

BEREC Report on Transparency and Comparability of International Roaming Tariffs

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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 2021, BEREC sent a questionnaire to operators and National Regulatory Authorities (NRAs) in order to gather information for the period August 2020 to July 2021 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.

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 2015/2120 and Regulation 2017/920, (hereafter “Roaming Regulation”) and the Commission Implementing Regulation 2016/2286 (hereafter “CIR”) customers should have easy access to understandable information on prices and conditions for each existing roaming tariff including its Fair Use Policy (FUP) if applicable. According to the Roaming Regulation, it should also be possible to switch between roaming tariffs quickly and conveniently.

In view of the application of FUPs, BEREC found that roaming providers make use of all kinds of FUP laid down in the CIR. It is worth noting that limiting roaming data volumes according to the provisions for open data bundles is the most used policy, as in the years before.

In specific and exceptional circumstances, and 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, a total amount of 15 applications for sustainability surcharges have been received for the period 1 August 2020 to 31 July 2021. Out of these 15 applications, 14 were granted. It seems that after a certain acclimatization phase of the RLAH principle with large numbers of applications, RLAH is no longer a threat to the domestic charging models of most of the mobile providers.

With regard to alternative tariffs in addition to regulated roaming tariffs, around 28 % of the responding operators said that they offer alternative roaming tariffs. According to the answers received, BEREC has also noted that 59% of operators also include non-EEA destinations in addition to the EEA in their RLAH tariff plans for at least some of their users (business/consumers or post-paid/pre-paid).

Finally, on the structure of roaming tariffs this year’s evaluation confirmed the findings of previous years concerning tariffs without roaming. Although this year’s questionnaire specified that fixed wireless access should be excluded, some operators still have included such tariffs in their reply. According to the information provided, mainly data only/mobile broadband plans do not include roaming options due to the fact that in general a high domestic data volume is granted in those tariffs.

Regarding the availability of 4G data roaming services, 40 % of the operators stated¹ that they offer 3G roaming services in the EU/EEA even where 4G would be available, however only 4 % of those operators are not planning to provide 4G roaming services by the end of 2021.

When BEREC asked whether NRAs had received consumer complaints about international roaming, 76% of the responding NRAs said that they had received complaints on roaming issues. Compared to the previous reporting period, this number is slightly lower, but the reporting period also covered a time with strict limitations on travel and therefore less roaming usage. In addition, there has again been a decrease in the total number of registered complaints of around 45 %. The categories of complaints that are most frequent are still end-users that inadvertently roam on a non-EU network while remaining on EU territory, followed by the cut-off limit not activating as expected and end-users being unaware that international calls are not covered by the Regulation.

BEREC asked operators if they informed customers about the FUP applied in its “Welcome SMS”.² In total, 82 % of the operators that apply a FUP also provide information about it in the “Welcome SMS”. This indicates a slight decrease in the number of operators which provide this information, compared to the findings in the previous report.

Another question dealt with the type of information provided by operators to end-users about the FUP. BEREC finds that 69 % of the roaming providers who implemented a FUP inform their customers about how the fair use limit is calculated. 92 % of the roaming providers state that they provide information about the actual roaming limit. These affirmative answers correspond to a slight decrease in comparison to the previous period.

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 (73 %), 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) (61 %) and a declaration by the customer (54 %).

The data collected for this report shows that a few NRAs or consumer associations provide tariff comparisons. In total, 33 % of the responding NRAs reported that they featured information on their website comparing domestic tariffs including intra-EEA roaming provided by different operators, which is an increase compared to last year.

Customers should be able to select the most suitable tariff based on their own estimated pattern of consumption. In this regard, 32 % 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.

¹ 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 whether those operators responding with “yes” apply this restriction to all countries and all networks.

² 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.

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 FUPs 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 August 2020 to July 2021 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.

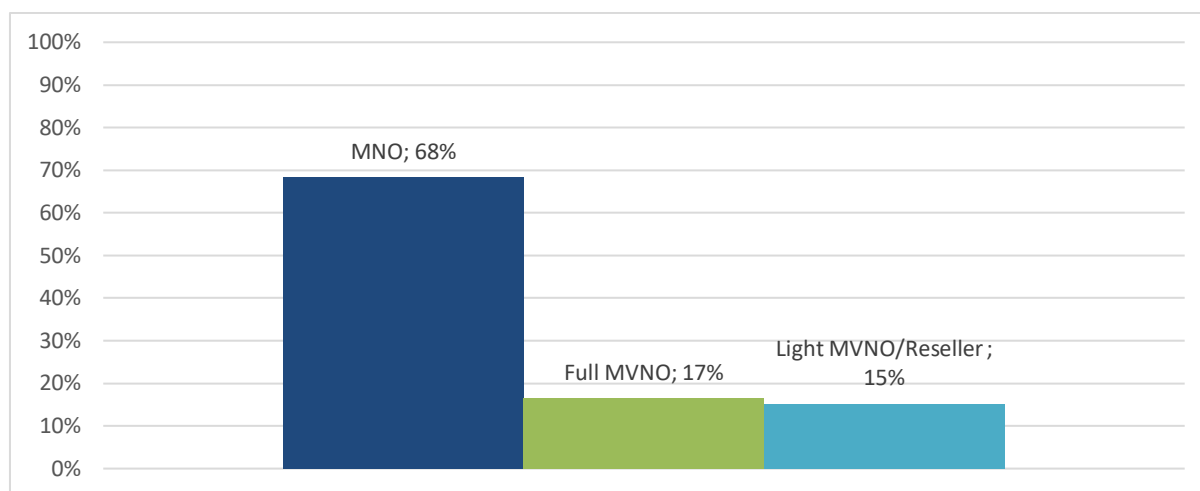
2. Information collected by BEREC

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 FUPs 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 price comparison tools for international roaming were addressed to operators. The operators' questionnaire also contained questions about Quality of Service (QoS) for EEA roaming services and the information provided to roaming subscribers for Value-added services (VAS).

