

BEREC Report on Transparency and Comparability of International Roaming Tariffs

5 December 2019

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Executive summary and main findings

This report provides an overview of the transparency and comparability of retail roaming tariffs. In July 2019, BEREC sent a questionnaire to operators and National Regulatory Authorities (NRAs) in order to gather information for the period July 2018 to August 2019 on two aspects that are key issues for customers when selecting tariffs for international roaming services: firstly, transparency, meaning the availability of clear information about prices and conditions for each tariff, as well as simple procedures for customers to switch between tariffs; and, secondly, the comparability of tariffs. By comparability, BEREC means the ability for customers to compare different types of tariffs offered by operators and to select the one best suited to their needs and patterns of consumption. This report complements the BEREC Opinion published in June 2019 that also discusses issues on transparency and comparability of roaming tariffs.¹

Transparency is key to enabling customers to make informed decisions. According to the Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union as amended by the TSM Regulation, (hereafter “Roaming Regulation”), customers should have easy access to understandable information on prices and conditions for each existing roaming tariff including its fair use policy if applicable. According to the Roaming Regulation, it should also be possible to switch between roaming tariffs quickly and conveniently.

BEREC has collected information on the structure of international roaming tariffs. With regard to the different types of roaming tariffs that are offered by operators, the report shows that 45 % of the responding operators include non-EEA destinations in some of their RLAH offers, which is beneficial for the customers as they can use mobile services in more countries under the same conditions as at home². The survey shows that Switzerland, Monaco, Andorra and Faroe Islands are the non-EEA destinations most frequently being included into RLAH offers. Around 30 percent of the responding operators offer alternative roaming tariffs and this is most common in the business segment.

Regarding availability of 4G data roaming services, 46 % of the operators stated³ that they offer 3G roaming services in the EU/EEA even where 4G would be available and 61 % of those operators that only offer 3G services despite 4G being available are not planning to provide 4G roaming services by the end of 2019 or don't have any plans at all.

Half of the roaming providers offer tariffs without roaming and 2 % of operators answered that they withdrew roaming services from at least one tariff plan after 1 July 2018. However,

¹ https://berec.europa.eu/eng/document_register/subject_matter/berec/opinions/8595-berec-opinion-on-the-functioning-of-the-roaming-market-as-input-to-ec-evaluation

² Some RLAH tariffs include outside EEA roaming in a way that it is an additional offer and not deducted from the RLAH allowance.

³ The question addressed to operators did not specify that operators replying positively offer 3G across all roaming networks and all member states. Therefore, it is not clear, if those operators responding with yes, apply this restriction to all countries and all networks.

according to the results of the BEREC IR Benchmarking Report, those tariffs are not obtained by a significant number of subscribers.⁴

When BEREC asked whether NRAs had received consumer complaints about transparency, 84 % of the responding NRAs said that they had received complaints on transparency issues. This is almost the same compared to the previous reporting period.⁵ However, compared to 2018 there has been an increase regarding the amount of complaints to NRAs about inadvertently roaming on a non-EU network while remaining on EU territory, the quality of service, data speeds while roaming, unawareness that roaming calls are charged as off-net calls and about roaming when being on board of planes and ships, which is not covered by the Roaming Regulation.

In specific and exceptional circumstances in order to ensure the sustainability of its domestic charging model, roaming providers may apply for authorisation to apply a surcharge in the case that they are not able to recover their overall actual and projected costs of providing regulated roaming services in accordance with the Roaming Regulation. According to the answers received by BEREC, 10 NRAs have received applications for sustainability surcharges with a total amount of 30 applications received for the period 31 August 2018 to 31 August 2019. From those, 23 of the applications were granted, and 7 applications were still pending at the end of August 2019. About the level of surcharges granted by NRAs, according to the information BEREC received, most of them reported that they had set surcharges at or below the wholesale caps for voice, SMS and data.

For half of the countries where a derogation was granted, surcharges applied to all tariffs. In the remaining countries, surcharges applied only to some tariffs or to selected services.

BEREC asked operators if they informed customers about the fair use policy applied in its "Welcome SMS"⁶. 73 % of the operators that apply a fair use policy provide information about it in the "Welcome SMS".

Regarding the opportunity to switch between tariffs, providers reported that they mainly informed their customers via call centres, at a point of sales or through information on their website.

Another question dealt with the information provided by operators to end-users about the fair use policy 74 % of the roaming providers who implemented a fair use policy inform their customers about the overall roaming allowance or about how it is calculated. 95 % of the roaming providers state that they provide information about the actual roaming limit.

The most commonly requested means of proof by roaming providers who have implemented stable link criteria are: a presentation of any valid document which proves that the person falls into one of the categories of stable links (62 %), a declaration by the customer (49 %)

⁴ https://berec.europa.eu/eng/document_register/subject_matter/berec/reports/8839-international-roaming-berec-benchmark-data-report-october-2018-8211-march-2019

⁵ To note, though, that one NRA reported not having the data treated until the end of the period under analysis (July 2018 to 31 August 2019).

⁶ The Welcome SMS is an SMS sent by roaming providers to their customers when they enter a country different from the one where their mobile subscription is issued.

and details of the customer's address and/or details showing the provision of any other services to them at the given address (e.g. a utility bill) (47 %).

The data collected for this report shows that few NRAs or consumer associations provide tariff comparisons. 23 % of the responding NRAs reported that they featured information on their website comparing domestic tariffs including intra-EEA roaming provided by different operators, thereby facilitating a comparison of RLAH tariffs.

Customers should be able to select the most suitable tariff based on their own estimated pattern of consumption. In this regard, 36 % of the operators responded that they provided end-users with information on how to estimate data services consumption based on the use of Internet services such as web browsing, e-mails, and specific applications such as Google Maps or WhatsApp.

BEREC will repeat this exercise according to Article 19 of the Roaming Regulation each year to collect information with which the European Commission can assess the evolution and advances in increasing the transparency and comparability of tariffs.

1. Introduction and objectives of the document

With effect from 15 June 2017, roaming providers shall not levy any surcharge in addition to the domestic retail price on roaming customers in any Member State for any regulated roaming calls made or received, for any regulated roaming SMS messages sent and for any regulated data roaming services used, including MMS messages, nor any general charge to enable the terminal equipment or service to be used abroad, subject to Articles 6b and 6c of the Roaming Regulation. Furthermore, the switch from or to the regulated roaming tariff pursuant to Article 6e (3), subparagraph 3 has to be made free of charge and within one working day.

Since RLAH came into force on 15 June 2017, roaming providers must inform subscribers about the fair use policies implemented in their tariffs and about the conditions for any alternative tariff chosen by end-users. Such an awareness, together with policies and instruments which allow customers to estimate their consumption and compare international roaming tariffs, will allow customers to make better informed decisions.

In line with the provisions set out in the Roaming Regulation, the report that covers the period from July 2018 to August 2019 has the following objectives:

- To investigate specific problems which prevent or impede customers from taking informed decisions. As part of this objective, the report aggregates information collected by BEREC on the basis of which the Commission is able to assess whether offers are transparent, and to investigate transparency issues concerning charges which may be applied or other billing issues.
- To examine the comparability of tariffs. Under this objective, the report aggregates collected information with which the Commission is able to assess how easy/difficult it is for customers to compare different roaming tariffs, especially to compare the regulated tariff with alternative tariffs, and to identify whether customers are able to take informed decisions in order to select the most suitable tariff based on their needs. The report also includes an overview of the different structures of roaming tariffs offered by mobile operators.

This report complements the BEREC Opinion published in June 2019 that also discusses issues on transparency and comparability of roaming tariffs.

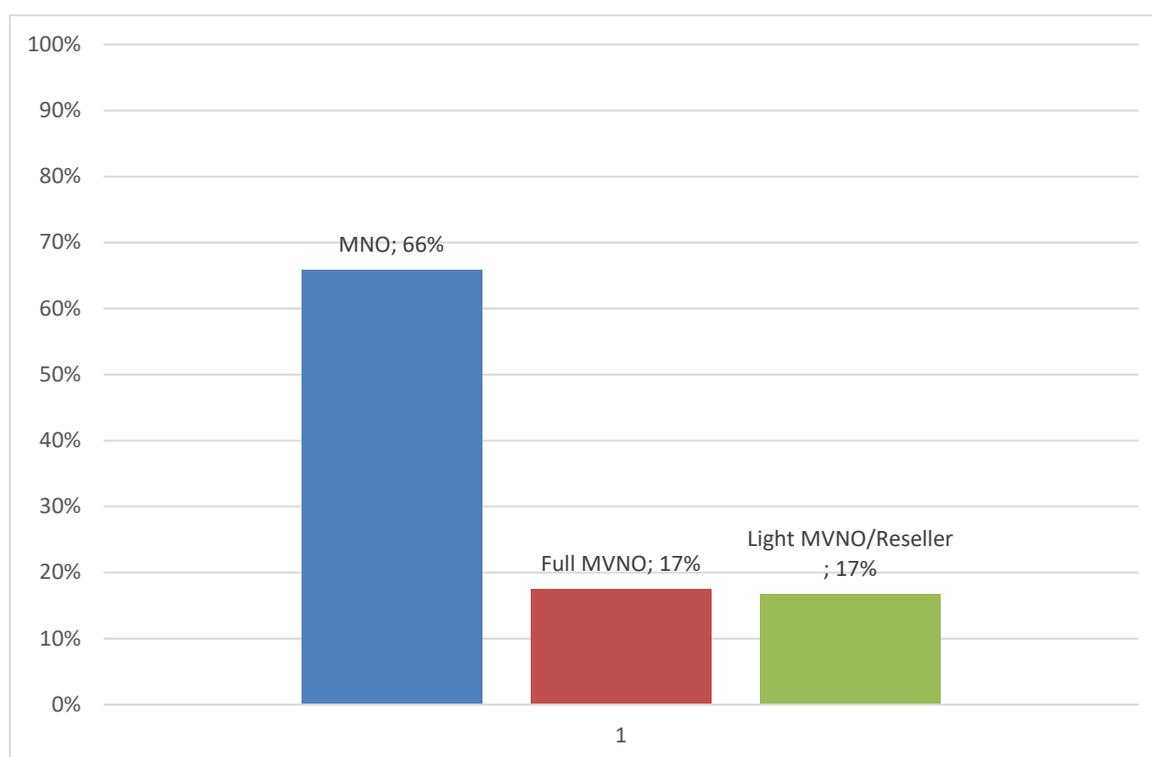
2. Information collected by BEREC

In order to investigate whether customers face transparent conditions (in the implementation of the RLAH regime), and are able to compare different tariffs, BEREC prepared two questionnaires: one addressed to operators and one to NRAs.

With regard to assessing the transparency of market conditions, the questions focused on the availability of roaming tariffs and the conditions applied (price limitations in terms of volumes, the geographical area or any other restrictions as well as any linkages to domestic tariffs or fair use policies or derogations, etc.). Operators were requested to provide information on the structure of tariffs for international roaming, the structure of alternative tariffs and the tariffs without roaming. In addition, questions regarding the information provided by operators in general for roaming and the available prices comparison tools for international roaming were addressed to operators..

NRAs were requested to provide any information on customer complaints concerning any alleged lack of transparency, information on applications for sustainability surcharges and information available to end-users to facilitate the comparison of RLAH tariffs.

Figure 1: Types of mobile providers responding to the BEREC questionnaire



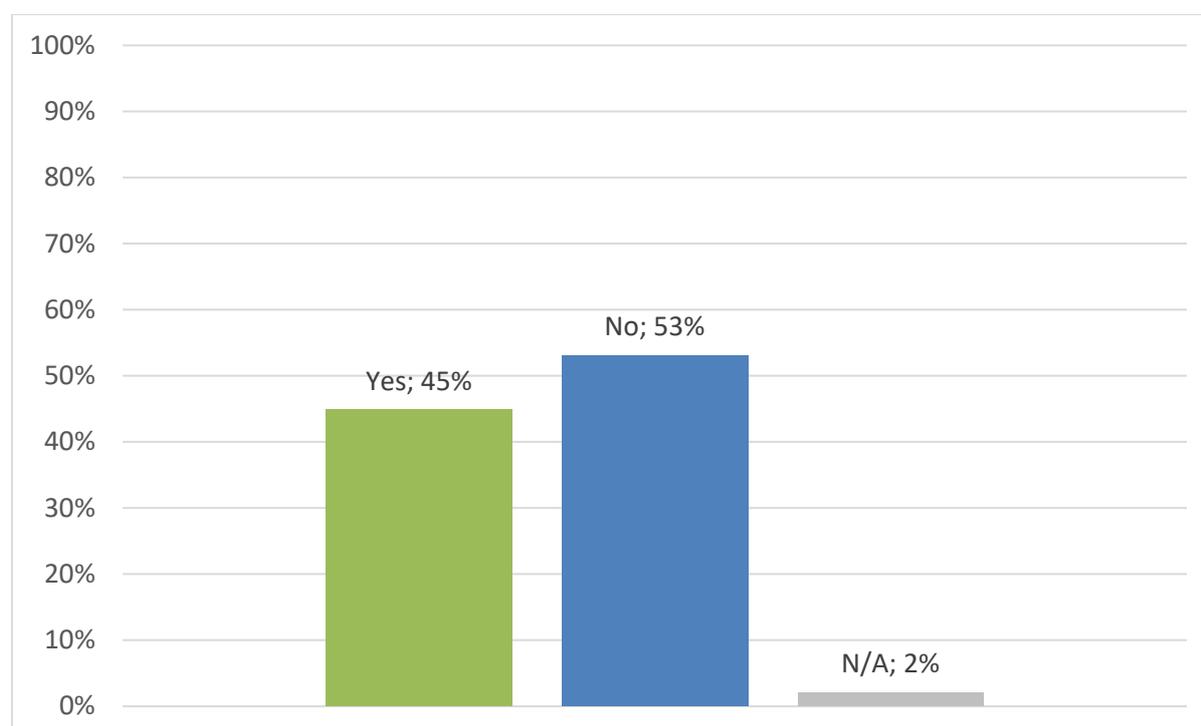
A total of 30 NRAs and 149 mobile providers operating in EEA countries sent their responses to BEREC. 66 % of the responses corresponded to MNOs and 34 % to full MVNOs or light MVNOs and resellers, as shown in Figure 1.

