



ERG (09) 24b International Roaming Regulation Guidelines Consultation Report

ERG Consultation Report following the public consultation on the ERG (09) 24 Draft Roaming Guidelines

July 2009

Introduction

This document contains the report of the European Regulators Group (ERG)¹ on the outcome of the public consultation on the draft "International Roaming Regulation ERG Guidelines" (ERG (09) 24 090602)². Interested parties were invited to comment on the draft. The consultation was open 2 June 2009 . 17 June 2009.

The Consultation Report summarises the main comments in the 26 submissions received and outlines how the ERG has taken account of those remarks in the final Guidelines (ERG (09) 24 final)³.

The Consultation Report is structured in the same order and under the same headings as the draft Guidelines.

ERG received 19 non-confidential responses and 7 confidential responses. Non-confidential responses were received from:

- 1) BT
- 2) GSMA
- 3) INTUG
- 4) KPN
- 5) Meteor Ireland
- 6) Ministry of Infrastructure, Poland
- 7) Mobilkom Austria
- 8) Portugal Telecom
- 9) SFR France
- 10) Sonaecom Portugal
- 11) Telecom Italia
- 12) Telefonica SA
- 13) Tele2
- 14) TeliaSonera
- 15) T-Mobile Netherlands
- 16) T-Mobile Germany
- 17) Vodafone
- 18) Wind Greece
- 19) 3 Group

¹ The ERG consists of European National Regulatory Authorities (NRAs). Its full members are the twenty-seven EU Member States whilst the four EFTA States (Switzerland, Norway, Iceland and Liechtenstein) and three EU Accession/Candidate States (Turkey, Croatia and Former Yugoslavian Republic of Macedonia) participate as observers.

² The Draft International Roaming Regulation ERG Guidelines:
http://www.erg.eu.int/doc/publications/erg_09_24_draft_roaming_guidelines_public_consultation_final_090602.pdf

³ The final International Roaming Regulation ERG Guidelines:
http://erg.eu.int/doc/publications/erg_09_24_final_roaming_regulation_erg_guidelines.pdf

Consultation Report

General Comments made by Respondents

Wind Greece and TeliaSonera expressed concern that the Guidelines should not go beyond what is required to comply with the Regulation, increasing the compliance burden for providers and leading to a less consistent application across the EU, which would be detrimental for customers. Telefónica said that the transparency measures in particular involve significant IT developments; regulators should not impose an inappropriate or inflexible system that entails unnecessary costs without considering whether the customer benefits are proportionate. Providers should be left to decide the type of control tools that meet the Regulation and consumer demands at the lowest cost in line with the prices and infrastructure in the providers' domestic market.

The ERG Guidelines are intended to complement the Roaming Regulation, to aid provider understanding and promote a consistent approach across the EU, which will benefit providers and customers. It is not the role of the Guidelines to extend the scope of the Regulation. Specific amendments have been introduced to the final Guidelines to guard against this, as are detailed in the following sections. But ERG considers it is legitimate and helpful to give examples of technical solutions that might be appropriate, without binding operators to use these, e.g. the types of message that might be used to deliver basic pricing information to customers on entering another Member State. And, in particular noting that some areas of the Regulation are complex and, ERG understands from providers, difficult to implement, ERG considers it legitimate and helpful to cast light on any apparent tensions between the spirit and the letter of the Regulation, and propose a consistent way forward, allowing for flexibility in meeting that objective.

INTUG said that the Guidelines deal with roaming from the perspective of residential customers, and appears to take no account of business users. It asked whether the regulated retail tariffs overrule existing business contract arrangements, who is the user who should consent to data downloading: the contract-holder or the end-user, and how would the financial or volume limit of data roaming use apply to multiple SIM cards held by a single contracting party in a business context?

Following this comment, the final ERG Guidelines have been amended to allow for the case of business customers, in particular on the financial and volume limits by stating that providers may construe 'customer' to mean the contracting party or an individual SIM-holder, and that these may not be the same person in the case of corporate or family contracts, for example. Providers must make it clear who the cut-off limit applies to, to the contracting party or to individual SIM-holders (paragraph 23), and that 'ERG recognises that the above financial or volume limits may not be suitable for corporate customers. This may be dealt with in the initial contract or in a contractual amendment for existing customers, for example where the corporate customer could opt-out of the mechanism' (paragraph 40).

Generally, the Guidelines do not enter into details for business users because this is a matter of contract law: the provider will deal with the contracting party at the business, and the provisions of the Regulation will be included or opted out of as appropriate in the business contract. Where the Regulation would create rights or obligations that are contrary to an existing business contract, it may be necessary to inform the contracting party and review and amend the contract.

BT said it was concerned that the Guidelines should acknowledge the existence of the reseller/MVNO market, and that the Regulation ignores this section of the market and this supply chain.

In response, ERG has added a specific reference in the introduction of the final Guidelines: 'ERG notes that the retail provisions of the Regulation apply to MNOs, MVNOs and other service providers that offer retail roaming services. In contrast, the wholesale provisions of the Regulation apply only to wholesale roaming agreements, which are normally transacted only between MNOs' (paragraph 3).

Retail issues

Basic personalised pricing information: voice, SMS and data

When should the basic information be provided?