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: Type of operators submitting feedback



A total of 29 NRAs and 151 mobile providers operating in EEA countries sent their responses to BEREC. 68 % of the responses corresponded to MNOs and 32 %³ to full MVNOs or light MVNOs and resellers, as shown in Figure 1.

³ In some graphs the percentages do not sum up exactly to 100 % due to rounding of numbers.

3. Structure of tariffs

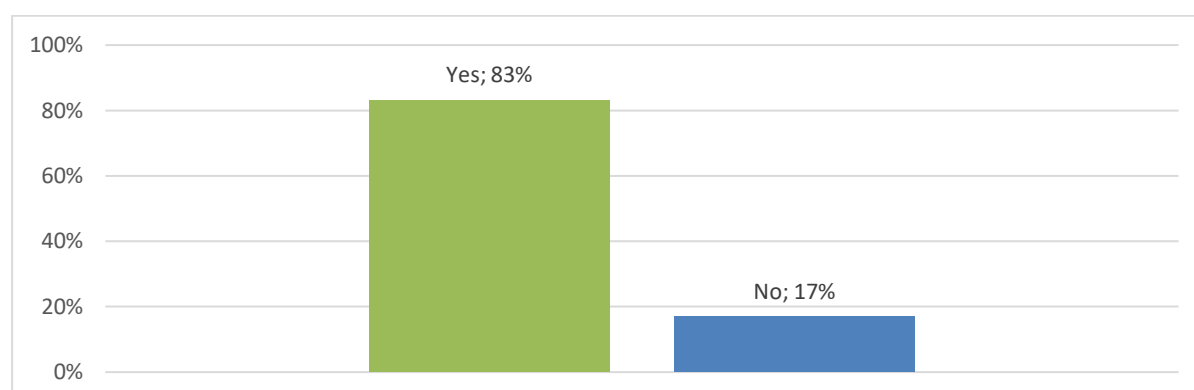
Pursuant to Article 6a of the Roaming Regulation, roaming providers shall not levy any surcharge in addition to the domestic retail price on roaming customers in any Member State for any regulated roaming calls made or received, for any regulated roaming SMS sent and for any regulated data roaming services used, including MMS, 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.

Nevertheless, roaming providers are entitled to apply surcharges exceptionally in case a fair use limit is reached or in case the sustainability of their domestic charging model is at risk and they have applied for and been granted a derogation from the RLAH rules by the competent NRA. Detailed rules on the application of FUP and on the methodology for assessing the sustainability of the abolition of retail roaming surcharges are contained in the CIR. Moreover, roaming providers are allowed to offer alternative tariffs according to Article 6e (3) of the Roaming Regulation in addition to regulated roaming services. Lastly, mobile providers are not obliged to offer roaming services and therefore can restrict tariff plans or services to domestic use only. Against this backdrop, BEREC in the following chapter has analysed tariff plans, their structure and services included in those plans.

3.1. Application of FUPs on regulated roaming services

BEREC has collected information from operators regarding the structure of default regulated tariffs, pursuant to Article 6a of the Roaming Regulation. In particular, BEREC was interested in whether operators have implemented the stable link criterion, whether they apply an open data bundle limit, whether they make use of the control mechanism and the monitoring of the objective indicators as described in Article 4 (4) CIR. BEREC also collected information on whether non-EEA destinations were included in the regulated tariffs. According to the answers received, roaming providers in addition to the EEA also include non-EEA destinations to their RLAH tariff plans (see Chapter 3.5).

Figure 2: FUP – Does your company offer tariff plans applying a FUP according to the CIR?

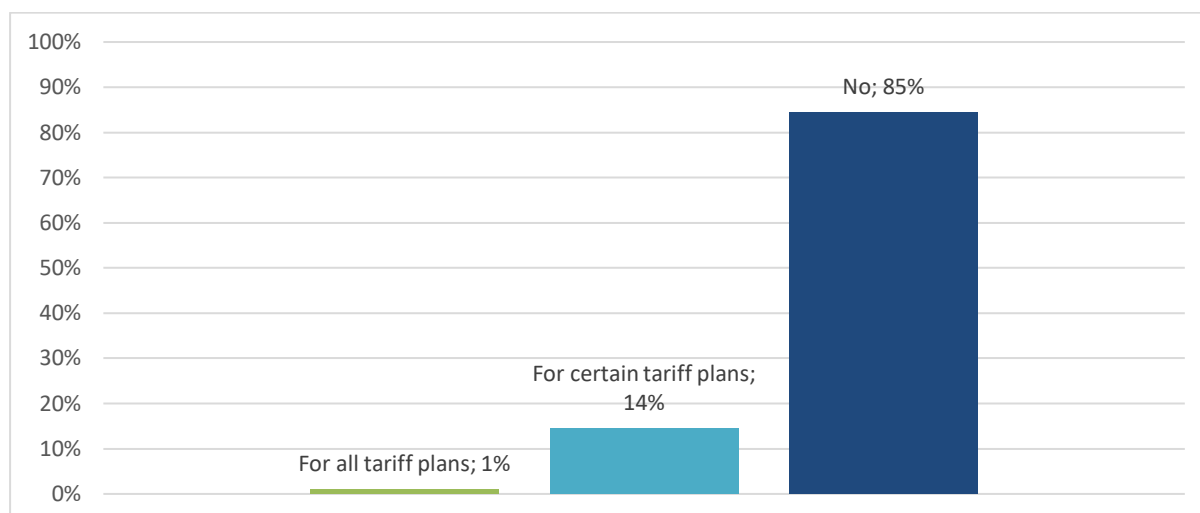


In general, 83 % of the respondents answered that they are applying a FUP to their roaming tariffs.

