ERG public consultation on a draft Common Position on symmetry of mobile/fixed call termination rates
Telecom Italia contribution

General questions

QUESTION G1: Do you think that the principles outlined in the general economic introduction cover adequately the underlying economic situation of both mobile and fixed termination markets?

- If yes, do you think they are sufficiently reflected in the two parts on "MTR symmetry" and "FTR symmetry" and that they are consistently applying the principles?
- **If no, what do you think is missing and which reasoning should be added?**

Telecom Italia considers that the principles outlined in the general economic introduction cover only partially the underlying economic situation of both mobile and fixed termination markets; if on one side they reflect adequately the average situation in the EU Member States, on the other side the same principles, however, need to be complemented in order to represent correctly the situation in all Member States.
In this regard Telecom Italia shares the conclusions of the paper where it states that a small level of asymmetry can be sustainable and thus produce positive effects only where it is applied during a relatively limited timeframe after which symmetry must be achieved.
This analysis, however, is not complete as it bases the sustainability of the asymmetric remedy only with respect to the timeframe in which it is applied without sufficiently taking into account the level of asymmetry granted to OAOs.

Where the level of asymmetry is particularly large, in fact, any positive effect of the remedy is in principle offset by its negative impact on the market. Economic literature gives no evidence that in those cases positive outcomes can emerge. Moreover, in such cases the remedy is normally disproportionate to the regulatory concern it has to address as it attributes to OAOs a too big advantage which can even produce market distortions at the retail level.
This is even more correct in those cases where, as in Italy, in parallel to the application of fixed asymmetric termination rates, incumbents are also subject to regulatory measures at the retail level.

A second point that should be added when analysing the reasons for asymmetry, therefore, is an analysis of the impact of the regulatory measures applicable in parallel to the imposition of asymmetric FTRs.
Some of these measures, notably those applicable at the wholesale level, are able to eliminate or reduce to a very large extent the reasons for asymmetry listed at paragraph 6.1. Regulators should carefully analyse if OAOs are granted the possibility to enter in the market at all the different steps of the ladder of investment and to move from one step to another whenever it is more convenient for them. This way OAOs are allowed to benefit from the very beginning of their entry of the same or similar economies of scale as the incumbent, and will, at the same time be able to schedule investments in their networks without compromising their ability to exercise a substantial competitive constraint to the incumbent. In other words, in those circumstances where the remedies already grants OAOs adequate “inputs” from the incumbent at a price based on efficient costs, the additional remedy of asymmetric FTR is redundant.

This conclusion is also confirmed when taking into account the regulatory measures applicable at the retail level.
These regulatory measures (notably the prohibition for the incumbent to price retail services under a certain threshold determined having regard to the wholesale input costs incurred by an average OAO), on the one hand are sufficient in themselves to guarantee OAOs sufficient margins to exercise an effective competitive constraint to the incumbent and to invest in their networks. On the other hand, when combined with the possibility for the OAO of cross subsidising retail activities with revenues from asymmetric termination rates, these measures may produce the effect that the incumbent cannot effectively compete on some retail markets (e.g. the market for big business clients and/or calls for tender); in Italy, indeed, the aforementioned measures have produced such distortion of competition in a number of cases.
In these circumstances, therefore, asymmetric termination rates characterized by a non justified and excessive level of asymmetry normally produce substantial and disproportionate distortions in both the wholesale and the retail markets. Rather than compensating the alleged advantages of the incumbent, these measures put the same incumbent at a relevant competitive disadvantage, thus exceeding the objective pursued by the regulatory measures.

Last but not least, the application of different levels of asymmetry in different Member States can also bring about distortion of trade between Member States. This is certainly the case where differences in the level of asymmetry attribute to some incumbents an objective and non justified advantage where they act as OAOs in other Member States.
As an example, Telecom Italia is obliged in Italy to pay OAOs termination rates based on OAOs incurred costs. BT operates in Italy as an OAO and has been granted by the Italian NRA fixed termination rates which are around 270% the incumbent's termination rates. At the same time, would Telecom Italia act as an OAO in the U.K. the British NRA would allow it only to apply termination rates which are symmetric to those applied by BT.
In conclusion, Telecom Italia agrees in principle with the analysis carried out in the general economic introduction and considers that they are sufficiently reflected in the part on FTR symmetry. At the same time Telecom Italia thinks that both the general economic part and the part on FTR symmetry should analyze more thoroughly the consequences produced in a given European market by a level of asymmetry in the regulation of FTR which is abnormally high if compared with levels of asymmetry in other comparable European markets.

Question G2: Any further comments regarding this document, and is especially interested in receiving answers to the following questions

On the premise that mobile and fixed termination services belong to different markets, Telecom Italia believes that different rules should apply in such markets, each one with its peculiarities in terms of investments required, competitive and regulatory environment.

For instance whereas in the mobile market, there are at a EU level, coverage obligations that force new entrant mobile operators to significantly invest in licenses and in the deployment of the networks at the very moment of their entry, on the contrary, in the fixed market, no coverage obligations and no control on level of new entrants' investments are foreseen, since fixed OAOs are allowed to enter the market using a large range of wholesale products at different network levels.

This is of course true also in the Italian case.

Thus, currently, the real problem of consistency that Telecom Italia envisages is that in the fixed market, the Italian asymmetry index is even higher than the one of the mobile market.

QUESTION G3: Finally we would like to ask you to elaborate on the question of converging MTR and FTRs and the timeframe you envisage for this.

In principle, fixed-mobile convergence allows network and service operators to make more efficient use of alternative access technologies (GSM, 3G, DSL, WiFi, Bluetooth, UMA) by launching new voice & multimedia services and realising relevant cost reductions.

It's worth to note that each operator is placing strategic bets on fixed-mobile convergence to satisfy a perceived customer demand. The array of technologies and the changing demands of subscribers make it essential for operators to redouble their focus on planning the development of their strategies. As a result, all technologies listed above are marketed today.

Convergence can be considered from two perspectives: service convergence (as Homezone) and network convergence (as UMA). But what are the prospects for converging services? How will the industry evolve? What will be market response? Which telcos are best positioned to emerge as the winners?

In the last years, several solution approaches are being tested and various business models are emerging.

One of the first approach (see "BT Fusion" service) was based on Bluetooth architecture that bridges mobility functions with the fixed networks. Indeed when the phone was within range of a special base station installed in the user's home then incoming and outgoing calls were routed through that base station instead of the mobile network. This link between the phone and base station was carried over Bluetooth. Later Bluetooth connection was replaced by wi-fi connection.
This approach is fixed-operator-centric. The promise of this approach is the potential enablement of wireline operators to make a successful bid at recapturing lost wireless minutes.

Then the UMA technology arose (Unlicensed Mobile Access). UMA technology provides access to GSM and GPRS mobile services over unlicensed spectrum technologies, as W-LAN. By deploying UMA technology, service providers can enable subscribers to roam and handover between cellular networks and public/private unlicensed wireless networks using dedicated dual-mode mobile handsets.
This approach is mobile-operator- centric, which is opposite to that of fixed-operator centric.

Recently mobile network operators (using only mobile network) commercialised fixed telephony services through their mobile handsets allowing mobile customers the possibility to port or activate geographic numbers on their mobile telephones.
Also such an approach is mobile-operator- centric.

Finally, the next generation technologies, as IMS (IP Multimedia Subsystem) or WiMax, is also emerging to offer the convergence functionality that can be applied across both wireline and wireless networks.

To the extent that it is not clear which could be the successful direction of the market and technology , TI considers, in agreement with what indicated in the Explanatory Memorandum of EU of the new Recommendation on Relevant markets, that it's too early to talk about the effect of

convergence on termination rates, and so define what is the better regulation or which level of regulation is necessary.
Pending this crucial decision on the definition of converging services, TI considers that mobile and fixed termination services belong to different markets, each with its peculiarities in terms of investments required, competitive and regulatory environment, as well explained in “Fixed part, Question F1”.

Fixed part

QUESTION F1: How do you think termination should be regulated in a converging fixed-mobile market?

As already said above in the answer to the Question G3, and as it will be further discussed in the answers to questions F7 and M2, TI believes that fixed-mobile converging services have not modified the boundaries of termination markets and that it's too early to define what is the better regulation on wholesale side or which level of regulation is necessary.

Mobile and fixed termination services belong to different markets, each with its peculiarities in terms of investments required and competitive environment,
According to this principle, the description of those services at page 25 of the consultation document does not correspond to reality at least with reference to the Italian case.
Indeed, in Italy fixed-mobile converging services allow mobile customers to port or activate geographic numbers on their mobile telephones, but MNO set its termination fee on the basis of numbering, i.e. fixed termination tariff is applied to geographic numbers while mobile termination tariffs is applied to "mobile" numbers. Moreover, use of geographic numbers is allowed if they are associated to a Home zone only, that is, to the mobile network cell covering the end-user's address.
As a consequence, in such cases a caller will always pay an appropriate and transparent price.

It's worth to underline that the level of fixed termination rates applied corresponds to that of the incumbent operator.
Therefore, fixed-mobile converging services have resulted in an increase in number of players, enhancing consumer choice.

Question F2: Do you agree on the methodology and assumption underlying the asymmetry index calculation?

Telecom Italia (TI) agrees on the general methodology and the assumptions underlying the asymmetry index calculation: the approach is reasonable and provides an immediate scenario in the European contest.
TI wants to put in evidence (with reference to figure 7 - single tandem rate) that as far as Italy is concerned some modifications are necessary so to obtain an asymmetry index which really reflects the actual situation.