T-Mobile Netherlands argued that the requirement to send data pricing information every time the roaming customer enters a Member State **'and'** initiates for the first time a regulated data roaming service should be changed to **'or'** initiates for the first time a regulated data roaming service (Article 6a(2)). It considered that the European Parliament did not intend the customer to receive two messages, and cited the Parliament's proposal included in the Presidency compromise proposal of 26 March 2009: 'Such basic personalised tariff information shall be delivered to the roaming customer's mobile telephone or email address or via a popup window on the computer every time the roaming customer enters another Member State or initiates a regulated data roaming service in a particular Member State other than that of his home network for the first time after having entered that Member State'.

T-Mobile Germany argued that the European Commission and the European Council had not intended a cumulative requirement either.

Sonaecom said that ERG was extending the scope of the Regulation by suggesting that users of traditional mobile handsets may receive two messages.

KPN, Tele2 and a confidential response commented that the only way to ensure the transparency purpose of Article 6a(2) is to send data price information when the customer first connects to the network, and asked ERG to recognise that this is sufficient to comply with the Regulation.

Although at a point in the negotiations the draft Regulation may have read 'or initiates for the first time a data roaming service', the final text that was agreed by the Commission, Council and Parliament uses 'and'. ERG understands this is the policy intention of the European institutions. It is not the role of the ERG Guidelines to change the wording of the Regulation.

3 Group asked for confirmation that the Guidelines require providers to send a message with data pricing information when the customer first connects to a data roaming service during a visit to a given Member State, and not every time the customer connects to a data roaming service during the same visit to that Member State. ERG understands that is correct.

Telecom Italia agreed with ERG's concern that by only sending data pricing information to the customer when both conditions of having entered another Member State and having initiated a data session are met, the customer may not be alerted in time to make an informed decision about using data services. Therefore Telecom Italia agreed with

ERG that the customer's interests in transparency would best be met if providers sent messages covering all required information in Article 6a(2) when the customer enters another Member State, regardless of whether he/she has simultaneously initiated a data session.

However, Telecom Italia disagreed with ERG's suggestion that data pricing information should be sent again if a customer subsequently starts a data session. It considered that the requirement to inform the customer about data service prices, in order to avoid bill shock, is met by the initial message and sending the same information again when the customer starts the data session would not only be unnecessary, as it would not provide any additional information, but even burdensome for the customer, who already receives a high number of messages every time he/she roams. TeliaSonera, Tele2, GSMA and BT agreed that a message with all of the information required under Articles 6 and 6a(2) when the customer first crosses the border should be sufficient. 3 Group, Sonaecom, T-Mobile Netherlands, T-Mobile Germany and Mobilkom Austria said that users would be likely to regard a second message as spam.

TeliaSonera, a confidential response and GSMA considered the ERG Guidelines on this point were overcomplicated and should leave more flexibility to providers, especially while providers are still developing technical solutions to comply with the Regulation.

SFR France, T-Mobile Germany and T-Mobile Netherlands and PITT said they did not see the merit or the technical possibility of sending a second message to devices that can connect to the visited network without connecting to data.

SFR France and Vodafone said that sending a second message might not be proportionate. In this respect, Vodafone noted that users of traditional mobile handsets that can connect to data services are a comparatively small group who generally 'snack' on very short data sessions that incur relatively small charges.

Vodafone suggested complying with the Regulation by drawing the customer's attention to the message they received on crossing the border. Mobilkom Austria suggested that in order to avoid spam, it would be better to send one message when the customer enters another Member State with the information required under Article 6 only, and a second message with the information required under Article 6a(2) only if the customer subsequently connects to a roaming data service.

In response to these comments, ERG has clarified and simplified this section of the final Guidelines to aid provider understanding of the requirements, allow flexibility in the means of implementation, and ensure that the aim of price transparency and bill control for customers is met.

ERG considers that customer's interests will best be met if all required information in Article 6 and Article 6a(2) is sent when the customer's traditional mobile handset first connects to a network in another Member State. ERG reminds providers that, in order to comply with the letter of the Regulation, they may consider it necessary to send a second message when the customer initiates a data roaming service, if this happens at a later time. These considerations have been reflected in paragraphs 12 - 17 of the final Guidelines.

Referring to the alternative suggestions made by Vodafone and Mobilkom Austria, Vodafone's suggestion of referring the customer to the information received on crossing the border seems to still involve sending a second message. And there is a risk that the customer has deleted the original message. A second message containing basic data prices would therefore seem to better meet customer interests. ERG considers that

Mobilkom Austria's proposal to avoid spam would not meet the spirit of the Regulation, because the customer would not receive information on data prices in time to make an informed decision about whether to use data roaming services. And where the provider is able to include data price information in the same message as the information required under Article 6, sent when the customer first crosses the border, it would result in the same number of messages as the ERG's proposal. Therefore ERG has not made changes to the Guidelines in response to these comments.

Wind Greece and two confidential responses noted that the means of providing pricing information when the consumer connects to data are technically complex. The confidential responses said that MMS is unlikely to be used by providers for technical reasons. In particular, delivery depends on the features of the visited network and its contractual relationship with the home operator, and the features of the customer's handset. Also, not all customers are used to accessing them. GSMA, SFR, a confidential response and Telecom Italia commented that operators should be left the flexibility to choose the most appropriate way to provide the information on data roaming prices to the customer (SMS, MMS, landing page, etc). GSMA thought that other areas of the Guidelines should also refrain from mentioning particular technologies like Machine to Machine communications and landing pages (paragraphs 7, 13, 63 of the draft ERG Guidelines). Wind Greece questioned the consumer benefits of the free phone number for further information, compared to the cost of providing it.