3.1.1. Stable link (Article 4 (1) CIR)

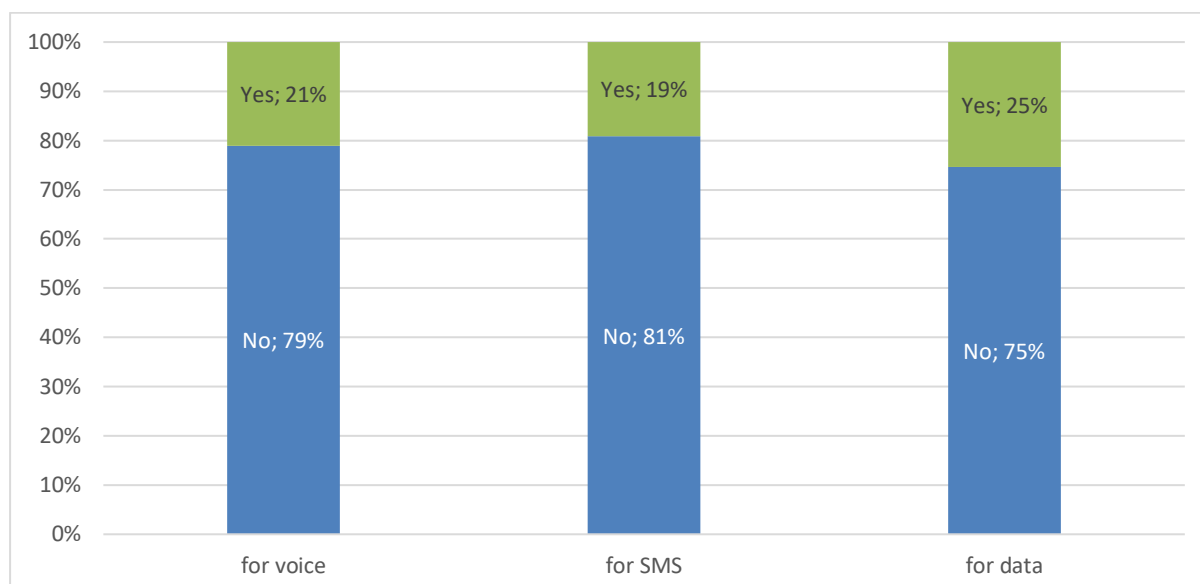
The stable link FUP is laid down in Article 4 (1) of the CIR. According to this principle operators can require a proof of permanent presence of their customers in their native country. According to the responses, only 1 % of roaming providers apply the stable link concept to all tariffs, 14% apply it to certain tariff plans, and 85 % do not apply the stable link criterion.

Figure 3: FUP – Does your company apply a stable link criterion acc. to Art. 4 (1) CIR?



From those roaming providers who make use of the stable link criterion, 15 % require a stable link for prepaid offers, 32 % for post pay offers, and more than half (53 %) for both kinds of plans.

Figure 4: FUP– Has your company levied surcharges due to Article 4 (1) CIR?



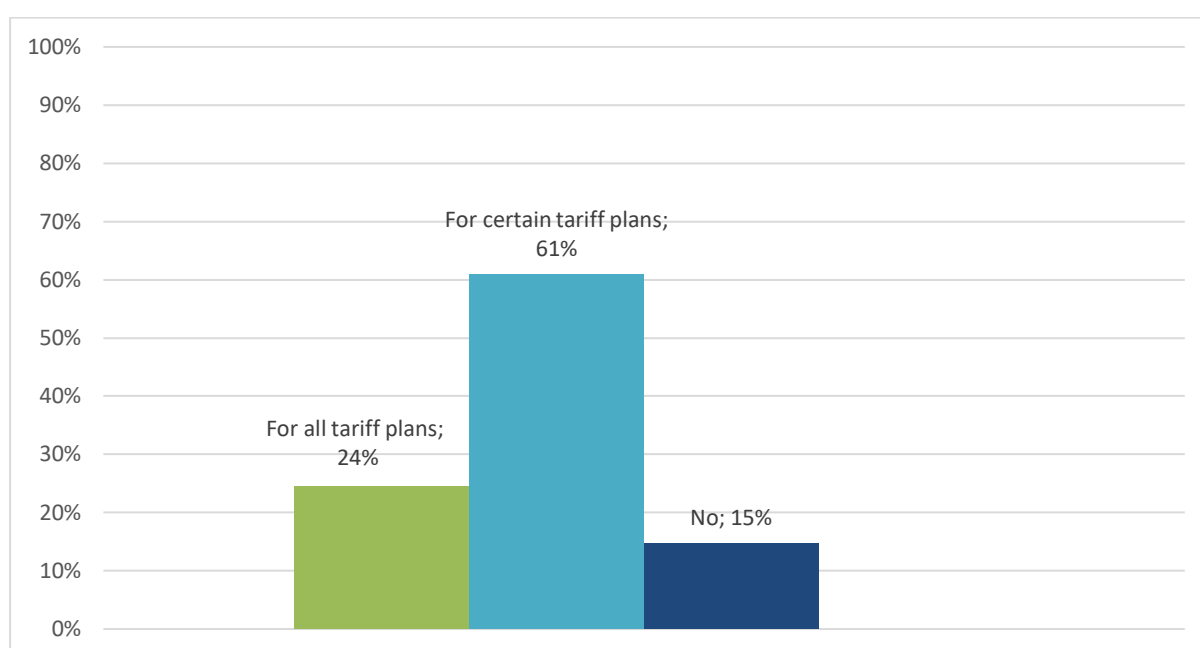
In the event that customers cannot or do not want to provide a stable link, the roaming provider is entitled to apply a surcharge for the provision of roaming services. In cases where the stable link was not provided, 21 % of the respondents implementing the stable link concept applied

a surcharge to its customers for voice services, 19 % said that they levied surcharges for SMS, and 25 % did so for data services. This shows a slight increase in surcharges levied for all services in comparison to last year, where the percentages were 17 %, 16 %, and 22 % respectively.