The reported value of 114,60% for Italy appears to be based on:

- the 2007 average price to terminate a call on TI's network at single tandem level , according to 2007 Reference Offer (0,615 € cent/min), and
- the average price to terminate a call on the OAO's network, using the value of 1,32 € cent/min ; this value is the one set by Agcom in art 40.3 of Decision 417/06/CONS, to be applied from July 1st, 2007 till June 30th, 2008[1]

[1] The Decision sets the price of the voice call termination service on the network of notified OAOs
- From 7/2006 up 6/2007 on the basis of a ***"8 years delayed approach"*** (the tariff is set equal to the incumbent's tariff in 1998)at the value of **1,54 €cent/min,** and, furthermore, sets

Therefore, the average price to terminate on the OAO's network is related to the period *from 07/2007 up 06/2008* (1,32 € cent/min), while the average price to terminate on TI's network is related *to the full year 2007*.

In order to achieve better consistency, TI suggests to take in consideration that the same AGCom's Decision 417/06/cons has **allowed OAOs to ask for higher prices (derogative values), on the basis of claimed incurred costs[2].** With a Decision dated 19/12/07 Agcom has retroactively granted to 3 of the major OAOs (which represent about 50 % of the OAOs traffic!) the following "Derogation" Values:

Derogation regime	Termination rate (AGCom Decision of 19/12/07) up to 6/2007
Fastweb (derogation OAO1)	**2,60 €cent/min**
BT_Italia (derogation OAO2)	**2,28 €cent/min**
Tiscali (derogation OAO3)	**2,24 €cent/min**

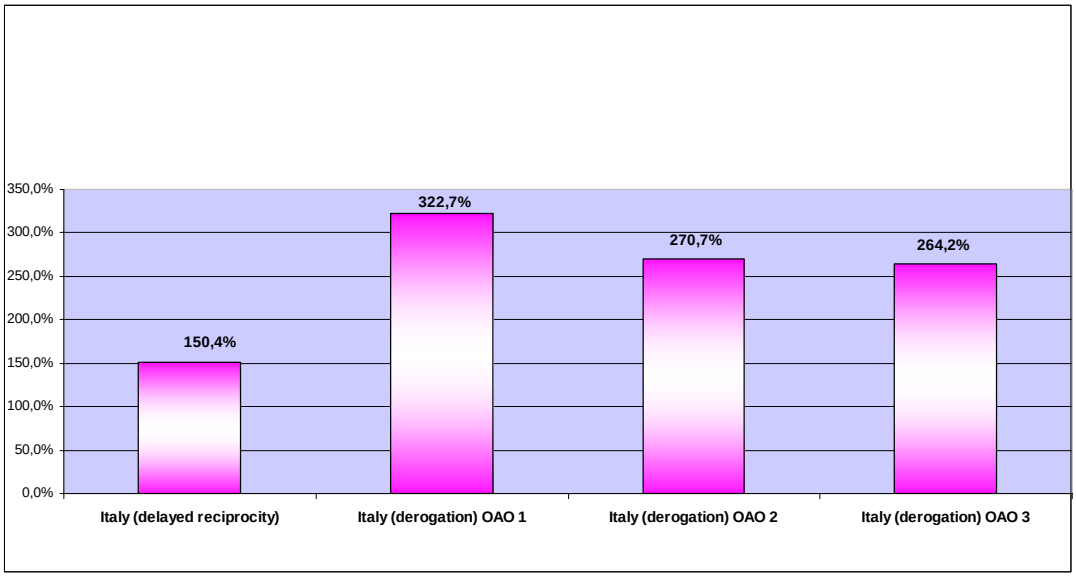
The above values are substantially higher[3] that the 1,54 value originally set for the *standard* Glide path, and are to be applied retrospectively (from 7/2006 up to 6/2007); the following figure shows the significant impact of the *derogation regime* granted by AGCom on the asymmetry index in 2007

Figure 1- Asymmetry index according to the different OAO's termination rates applied in Italy in 2007

- a ***glide path*** up 6/2012vith the following *decalage*:
  - Up to 6/2008: 1,32 €cent/min
  - Up to 6/2009: 1,11 €cent/min;
  - Up to 6/2010: 0,88 €cent/min;
  - Up to 6/2011: 0,69 €cent/min;
  - Up to 6/2012: 0,55 €cent/min

[2] This system of derogation appears to be a further OAO price control method ; accordingly, **this method should be added to the OAO price control method listed in pag. 26 (or table 9) of ERG document).**

[3] The way these values have been established appears not to take into account the obligation for the OAOs to be efficient but simply reflects incurred costs, including some non network costs ; moreover Agcom has allowed OAO 1 (which has the largest market share and the largest infrastructure behind Telecom Italia, and therefore the highest economy of scale among the OAOs) to benefit from the highest termination rates, and consequently the highest asymmetry.



Consequently these different values should be properly reflected in Figure 7.

Therefore TI suggests to recalculate the "Asymmetry index for single tandem rates" for Italy. According to the methodology proposed by ERG the index should be based on "***the average price to terminate on the OAOs network***"**,** and therefore should consider the weighted average of the value of **1,54 €cent/min** set by Decision 417/06/Cons and the "**derogation values**" granted to the 3 major OAOs (which represent about 50 % of the OAOs traffic!). If the derogation values were considered, **the asymmetry index for single tandem rate for Italy, that, in figure 7 is calculated as 114,60%, would be set to 166,6% (for 2007).**

Question F3: Do you think the list in paragraph 6.1 constitutes an exhaustive list of the possible reasons justifying the adoption of asymmetric tariffs?

Telecom Italia considers that no other reasons different from those listed at paragraph 6.1 would possibly justify the adoption of asymmetric tariffs. Moreover, Telecom Italia also considers that, as each of the reasons listed at paragraph 6.1 make reference to specific regulatory concerns, asymmetric remedies **should be proportionate** to the concerns that are to be addressed.
This implies in the first place that the circumstances listed at paragraph 6.1 should not in themselves necessarily imply the application of asymmetric remedies. The application of asymmetric remedies should in fact be limited to those circumstances in which such remedies are necessary to the elimination of the specific regulatory concerns.

As an example, the different **economies of scale** can justify the application of asymmetric termination tariffs only where this also implies substantial efficient cost differences between the incumbent and the OAOs for the provision of the termination service. **On the contrary, where OAOs have achieved economies of scale that allow them to have a similar cost structure, there is no reason to impose asymmetric termination tariffs. In fact, it should be considered that scale economies** in access networks (used for call origination and termination) are mostly achievable at a local level, and therefore, are independent from the whole dimension of an operator. In other words, a metropolitan operator may have either the same or even better scale economies in the concerned geographical area than a national operator. For further details see also answer to question F6.

Moreover, whereas the regulation has to decide upon the adoption (and the levels) of asymmetric remedies aimed at compensating possible different levels of scal economies, it has to take into account all the possibilities that OAOs have of sharing economies of scale of incumbent by means of wholesale services available at different levels of OAOs ladder of investment. In particular, in Italy, the range of regulated wholesale services covers simultaneously all the steps of the ladder, thus allowing each OAO to:

1. enter the market at the preferred level of the ladder;
2. switch between the different steps any time it considers it convenient.

In light of the foregoing, the imposition of any asymmetric remedy aimed at compensating different economies of scale, should take into account to what extent such potential differences in the economies of scale between incumbent and OAOs are as a matter of fact offset by the availability of wholesale services.
Telecom Italia considers that in Italy the range and the price control regimes of wholesale services is such that these differences are to a large extent effectively compensated without the need of imposing asymmetric termination rates.

As regards the second reason on “new entrant’s profits”, Telecom Italia believes that the increase of new entrants profits cannot be considered, *per se*, an incentive to invest in alternative networks, unless there were (as it was the case in Italy, in the mobile market) regulatory incentives and/or constraints that, in parallel with the asymmetric remedy, at the same time could divert the profit increase towards the deployment of the alternative network.

To give an example, Hansenet (a Telecom Italia subsidiary in Germany), with market shares and network infrastructures comparables with main OAOs in Italy, has made substantial investments in the network notwithstanding the very low level of FTR asymmetry imposed by Deutsche regulator.

Moreover, as explicitly recognised in the literature about infant industry, regulatory asymmetric policies may lead to moral hazard approaches by new entrants and permanence of inefficient players in the market.

A similar reasoning is also applicable to the other two reasons listed at paragraph 6.1. The adoption of asymmetric tariffs should not become an incentive for preserving a lower network coverage or a lower number of interconnection points.

Finally, regarding different equipment prices and lower bargaining power of OAOs, Telecom Italia believes that this should be not considered as relevant for asymmetry, since OAOs, as it is generally well-known, being new entrants in the markets and having to deploy a new network, use modern and more performing equipments compared to those of the incumbent's network.

Telecom Italia agrees, therefore, with ERG conclusions about advantages of symmetry. At the same time, however, Telecom Italia considers that the reasons given for asymmetry should be complemented with a strong recommendation to NRAs to always conduct adequate and well sound analysis of the concrete circumstances, in order to give factual and transparent evidence of the existence of a situation, if any, in which asymmetry is objectively justified. This would allow to avoid any unnecessary and disproportionate adoption or application of asymmetric remedies.

