

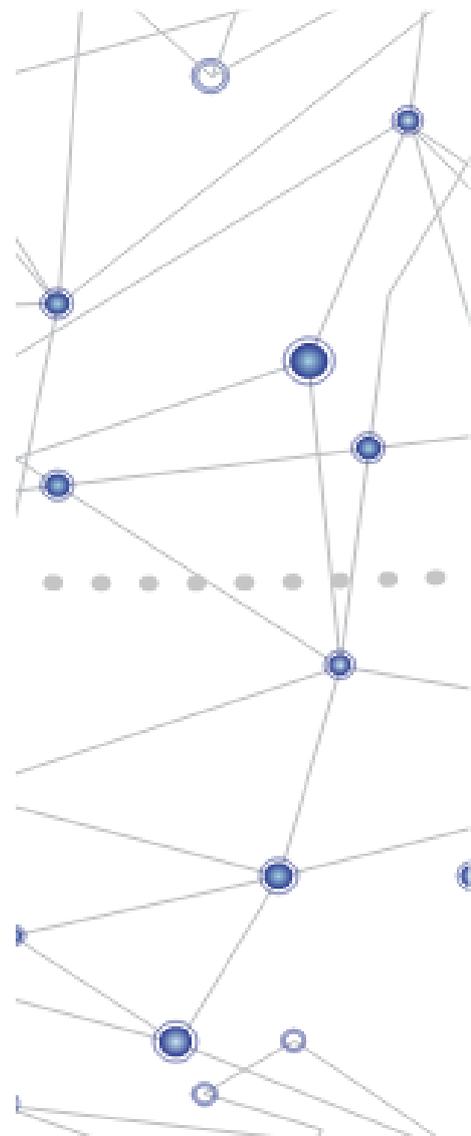


**BEREC**

Newsletter 09/2016

## Table of Contents

<b>Draft BEREC Guidelines on Regulators' Implementation of European Network Neutrality rules.....</b>	<b>3</b>
<b>Draft BEREC Common Position on Layer 2 Wholesale Access Products .....</b>	<b>5</b>
<b>Draft BEREC Report "Challenges and drivers of NGA roll-out and infrastructure competition" .....</b>	<b>6</b>
<b>BEREC Response to the European Commission's public consultation on the evaluation of the Termination Rates Recommendation .....</b>	<b>8</b>
<b>BEREC report on Termination Rates at European Level (January 2016).....</b>	<b>9</b>



# Draft BEREC Guidelines on Regulators' Implementation of European Network Neutrality rules

On 6 June 2016 BEREC publish for consultation draft BEREC guidelines on the implementation of new Network Neutrality rules. An EU law<sup>1</sup> to safeguard open internet access, and commonly referred to as the Telecoms Single Market Regulation, was adopted in November 2015 and came into force on 30 April 2015.

Public consultation will be open for stakeholders to submit their comments till 18 July 2016 by sending a consultation response to [NN-Consultation@berec.europa.eu](mailto:NN-Consultation@berec.europa.eu).

## ❖ What are the net neutrality rules?

The law enshrines in law the principle that all internet traffic should be treated equally, giving end-users the right to access and distribute information and content of their choice.

The law contains a number of measures to *“protect end-users and simultaneously to guarantee the continued functioning of the internet ecosystem as an engine of innovation”*. These measures range from rules on how internet service providers may manage the data traffic on their networks ('traffic management'), through to transparency obligations for them in their contracts to provide internet access. They also included obligations on NRAs to monitor and ensure compliance with the rules.

The law also requires BEREC to provide guidance on the implementation of the obligations which NRAs have to be adopted by 30 August 2016. Specifically, the guidance should cover the obligations of NRAs to closely monitor and ensure compliance with the rules to safeguard equal and non-discriminatory treatment of traffic in the provision of internet access services and related end-users rights as laid down in Articles 3 and 4 of the Regulation.

