

# Cable Europe response to the ERG Consultation on Next Generation Networks Future Charging Mechanisms / Long Term Termination Issues

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Cable Europe, the European Cable Communications Association, groups all the leading European cable TV operators and their national trade associations throughout Europe. The aim of Cable Europe is to promote and defend the industry's policies and business interests at European and international level, and to foster co-operation among its members. The European cable TV industry provides broadband, telephony, digital TV to more than 73 million customers.

Cable Europe welcomes the opportunity given by the European Regulators Group (ERG) to comment on its draft Common Position (CP) on Next Generation Networks Future Charging Mechanisms (the Draft CP) as correcting the distortions created by the current Calling Party's Network Pays (CPNP) system is key to promoting NGN deployment and the development of efficient fixed-mobile converging services in the single market.

### I. Introduction<sup>1</sup>

Cable Europe believes that the Draft CP develops a sound approach to appropriate NGN future charging mechanisms which rightly assesses a number of positive effects associated with the introduction of a Bill and Keep (BAK) technologically-neutral interconnection regime for voice services. In particular, Cable Europe agrees with ERG on the following conclusions:

The **convergence of fixed and mobile network** and services demands a technologically neutral approach to the introduction of a new interconnection regime, such as BAK.

A decrease of the regulated prices for wholesale termination under the current CPNP may pave the way for a regime change, although Cable Europe considers that to ease the transition **the reduction of current asymmetries between fixed and mobile** termination rates is equally or even more important.

Setting a regulated rate for termination under the CPNP regime has **high** regulatory and transaction costs that are bound to be substantially reduced under a BAK system.

<sup>&</sup>lt;sup>1</sup> Telenor/Canal Digital and Numericable do not support this response



Moving cost recovery from a regulated market, such as termination, to a competitive retail market is efficient both in static and dynamic terms as this increases incentives for cost minimization and marketing/pricing innovation.

Though it might be difficult to ascertain in quantitative terms the effect on consumers of changing to a BAK mechanism, overall **consumers as a whole will be better off** as they can be expected to benefit from production cost reductions, increased competitive pressure and retail diversity.

As to the effect on operators, it is clear that "mobile operators will lose their current cash stream from fixed operators related to the relatively high MTRs", though Cable Europe disagrees with the Draft CP in that this is merely a transfer of resources between operators with no effect on welfare.

Finally, possible negative side-effects, such as eventual higher out payments by **low usage consumers**, **increased unwanted calls or arbitrage by operators inside and outside the BAK domain**, either can be minimized through appropriate implementation (adding a mark-up to access prices, rightly defining the BAK domain, harmonizing BAK adoption by countries) or should be addressed by alternative and more appropriate regulatory tools (it is highly disputable that even if BAK could bring about more unwanted calls the most cost-effective and proportionate regulatory remedy for that problem is to set high termination rates).

According to the above, whereas Cable Europe supports the Draft CP we believe that it could be improved and this submission seeks to make a positive contribution in that direction. In that sense, Cable Europe considers that one important benefit from BAK is the suppression of **market distortions originated** in current fixed-mobile asymmetric TRs. Though this issue is mentioned by the Draft CP, Cable Europe considers that it deserves more analysis, as we explain in section II.

In section III, we provide some general comments on additional issues not specifically covered in the questions raised by ERG in the Draft CP.

In section IV, we aim at providing some answers to these questions.

## II.Competition distortions created by high MTRs and F-M asymmetries

In section 5.1, the Draft CP identifies the so called "termination bottleneck" as a source of market distortion under the current CPNP system and a major barrier to the development of full IP-based NGNs. More specifically, the Draft CP contends that under a CPNP system the "termination bottleneck" **excessive pricing** of termination rates creates a major competition problem.



Whereas Cable Europe agrees with this conclusion, we consider that the analysis is incomplete as it is not only high termination rates that create a competition problem, but also asymmetries between mobile and termination rates. These distort consumption patterns, favours mobile operators on the race to NGN deployment and impede the emergence of converging fixed-mobile services.