A second point that Telecom Italia would like to highlight regards the drawbacks of asymmetry, mentioned in the ERG paper e.g. an increase of off-net retail tariffs, lower incentives to invest and innovate, risk of inefficient entry, etc.
In general, it can be said that these drawbacks increase with the level of asymmetry. In this specific case, the bigger the difference between the termination rates of the incumbent and of the OAOs the bigger the negative impact of asymmetry. Accordingly, in identifying the appropriate and proportionate level of asymmetry the regulator should also avoid a situation in which its alleged positive effects are offset by its negative consequences.
In the light of the above, the net effect of asymmetric remedy is highly dependent on the level of the imposed asymmetry.
Proportionality of the remedy implies in the second place that **the remedy needs to cause the least distortion necessary to address the relevant regulatory concern.**
In this specific case this implies that, also in those circumstances where the regulatory considers asymmetric termination tariffs a temporary necessary instrument, the level of asymmetry should not exceed **what is sufficient to compensate** the factors which the NRA believes to negatively affect the competitive playing field.

QUESTION F4: Do you agree on the fact that any entry assistance policy for the future based on higher OAOs' FTRs is likely to be less effective than in the past?

Telecom Italia fully agrees with the principle and considers that, given the current level of LLU penetration, at least in Italy and other comparable countries, any further entry assistance policy will be not only less effective than in the past, but will also create a distortion of competitive conditions.

If an entry assistance policy is set, especially for a long interval, it could become a non proportionate measure which:

- discourages the OAOs currently present in the market from achieving cost efficiency,
- promotes further inefficient entrance,

- creates a distortion in the retail market (i.e. cross-subsidies between retail and wholesale prices), and
- in the long term, determines a reduction of consumer's welfare as a consequence of cost-inefficiencies and "assisted" competition.

Question F5: Could you please provide a definition of the "efficient operator" NRA should refer to in fixing FTRs ? What are the costs an efficient operator would incur to provide termination service ?

Question F6: Do you agree on the fact that OAOs should be as efficient as the incumbent ?

According to the economic theory, TI agrees that the "productive efficiency" is achieved when firms **minimize total cost** (given inputs needed and competitive prices of inputs) with respect to technology of production.

The regulatory objective is to achieve the maximum level of efficiency in the supply of wholesale service, and in particular of termination services (market 9), in order to provide a right signal to give incentives for productive efficiency.

An efficient OAO is an Operator that, by using incumbent's wholesale services and by progressively climbing the ladder of investment, rationally deploys its network using the most efficient technology available. Such an Operator is able to reach, **in a short term,** a level of efficiency including economies of scale and scope, comparable to that of the incumbent,

Telecom Italia believes, in particular, that **reasonable economies of scale are easy to be achieved in** a relatively short timeframe **and without disproportionate resources.**
In fact, the fixed OAOs, not being subject to any "coverage"/universal service obligation, are free to enter in selected geographic areas – i.e. the most profitable – and adopt whichever technology they believe to be the most efficient. **In this contest it is clear that the OAOs "national" markets shares on access markets, often used as an indicator of the economies of scale achievable by operators, are meaningless (see answer to Question F3).**
In fact, a fixed OAO operating on a regional basis is able to concentrate its customer base in few locations (high density areas: cream-skimming), using a new technology and an optimized network, with qualitatively adjusted staff, lean organization and commercial dynamism.
The fixed OAO will presumably be able to reach an efficient scale in a relatively short timeframe despite its low national market share. Therefore, the claim that – after almost 10 years since the opening of the market to competition - OAOs still suffer from diseconomies of scale is not as strong as sometimes thought.

Moreover, the current levels of asymmetry granted by NRAs to OAOs in EU Countries don't seem to be correlated to actual differences in economies of scale. (**more specific and detailed considerations about the economies of scale that OAOs can benefit** and a proposal for an evaluation of such economies are provided in Annex 1).

In this contest, **the cost that the efficient operator would incur to provide termination service should be comparable to that incurred by the incumbent and, therefore, an efficient cost reference could be the incumbent's cost.**

Telecom Italia agrees that OAOs should be as efficient as the incumbents. As a consequence, symmetry should be the an objective to be reached as soon as possible and asymmetries

should be limited only to those cost differences which are strictly dependent on different economies of scale and LLU market scenario.

Asymmetric termination rates are justifiable only in those Countries were LLU penetration rates is substantially lower that EU average and, therefore, there may be a presumption of OAOs' low scale economies (that should be confirmed by a proper analysis concerning the geographical concentration of LLU access lines). In Countries characterised by comparable penetration of LLU, highly different levels of asymmetry are not justifiable. Moreover, where LLU has overcame a given penetration threshold (e.g. 10% of copper loops) and the effective provision of the service is proven from years, no asymmetries should be imposed.

Moreover, TI wishes to underline that ***according to the general regulatory approach to the sector for all member countries,*** termination costs for fixed services, must consider only network costs , and more specifically only network costs which are strictly related to the wholesale termination service for voice calls.
The termination service is, in fact, regulated in market 9 of voice termination on fixed network. Therefore, the cost elements that have to be considered in the provision of termination, have to be the same both when the termination service is provided by the incumbent, and when it is provided by the new entrants.

In particular TI underlines that no cost related to "access services" (market 11, e.g.: copper loop, line card on Dslam, fiber to the customer premise, customer premise equipments, etc) can be included in the termination costs. Access costs are explicitly excluded by relevant accounting Recommendations and by the practice in all member countries. It's clear that this kind of investments is in no way related to the amount of traffic to be switched or delivered (in fact is only related to the number of customers). The same European Commission CA & AS Recommendation states that cost related to customers and access cannot be consider in the traffic costs on fixed networks.

Moreover, TI believes that not all the costs incurred to "interconnect OAOs network" (market 13) to TI network should be included in the network costs. For example, network assets used to interconnect OAOs nodes to TI (or other OLO) nodes should not be included in the cost of termination, unless they where used specifically for termination on OLO network. In other words, the "termination" should start from the OLO node, down to OLO client (excluding access service). The "interconnection" costs between different networks are covered by interconnection link costs and, for this reason, they should not be considered in the model.

Non-network costs such as "marketing and retail customer acquisition costs" (retail markets 3-5) cannot be considered when modelling fixed networks for the purposes of setting wholesale rates, since buyers of wholesale services, being other fixed operators, should not contribute to the retail costs of the firm with whom they are themselves competing at the retail level. Commercial costs are explicitly excluded in all member countries.

Therefore, TI underlines that only the **pertinent costs** could be allocated to the market 9 service.
This, in order to avoid market distortions deriving form different cost allocation criteria applied to different actors, as it has been the case for Italy, where the NRA has included non pertinent costs (e.g., commercial costs and costs of customer premises' equipments) in the calculation of termination tariff for OAOs, while the same is not allowed to Telecom Italia as a consequence of the imposed Cost Accounting and Accounting Separation rules.

Finally, the costs of an efficient operator should be based on **Current Cost Accounting** .

This is due to the fact that considerable part of the network assets involved in the provision of terminating services is characterized by a rapid technical-economic obsolescence, as demonstrated by a trend of strong prices decrease. More generally, a **Cost Accounting System**, coherent with the current regulatory framework regarding Regulatory Accounting, should be applied transparent, sounds and auditable drivers in order to assure an adequate common cost allocation to a number of services and in order to put in evidence the costs of an efficient service provision.

Last but not least, when defining an efficient Operator, Regulators should also take into account comparable Operators in EU Countries. Harmonisation is one the objective of regulation according to Art. 8 of the Framework Directive. It cannot be accepted that different definitions of efficient Operator in different Member States brings to the application of a level of asymmetry disproportionately higher than those applied in applied in comparable circumstances.

QUESTION F7: Do you agree on the fact that there are less reasons for fixed operators compared to mobile operators that justify the adoption of asymmetric tariffs?

Based on the considerations made in G2, TI believes there are no reasons that could justify the adoption of asymmetric tariffs in the fixed termination market . Indeed, all operators made investments in the same technology (i.e. IP), sell similar services (i.e. ADSL, IpTV, VoIP) and so they incurred in the same costs. Moreover, OAOs can already benefit from a full range of wholesale regulated services (i.e. ULL, bitstream - with multicast function for IpTV services) that allow them to do a rational choice of make-or-buy. In addition, OAOs don't have any coverage obligation, thus they can jeopardize their entry strategy in the market on geographic basis in order to realize - quickly - considerable economies of scale.

As far as mobile termination is concerned, TI considers that an asymmetry could be justified as a result of exogenous factors, outside the control of operators (for more details see Mobile Part, Question M2).

As far as FTR and MTR comparison is concerned, TI considers that there are no reasons that could justify such a comparison, as explained in "General Questions" and in "Fixed part, Question F1".

<u>Question F8</u>: Do you agree on the fact that if all call termination charges were basedstrictly on incurred costs there would be a distortion of competition?

At page 6 of its draft common position ERG states that:

Unlike a unique efficient TR level, asymmetric TR pricing does a priori not favour productive efficiency. In particular, even if it ensures every type of operators (efficient or not) to recover their incurred costs, it imposes a constraint on more efficient operators to subsidize the relative inefficiencies of their competitors. Consequently, incentives to deal with inefficiencies may be reduced and passed on to downstream markets, which is detrimental to the end users. In other words, regulators allowing asymmetric termination rates over a too long period risk to encourage inefficient market entry. (…)

(…) In this case, regulators should keep in mind that asymmetric regulation is sustainable only on

a transitional period, because asymmetric regulation also shows a number of drawbacks, among others: an increase of off-net tariffs of the more efficient mobile and fixed operators, lower incentives to invest and innovate, risk of inefficient entry, etc.