BEREC's Guidelines constitute recommendations which NRAs should take utmost account of when implementing the law. As such, the Guidelines will contribute to the consistent application of the Regulation, thereby also contributing to regulatory certainty for stakeholders.

## ❖ What do BEREC's guidelines cover?

The Guidelines follow the structure of the Regulation and incorporate the text of the relevant articles and recitals to facilitate easy reference for readers, and begin with a basic description of the subject and scope of the Regulation, and relevant definitions used in the Guidelines.

They then look at commercial practices. The much-discussed 'zero-rating' is the most common type of commercial practice currently found in the market and the Guidelines look at the various different types of zero-rating offers. The regulatory approach suggested in the Guidelines is that NRAs should use a number of criteria to assess commercial practices, since

---

<sup>1</sup> Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R2120&from=EN>

there are few clear-cut conclusions about their permissibility under the Regulation that can be drawn without such assessment.

The next major issue covered is the complex regulatory assessment of internet service providers traffic management practices is described step-by-step, covering equal treatment of traffic; reasonable traffic management of traffic categories; and exceptional traffic management going beyond reasonable traffic management. The latter consists of the three exceptions set out in the Regulation –

- (a) compliance with legal obligations;
- (b) preservation of the integrity and security; and
- (c) congestion management.

The Guidelines also cover the regulatory assessment of specialised services, looking at how to understand and assess the two requirements set out in the Regulation. According to the “necessity” requirement, it must be objectively necessary to meet requirements for a specific level of quality that cannot be assured by the standard best effort internet. According to the capacity requirement, the network capacity must be sufficient to provide the specialised services in addition to any internet access services provided.

The guidance then describes how NRAs should ensure that internet service providers meet their obligations of transparency about the internet access services they provide. In particular, it covers contractual and published information about traffic management measures, speed and other quality of service parameters regarding fixed and mobile internet access services, and how specialised services might have an impact on internet access services.

Finally, the Guidelines cover the supervision and enforcement duties of NRAs. NRAs are required to closely monitor, ensure compliance and promote continued availability of non-discriminatory internet access services at levels of quality that reflect advances in technology. Furthermore, NRAs shall publish reports on an annual basis regarding their monitoring and findings.

#### ❖ **Main issues addressed**

Main indicative issues addressed on network neutrality public consultation:

- What does the Regulation mean for network neutrality?
- What is covered and protected by the Regulation?
- How should NRAs assess cases of zero-rating?
- How should NRAs assess traffic management practices?
- How should NRAs assess specialised services?
- What do the Guidelines say about transparency requirements?
- Which are the main tasks of the regulators?

More detailed information on the topic can be found on the specifically dedicated section on [Network Neutrality](#) on the BEREC website.

## Draft BEREC Common Position on Layer 2 Wholesale Access Products

In recent years, several incumbent operators rolled out NGA networks in order to provide higher bandwidths to end users. This leads to situations in which access to physical infrastructure was not considered sufficient to ensure effective competition at the retail level. Therefore, several NRAs have imposed access to (active) Layer 2 (Ethernet) wholesale access products (L2 WAP) as a remedy on the wholesale local access market (market 4) and/or the wholesale broadband access market (market 5). In some cases L2 WAP on the wholesale broadband access market were already imposed before the NGA rollout started.

In order to get a deeper insight into these products and to foster the exchange of experiences and contribute to the harmonisation of regulatory instruments used in the European Union, BEREC has already analysed L2 WAP in the past years and published the [BEREC Report 'Common characteristics of L2 WAP in the EU'](#).

With the [draft Common Position on L2 WAP](#) BEREC goes one step further and defines Common Positions for L2 WAP imposed on the wholesale local access market (market 3a) and L2 WAP imposed on the wholesale central access market (market 3b). Common Positions are defined for the conditions for the imposition of L2 WAP, prices and technical characteristics.



