Comments on ERG Draft Common Position on Next Generation Networks Future Charging Mechanisms / Long Term Termination Issues

Submissions by PT (Portugal Telecom) Group

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1. Global comments

In general terms, PT agrees with the comments presented by ETNO on ERG Draft Common Position on NGN Charging Mechanisms. ETNO's document represents a balanced overview of the problem and is a good base for the assessment of NGN interconnection and related charging mechanisms.

We are still in early stage of NGN implementation. Any decision on IP interconnection and charging should be carefully assessed, avoiding the imposition of a single and unique solution.

ERG consultation should be considered as a starting point and not a final decision or a way of eliminating other alternatives and possibilities.

We know that, as we move into NGN (all-IP), the regulatory debate gains a new momentum. NGN convergent features suggest that new interconnection regimes should be discussed. However, it is too early to say which interconnection regime should be adopted. It is quite possible that different regimes will be considered. Some of them could even be the outcome of voluntary agreements between operators. At this stage we should not only focussed on BaK as the unique regulatory solution. In NGNs - as well as in other networks - there is no single interconnection charging model that maximizes economic efficiency.

In a convergent and technologically neutral environment, it is not possible to establish a single interconnection architecture as well as the way multiple play services will interoperate. If one looks into the Relevant Markets Recommendation there is no reference about a single regulatory model deriving from interconnection markets. The Recommendation points out an interconnection mechanism, based on origination and termination. The adoption of BaK represents in fact the end of termination markets or at least a relevant market where prices are zero. Bearing in mind that OECD defines BaK as "A pricing scheme for the two-way interconnection of two networks under which the reciprocal call termination charge is zero - that is, each network agrees to terminate calls from the other network at no charge", it becomes clear that BaK calls for a different regulatory approach which is hardly supported in the new regulatory environment.

Looking into the various positions on BaK and the fact that NRAs are still unclear about the interconnection regime for NGN (all-IP), it is clear that we are still from reaching a consensus on the adoption of this pricing model.

It is, also, important to underline the fact that NGN will make their way progressively and will have to interoperate with legacy nets, cable nets, mobile and wireless nets. ERG should in any case discuss a transition regime under the new Directives and the new Recommendation.

As it is pointed out at a study[1] prepared for GSMA: *There is no "one-size-fits-all" IP interconnect charging model that delivers superior efficiency in all situations. Initiating Party Network Pays (IPNP) is likely to be optimal in many cases. But in some circumstances, Receiving Party Network Pays (RPNP) can maximise efficiency. Bill-and-keep (BAK) is superior only in very limited circumstances particularly where traffic and costs are balanced and where there is no scope for strategic behaviour to alter that balance. BAK cannot respond to market dynamics because it effectively fixes the interconnect price at zero. Because NGNs will carry high traffic volumes bringing together a diverse range of services – including telephony, pay TV and other services with well-accepted retail charging paradigms – it would jeopardise efficiency and innovation to limit the kinds of wholesale arrangements that will underlie retail pricing. These risks are greater in an NGN environment than for traditional networks, due to the greater variety of services and greater variety of interconnection operators.*

At this stage it should be assumed that there are more questions than certainties. As we know there are very different views amongst operators, consumer associations and the majority of NRA has not expressed a view on Bill and Keep (BaK) mechanisms or even consulted on this issue.

PT would like to point out the following general comments:

Legal base: Bill and Keep is a pricing arrangement for the interconnection under which the reciprocal call termination charge is zero. This means that each operator agrees to terminate calls from the other network at no charge. OECD defines BaK as "A pricing scheme for the two-way interconnection of two networks under which the reciprocal call termination charge is zero".

The imposition of a single charging mechanism, in this case BaK, may turn into a deviation from the existent regulatory framework. There are different charging alternatives, which should be the result of the analysis of the relevant markets, as well as of the NGN evolution.

Such a decision should take into account that NGN is still under progress and legacy networks, cable networks, mobile and wireless networks will not turn into all-IP all of a sudden.

On the other hand, NGN supports convergent solutions including different services which usually base their interoperability mechanisms on different solutions.