The problem of F-M asymmetry has been rightly addressed in the recent European Commission Recommendation on the regulation of termination rates (the EC TR Recommendation) and its accompanying memorandum. Therefore, in section 2.1, the memorandum states that:

"In the past, negotiations between fixed and mobile operators typically evolved differently because mobile operators could raise the initially unregulated mobile termination rates without experiencing a reciprocal increase in the often tightly regulated fixed termination rate (FTR). This raised allocative-efficiency concerns where there is an implicit cross-subsidy from fixed network operators and their customers to mobile operators and mobile customers." (emphasis added)

Likewise, according to section 4.1 of the same memorandum:

"The main advantage of low interconnection charges based on an incremental-cost approach which allocates only efficiently incurred costs is that it promotes efficient production and consumption and minimises potential competitive distortions. It sends correct signals to originating operators as to the costs generated by their activities and they can therefore adjust their behaviour in the most efficient manner.

For example, allowing network costs to be recovered from the wholesale termination rate which do not result directly from the provision of that service can lead to distorted signals and higher prices for the originating operators and, consequently, their consumers. In effect, this results in them cross-subsidising the investment costs of other operators' networks and may also result in a sub-optimal number of calls being made. Currently, there are net transfers of wholesale termination revenues from:

- fixed network operators to mobile network operators, creating an effective cross-subsidy between fixed and mobile markets and consumers: and
- net senders to net receivers of voice traffic, which can reinforce network effects and increase barriers to smaller operators expanding within markets.

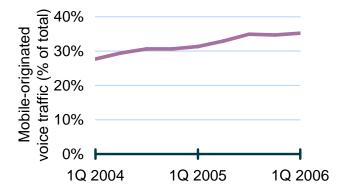
Furthermore, this can promote inefficiency on the part of the terminating operator." (emphasis added)

In connection with the above statements, Cable Europe would expect that the distorting effect of the subsidy will be particularly acute in an environment of increasing fixed-mobile substitution.



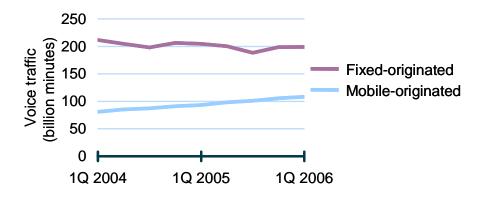
In effect, as stated in the study Fixed-Mobile substitution in Western Europe: causes and effects, by Analysys Research Ltd, "mobile voice services become increasingly affordable, and users opt for the convenience and personalisation of mobile phones, mobile voice services are progressively substituting for fixed voice services across Western Europe. Between the first quarter of 2004 and the first quarter of 2006, the proportion of households with a mobile phone but no fixed line grew from 9% to 12%, while the proportion of voice minutes that originated on mobile networks increased from 28% to 35%", as it is shown in figures 1 and 2.

**Figure 1:** Proportion of households in Western Europe that were mobile-only, December 2003–December 2005.



Source: Analysys Research, 2007

**Figure 2:** Volume of fixed-originated and mobile-originated voice traffic in Western Europe, 1Q 2004–1Q 2006



Source: Analysys Research, 2007



Against this background of increasing fixed-mobile substitution we note that under the current CPNP system regulators do not treat fixed and mobile networks equivalently. Whereas fixed networks have been subject to tight cost orientation principles, mobile networks have traditionally been allowed to apply considerable mark-up over costs. In addition, the regulatory treatment of mobile termination costs by most NRAs has been such that, as a result of the methodology used and by contrast with the fixed case, a greater portion of the cost of the entire network is attributed to termination. This regulatory asymmetry, if not corrected, has the potential to hinder the emergence and expansion of converging services by limiting the potential of fixed operators to compete in this market.

As shown above, competition of mobile services in the same retail market as fixed services (calls made at home and in the office) is leading to fixed-mobile substitution of both calls and lines. In circumstances where the players are indeed competing in the same retail market, then a party who obtains a higher termination rate gains a network externality which can cause competition harm (ultimately, the weak give to the strong). In this sense the British regulator, Ofcom, has stated in their fixed termination market review that:

"Not only does the terminating provider increase its call termination revenues but it also increases its competitors' end-to-end retail costs, as the terminating provider's competitors have to buy its call termination service. The effect of this is that a provider with higher call termination prices has a competitive advantage at the retail level over its direct competitors. This perverse cost incentive is known as the 'termination externality." (emphasis added)