The Common Positions identified contribute to the following regulatory objectives. On market 3a L2 WAP aim to offer alternative network operators (ANO) as much as possible the same flexibility to provide different products and to innovate as with physical unbundling. However, the flexibility and the potential to differentiate is restricted compared to physical unbundling since L2 WAP provide a service (not a physical medium) and the technological capabilities of the network of the provider of L2 WAP have to be taken into account. Nonetheless, the regulation usually aims, as much as possible and proportionate, to enable ANOs to provide a variety of services to residential and business customers (incl. voice, internet, IPTV, data) based on L2 WAP with local PoH. On market 3b L2 WAP give alternative operators more flexibility and a higher degree of freedom regarding product characteristics compared to a Layer 3 product (IP bitstream). The regulation also usually aims, as much as possible and proportionate, to enable ANOs to provide a variety of services (incl. voice, internet, IPTV, data) depending on the market definition.

The definition of technical characteristics of L2 WAP needs to take into account both the demand of retail customers of ANOs and the technical capabilities in the network of the SMP operator. Both may vary between countries and therefore also the technical characteristics of L2 WAP can be expected to differ between countries.

However, the [BEREC Report 'Common characteristics of L2 WAP in the EU'](#) shows that L2 WAP of different countries, despite differences in national circumstances, do have several common characteristics. The Common Positions are based on these findings and aims to foster the harmonization of regulatory instruments at the European Union level. For this reason the technical characteristics of L2 WAP in the Common Positions can be viewed as minimum requirements. Depending on national circumstances it may be necessary that the L2 WAP fulfil further requirements (including other technical characteristics).

The following Common Positions are defined:

CP1: Conditions for the imposition of L2 WAP on market 3a

CP2: Pricing of L2 WAP

Common Positions on technical characteristics imposed on markets 3a or 3b

CP3: Technology

CP4: CPE/Modem

CP5: Bandwidth

CP6: Quality of service

CP7: Traffic prioritisation

CP8: Multicast

CP9: Number of VLANs

CP10: Customer identification

CP11: Security

CP12: Fault management

The BEREC draft Common Position on L2 WAP is published for public consultation on 6 June and all stakeholders and interested parties are invited to provide their views on this document until 1 July, 2016.

## **Draft BEREC Report “Challenges and drivers of NGA roll-out and infrastructure competition”**

Today, a high-capacity communication infrastructure is indispensable for the functioning of an economy and a society. In Europe, there is a broad consensus among all parties (the European Commission (EC), national and regional governments, regulatory agencies, communications providers) that the rollout of next generation access (NGA) networks is a desirable goal. With its 2020 Digital Agenda for Europe, the European Commission has set out targets for NGA coverage and take-up. Moreover, European countries have individually defined rollout strategies and devote efforts towards the swift rollout of new high capacity infrastructures.

Having the common objective of extending NGA coverage, the type and speed of NGA rollout varies considerably across European countries. A number of factors seem to greatly influence the specific deployment of NGA, namely the chosen NGA structure, the technologies deployed and also the pace at which rollout takes place.

This report is motivated by this very variation in NGA rollout: it analyses the main challenges and drivers of NGA rollout. The factor analysis is based on a case study approach, drawing on information obtained from NGA stories provided by NRAs. After providing an overview of the *status quo* of NGA rollout across Europe (Figures 2 and 3), the report identifies and thoroughly analyses three important (categories of) driving factors, largely exogenous to the national regulators' sector specific *ex ante* regulation:

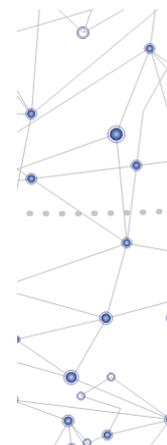
- i) infrastructure competition, mostly resulting from cable (DOCSIS 3.0), but also from alternative operators' fibre deployment (FTTP);
- ii) demand side factors, i.e. factors driving demand for services in need of ultrafast broadband and shaping the willingness to pay a *premium* for NGA-based access;
- iii) supply side factors, i.e. factors which influence the costs or the quality of NGA-deployment, including factors which may more indirectly influence cost or quality such as public policy

The analysis moreover shows that the type of NGA rollout is considerably shaped by the legacy infrastructure and by the existing civil infrastructure. Hence, rollout appears to be strongly featured by path-dependencies. Table 1 at the end of the first section provides an overview of the factors that played a particularly important role for NGA rollout in specific countries.