The general principles mentioned above are fully agreed by Telecom Italia.

Termination rates imposed by the regulator should create an incentive to increase efficiency.

While completely sharing ERG's views, Telecom Italia would like to add that the drawbacks indicated in the paragraph above are even more disproportionate where asymmetry consists in allowing OAOs to recover their incurred costs, to the extent that OAOs are not efficient and that not pertinent costs are considered. In these cases, in fact, the level of asymmetry does not face any specific limit, thus opening the door to potentially disproportionate remedies.
This is exactly what has happened in Italy where the decision of the regulator to allow OAOs to recover incurred costs, together with costs elements that are not pertinent of market 9, has brought to the application by OAOs of termination rates which are the highest in Europe.

QUESTION F9: Do you agree on the fact that symmetric tariffs would allow to avoid transaction and regulatory costs?

The general principle above is fully agreed by Telecom Italia.

Question F10: Do you agree on the fact that NRAs should reach symmetry in fixed termination tariff within a reasonable period of time ?

Question F11: Do you agree that it would be reasonable for NRAs to allow a transition period to move to symmetric FTRs? How long should this transition period be ?

As above mentioned, asymmetric rates for OAOs do not favour productive efficiency, as they impose a constraint on more efficient operators to subsidize the relative inefficiencies of their competitors (cross subsidies between operators) passing the inefficiencies on to retail markets.

On the contrary, according to the economic theory, symmetric TRs contribute to enhance static economic efficiency (limiting allocative and productive inefficiencies), investment, innovation and, finally, global welfare.

In order to avoid the risk of inefficient entry, of lower incentives to invest and innovate, an increase of off-net tariffs and (in general) a distortion of competition, asymmetric rates should be avoided or should not remain in force for too long, and the Asymmetric index should not be disproportionate.

TI agrees that NRAs, in the market 9 review and whereas the case, should consider setting a path to achieve symmetry in FTRs as soon as possible.

In order to reach symmetry in fixed termination tariff within a reasonable period of time, NRAs should have a common approach (well and explicitly defined at European level) to take into account:

- the prevailing national circumstances, such as the date of **access market** opening, the number of OAOs and their respective access market shares – evaluated in the geographical access market in which they operate rather than at the national level - in term of **Number of clients and number of clients on a MDF sites opened to unbundling**
- the fact that OAOs are able to realise, in a short term, similar economies of scale of the incumbent: the economies of scale are not in general as significant and are easy to implement, without exhausting disproportionate resources.
- the necessity of harmonization of the European contest in order to avoid excessive price differentials in similar member countries: as an hypothetical example, the FTR rate paid in Italy to TI by an OAO which represent another European operator also present in the Italian market (i.e. BT Italia) should be similar to the TR paid in United Kingdom by TI's arm to BT. Possible price differentials should be related only to the specific and well identified peculiarity of the national market (i.e.: technology development, geographic peculiarity, service development, etc.)

In conclusion:

The analysis related to the already significant presence of relevant economies of scale, and to the average volumes (number of clients) reached by OAOs (especially if concentrated in specific high demand areas), suggest that the "symmetry" should be rapidly adopted in a time frame depending on the level of maturity of the LLU market, but not exceeding two/three years since the OAOs enters the market.

Possible temporary asymmetries should be introduced with an harmonized approach in all member countries, taking into account efficient costs incurred, in order to define a correct signal to the market that could avoid inefficient entrance, unjustified subsidies to OAOs and market distortions.

Question F12: In your opinion what criterion should NRAs adopt to set the glide path ?

Telecom Italia maintains that when setting an OAO's termination glide path, the NRAs should

1. *in primis*, follow transparent procedures
2. adopt non retroactive decision
3. define at European level a common approach regarding the "structure" of the Glide Path (e.g.: are only "single Glide Path" eligible in member States or also "multiple Glide Path" (i.e. operator specific glide paths)?)
4. base their decisions on the economic accounting criteria defined by the Commission (Directives and Recommendations) and followed in EU
5. take into account efficient LRIC models
6. give sound evidence of the economic and competitive reasons which would lead to the specific characteristics of the Glide Path (such as the length of the glide path, the assumptions to be made in the definition of a bottom up model of an "efficient" provision of the service, the demand under which the model has to be dimensioned, the technology chosen and so on)

7. evaluate the level of asymmetry granted to OAOs in the light of the regulatory burden applied (regulatory obligations) .

More specifically, about point 5 (LRIC models) TI believes that a development, in each member countries, of a specific cost model based on **LRIC methodology** can help in defining efficient costs to be used when **setting a symmetric pricing** (or same pricing) for fixed OAOs and incumbent, to be reached through the "Glide path".

The Cost model

- should be coherent with the regulatory framework regarding Regulatory Accounting rules ,
- should take into account the evolution of the demand deriving from the growth of competition in the market of termination services, and economies of scope correlated to the growth of the range of services;
- should adopt transparent, sounds and auditable drivers in order to assure an adequate common cost allocation to a number of services and in order to put in evidence the costs of an efficient service provision

This approach would assure, setting the Glide path, the achievement of **singles and efficient symmetric rates** at the end of the path, applicable both to fixed OAOs and incumbent.

The Glide Path and the same symmetric rates have to be notified to the EC, together with the relative market analysis, in order to assure the necessary harmonization at European contest to avoid huge price differentials across member countries.

Otherwise, the development of different cost models for each operator present in the market with different core network technologies and topologies, etc. would inevitably lead to several symmetric rates and several Glide Paths which in turn would lead to huge transaction costs (that would arise from multiple negotiation), as well as to high regulatory costs (arising from the necessity to make a rigorous assessment of each individual OAO's termination charge proposal).

QUESTION F13: As the length of the glide path is a controversial point, in your opinion, should the time period to reach symmetry be the same for all NRAs or should each NRA determine it according to national circumstances?

Telecom Italia considers that, in general terms, the application of asymmetric remedies by EU NRAs should be as homogeneous as possible. As asymmetric remedies respond in principle to the same or similar regulatory concerns in all Member States, there is little or no reason to apply them differently unless this is justified by specific and objective circumstances, such as the development of LLU market.

This applies also to the length of the time period to reach symmetry.
Telecom Italia would like to add in this regard that the specific and objective circumstances justifying a different length of the transitional period towards symmetry can also have a regulatory origin. In particular, when defining the length of the glide path, the regulator should take into account the net effect of both the asymmetric FTRs and of the other regulatory measures applicable in parallel. This is the case for example, where asymmetric remedies bring to a level of asymmetry substantially higher than the EU average (for example where it allows OAOs to recover incurred costs) and/or where the combined application of symmetric FTRs and regulatory measures at the

retail level can produce distortions in retail markets. In these circumstances, regulator should in the first place avoid the production of the mentioned distortions by avoiding excessive levels of asymmetry. At the same time, they should also reconsider the length of the transitional period in order to maintain the overall sustainability of the asymmetric remedy.

ERG public consultation on a draft Common Position on symmetry of mobile/fixed call termination rates
Telecom Italia contribution

Mobile part

Question M1: Do you agree with the general principle promoting symmetry "Termination rates should normally be symmetric"?

The general principle above is fully agreed by Telecom Italia.

Termination rates should normally be symmetric.

As stated by the ERG in the present consultation document, a small degree of asymmetry may be acceptable only in some exceptional cases and under these conditions it always requires an adequate and objective justification (please see also the following answers).

In any case, asymmetric prices regulation would be sustainable only on a transitional and limited period of time, because asymmetric regulation can also result in a number of competitive distortion drawbacks, among which an increase of off-net tariffs of the main mobile operators, lower incentives to invest and innovate, risk of inefficient entry, etc.
These negative effects should be previously and carefully evaluated by the regulator in order to verify if they can offset the positive effects for competitors benefiting from asymmetric MTRs. In their evaluation, NRAs should consider also the whole set of possible other asymmetric measures imposed on the national market (i.e. national roaming obligation/cost oriented; compelling site sharing; frequency sharing, etc.).

Furthermore, when opting for such an asymmetric regulatory policy, every national regulator must be able to commit itself on a sunset clause for safeguarding the transparency and the certainty of the regulatory framework to the benefit of all market players.
All the national regulators should make mobile termination rates asymmetry disappear and specify, meanwhile, the convergence conditions towards symmetry, with regard to both target level and time frame (max. 4-5 years from the entry in the market).

Exception to take into account exogenous factors, not related to a late entrance:

QUESTION M2: Do you agree with the exception to take into account exogenous cost differences: "asymmetry is only acceptable to take into account exogenous factors, outside the control of operators"? The only example, which is not related to a late entrance, identified by ERG is cost differences due to the spectrum licensing holdings. Can you identify other exogenous factors?

In response to the possibility of differentiating mobile termination rates as a result of different exogenous costs outside the control of operators, Telecom Italia considers appropriate to evaluate ***only the impacts associated with different allocations of transmission frequencies.***

In particular, ***it is appropriate to distinguish between operators with only 1800MHz frequencies or UMTS only and those with endowments fo 900MHz only or mixed 2G/3G.***

At a purely ***theoretical level***, it is reasonable to consider that ***the costs of 1800MHz only operator or UMTS only operator***, ***in the early stages of network development, can be higher in relation to coverage of the territory and population.***

The exogenous differences in costs between the two technologies are related to the lower propagation characteristic of 1800 MHz spectrum compared to 900 MHz. This means, in theory, that ***an operator 1800 MHz only or UMTS only, for the same surface covered, requires a greater number of sites and therefore higher costs compared to a 900 MHz only operator.***

The phenomenon described above is to be considered only temporary (especially in the first 2 / 3 years of life), in fact, in the following years the dimensioning of the access network will be mainly linked to the needs of traffic. ***Starting from the third / fourth year of life, even 1800 MHz only operator or UMTS only develops its network under the same conditions, and with costs not dissimilar to those incurred by operators with 900 MHz only frequencies or combined 2G/3G***.