3.1.2. Open data bundles (Article 4 (2) CIR)

In view of tariff plans which include an unlimited domestic data volume or where the price per unit – derived by dividing the total price of the tariff plan by the total data volume – is lower than the maximum wholesale data cap, operators are allowed to limit data roaming volumes according to the calculation referred to in Article 4 (2) of the CIR.

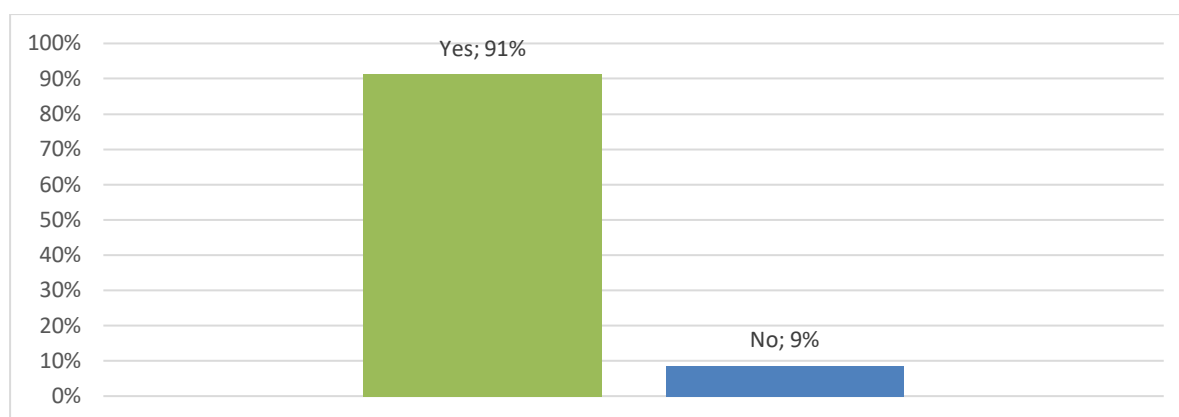
Figure 5: FUP – Does your company apply open data bundle FUP according to Article 4 (2) CIR?



From all responding operators, as shown in Figure 5, 24 % applied a data limit to every tariff plan classified as “open data bundle”. At the same time, 61 % of these operators apply a data limit only to some of the tariff plans classified as “open data bundle”. 15 % of the respondents said that they do not make use of such a FUP.

Figure 6 shows that, when it comes to the calculation of the minimum data roaming allowance which has to be granted for customers, more than 90 % of the responding providers that apply open data bundle FUP perform calculation in accordance to the detailed formula referred to in the CIR.

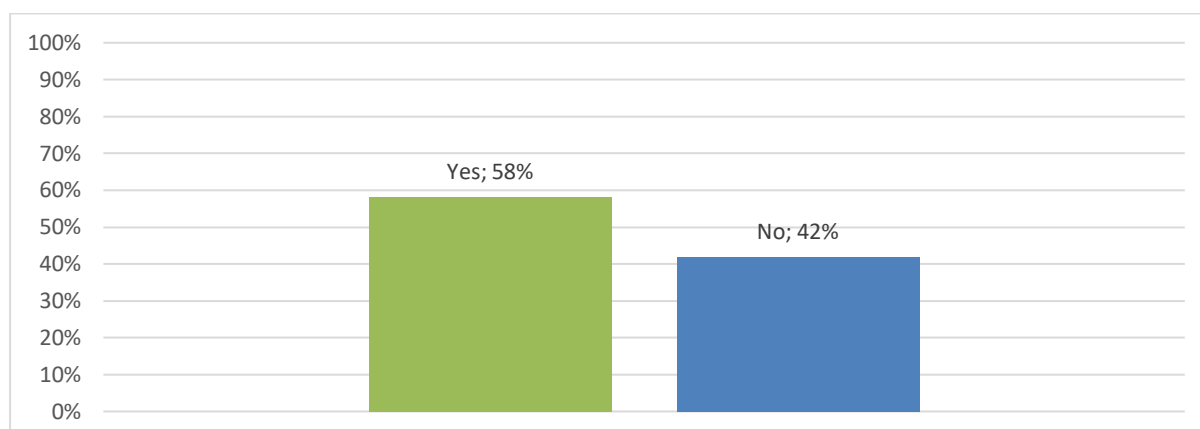
Figure 6: FUP – Is the data roaming limit calculated acc. to the calculation laid down in the CIR?



Furthermore, 9 % of the roaming providers are not calculating the roaming allowance according to Article 4 (2) CIR. Those roaming providers are deviating from the minimum limit and, in harmony with the roaming rules, they are granting higher data roaming volumes. According to their input, in most cases this is done by rounding the calculated volume up in favour of the customers. This percentage is slightly lower than in previous year.