Timing: An eventual change to BaK or any other charging regime may occur either before or after the transition to NGNs is completed, since charging mechanisms are applicable in a technologically neutral manner, and are part of the interconnection models in place. Therefore,

[1] Economic study on IP interworking: White Paper, CRA International and Gilbert + Tobin, February 2007.

no special urgency or justification is seen, that would lead to changing in the short or medium term the current models to BaK.

Net neutrality: CPNP is not incompatible with net neutrality, as it does not consider the contents of communications, but only the charging between recognised parties.

Impact on users: Although the ERG document partially eludes or downplays this problem (even if in section 3.1, at the top of page 18, it is stated unmistakably that the BaK Operator *"recovers its net costs incurred for termination –- and any payments for upstream connectivity – in other ways, e.g. by billing them to its end customers."*), the introduction of the BaK model may have very significant impacts on the retail level, inasmuch as its logical consequence is the so-called "shift of cost recovery to the retail domain".

Moreover, there is a base assumption which ERG should reconsider and clarify, that making and receiving calls has almost the same value for the customer, and thus there are regimes like the one in the USA, where incoming calls are paid by the called user, who pays for the "privilege" of receiving calls, so to speak.

But things are really not so simple (or simplistic).

To be able to contact or to be contacted is certainly something of general interest. However, each call has really a variable contextual or opportunity interest.

Indeed, contrary to ERG's arguments in favour of BaK set out in this document, the value of calls is not the same for caller and called, as the utility to the called user is lower than the utility to the calling user, with a significant difference:

- Who initiates a call has a specific interest in doing so, to that destination and at that time. Therefore, it has a value for the caller and it is natural for him to be expected to pay for it, end to end. Let the associated value for the calling user be X.
- Who receives a call may not always have interest in receiving it, from that particular origin and/or at that particular time. Therefore, the value for the called user is not the same as before. It is clearly inferior to X. And it is not natural to be expected to pay for receiving a call, which may be more than just unsolicited: unwanted and even annoying, compounding a waste of time with a waste of money. Note that, although it is possible to reject calls, when the display shows a number - though unknown - the natural tendency is to answer the call, in order to know what the subject is.

Besides, even in the case when there is no answer, e.g. if it is diverted to a voice-mail system, the call will succeed and be charged to the called user, even if he/she really has no interest

whatsoever in receiving it. Telephony Spam and SPIT are thus encouraged and even rewarded, so much as to appear that the proposed introduction of the BaK model is made to its measure.

A model like the one applicable in the USA implies forcing the called users to pay amounts they do not want for calls they do not want. Such a situation should be evaluated by NRAs and ERG has to express a clear position on these impacts of BaK.

BaK could imply, in fact, the migration to what may be called the "American retail model", where the called client will also pay for the call (*"termination costs being recovered in the retail market"*), contrary to the well-established practice in Europe, where the consumers are accustomed to a clear, simple and intuitive charging model. This change will very likely be unacceptable to the European consumer.

This could indeed help to explain why the mobile penetration is lower in the USA in comparison with Europe, as the American model is BaK based, and both the calling and the called users pay for the same call.

Concept: Besides these issues (which incidentally the document seems to consider unimportant), as far as the BaK model itself is concerned, along the whole of the document the case for its implementation is considered as not proven beyond any doubts, far from it.

Indeed, ERG itself seems to acknowledge this, considering the terms employed: "long glide path", "cautious", "national circumstances", "continuation of the CPNP model in the short and medium term", or "at least in the next regulatory period".

The rule in Europe (and most of the World) is CPNP for inter-Operator relationships. If it works well, why change it forcibly, by regulatory decision? Especially when:

- with dwindling termination rates, both models supposedly "converge"?
- the future objective is simpler and less costly regulation?
- the ever-present objective is customer satisfaction and protection?

2. Comments to the Executive Summary

2.1 Page 6, 2nd paragraph:

"If the expected decrease in regulated prices (or price caps) for wholesale termination under the current CPNP regime materializes, the difference between CPNP and BaK, in terms of

effects, will decrease. *This is an important development that also affects the relative merits of interconnection regimes and which may pave the way for a regime change."*

Comment:

This difference between CPNP and BaK diminishes, but is not gone in what concerns QoS, SPAM, SPIT, arbitrage and free rider problems. Moreover, if the effects of both models are really so similar, then why change from CPNP to BaK altogether (with all the associated migration problems and expenses)?

