

# **BEREC response to the European Commission's public consultation on the evaluation of the Termination Rates Recommendation**

## Executive summary

On 7 May 2009 the European Commission adopted its Recommendation 2009/396/EC on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, aiming at coherent regulation in termination markets across the EU, which has to be reviewed no later than the end of 2016.

This document is the BEREC's response to the consultation launched by the European Commission on this Recommendation (running from March to June 2016). The response to the consultation leverages on the work and analysis carried out by BEREC in the previous years.

The response recalls the benefits of setting the termination rates at a pure BU-LRIC level, consistent with the recommendation. It shows the positive effects of a coherent approach across Europe, for national markets as well as the development of an internal market.

This document recognizes that the Recommendation has been successful in reducing termination rates across the EU. However, despite the significant and widespread decrease of rates there are still divergences among countries, and the Recommendation itself has some limitations. Today, the majority of Member States have their fixed and mobile TRs set at a level consistent with the Recommendation, but some Member States do not follow the Recommendation's principles.

BEREC underlines this divergence is the main issue to address. BEREC suggests that making the principles of the recommendation binding would address the issue. BEREC sets out several options that could be chosen by the Commission such as an infringement procedure, a regulation or a decision based on Article 19 FD. For the long term, the document also suggests the regulatory burden might be lowered. The pros and cons of a common model or uniform rate across Europe are discussed.

### **Context of the consultation**

The European Commission (EC) on the 7<sup>th</sup> of May 2009 issued a Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU – 2009/396/EC (hereinafter called the Recommendation). The Recommendation was adopted on the basis of the Directive 2002/21/EC of the European Parliament and of the Council of 7<sup>th</sup> of March 2002 on a common regulatory framework for electronic communications networks and services (hereinafter called Framework Directive). Art 19 of the Framework Directive entitles the European Commission to issue recommendations on the harmonized application of its provisions whenever divergences in the implementation by the national regulatory authorities of the regulatory tasks specified in the Framework Directive may create a barrier to the internal market. Member States (MS) shall ensure that national regulatory authorities take the utmost account of those recommendations (including the Recommendation) in carrying out their tasks.

Prior to the publication of the Recommendation the EC recognized a wide spread between wholesale termination rates applied across the European Union, which in their view could have only been partly explained by national circumstances. The EC perceived the divergences in the regulatory treatment of the fixed and mobile termination rates to create fundamental competitive distortions by leading to substantial asymmetries in interconnected operators' settlements and to result in subsidization of privileged operators on the expense of operators burdened with obligatory lower regulated termination rates. According to the EC, the lack of harmonization in the application of cost accounting principles to termination rates prior to the publication of the Recommendation demonstrated the need for a common approach. Hence, European Commission decided to adopt the Recommendation in order to provide greater legal certainty, the right incentives for potential investors as well as reduce the regulatory burden on existing operators and assure a level playing field for all communication operators in the European Union. Additionally, the absolute level of termination rates that had remained high in a number of MS was another of the EC's reason for the adoption of the Recommendation.

The Recommendation advises NRAs to set symmetric termination rates in a Calling Party Network Pays charging system. The rates should be based on the current costs incurred by an efficient operator calculated based on a bottom-up modelling approach using pure long-run incremental costs (pure BU-LRIC) as the relevant cost methodology. According to the Recommendation the relevant cost increment should be defined as the wholesale voice call termination service provided to third parties. Furthermore, the cost model should be based on efficient technologies available in the timeframe considered by the model. The efficient scale of the modelled operator should be consistent with detailed guidelines set out in the Recommendation's annex. The Recommendation additionally allows for transitory termination rate asymmetry for the benefit of new market entrants as a possible regulatory tool to foster competition. Moreover, in exceptional circumstances where an NRA is not capable of developing a cost model, it could consider setting interim prices based on the alternative approach of benchmarking as long as it is able to demonstrate that the alternative methodology has efficient outcomes consistent with the objectives of the Recommendation. Such an outcome should not exceed the average of the termination rates set by NRAs implementing the recommended cost methodology.

The Recommendation sets out the deadline for its adoption in all Member States for the end of 2012 or in exceptional cases related to NRA's lack of resources for the end of the first half

of 2014. The European Commission announced that the Recommendation will be reviewed no later than 2016.

As BEREC did not exist when the Recommendation was adopted, it did not express an opinion on the project. However, the ERG (European Regulators Group) as a predecessor of BEREC, at the time issued an answer<sup>1</sup> to the public consultation of the European Commission, stating that it “*strongly share[d] the strategic objective of ensuring cost reflective pricing for fixed and mobile termination rates*” and “*[was] not opposed to the use of a bottom-up/top-down LRIC calculation provided that there [was] sufficient flexibility in the model*”. Additionally, the subsequent Phase II procedures did not exhibit any opposition but demonstrated BEREC support for the substance of the Recommendation.

Efficient incremental-cost-oriented and symmetric termination rates assured by the Recommendation can lead to clear benefits for end users, both in terms of retail price level and quality and diversity of telecommunication services. Such rates enable enhanced competition, foster the development of innovative retail pricing schemes such as bundled offers, lead to more efficient investment and more balance in the regulatory environment between fixed and mobile networks. Harmonised cost methodologies and therefore similar rates also contribute to the development of the internal market.

The Recommendation has clearly been successful in reducing termination rates across the EU, however, despite the significant and widespread decrease of rates there are still divergences among countries, and the Recommendation itself has some limitations.

In this context, BEREC welcomes the opportunity to respond the European Commission’s public consultation on the evaluation of the Termination Rates Recommendation (“the Recommendation”).

