simple to implement and does not in it self require regulatory monitoring or intervention. In a Greenfield situation it could be argued that CPNP has much more disadvantages than bill and keep. There are however a number of other factor that need to be analyzed and thought through in this context. One major factor is the existing business cases on which a number of new entrant operators have built their investments on. In the current regulatory regime it has for a long time been accepted that one way of receiving pay back is through termination rates which reflect the costs and the risks involved for a certain operator.

Incumbents holding legacy networks have been able to benefit for more than a decade from the CPNP principle. This is mainly due to the fact that termination historically has been calculated according to a HCA model with a FDC approach. Using a LRIC-model for the calculation can also result in relatively high modulated costs for the incumbent operator. This is a fact that shows the hard work and analysis that is needed in cost calculation for setting regulated prices at appropriate levels. According to the views of Tele2 few NRAs have devoted enough time and resources through out the years to arrive at a reasonable price.

The reason why incumbent operators have been able to benefit from the CNCP principle is that they terminate large volumes on their networks (for instance CPS players can't benefit from termination fees, this in its own leads to an imbalance of traffic in favor of the incumbent). The position put forward on page 70 of the ERG document is in the view of Tele2 too simple.

The potential for abuse of the physical bottleneck for termination is closely linked to the charging mechanism. With CPNP, this bottleneck can be exploited because it entitles the terminating operator to receive a payment out of its position of control over this bottleneck. Furthermore, a high termination fee does not hurt the terminating operator's market position in competing for customers since this fee is not levied on its own customers but ultimately levied on the customers of its interconnecting party, i.e. the calling party. Termination fees may work as a collusion device allowing access providers to keep retail prices high. Therefore application of CPNP generally leads to the

determination of SMP in the relevant termination market with subsequent remedies being necessary to apply.

Historically the issue of how the use or abuse of a dominant position should be tackled has always been a question for the regulatory bodies. It has naturally been a question of how the regulating bodies have applied the existing regulatory framework. It should be, and has for a long time been, a given fact that an incumbent operator will use its powers and dominant position to gain advantages in the market. That was one of the reasons for various obligations, e.g. the obligation to negotiate interconnection, in the ONP directives. The statement that *"Termination fees may work as a collusion device allowing access providers to keep retail prices high"* may in some instances be correct. It does seem, however, that the ERG is prepared to discard the current ways to deal with termination issues, which has been the prevailing way since the liberalisation of the fixed market. Deciding on cost accounting models and the size of termination charges has for a long time been one of the key objects of regulators. Changing the charging mechanism from CPNP to bill and keep or RPP is such a fundamental change that must be subject to a lengthy study and an extensive impact assessment and public consultation. In the view of Tele2 the public consultation presented merely asks a question without having debated the issue in depth.

8) C.3 Bottlenecks and SMP positions

Do you see other areas (potential bottlenecks) for regulatory intervention?

Other obstacles still may need to be addressed:

1. Interconnection to subscribers on other networks must be secured which requires obligations. Abuse of a dominant position can also materialize in obstructing or delaying tactics in interconnection. This is because such an obstruction hurts a smaller operator much more than a large.
2. Technical interconnection issues may lead to a lot of confusion in the market. These problems have sometimes proved to be too difficult for an NRA to cope with. Tele2 encourages the ERG to set up a technical advisory group that can help with setting guidelines on these matters. This is especially important since NGNs will lead to increased cross border services.
3. One of the challenges will be the timing and nature of the obligation to interconnect based on NGN principles. The current PSTN based interconnection facilities are still used and are also used for VOIP interconnection. This is not efficient but facilitates the interconnection as such in the current situation. The question is: when can an operator be forced to offer an NGN interconnection facility. Which operators fall under this obligation? How will stranded assets of alternative operators, who in the past where forced to follow the incumbents PSTN network, be dealt with?

9) C.4.2 Measures based on USO directive

a) Do you consider sufficient to potentially regulate minimum quality (Art. 22 USD new para 3)?

b) Does this require additional regulation at the wholesale level?

This may be the case depending on the implicit quality levels in PSTN interconnection that are no longer implicit in NGN interconnection. These implicit quality levels can be not specifically regulated whereas in NGN this requires specific regulation. An example may be the obligation for resilience and transport capacities to the B-end subscriber.

c) What is your opinion on ERG's consideration that the power to set minimum quality of service requirements (both, on end-user and network level) should be entrusted directly to NRAs?

NGN is an excellent opportunity to look at interconnection principles in a pan European way. Tele2 understands that an NRA must be able to diverge from a European approach but only if the national situation requires so. Also, it needs mentioning that NGN makes national boundaries more or less irrelevant. Pan European players may find efficiencies in interconnection on a Pan European scale, rather than a national scale. It seems apparent that regulation is required to ensure that CPs are offered the same QoS to off-net calls as they do to their on-net calls. The issue of higher quality within the SMP operator's own network could be addressed for instance by an appropriately detailed non-discrimination obligation imposed by the NRAs on SMP operators. However, in order for services to interwork there will need to be a set of quality metrics agreed between CPs, and if this cannot be done by industry then some form of regulatory intervention may be necessary.

10) C.5 Costing and Pricing

a) Do you agree with the description of the relevant change regarding the cost level, the cost drivers and the cost structure?
b) For a pricing regime under CPNP, which of the wholesale pricing regimes (EBC or CBC) do you consider more appropriate for IP interconnection?

a. Tele2 agrees with this description.
b. Tele2 believes that EBC is the most appropriate scenario as a costing principle in NGN networks.

11) C.6 Charging mechanisms

a) How do you assess the arguments with regard to the properties of the charging mechanisms CPNP and Bill & Keep raised in the sections C.6.2 – C.6.10?

b) How can the migration process towards all-IP infrastructures be alleviated for the following.

options: 1) long term goal CPNP, 2) long term goal Bill & Keep? How do you evaluate the measures and options discussed here? Please also consider problems of practical implementation.

See answer to question 7) C.3.2 Impact of charging mechanism on transport bottlenecks, above.

Tele2 AB
Group Regulatory Affairs

Mikael Grape