2.2 Page 6, 5th paragraph:

"First it was observed that the convergence of networks, the transition to NGN networks and the growth of data services, all cause the costs of voice per minute to fall. This is relevant for the full cost including common and joint cost, but even more relevant for the incremental cost of termination. This is an important fact because ***the more the costs per minute decrease and come closer to zero,*** *the less the difference between CPNP and BaK in terms of effects will be and the more important the higher regulatory cost of setting a rate under the CPNP regime will become. Regarding the falling costs per minute, it is also important that the absolute difference in cost per minute between fixed and mobile is decreasing."*

Comment:

Termination has costs. The costs may be going down, but they shall never reach zero. Remember that the regulatory framework has some basic principles, among them, cost orientation, which is of no small importance. Otherwise, all the regulatory structure would have been developed under unstable principles.

2.3 Page 6, 6th paragraph:

"Second, the effects of BaK on the termination bottleneck where assessed in section 5.1. The conclusion was that BaK reduces regulatory cost and uncertainty (see section 5.1.3). Another conclusion was that ***moving cost recovery from termination, which is a regulated market, to competitive retail markets*** *increases incentives for cost minimization as more cost are subjected to competitive cost recovery (see section 5.1.2)."*

Comment:

This means that *"cost recovery"* will be achieved at the expense of retail and individual consumers. However, the "American scenario" - where a client who receives a call must also pay for it, which

from the viewpoint of the European consumer does not seem to be acceptable, should not be deviously imposed.

2.4 Page 6, 7th paragraph:

"Third, it is assessed how well BaK internalises call and network externalities. Consideration of call externalities would lead to the conclusions that – ***assuming usual plausible cost and utility distribution and bearing in mind their uncertainty*** *- BaK is likely to internalize these effects better than CPNP. There is also not much evidence that network externalities are important when setting termination rates and even if they were important in general, it is not clear that termination rates are a good tool to increase the number of subscribers to telephone networks."*

Comment:

These arguments and conclusions do not seem convincing and ERG provides no evidence of what is said in this paragraph. Moreover, they abound in expressions such as *"usual plausible"*, *"uncertainty"*, *"is likely to"*, etc, which show that there still several unclear arguments to be dealt with.

2.5 Page 7, 2nd paragraph:

"Fourth, the effects of BaK on different retail offers and customer groups are assessed. There are two main probable effects that can be discerned here. The first is that BaK is expected to lead to higher average usage per capita and a lower average price per minute. The second is that BaK could possibly lead to a slightly lower handset ownership. The prediction of these effects is based on both empiric data as on logical reasoning. ***From the section on empirical evidence it seems evident that countries that use BaK – or near BaK – regimes have far higher usage and a lower average price per minute. From the adjusted Merrill Lynch data it follows that, on average, usage in BaK countries is more than twice as high and price is half of the price in countries with a CPNP regime.*** *Logical (theoretical) reasoning also predicts these effects. Crucial in the logical reasoning is the mechanism that BaK decreases the marginal costs of traffic and the cost risk related to especially flat-rate offers that drives higher usage. Higher usage in combination with the large scale effects (economies of scale present in fixed and mobile networks) create lower costs per minute and so BaK feeds a positive feedback loop of higher usage and lower prices."*

Comment:

Again, the arguments do not seem convincing, besides that with a renewed abundance of expressions like "empirical", "seems evident", "on average", "logical (theoretical) reasoning", etc. Moreover, the statistical fallacy of "the half a chicken story" seems to be used: if, a group of 2 people, one eats a chicken and the other eats nothing, statistically both have eaten ½ a chicken. And this seems to be the case with the comparison between BaK e CPNP.

Extrapolating this to the foreseeable and negative consequences at the retail level (which may go as far as imposing a payment for received calls), one has:

- the average price going down (but maybe with a new reality introduced: a price for receiving a call, forcing the called user to pay the difference);
- possible usage increase, spurred by the reduced price for initiating calls, but also by an increase in unwanted (spam, SPIT, etc.) calls, but which does not mean an increase in customer satisfaction.