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<sup>1</sup> ERG (08) 31 rev1 - IRG/ERG Response to Public Consultation on Termination Rates, September 2008

**Did the Recommendation achieve a level-playing field between fixed/mobile and net senders/receivers, allow the development of flat rates and bundles, and provide additional revenue and investments of fixed operators? Did it bring benefits for end users?**

(Questions 2.1/2.2/2.6/2.7/2.8/2.9/2.10/2.11/2.12/2.13/2.14/2.15/2.16/2.17)

*Level-playing field between net senders and receivers*

Cutting termination rates to the level of pure-LRIC led to undoubted reduction of the payments made by smaller mobile operators which are usually net senders of call traffic to other mobile networks. This in turn facilitates more intense price competition from these operators which effectively are better positioned to provide competitive offers for off-net mobile calls. Smaller operators are also able to target high value consumers (who typically make more outbound calls) without the concern of large outbound termination payments. Increased competitive pressure on often mature mobile network operator markets resulting from the creation of a more level playing field for the provision of mobile calls helped to ensure a continuous downward trend for overall retail prices and, to some extent, decrease entry barriers for new operators.

*Level-playing field between fixed and mobile operators, development of bundles*

Reducing termination rates to the level of pure-LRIC also helps to reduce the per-minute costs faced by fixed operators, thereby providing a more level playing field between all operators and facilitating the provision of more innovative retail offers such as bundles involving various combinations of fixed and mobile services. Thus, a balanced and predictable regulatory approach to both fixed and mobile networks introduced by the Recommendation may also encourage investments in the fixed sector such as in NGN which yields important benefits to consumers in terms of service quality. Price and service innovations in turn pave the way for increased customer usage, even if usage is also driven by other factors.

*Benefits for end-users*

Wholesale termination settlements in the telecommunication market are effectively financial transfers between operators. Any change to termination rates of operators does not necessarily imply a loss or gain for the sector as a whole but rather a redistribution of financial transfers between market players. There may be a loss to the sector of a particular country due to reduced payments from international traffic if the country from which that traffic originates has not also reduced its termination rates. The level and distribution of these financial flows has important consequences for end users indirectly through competitive pressures enabled at the retail level.

Therefore, the implication of termination charges for end users need to be assessed in the light of their impact on retail prices, consumption levels and the overall dynamic effects such as on new products and services development that results from intensified retail competition. A reduction in wholesale termination rates caused by the Recommendation was expected to result in an overall retail price reduction in the mobile voice call market, which in turn may have positive impacts on end-user welfare.

*Development of flat-rate plans*

Above-cost termination rates may create a floor to retail pricing. Where termination rates exceed an efficient level of cost they may make it difficult for operators to offer flat-rate calling plans due to uncertainty regarding future wholesale settlements and the likely level of customer take-up of such calling plans. High per-minute termination costs thus could impose an artificial per-minute cost structure of operators, which may be passed through to consumers in the form of per-minute retail rates. Therefore, the Recommendation is expected to contribute to the development of flat-rate plans, even if flat rate offers are not necessarily absent in Member States where the Recommendation is not implemented.

*Empirical evidence*

It is not easy to separate the impact of lower termination rates on retail prices from the other developments in the competitive landscape and the cost base of operators. During the period when the Recommendation was being implemented we saw various technological developments (e.g. LTE deployment) as well as market entries and exits from operators. Therefore, although theoretically lower termination rates have brought benefits to the retail market, this is difficult to show empirically. The annex provides some qualitative observations – from a selection of countries – that support some of the theoretical arguments made above.

*Conclusion*

By adopting the TR Recommendation, and, therefore, the recommended pure BU-LRIC approach, NRAs ensure that the costing methodology chosen supports efficient production and consumption decisions; minimises artificial transfers and distortions between competitors and consumers; and best promotes competition by, among other things, ensuring that all users derive maximum benefit in terms of choice, price and quality.

Efficient cost oriented and symmetric termination rates assured by the Recommendation can:

- enhance competition that influences retail prices and customer usage;
- facilitate development of innovative pricing structures such as flat-rate tariffs;
- facilitate development of innovative services such as bundled offers;
- encourage efficient investment through more consistent and balanced regulatory environment between fixed and mobile networks;
- increase consumer choice due to the creation of more level playing field between fixed and mobile operators;
- reduce asymmetries between EU countries and contribute to the development of the internal market.

All of the above ultimately lead to clear benefits to all end-users (with or without disabilities) both in terms of retail price level and quality and diversity of telecommunication services.

**On the possibility of a waterbed effect**

(Questions 2.25/2.26/2.27)

It is argued that the reduction in MTR and FTR can lead to a so called waterbed effect that can potentially increase the level of retail prices. Economic theory suggests that, under competitive conditions, operators might have incentives to increase some elements of the retail price in order to recoup their losses due to lower termination revenues. Meanwhile, lowered termination rates lead to dynamic effects on competition which could provide an opportunity for additional revenues.

BEREC notes the practice of the last few years does not provide concrete examples of increase in retail prices of any service offered by mobile or fixed operators as a result of regulatory cut of termination charges or any other substantial market disruption that could be caused by the waterbed effect.

**What are the impacts of the non-compliance of certain MS with the Recommendation?**

(Questions 2.20/2.21/2.28)

Currently, 26 NRAs in the EEA have implemented the Recommendation for MTR and have pure-LRIC-based MTR applicable:

- Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, France, Greece, Hungary, Italy, Luxembourg, Malta, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom have developed their own BU-LRIC cost models.
- Cyprus, Estonia, Iceland, Latvia and Lithuania have imposed MTR rates via benchmarking of other countries that applied pure BU-LRIC.