In cases where the (minimum) data roaming allowance based on Article 4 (2) CIR is used, the roaming providers are entitled to levy surcharges for the subsequent data usage of the customer travelling in the European Union. Figure 7 shows that 58 % of the responding roaming providers applied a surcharge to their customers after the granted data roaming allowance was exhausted.

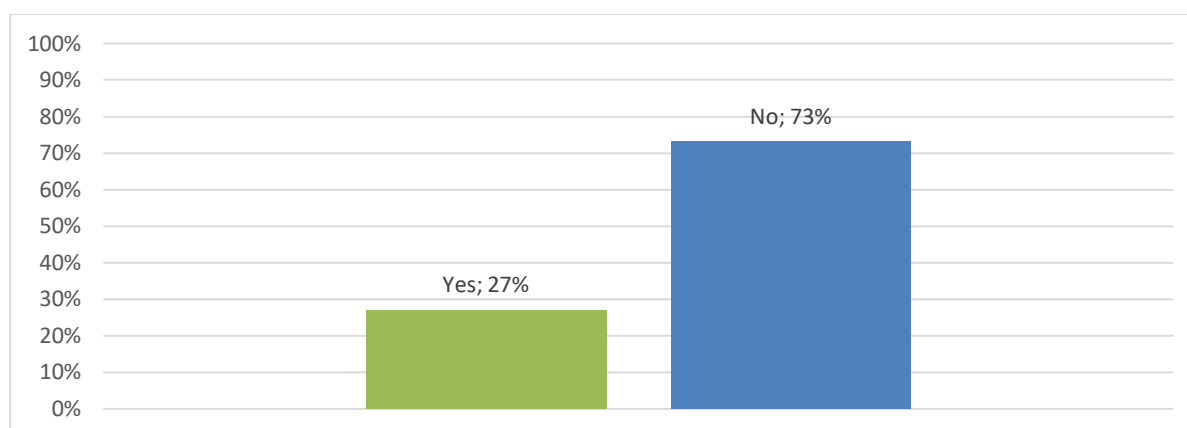
Figure 7: FUP – Has your company levied surcharges for data roaming due to Article 4 (2) CIR?



3.1.3. Prepaid data roaming limits (Article 4 (3) CIR)

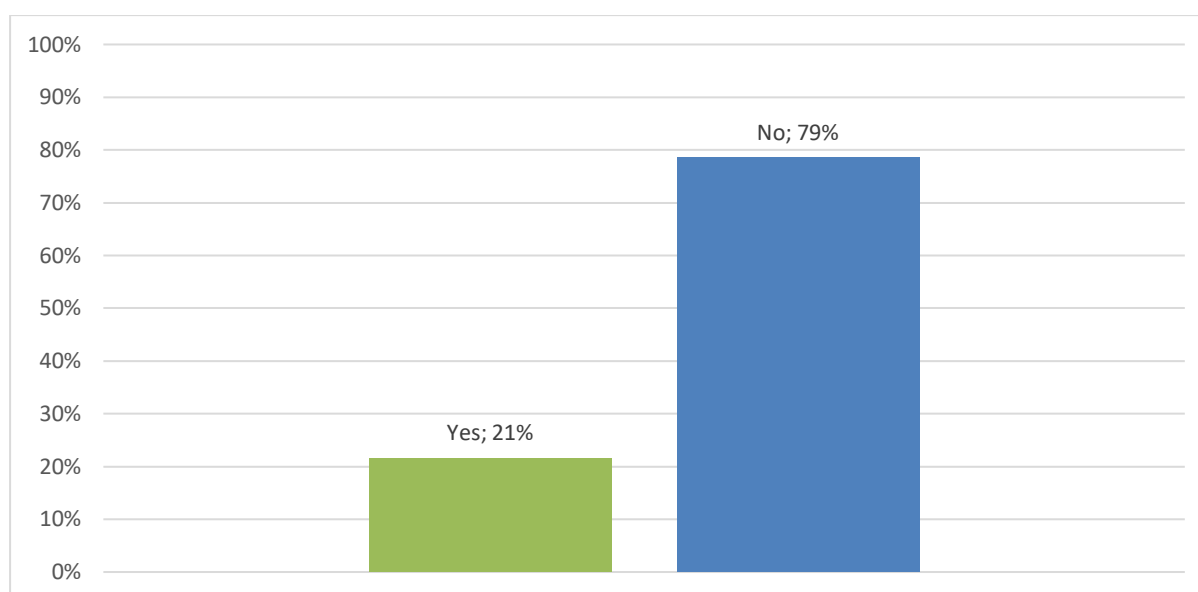
Limiting roaming data volumes for prepaid plans according is a possibility roaming providers have according to Article 4 (3) CIR.

Figure 8: FUP – Does your company apply a data roaming limit for prepaid acc. to the CIR?



Almost a third of the respondents who said that they apply any FUP indicated that they limited the data usage of prepaid offers. This corresponds to an increase since last year when 21 % of these respondents indicated the application of this roaming data limit.

Figure 9: FUP – Has your company levied surcharges for data roaming services acc. to the CIR?