2.6 Page 7, 3rd paragraph:

"Overall these two effects suggest that BaK is likely to deliver a material welfare gain to consumers overall. Consumer welfare is mainly determined by usage per capita and price. Total welfare is mainly determined by usage per capita and the cost per minute. *For consumer welfare and total welfare the ownership is mainly only an indirect variable that is relevant as far as it drives higher usage per capita. Ownership is therefore integrated in the weighing of aggregate effects by looking at the usage per capita and not at the usage per active user.*[6] *Weighing the usage per capita, price and ownership effects together, the higher usage and lower price per minute clearly indicate BaK results in a higher consumer and higher total welfare."*

Comment:

Figures like usage per capita and (average) cost per minute do not really produce real welfare, inasmuch as one of the parties of a call may have to start paying for receiving calls, and to receive (and eventually pay for) calls that he really does not want. This is certainly no increase in customer welfare.

2.7 Page 7, 5th paragraph:

"Fifth, the effects on operators are assessed. These effects are mixed. Moving to BaK will influence the competitive strength of groups of operators and individual operators especially in the migration to BaK. It is in general not possible to say which category or group of operators will benefit. ***What is clear is***

that mobile operators will lose their current cash stream from fixed operators related to the relatively high MTRs. Thereby the move to BaK and the expected adjustment of fixed and mobile prices will imply an adjustment of the competitive balance between fixed and mobile operators."

Comment:

This proposal will have a negative impact on Mobile Operators, already affected by the successive reductions in MTRs imposed by the European Commission.

ERG should promote balanced solutions and mechanisms. Otherwise the outcome of this exercise will affect operators, consumers and will not contribute to the expected and necessary investment on NGN.

2.8 Page 8, 2nd paragraph:

"It is noted again that predicting in general the effects on other groups of operators is not possible. ***The effects depend on the traffic balance of the individual operators.*** *By moving to BaK some operators will benefit but others will have a disadvantage especially during the migration in which the industry adjusts to the new regime. Given the falling cost per minute and the expected lower level of terminating rates under a CPNP, these effects are not expected to be very substantial in general.* ***However, a change of regime and the resulting adjustment process could result in some transaction costs and as such this is a negative element of moving from the current regime to BaK.***"

Comment:

One must not forget the fact that BaK should really be applicable only when traffic flows between two entities are equal or approximately equal, something that is not mentioned in the document and that is not guaranteed to be always the case.

Besides, a migration to the BaK model will imply a drastic readjustment of the tariff schemes, business analyses, communication and marketing campaigns, changes to OSS and BSS, etc. involving amounts yet to be determined. These actions and costs are practically overlooked in the document, except as *"some transaction costs"*, as if they were not also part of the "business case" for migrating (or not) to a hypothetical BaK model. And let us not forget that real Operators are at stake here, not some academic institutions or service providers of diverse dimensions.

2.9 Page 8, 4th paragraph:

"Seventh, the effect on QoS is assessed. Regarding voice termination ***BaK is not expected to result in lower QoS because the terminating operator has an incentive to deliver reasonable service for his own customer who is receiving the call.*** *At least incentives regarding QoS are not different in CPNP or BaK."*

Comment:

It is not understood what incentive the terminating operator might have, considering that it will get no money for the traffic, unless it is going to charge it to the client who receives the call. And here is again the attempt to introduce the "American model", against the well-established, proven and intuitive "European model".

2.10 Page 8, 5th paragraph:

"Eighth, the effect on CPS is assessed. Possible distortions by moving to BaK in the ***competitive balance between CPS and non-CPS operators can be corrected by applying a mark-up on the regulated tariff that the CPS operator pays to the incumbent for originating traffic.****"*

Comment:

How is this *"mark-up"* defined / justified? And does not this change also have impact, both on the business and implementation costs level, on the Operators and Service Providers concerned? And is it not an added negative impact for the "business case" for BaK?

