

BEREC report on Alternative Retail Voice and SMS Roaming Tariffs and Retail Data Roaming Tariffs

March 2010

1. Background

Regulation 544/2009 of 18 June 2009 on international roaming¹ requires all operators in the EU to offer customers regulated voice and SMS retail roaming tariffs, which must comply with maximum price caps (known as the Eurotariff and the Euro-SMS tariff). The Regulation also provides that operators may offer alternative, i.e. unregulated, retail roaming tariffs alongside. The Regulation does not provide for a regulated data roaming retail tariff.

In September 2009, ERG conducted a survey of the alternative retail voice and SMS tariffs and the retail data roaming tariffs offered by operators in the European Union. ERG produced a standard questionnaire, which NRAs sent to their operators. It covered retail tariffs that can be used both inside and outside of the EU/EEA, but excluded the Eurotariff, Euro-SMS tariff, and tariffs for roaming outside of the EU/EEA only.

Following its creation in January 2010, the Body of European Regulators in Electronic Communications (BEREC) has taken over responsibility for this work from ERG. In this report, BEREC summarises the results of the survey.

The survey will be repeated in 2010 and in 2011, to see if there are identifiable trends in the types of alternative retail voice and SMS tariffs and retail data roaming tariffs reported². This information will be included in BEREC's advice to the Commission on the functioning of the Roaming Regulation. According to Regulation 544/2009, the Commission is required to produce an interim and a full report on the functioning of the Regulation by June 2010 and June 2011 respectively.

This report gives an overview of more than 330 roaming tariffs reported by operators in September 2009: alternative retail voice and SMS roaming tariffs, retail data roaming tariffs

¹ Regulation (EC) No 544/2009 of the European Parliament and of the Council of 18 June 2009 amending Regulation (EC) No 717/2007 on roaming on public mobile telephone networks within the Community and Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:167:0012:0023:EN:PDF>

² BEREC has not sought to conclude whether the alternative voice and SMS tariffs offer final prices below the Eurotariff and Euro-SMS tariff caps. In addition to the per-unit price, this depends on many factors including the size of any subscription or voice call set-up charge, voice billing units, and a customer's patterns of use. For bundles, the final price per unit will also depend on how much of the bundle the consumer actually uses.

and retail multi-service roaming tariffs³, provided by more than 70 operators from 24 countries (see Figure 1)⁴.

In the Report, Chapters two to four deal with the number and characteristics of the alternative retail voice and SMS tariffs, retail data roaming tariffs, and retail multi-service roaming bundles reported. Figures 2, 6 and 7 summarise the numbers of each type of service reported in response to the questionnaire. The second chapter also draws on data from the ERG International Roaming Benchmark Reports to consider the proportion of enabled roaming subscribers with a subscription to alternative retail voice roaming tariffs instead of the Eurotariff, as shown in Figures 3 - 5. The topic of billing units for alternative voice tariffs and for data roaming tariffs is addressed in Chapter five. Finally, the last chapter describes some common characteristics of the tariffs reported.

Figure 1: Number of operator respondents and number of reported alternative retail voice and SMS tariffs and retail roaming data tariffs, by country

Country	Number of operators reporting tariffs	Number of reported tariffs	Country	Number of operators reporting tariffs	Number of reported tariffs
Austria	5	31	Latvia	1	1
Belgium	3	27	Lithuania	2	2
Bulgaria	2	10	Malta	3	12
Cyprus	1	2	Netherlands	5	26
Czech Republic	3	15	Poland	2	5
Denmark	3	3	Portugal	3	17
France	5	25	Romania	3	17
Germany	5	14	Slovakia	≥1	2
Greece	2	9	Slovenia	5	18
Hungary	2	6	Spain	5	33
Ireland	3	4	Sweden	≥1	10
Italy	7	31	UK	4	16
			Total reported	≥76	336

³ The report covers the tariffs that were submitted by the operators that responded to the ERG questionnaire. It is not necessarily a complete list of all alternative retail voice and SMS roaming tariffs, data roaming tariffs or multi-service bundles available in the EU during the relevant period.

⁴ Note that in Q3 2009, operators in Estonia, Finland and Luxembourg only offered the regulated Eurotariff and Euro-SMS tariff, and operators in Norway only offered the regulated Eurotariff (the Euro-SMS tariff was not yet in force in EEA-only Member States Norway and Iceland). Operators in Iceland did not report any alternative voice tariffs although BEREC understands that such a tariff was available. None of these countries are covered in this Report.

2. Alternative Voice and SMS Retail Roaming Tariffs

Most of the alternative tariffs reported by the operators of the European Member States regarding voice and SMS services are voice-only tariffs or bundles of voice and SMS. The number of such tariffs reported per country is available in Figure 2.