Currently, 24 NRAs in EEA have implemented the Recommendation for FTR and have pure-LRIC-based FTR applicable:

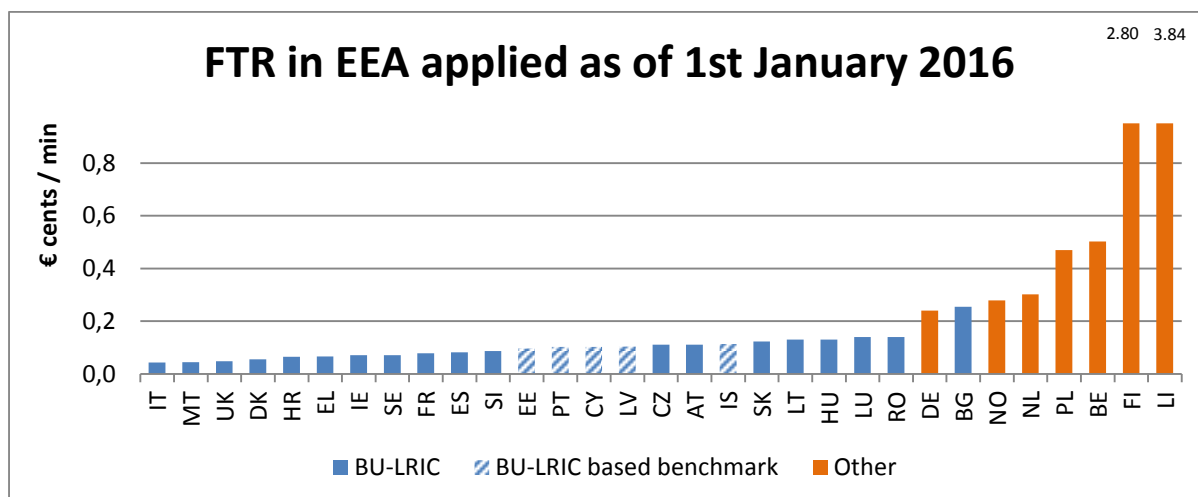
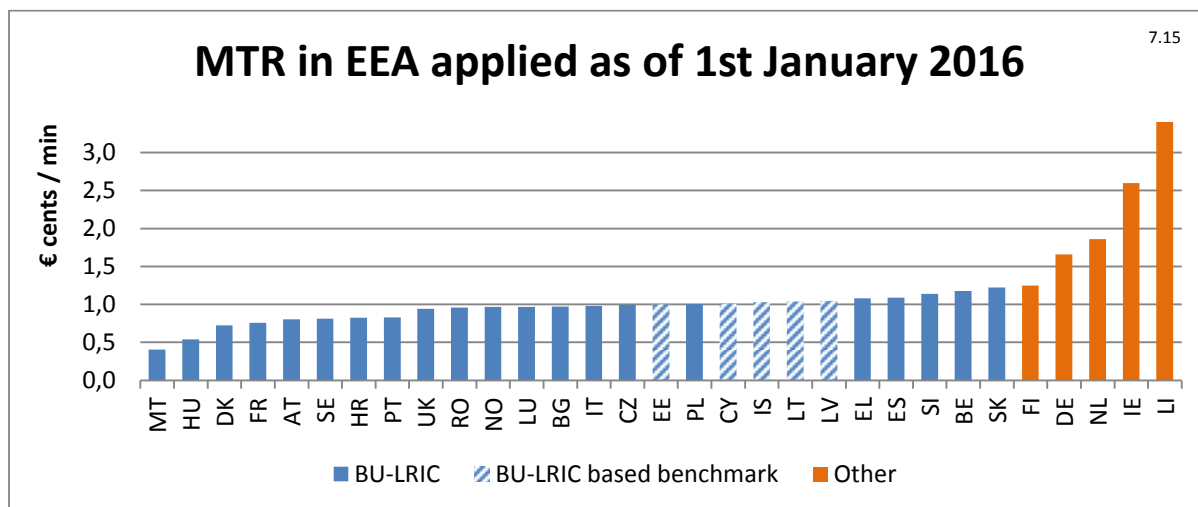
- Austria, Bulgaria, Croatia, Czech Republic, Denmark, France, Greece, Hungary, Ireland, Italy, Lithuania, Luxembourg, Malta, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom have implemented their own pure BU-LRIC cost models.
- Cyprus, Estonia, Iceland, Latvia and Portugal have followed the benchmarking alternative approach, based on pure BU-LRIC rates of other NRAs.

In summary, the level of compliance with the Recommendation in the EEA is high, and only 5 countries do not follow the Recommendation for MTR (Finland, Germany, Ireland<sup>2</sup>, Liechtenstein and Netherlands) and 7 for FTR (Belgium, Finland, Germany, Liechtenstein, Netherlands, Norway and Poland).

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<sup>2</sup> The situation of Ireland is expected to change in 2016. Following publication of ComReg decision D02/16, from 1 September 2016 until 31 December 2018, the maximum MTRs will be determined in accordance with the Pure BU-LRIC Model (as per that decision). The MTR from 1 September 2016 to 31 December 2016 is 0.84 euro cent per minute.

The following figures show graphically the MTR and FTR applied in the EEA from 1<sup>st</sup> January 2016, with the information about the compliance with the Recommendation.



BEREC's opinion has been aligned with the European Commission's serious doubts in most Phase II procedures regarding termination markets, considering that there are benefits in harmonizing cost methodologies and in particular in adopting a pure LRIC cost model to set termination rates and in imposing symmetric rates for all operators.

The Recommendation provides for a common approach for NRAs to calculate both fixed and mobile termination rates at a cost oriented and symmetric level, with the aim to promote efficiency, foster sustainable competition, maximize consumer welfare and contribute to the development of the internal market that is discouraged by high asymmetric termination rates across the Member States.

The lack of harmonisation in the application of cost-accounting principles to termination markets may create a barrier to the internal market. In particular, operators from those Member States where termination rates are pure BU-LRIC-based would have to pay higher termination charges to those operators who do not have pure BU-LRIC-based termination rates, which



may translate into higher retail prices or make it difficult to include cross-border calls in national plans. Such significantly higher termination fees could have a negative effect on the development of pan European offers.

In addition, higher wholesale charges can present potential side-effects of distorting consumer behaviour and amplify the deficits in the international traffic balance.