3. Structure of tariffs

3.1. General structure of international roaming tariffs

BEREC has collected information from operators regarding the structure of roaming tariffs. In particular, BEREC was interested in knowing whether operators include any non-EU/EEA destinations in their RLAH tariffs and whether that data consumption is being deducted from the RLAH data allowance or being offered as an additional plafond and by that way not being deducted from the RLAH data allowance.

Figure 2: Operators including non-EU/EEA destinations



Some operators included a wide range of non-EU/EEA countries in their RLAH offers⁷, however, most of the operators focus on a few neighbouring countries. The most frequently mentioned country was Switzerland, followed by Monaco, Andorra and Faroe Islands. Compared to last year's report, the number of operators that included non-EU/EEA destinations in their offers is nearly unchanged.

Some operators also included the United States of America, Canada and Turkey in their RLAH tariffs. Only a few operators advertise RLAH tariffs with countries like Australia, China and Russia.

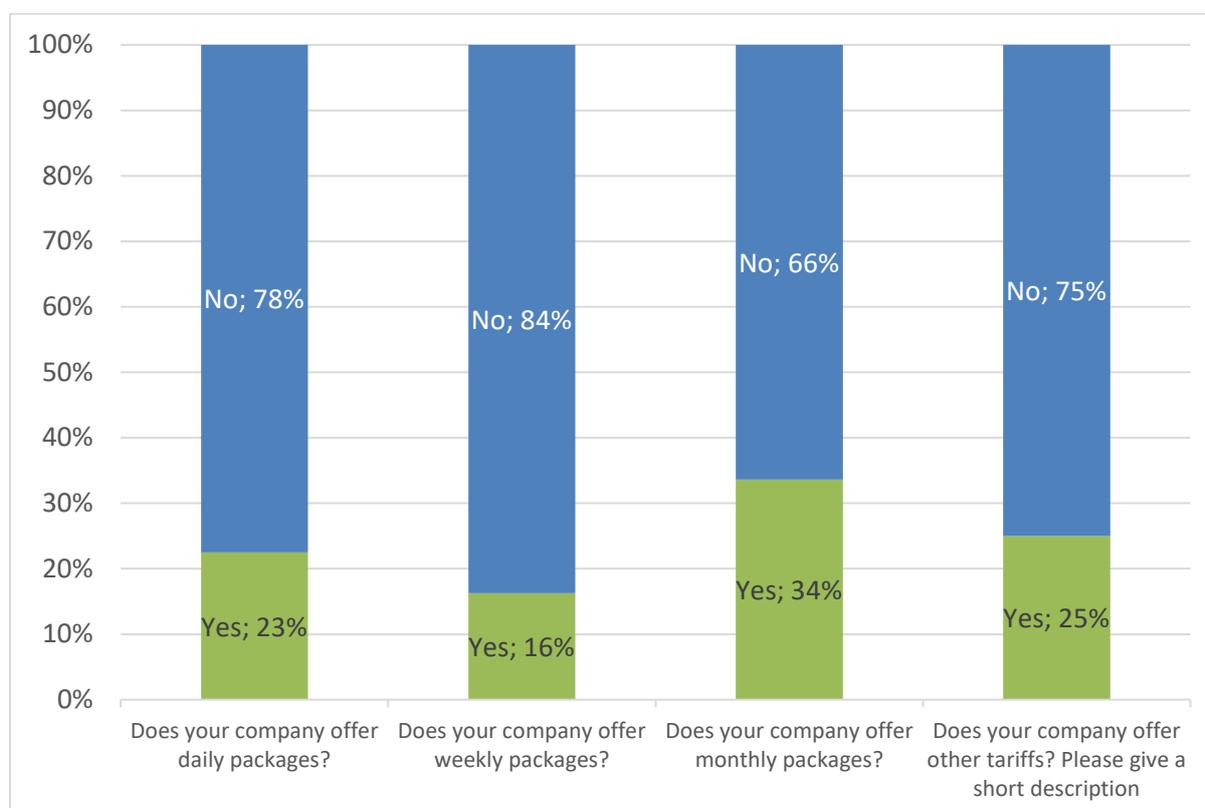
⁷ When replying to this question, one provider clarified that some RLAH tariffs include outside EU/EEA roaming in a way that it is an additional offer and not deducted from the RLAH allowance.

3.2. Structure of alternative roaming tariffs pursuant to Article 6e (3)

Pursuant to Article 6e (3) of the Roaming Regulation, roaming providers may offer, and roaming customers may deliberately choose, a roaming tariff other than the one set pursuant to Articles 6a, 6b, 6c and 6e (3) paragraph 1, by virtue of which roaming customers benefit from a different tariff for regulated roaming services other than the one they would have been given in the absence of such a choice. Of the responding operators, 31 % offer alternative roaming tariffs.

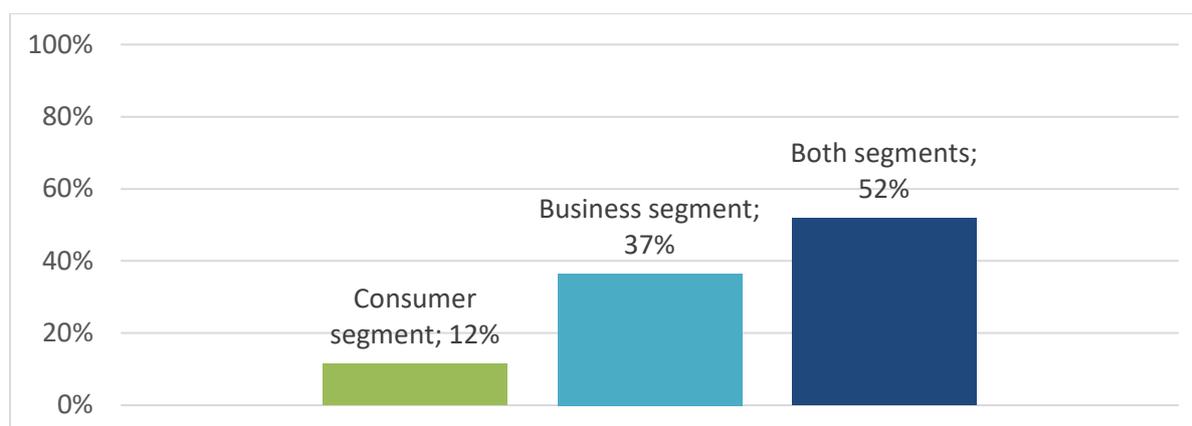
BEREC has collected information on the type of packages offered as alternative roaming tariffs (whether they are daily, weekly, monthly or other tariffs).

Figure 3: Structure of alternative roaming tariffs according to Article 6e (3)



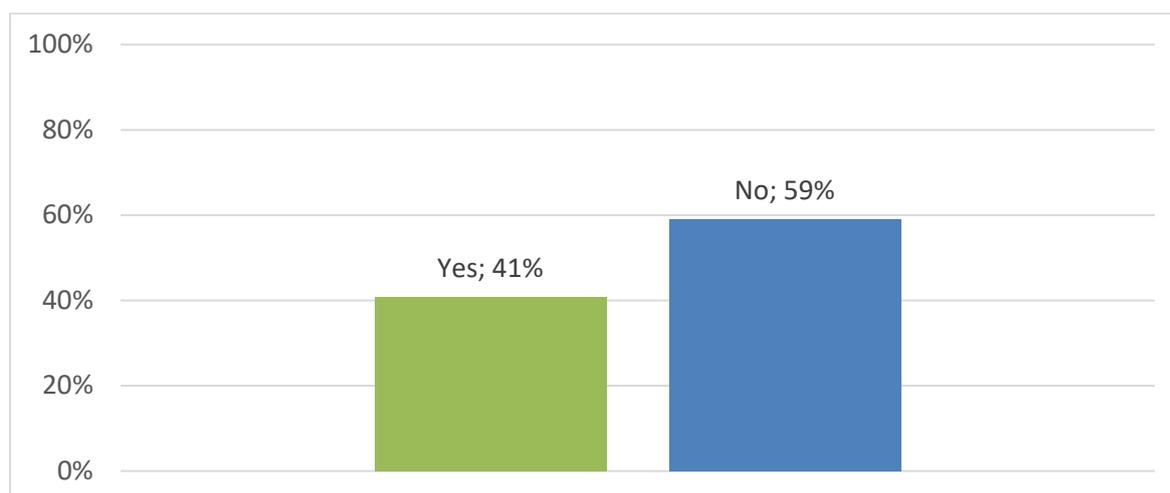
Of all responding operators which offer alternative roaming tariffs, 23 % of operators offer such a tariff in the form of daily packages, 16 % in the form of weekly packages and 34 % in the form of monthly packages. Compared to last year's report, the proportions of the alternative roaming packages are nearly unchanged.

25 % of the operators offer other alternative packages. In detail, operators for example provide special pay-as-you-go tariffs, customized price plans for large customers, pooling tariffs or day-passes. Two operators stated that 3-day and 40-day passes for data roaming services were offered to roaming customers.

Figure 4: Segments in which alternative roaming tariffs are offered?

Among the operators that offer alternative tariffs, such tariffs were most commonly offered in both customer segments (52 %). Regarding segment-exclusive offers, 12 % of the responding operators offered alternative roaming tariffs only in the consumer segment and 37 % only in the business segment. In total this means that 89 % of operators that offer alternative tariffs offer such tariffs in the business segment, and 64 % offer such tariffs in the consumer segment.

BEREC asked the operators whether they include in alternative tariffs non-EU/EEA destinations at a reduced rate (or without levying a surcharge) while applying a roaming surcharge in the EU/EEA.

Figure 5: Inclusion of non-EEA destinations at a reduced rate (or with no surcharge) while a roaming surcharge is applied in the EU/EEA (in alternative tariffs)

41 % of the operators that offer alternative tariffs pursuant to Article 6e (3) answered that they do include services in non EU/EEA destinations at a reduced rate in such tariffs. Switzerland and USA were the most frequently included countries in alternative tariffs at a reduced rate. Some operators also mentioned reduced fares for roaming-services in Eastern European non-EU/EEA states, e.g. Albania, Bosnia, Serbia and Belarus.

3.3. The extent of sustainability surcharges

The abolition of retail roaming surcharges has made it easier for consumers to understand what they will pay for when using mobile services while travelling in the EEA. This stems from the fact that while roaming in the EEA, prices or charging mechanisms shall be the same as in the home country. The implementation of RLAH from 15 June 2017 has, in this sense, increased both the transparency and comparability of mobile tariffs. However, the application of fair use policies and sustainability surcharges could still be an obstacle for increased transparency and comparability of mobile tariffs. Against this background, BEREC has asked NRAs for information regarding the application of sustainability surcharges.

For the period of 31 August 2018 to 31 August 2019, 10 NRAs received applications for sustainability surcharges. In total, 30 applications were received of which 23 were granted. No applications were refused, but 7 were still pending. The table below shows the number of granted and refused applications in each of the countries that received applications.