For voice, including voice-only tariffs and the voice element of voice and SMS bundles, some of these alternative tariffs offer per minute prices that are below the maximum Eurotariff caps for calls made or calls received (€0.43 and €0.19 per minute respectively)⁵. Some tariffs offer per minute prices below the Eurotariff caps when the customer roams on partner networks or preferred networks, while the per minute price for roaming on other networks is more expensive than the Eurotariff caps. Two operators from one group reported that they offer the customer's domestic tariff when roaming on partner networks in five countries and use of the domestic allowance when roaming. For some tariffs, there is no per minute charge for calls received, although a subscription or call set-up charge may apply.

In addition to the per-minute price, whether in practice these alternative tariffs offer cheaper voice calls than the Eurotariff caps depends on various factors including the size of any subscription or call set-up charge, billing units, and call statistics such as a customer's average call length, peak and off peak use, travel patterns etc⁶. BEREC will report on the average per minute price actually billed for alternative retail voice roaming services and the Eurotariff in Q2 2009 – Q4 2009 in spring 2010 (bearing in mind that the alternative tariffs survey, subject of this report, was run at the end of Q3 2009).

BEREC notes that some alternative roaming offers are likely to offer better value than the regulated Eurotariff caps for longer voice calls only, since a significant call set-up charge or billing unit applies. For example, a call set-up charge of about €1 (applied by a common alternative voice tariff, depending on the country) is equal to about 2 minutes conversation when making a call using the Eurotariff charged at the regulated cap. On the other hand, a call of more than 2 minutes using this alternative tariff would be cheaper than the Eurotariff charged at the regulated cap. It is also fairly common for alternative voice tariffs to be billed

⁵ In Q1 2009, the average retail price per minute based on billed minutes for Eurotariff voice roaming calls made was €0.425 and for Eurotariff calls received was € 0.199. See ERG International Roaming Benchmark Report October 2008 – March 2009 http://erg.eu.int/doc/publications/2009/erg_09_31_international_roaming_report_090722.pdf.

⁶ In Q1 2009, the average retail price billed per minute based on billed minutes for alternative voice roaming services in the EU/EEA was €0.411 per minute for calls made and €0.160 for calls received. The equivalent values for the Eurotariff were €0.425 and €0.199. See ERG International Roaming Benchmark Report October 2008 – March 2009 http://erg.eu.int/doc/publications/2009/erg_09_31_international_roaming_report_090722.pdf.

on a per-minute basis for calls made and received (60/60 seconds), whereas the Eurotariff for calls made is billed with a maximum initial billing interval of 30 seconds followed by per second billing (30/1), and per second billing only for calls received (1/1) (see Chapter 5).

For SMS, including SMS tariffs and SMS elements of voice and SMS bundles, about one third of the alternative tariffs reported offer SMS prices that are the same as the Euro-SMS tariff charged at the maximum cap (€0.11 excluding VAT). Only a few alternative tariffs include SMS prices that are below the cap. Most tariffs have prices above the cap.

As mentioned above, operators do not only offer voice and SMS tariffs that are charged per unit (metered tariffs), but also bundles of minutes and SMS included in a fixed fee for a specified period. In particular, monthly bundles of voice and/or SMS make up just under a third of the alternative voice and SMS tariffs reported. A few holiday offers valid for one or more weeks or daily bundles were also reported. Again, whether a bundle offers lower per-unit prices than the Eurotariff caps or the Euro-SMS caps will depend on the customer's usage patterns. Large bundles often offer lower per-unit prices than smaller bundles, assuming the entire bundle is used; the final price per unit will depend on how much of the bundle the consumer actually uses and on which service, where more than one is included.

Figure 2: Number of reported alternative retail voice and SMS roaming tariffs, including voice and SMS bundles⁷

Country	Number of operators reporting voice & SMS tariffs	Number of voice & SMS tariffs reported	Country	Number of operators reporting voice & SMS tariffs	Number of voice & SMS tariffs reported
Austria	4	11	Latvia		
Belgium	3	8	Lithuania	2	2
Bulgaria	2	4	Malta	1	1
Cyprus			Netherlands	2	13
Czech Republic	2	2	Poland		
Denmark	2	2	Portugal	2	4
France	3	6	Romania	2	4
Germany			Slovakia	≥1	2
Greece	2	5	Slovenia	1	5
Hungary	1	3	Spain	2	6
Ireland	1	2	Sweden	≥1	5
Italy	4	11	United Kingdom	4	7
			Total reported	≥ 42	103

⁷ For countries with missing values, operators that responded to the ERG questionnaire either did not report any voice or SMS tariffs or reported tariffs that include data services.