Not implementing the Recommendation therefore reduces the benefits that could be achieved in terms of retail price level and quality and diversity of telecommunication services in the respective MS. More specifically, above pure BU-LRIC-level termination rates and the asymmetry between MS create undue financial flows between operators, and can have a negative impact at national level on competition, innovative services or pricing structures. Such financial transfers are significant, given the traffic intensity in markets where termination rates are not at a pure BU-LRIC level.

Ultimately, investment and end-user welfare may be affected by the non-compliance with the Recommendation. However, providing evidence to materialize this effect is difficult.

The level of termination rates is not only relevant at a Member State level, but it is also worth being analysed at an EU level.

It can be argued that not implementing the Recommendation can have a negative effect on competition in the MS itself, and on the European single market.

The lack of harmonization may result in the exclusion of cross-border communications into bundles, in the case where an operator is present in several Member States, it may also lead to a distortion of competition in the markets where the recommendation is applied. Indeed, the pan-European operator may benefit from internal costs for cross-border calls which are lower than the rates regulated at a level not consistent with the Recommendation.

Additionally, in the context of international roaming and the abolition of retail roaming surcharges by 15 June 2017 (Roam like at Home, RLAH), for which the Commission shall review the wholesale roaming market, the diversity of MTR creates a constraint to a sustainable introduction of RLAH, as the highest MTRs should remain sufficiently below wholesale voice charges. In a scenario of lower wholesale caps, the harmonization of MTRs will contribute to a sustainable introduction of RLAH.

Finally, it can be expected that non-compliance leads to inefficient investment decisions through less consistent and less balanced regulatory environment between MS. Therefore, it is important for the Member States and for the European Union as a whole that the Recommendation is fully implemented, or only deviated from if it can be justified by national circumstances.

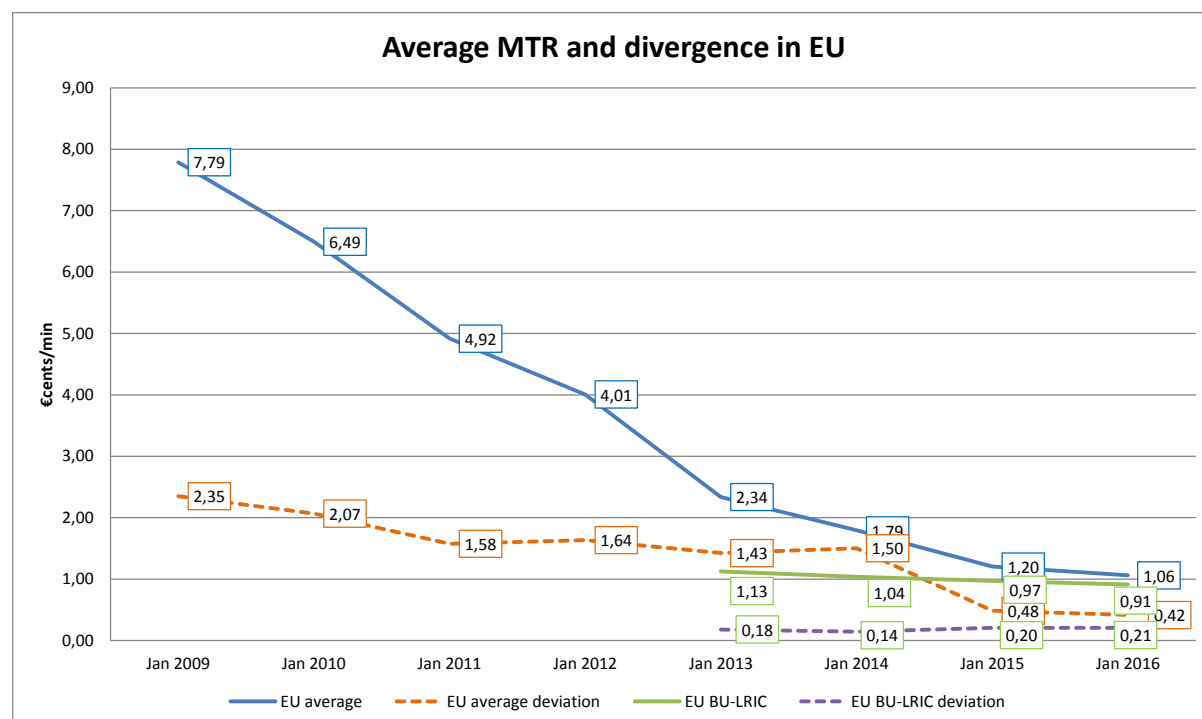
### What are the reasons for divergences amongst MS who apply the Recommendation?

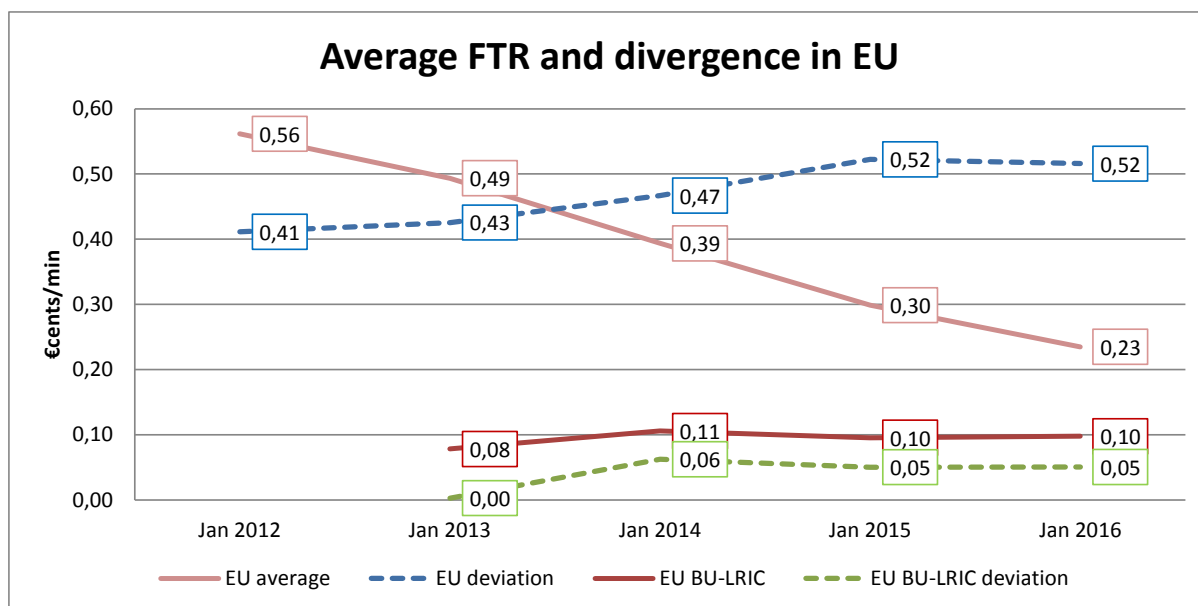
(Questions 2.61/2.62)