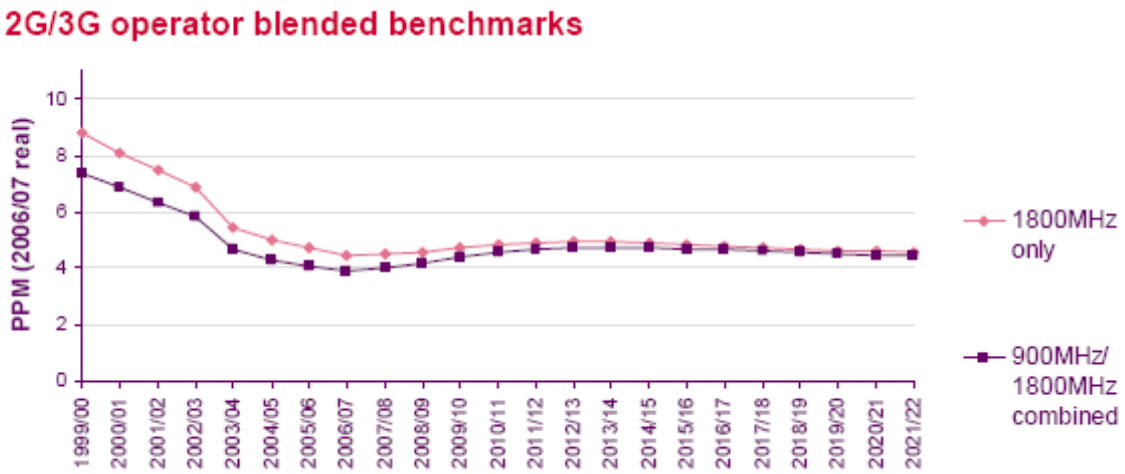
Telecom Italia fully shares the statements made by OFCOM in "Mobile call termination statement 2007".

"The modelled differences in network costs between the 2G/3G operators arise predominantly from the costs of deploying coverage networks in the past."

"The 1800MHz-only operators face higher coverage costs, other things being equal, because they need a greater number of coverage cells. However, as traffic demand grows, the difference in the required numbers of cells (and by extension other network equipment such as BTSs and BSCs) narrows. The requirement to meet traffic demand becomes increasingly the binding constraint in network deployment, i.e. what were initially cells required for coverage purposes become capacity constrained as demand increases."

"Ofcom's cost modelling indicates that the differences in network unit costs between the two types of 2G/3G operator have narrowed. The forecast unit cost difference is less than 0.3ppm in 2010/11 using economic depreciation under a medium voice and data traffic scenario."

2G/3G operators: comparison of blended efficient charge benchmarks under the medium voice and data traffic scenario

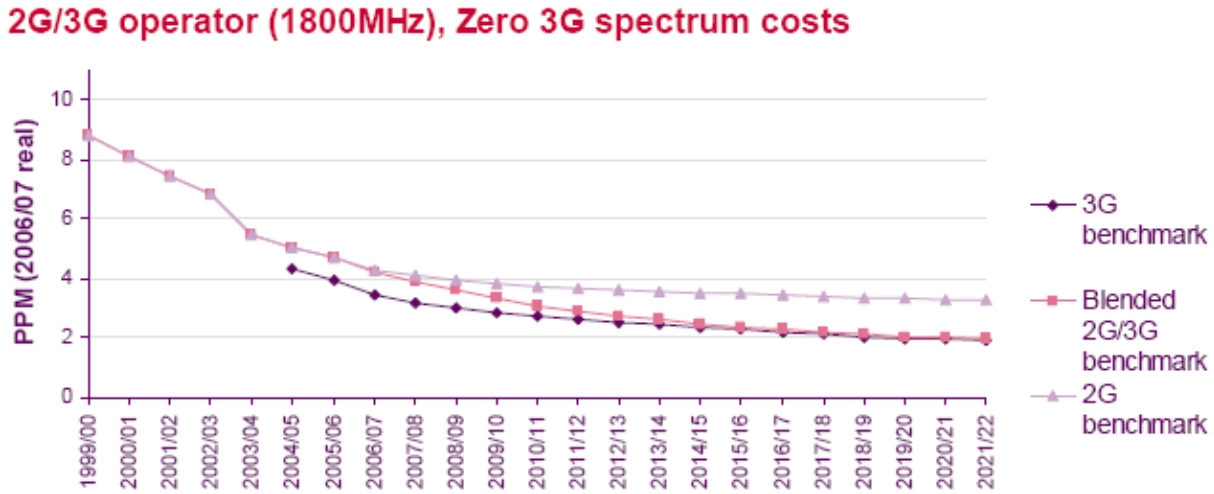


Ofcom, in his final decision, defines a complete MTR simmetry in 2010/2011.

Moreover, Ofcom in the above mentioned economic evaluation, shows that considering UMTS network investment and operating expenditure, in the absence of 3G spectrum costs, the 3G cost trend continues to fall relative to the 2G trend over time. As a matter of fact, a pure 3G operator sustains even less costs than a pure 2G or a combined 2G/3G operator (see below).

In addition, Telecom Italia agrees with the statements made by ERG with regard to mechanisms for spectrum alignment. Indeed when the NRA modifies over time frequencies allocation aligning spectrum endowment of all operators, it would be automatically cancelled any difference in cost and therefore the asymmetry should be immediately removed.

2G, 3G and blended unit cost benchmarks under medium voice and data traffic scenario



Telecom Italia submits that mobile markets of the main European country are now mature and highly competitive. This implies, that the development of mobile business and

competitiveness have encouraged, and will encourage, network optimization of both types of operators, 1800 MHz and 900 MHz and especially UMTS, with the consequent total annulment of any difference in cost.

QUESTION M3: Do you agree with the following principle: "Assuming that cost differences due to different spectrum allocation are properly evaluated, they may justify an asymmetry"?

Telecom Italia, believes that tariff asymmetries can be justified only on the basis of substantial differences in frequency spectrum allocation.

In any case, this asymmetry should be limited in time, maximum 4 / 5 years from the operator's start up, (as we have been argued in response to question M2) and certified by the accounting regulatory data which should be submitted by any operator.

Transitory exceptions to take into account a significantly late entrance:

Question M4: Do you agree with the following principle "If the level of competition in the mobile retail market asks for measures which create incentives for new network level entry or measures that strengthen the position of small new entrants, substantial differences in the date of market entry can justify an asymmetry for a transitory period"?

As already mentioned above (see answer to question M3), asymmetric MTR can only be justified by objective cost differences, external to the operator.

Market entry or market position strengthening are not and should not be a primary objective of regulation thus justifying asymmetries.

Indeed, asymmetry introduced in order to help new entrants, and not justified by objective cost elements, would create a dangerous distortion in the market and would represent an industrial policy choice which should be out of the scope of regulation.

In addition to that, it should be considered that the great majority of EU MNOs have now entered the market by at least 4-5 years and should have yet fulfilled their coverage obligations; therefore presumably, the proper implementation of cost accounting methodologies would not highlight big differences between national MNOs.

In conclusion, Telecom Italia agrees with ERG that the only elements that can justify asymmetry (i.e. Spectrum differences) should constitute exceptions based on objective exogenous cost differences and it is convinced that an eventual unbalanced situation of the market (e.g. a lower market share for later entrants in the market) can hardly be solved by an asymmetric solution if this is not studied, justified and analyzed in details.

Question M5: Do you agree with the principle of keeping the level of asymmetry "reasonable"?

Telecom Italia believes that Termination rates should normally be symmetric. In any case if an NRA decides to introduce asymmetric rates in the market, it should properly justify the level of such asymmetry, and rapidly support for all the Operators (new entrants and incumbents) the actual implementation of a cost accounting system in order to analyze possible asymmetric rates for the

market and also the level of the costs of an efficient Operator. In this way the "reasonable" level of asymmetry can be studied, detailed and explained by the NRA to the market and to the Operators.

It is also to be considered that even if a late entrant will not, in its very early stages of operation, have an equal market share to main operators and will need to improve its economies of scale and scope – i.e. during a transitory period, this late entrant may face higher unit costs than the costs of the hypothetical efficient operator - nevertheless the persistence of higher mobile termination rate would not be justified after a period long enough for the operator to adapt to market conditions and become efficient and could even discourage smaller operators from seeking to expand their market share.

In any case, even considering all the possible differences at national level (date of entry, maturity of market, churn rate, rate of customer acquisition, level of competition in the national mobile market, etc.), the initial asymmetry – set in accordance with a common European grid - should not be set higher than 50% of the lowest MTR in the same national mobile market.

Question M6: Do you agree with the fact that an initial level should be accompanied by a glide path towards symmetry?