Data collected for the ERG Benchmark Reports⁸ up to Q1 2009 indicates that the percentage of enabled roaming subscribers⁹ with a subscription to an alternative voice roaming tariff, as opposed to the Eurotariff, was fairly low. The percentage slightly grew for post-paid users but slightly fell for pre-paid users (Figures 3 – 5). When considering these percentages it is important to bear in mind that the regulated voice and SMS tariffs (Eurotariff and Euro-SMS tariffs) are the default roaming tariffs, although operators may promote alternative tariffs; some operators do not offer any alternative tariffs for voice or SMS roaming; and the percentages are calculated using the number of enabled roaming subscribers, which will include customers who did not actually use the roaming service in the relevant period.

The EU/EEA average proportion of pre-paid customers with a subscription to an alternative voice tariff at the end of March 2009 was about 7%. However, almost all of the countries have a percentage below the average, while one large country and one smaller country have a percentage significantly above, which increases the average. Overall, there seem to be fewer alternative tariff offers for pre-paid customers than post-paid customers. The lower overall proportion of pre-paid to post-paid customers and the lower average usage and spending by pre-paid customers, in most countries, are likely to play a role.

The EU/EEA average proportion of post-paid customers¹⁰ that use an alternative tariff seems to have slightly increased from around 13% in March 2008 to around 14% at the end of March 2009. As at 31 March 2009, out of a total of 30 countries, around 13 countries have a percentage of subscribers to alternative tariffs at or above the average, of which 8 countries reported over 20% of customers with subscriptions to alternative tariffs.

The EU/EEA average of non-Eurotariff subscription for pre-paid and post-paid users is about 10%, again with significant variations by country.

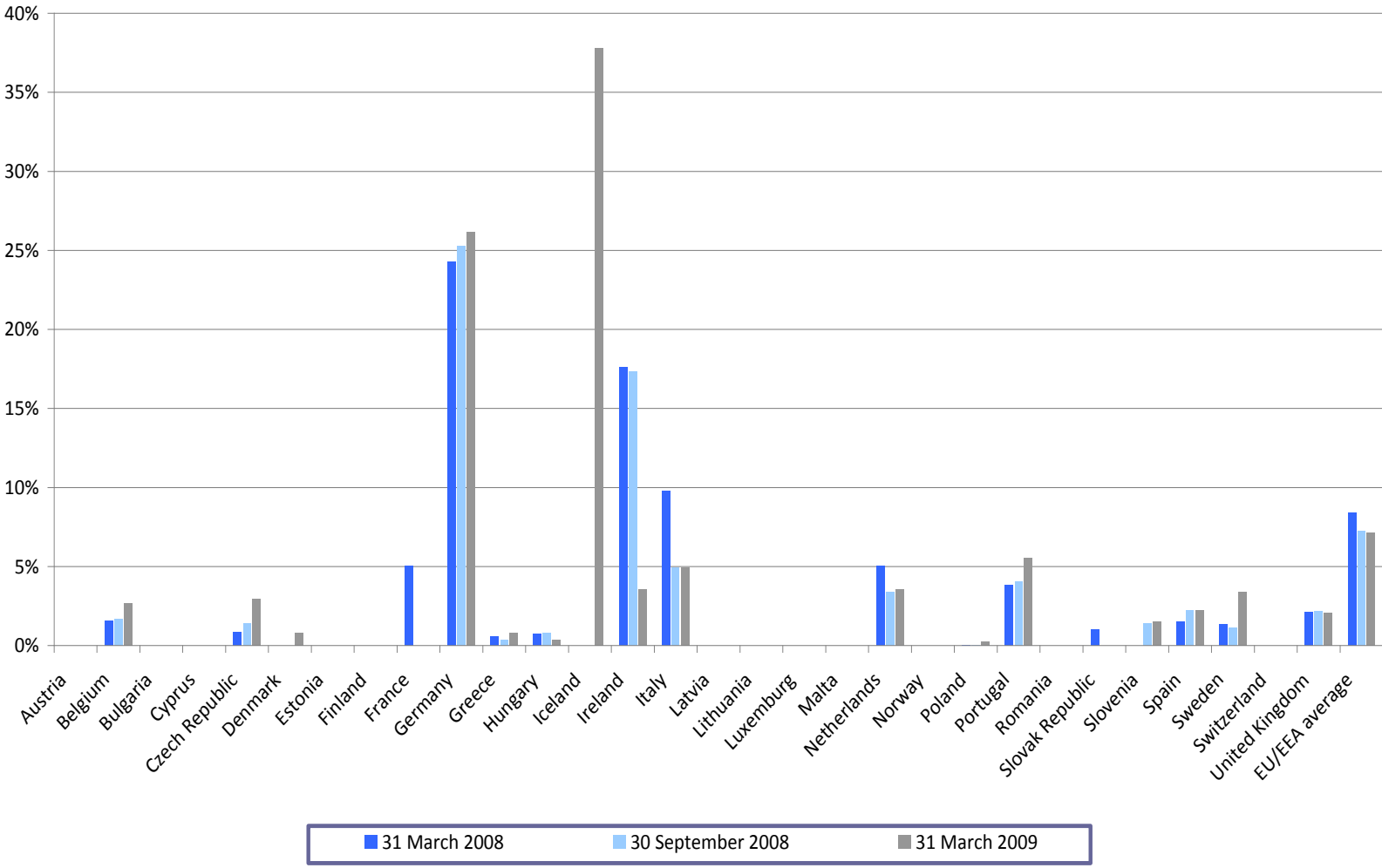
(The Euro-SMS was introduced in July 2009. BEREC does not have data on the proportion of subscriptions to the Euro-SMS to date).