Termination rates differ among those countries which apply the Recommendation, in spite of using the same pure BU-LRIC costing methodology. For the lowest FTR target in January 2016, a difference of 0.21 €cents/min between the lowest FTR 0.04 €cents/min (Italy), and the highest 0.26 €cents/min (Bulgaria) can be observed. This divergence in LRIC FTR is lower than the difference between pure BU-LRIC MTR, where the gap between the highest MTR 1.23 €cents/min (Slovakia) and the lowest MTR 0.40 €cents/min (Malta) is 0.82 €cents/min.

However, today, the differences among countries where the pure BU-LRIC methodology was implemented remain limited (divergence of 0.21 €cents/min on average for MTR, and 0.05 €cents/min FTR) compared to the differences between all EU countries where some of them did not follow the Recommendation (0.42 €cents/min on average for MTR, and 0.52 €cents/min FTR).

Although termination rates have been decreasing over recent years in all European countries, the FTR/MTR values of the countries that apply the recommended pure BU-LRIC costing methodology not only decreased to lower levels but are also more homogeneous, converging towards lower level of prices than those countries that apply alternative costing methodologies. Hence, divergences between the applied rates are much lower in those countries that have applied the recommended pure BU-LRIC approach.





Given this evidence, it could be concluded that the main differences between termination rates in European countries relate to the application or not of the Recommendation, as there is a greater degree of harmonisation in termination rates between those countries that are compliant with the Recommendation.

BEREC has expressed its opinion previously that Member States setting different rates do not necessarily indicate that the Recommendation is not being followed. Even among Member States that have fully implemented the Recommendation, it is still possible to observe a range of FTRs and MTRs. There are a number of reasons why different rates can be seen even when the same cost standard is being used and each of these is considered in turn below.

#### *Country specific differences*

Even if each country used exactly the same model to estimate the cost of termination services, some variation in the rates would still be expected. Telecommunication networks in different countries have different topologies and are required to cover different geographies. Additionally, different countries are likely to face different equipment and labour costs. Different network dimensioning parameters might then be expected to differ between countries. Therefore, it is reasonable for efficient networks in different countries to exhibit different LRIC levels. It may also not be appropriate to compare individual parameters between NRAs' models. Network dimensioning parameters often interact with each other and are further adjusted as part of a calibration exercise (as discussed below). Therefore, a holistic approach should be taken to comparing model parameters.

#### *Differences in cost estimation methods*

The Recommendation and the accompanying explanatory note set out in some detail how NRAs should approach the calculation of the pure LRIC of termination. However, any cost modelling exercise will be dependent on a very large number of individual input assumptions and dimensioning decisions. NRAs should be free to use their regulatory judgement based on the evidence available to them when constructing cost models. For instance, NRAs may take different views on the minimum efficient scale of their modelled network and may not estimate the same level for the weighted average cost of capital calculation. The Recommendation

allows NRAs to use different inputs to their cost models based on the NRA's best analytical view.

These differences can lead to divergence in outputs for any form of cost model and pure LRIC modelling is particularly susceptible to differing assumptions.

Additionally, there is a certain degree of disparity among NRAs when identifying incremental cost categories, in particular those related to wholesale commercial costs and billing. Some NRAs include these costs in the termination rate whereas others disregard them because they are not considered incremental. Furthermore, in some cases wholesale commercial costs represent an important proportion of the target rate.

#### *Calibration*

The calibration of a bottom-up model against real world data can be a key part of the modelling exercise. Bottom-up modelling enables NRAs to determine the relationship between network traffic and equipment costs, however, this type of modelling may not be effective at determining the total cost level. Bottom-up modelling may miss certain wrap around costs that are not easily identifiable from bottom-up data. To ensure no costs are missed, a bottom-up model could be calibrated against top-down data such as accounting data. The Recommendation allows for the calibration of such bottom-up models against top-down information.

The precise approach to calibration will vary between NRAs and depends on the availability of data. Some NRAs take a relatively high level approach to calibration and ensure that the total network costs produced by the bottom-up model are consistent with total accounting costs (e.g. the book value of the network). Alternatively, NRAs could take a more detailed approach to calibration and ensure the unit cost outputs of the bottom-up model are consistent with the unit cost outputs of a top-down model. These differences in calibration approach may lead to different pure LRIC estimates.

#### *Timing of implementation and technology choice*

Some of the difference in cost estimates will also be due to when models are built and updated. Over time technology changes and these changes are reflected in the modelling of cost estimates. For instance, we have seen significant technological change in mobile networks with the deployment of 4G technologies and the roll-out of shared radio access network (S-RAN) infrastructure. These technological developments will invariably have some impact on cost estimates, which may lead to lower rates. It is therefore likely that there will be an element of lag as new models reduce rates over time. Once models have become established, these differences are likely to be a greater problem for mobile network models, where there are more significant changes in technology and usage over time.