Figure 6: Share of granted and refused applications for derogation

Information on applications for sustainability surcharges				
From 31/08/2018 to 31/08/2019				
	Received	Granted	Refused	Pending ⁸
Austria	2	2	0	0
Belgium	1	1	0	0
Denmark	1	0	0	1
Finland	3	3	0	0
France	3	2	0	1
Italy	4	4	0	0
Lithuania	3	3	0	0
Poland	11	7	0	4
Romania	1	1	0	0
Slovenia	1	1	0	0

The period from 31 August 2018 to 31 August 2019 covers in principle the third round of applications, provided that the first round started 15 June 2017, the second round 15 June 2018 and the third round 15 June 2019. In the first round, 17 NRAs granted in total 46 applications and in the second round, 8 NRAs granted 23 applications. The number of NRAs that received applications from their domestic providers remained relatively stable during the last two rounds. The same holds true for the number of granted applications.⁹

⁸ In France the pending application at the end of August 2019 was accepted in September 2019. The same holds for Denmark. In Poland, two applications that were pending on 31 August 2019 were granted in September. One was refused in October.

⁹ The decrease of the number of granted applications in France (from 11 granted applications in the first round to 6 in the second round and 3 in the third round) is due to the decision of the very small resellers not to apply for a renewal of their derogation.

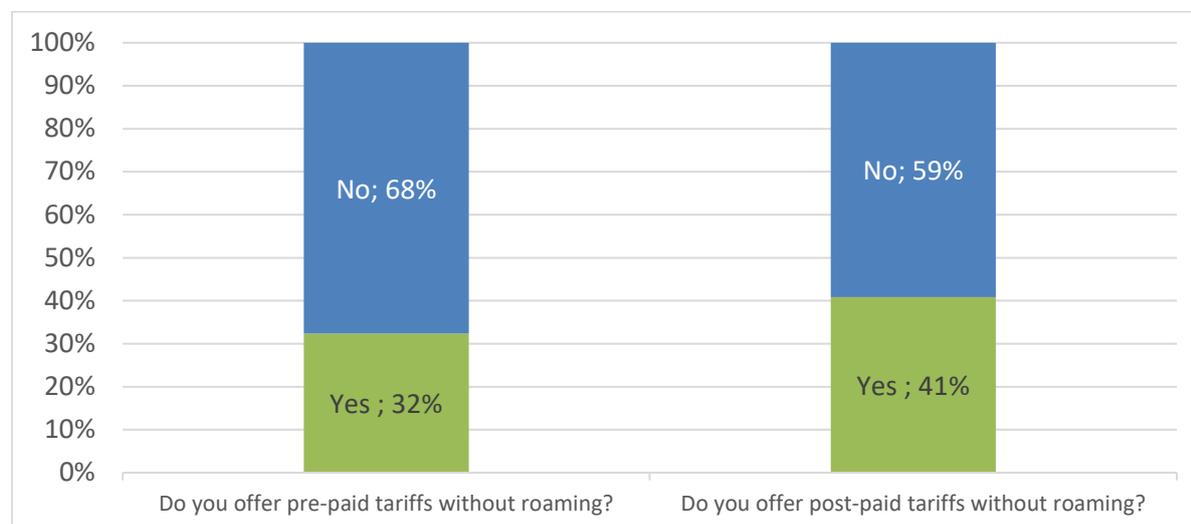
Around 35 % of applications granted were submitted by MNOs, around 22 % of the granted applications were submitted by full MVNOs and 43 % of the granted applications were submitted by light MVNOs. The providers operate in both the residential and business segment. Most of the providers that were granted derogation have a small market share. However, in one country the market shares of the MNOs that were granted derogation amounted to 99 % of the total national market. For a second country, the corresponding number was 46 %, which illustrates that RLAH has different effects in different markets.

The level of the surcharge for all services were set at or below the caps in all countries, with the exception of one NRA which accepted surcharges above caps for data. For half of the countries, where a derogation was granted, surcharges applied to all tariffs. In the remaining countries, surcharges applied only to some tariffs or to selected services.

3.4. Tariffs without roaming

BEREC has collected information on tariffs without any roaming option as well as on tariffs from which roaming was withdrawn. As far as tariffs without a roaming option are concerned, 51 % of the responding operators offered such tariffs. This is an increase of 17 percentage points compared to previous year's report.¹⁰ However, according to the results of the BEREC IR Benchmarking Report, those tariffs are not obtained by a significant number of subscribers.

Figure 7: Tariffs without roaming



32 % of the operators offer prepaid tariffs without roaming and 41 % offer post-paid tariffs without roaming.

¹⁰ In addition to their existing tariff portfolio an increasing number of mobile operators started during the period July 2018-August 2019 offering fixed wireless access tariffs and data only tariffs that were advertised as substitute for fixed line access products. These products were frequently bundled with a 4G / 5G router and are offered as domestic only tariffs.

The majority of the operators stated that tariffs without roaming are mostly dedicated data-only plans or fixed wireless access (FWA) products that can only be used on a specific location. Some operators also mentioned that low-end tariffs and other inexpensive offers like welfare tariffs were restricted to national use. Other tariffs without roaming included IoT tariffs, dedicated business tariffs, and special tariffs for minors.

According to the responding operators, there were several reasons for not providing roaming services. Some operators stated that roaming was not possible for some offers because there was no commercial sustainability in the RLAH context, especially in regard to low-end tariffs and data-only offers. Another reason for domestic-only offers are tariffs that are designed for tourists and other foreign users that do not need any roaming. Operators also mentioned that some tariffs for business customers were created for national use only based on customer request.

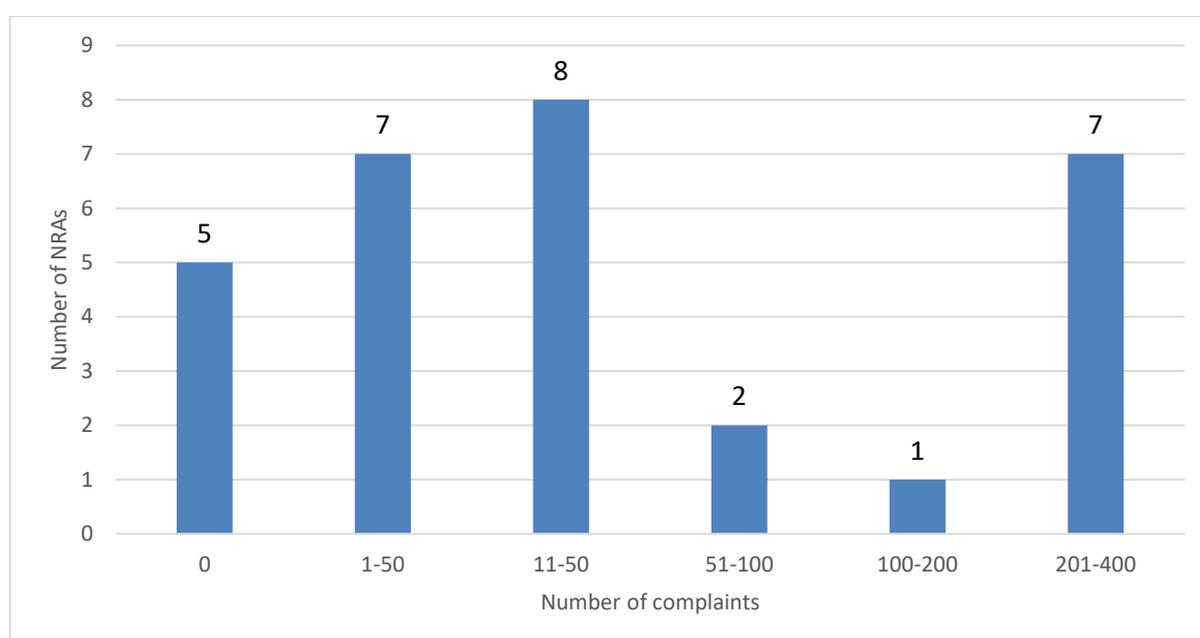
2 % of the operators stated that they withdrew roaming from at least one tariff after 1 July 2018. This is a decrease of 15 percentage points compared to last year's report. Reasons stated by operators for withdrawing roaming are customers asking for a domestic solution and launch of a new tariff portfolio.

4. Transparency of roaming services

4.1. Complaints on transparency issues received by NRAs

The questionnaires revealed that – similarly to the previous period - 84 % of the responding NRAs have received complaints on transparency issues since July 2018. The total number of complaints registered during this reporting period was about 3,300.¹¹ This is about the same level as observed in the previous period. The figure below shows the NRAs grouped by the number of complaints received.

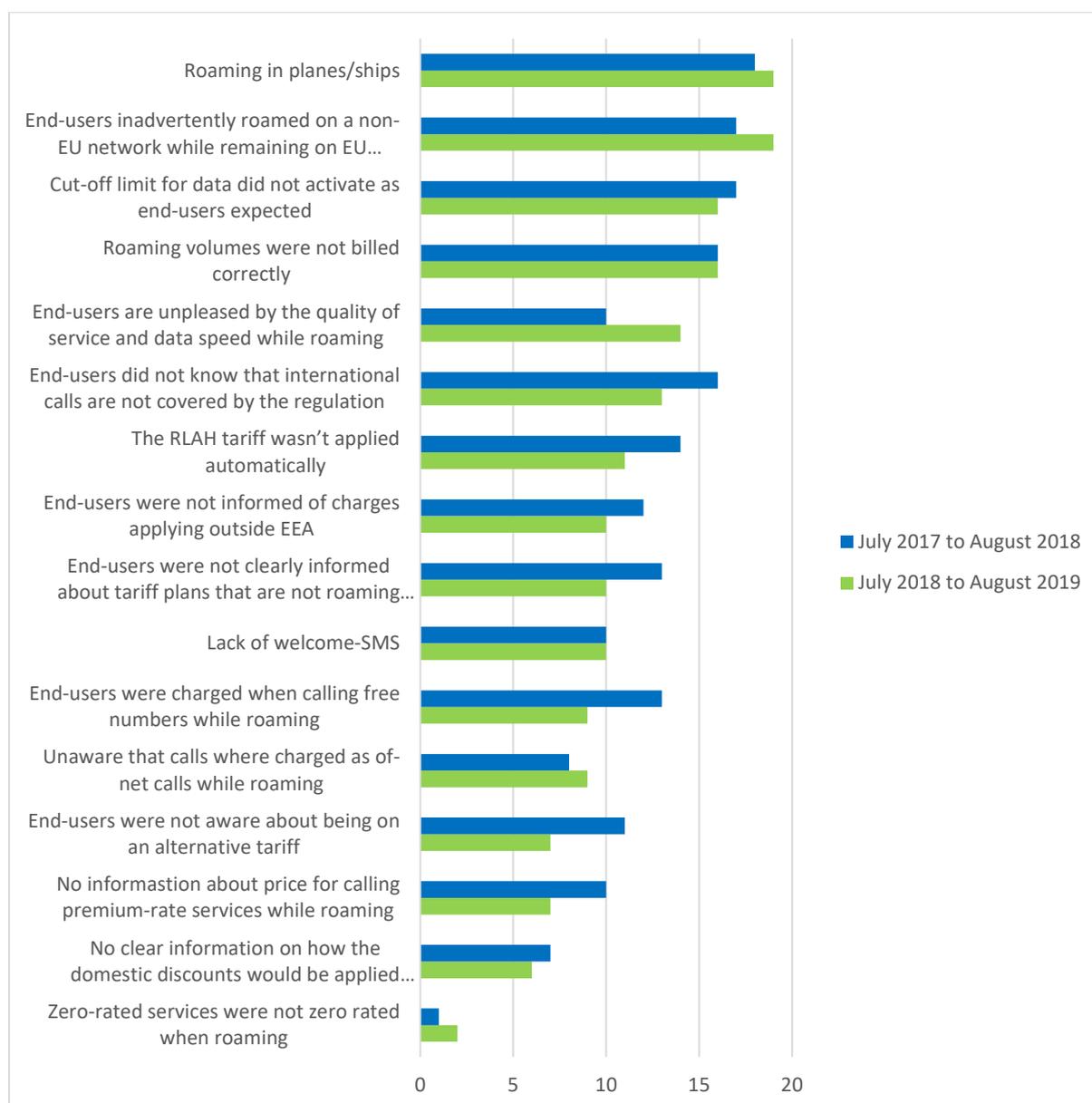
Figure 8: NRAs grouped by number of complaints



Of the 30 responding NRAs, 7 received more than 200 complaints each and 1 received almost 200. On the other hand, 5 NRAs did not receive any complaints at all. One should note, however, that this might not give a correct picture of the total number of complaints regarding transparency issues. In some countries, other bodies than the NRA might handle customer complaints.¹² Some NRAs also reported that the system used for registering complaints (in general) makes it difficult to assess the precise amount of complaints on transparency and comparability for roaming.

¹¹ One NRA reported not having data of complaints until the end of the analysed period (July 2018 to 31 August 2019).

¹² The complaints reported by CNMC for this report have been provided by the Ministry of Economy and Enterprise. This Ministry has the competences related to end-users complaints in electronic communications services in Spain.