⁸ See ERG International Roaming Benchmark Reports http://www.erg.eu.int/documents/docs/index_en.htm

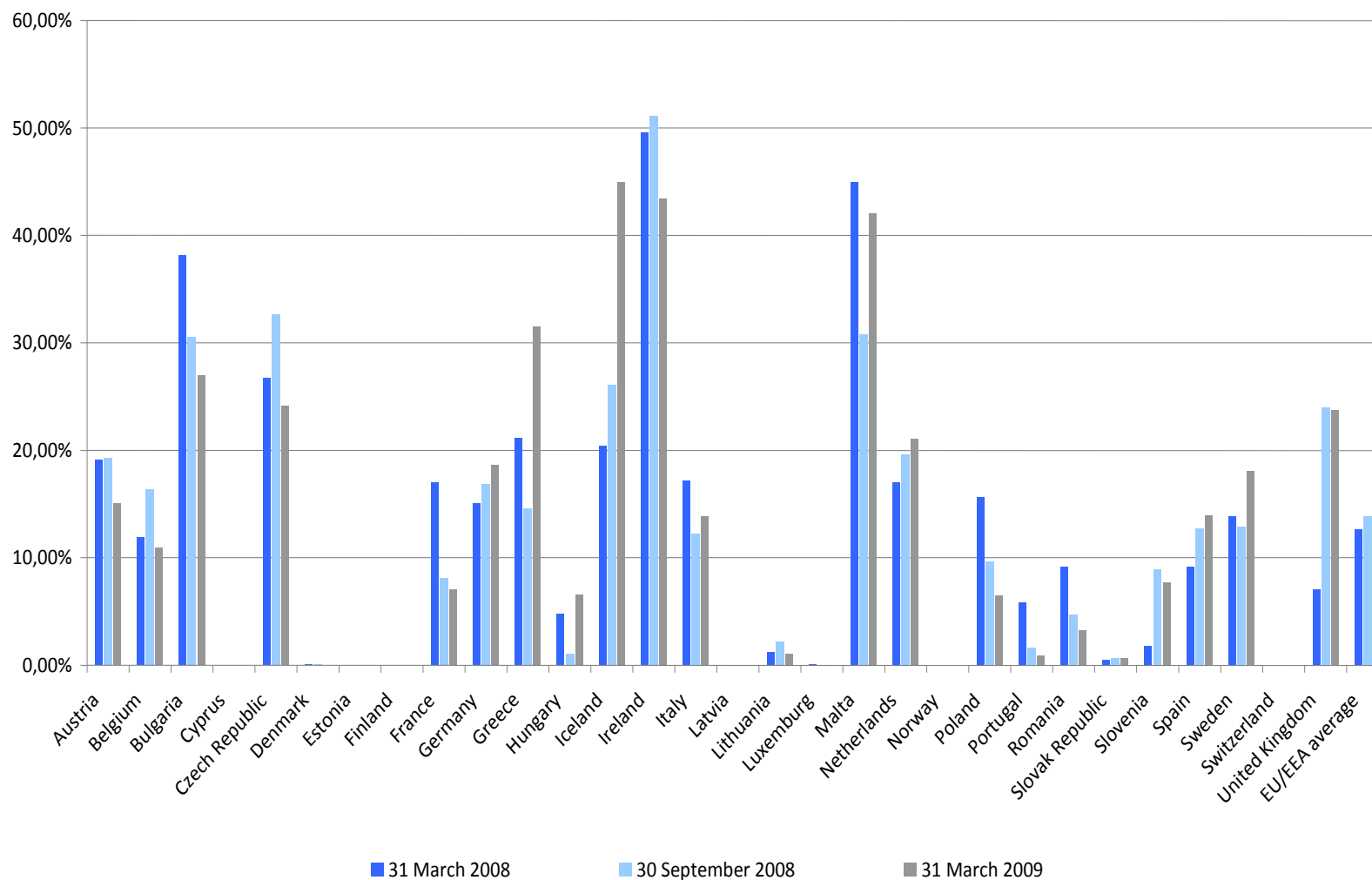
⁹ 'Enabled roaming subscriber' means a customer that is able to make and / or receive a call while abroad. It is not equivalent to the number of subscribers that used the roaming service in practice, in the relevant period.