Telecom Italia believes that asymmetry can be borne by the market just for a transitory period (which in any case cannot be longer than 4-5 years) and that a glide path must be defined as soon as the NRA decides for asymmetry. The new player should be aware from the beginning of the expiring date of its privileges and make plans to be competitive once these are removed. This is, in our opinion, the best way to ensure transparency to the market and to defend the certainty of the regulatory framework.
As already mentioned in the previous answer, Telecom Italia proposes that the NRA must justify in detail the glide path.

Question M7: Do you agree that national factors should be taken into account to evaluate the length of the transition period?

Certainty and predictability of the regulatory regime are factors of paramount importance for market players in a competitive environment.

Considered that asymmetric MTRs produce de facto "a constraint on more efficient operators to subsidize the relative inefficiencies of their competitors" potentially distorting market dynamics, **NRAs discretion in taking into account national market characteristic should be limited as much as possible** linking it to a very well defined and transparent set of parameters.

Telecom Italia believes that harmonisation of glide paths – referring to length, time between milestones – would be key in order to give market players a sufficient level of confidence in the stability of the regulatory regime, without the possibility to continually reset the sunset clause.

Transitory exception before MTRs are at cost, to limit distortions created by MTRs above costs:

Question M8: Do you agree that in specific market circumstances (MTRs tariffs are significantly above MTR costs, there are high traffic imbalances between mobile operators and benefits of a transitory asymmetry outweigh any short term disadvantages of doing so), a temporary asymmetry may limit competitive distortions?

In no cases, the asymmetry in MTR levels between national operators should be too wide, in order not to distort market dynamics

Nevertheless, to date asymmetric MTR within a Member State are considered legitimate up to a given point in order to assist new market's entry and also to prevent potential market distortions.

In this context, asymmetric regulation on a national market would very much look like a purely industrial policy choice; as such it should be made on a case by case basis, taking into account that any market entry assistance has immediate costs which are ultimately paid by other operators' customers.

In case these measures were considered appropriate by policy makers, they have to be set at reasonable levels and for a previously well defined and limited period of time. In their evaluation, NRAs should consider also the whole set of asymmetric measures imposed on the market (i.e. national roaming obligation/cost oriented; compelling site sharing; frequency sharing).

Once again we agree with the opinion of the ERG, that allowing asymmetric termination rates differences over a too long and unreasonable period of time can lead to inefficiencies and be detrimental to competition and welfare. For instance, it will provide limited incentives to cost minimization, distort price signals and high cost operators will be allowed to pass their inefficiencies on to fixed and mobile consumers. In addition, it could provide MNOs with an unjustified advantage when competing against other MNOs, such as in retail mobile services.

Telecom Italia concurs with the European Commission target to eliminate the asymmetry in the MTRs over a reasonable timeframe on the basis of the costs of an efficient operator. The European Commission has already indicated in a high number of cases that it is necessary to ensure that asymmetries do not remain in force for too long and that MTRs of each MNO should be brought down to the cost of an efficient operator as soon as possible.

QUESTION M9: Do you agree that NRAs should first try to set MTRs at costs?

Telecom Italia believes that cost accounting methodologies are absolutely the most appropriate approach capable to determine the correct level of MTR in each Country.

A common cost accounting approach or common European guidelines could be a good way of minimising unjustified costs differences, but it has to be taken into account that it would not result in a same termination level across Europe. As a matter of fact, each national market is characterized by specific elements that differently affect the cost of the mobile termination rates.

There are a lot of peculiar factors, which differentiate European countries, here below we summarize some of the main factors that is necessary to consider:

- *Macroeconomic characteristics (Inflation rate, WACC, tax rate, etc.)*
- *the cost of inputs (Labour, Capital, etc.)*
- *overhead (i.e. administrative costs and network development costs),*
- *the Purchasing Power*
- *the morphology of the territory*
- *the cost of UMTS licenses*

- *different market characteristic (penetration rate, number of MNOs, terminal subsidy, prepaid/post-paid, retail prices)*

The differences mentioned above may well justify different Mobile Termination Rate across European Union.

Telecom Italia believes that the ERG and the European Commission might issue common and sufficiently detailed guidelines for the implementation of a harmonised cost model that each NRA could use to tailor to the peculiarity of each national mobile market.

In this way, by the adoption of a common cost accounting approach it is likely that the actual MTR spread between European Countries would be reduced, but this would not result in a single European Price, because every MTR level correctly reflects the existing cost differences among European Countries.

Within each country, given what has already been said in response to questions M2 and M3 in regard to differences in frequencies allocation, Telecom Italia believes that the costs incurred by operators in the medium term (four or five years after commercial launch), tend to be equivalent.

ANNEX1: The issue of Economy of Scale

A) **Claimed relationship between penetration/economy of scale levels incurred by OLO and termination costs**

As it is shown in the following, from an analysis of the data gathered by ERG and data gathered by ECTA on the same period considered (july - september 2006), one can easily infer that **there is no evidence that NRAs which have decided to grant asymmetric termination rates have correlated the level of asymmetry to factual considerations about the economies of scale achieved by OAOs.**
In other words **it is not proven that the factor "economy of scale " has been really considered by NRAs as a driver for defining the level of asymmetry to be allowed.**

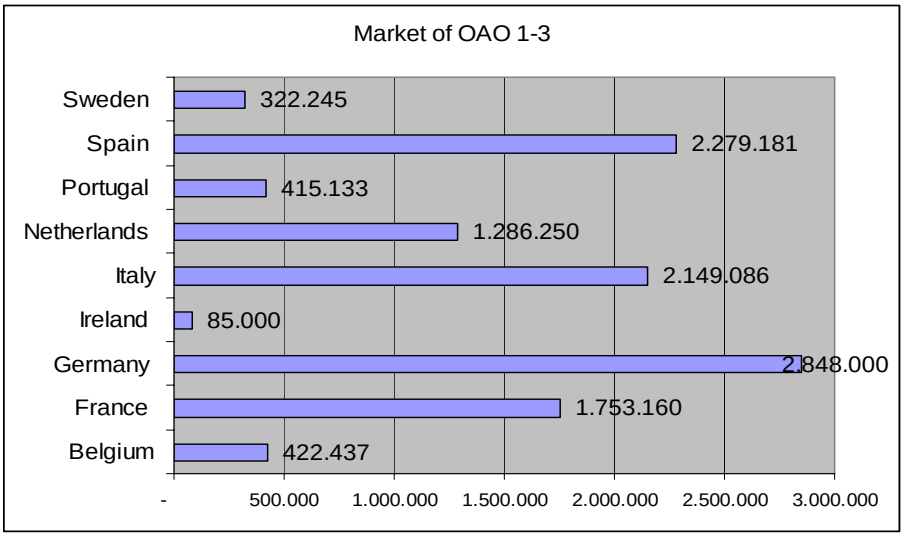
In the following figures the result of the analysis is illustrated.

In Figure 1 we have calculated the absolute market shares -in terms of number of clients- of the first three OAOs of Table 5 of the ERG document, by applying the percentage market shares given in table 5 to the number of PSTN lines updated at September 2006, as available in the ECTA scorecard.

As it can be easily seen, in terms of number of accesses, the Italian market of the first OAO is almost 2,2 million of clients, comparable to the Spanish, German and French ones.

As a first consideration, it results from this Figure that, since Italy and the above Countries are apparently similar in terms of clients served by the main OAOs, there should be no **justification for relevant differences in the Global Asymmetric Index** (GAI in the following**).**
However such relevant differences in the GAI do exist, with Italy presenting, in figure 8 of the ERG document, a GAI of 173,29%!) with respect to much lower indexes, e.g., in France (52,22%) and in Germany (28,94%)

Figure 1 – Number of clients of the three main OAOs as defined in Table 5 of doc ERG (07) 83



However, since the **number of clients** itself could be seen as not being an adequate indicator of economies of scale (e.g. because of differences in terms of country areas covered by OLOs), we have calculated a more specific **indicator of "concentration" of OAOs** in the various countries.

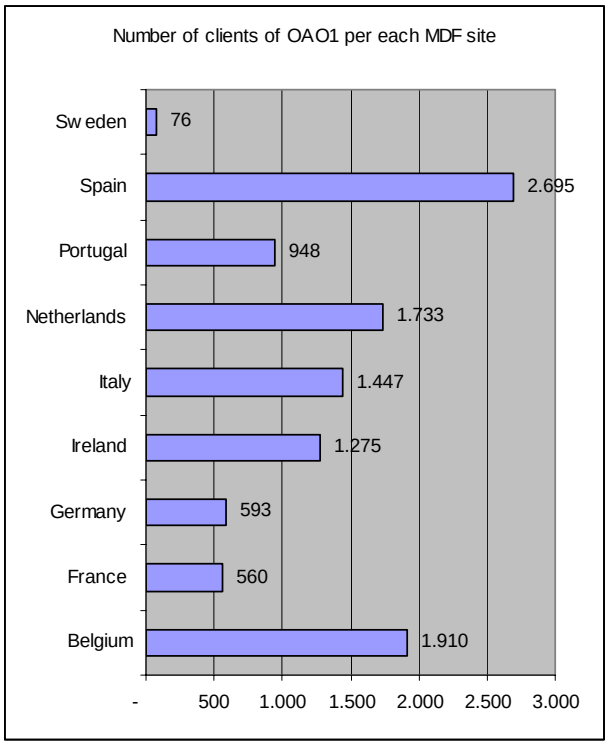
As a more proper Indicator of **economies of scale incurred by an OLO we have considered the number of clients (lines) the main OLO (that is the one with the higher market share of Table 5 of the ERG document) has on average on a MDF site opened to unbundling**.
This approach takes into account the fact that –other factors being equal- OAOs which concentrate their commercial efforts in selected areas can benefit from higher economies of scale than those achieved by OAOs with clients "scattered" in the country.