For these reasons, during the consultation leading to the EC TR Recommendation, Cable Europe submitted that though it welcomed the costing principles set out in the Recommendation (as they contributed to close the gap between cost-oriented fixed and mobile regulated prices) there were a variety of alternative ways in which a lower mobile termination charge, close to – or even better at – that regulated for fixed termination, could be established:

- 1. Bill and keep (i.e. a rate of zero) applied not only to M-M but also to F-M termination.
- 2. Seek symmetry between fixed geographical and mobile rates as a matter of principle (this is the US position).
- 3. Change the mobile costing methodology (e.g. by excluding common costs and non-traffic related costs from mobile termination)
- 4. Simply apply the current costing methodology at face value to eliminate over-recovery

On that occasion, we also submitted that "selecting the options of 'bill and keep' or 'symmetry with fixed rates as a matter of principle' would have a number of additional benefits, in particular reducing the cost of regulation of mobile termination rates" and that "the reduction of such asymmetry [is] a policy that NRAs should pursue by the adoption of alternative tools consistent with a



competitive market, among which the changes proposed in the costing methodology by the Commission in the Draft Recommendation is only one example". In that sense it can be said that we anticipated one of the main conclusions of the ERG Draft CP, namely, that a BAK charging system not only is effective to correct market distortions but also to reduce regulatory costs and failures.

However, although ERG refers in several parts of the Draft CP to the current unbalances created by asymmetric F-M rates under the CPNP system, it fails to recognize the correction of such unbalances as one of the positive effects of introducing a BAK system in terms of general welfare.

Therefore, in section 4.1 the Draft CP contends that "the absence of alternative pricing schemes (flat rates, buckets of minutes) is usually related with calls to services with high termination rates. This trend is even more noticeable if there are asymmetric termination rates between calling and called party (i.e. fixed to mobile calls). The empirical evidence of F2F calls suggests that symmetric and low termination rates between calling and called party allow great variety of retail schemes and are directly correlated with the availability of total flat rates in the market." (emphasis added). Clearly, the Draft CP suggests that asymmetric termination rates under the current CPNP mechanism might be a barrier to the development of innovative pricing schemes that are beneficial to consumers.

Likewise, in section 5.1.2 the Draft CP illustrates the advantages of moving cost recovery to retail under a BAK system with an example of how when choosing between a fixed and a mobile network under a CPNP system a typical consumer is not taking into account the full costs of a mobile subscription and thereby is not making an efficient choice between fixed and mobile networks.

In addition, the Draft CP concludes in section 7 that "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".

In spite of these considerations, which clearly impinges on **issues of efficiency**, **competition and welfare**, when the document carries out its impact analysis of the introduction of BAK (section 5) it does not include the correction of fixed-mobile asymmetry in the list of positive effects on welfare that might be expected from BAK, but only as something that would have an impact in the distribution of money flows among operators, an alleged zero-sum game with no effect on welfare or investment.

In summary, in Cable Europe's opinion the Draft CP should explicitly refer to the competition problems created by asymmetric fixed-mobile rates, and include the suppression of such asymmetry as one of the main beneficial effects on welfare brought about by the introduction of BAK.



#### III. General comments

In addition to the question of F-M distortions created by the CPNP system, in this section we provide general comments on a number of additional issues which are not specifically covered by the questions raised in the Draft CP.

#### III.1. Impact on operators and consumers

In the light of section II above, we disagree with the Draft CP in that BAK will only imply a financial transfer between operators. At least in the case of fixed and mobile operators the introduction of BAK will certainly mean that "the net cash stream from fixed to mobile operators will disappear" (section 5.3.5 of the Draft CP), but also that important distortions affecting competition, retail innovation and efficient choice, as described in section II, will be corrected.

#### III.2. Impact on investment

For similar reasons, we also disagree with the Draft CP in that no impact on investment is to be expected as a result of the introduction of BAK. Current F-M asymmetries might be distorting the incentives to invest in converging services and NGNs by fixed operators vis a vis mobile operators.