¹⁰ The data for postpaid customers includes 'special corporate customers', which are large business customers that have negotiated a bespoke tariff for roaming, which is not available to individual customers. The proportion of ordinary postpaid customers (i.e. not special corporate customers) using alternative tariffs will be lower than the postpaid total indicated. Data is not available at present to quantify the difference.

Figure 3: Proportion of EU/EEA enabled roaming subscribers with a subscription to an alternative voice tariff: Pre-paid

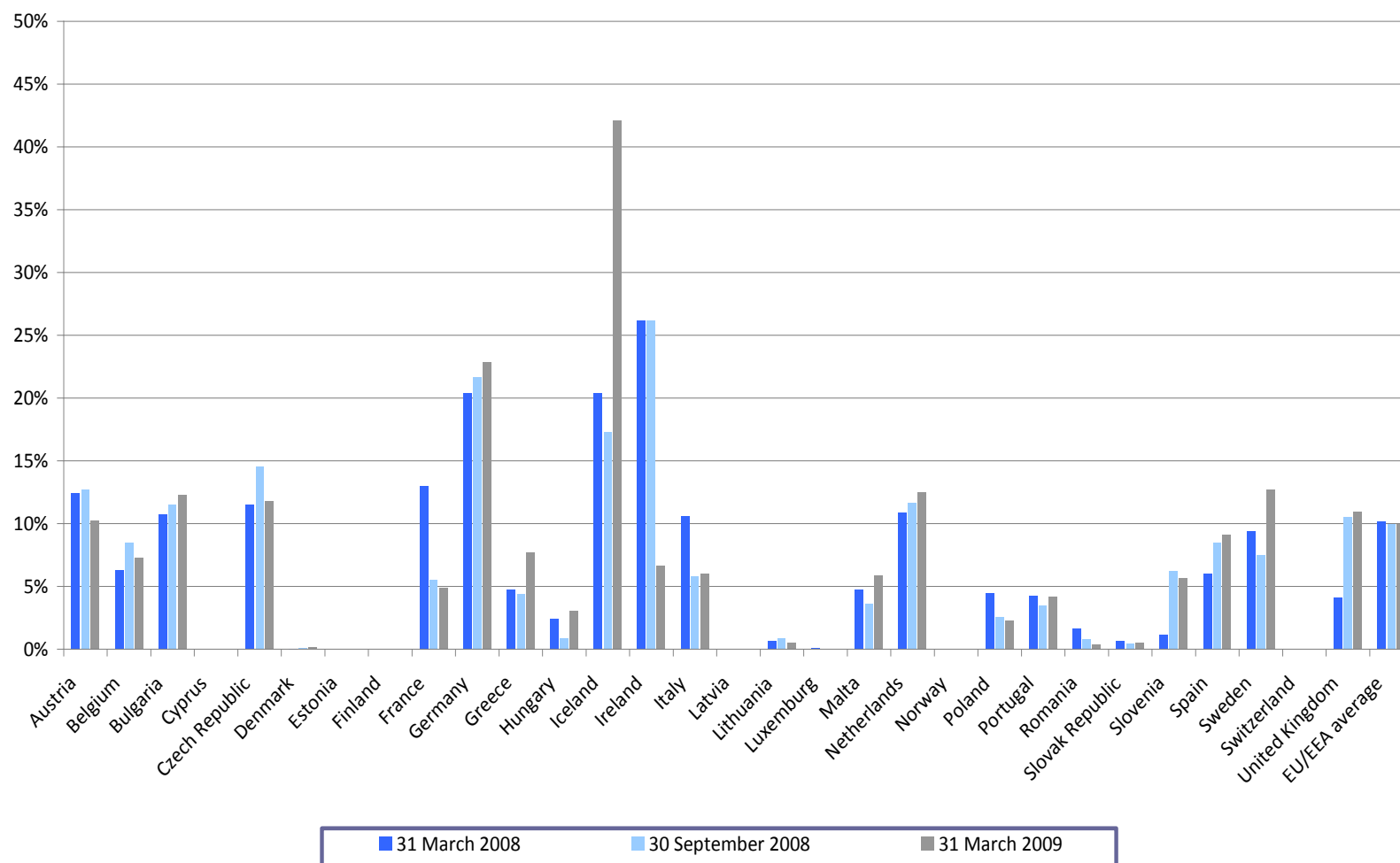


EU/EEA average: 31 March 2008: 8.42%; 30 September 2008: 7.26%; 31 March 2009: 7.16%