As noted in the draft Guidelines, the Regulation does not require a specific means to be used, but Recital 34 states that 'information should be delivered in the manner best suited to its easy receipt and comprehension'. The final Guidelines have been updated to maintain such flexibility while better meeting consumers' needs by removing the reference to MMS and noting that, 'where SMS are used, providers may send more than 160 characters if needed, although ERG considers that customers are likely to appreciate concise messages' (paragraph 8).

ERG has not removed other references to particular technology in response to the GSMA's comment, because they are given as examples only, and not recommendations.

In response to Wind Greece, ERG notes that the Regulation clearly requires providers to provide a free phone service for more detailed, personalised pricing information. To limit costs, providers could use their existing customer services, for example. The ERG Guidelines have not been amended on this point.

Sonaecom said that there could be a diversity of data roaming prices, which would be difficult to cover in basic pricing information.

ERG has responded to this comment by specifying in the final Guidelines that the message should contain the 'maximum' prices (paragraph 10). ERG agrees that customers can then obtain more detailed, personalised information by using the free phone number.

Sonaecom considered that the basic message provided in accordance with Article 6 had to include a free of charge number from which the customer could access information on the possibility of using 112 in an emergency, rather than including a reference to 112 in the basic message itself.

ERG understands that is not the policy intention behind the Regulation. Indeed, under Sonaecom's interpretation, the customer wouldn't know to call the free phone number for information on 112 unless 112 was mentioned in the initial message. That

interpretation would not, therefore, further the interests of consumers. The final ERG Guidelines have not been changed in response to this point.

On the other hand, Wind Greece said that it was concerned about the obligation to provide information on 112 because it could not guarantee that its roaming partners support the 112 service. It did not feel comfortable about informing its customers about such a vital service when it was not responsible for its availability.

ERG considers that Article 6(2) clearly requires providers to provide information on 112 in the initial message. Moreover, ERG notes that the availability of 112 is governed by separate EU legislation, specifically 91/396/EEC Council Decision of 29 July 1991 on the introduction of a single European emergency call number followed by the Universal Service Directive 2002/22/EC. That requires all Member States to ensure that users of fixed and mobile telephones, including payphones, are able to call 112 free of charge; 112 calls must be appropriately answered and handled; Member States must ensure emergency services are able to establish the location of the person calling 112 where the person is unable to state his or her location, which can happen particularly when calling from a mobile phone and while travelling abroad. Therefore ERG has not made any changes to the Guidelines on this point.

The draft Guidelines proposed that 'Customers have the possibility to opt-out of receiving information on regulated voice and SMS roaming services, 112, and the free phone number for more detailed information on the one hand, and the possibility to opt-out of receiving information on regulated data roaming services, including MMS, on the other hand'. SFR France, GSMA, 3 Group and a confidential response said that was incompatible with other areas of the draft Guidelines, which encouraged providers to send at least *one* automatic message providing all basic roaming information for the visited Member State.

ERG has responded to these comments in the final Guidelines by providing that 'Customers have the possibility to opt-out of receiving information on the maximum charges for regulated voice and SMS roaming services, access to 112, the free phone number for more detailed information, and the maximum charges for regulated data roaming services, including MMS' (paragraph 10). This allows providers to provide all basic pricing information in the same message, which may be more convenient for customers, and to allow customers to opt-out of the information required by Article 6 and Article 6a(2) separately only where it is technically feasible.

Sonaecom and a confidential response considered that the draft Guidelines extended the scope of the Regulation by proposing that providers should send basic pricing information on MMS.

ERG notes that Article 6a(2) requires providers to provide 'basic personalised tariff information on the charges applicable to the provision of regulated data roaming services', and that Article 2(2)(k) states that 'a regulated data roaming service⁵ does include the transmission and receipt of MMS messages'. Therefore no change has been made to the final Guidelines on this point.

The draft Guidelines said that 'The following information must be provided to roaming customers:

- a) the maximum charges while in the visited country for roaming voice calls made back to the subscriber's home country and within the visited country, for sending regulated roaming SMS, and for using regulated data roaming services, which includes charges for sending a roaming MMS. Providers must also send

information on maximum charges for calls received and for MMS received that the customer will pay under his or her tariff scheme; ò

In addition, ERG considers that it would be good practice to:

(e) specify the maximum rates that a consumer will pay for roaming voice calls made and received where these are higher than the rates specified under (a) above, for example for a regulated call to a third country'.

3 Group and a confidential response asked for clarification of 'a regulated call to a third country'. ERG has provided this in the final Guidelines, which now state: 'ò for example for making a roaming voice call to a Member State other than the subscriber's home country or within the visited country'. This is because the Regulation requires providers to send basic price information on the cost of making a Eurotariff call back to the roaming customer's home country and within the visited country, but does not mention information on the price of making a Eurotariff call to another Member State. ERG considers it is good practice to provide this information, as it also stated in the Guidelines on the first Regulation.