Figure 9: Number of NRAs that have received complaints on various categories of transparency issues

The figure above shows how many NRAs received and registered complaints on each of the defined categories of transparency issues. There might be other issues not covered by these predefined categories from the questionnaire. Note also that an NRA may have received more than one complaint in each of the categories.

Roaming on board of planes and ships, as well as the issue of inadvertent roaming, were the cause of complaints amongst 65 % of the NRAs. These two categories also subsumed the most frequently cited reasons for complaints in the previous reporting period. The total number of complaints in each country regarding transparency issues when end-users are roaming on ships or planes are low in most countries, i.e. less than 10. However, 5 countries had more than 10. The same situation applies to complaints regarding inadvertent roaming; however, 3 countries received more than 60 complaints each in this category.

More than half of the responding countries have received complaints regarding the activation of cut-off limits for data services while roaming. The cut-off did not happen the way users expected. 5 countries received more than 30 complaints each on this issue.

Billing of roaming is also a category where more than half of the responding NRAs received complaints. One NRA received around 200 complaints, 3 NRAs received between 40-70 complaints and the remaining NRAs received less than 10.

Since the previous reporting period, BEREC observed an increase in the number of countries that received complaints regarding quality of service and data speeds while roaming. However, the number of complaints in each country is relatively low (from 1-9 complaints), except for one country, where approximately 30 complaints were received.

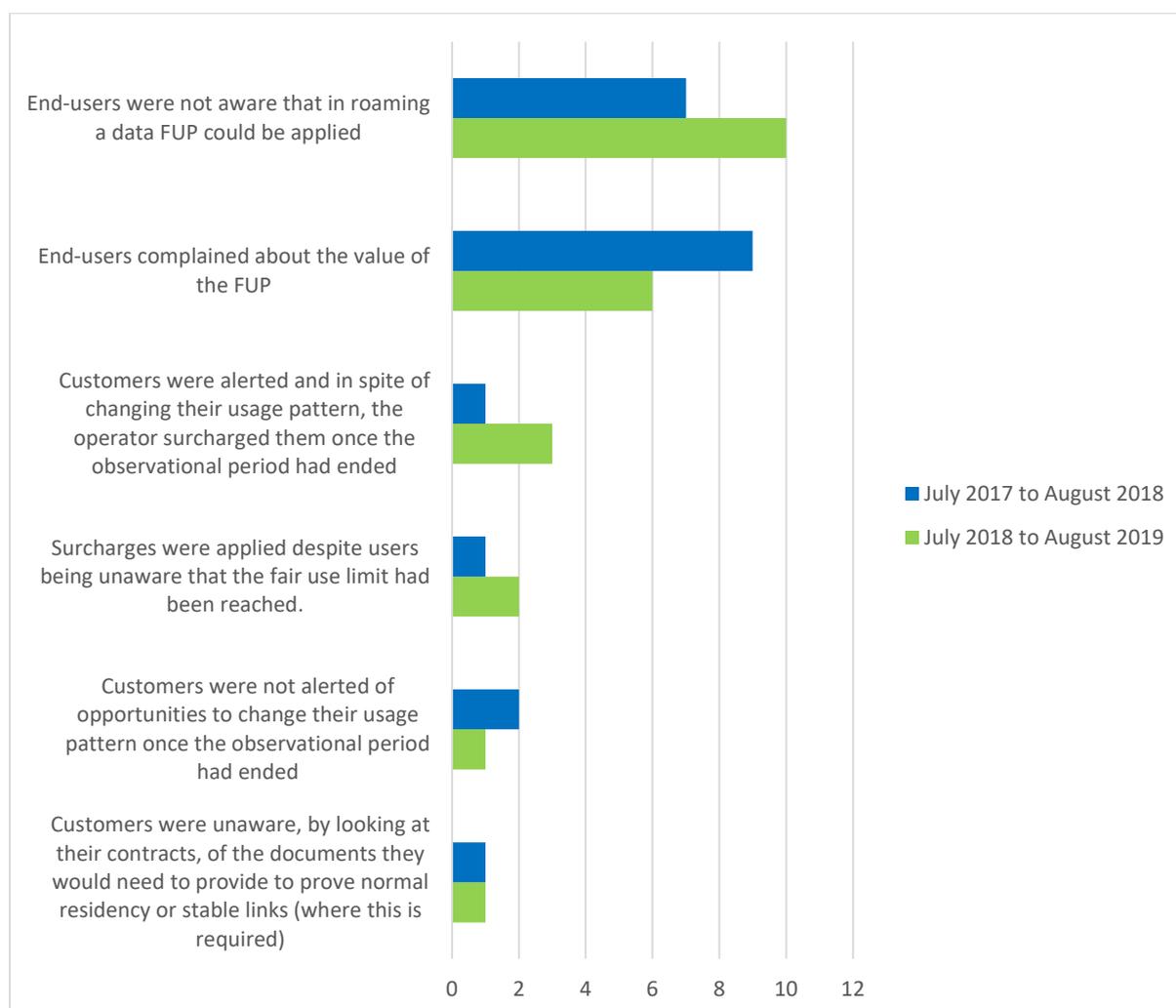
On the other hand, a slightly positive downwards trend for several categories of complaints was noted. Improvements in the following categories were registered: awareness of international calls not covered by the regulation, RLAH not applying automatically, awareness of charges applying outside EEA, information about non-roaming enabled tariffs, charging when calling free numbers while roaming, awareness of alternative tariffs, information about prices for calling premium-rate services and information about domestic discounts. These issues caused complaints in fewer countries than during the previous report period. However, one NRA received around 200 complaints from end-users that did not know that international calls were not covered by the regulation. In the same country, around 40 complaints stemmed from end-users that were not clearly informed about tariff plans that were not roaming enabled, and an equivalent number from end-users that were not aware of having subscribed to an alternative tariff. Another NRA received many complaints from end users that were charged for calling free phone numbers while roaming. Apart from these cases, the number of complaints corresponding to these categories was very low.

A lack of Welcome SMS is a problem in some countries. 4 NRAs received over 20 complaints on this topic.

Only 2 NRAs received complaints on zero-rated services from end-users that were roaming.

BEREC also asked NRAs if they had received complaints from end-users on issues related to the fair use policy during the period from July 2018 to the end of August 2019. This could be restrictions either imposed on the roaming data volumes or on the control mechanisms for permanent roaming. 15 NRAs received complaints regarding the FUP during this period.

Figure 10 shows how many NRAs received complaints in each of the defined categories of complaints related to the FUP compared to the previous period.

Figure 10: Number of NRAs that have received complaints on the FUP

The number of complaints received in each of the categories was in general low (less than 10), except for one NRA which received around 50 complaints from customers unaware that a data FUP could be applied while roaming. Compared to the previous reporting period, more NRAs received complaints from end-users on the following topics: 1) while roaming, the provider might apply an data FUP, 2) end-users were charged extra even if changing usage pattern inside the observational window, 3) end-users was surcharged despite no warning that their fair use limit had been reached. For the other categories, there is either a reduction or a standstill in the number of NRAs that received complaints.

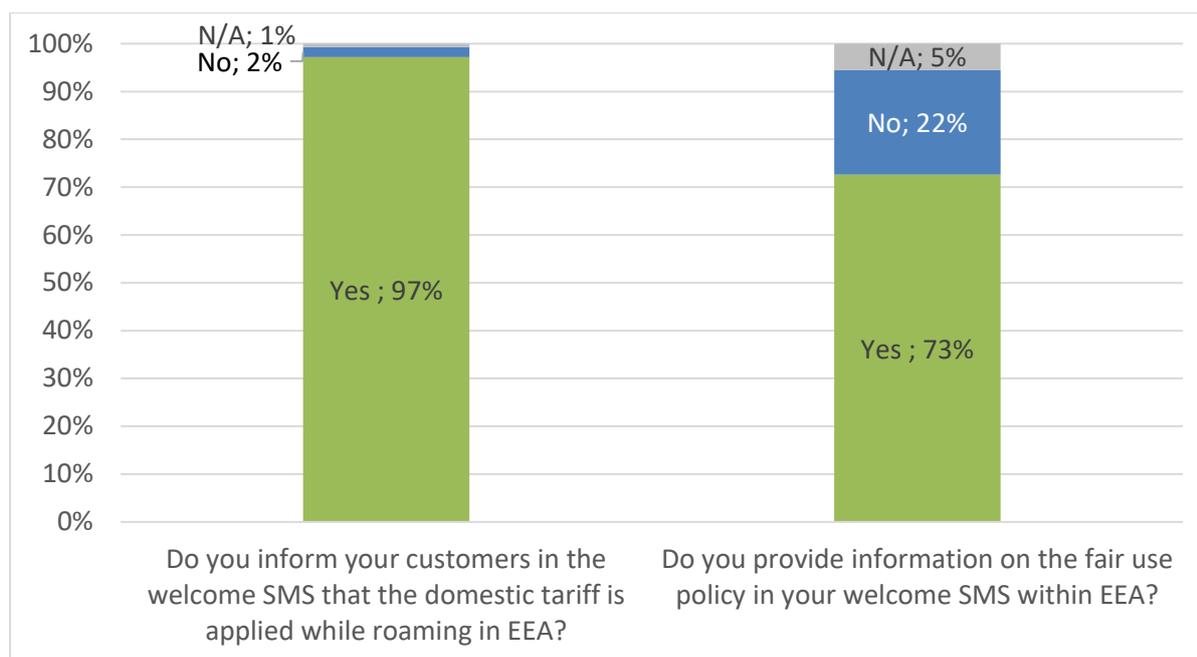
4.2. Information about RLAH in the Welcome SMS

According to Article 15 of the Roaming Regulation, operators are obliged to send an automatic message to their customers while roaming, providing basic personalized information for the roaming customer. This provision is still valid both inside and outside the EEA, although the RLAH principle requires that the domestic retail price is applied while roaming in the EEA. About 97 % of the operators inform their customers via Welcome SMS

that the domestic tariff applies while roaming. This is at the same level as in the previous reporting period.

The Welcome SMS should also include information on the fair use policy the roaming customer is subject to and any surcharges that apply in excess of the FUP. Around 73 % of the operators applying a fair use policy provide information regarding the FUP in the Welcome SMS. In the previous reporting period the corresponding number was 74 % meaning that there is only a minor adjustment compared to the current period.

Figure 11: Information provided by operators (Welcome SMS)



The operators were also asked whether they provide any Welcome SMS when their customers travel outside the EEA. According to the replies, about 15 % of the operators do not send Welcome SMS to their customers abroad – the majority of the respondents therefore inform their customers even when roaming outside the EEA.

Close to 60 % of those that provide Welcome SMS outside EEA provide their customers with pricing information for voice, SMS and data. In addition, many include links or contact information to customer service should the traveller require more detailed information. About 20 % claimed to include detailed information about FUP limits and limits for any periodic package/allowance. There are however some operators (about 10 %) that only provide info to customers with pay-as-you-go tariffs. Some operators include information on local emergency numbers in the Welcome SMS.

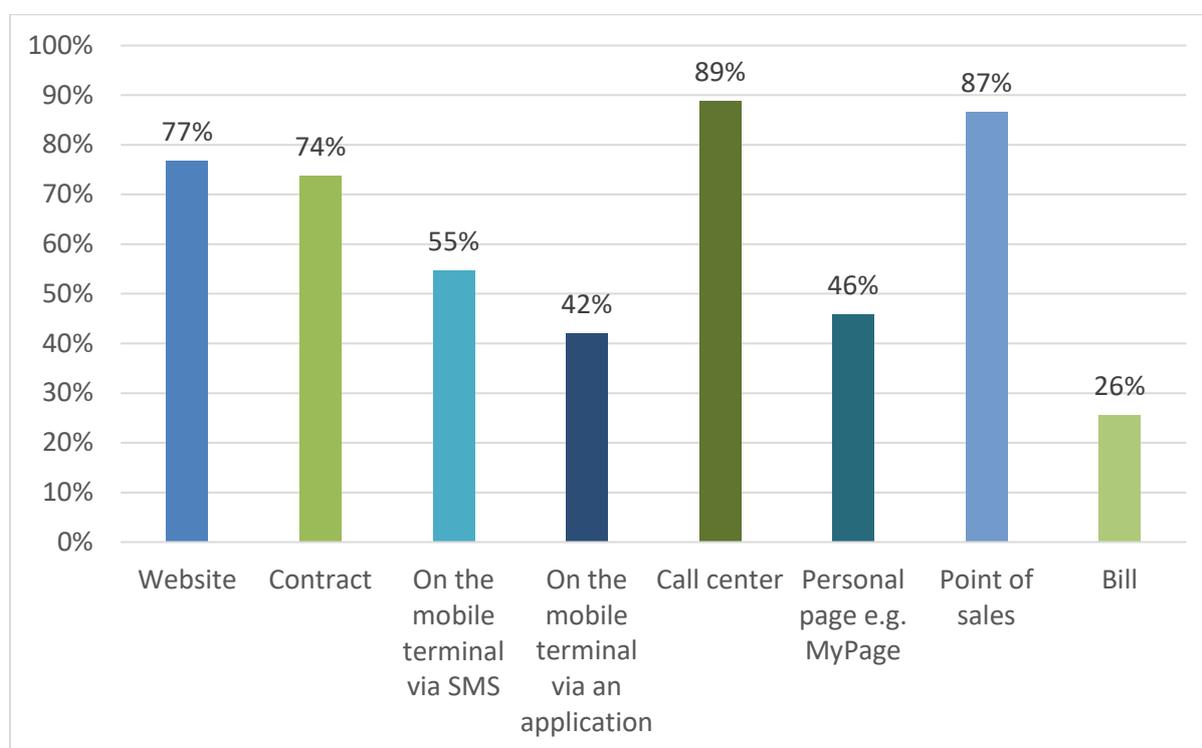
4.3. Information when providing alternative tariffs

According to Article 6e of the Roaming Regulation, roaming providers are allowed to offer alternative tariffs. Such alternative tariffs are characterized by the deviation from roaming tariffs according to Articles 6a, 6b and 6c. Such tariffs could involve surcharges for EEA

roaming in combination with the inclusion of countries other than the EU Member States (e.g. Switzerland), a different data roaming allowance, or *per diem* or monthly packages as illustrated in Figure 4. Customers shall deliberately choose such tariffs which require knowledge about the existence of the regulated tariff and the nature of the roaming advantages which would thereby be lost. In addition, customers shall be able to switch back; any switch shall be free of charge and shall not entail conditions or restrictions pertaining to elements of the subscriptions other than roaming. Therefore, roaming providers shall inform their customers in a transparent way, enabling them to make a conscious choice.