2.11 Page 8, 6th paragraph:

"Finally, some practical implementation issues are assessed. This leads to the conclusion that there are no blocking implementation issues regarding BaK, but that there is one negative aspect related to the implementation of BaK in a certain domain (for example a country of group of countries) while the outside world remains at CPNP. ***This effect results from the fact that there will be cash flow from BaK to CPNP domains, which means users within the BaK domain subsidize users in the CPNP domain.*** *Another conclusion regarding the practical implementation is that if BaK is introduced****, it should be done in gradual change requiring a sufficiently long glide path to allow retail business models and retail pricing to adjust slowly.****"*

Comment:

This "subsidisation" effect is to be expected, given the differences between the models. For instance, in the present situation, if one has an American mobile network interconnected to a European one, the first, with BaK will be subsidising the second, with CPNP.

On another hand, the *"long glide path"* is an acknowledgement of the difficulty in imposing BaK and its impacts at various levels. And again appears the cloaked admission that this will have consequences for the clients, by adding that this is needed "*to allow retail business models and retail pricing to adjust slowly*".

2.12 Page 9, 2nd, 3rd and 4th paragraphs:

"The most important effect is the ***expected significant higher usage and lower price per minute that, although with possibly slightly higher prices of low usage offers and slightly lower mobile ownership,*** *overall will lead to higher consumer and total welfare. The ERG assesses this as a primary and big advantage of BaK. The other effects that where identified in this CP are secondary in nature.*

Secondary positive effects of BaK are the following: firstly, ***the shift of cost recovery to the competitive retail domain as such gives better incentives for efficient cost recovery****. Secondly, there will be a reduction of regulatory costs and uncertainty.*

Secondary negative effects of BaK are the following. ***Firstly****,* ***the transition and adjustment process to BaK could create limited transaction cost of the regime change. Secondly, users inside the BaK domain subsidise users outside the domain****. The significance of this effect depends on the percentage of outside BaK domain traffic and the level of termination rates outside the BaK domain."*

Comment:

The positive points are really just *"expectations"*.

One of the secondary positive points is really a disadvantage: to burden retail with the consequences of BaK.

The secondary negative points are true, except for the fact that the transition costs shall not be *"limited"*, contrary to what is said in the document.

2.13 Page 9, 7th and 8th paragraph:

*"****However, some of the cons could justify continuation of the CPNP regime at least for the short and medium term.*** *Especially in countries (1) where CPS operators are important for*

competition (moving to BaK could be more complicated in that case, because of the possibly appropriate mark-up on voice originating), (2) that have a significant percentage of traffic to neighbouring countries that use CPNP regime (which means BaK introduces a subsidy to the CPNP domain). ***Also the uncertainty about the effects could be a reason to be cautions, possibly keep the CPNP regime in place and monitor the effects of lowering terminating rates under the CPNP regime first, before the step to BaK is made.***

Therefore, BaK is more promising than CPNP as a regulatory regime for termination for the long term and based on national circumstances (including legal issues) ***NRAs could set a glide path to BaK within the regulatory period related to the next market analysis they carry out for voice termination. However, for the short and medium term CPNP can also be an appropriate choice based on national circumstances, so NRAs can also continue the CPNP regime at least in the next regulatory period.****"*

Comment:

Here, ERG itself seems to acknowledge the impacts and uncertainties linked to the introduction of BaK. This is so much so, that ERG proposes a smooth and prolonged transition, advising even to keep the CPNP model in the short/medium term, at least during the next regulatory period.

Now, if this BaK model presents such an uncertain advantage (if, as said, termination costs are dwindling) and of so complex and costly implementation, why introduce it at all?

Besides, it must be stressed out once more that its impact on European consumers will be a shock, opening the way to foreseeable negative reactions, and in general potentially harming the image of the market players and their legitimate interests.

3. Answers to the questions

3.1 Question 1 (Section 1 – Introduction and drivers of change)

Do you agree that in a multi-service NGN environment, in which different services use a shared transport layer, different interconnection regimes for different services could create arbitrage problems? If yes, could you describe the problems that you foresee or that have already occurred. If no, what prevents these arbitrage problems in your view?