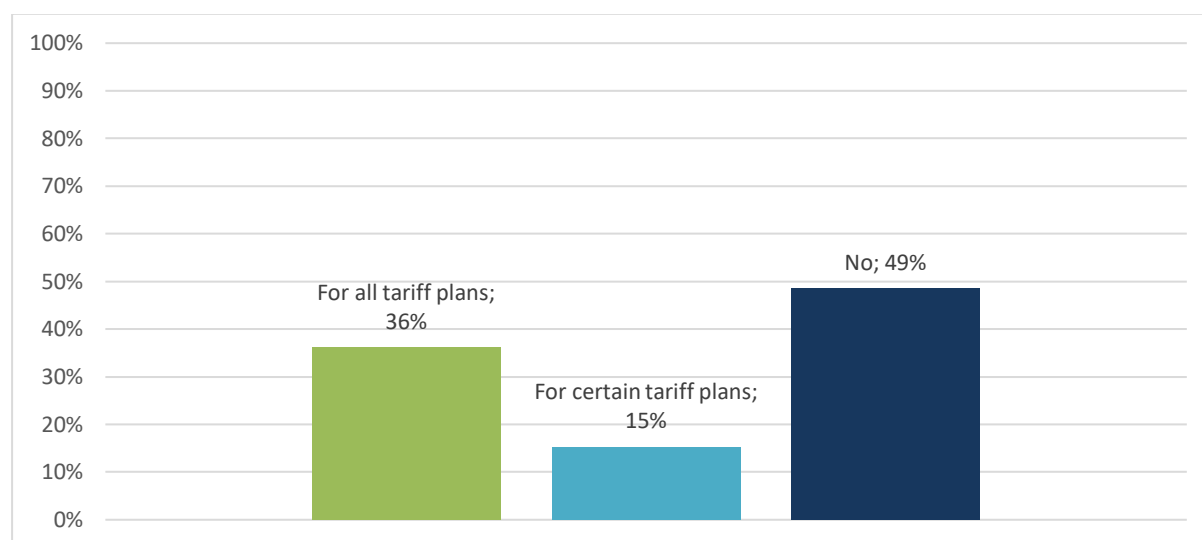
21 % of the roaming providers who limit the data volumes of prepaid offers answered that subsequently, they have also applied surcharge for data usage exceeding the regulated FUP limit.

3.1.4. Objective indicators (Article 4 (4) CIR)

Article 4 (4) CIR gives roaming providers the opportunity to observe and to surcharge the use of regulated roaming services in case of abusive or anomalous usage of roaming services. Therefore, roaming providers levying this surcharge must observe the presence and the usage of roaming customers and based on this observation must prove that both the presence and the usage prevalently occurred in their home country.

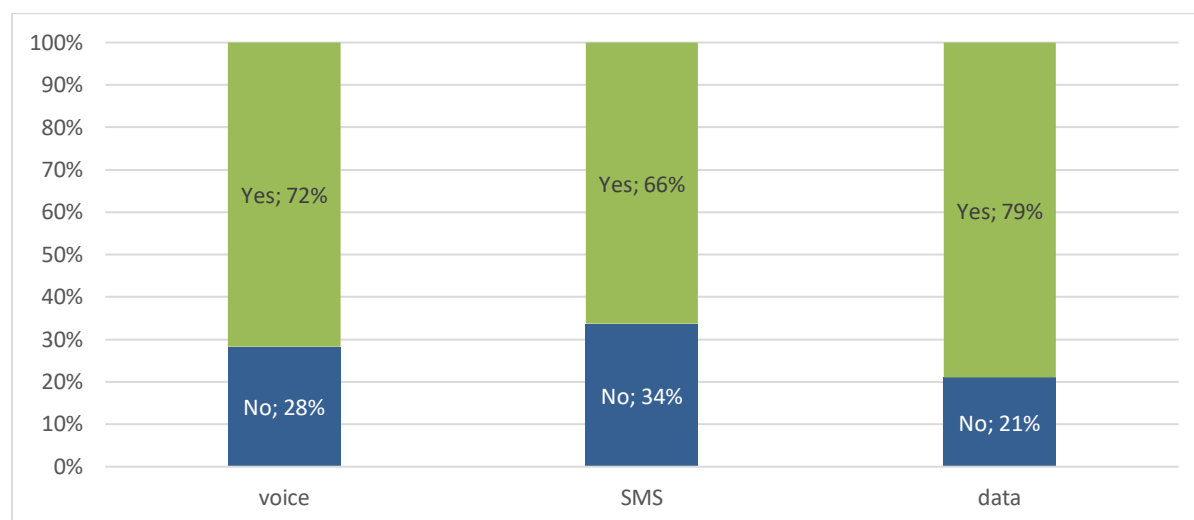
Regarding the implementation of this control mechanism, Figure 10 shows that slightly more than half of the respondents (36 % for all roaming tariff plans and 15 % for certain roaming tariff plans) implemented the control mechanism and another half (49 %) has not implemented the control mechanism at all. These figures do not represent a significant change since last year.

Figure 10: FUP – Does your company apply a control mechanism / objective indicators acc. Article 4 (4) CIR?