Figure 4: Proportion of EU/EEA enabled roaming subscribers with a subscription to an alternative voice tariff: Post-paid

EU/EEA average: 31 March 2008: 12.63%; 30 September 2008: 13.81%; 31 March 2009: 13.88%

Figure 5: Proportion of EU/EEA enabled roaming subscribers with a subscription to an alternative voice tariff: average of Pre-paid and Post-paid



EU/EEA average: 31 March 2008: 10.13%; 30 September 2008: 9.91%; 31 March 2009: 9.92%

3. Data Roaming Retail Tariffs

Data-only roaming tariffs are available in most of the EU Member States. In response to the ERG questionnaire, more than 40 operators reported 170 data-only roaming tariffs (see Figure). The variety of the tariffs reported is larger than that of the alternative voice and SMS roaming tariffs.

Figure 6: Number of reported retail data-only roaming tariffs ¹¹

Country	Number of operators reporting data-only tariffs	Number of data-only roaming tariffs reported	Country	Number of operators reporting data-only tariffs	Number of data-only roaming tariffs reported
Austria	4	10	Latvia		
Belgium	3	19	Lithuania		
Bulgaria	2	5	Malta	1	10
Cyprus	1	2	Netherlands	1	3
Czech Republic	2	9	Poland		
Denmark			Portugal	3	13
France	4	18	Romania	3	12
Germany	2	4	Slovakia		
Greece	1	4	Slovenia	5	13
Hungary	2	1	Spain	3	20
Ireland			Sweden	≥1	5
Italy	2	13	United Kingdom	3	9
			Total reported	≥ 43	170

Although there still exist quite a lot of linear tariffs (metered tariffs, mainly for pre-paid), just over 100 of the 170 data roaming tariffs reported are bundles (data-only tariffs and roaming bundles including data services). Operators reported bundles of a certain volume of data for a monthly charge, holiday bundles (similar to the voice tariffs) that are valid for a week and bundles that are valid for one day or 48 hours. Operators also reported smaller bundles designed to address the needs of Smartphone users who mainly consume mobile e-mail¹².

¹¹ For countries with missing values, operators that responded to the ERG questionnaire did not report data roaming tariffs.

¹² Some data bundles switch to linear charging at the end of the bundled volume. For roaming bundles that include data services, there may be a linear data charge in addition to the overall subscription charge (as is the case for voice and SMS).

There are significant differences in price per MB for the tariffs reported. Prices for data roaming services differ between Member States, among operators in the same Member State, and between tariffs from the same operator. There are various reasons for these price differences: to cater for different data services (i.e. mobile broadband, mobile Internet, mobile e-mail); the larger bundles reported offer lower prices per MB than smaller bundles, assuming all data is used; reported post-paid tariffs are usually cheaper per MB than pre-paid tariffs, although a regular subscription applies to post-pay; and reported tariffs for roaming on-net are usually cheaper per MB than roaming off-net, as operators are able to internalise the associated wholesale costs of on-net roaming.

Considering the tariffs reported (pre- and post-paid, on- and off-net), prices for one MB within a data-only bundle are relatively low. The lowest price is around €0.10/MB, presuming all of the included volume is used. Prices between €0.10 and €1 per MB are reported for around two thirds of all data bundles reported, and prices of between €1.01 and €2 per MB for around 30%, again presuming the full bundle is used. Only around 0.05% of data bundles reported cost more than €2 per MB if the whole bundle is used, nearly all of which are under €3 per MB with a maximum of around €4 per MB. Data-only bundles reported are frequently aimed at mobile broadband and mobile Internet use. In most cases, the lowest prices are for daily bundles for post-pay customers. Sometimes, lower tariffs are available on-net. Meanwhile, the higher prices per MB are for mobile e-mail use.

On the other hand, some reported prices for linear tariffs seem relatively high. The lowest are around €1 per MB, which are mostly post-pay and on-net tariffs, and represent around 1 in 6 of the linear tariffs reported. Tariffs of between €2 and €5 per MB are also commonly reported (just over a third of the linear tariffs reported), as well as tariffs of €7-€8 per MB (around 1 in 8 of the linear tariffs reported). There is then a tail of reported tariffs of over €10 per MB, with a small number that are particularly high at around €25 per MB. These are mostly older, pre-pay or/and off-net tariffs, and are often aimed at mobile e-mail and WAP use.

The average price billed per MB for all types of off-net data roaming within the EU/EEA in Q1 2009, as indicated by the ERG International Roaming Benchmark Report,¹³ was €3.59 per MB. The average wholesale cap set by the Roaming Regulation is €1 per MB for the year 1 July 2009 – 30 June 2010. BEREC will report on average wholesale and retail data prices for Q2

¹³ See ERG International Roaming Benchmark Reports http://www.erg.eu.int/documents/docs/index_en.htm

2009 – Q4 2009 in spring 2010 (bearing in mind that the alternative tariffs survey, subject of this report, was run at the end of Q3 2009).