In the near term, the choice of technology may also be a reason for the greater range in LRIC FTRs compared to the LRIC of MTRs. The technology choice for a mobile network is a gradual transition from older to newer technologies (i.e. 2G, 3G and 4G services). Indeed, different technologies can be in operation concurrently for a considerable period of time. For a fixed core network, we are faced with a more binary choice between next generation IP technology and legacy TDM technologies (i.e. we expect a transition from TDM to IP rather than an extended period of joint running).

*Conclusion*

As discussed above, there are a number of valid reasons for rates to diverge even if NRAs are compliant with the Recommendation.

To date, the differences among countries where the Recommendation was implemented remain limited compared to the differences between countries where the Recommendation was implemented and countries where it was not.

<p><b>Should the EC continue to recommend pure BU-LRIC model?</b></p>
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<p>(Questions 2.55/2.56/2.57)</p>
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As for the recommended cost methodology, due to the specific (two-sided) nature of call termination, both in fixed and mobile markets, only a narrow definition of the incremental cost will lead to the most efficient and least distortionary use of call termination services and, ultimately, minimize the risk of problems such as cross-subsidisation between operators and inefficient pricing and investment behaviour. As such, BEREC has been arguing, in its opinions in the Phase II cases, in the case of termination services, that the pure BU-LRIC is the approach best suited to facilitate a more efficient distribution of financial transfers between competing operators and, consequently, by eliminating competitive distortions in the termination markets, also to contribute to a level playing field between all fixed and mobile operators. Additionally, continuing to base the calculation of TR on a pure BU-LRIC approach will maintain regulatory certainty for stakeholders.

<p><b>What are the objectives not achieved by the current Recommendation?</b></p>
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<p>(Questions 2.35/2.36/2.37)</p>
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The Recommendation stresses that “the objective of coherent regulation in termination markets is clear and recognised by the NRAs and has been repeatedly expressed by the Commission [...]” and that “Article 8(2) of Directive 2002/21/EC further requires NRAs to promote competition by, amongst other things, ensuring that all users derive maximum benefit in terms of choice, price and quality of service and that there is no distortion or restriction of competition.” To achieve these objectives, “the regulated termination rates should be brought down to the costs of an efficient operator as soon as possible.”

The use of the recommended cost methodology has reduced both the rates themselves and asymmetries across Member States, and thus reduces cross-subsidisation between operators resulting from a heterogeneous regulation within EEA countries, while also increasing benefits for users.

The objective of a coherent regulation in termination markets has not been completely achieved, since we can observe that the termination rates in the mobile and fixed markets span quite a range between the lowest and the highest rates.

In this context, three issues can be identified.

*Issue 1: divergences in the cost methodology used between countries that apply the Recommendation and countries that do not*

The two-tier situation where most countries comply but some others do not is an issue to address, as in most cases both the Commission and BEREC considered that diverging from the Recommendation is not compliant with the Framework Directive. Furthermore, in such a context, the objective of the Recommendation to address the divergences in the regulatory treatment of TR through a common approach, while additionally lowering TR, is not met as such.

This is the major issue. Fixed and mobile TRs are higher particularly in those MS where the recommended pure BU-LRIC model is not used to calculate the TR. Having regard to the remaining divergences, one could conclude that there might be a distortion in competition among European operators, or that the development of the internal market is hampered. As set out above, asymmetries of rates could limit the inclusion of cross-border communications into bundles. Non-pure BU-LRIC-based asymmetries create undue financial flows between operators, to the advantage of operators regulated above LRIC and to the detriment of operators active in the markets regulated at LRIC level.

*Issue 2: variations among countries that apply the Recommendation*

The analysis also shows that even the termination rates calculated using the recommended cost model are not uniform. Nevertheless, it should also be pointed out that the dispersion of compliant TRs is often much lower than the gap between compliant TRs and non-compliant TRs and have come down considerably since the implementation of the Recommendation. This dispersion in rates among countries that apply the Recommendation is mainly explained by varying national circumstances, but also, in certain situations by a different interpretation of the principles of the Recommendation or different assumptions.

As this dispersion reflects national specificities, it may neither be possible nor desirable to fully harmonize the termination rates (“full symmetry of rates”) even under the recommended cost model. The expected benefits, if any, from further harmonisation, if possible, should also be balanced with the cost of further reducing the variations, which may depend on the approach used.

*Issue 3: barriers to access to regulated rates*

A further concern is that even when a country is fully compliant with the Recommendation, sending operators sometimes still pay relatively high wholesale charges for cross-border calls towards specific countries inside the EEA. There might be several causes for this and it may not always be clear whether there is a problem on the transit market (the price of which may be included in the wholesale tariff paid by the sending operator), in interconnection provisions (e.g. scarcity in capacity for direct interconnection), or in incorrect application of regulated rates. These topics may not be in the scope of the Recommendation, but are important when assessing the functioning of the markets.

<p><b>What should the next steps be as regards termination rate regulation?</b></p>
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<p>(Questions 2.29/2.30.2.31/2.32; 2.33/2.34/2.38/2.39/2.40/2.41/2.42/2.43/2.58)</p>
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In the future, the need to regulate termination rates will have to be assessed.

However, for now and at least the near future, call termination markets can be expected to remain a bottleneck and as long as the regulation of termination rates remains necessary, an action at EU level is relevant, in the light of the impacts on the internal market.

The current two-tier situation where most countries follow the recommendation principles but some others do not stands out as a concern. One of the main reasons put forward for not fully implementing the Recommendation is constraints from national law, particularly arising around the principle of proportionality.

Such a situation can be viewed as problematic, notably because non pure BU-LRIC based asymmetries create undue financial flows between operators, to the advantage of operators regulated above pure BU-LRIC costs and to the detriment of operators active in the markets regulated at the pure BU-LRIC level. It could be detrimental to the internal market, e.g. the development for cross-countries communications or roaming, where cross-border terminations are charged.