In a second step, the report looks at the different forms of access regulation adopted in different MSs under different circumstances and at the possible effects on competition and NGA investments. An important insight from the analysis is that the main factors identified and discussed are factors which are largely or completely exogenous to regulatory interventions by NRAs. Hence, SMP regulation is only one factor among many and its ability to promote NGA rollout or particular types of NGA rollout does not need to be overstated.

Depending on the exogenous factors identified in the factor analysis, regulatory approaches which best meet the principles of promoting sustainable competition and efficient investment as well as safeguarding consumer benefits might look different across MS and indeed even within a MS. For instance, while passive remedies, such as duct access, work well in countries where a ubiquitous duct access network (encompassing the last segment of the access network) is available, additional remedies such as active wholesale access products are needed in other settings. Considering four different scenarios (depicted in figure 10), the report shows that SMP regulation focuses on the promotion of competition to incentivise investment, taking into account the given national (or subnational) conditions and NGA rollout strategies of operators.

The BEREC draft BEREC Report on Challenges and drivers of NGN roll-out and infrastructure competition is published for public consultation on 6 June and all stakeholders and interested parties are invited to provide their views on this document until 1 July, 2016



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

BEREC has provided a response to the European Commission's public consultation on the evaluation of its Recommendation on the regulatory treatment of fixed and mobile termination rates. The response was agreed and adopted at BEREC's Plenary meeting that took place in Vienna on 2-3 June.

In the response, BEREC reviews the principles behind the European Commission's Recommendation, assesses the success with which the Recommendation has been implemented and discusses the issues that remain in the relevant markets and potential ways that these may be addressed. The response leverages on the substantial work and analysis carried out by BEREC in previous years.

The European Commission's Recommendation on the regulatory treatment of fixed and mobile termination rates aimed to increase consistency across EU countries in the way National Regulatory Authorities (NRAs) set termination rates through the use of a specific costing methodology. It sought to bring termination rates across the EU down to the truly cost-efficient level and reduce discrepancies between fixed and mobile termination charges, thus contributing to the promotion of efficiency and sustainable competition, as well as to the maximisation of consumer benefits. It was due to be implemented by NRAs by 31 December 2012.

The European Commission also announced that it would review the Recommendation no later than 2016.

As part of this planned review, the European Commission opened a public consultation in which stakeholders could offer their views on the impact of the Recommendation and whether it should be maintained or amended as a tool for achieving the policy objectives of the regulatory framework for electronic communications, such as developing the internal market and promoting competition and EU citizens' interests.

BEREC's response to the consultation recalls the benefits of setting the termination rates at a 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 the internal market.

It 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 termination rates set at a level consistent with the Recommendation, but some Member States have not implemented the Recommendation.

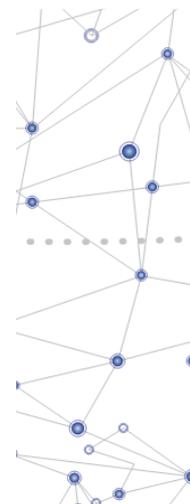
BEREC underlines this divergence, between those countries where the Recommendation is implemented and those where it is not, as the main issue to address. Such asymmetries create undue financial flows between operators, to the advantage of operators not regulated according to the recommended methodology and to the detriment of operators active in the markets where the Recommendation has been applied.