4. Retail Roaming Bundles (voice, SMS, MMS, data)

As SIM cards can be used for more than one service, namely voice, SMS, MMS and data services, operators offer tariffs where all of these services are included. The number of such tariffs reported in response to the ERG questionnaire is listed in Figure 7.

Figure 7: Number of reported multi-service retail roaming bundles¹⁴

Country	Number of operators reporting bundles	Number of bundles (voice, SMS & data)	Country	Number of operators reporting bundles	Number of bundles (voice, SMS & data)
Austria	4	10	Latvia	1	1
Belgium			Lithuania		
Bulgaria	1	1	Malta	3	1
Cyprus			Netherlands	3	10
Czech Republic	1	4	Poland		
Denmark	1	1	Portugal		
France	1	1	Romania	2	4
Germany	6	13	Slovakia		
Greece	1	1	Slovenia		
Hungary	1	2	Spain	3	7
Ireland	2	2	Sweden		
Italy	3	7	United Kingdom		
			Total reported	33	65

These tariffs are either charged per unit for each service (metered tariffs) or they contain a bundle of voice minutes, SMS and data, which are valid for a specified period of time (e.g. a day, week or month). As with the alternative voice tariffs and data-only tariffs, roaming services may be cheaper if the customer is roaming on their home operator's preferred network or partner network, or can only be used on such networks.

Whether these alternative tariffs offer cheaper voice calls than the Eurotariff caps or Euro-SMS caps in practice will depend on various factors including any voice call set-up charges, voice and data billing units, and statistics such as a customer's average voice call or data session length,

¹⁴ For countries with missing values, operators that responded to the ERG questionnaire did not report any multi-service bundles.

peak and off peak use, travel patterns, the bundle price and how much of the bundle the consumer uses in practice.

5. Billing Units

This chapter provides an overview of the billing units used by the operators for alternative retail voice roaming services and retail data roaming services.

5.1. *Voice roaming – billing units*

Figure 8 and Figure 9 show how many tariffs apply each type of billing unit and if these tariffs charge a set-up fee. The Eurotariff is billed with up to a minimum charge of 30 seconds, followed by per second billing for calls made (30/1), and per second billing only for calls received (1/1). For alternative voice roaming tariffs, the smallest billing unit reported is one second followed by another second (1/1), while the biggest billing increment reported is one minute followed by another minute (60/60). In general, BEREC notes that the billing units for calls received are smaller than the ones for calls made.

34 reported tariffs apply the maximum Eurotariff billing units for calls made (30/1), and 41 tariffs for calls received (1/1) (no set-up charges).

For calls made, operators reported two tariffs with per second billing and no set-up charge, and 20 with per second billing plus a set-up charge.

Nine reported tariffs for calls made and four for calls received offer domestic billing units for roaming calls.

Five tariffs were reported where customers do not have to pay anything for calls received. 18 tariffs only charge a set-up fee for a call received, and customers do not have to pay an additional per minute price.

48 of the reported tariffs apply per minute billing for calls made, and 53 for calls received (no set-up charge). 14 reported tariffs for calls made and 8 tariffs for calls received apply per minute billing, plus a set-up charge.

Figure 8: Number of tariffs reported with a certain billing unit for retail roaming voice calls made¹⁵

Country	1/1	setup + 1/1	30/1	setup + 30/1	setup + 45/1	60/1	setup + 60/1	60/30	setup + 60/30	60/60	setup + 60/60	same as domestic
Austria			6					4		13		
Belgium	1		6				1					
Bulgaria				1						3	1	
Cyprus												
Czech Republic						1	1			3	1	
Denmark			1								1	
France			1			6						1
Germany								3		2	2	1
Greece			1	1	1							1
Hungary										1		1
Ireland			1						1	2		
Italy	1	5						1		6	3	2
Latvia			1									
Lithuania			1*									
Malta				1							1	
Netherlands		2	6			1	5		1	9	3	
Poland			1							2	1	
Portugal			3						1			
Romania							1			3		
Slovakia			1							1		
Slovenia										3	1	
Spain		13										
Sweden								2				2
United Kingdom			5									1
Total reported	2	20	34	3	1	8	8	10	3	48	14	9

*Lithuanian operators reported one alternative voice roaming tariff for calls made and received, reflected in figures 8 and 9, and two alternative voice roaming tariffs that cover received calls only, included in figure 9.

¹⁵ The table only consists of the tariffs for which billing units were reported in response to the ERG questionnaire.