#### III.3. Alternative mechanisms: capacity-based interconnection

The Spanish experience shows that the implementation of capacity based interconnection poses a number of regulatory problems, particularly when for a number of reasons it has to be complemented with per-minute interconnection. In this case, regulators have to decide on two regulatory prices, which increases the risk of regulatory failure and might give place to arbitrage opportunities. Therefore whereas capacity based interconnection might contribute to the introduction of flexible and probably more efficient retail pricing schemes, it lacks the other advantages associated with BaK: reduction of transaction and regulatory costs, recovery of costs from competitive services, etc.

#### III.4. Harmonized adoption of BAK

The Draft CP highlights the problems that might arise from traffic outside the BaK domain (section 6.1). In that respect, we share the view –implicit in the Draft CP-that the industry can find practical remedies to tackle this problem.

#### III.5. Boundary for BAK application

While we recognize that the definition of the minimum network level at which BAK is to be applied constitutes one of the most critical features of the system, we also consider that this is better left to negotiations among operators, with intervention by NRAs only in case of interconnection conflict or evidence of abuse by SMP operators.



#### III.6. Transition to BAK

In section 1 the Draft CP considers that the reduction of both fixed and mobile network costs, driven by the development of NGN networks, and the new costing methodology contained in the EC TR Recommendation can contribute to pave the way for the introduction of BAK.

At the same time, the Draft CP considers that for a number of reasons it is advisable that NRAs adopt BAK as a long-term measure to be introduced gradually through a sufficiently long glide path, probably within the regulatory period related to the next market analysis they carry out for voice termination. In connection with this, Cable Europe would like to make the following comments.

Firstly, in Cable Europe's opinion, of the two main forces driving the transition to BAK mentioned in the Draft CP it is the reduction of mobile termination rates by regulatory decision that deserves particular attention in the current debate. This is so because, by contrast with inherent technologically-driven costs, the level and evolution of regulated termination prices can be controlled by NRAs, which can use this regulatory variable precisely to promote migration to BAK. In addition, by reducing mobile TRs and also F-M asymmetries in the short term not only do NRAs contribute to promote longer-term transition to BAK but also correct market distortion under the current CPNP system.

In that sense, we believe that both regulatory objectives can be harmonized by encouraging the implementation of the EC TR Recommendation, which should be given a more prominent role in the Draft CP. According to the memorandum accompanying the Recommendation, if this is fully implemented reductions of up to 70% in mobile termination rates can be expected by 2013 (fixed termination rates, however, can be expected to remain essentially unaffected by this factor as they are already cost-oriented and much lower than MTRs). As a result, from 2013 onwards migration to a BAK system should be far easier than it is now.

Secondly, and closely related to the discussion above, Cable Europe indeed sees the "glide path to BAK" mentioned in the Draft CP as a vector of average mobile termination rates smoothly descending from its current level to (or at least one closer to) that of average fixed termination rates. This, according to the memorandum accompanying the EC TR Recommendation should lie in the vicinity of 0.71 eurocents/minute by 2013. As said before, this descending glide path of MTRs would indeed "pave the way" for the implementation of BaK by 2013.

Thirdly, taking into account the importance of an harmonized introduction of BaK by member states (see III.4) and also the fact that different NRAs will undertake their next round of market analysis of voice termination at different moments, we see benefits at referring the transition to BAK to common timetable, which in turns takes as a departure point an objective date such as the December 2012 deadline set by the EC TR Recommendation.

To sum up, the transition regime to a BaK system could consist of a glide path for mobile termination rates from current levels to those resulting from the EC Recommendation in December 2012, followed by the immediate and simultaneous implementation of BaK in all member States within the following 2 years.



#### IV. Specific comments and reply to consultation questions

Question 1 (Section 1): 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?

We have not analyzed arbitrage possibilities under the current dual system (BAK for data and CPNP for voice) in full, but clearly with increased voice traffic migrating to Voice IP under an NGN scenarios the existence of a dual regulatory treatment for voice and data could be expected to distort market signals and give place to commercial practices unrelated to efficient resource allocation, such as arbitrage.

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?

In connection with this question our only remark is that it is important to bear in mind that a BAK should not be considered as an interconnection regime exclusively associated with NGNs, but rather as an option for voice interconnection whatever the kind of network supporting this service. While it is true that next generation networks may facilitate this regime, it might be applied under either IP or ss7 interconnection regardless the network architecture.

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)?