However there are also (smaller) divergences even among those countries where the Recommendation has been implemented, which may be caused by a variety of factors, as explained in the response. Whilst these asymmetries may also have negative consequences, BEREC notes that it may neither be possible nor desirable to fully harmonise termination rates across Europe, even under the recommended cost model.

In order to address the remaining issues and divergences, BEREC outlines a number of potential approaches that could be considered to bring about greater consistency. These vary in the extent to which they would be prescriptive or enforced. For instance, further guidance could be issued on the methodology NRAs should use. The European Commission may also consider initiating infringement proceedings in cases of non-compliance. Alternatively, it may consider ways in which the Recommendation could be made more binding, such as by replacing it with a Decision.

Each of these alternatives would have limitations and, if they are to be considered, the expected benefits from further harmonisation should also be balanced with the costs of further reducing the divergences. Account should also be taken of the effects caused by factors outside the termination rates markets (e.g. in transit markets) and the effects on European operators of different regulatory regimes that are in operation outside Europe.

BEREC will continue to engage with the European Commission as it conducts its evaluation of the impact of the Termination Rates Recommendation and considers whether to maintain or amend its current regulatory approach.



## **BEREC report on Termination Rates at European Level (January 2016)**

The aim of this report is to offer a picture of the interconnection and termination prices as well as the methodology used to set those termination rates in the cases of mobile, fixed and SMS communications in Europe, thus continuing the work started by ERG (European Regulators Group). Overview reports on FTRs, MTRs and SMS TRs are carried out twice a year.

The BEREC Report on Termination rates at European Level (January 2016) provides an overview of Mobile Termination Rates (MTR), Fixed Termination Rates (FTR) and SMS Termination Rates (SMS TR) per country, based on the results of a request for information sent to all National Regulatory Authorities (NRAs). The data reflects the situation as of 1 January 2016, it includes rates from 36 NRAs that provided responses.

As of January 2016, the situation regarding Termination Rates in Europe is as follows:

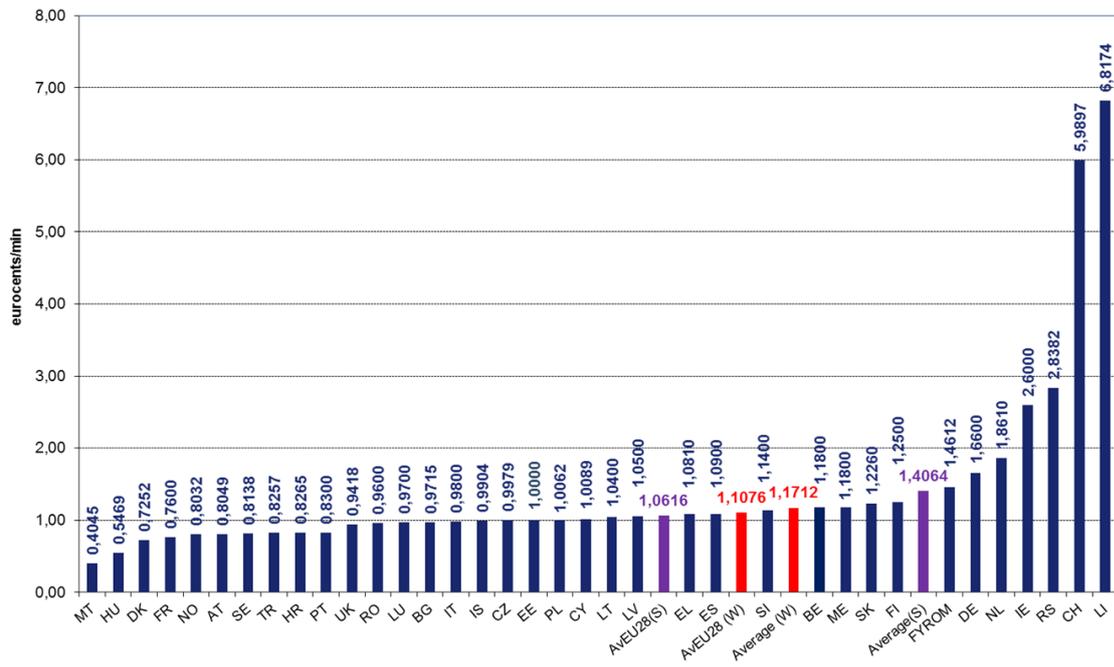
### **Mobile Termination Rates**

Mobile termination rates (MTRs) are regulated in all countries of the EU(28) and in the additional members of BEREC. The highest Mobile Termination Rates originating operators still face in Lichtenstein with 6.1874 eurocents per minute, though the lowest rates for mobile termination services or 0.4045 eurocents per minute can be found in Malta.

MTR averages:

- MTR simple average A(s) at European level (all 36 countries) stands at 1.41 eurocents per minute, whereas weighted average A(w) at European level is estimated at 1.17 eurocents per minute.

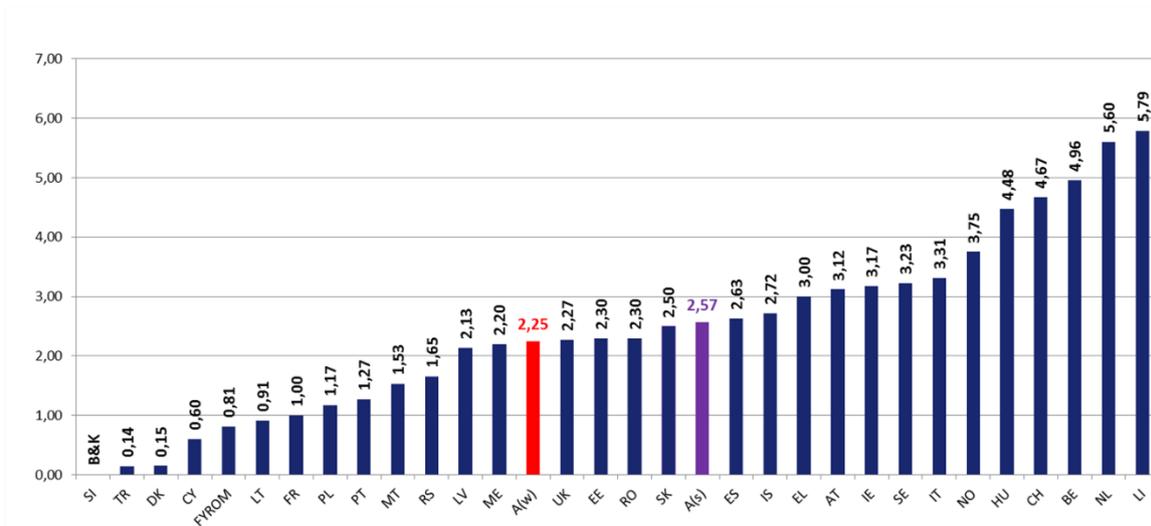
- MTR simple average A(s) at EU level (only EU member states) stands at 1.06 eurocents per minute, whereas weighted average A(w) at EU level is estimated at 1.11 eurocents per minute.



### SMS Termination Rates

This service is not regulated in most EU countries, but the evolution of wholesale SMS termination rates is monitored in most cases by NRAs. If to compare the SMS termination rates, the highest rates are Liechtenstein, where the originating operators have to pay 5.79 Eurocents per short message. The cheapest SMS termination rates can be found in Turkey, so as the operators are paying 0.14 eurocents per SMS. Slovenia is the only country where “Bill & Keep” agreements are in place for traffic between all domestic operators.

The EU simple average is Eurocents 2.57 per SMS, whereas the weighted average is reported to be Eurocents 2.25 per SMS.