All the respondents offering alternative tariffs inform end-users that have opted for such tariffs about the regulated tariff. 90 % of these inform their customers on a yearly basis, 5 % per quarter and 5 % do so every month.

Figure 12: Source of information about regulated tariffs for customers subscribed to an alternative tariff

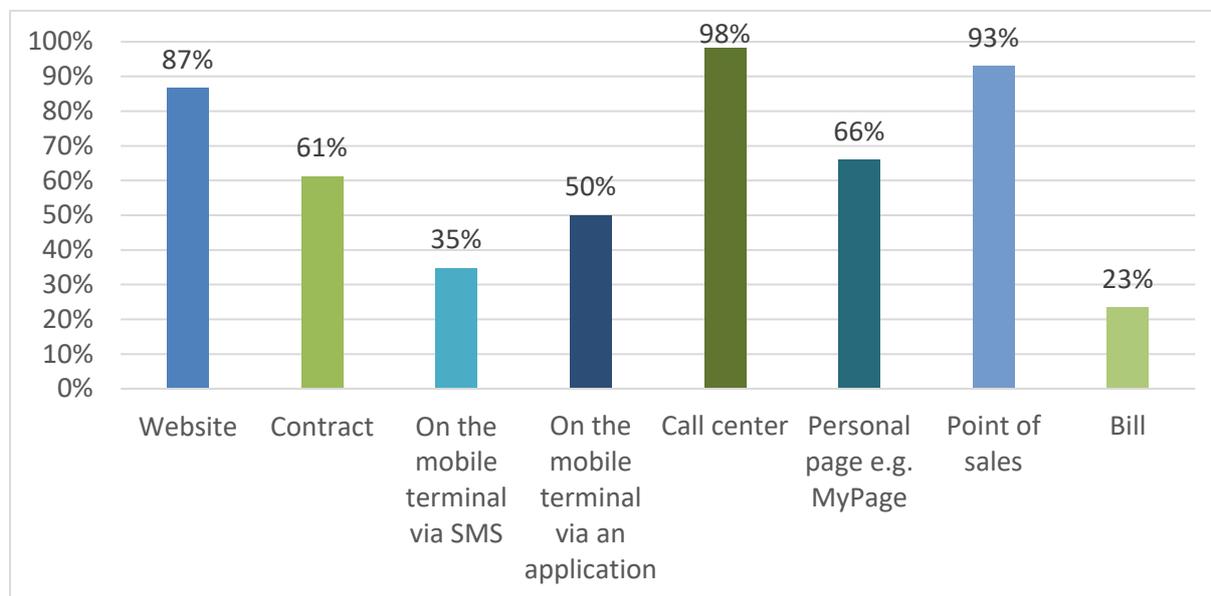


As presented in the figure above, the two most common ways to inform customers about the regulated tariff are at points of sales (89 %, slightly up from 86 % in the previous period) followed by call centres (87 %, slightly down from 88 %). Websites (77 %, down from 81 %) and contracts (74 %, up from 70 %) are additional sources of information for the customers. In addition, SMS (55 %, up from 52 %), personalized webpages (46 %, up from 40 %), mobile applications (42 %, up from 38 %) and the customer's bill (26 %, down from 28 %) are used to provide information about regulated tariffs.

4.4. Information about switching between tariffs

Operators use various methods to provide information on the possibility to switch between tariffs.

Figure 13: Source of information about switching between tariffs



Most of the roaming providers inform their customers by means of call centres (98 %, up from 95 % in the previous period), at the points of sales (93 %, slightly up from 92 %) or their website (87 %, slightly down from 88 %) regarding the possibility to switch between tariffs. Other methods that are used are MyPage services (66 %, up from 56 %), contracts (61 %, up from 56 %), mobile applications (50%, up from 44 %), SMS (35 %, down from 38 %) and via the customer's bill (23 %, down from 26 %).

The majority (about 90 %, down from 92 % in the previous period) of roaming providers offering alternative tariffs stated that they did not apply any activation charge when their customers switch between any of their tariffs. Concerning alternative tariffs limited in time, 76 % (down from 78 %) of the respondents inform their customers actively about charges that apply to roaming services when the time period for the chosen alternative tariff ends. This is a negative development and means that 24 % of the roaming providers do not actively inform their customers about the charges applied after the end of the alternative tariff period.

When customers have contracted an alternative tariff bundle with roaming services that includes a limited number of minutes, SMS and/or limited amount of data services, 90 % (up from 87 %) of the operators inform their customers about the charges that apply to out-of-bundle consumption. Furthermore, 89 % (identical number as previous period) of the operators notify their customers when they reach the limit of the bundle, while 87 % - a positive development from 81 % in the previous period - of the respondents said that they also provide additional information for their customers in case a certain percentage of the bundle is used.

Regarding alternative tariff bundles, 90 % (up from 87 % in the previous period) of the operators inform their customers about the tariffs/charges they have to pay for roaming services out-of-bundle. This means that some operators still do not inform their customers when they reach the limit included in the bundle. This may have a negative impact for customers as this could lead to additional charges (e.g. bill shocks) as a result of customers not receiving detailed information about such out-of-bundle charges in advance.

4.5. Providing information within the fair use policy

According to Article 4 CIR, roaming providers are allowed to implement a fair use policy. Especially in cases of fair use policies which depend directly on the consumption of regulated roaming services, providing transparent information is necessary.

4.5.1. Open-data bundles

According to the Roaming Regulation, open-data bundles are tariff plans for the provision of one or more mobile retail services which do not limit the volume of mobile data retail services or for which the domestic unit price of mobile retail data services is lower than the regulated maximum wholesale roaming charge. Operators are allowed to limit roaming data consumption at domestic prices for those open-data bundles. After exceeding the fair use roaming allowance, roaming providers are allowed to charge a surcharge for the additional use of the data service. The Roaming Regulation states that information about the overall and actual data volume used is accessible for customers to know how much roaming volume allowance is left before a surcharge could be applied by the roaming provider.

Figure 14: Information about charges and consumption within a FUP in case roaming volumes are calculated according to the open-data bundle rule

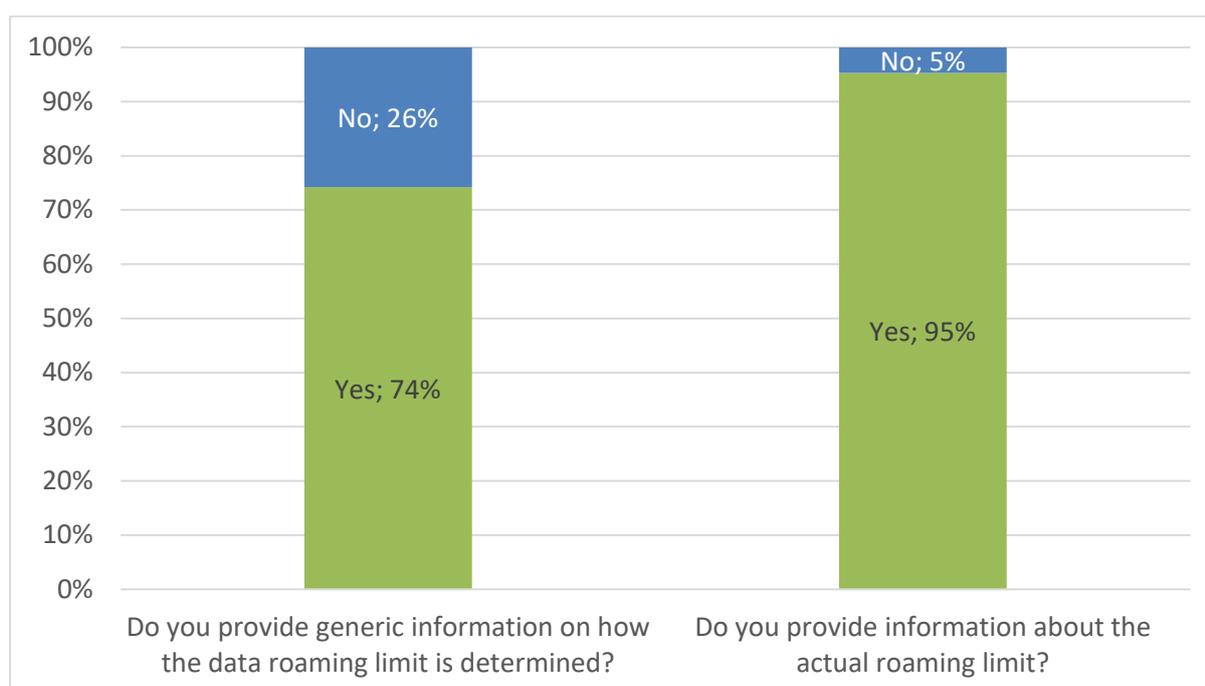
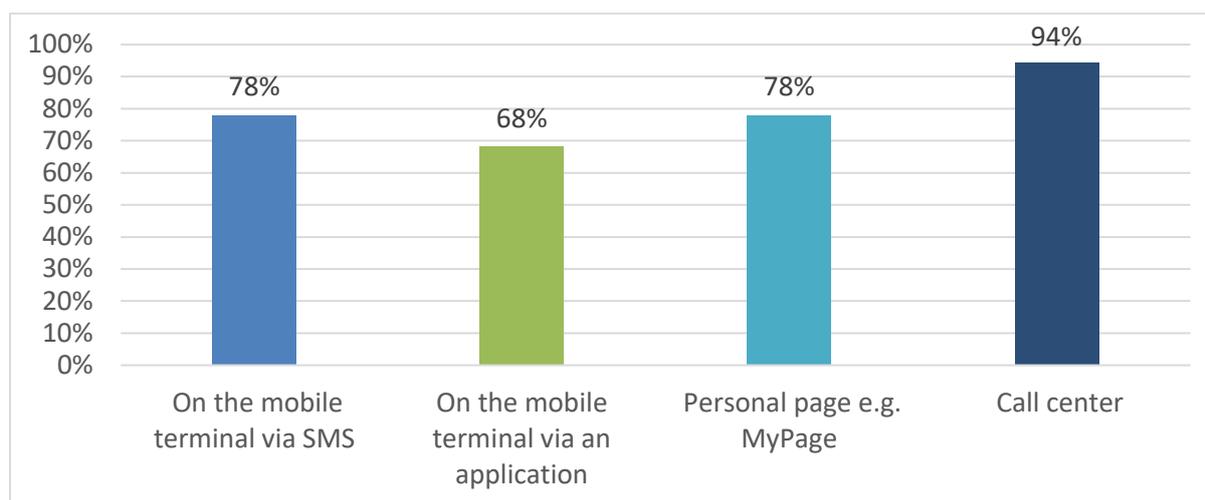


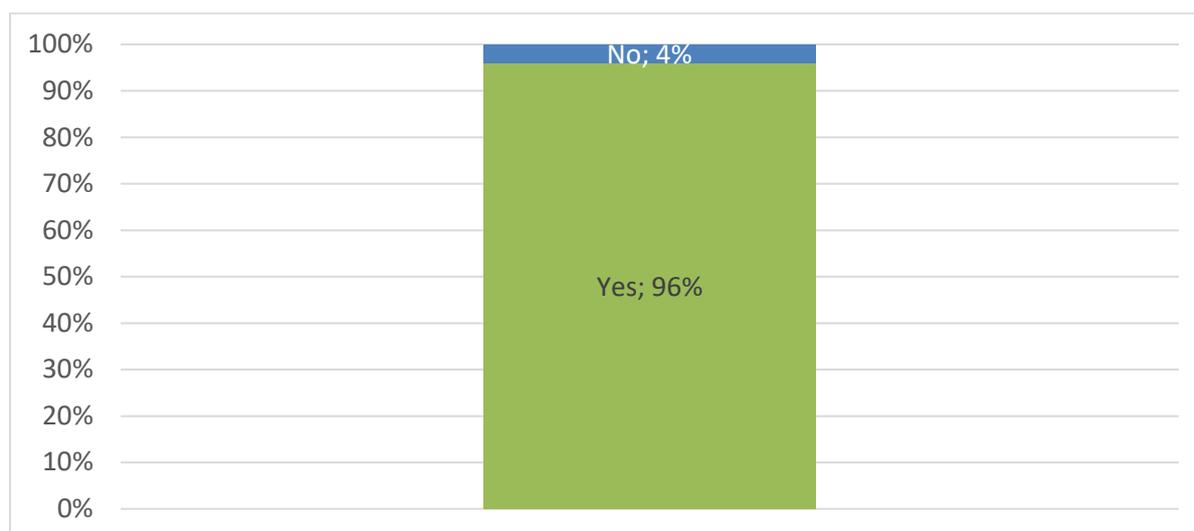
Figure 14 shows that 74 % of the responding roaming providers which apply a fair use policy according to Article 4 (2) CIR inform their customers about how the roaming allowance is calculated. In addition, 95 % of the roaming providers which established a fair use policy according to the open-data bundle rule provide information for customers about their actual roaming volumes.