This Indicator has been calculated on the basis of the data on *PSTN lines* and on *MDF sites opened to ULL* which are available on ECTA scorecard database.

By inspecting the data illustrated in Figure 2 it's easy to see that, given the number of MDF sites reported at that date, in Italy the OAO which enjoined the highest number of LLU lines per average MDF was able to address almost 1450 clients per each MDF site.
The comparison with its peers in Germany and France (i.e. the OAOs which enjoined the highest number of ULL lines per average MDF) shows that they were able to achieve, respectively, 593 and 560 clients on average MFD.
As a consequence, the level of economy of scale which has been achieved by the "first" OAO in Italy seems to be much greater than the one achieved by the "first" OAO in Germany and in France. **Despite this fact, as we have seen, in these two countries the NRAs have allowed a GAI much lower than the GAI allowed to the "first" Italian OAO (and also higher than the GAI allowed to the other Italian OAOs).**

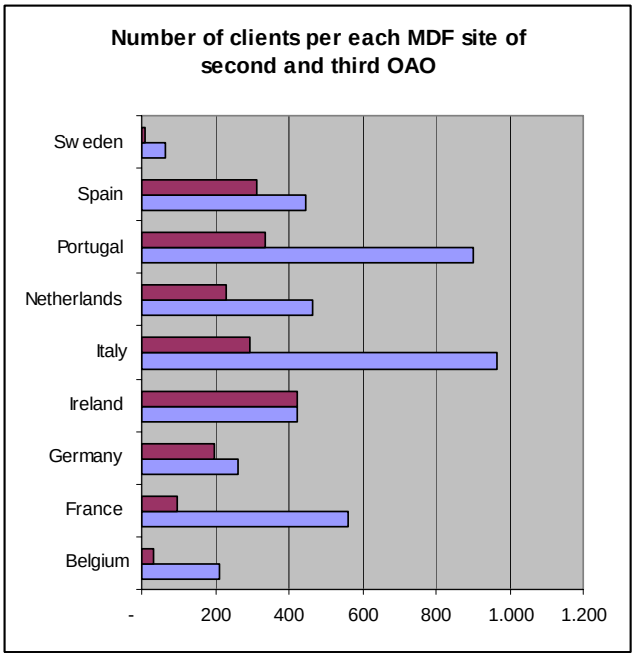
On the other side the number of clients/MDF of the "first" Italian OLO could be considered *comparable* to the ones computed for Netherland and Ireland, while the level in Spain seems high when compared to its peers. Again, apparently no correlation does exist between the GAI allowed by the NRA and this indicator of the economy of scale (and , in particular, that there is no motivation for the disproportionate gap between Italy and other Countries).

Figure 2– Number of clients of the main OAO



Analogous considerations can be done considering, as in Figure 3, the number of clients of the other two OAOs

Figure 3 – Number of clients of the second and the third OAOs



B) **Concrete possibility for OAOs to realise in a short term significant economies of scale**

Telecom Italia believes that OAOs are able to realise, in a short term and despite their possible low national market share, relevant economies of scale, not so dissimilar from those achieved by the incumbent. In fact the fixed OAOs are free to enter in selected areas – i.e. the ones that are potentially the most profitable – and they are able to concentrate their customer base in few locations (high density areas: cream-skimming), with qualitatively adjusted staff, lean organization and commercial dynamism, using a new technology and an optimized network (i.e IP).

The following analysis provide further elements in order to take in adequate consideration the concrete possibility for OAOs to realise in a short term significant economies of scale.
The analysis moves from the levels of efficiency reachable, in short time, at the edge of the transport network, that is the part where economies of scale are more important and can be more relevant to the costs of Termination service.

Therefore we address DSLAM equipments (because they are quite relevant in term of incidence on Capex and are used by most of OAOs for delivering also voice services, through VoIP techniques).

Efficient ***levels of production*** can be reached by OAOs in a short term, based on the fact that typical DSLAMs implemented by a manufacturer do not have a unique modularity, but are composed by different components, each one with its own price and its own modularity. The main components of a DSLAM are:

- rack,
- subrack,
- ADSL or SDSL linecard,
- ATM ports to the network

Typical DSLAM's configurations are reported in the following Table

Table 1

Equipment type/references	**A**	**B**	**C**
Number of subracks per rack	**2**	**1**	**2**
Number of line cards per subrack	**20**	**14**	**16**
Number of users ADSL per linecard	**48**	**64**	**48**
Number of users SDSL per linecard	**32**	**32**	**24**
Maximum number of users per rack*	**1920**	**896**	**1536**

*defined with capacity of ADSL linecards.

Capacity depends on the number of components considered (i.e.: if the number of clients to be served in less than 960 for DSLAM A, there is no need for a second subrack unless, of course, there could be bandwidth constraints that wouldn't allow to fill completely the linecards of the subrack).
Moreover, modularity depends also on different manufacturers. DSLAM B, in table 1, has an higher capacity in terms of linecards, but a lower capacity in terms of number of line cards per subrack.

In order to set up a DSLAM an OAO (such as any other stakeholder) incurs fixed costs that refer mostly to the price paid for:

- The rack, that represent the external structure that contains the other components of the DSLAM. The rack has a marginal price compared with the cost of the whole DSLAM entirely equipped.
- Alarm unity, and so on.

Such fixed costs are then not scalable in function on the demand to be served.

Having sustained above fixed costs, the efficient Operator may however choose, depending on the potential demand,

- To equip the rack directly with one or two subracks and with corresponding ATM ports towards the ATM node;
- To equip the subrack with the number of linecards sufficient for the demand considered

In the hypothesis of maximun scalability, for DSLAM "A" considered in the example there are 1920 clients per rack, to which corresponds half the capacity for the subrack, while single linecards have a capacity of 48 modem.

On the basis of such a modularity, out of 100 euros invested,

- 1-5 % is the percentage associate to the rack (and other fixed component)
- 14 – 33%% is the percentage associate to the costs of the subrack
- 66 – 81%% is the percentage associate to the costs of the linecards

Thus, on 100% of investment, the 66% - as a minimum- is associated to the cost component that has the the highest modularity, i.e the Line Cards.

The next figures illustrate the growth of cost[4] incurred by the OAO for dimensioning opportunely the DSLAM (in the case of DSLAM A), as a function of the demand (number of clients)

- In terms of total expense (figure 4)
- In terms of average expense per client (figure 5).

Figure 5

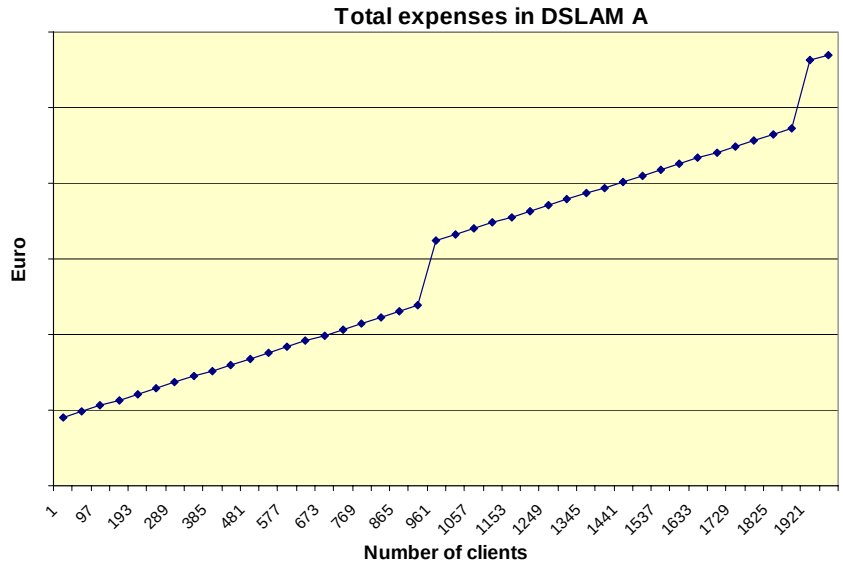
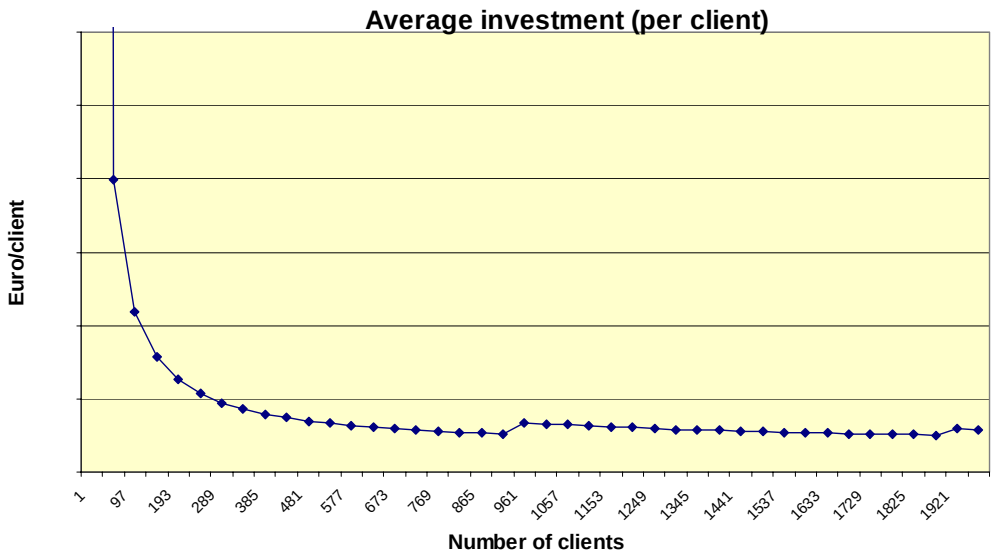


Figure 6

[4] The analysis is just focused on the investment on equipment and is, of course, not exhaustive of all cost components need to obtain a full cost of the DSLAM, that is O&M costs and other indirect costs that should be considered, e.g, in a FDC cost accounting methodology.