Figure 9: Number of tariffs reported with a certain billing unit for retail roaming voice calls received¹⁶

Country	no charge	only setup	1/1	setup + 1/1	60/1	setup + 60/1	60/30	setup + 60/30	60/60	setup + 60/60	same as domestic
Austria			6				4		13		
Belgium			7								
Bulgaria				1					3	1	
Cyprus									2		
Czech Republic					1	1			1	1	
Denmark			2						1	1	
France			2		3				2		
Germany							3		2		1
Greece				2							1
Hungary									1		
Ireland	2	1	1								
Italy	2	3							9	1	
Latvia			1								
Lithuania			3								
Malta		1								1	
Netherlands	1	8	5					1	9	2	
Poland			1						3		
Portugal		1	3								
Romania						1			3		
Slovakia			1						1		
Slovenia									3	1	
Spain		3	3	6							
Sweden		1	2								1
UK			4								1
Total reported	5	18	41	9	4	2	7	1	53	8	4

¹⁶ The table only consists of the tariffs for which billing units were reported in response to the ERG questionnaire.

5.2. *Data roaming – billing unit*

Figure 10 shows the number of reported data roaming tariffs that apply a certain billing unit per country. Almost all of the operators that replied to the questionnaire offer tariffs that are charged according to the amount of data used. Only two operators reported tariffs that are charged by the time used (Belgium: two tariffs from the same operator with billing increments of 5 minutes; the Netherlands: one tariff from a different operator with a billing unit of 1 minute).

Of those reported, the billing units for data roaming tariffs charged by the volume used range from 1kB up to 1 MB. A billing unit of 1 MB was reported for three tariffs (one in Slovenia and two in the Netherlands). The billing unit reported most frequently by the operators that responded is 100 kB followed by another 100 kB (76 tariffs). Also quite common are billing increments for data roaming services of 10 kB (42 tariffs reported), 1 kB (23 tariffs reported) and 50 kB (18 tariffs reported).

The remaining combinations were reported for 9 tariffs or less. In particular, five operators answered that in the case of billing units they do not distinguish between national and roaming data services; the same billing unit is applied for both.

Figure 10: Number of reported tariffs with a certain billing unit for retail data roaming services¹⁷

Country	1 kB	10 kB	20 kB	25 kB	30 kB	32 kB	50 kB	51.2 kB	64 kB	100 kB	200 kB	0.5 MB	1 MB	duration	national
Austria						1	1	6		10					
Belgium	3	5								5				2 tariffs: 5 min	
Bulgaria	4									1					
Cyprus	2														
Czech Republic		5								6					
Denmark		1					1								
France		5			3										
Germany							7			1					
Greece		2								2					
Hungary										1		2			
Ireland															
Italy	1									3					1
Latvia	1														
Lithuania															
Malta	2	5							2	2					
Netherlands	1	13	8								3		2	1 minute	
Poland							7			13					
Portugal		2								6					4
Romania		3		9*						3					
Slovakia															
Slovenia	1						2			9			1		
Spain	2	1								14*					
Sweden															
UK	6														
TOTAL REPORTED	23	42	8	9*	3	1	18	6	2	76(*)	3	2	3	3	5

* followed by 10 kB

¹⁷ The table only consists of the tariffs for which billing units were reported in response to the ERG questionnaire.

6. Examples of Tariff Types and Availability

This chapter describes some of the characteristics of the alternative roaming tariffs reported in response to the ERG questionnaire.

6.1. *On-net only Tariffs*

Some operators offer alternative roaming tariffs that offer lower rates that are available 'on-net' only, meaning when the customer roams on a partner network and the operator is able to internalise its wholesale costs. They are typically available to post-paid customers only.

Common features of on-net tariffs are reduced prices per unit (for voice, SMS and data roaming services) when roaming on a preferred network compared to when roaming on the network of an operator not belonging to the same group or roaming alliance. Prices per unit are typically somewhat lower than the Eurotariff caps.

Two operators from one group reported that they offer the customer's domestic tariff when roaming on partner networks in five countries and use of the customer's domestic allowance when roaming. In some instances, there is no per minute charge for calls received, although a subscription or call set-up charge may apply.

6.2. *On-net and Off-net Tariffs*

Some operators offer alternative roaming tariffs that can be used both on-net and off-net, meaning that the same price is applied whether or not the customer is roaming on a partner network of the home operator. (In practice, where the operator has a large footprint, a significant proportion of traffic can still be kept on-net, enabling the operator to internalise the associated wholesale costs).

Such offers may involve a call set-up charge, higher billing intervals than the Eurotariff, and/or a one-off or periodic subscription charge. Examples have also been reported of roaming services at the same per unit price as domestic services with no additional call set-up charge for calls made; a monthly subscription charge giving access to a bundle of voice minutes at domestic prices and no additional charge for calls received; or for regional offers, reduced per unit charges for data sessions and calls within the visited country and back to the home country, compared to roaming in other EU countries.