Answer:

Yes, there seems to be a risk of unauthorised providers of electronic communications networks and services asymmetrically seeking interconnection on BaK terms. The arbitrage (or "juggling"

with the tariff imbalances) between entities obliged to have BaK and a host of others (Operators or not) exempted from it will create serious "parasiting" of the former by the latter.

3.2 Question 2 (Section 1 & 2.2)

What is the influence of the separation of transport and service for the interconnection regime and in particular the charging mechanism and in what way are NGNs and BaK related?

Answer:

PT agrees with the comments presented by ETNO on ERG Draft Common Position on NGN Charging Mechanisms.

3.3 Question 3 (Section 3.2)

How would you define the boundary for the application of BaK and where should it be located (i.e. points of interconnection where BaK is applicable)?

Answer:

The existence of BaK and non-BAK interconnection points may cause congestion focalised in the BaK PoIs. Therefore, it is our understanding that, in case the BaK interconnection should be applied, it should be so in the whole of a network.

3.4 Question 4 (Section 4.2)

What is your conclusion on the relationship between the charging mechanism and penetration, usage and price level?

Answer:

BaK generates lower penetration. It is enough to compare the USA (BaK) with Europe (CPNP).

On one hand, if a client is expected to pay for incoming calls too, market response is evidently negative. And if a client – as in Europe – is accustomed not to pay for incoming calls, the imposition of such a mechanism will have a greatly negative impact on Operators, leading to a potentially lower usage.

On the other hand, if traffic flows between two entities are quite different, the Operators who are receivers in the CPNP model will be negatively affected with the introduction of a BaK model, and thus will have incentives to increase prices to their end customers, which consequently will have an impact on penetration and usage.

Finally, it remains to be seen what happens if an Operator has clients that only receive calls: either the Operator has to start billing his customers for incoming calls, or he has to define flat rates independently of the type of traffic (incoming or outgoing) his customers usually generate. Both situations will have an impact on penetration and usage.

3.5 Question 5 (Section 5.1.3)

How does BaK affect regulatory certainty and the risk of legal disputes?

Answer:

To begin with, and contrary to what the document states, there is no real termination bottleneck to be solved (considering termination rates have been going down steadily, following regulatory and Commission intervention). And termination has indeed costs to be recovered: it cannot be totally free.

In the current situation, CPNP is used, but with regulatory intervention on termination prices towards a cost-oriented tariff. The calculation and setting of these tariffs are regulatory matters, and not to be considered by them a cumbersome burden, but simply part of their job. If, in order to evade it, regulators impose a suitable new charging regime, which implies that users will start to pay for receiving calls, then they are betraying their public mandate. This is contrary to the objective of reducing regulation "*Given the objective that sector specific regulation should be temporary, there is also a clear desire to simplify regulation and reduce the regulatory costs for all parties involved*."

The document (page 28, 3rd paragraph) states that *"Contrary to what is sometimes claimed, the cost recovery from own retail-users does not mean that the prices for those users will have to increase on average. After all, in parallel to the eliminated wholesale revenue for termination there is overall the same amount of eliminated wholesale costs albeit effects on individual operators may differ. This reflects the zero-sum nature of termination revenues."*

This is biased, as it forgets, as far as Europe is concerned, that even if overall prices may not rise, a new and unacceptable consequence will appear: the called user will start to pay for received

calls, unwanted (spam, SPIT, wrong numbers, etc.) or not. This is certainly a crucial point that results really in a "non-zero sum" for the customer. Not to mention all the structure to be implemented by the Operators for marketing, business analyses, CRM, charging, billing, etc. in the new context. The sum is definitely "non-zero".

We disagree on the final statement (chapter 5.1.4): *"First, the shift of cost-recovery to the competitive retail market is likely to give better incentives for an efficient outcome. Second, the regulatory uncertainty and costs are reduced."*

3.6 Question 6 (Section 5.2.1.3)

How do different wholesale charging mechanisms impact on the number of unwanted calls? Do you expect (other) effects on consumers/consumer groups? Where possible, provide a quantitative assessment of the expected effects.

Answer:

As ERG now clearly says (page 31, 2nd paragraph) *"in contrast BaK means the terminating operator has to recover the cost of termination network from his own end-users"*. Thus the impact of BaK is clear, not only to Operators, but especially to the consumers.