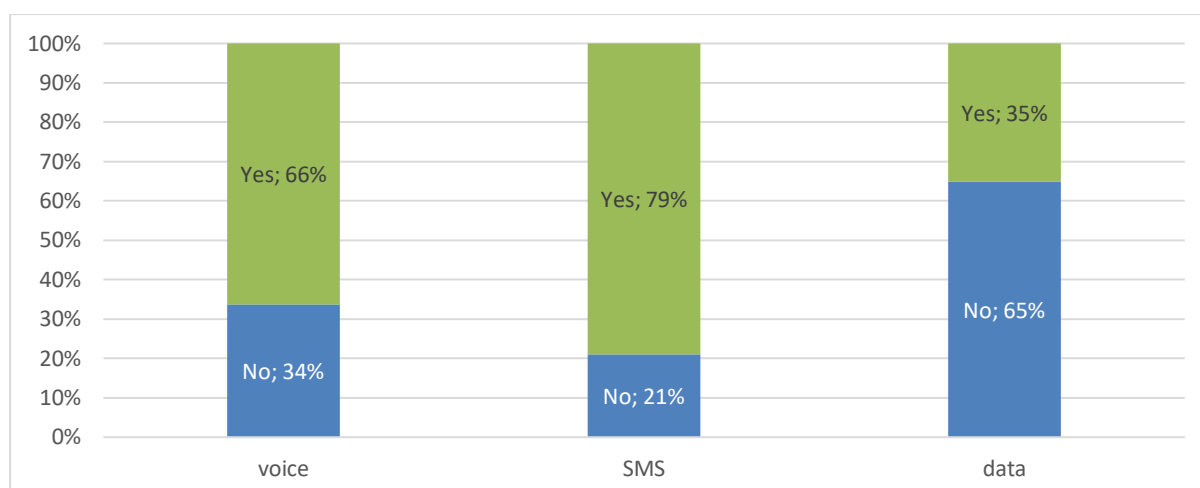


It is worth mentioning that 84 % stated that the observation window within their control mechanism is according to the CIR, i.e. 4 months. This however means that 16 % has a longer observation period than the minimum observation period of 4 months established in the CIR.

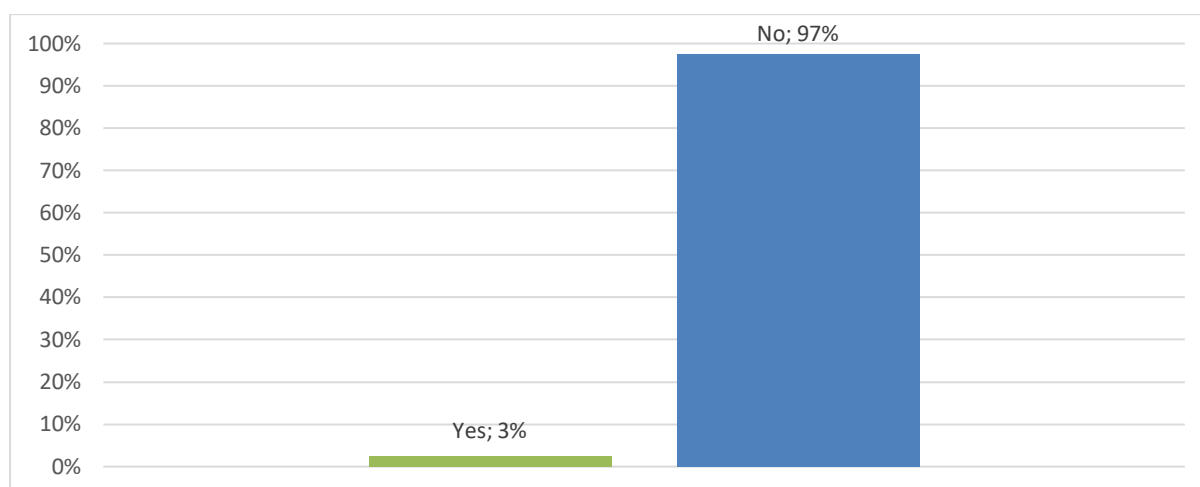
Figure 11: FUP – Which roaming services does your company observe?



In view of the observed services by the roaming service providers, 72 % answered that they observe voice services, 66 % answered that they observe SMS services, and 79 % of roaming providers which have implemented a control mechanism analyse how much and where data services are used by customers.

Figure 12: FUP – Has your company levied surcharges for roaming services due to Art. 4 (4) CIR?

According to the information provided, 66 % of the respondents have applied surcharges to voice services due to their control mechanism, 79 % for SMS services and 35 % for data services.

Figure 13: FUP – Has your company levied surcharges for roaming services based on other objective indicators?

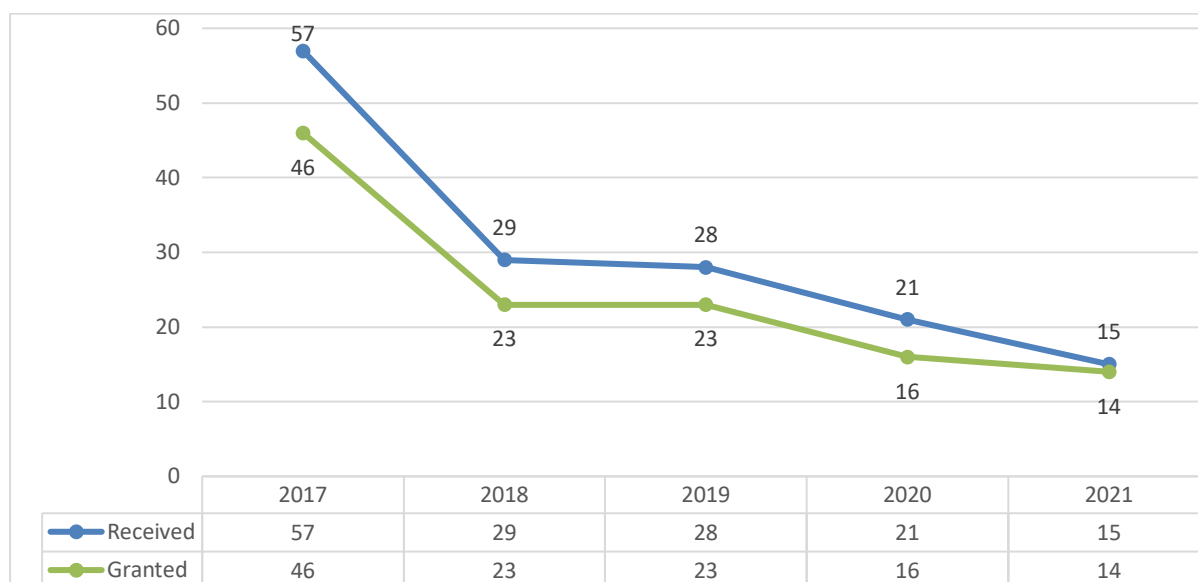
Besides a control mechanism based on the observation of consumption and presence, roaming providers may also apply other objective indicators. Apart from the ones mentioned in the CIR, other indicators mentioned include checking the number of SIM cards bought by a customer and informing the customer accordingly.