As indicated in the Draft CP, a BAK system should be implemented at a network level that does not imply an excessive resource investment by operators receiving calls. However, it must be taken into account that some operators have invested in deploying an extensive network of local interconnection points with incumbents and that if the minimum interconnection level to apply BAK is set at a high point in the network (let's say at **single transit** or equivalent in an NGN setting) they would see a legitimate advantage over other operators with a more limited deployment/investment disappear.

According to the above, although it might be reasonable to set the minimum interconnection level for BAK at a network point between local and single-transit, Cable Europe thinks it is preferable to leave it open to negotiations among operators. NRAs would only intervene in case of lack of agreement.

Question 4 (Section 4.2): What is your conclusion on the relationship between the charging mechanism and penetration, usage and price level?

Cable Europe considers that the analysis carried out in the Draft CP is adequate. In



effect, we can expect that similarly to the case of fixed telephony -with their typically low fixed termination rates- a BAK system will bring about an increase in the number of flat retail prices and, consequently, an increase in retail consumption in terms of voice minutes. This, together with increased and more even competition between fixed and mobile operators in the retail market, will likely have a positive overall effect on penetration, usage and price level, even though some groups might be worse off.

In connection with this point it is important to emphasize that under a BAK regime the largely artificial difference between price/costs of fixed and mobile termination can be expected to disappear, and this will create a new and more even competitive playing field, along with more efficient network utilization. In effect, the current substitution pattern between mobile and fixed traffic does not reflect either efficient network utilization or actual consumer preferences but it is rather the result of very high and asymmetric mobile termination rates with the associated fixed-mobile subsidy. The rebalancing of this situation by the introduction of BAK will undoubtedly yield better network utilization and increased fair fixed-mobile competition.

## Question 5 (Section 5.1.3): How does BaK affect regulatory certainty and the risk of legal disputes?

The current regulatory process to calculate and set interconnection prices can be expected to be considerably streamlined as a result of an effective and well managed implementation of BAK. Under a BAK regime, NRAs will only have to set up a single regulated interconnection price, which is the access price to be applied to indirect access operators with a mark-up. This price could be used as a reference for international termination, transactions between national operators and international carriers can also be considerably simplified. The same price should also be applied to traffic exchanges with countries outside the BAK domain.

This simplification would have important consequences as we move from having different termination prices for fixed and mobile networks -subject to continuous controversy and revision- to a single regulated price. As a result of the reduction in the perimeter of regulatory intervention in prices, reduced risk of regulatory failure and increased regulatory certainty can be expected.

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.

Some legal restrictions on unwanted calls already exist that can be enhanced or strengthened without having to impede the transition to BAK. As we said in the introduction to this submission, it is highly disputable that even if BAK could bring about more unwanted calls the most cost-effective and proportionate regulatory remedy for that problem is to set high termination rates.

Question 7 (Section 5.2): How do you assess the quantitative relevance of call and network externalities?



Although we have not carried out our own assessment, we find that the main conclusions in the Draft CP are sufficiently supported. Externalities are either internalized in a BAK regime or have a reduced impact on economic welfare.

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.

See response to question 4 above.

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?

As said in our response to question 5, under a BAK system NRAs should only set a single interconnection price which can be used as a reference for price termination from international operators that do not adopt a BAK regime.

This is the model followed in the USA which implies that operators who do not have an owned international network to terminate traffic in the USA negotiate with international carriers a single price to terminate traffic in both fixed and mobile networks.

This single termination price, increased by a markup of the same amount, could be applied to indirect access operators within the territory of a member state.

Question 10 (Section 6.3): Do you see any implementation problems for a migration period towards BaK? How could such problems be addressed?

The main problem in our view would be a non harmonized adoption of BAK by different member states. Consequently, a common harmonized timetable for the introduction should be agreed. At the same time, once such date is agreed the sooner the migration within the European Union the better as the shortcoming resulting from different interconnection regimes, co-existing in different member states, could be avoided.

As suggested in our general comments in section III above, once member states – further to the full implementation of the EC TR Recommendation- reach a mobile termination rate level of around 2.5 eurocents, which should occur by 2013, migration to BAK should take place within 2 years.

Question 11 (Section 7): Does the draft CP miss any other relevant issues?

See our general comments in section III of this submission.