From these figures clearly **emerges the presence of relevant economies of scale at DSLAM level in presence of average volumes (number of clients) that appear to be easily and quickly reachable by an OAO (especially if the offer is concentrated in specific high demand areas).**

In other terms, an OAO can adopt [differently from what is generally done by the incumbent, which is often asked by (national and regional) social and political constraints to invest not only in remunerative geographical areas] very focussed policies of investments, easily modulating the Capex "step by step", by filling in a very effective way (with linecards and subracks) the DSLAM in the sites where it has decided to invest.

This allows the OAO to reach in relatively short period, and with a consistence of less that 400 clients per DSLAM) high economies of scale in the provision of the service.

The number of customer considered in the example **are well below the average numbers that can be computed, e.g for the main OAO and even for the second and the third of France and Germany** (data gathered on the ERG document itself and on ECTA scorecard).

Table 2

Country**	Market share OLO 1 - 3; Table 5, pg 19 ERG (70) 83	**OLO 1-3 clients per each MDF***	***F: Number of clients of OLO1***	***G: Number of clients of OLO2***	***H Number of clients of OLO3***
Belgium	13,2%	**2.155**	***1.910***	***212***	***33***
France	6,3%	**1.217**	***560***	***560***	***97***
Germany	8,0%	**1.055**	***593***	***264***	***198***
Ireland	5,0%	**2.125**	***1.275***	***425***	***425***
Italy	10,1%	**2.707**	***1.447***	***965***	***295***
Netherlands	21,0%	**2.427**	***1.733***	***462***	***231***
Portugal	13,6%	**2.185**	***948***	***900***	***337***

Spain	13,2%	**3.453**	***2.695***	***445***	***314***
Sweden	6,3%	**150**	***76***	***67***	***7***

**data calculated on the basis of data gathered by ECTA in ECTA scorecard, September 2006*

*** United Kingdom has not be considered in this analysis because data present in the ERG and in the ECTA document were not immediately comparable – a further analysis on the role if Cable Access OAO should be performed*

To conclude:

- Telecom Italia believes that a more harmonised pattern should be defined at European level, in terms of price control regimes for OAOs, that effectively took into account the real possibility for an OAO to achieve efficient costs even with not very high market share. This harmonisation would avoid to give wrong signal to the market and could avoid inefficient entrance or market distortions.
- current levels of asymmetries between tariffs of OAOs and incumbents seem **not** to have been decided by NRAs on the basis of real differencies in economies of scale of OAOs, or on the cost of an efficient entry, but on different, not explicit and not coherent criteria. This is, in particular, the case in Italy.

ANNEX 2: The glide path definition process in Italy

The path followed by Italian NRA for defining OAOs call termination rates has been very long, but nor linear neither transparent.

After a 5 years period (since 1998) in which the market used to apply symmetric charges, in 2003 the NRA claimed that asymmetric charges in M9 were necessary in order to help OAOs investments in M11, so being the first (and unique) NRA to formally introduce and approve the possibility of regulated prices aimed at implementing subsidies among different regulated markets![5].

While, following this statement, disputes among Operators were increasing, only on August 2006 (with Order 417/06/CONS), the NRA issued a **glide path of five years** with the following conditions

Figure 1: the maximum termination values set by AGCom in Order 417/06/CONS

SMP OAOs	BT, Colt, Eutelia, Equant Italy, Fastweb, Metropol Access Italia, Multilink, Tele 2, Tiscali, Welcome, Wind.
price control mechanism (values in €cent/min)	Glide path + deroghe
Price for 2007	1,54 to june the 30th; 1,32 to december the 31st;
Price for 2008	1,32 to june the 30th; 1,11 to december the 31st;
Price for 2009	1,11 to june the 30th; 0,88 to december the 31st;
Price for 2010	0,88 to june the 30th; 0,69 to december the 31st;
Price for 2011	0,69 to june the 30th; 0,55 to december the 31st;
Price for 2012	0,55 to june the 30th;

The path was set with the target of reaching, for the year 2012, the value of 0,55 €cent./min.

It important to put in evidence that the **ceiling of 1,54 for year 2007** was computed, as far as the same AGCom says in Order 417, on the basis of Telecom Italia SGT value for the year 1998, that implies a "8 year delayed approach" (!).

The comparison with the current average (50% peak; 50% off peak) price of Telecom Italia's SGT termination is impressive (0,62 eurocent/min). Notice that <u>local termination</u> for 2007 is currently priced at a lower value (0,35 €cent/min). The comparison, then, is even more impressive!

[5] Decision 11/03/Cir

In the same Order 417/06/CONS, however, AGCom has defined for OAOs the possibility to ask for termination values higher than the ones of Figure 1, if they could justify higher costs on the basis of their cost accounting reports.
The result of this has been that the main OLOs asked for prices up to the end of june 2007 that exceeded by far the maximum ceiling imposed by AGCom (3.61 BT Italia, 3.27 Fastweb, 2.87 Tiscali – all data in €cent/min).

On 19/12/07, after almost six months from the deadline of validity of these prices (june 2007) the NRA eventually decided the final values ("derogative values") that could be (retroactively) requested by the three OAOs. These prices, as it can be seen below, exceed by far the first ceiling (1,54 €/cent/min) imposed by AGCom itself.

	Ceiling - up to july 2007	Prices proposed by OAOs	Prices authorized by AGCom at december 2007, but valid up to july 2007.	Telecom Italia SGT Price in RIO 2007
Fastweb	1,54	3,75	2,6	0,62
BT Italia		3,61	2,28	
Tiscali		2,87	2,24	

This means that the "derogative values" authorised by AGCOM for termination on OAOs network imply that Telecom Italia has to pay <u>for 2007</u> a FTR much higher than the FTR already paid to OAOs <u>at the beginning of the liberalization process of the market for interconnection at transit level!</u>

<u>Thus, after 9 years from liberation of the market, and 5 years from the effective availability of LLU in Italy!</u>

On the basis of the published documents it's clear (and has been formally declared by the NRA) that in order to determinate such high values the NRA has accepted to include costs which are not relevant to the Voice Call Termination Service (e.g. commercial costs and costs of customer premises' equipments) and to adopt costs allocation criteria not adequately sound & auditable in term of not discrimination and cost causality principles.

It is very relevant to note, furthermore, that this asymmetry in prices comes also with another asymmetric measure against Telecom Italia prices, that is the fact the Telecom Italia cannot differentiate retail market prices for markets 3 and 5 with respect to the OAO of termination of the call.

What is reported, in fact, in Table 14, isn't correct for Italy. On the contrary of what reported in Table 14, Telecom Italia is not allowed to differentiate between on net and off net general retail tariffs.

The more recent step of this process is a NRA's release of a consultation document, where AGCom defines new "target" values for symmetric FTR set at 0,57 €cent./min for year 2010 for all stakeholders, Telecom Italia included.

This value has been set, according to the note published by AGCom[6], on the basis of a bottom up cost model which the NRA has implemented in the last months.

However it is not clear on which basis the AGCom has defined a target value to be valid also for Telecom Italia for year 2010, given the fact that:

1) The current Network Cap mechanism is valid until year 2009 and, in order to set a new value for year 2010, a new market analysis should be performed, not only the definition of a new model;
2) Regarding the model used to evaluate the **target costs**, this has not been developed also on the basis of Telecom Italia traffic patterns. If the resulting values have to be also applied to the incumbent SMP operator , one should expect that the dimensioning of the model should also refer to traffic volumes and routing factors of this Operator.

As a final consideration, Telecom Italia express serious concerns about the concrete risk that the Derogation decision of 19/12/07 could change the original "structure" of the Glide Path foreseen in decision 417/06/Cons: instead of having a "new" Glide path based on more accurate outcomes produced by a cost model, there is the risk that the three "derogative" values could be "added" to the (originally) unique starting point (the value of 1,54 up 06/2007) of the original glide path and could result in the introduction of "multiple Glide Paths", to be valid for each OAO . Clearly such a situation would represent an additional element of not harmonisation among Member States

YES

	Original Glide Path	Revised Glide Path
2007	1,54	X,XX
2008	1,32	Y,YY
2009	1,11	K,KK
2010	0,88	Z,ZZ
...		

NO !

Revised Glide path			
OLO 1	OLO 2	OLO 3	OLO 4
X,XX1	X,XX2	X,XX3	X,XX4
Y,YY1	Y,YY2	Y,YY3	Y,YY4
K,KK1	K,KK2	K,KK3	K,KK4
Z,ZZ1	Z,ZZ2	Z,ZZ3	Z,ZZ4

[6] The only information available up to now is a short note published on AGCom website, were a synthesis is given. The order has not been published yet.