Financial or volume limit on data roaming consumption

Wind Greece commented that Article 6a(3) of the Regulation is technically complex to comply with and, for example, may lead to customers being cut off without warning when their limit on data roaming use is reached. This may confer competitive advantage on larger providers that have a larger budget to fund the necessary technical developments.

ERG understands that providers are likely to have to conduct significant technical developments to comply with Article 6a(3). But it is not the role of the ERG Guidelines to change the provisions of the Regulation, therefore no changes have been made to the final Guidelines in response to this comment. ERG is open to further dialogue with providers on implementing the financial or volume limit as their technical development work advances.

T-Mobile Netherlands asked for clarification of whether it must enable customers to use the financial or volume limit from 1 March 2010, or only to allow them to select it for use from 1 July 2010.

ERG understands that all customers must be able to select and use a financial or volume limit from 1 March 2010. All customers who have not already selected a limit or opted out of a limit must be given and be able to use the default financial or volume limit from 1 July 2010.

On consent for data roaming, KPN said that requirements on consent in the Recitals have a different status to the requirements in the Articles of the Regulation, and that this distinction should be made clearer in the Guidelines.

Vodafone noted that PDAs and handsets will increasingly connect to data services to automatically update applications. Obtaining consent may be complex because customers do not necessarily acquire their device from their network operator. KPN made a similar point in relation to 'data-downloading, including software updating and e-mail retrieval under Recital 32, because these services are specific to certain software and hardware setups and are not provided by telecoms companies. In general terms operators can inform that some software, such as for example Microsoft Update or security updates etc. on a laptop can trigger data downloads, but telecom operators do

not know which software and which setups are used by its customers. Requiring consent at the time of subscription is therefore not a possibility.

The final ERG Guidelines have been clarified, as below, and now distinguish between the Articles and the Recitals. ERG notes that they give examples of how providers might comply, and therefore allow flexibility for technical limitations. Where the operator is aware of the possibility of automatic consumption, for example software updates, it could explain that possibility to the customer, even though it may not provide the updates itself and so may not be in a position to give details. In accordance with the Recitals, the provider could ask for a general consent to automatic downloads by third party applications, or provide general information on how to switch these off (paragraphs 20 and 21).

A confidential response suggested that ERG should work with GSMA and providers to produce a standard list of examples of prices and volumes for different data uses, to improve clarity for consumers. ERG would be happy to discuss a draft list with industry.

Another confidential response considered that the draft Guidelines did not go far enough regarding Recital 33, which provides there should be no obstacles to the emergence of applications or technologies which can be a substitute for, or alternative to, roaming services and that they should prohibit any such obstacles. ERG notes that this is a Recital and not an Article of the Regulation, and understands that the underlying policy intention of the European institutions was to express a policy aspiration rather than an enforceable prohibition. The ERG Guidelines cannot extend the substantive provisions of the Regulation. Therefore the Guidelines have not been amended on this point.

On application of the notifications and data limit, the Polish Ministry for Infrastructure considered it critical that operators inform customers on their websites or in other literature about the possibility of losing the downloaded data where the agreed limit is reached and the download has not finished. This can cause users dissatisfaction and expose them to needless costs.

Telecom Italia also asked ERG to consider that it is technically not feasible for the operator to freeze a data session when the financial/volume limit is reached in order to allow the customer to retrieve the data at a later stage, and there might be significant delays between the operator sending the 100% notification and the customer receiving the message and acting upon it. Therefore the data session will be interrupted and the customer will lose all data in the process of being downloaded/ uploaded. GSMA and 3 Group agreed, and said that the 80% notification might also arrive after the limit has been reached. GSMA recommended that providers should be able to send the 80% notification at 80% of the limit, or before.

BT argued that specific trigger points for sending notifications should be avoided, so that providers can set them based on the technical limitations of their systems. The ERG Guidelines should simply state that a warning should be given that enables the user to react and make a decision in good time. BT considered that providers should be able to devise their own method of managing the cut-off when a financial or volume limit is reached within broad principles and taking into account customer experience. In no circumstances should a customer be cut-off mid-session: they should be given a "click to continue or save now" message. Expecting providers to devise methods of retaining "lost" data etc is not realistic.

3 Group and Mobikom Austria agreed that it is impossible for data not completely received by the customer to be preserved when the limit is reached and the connection

is cut off because the data is on the customer's equipment and not on the provider's network. There are various download managers available to customers that will resume downloading data that was not received before a connection was broken. Therefore customers already have tools available to protect themselves from broken connections, making additional obligations for providers redundant. Any references to operators endeavouring to prevent data loss should be removed from the Guidelines.

SFR said that it is investigating ways to prevent data loss when the limit is reached, as this may deeply degrade its customer experience. Nevertheless, its current view is that such retention of data would require a fundamental reengineering of the software on customer devices rather than being something that the network operator can address directly. Vodafone, KPN, T-Mobile Germany and three confidential responses agreed. KPN and two confidential responses said that the specific recommendation to 'make reasonable technically feasible efforts to preserve any data that was in the course of being downloaded when the limit was reached, so as to allow the customer to resume the download' should be removed (paragraph 34 of the draft Guidelines).

Mobikom Austria and two confidential responses questioned whether retaining data content in order to facilitate the resumption of a download would be in line with data retention regulation and user's privacy rights, specifically Directive 2006/24/EC and Directive 2002/58/EC.