Figure 15: Means for providing information in case roaming volumes are calculated according to the open-data bundle rule

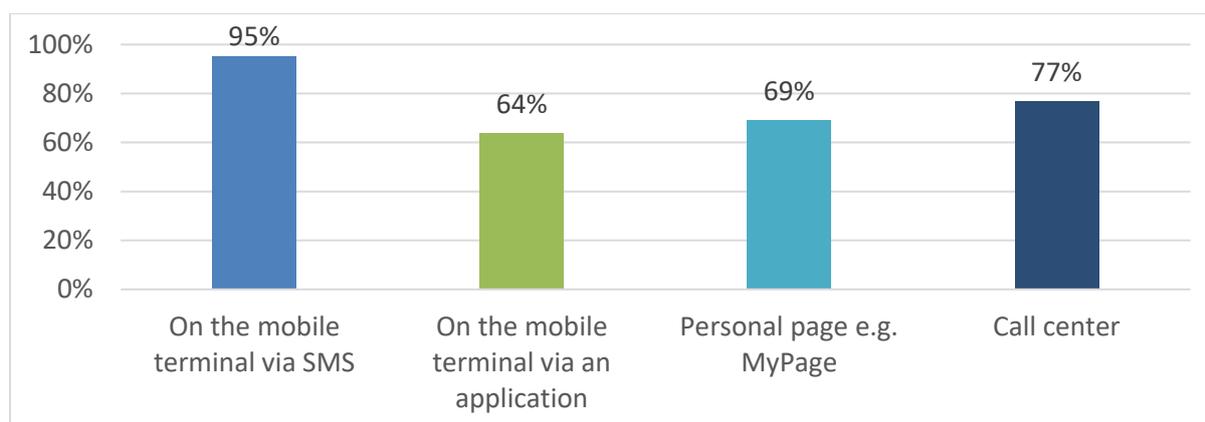


As Figure 15 shows, the actual roaming allowance is mostly provided via call centres (94 %), followed by the personal page e.g. MyPage (78 %), on the mobile terminal via SMS (78 %) or on the mobile terminal via application (68 %).

Figure 16: Operators actively informing end-users when they reach the roaming limits included in the open-data bundle



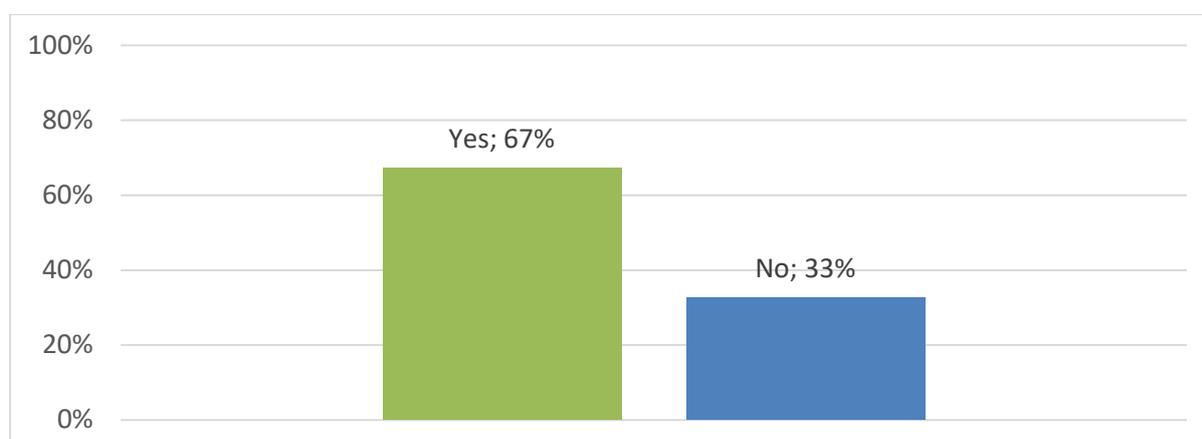
As presented in the figure above, 96 % of the responding operators inform end-users actively when they reach the roaming limits included in the open-data bundle.

Figure 17: How do you provide information on actual available roaming volumes to the end-users?

As Figure 17 shows, the following communication channels are commonly used to inform end-users about roaming limits: on the mobile terminal via SMS (95 %); via call centre agents (77%); via personal page e.g. MyPage (69 %) and on the mobile terminal via an application (64%).

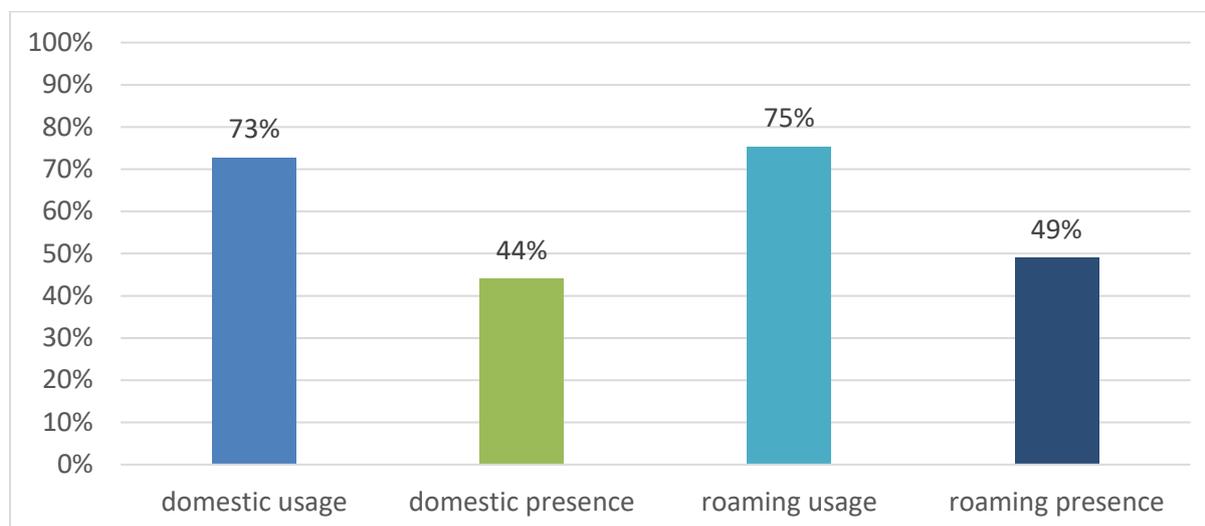
4.5.2. Objective indicators

In addition to the open-data bundle fair use policy, roaming providers are also allowed to implement a control mechanism over an observation period of at least 4 months. This control mechanism includes two objective indicators, namely the consumption and the presence of customers. In the event that a customer has both a prevailing roaming presence and a prevailing roaming consumption, the roaming provider must notify the customer of applicable surcharges and allow the customer two weeks to react and change her or his behaviour. If no changes are detected by the operator in these two weeks, the operator may apply surcharges for further use of the observed roaming service. Roaming providers are obliged to provide evidence after the 4-month observation window of the customer's unchanged behaviour.

Figure 18: In case control mechanism is applied do you provide information within the observation period?

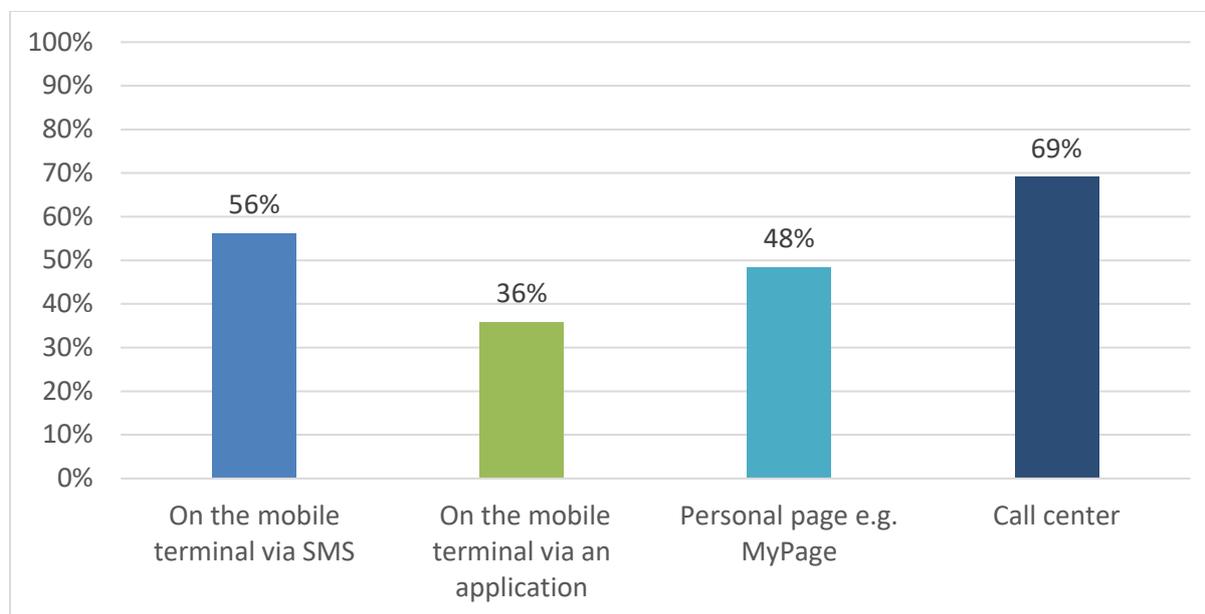
In light of this obligation, 67 % of the respondents state that they already make such information available to their customers within the observation period.

Figure 19: Information provided in case the control mechanism is applied

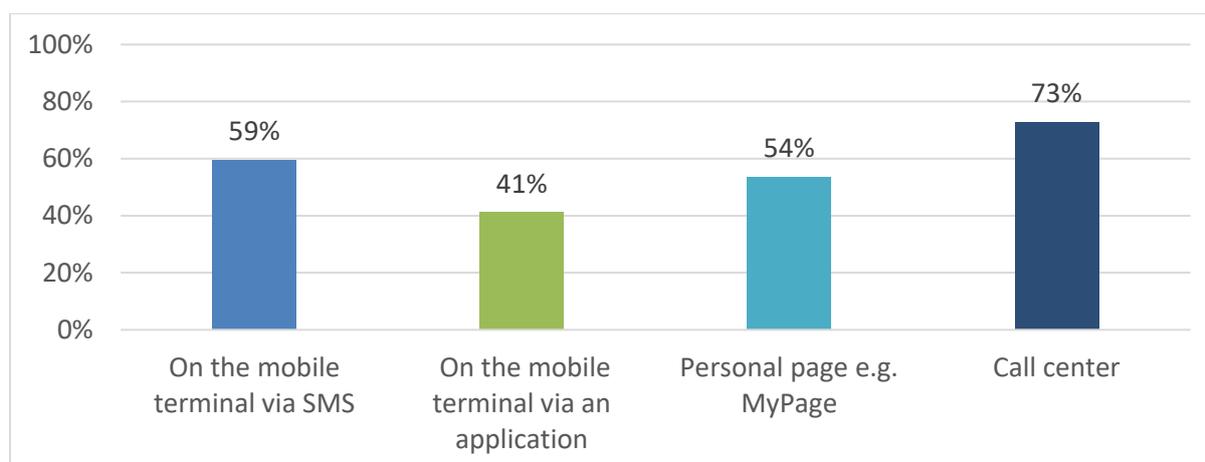


Roaming providers which provide such information mainly focus on the consumption of their customers, not on the presence control. As shown in Figure 19, 73 % of the operators provide information on domestic usage and 75 % on roaming usage, while 44 % of the operators provide information on domestic presence and 49 % on roaming presence.