These diverging approaches may lead to reactions from Member States that already apply the pure BU-LRIC rate and may want to minimize asymmetries by deviating from the recommended approach themselves.

*Main issue to address*

The current two-tier situation seems to be the main issue to address. On the one hand, both the Commission and BEREC considered that diverging from the Recommendation is not compliant with the Framework directive, in absence of well-founded justification. On the other hand, NRAs remain free to deviate from the Recommendation if they provide an adequate justification; however, there does not appear to be, so far, a convincing economic justification for deviating from pure BU-LRIC oriented rates.

Making the principles of the recommendation binding would address the issue of divergences in the regulatory treatment of TR, and provide a greater legal certainty to NRAs.

Several legal instruments may be relevant in the perspective of meeting the objectives of the Recommendation and further achieving the objectives set out in Article 8 Framework Directive.

The EC may initiate an infringement proceeding against those Member States that do not comply with the provisions of the regulatory framework, in the context where the appropriate and coherent interpretation and application of the Regulatory Framework as regards price control of TR is set out (absent appropriate reasons to deviate) by the Termination Rates Recommendation.

Another possibility may be for the European Commission to propose a regulation, which could reinstate the objectives of the Recommendation. Such a regulation could have a binding effect

and that way may be an efficient means to achieving a more consistent application, in all countries, of the recommended cost calculation method.

The European Commission may also propose a decision pursuant to Article 19 (3) Framework Directive. Such an approach could address the issue of divergences in the regulatory treatment of termination rates, provide a greater legal certainty and may also be a way to ensure the coherent application of the framework among Member States.

The aforementioned approaches intend to establish and ensure a more consistent practice with regard to regulating the termination rates. BEREC notes that the Commission will have to consider the most appropriate solution to address the identified failures.

#### *Other issues*

Once the main issue has been addressed, other issues may be given further consideration. It should not be expected that making the principles of the Recommendation binding will lead to fully harmonized wholesale charges across Europe. Some discrepancies will remain, for various reasons.

Even among Member States which apply the Recommendation, regulated rates vary. This dispersion, as stated above, is currently lower than the gap between compliant and non-compliant Member States. If there was sufficient concern regarding the difference in rates between NRAs that have implemented the Recommendation, the Commission could look for ways to reinforce the principles of the Recommendation.

The Commission could, in its review of the Recommendation, provide further guidance on requirements for a pure BU-LRIC model, or even provide a recommended cost model template to be used by each NRA, which should be flexible enough to account for national specificities. Such a cost model could address either countries that have not developed their own model (and which are for instance relying on benchmark), or all the countries.

Such an approach may help to increase the harmonisation of rates by limiting the divergences of interpretation of the Recommendation. As a result, differences in pure-LRIC rates may only be explained by national circumstances. In addition, it may also decrease the regulatory burden for some NRAs.

However, such a solution does not solve the major issue of harmonisation in methodologies among all countries. It would only have a limited effect on reducing dispersion among Member States which apply the Recommendation.

Such an approach would have to start from and take into account further analysis of the consequences of the differences in the termination rates between countries which have implemented the recommendation, as these differences are now quite limited. The cost vs additional benefits trade-off of further specifying the methodology would have to be assessed. For instance, the Commission building a recommended model and then this model being adopted across Member States that already have models in place potentially causes a significant additional regulatory burden on the Commission, NRAs and regulated operators. This burden may outweigh the perceived benefit of tighter harmonisation of rates across Member States that have implemented the Recommendation.



Additionally, as identified as Issue 3, operators sometimes have to pay higher charges for outgoing cross-border traffic towards specific destination countries in EEA than the regulated TR levels. Further harmonization of the TR may only partially solve this problem, as it may also be associated with the transit market. Indeed, wholesale charges for cross-border calls may include transit, which is negotiated at non-regulated (and often non-transparent) prices, therefore leading to a mark-up added to the termination. More generally, in this context of cross-border calls, some operators may have a difficulty to identify the pass-through of TR decreases and to offer global international call bundles regardless of the specific European destination country.

Finally, when analysing the regulation of termination rates, it is worth noting the harmonization process is limited to the European Economic Area (EEA). The regulatory treatment of termination rates outside the EEA seems to be heterogeneous, and these different regimes can have an effect on operators active in the EEA.

#### *Further considerations for a simplified regulation*

Once the objectives of the Recommendation have been met, and the tariffs have been lowered so that the economic stakes for operators are significantly reduced, it should not be excluded that simpler regulation would be sufficient to maintain the market conditions, and especially the tariffs, as imposed by the current remedies.

Possible ways to simplify regulation, for both operators and NRAs, are explored below.

For instance, if estimated termination rates turn out to be stable over a number of market review cycles, there may be a case for modelling termination rates less frequently than every market review or having longer periods between market analyses. Such measures could fit into the Framework Review.

Another possibility to reduce the divergences and the burden for stakeholders may be to include specific termination rates or a price ceiling in a revised recommendation, or even a regulation.

Such a tariff could either be a single symmetric tariff for all countries, or differentiated per country for taking into account national circumstances, but grounded on the same cost modelling methodology.

Some argue that a uniform European price at a pure BU-LRIC level would solve both the issue of regulatory burden and the remaining divergences between national tariffs. Such an approach has been chosen for international roaming, where the regulation (e.g. EU 531/2012 regulation) sets a uniform regulated wholesale roaming tariff across Europe.

This would go beyond the initial objective of the Recommendation of reducing divergences among Member States, but could in turn dramatically reduce the regulatory burden for NRAs at national level (especially for NRAs with limited resources) and the Commission.

However, BEREC notes that roaming and termination markets have different dynamics. Additionally, tightening wholesale regulation (as currently under work for wholesale roaming) requires a careful and lengthy process at European level, so as to take into account the situations of all Member States.