In response to these comments, the final Guidelines propose that operators inform customers about what will happen to any data in the course of being downloaded if the customer does not wish to continue use when the limit is reached, on their website and in other literature, and in the notifications sent when the user reaches 80% and 100% of the agreed limit (paragraphs 25, 34 and 36). It is not for the Guidelines to change the requirements of the Regulation. ERG also notes that it may be possible for the speed of data download to be slowed to a trickle where the cut-off limit is reached without a response from the customer to the notifications. This would seem to avoid the bad customer experience of losing data while protecting the retail provider from material costs which it may be unable to recover from its customer.

To ensure a positive customer experience of the data limits, Telecom Italia and 3 Group asked for the Guidelines to allow maximum flexibility to operators on how to implement the data limit functionality. Telecom Italia referred in particular to allowing the operator to send the 80% notification before the client reaches 80% of agreed limit, include in the message the procedure to be followed by the customer to avoid being cut off, not send an additional message at 100% of the agreed limit if the customer has positively responded to the previous message.

This is in line with the ERG's intentions when producing the draft Guidelines. ERG has amended the final Guidelines to ensure that these points are clear (from paragraph 32).

SFR asked for clarification that, if it provided customer information on consenting to continue data use after the limit in the 80% notification, it would not have to provide the information again once the data limit is reached.

ERG notes that the Regulation requires providers to send customer information on how to continue data use after the limit in the 100% notification. Because that may arrive too late for customers to consider and act upon, ERG proposes that providers include this information in the 80% notification.

Telefónica said that the implementation of the notifications and limits requires real time monitoring, automatic customer interaction and very complex IT systems linking the

billing and CRM system and the network. The complexity is compounded by the fact that this involves multiple networks because the user is roaming. The development of these systems will require significant resources, and just as importantly it will carry significant opportunity costs. Several Telefónica operating companies considered developing such solutions in the past for the national market but were forced to cease to progress them because of the high complexity involved. It is concerned that ERG underestimates these real opportunity costs.

ERG understands from many providers that implementing the volume or financial limits is complex and requires investment. ERG also considers that it is very important for bill shock from data roaming to be addressed, for the benefit of customers and also providers. The Regulation establishes a means of doing that; it is the role of the Guidelines to aid implementation.

Paragraph 35 of the draft Guidelines said 'By 1 March 2010, providers must also allow their customers to opt for a facility that provides information on their accumulated consumption expressed in volume or in the currency in which they are billed'.

Vodafone, PIIT, two confidential responses, T-Mobile Germany and Mobilkom Austria were concerned that this suggested an obligation for a separate facility, in addition to the financial or volume limit itself, for consumers to check their expenditure in real-time, and that this paragraph of the draft Guidelines should be deleted as extending the scope of the Regulation.

ERG agrees with these responses and has removed this paragraph from the final Guidelines.

Article 6a(3) of the Regulation requires providers to make available to their customers financial or volume limits on data roaming use, but the Regulation does not define 'customer'. In the draft Guidelines, ERG said it understood 'customer' to be the contracting party. Therefore a single limit would apply to all of the SIMs within a family contract.

TeliaSonera, Mobilkom Austria and a confidential response said it was technically complex to measure the total consumption of all the SIMs under the same account, and apply a single limit to all of them. This would make it difficult for SIM holders to have different limits, or for some to opt-out of having a limit. The transparency aim underpinning the Article would be met if the limit were calculated per SIM. The draft Guidelines were contradictory because they viewed the 'customer' as the contracting party for the data limit, but seemed to require providers to send each SIM holder personalised pricing information when the entered another Member State.

ERG has reflected these comments in the final Guidelines by stating 'Customer' is not defined in the Regulation. ERG considers providers may construe it to mean the contracting party or an individual SIM-holder (these may not be the same person in the case of corporate or family contracts, for example). Providers must make it clear who the cut-off limit applies to, to the contracting party or to individual SIM-holders' (paragraph 23).

SFR held similar concerns regarding customers that use a specific APN. Specific APN are managed by equipment outside SFR's control and it is not able to precisely follow the consumption of individual users situated behind the APN. SFR considered specific APN customers should be excluded from the cut off limit.

ERG has responded to this comment by specifying that 'ERG recognises that the above financial or volume limits may not be suitable for corporate customers. This may be dealt with in the initial contract or in a contractual amendment for existing customers, for example where the corporate customer could opt-out of the mechanism' (paragraph 40).

Regarding pre-pay customers, Vodafone considered that the financial or volume limit should only apply to customers with a monthly balance of over "50. But it pointed out that this group is very small, as did Mobilkom Austria and TeliaSonera. Vodafone thought that limiting pre-pay credit to "50 might be a way of complying with the Regulation, and the comment to the contrary in the draft Guidelines should be removed. T-Mobile Netherlands made a similar point.

GSMA, T-Mobile Netherlands, T-Mobile Germany, Mobilkom Austria, 3 Group, TeliaSonera, three confidential responses, Telefónica, SFR and PITT disagreed with the draft ERG Guidelines that Article 6a(3) applies to pre-pay customers: it is in the nature of pre-pay subscriptions that pre-pay customers manage their own maximum financial limit, and must choose to top-up their credit in order to continue use; when roaming, the pre-pay mechanism means that the accumulated expenditure for regulated data roaming services over a specified period of use cannot exceed a specified financial limit; a 'monthly billing period' does not exist for pre-pay; applying Article 6a(3) to pre-pay customers would interfere with the customer's existing means of controlling their expenditure.