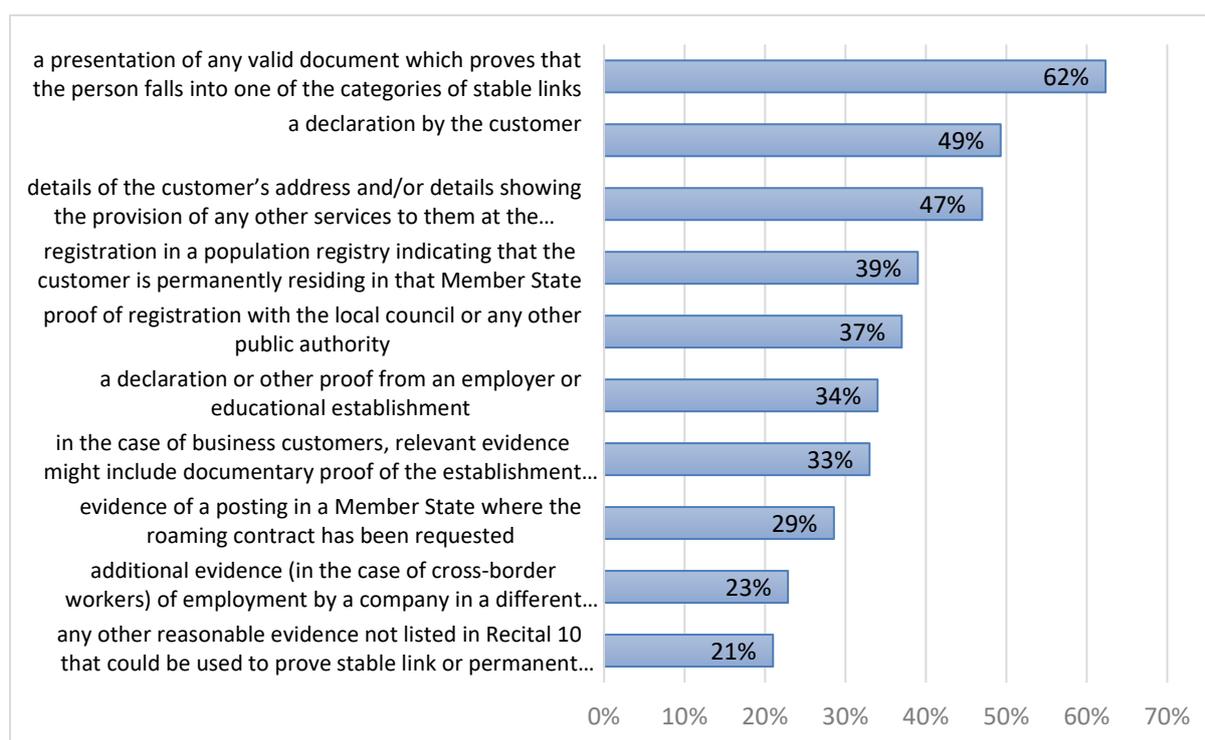
Figure 20: How is such information provided (domestic services)?



The roaming providers which inform their customers already within the observation window (see Figure 20) stated that such information is mainly presented for domestic services via call centre (69 %); followed by the mobile terminal via SMS (56 %); personal page e.g. MyPage (48 %); and on the mobile terminal via an application (36 %).

Figure 21: How is such information provided (roaming services)?

As presented in Figure 21, information regarding roaming services is mainly provided by call centre agents (73 %), followed by information given on the mobile terminal via SMS (59 %); then presented on the personal page e.g. MyPage (54 %), and on the mobile terminal via an application (41 %).

Figure 22: What kind of evidence is requested to assess stable links?

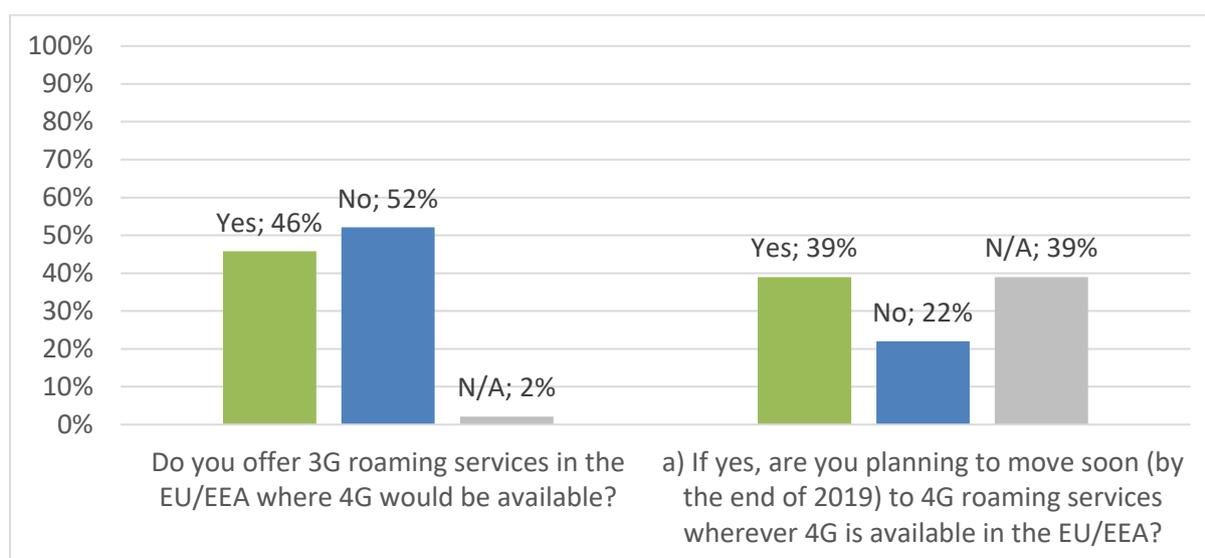
From those operators which request evidence on stable links and/or normal evidence, the following evidences are requested: a presentation of any valid document which proves that the person falls into one of the categories of stable links (62 %), a declaration by the customer (49 %), details of the customer's address and/or details showing the provision of any other services to them at the given address, e.g. a utility bill (47%), registration in a population registry indicating that the customer is permanently residing in that Member State

(39 %), proof of registration with the local council or any other public authority (37 %), a declaration or other proof from an employer or educational establishment (34 %), in the case of business customers, relevant evidence might include documentary proof of the establishment or activities of the business in the Member State concerned (33 %), evidence of a posting in a Member State where the roaming contract has been requested (29 %), additional evidence (in the case of cross-border workers) of employment by a company in a different country of residence (23 %) and any other reasonable evidence not listed in Recital 10 that could be used to prove stable link or permanent residence, such as a valid property rental agreement (21 %).

4.6. Quality of service in roaming

BEREC was also interested in the network technology that was used for providing roaming services. 46 % of the operators stated¹³ that they offer 3G roaming services in the EU/EEA even where 4G would be available¹⁴. The issue about quality of service while roaming was also analysed in the BEREC Opinion and identified as an issue to be addressed in any potential update of the Roaming Regulation.

Figure 23: Availability of 3G and 4G roaming services



61 % of the operators that only offer 3G services despite 4G being available are not planning to provide 4G roaming services by the end of 2019 or did not specify any plans at all to improve their quality.

¹³ The question addressed to operators did not specify that operators replying positively offer 3G across all roaming networks and all member states. Therefore, it is not clear, if those operators responding with yes, apply this restriction to all countries and all networks.

¹⁴ "The end-user will typically experience much higher data rates with 4G technology than with 3G technology.

5. Comparability of international roaming tariffs

Roaming services have generally been sold as additional services in a bundle which included domestic mobile services. In the retail market, the focus of competition has been on domestic services due to the fact that for the majority of users, domestic services are of prime importance. The abolition of retail roaming surcharges has overturned the premise for comparing retail roaming tariffs: unlike the complex variety of prices and packages for retail roaming available before, roaming consumption within the EEA should now be deducted from the domestic allowance (except for domestic tariffs with charges per unit).

The fair use policy and sustainability surcharges are however factors that influence the cost of the roaming services and might make comparisons of tariffs more complex. Alternative tariffs for roaming may also contribute to the variety of tariffs. In any case, the availability of information to allow the comparison of different tariffs is a first step towards empowering customers to make informed decisions on mobile and roaming offers.

5.1. Tables on the providers' websites comparing tariffs available to customers

BEREC asked providers if they offered any tables or tools on their websites that enable customers to compare alternative roaming tariffs with regulated roaming tariffs. Among the providers that offer alternative tariffs, 14 % reported that they offered tables for such comparison.

5.2. Tables and assessment from consumer associations and other organizations

BEREC asked NRAs if consumer associations or any other organisations provided tables or any other information that allow the comparison of tariffs for international roaming services offered by different operators, as well as access for customers to publicly available reports comparing international roaming tariffs.

4 % of the responding NRAs are aware of such comparison tables or information. 8 % of responding NRAs reported that consumer associations or other organisations have published recommendations for end-users in order to help them select the most adequate international roaming tariff. 7 % of the responding NRAs were aware of a publicly available report provided by consumer associations or other organisations which compares international roaming tariffs. 4 % of the responding NRAs were aware of an application to help end-users to decide which type of tariff to select based on their consumption for international roaming.

5.3. Tables on NRAs' websites comparing tariffs

BEREC asked NRAs if there is any information available to end-users on the NRA's website enabling them to compare tariffs.

23 % of the responding NRAs reported that they featured information on their website comparing domestic tariffs including intra-EEA roaming provided by different operators, thereby facilitating a comparison of RLAH tariffs. BEREC also asked whether NRAs provided up-to-date information comparing alternative roaming tariffs (including tariffs that combine intra-EEA and Rest of World roaming) to facilitate a comparison of RLAH tariffs. 17 % of NRAs reported that they provided such information. 7 % of the responding NRAs reported that they provide updated information on their websites comparing tariffs that have a sustainability surcharge and 17 % of the responding NRAs reported that they provide updated information on their websites comparing roaming tariffs for non-EEA-countries.

In the past, providing tables and reports to compare tariffs for international roaming from different operators was quite resource intensive as it required monitoring a variety of tariff plans in order to keep the information updated. However, the implementation of RLAH from 15 June 2017 has made the roaming regime more transparent for customers and the previously required separate tables for comparing retail roaming tariffs may no longer be necessary. Side-by-side comparison of domestic tariffs including terms and conditions for intra-EEA roaming is more manageable. Relevant information about roaming includes whether the tariff is enabled for roaming or not, the volume of the data allowance for EEA roaming and if any surcharges are applied to the tariff. The data collected for this report revealed that very few NRAs or consumer associations provide such tables with comparisons.

5.4. Guidance for customers to estimate data traffic and tools to select a tariff

The volume of data included in the packages is a major factor in the price of the tariffs offered. Therefore, it is important that customers can estimate their need for data traffic in order to be able to make an informed choice. Any tools for estimating future data usage could support customers in choosing the most appropriate tariff. In order to review the users' access to the information necessary for making informed decisions, BEREC asked whether consumer associations and operators offer information, applications or other tools to estimate the consumption of data services and to decide which kind of tariff to select based on an estimation of consumption.

36 % of the responding operators responded that they provide end-users with information on how to estimate data services consumption based on the use of Internet services such as web browsing, e-mails, and specific applications such as Google Maps or WhatsApp.

15 % of the responding operators reported that they provided applications to help consumers to select the most adequate tariff, including intra-EU roaming based on their estimation of consumption. Very few providers actually have interactive tools where the customers'

consumption patterns are the starting point for selecting the most adequate tariff. However, the need for such tools is probably not as strong as in the past, as most consumers have access to information about their previous data consumption and can therefore estimate their needs for data volumes themselves.