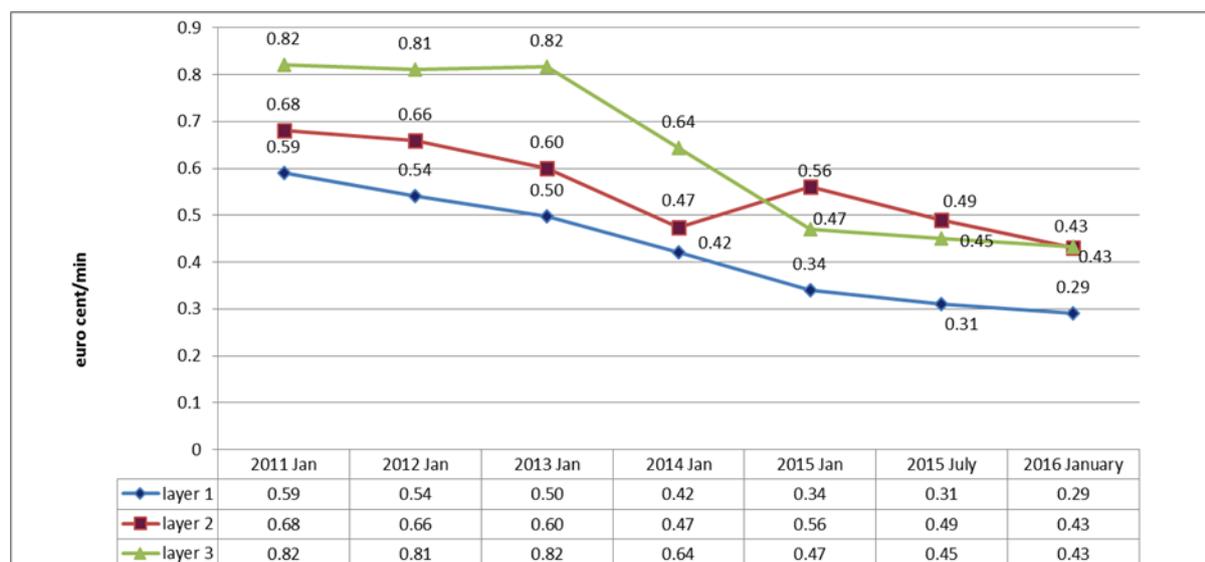


### Fixed Termination Rates

Fixed termination services in Europe are subject to price regulation. The regulation of Fixed Termination Rates has been harmonized by the Recommendation of 7.5.2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU (C (2009) 3359 final). However, some differences can be found across the national regulatory regimes:

- 1) In some cases the termination rate is a two-part tariff, i.e. composed of a variable part (to be paid for each minute of a call) plus a set-up or fixed part (to be paid for each call). In other cases, termination prices consist only of the variable part.
- 2) Interconnection services in fixed networks are provided at different levels in the hierarchy of the incumbent's networks, called layers. Even though some peculiarities in specific countries are present, in general three main layers for interconnection are defined: i) layer 1, or local level service provision, ii) layer 2, or regional level service provision (single transit), and iii) layer 3, national level service provision (or double transit).

**Figure 4 Simple averages<sup>23</sup> of incumbents' fixed termination rates at the European level per layer**



The report also indicates that the termination rates for incumbent operators of fixed networks keep the decreasing tendency in general.

Taking into account the three main levels of fixed interconnection layers, Layer 1 simple average as of January 2016 stands at 0.29 Eurocents per minute. Regarding Layers 2 and 3, the simple averages stand at 0.43 Eurocents per minute for both layers.

Additional information concerning the regulatory models used, wholesale revenues, short-term evolution of termination rates as well as information on numbers of lines and symmetry applicable across operators of the respondent countries is available in more detail in the report.

<sup>2</sup> The average of Layer 2 is slightly higher in January 2015 compared to January 2014, due to the inclusion of additional countries that did not provide information for January 2014.

<sup>3</sup> The average of Layer 3 in July 2015 is slightly higher compared to January 2015, due to the inclusion of different countries that did not provide information for January 2015.