A confidential response said that, considering the value of its top-up options on the EU market, which are all under "50, its customers would have to buy several top-ups at the same time in order to face a potential risk of bill shock, even assuming that a full pre-pay account was spent on data roaming, which it considered unlikely. In practice, a single top-up has an average value of well under "50, the average total monthly top-up by customers is also under "50, and the pre-pay customers that spend the most per month also recharge the lowest amounts at each top up. Therefore, the highest pre-pay spenders have less money available at any one time on their account than the average customer - and thus face even less risk of bill shock. Based on these four elements, inherent in the nature of the prepay principle, the response considered that the objectives of Article 6a(3) are met, and the explicit inclusion of prepaid customers in the ERG draft guidelines should be removed. If it is not removed, it is worth highlighting that the implementation of the cut-off limit for prepaid customers will raise additional questions such as: when do operators have to start the "50 calculation: per monthly period? Or each time customers top up their cards?

GSMA, T-Mobile Netherlands, SFR and Telefónica said that it would be technically very complex to develop a cut-off system for pre-pay customers because they are on a different platform from post-pay customers and parallel systems would be needed. Together with Mobilkom Austria and 3 Group, they said that it could not be financially justified for such a small number of customers. If a monthly cap is required, T-Mobile Netherlands said it would be forced to suspend pre-paid data roaming altogether. TeliaSonera added that customers will already receive basic data pricing information on entering another Member State and initiating a data session, information on the approximate cost of certain types of data service, and have the ability to check their pre-pay balance at any time. 3 Group made a similar point, and added that it would be inconvenient for pre-pay customers to be cut off when roaming because it is not always easy to top-up pre-pay credit when travelling.

SFR and two confidential responses questioned the basis for asserting that Article 6a(3) covered pre-pay given that it refers to a 'monthly billing period' and 'outstanding charges', which do not exist for pre-pay customers. SFR also considered that the draft

Guidelines could be extending the scope of the Regulation in this respect, increasing legal uncertainty. They all considered that paragraph 22(2) providing that Article 6a(3) applies to pre-pay should be deleted.

T-Mobile Netherlands said that if it were obliged to apply the bill shock protection to its pre-pay customers, under Dutch law it would be required to grant its customers the right to terminate their contract immediately since the measures of the Regulation are less beneficial for its customers than the existing protection of a pre-pay account. This cannot be the intention of the Regulation. The ERG Guidelines should clarify this situation.

The Polish Ministry for Infrastructure commented that, during its participation in the negotiation of the Regulation, it had understood that Article 6a(3) was intended to apply to post-pay and pre-pay customers.

In response to these comments and in light of discussions with the European Commission, ERG has simplified the content of the Guidelines on pre-pay to say: 'ERG understands that the European institutions intended that the financial or volume limit must be made available both to post-pay and to pre-pay customers. This allows flexibility in implementation for providers, and makes the customer protection intentions of the institutions clear.

Paragraph 23 of the draft Guidelines said: 'Some customers pay for data roaming services according to a tariff where data access is bought separately from other mobile services, paid for in advance and for a fixed, pre-defined non-recurring sum and non-recurring duration, after which the data session ends unless and until the customer gives their express consent to resume data access. These customers are automatically protected from bill shock and there is no need to make special arrangements for them'. T-Mobile Germany and a confidential response asked for the last sentence to be made more explicit, to say that Article 6a(3) does not apply to such tariffs.

ERG did not amend the Guidelines in response to this comment; it considered that the text was clear.

The Polish Ministry of Infrastructure considered that fixed-rate MMS messages should not be excluded from the volume limit on data roaming, as proposed in the draft Guidelines, because it is a data service.

A confidential response was concerned that it could be misleading and confusing for customers if MMS are counted towards volume limits and not financial limits. Consumers prefer transparent and easily understood schemes. The ERG's position may force operators to provide both types of limit. It considered that MMS should be excluded from both limits.

TeliaSonera agreed that MMS should be excluded from both limits because MMS have technical restrictions and do not create bill shock. Mobikom Austria also said that MMS should be excluded from both limits, because fixed price MMS are easily understood by consumers.

Mobikom Austria and 3 Group said that including MMS under the default financial limit and not under the default volume limit would make it impossible to ensure that the results of the financial and volume limits are the same ("50) - there would be the unknown of how many fixed price MMS that users of the financial limit would send.

A confidential response said it was aware that Article 2(k) of the Regulation includes MMS as a 'regulated data roaming service'. However, on its network, MMS pricing is separate from data and is not volume based, transmission to send an MMS is not charged separately, and there is no charge to receive an MMS. Also, MMS are sent and received over a separate platform from data services. Merging information from the data delivery platform and the MMS platform so as to count MMS towards the data limit would involve considerable development work. Another confidential response said this would be technically complex, as would aggregating use from VPNs, PDAs and devices of which they are not aware (e.g. unlocked phones from other networks using their network) and that further dialogue was needed between operators and ERG. The first response considered that requiring MMS to be counted towards the data limits would extend the scope of the Regulation and the Guidelines should exclude all MMS from Article 6a(3).