Introducing a common regulation for termination rates, with possibly common termination rates across the EU, could disregard national features and circumstances (e.g. relating to: type of operators, operator life, labour cost, WACC cost, site construction/rental cost, geotypes, operator date of market entry) which in the end may create distortions.

A process of fixing prices based on a uniform model that allows for national specificities, although technically feasible, would most likely be very complex and imply a difficult acceptance process by all NRAs and operators. It would most likely result in a lengthy process.

A further detailed analysis of benefits and costs could be needed in order to understand how feasible these approaches are.

As stated above, the main issue is the difference of rates between countries that apply and countries that do not apply the Recommendation. This needs to be addressed.

Once this problem has been solved, some differences will remain. As shown above, the differences among countries where the Recommendation is implemented remain limited. Addressing these remaining divergences may go beyond the objectives and the contents of the Recommendation and may depend on market developments.

In the future, special attention should be given to evolving market trends and technological changes that may affect the assessment of the bottleneck on call termination markets. In the long term, there is a possibility that the need for regulation will evolve and decline.

In a context of more symmetrical and decreasing rates, operators might have incentives to adapt interconnection billing regimes, one of the possibilities being bill and keep agreements. The importance of termination rates would wane in this context, as this regime would not require charging termination rates. For now, some argue that a European regulation setting uniform caps for termination rates at efficient levels could incentivize the market into moving towards other business models, such as bill and keep.

Different ways to adapt regulation, in particular with a view to reducing the burden for NRAs and take market trends into account, might be given consideration in the broader context of the Framework review.

## Annex: Observations on changes in the retail markets

Country	Impact on mobile retail market	Impact on fixed retail market
<b>Austria</b>	There are now multiple examples of where mobile operators are offering flat bundles that include M2F calls. On-net calls as a tariff category disappeared.	Uniform prices for bundles independent of destination (fixed or mobile) and increasing volumes in bundles
<b>France</b>	With the introduction of lower and symmetric MTRs, the restriction of bundles to on-net calls has largely disappeared, with all networks now being included in bundles. Later, when MTRs in the French overseas territories have aligned with mainland rates, those territories were gradually included in flat-rate bundles. Finally, it is noteworthy that European MTRs are not yet harmonized, and European mobile networks are not yet included in the majority of flat-rate bundles.	2010/11 a fixed operator started to include all mobile networks in its triple play offer. All major fixed providers followed during 2011 leading to a large increase in F2M traffic.
<b>Greece</b>	A small increase is observed during the last 2-3 years in the number of call minutes for off-net calls and a small decrease in the number of call minutes for on-net calls.	During the last 2-3 years there is a tendency to increase the number of call minutes, included in bundles, from fixed to mobile and decrease in flat rates.
<b>Lithuania</b>	First flat rate plans were offered in early 2008 and included call to all networks in Lithuania. Allowance for particular amount of SMS and data services were add to flat rate plans later on. In 2014, mobile operators	In 2013 fixed operators also began offering flat rate plans that included calls to mobiles. Prior to this, calls to mobile had been charge on a per minute basis. The introduction of these plans may have been a response

	began offering flat rate plans with unlimited calls to Lithuanian networks. International calls are excluded from flat rate offers.	to flat rate offers from mobile operators. International calls are excluded from flat rate offers.
<b>Netherlands (not at Pure LRIC)</b>	Mobile operators have started introducing bundles that include unlimited calls inside the Netherlands that also include a number of minutes for calls from the Netherlands to any country in the EU and from any EU country to any other EU country.	Fixed operators have fixed rate plans for unlimited calls inside the Netherlands, as well as fixed rate plans for unlimited calls to any EU countries.
<b>Spain</b>	Since MTRs are set at pure LRIC, the use of on-net/off-net differentiation is ended and mobile operators introduced flat rate tariffs that are nowadays generalised in the market.	Since MTRs are set at pure LRIC fixed operators began to include calls to mobiles in their flat rate tariffs.
<b>UK</b>	There are a large number of calls being include in bundles, which has largely remove the on-net/off-net differential.	Estimated that a large proportion of the reduction in MTRs was being passed through to lower fixed to mobile retail prices.
<b>Poland</b>	Public consultation of the decisions introducing cost oriented MTR went hand in hand with the introduction of the first subscription plans offering unlimited domestic voice calls. The Recommendation fostered the introduction of a new (4 <sup>th</sup> MNO) market player.	
<b>Portugal</b>	After MTR's reached a pure-LRIC level, between 2013 and 2014, new offers began to emerge with a flat fee, often including free calls, both on-net and off-net, and	Fixed telephony services are currently integrated in most bundle offers, including free calls both on-net and off-net.

	they also started to be part of bundles, that may include, in addition to mobile services, fixed telephony service, fixed and mobile broadband, and pay-TV. Simultaneously it has increased the number of offers that include high volumes of traffic (calls and SMS) for a flat fee.	
<b>Romania</b>	Lower MTRs influenced the decision of mobile operators to introduce a number of packages including more and more flat rate calls or unlimited calls to various destinations. The proportion of voice on-net traffic decreased (from 90% in 2012 to 77% in 2015), operators introduced bundles with flat rate for calls to fixed, flat rate for calls to mobile, calls to other European countries, internet traffic, also major and alternative mobile and fixed operators introduced “unlimited” tariff plans.	Lower FTRs and the competitive pressures from the mobile sector influenced the decision of operators to introduce new and diversified retail fixed offers in the last few years. Depending on the type of subscription used, the current fixed offers may include flat rate minutes to national or/and international fixed/mobile destinations or unlimited calls to national fixed networks. The proportion of voice on-net traffic decreased (from 74% in 2012 to 70% in 2015).
<b>Slovakia</b>	The competitions between operators have increased (fourth mobile operator attended the mobile market). Operators provide higher quality services, bigger data volumes or bundled services for the same price.	The number of flat rate programs and bundled offers increased.