Annex 1: Questionnaire sent to NRAs

1. Identification					
Name of the NRA:					
Country:					
Contact person (name):					
Contact person (e-mail):					
2. Complaints on transparency (received from July 2018 to 31 August 2019)					
				Yes/No	Total number of complaints (if Yes)
2.1.	Have you received complaints from end-users on transparency issues?				
2.2.	If yes, please select the relevant issues from the list below			Yes/No	Number of complaints
2.2.1.	The RLAH tariff wasn't applied automatically				
2.2.2.	Roaming volumes were not billed correctly				
2.2.3.	End-users were not clearly informed about tariff plans that are not roaming enabled				
2.2.4.	End-users were not clearly informed that for on-net calls made while roaming in the EEA they would be charged the price of calls to other national networks				
2.2.5.	End-users were not clearly informed or were wrongly informed on how the domestic discounts would be applied when roaming in the EEA				
2.2.6.	End-users were not aware about being on an alternative tariff				
2.2.7.	Lack of welcome-SMS				
2.2.8.	Cut-off limit for data did not activate as end-users expected				
2.2.9.	End-users did not know that international calls are not covered by the regulation				
2.2.10.	End-users were charged when calling free numbers while roaming				
2.2.11.	End-users did not know the price for calling premium-rate services while roaming				
2.2.12.	End-users were not informed of charges applying outside EEA				
2.2.13.	Roaming in planes/ships				
2.2.14.	End-users are displeased by the quality of service and data speed while roaming				
2.2.15.	Zero-rated services were not zero rated when roaming, (deducted from the bundle)				
2.2.16.	End-users inadvertently roamed on a non-EU network while remaining on EU territory				
2.2.17.	Other complaints, please specify (below)				
				Yes/No	Total number of complaints (if Yes)
2.3.	Have you received complaints from end-users on issues related to the FUP?				
2.4.	If yes, please select the relevant issues from the list below			Yes/No	Number of complaints
2.4.1.	Customers were unaware, by looking at their contracts, of the documents they would need to provide to prove normal residency or stable links (where this is required)				
2.4.2.	End-users were not aware that in roaming a data FUP could be applied				
2.4.3.	End-users complained about the value of the FUP				
2.4.4.	Customers were not alerted of opportunities to change their usage pattern once the observational period had ended				
2.4.5.	Customers were alerted and in spite of changing their usage pattern, the operator surcharged them once the observational period had ended				
2.4.6.	Surcharges were applied despite users being unaware that the fair use limit had been reached.				
2.4.7.	Other? If so, please provide details below:				

3. Information currently available to end-users on the NRA website facilitating comparison of RLAH tariffs			
		Yes/No	
3.1.	Is there up to date information on your website comparing domestic tariffs including intra-EEA roaming, provided by different operators?		
3.2.	If yes, please provide the link		
		Yes/No	
3.3.	Is there updated information on your website comparing alternative roaming tariffs (including tariffs that combine intra-EEA and Rest of the World roaming)?		
3.4.	If yes, please provide the link		
		Yes/No, N/A	
3.5.	Is there updated information on your website comparing tariffs that have a sustainability surcharge? (NA if no operators are granted sustainability surcharge)		
3.6.	If yes, please provide the link		
		Yes/No	
3.7.	Is there updated information on your website comparing roaming tariffs for non-EEA countries?		
3.8.	If yes, please provide the link		
4. Information available to end-users provided by consumer associations or other organizations facilitating the comparison of tariffs (made public from May 2018 to 31 August 2019)			
		Yes/No	If yes, please provide the link
	Have consumer associations or any other organization provided:		
4.1.	tables or any other information comparing tariffs for international roaming from different operators?		
4.2.	any publicly available report which compares international roaming tariffs?		
4.3.	any set of recommendations for end-users in order to help them select the most adequate international roaming tariff?		
4.4.	an application to decide which type of tariff to select based on an estimation of their consumption for international roaming?		

5. Information on applications for sustainability surcharges			
		From 31/08/2018 to 31/08/2019	
5.1.	How many applications have you received?		
5.2.	How many applications were granted?		
	For each application (from 31/08/2018 to 31/08/2019), please inform about:	Application granted #1	Application granted #N (include additional columns for each application granted)
5.2.1.	Date of application		
5.2.2.	Date of authorisation of the derogation		
5.2.3.	Kind of operator (MNO, Full MVNO, Light MVNO)		
5.2.4.	Domestic market share		
5.2.5.	End-user segment (consumer, business or both segments)		
5.2.6.	Level of the surcharge authorized for voice (outgoing)		
5.2.7.	Level of the surcharge authorized for voice (incoming)		
5.2.8.	Level of the surcharge authorized for SMS (outgoing)		
5.2.9.	Level of the surcharge authorized for data (MB)		
5.2.10.	Please provide any relevant information about the level of the surcharges		
5.2.11.	Are the surcharges applied for all tariffs?		
5.2.12.	If no, please point out how surcharges are applied		
5.2.13.	Please provide further details in other options		
		From 31/08/2018 to 31/08/2019	
5.3.	How many applications were refused?		
5.4.	Please, indicate the basis for the refusal		
5.5.	If available, please provide the link to any published information related to this		
6. Any other input that can be considered useful by the NRA			
6.1.	Please, include any additional information that you consider useful for the BEREC report on transparency and comparability of tariffs		

Annex 2: Questionnaire sent to operators

1. Identification			
Name of the provider			
Country			
Type of provider (mark with a cross in the corresponding cell)		MNO	
		Full MVNO	
		Light MVNO/Reseller	
All questions should be answered based on the current situation.			
2. Structure of tariffs for international roaming (intra-EU)			
		Yes/No, N/A	
2.1.1.	Do you offer 3G roaming services in the EU/EEA where 4G would be available?		
	a) If yes, are you planning to move soon (i.e. within this year (by the end of 2019)) to 4G roaming services wherever 4G is available in the EU/EEA?		
2.1.2.	Do you include non-EEA destinations in some of your offers?		
	a) If yes, list non-EEA destinations included in RLAH tariffs		
	b) Please specify in the comment box the approximate share of your customer base covered by RLAH offers including non-EEA countries		
2.2 Structure of alternative roaming tariffs according to Article 6e (3)			
Please see BEREC Guidelines 87-93 for further information			
		Available Yes/No	Comment
2.2.1.	Do you offer any alternative tariffs in line with Article 6e (3)?		
2.2.2.	In which segment(s) are alternative tariffs offered? (Mostly consumer, mostly business, similarly both segments)		
2.2.3.	Does your company offer daily packages?		
2.2.4.	Does your company offer weekly packages?		
2.2.5.	Does your company offer monthly packages?		
2.2.6.	Does your company offer other tariffs? Please give a short description		
2.2.7.	In alternative offers, do you include non-EEA destinations at a reduced rate (or with no surcharge) while a roaming surcharge is applied in the EU/EEA?		
2.2.8.	If yes, please list those destinations		
2.2.9.	Other types of alternative tariffs, please give a short description		
2.3 Tariffs without roaming			
		Available Yes/No	Comment
2.3.1.	Do you offer pre-paid tariffs without roaming?		Percentage of customers without roaming
2.3.2.	Do you offer post-paid tariffs without roaming?		
2.3.3.	If yes, please describe below what are these offers (e.g. bundles, data-only, low/medium/high-end tariff plans, etc.) and why roaming is not provided		
		Available Yes/No	If yes, since when
2.3.4.	Were there any tariff plans from which roaming was withdrawn after July 1st 2018?		Percentage of customers without roaming
2.3.5.	If yes, please describe the reason for withdrawing roaming services from a tariff.		

3. Information provided by operators			
3.1 Welcome SMS			
		Yes/No, N/A	
3.1.1	Do you inform your customers in the welcome SMS that the domestic tariff is applied while roaming in EEA?		
3.1.2	Do you provide information on the fair use policy in your welcome SMS within EEA?		
3.1.3	What basic pricing information do you include in welcome SMS outside EEA?		
3.2 Alternative tariffs			
	Alternative tariffs and regulated tariffs	Yes/No, N/A	
3.2.1	Do you inform end-users that have opted for alternative tariffs about the regulated tariff? (N/A if you don't offer alternative tariffs)		
3.2.2	If yes, how do you inform them:	Yes/No, N/A	
a)	Website		
b)	Contract		
c)	On the mobile terminal via SMS		
d)	On the mobile terminal via an application		
e)	Call center		
f)	Personal page e.g. MyPage		
g)	Point of sales		
h)	Bill		
i)	Other (comment box below)		
		Please indicate period	
3.2.3	If yes, how often do you remind end-users with alternative tariffs about the regulated tariff? If other period indicated, use comment box below		
	Alternative tariffs	Yes/No, N/A	
3.2.4	Are there any activation charges applied when switching between alternative tariffs? Also for alternative tariffs limited in time, do you inform end-users about the tariffs/charges they have to pay for roaming services when their alternative tariff period ends?		
3.2.5	Do you inform end-users actively when they		
3.2.6	a) reach the limits included in the bundle ?		
b)	reach a certain percentage of the limits in the bundle (please specify the percentage)		
3.2.7	Regarding alternative roaming bundles, do you inform end-users using an alternative tariff (via SMS, website, etc.) about the charges applied for out-of-bundle consumption?		
3.2.8	Please list any other means below:		
3.3 Switching between tariffs			
		Yes/No	
3.3.1	Is the customer allowed to switch back to RLAH in case they have an alternative tariff according to Article 6e (3)?		
3.3.2	Where do you provide information concerning switching between tariffs ?	Yes/No, N/A	
a)	Website		
b)	Contract		
c)	On the mobile terminal via SMS		
d)	On the mobile terminal via an application		
e)	Call center		
f)	Personal page e.g. MyPage		
g)	Point of sales		
h)	Bill		
i)	Other (comment box below)		
3.4 Information about charges and consumption within FUP			
	In case roaming volumes are calculated according to the open data bundle rule ...	Yes/No, N/A	Comment
3.4.1	Do you provide generic information on how the data roaming limit is determined?		
3.4.2	Do you provide information about the actual roaming limit?		
3.4.3	If yes, how do you provide information on actual available roaming volumes to the end-user?		
a)	On the mobile terminal via SMS		
b)	On the mobile terminal via an application		
c)	Personal page e.g. MyPage		
d)	Call center		
e)	By any other means (please specify below)		
3.4.4	Do you actively inform end-users when they reach the roaming limits included of the open-data bundle ?		
3.4.5	If yes, how do you provide information on actual available roaming volumes to the end-user?		
a)	On the mobile terminal via SMS		
b)	On the mobile terminal via an application		
c)	Personal page e.g. MyPage		
d)	Call center		
e)	By any other means (please specify below)		

In case the control mechanism is applied ...		Yes/No	Comment	
3.4.6	Do you provide information within the observation period?			
3.4.7	Do you provide information on			
a)	domestic usage			
b)	domestic presence			
c)	roaming usage			
d)	roaming presence			
	How do you provide such information?	Domestic services	Roaming services	Comment
a)	On the mobile terminal via SMS			
b)	On the mobile terminal via an application			
c)	Personal page e.g. MyPage			
d)	Call center			
e)	By any other means (please specify below)			
3.4.8	What kind of evidence is requested to assess stable link and/or normal residence?	Yes/No	Comment	
a)	a declaration by the customer			
b)	a presentation of any valid document which proves that the person falls into one of the categories of stable links			
c)	details of the customer's address and/or details showing the provision of any other services to them at the given address (e.g. a utility bill)			
d)	a declaration or other proof from an employer or educational establishment			
e)	evidence of a posting in a Member State where the roaming contract has been requested			
f)	proof of registration with the local council or any other public authority			
g)	registration in a population registry indicating that the customer is permanently residing in that Member State			
h)	additional evidence (in the case of cross-border workers) of employment by a company in a different country of residence			
i)	any other reasonable evidence not listed in Recital 10 that could be used to prove stable link or permanent residence, such as a valid property rental agreement			
j)	in the case of business customers, relevant evidence might include documentary proof of the establishment or activities of the business in the Member State concerned.			
k)	other evidence accepted to justify a stable link and/or normal residence; list them below			
4. Information and tools to compare tariffs for international roaming				
4.1 Tables comparing all international roaming tariffs				
4.1.1	Is there any table/tool/application for end-users comparing alternative tariffs with regulated roaming tariffs available on your website? (NA if alternative tariffs are not regulated)	Yes/No, N/A		
4.1.2	If yes, please, provide the link			
4.2 Tools for selecting the most adequate domestic tariff including intra-EU roaming based on estimation of consumption				
4.2.1	Do you provide end-users with any application to help them select the most adequate tariff for their pattern of consumption?	Yes/No		
4.2.2	If yes, please, provide the link			
4.3 Information for end-users on estimating data traffic consumption				
4.3.1	Do you provide end-users with information on how to estimate data services consumption based on the use of Internet services such as web browsing, e-mails, and specific applications as Google Maps or Whatsapp?	Yes/No		
4.3.2	If yes, please, provide the link			
4.4 Information for end-users about Quality of Service during intra-EU roaming				
4.4.1	Do you provide separate itemized information on the quality of service during intra-EU roaming	Yes/No	If Yes Per country or per visited network per country or in	If Yes URL website
5. Any other input that can be considered useful by the provider				