Another confidential response said that no MMS should be counted towards the data limits because the risk of roaming customers experiencing bill shock from this type of service is very low, partly because of the low uptake of such services abroad, and partly because it is easy to predict how much they will cost. Furthermore, customers will receive a message when crossing a border informing them of the cost of sending and receiving MMS. The proposal that fixed price MMS should be counted towards the financial limit should be removed.

ERG has reflected these comments in the final Guidelines by stating: ~~ERG~~ notes that MMS are included in the definition of 'regulated data roaming service' according to Article 2(2)(k)), and are not explicitly excluded from the scope of Article 6a(3). ERG understands that at present it is technically challenging to monitor MMS use alongside other data use. Providers should ensure that consumers are informed about how any MMS expenditure is charged and controlled (paragraph 31).

Wholesale issues

Wholesale voice and data roaming caps

3 Group said it believes the wholesale caps for voice should apply to each minute rather than as an average over a 12 month period. It said that this is already the case in practice under the GSMA operational procedures whereby any individual regulated voice call is required to be equal to or less than the regulated price cap when calculated on an individual transaction basis or it will be rejected as incorrectly charged. 3 Group also considered that this should apply to the implementation of the data wholesale rates, thus avoiding the cash flow issues highlighted in paragraph 40 of the draft ERG Guidelines.

Sonaecom suggested that, instead of insisting that the average wholesale cap for voice, SMS or data services must be calculated on a 12-month period, the ERG Guidelines should advise operators to apply the regulated wholesale rates on the Tap file, so as to avoid larger operators overcharging smaller operators and adjusting prices at a later stage.

A confidential response considered that paragraphs 38 - 40 of the draft ERG Guidelines on the practical application of the wholesale caps extended the scope of the Regulation and should be deleted. GSMA made the same comment about paragraphs 39 and 40. As the Guidelines recognize, the Regulation gives visited operators the flexibility to comply with the cap as long as adjustments are made to ensure that the average price cap is met by the end of the relevant period.

ERG has not reflected these comments in the final draft. The Regulation establishes an average wholesale cap applicable between any pair of operators, generally over a 12-month period. It is not the role of the Guidelines to change the wording of the Regulation. ERG has not removed paragraph 38 . 40 (updated to paragraphs 42 . 44 in the final Guidelines) because they are recommendations on best practice when applying the wholesale rates, which were also made in the ERG Guidelines on the first Regulation, and are intended to ensure that the rates are applied in a way that meets the aims of the Regulation so that lower wholesale rates are available to all sizes of operator and may then be passed through to the retail level.

Maximum charging intervals

Retail voice calls

Paragraph 44 of the draft ERG Guidelines on charging intervals for retail voice roaming calls said that 'The Regulation does not prescribe a minimum or maximum charging interval for other roaming retail voice calls made or received'. Sonaecom and a confidential response asked for clarification of which calls fall under the category of 'other roaming retail voice calls made or received'.

ERG has added a clarification to the final ERG Guidelines: 'The Regulation does not prescribe a minimum or maximum charging interval for other roaming retail voice calls made or received (i.e. alternatives to the Eurotariff)' (paragraph 38).

Wholesale voice calls

Portugal Telecom asked ERG to confirm its understanding of the charging intervals for wholesale voice roaming calls: if an operator chooses to set an initial minimum period of 30 seconds the average wholesale price that results from dividing the total revenue by the actual minutes can never exceed " 0.26 per minute for the period in analysis, for each pair of operators, that is, an operator that chooses to set this initial period will have to establish a price per minute lower than " 0.26, in order to ensure compliance with the price-cap. ERG understands the Regulation in the same way.

ERG clarified the paragraph on wholesale voice charging intervals to say 'This means that at the wholesale level operators must also bill on a per second basis, subject to a minimum initial charging interval of up to 30 seconds. As for Eurotariff revenues, compliance with the wholesale cap will be assessed by dividing the relevant revenue received by the amount of time **billed**'.

SMS

On SMS, the draft ERG Guidelines said 'SMS must be billed per message at the wholesale and retail levels. A message is up to 160 characters' (paragraph 47). Mobilkom Austria made the point that SMS can be encoded using a variety of alphabets: the default GSM 7-bit alphabet, the 8-bit data alphabet, and the 16-bit UTF-16/UCS-2 alphabet. Depending on which alphabet the subscriber has configured on the handset, the maximum individual Short Message size is 160 7bit characters, 140 8-bit characters, or 70 16-bit characters (including spaces). The Cyrillic alphabet, for example, corresponds to 70 16-bit characters (including spaces).

ERG has clarified the final Guidelines to provide: 'SMS must be billed per message at the wholesale and retail levels. According to Recital 30, a roaming SMS message must have the same technical parameters as a domestic SMS' (paragraph 51).

General issues

Charges for voicemail messages

On voicemail charges, KPN commented that the Guidelines should say that the prohibition on charges for voicemail messages that are deposited in the roaming customer's network mailbox by another caller comes into effect on 1 July 2010.

ERG has amended the final Guidelines to include this clarification (paragraph 54).

Portugal Telecom argued that this prohibition at the retail level should be matched with a similar prohibition at the wholesale level.

ERG has not changed the Guidelines in response to this comment; it is not the role of the Guidelines to change the wording of the Regulation.