By, in practice, alleviating charges for making calls at the expense of charges for receiving calls, unwanted calls are evidently fostered and rewarded. Besides all comments concerning this important problem already made in previous answers, an assumption of ERG's reasoning must be rebated: utility for the calling and called user is not equal, and to see this is mere common sense. A calling user has always a definite interest in initiating a call and pay for it, while a called user certainly has not always an interest in receiving a call and most certainly not in paying for it, on top of everything!

This basic fact invalidates the entire edifice of pro-BaK supportive arguments. Even the ERG in part agree with this at a certain point of the text (page 31, last paragraph, and page 34, 1st and 2nd paragraphs), although it does not extract the full consequences from it, and indeed ends up disregarding it, based on the fallacious "qualitative" and "probabilistic" arguments that *"from the fact that there are countries with an RPP system, like the US, it can be derived in a qualitative manner that called users have a utility which is generally greater than the price of incoming calls (typically a few dollar cents)."* and that *"although callers in general probably have higher utility than the called users, the US RPP regime indicates the difference between both will probably not be very large."*

And contrary to what ERG says, hanging-up will not restrict unwanted calls. Even when a called user hangs up, he/she will have to pay for the call. And if he/she chooses not to answer or is absent, the call may be routed to a messaging system, thus being completed and generating both a nuisance and an unwanted payment.

These biased and ill-founded arguments are not accepted and not acceptable.

Unwanted calls will soar and customer dissatisfaction also. Besides, simply trying to present this new charging regime to European users will be extremely difficult and generate widespread rejection. Moreover, this situation will be accompanied by an increase in SPIT.

Also, this situation will most probably raise accounting problems between different operators, which could lead to the blocking of certain traffic routes by some operators.

3.7 Question 7 (Section 5.2)

How do you assess the quantitative relevance of call and network externalities?

Answer:

PT agrees with the comments presented by ETNO on ERG Draft Common Position on NGN Charging Mechanisms.

3.8 Question 8 (Section 5.3.5)

How would your business be affected by a move from CPNP to BaK? Please explain the expected impact on prices, volume of supplied services and profit.

Answer:

PT agrees with the comments presented by ETNO on ERG Draft Common Position on NGN Charging Mechanisms.

Moreover, Operators may be interested in avoiding direct interconnection among themselves, due to the costs it implies, and establish direct interconnection only with the incumbent, thus sending traffic between each one through the incumbent's transit, with a very significant impact at the network level.

3.9 Question 9 (Section 6.1)

Do you agree with the conclusion that operators/users in the BaK domain will subsidise traffic coming from outside the domain (regardless of the legal aspect)? Are there any mechanisms to prevent this and how will they work in your view, in particular to avoid arbitrage?

Answer:

PT agrees with the comments presented by ETNO on ERG Draft Common Position on NGN Charging Mechanisms.

3.10 Question 10 (Section 6.3)

Do you see any implementation problems for a migration period towards BaK? How could such problems be addressed?

Answer:

Within the general arbitrage problem, the "free-riders" or "call-back schemes" are indeed foreseeable problems.

But it must be pointed out that ERG produces a troublesome statement in page 50, 5th paragraph, that *"this problem could be addressed by use of a commercially agreed RPP model that recovers the full costs from the called party."* This solution is not acceptable, of course, as it would force the called user to pay for the call in its entirety, because of the adhesion of another party, the calling user, to a "free-riding Service Provider". Other solutions must be found.

Besides this, ERG mentions several aspects, like reduced regulatory costs, but seems to forget that the implementation of such a new scheme has indeed sizeable added costs for Operators:

- New contracts;
- New business models;
- Network reconfiguration (PoIs);
- Charging and Billing systems;
- Information Systems;
- Communication / Marketing;
- Churn;
- Legal issues.

3.11 Question 11 (Section 7)

Does the draft CP miss any other relevant issues?

Answer:

PT agrees with the comments presented by ETNO on ERG Draft Common Position on NGN Charging Mechanisms.

Note that in a BaK model the transit service acquires a huge importance, as it may become to be considered as an alternative to direct leased lines between operators.