Charges in currencies other than the Euro

Sonaecom commented that it is unreasonable for there to be two different dates for the applicable exchange rate for currencies other than the Euro (6 May 2009 for SMS and Data and 1 June for voice) may apply. In order to provide greater consistency, Sonaecom suggested the adoption of a single date.

ERG has not changed the Guidelines in response to this comment; it is not the role of the Guidelines to change the wording of the Regulation.

Tele2 and a confidential response specified that, if no OJEU is published on the applicable date, the relevant exchange rate is the one published in the first OJEU following this date that contains reference exchange rates (Recital 12).

The ERG has changed the final Guidelines to make this clear (paragraph 56). Tele2 suggested ERG also refer to the relevant publication dates in the European Central Bank; ERG has not taken up this suggestion because it could increase confusion.

Scope of regulated data roaming services

Value-added services

Vodafone agreed that a distinction needs to be drawn between content and other value added services and the roaming transmission service. However, Vodafone considered that a better distinction would recognise that content and value added services may either be invoiced by and paid separately to a third party provider or itemised separately (from transmission) but nonetheless invoiced by and paid to the mobile provider. For these purposes, the price of content and value added services (but not the transmission) must not vary by reference to whether they are consumed while connected to the home network or the visited network. Vodafone suggested that paragraph 61 of the draft ERG Guidelines should be amended to reflect this distinction, which it believed better reflects the intent of the lawmakers (and the ERG).

TeliaSonera said that all value-added services should have been excluded from the Regulation, for consistency with the first Roaming Regulation. In the event that value-added data services are not excluded, it considered that only the data consumed for transferring the value-added service should be counted towards the limit. Customers are made aware of the cost of value-added services when they purchase them and in many

cases are asked to confirm that they accept the cost. The only variable element in the receipt of the service is the cost for data transfer while roaming.

Sonaecom said that the draft Regulations provide that value-added SMS are not covered by the Guidelines, but they are unable to identify value-added SMS received at the wholesale level.

SFR believed a clear distinction needs to be drawn between value-added services and the roaming transmission service. However, it did not agree with the ERG's recommendation on value-added services and proposed that the distinction used for MMS in the draft ERG Guidelines should be applied to value-added services. In paragraph 61, ERG recommends that services should be included in the limit as soon as they are itemised separately (from transmission) but nonetheless invoiced by and paid to the mobile provider. Taking into account that the price of content and value-added services (but not the transmission) do not vary by reference to whether they are consumed while connected to the home network or the visited network and that it is technically easy to distinguish between the transmission and the value-added service costs, we believe that only the transmission (variable) costs should be included in the limit (as recommended for MMS in paragraphs 27 and 32 of the draft Guidelines). Therefore, SFR suggested that paragraph 61 of the draft Guidelines should be amended to illustrate this distinction, which it believes better reflects the intent of the lawmakers (and the ERG) and the technical possibilities.

The Polish Ministry for Infrastructure expressed the opinion that the Regulation gives no basis for the interpretation that price for content should be separated from the price for data transfer, and that this would be contrary to the legislators' intentions. It considered that these roaming services should be treated as inseparable and the total price (data transmission and content) should be included in the financial or volume limit. National regulatory authorities would be entitled to impose penalties for failure to do so, according to the Article 9 of Regulation.

Following these comments, the final Guidelines have been amended to specify the type of content or service in question, e.g. a mobile ring tone or a song (and not opening a file attached to an e-mail or streaming a free clip from a website etc). ERG agrees that the bill shock problem results from insufficient knowledge of customers about the charges for roaming data transmission. This is reflected in the Guidelines because in all cases, roaming data transmission must be counted towards the cut-off limit. In other words, for standard Internet shopping, e.g. buying an MP3 song, the data transmission required to receive the purchase must be counted towards the cut-off limit. This will protect customers in cases where they think they have paid for everything by buying the song itself. For value-added services where the content/service and the data transmission are bundled and both paid to the mobile provider, the Guidelines provide that the total price or volume should be counted towards the cut-off limit, and that includes the data transmission.

As it seems that mobile operators are moving into offering additional content, services and applications apart from standard mobile services, ERG will monitor carefully market developments in this area and the implications for consumer transparency to ensure the Guidelines remain relevant and comprehensive.

Roaming calls made to/from ships or planes

T-Mobile Germany proposed that the draft Guidelines, which read 'The Regulation does not apply to calls made to/from ships or planes using satellite networks' should be

updated to refer to all communications to cover SMS and data. We have done this, because it is in line with the scope of the Regulation (paragraph 67).

Machine to machine communications

Telecom Italia, a confidential response and SFR suggested that Machine to Machine communication is outside the scope of the Roaming Regulation. Telecom Italia said that they cannot lead to a bill shock because they are planned beforehand, without the possibility of unexpected flow of data. Moreover, it would be technically impossible to overcome the cut-off limit as there is no physical person behind the SIM card to respond to the notification messages. The interruption of the data session would be critical in some particular Machine to Machine communication cases, such as medical monitoring. TeliaSonera expressed similar concerns.

ERG understands these concerns and has responded by softening the final Guidelines from 'ERG considers that the Roaming Regulation applies to those Communications' to say that 'ERG notes that there appears to be no exemption from the Roaming Regulation for such communications' (paragraph 63). In practice, this class of customer will no doubt wish to opt out of the relevant notifications and controls for the reasons stated above.