Nearly no provider levied surcharges based on other objective indicators (only 3 %), which corresponds to a reduction from previous year (14 %).

3.2. Application of derogation mechanism

By way of derogation from offering roaming at domestic prices, roaming tariffs may include surcharges based on application of a provider and authorised by the NRA in order to ensure the sustainability of roaming provider's domestic charging model.

Figure 14: Derogation applications received by NRAs



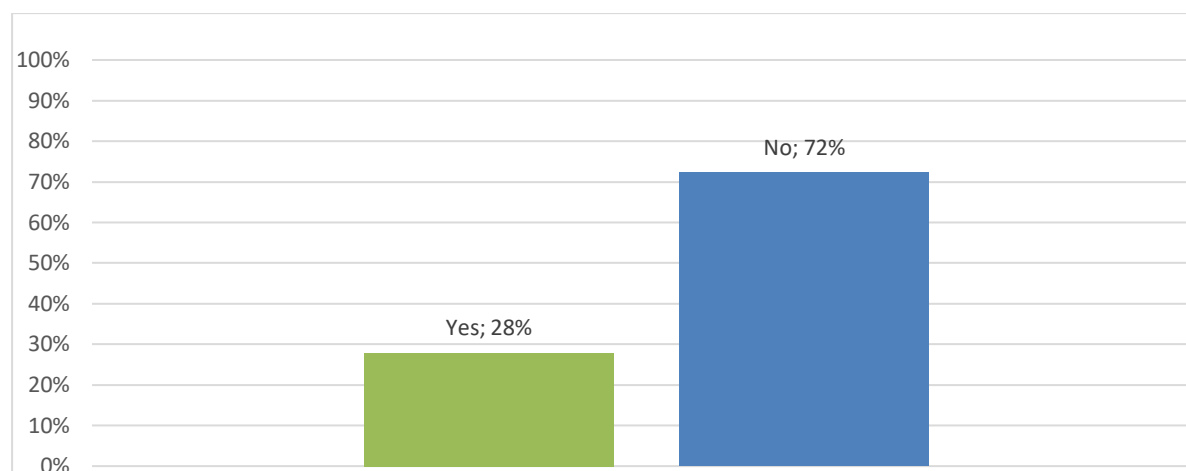
As shown in the graph above, the total number of applications received by NRAs is decreasing since RLAH came into force. It is worth mentioning that NRAs only received 15 applications for derogation and 14 were granted. In this context, a share of 6 % of the responding roaming providers stated that in the period of consideration of this report they made use of the derogation mechanism referred to in Article 6c of the Roaming Regulation. 67 % of these operators levied surcharges on all roaming tariff plans and the other 33 % applied surcharges for certain tariffs only.

3.3. Alternative tariff plans

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 and 6c and Article 6e (3), paragraph 1. By virtue of this choice, 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.

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

Figure 15: Structure of alternative roaming tariffs – do you offer any alternative tariffs in line with Article 6e (3)?



According to the responses, 28 % of roaming providers make use of the opportunity to offer alternative tariff plans in parallel to the provision of RLAH plans. On the other hand, 72 % of the respondents stated that they do not offer alternative tariff plans according to Article 6e (3) of the Roaming Regulation.

Figure 16: Structure of alternative roaming tariffs - What kind of packages does your company offer?



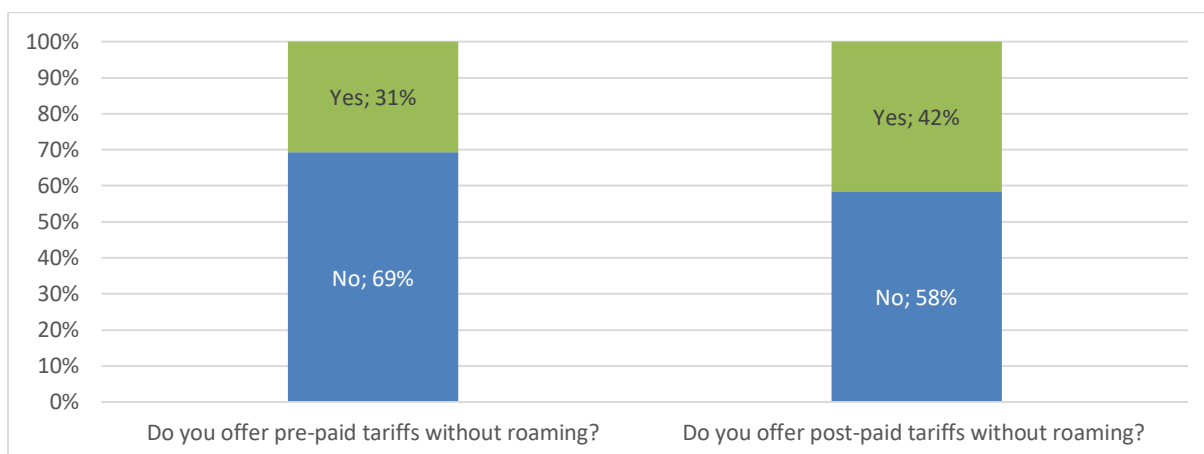
Of all responding operators offering alternative roaming tariffs, 18 % of the operators offer such tariffs in the form of daily packages, 11 % in the form of weekly packages, 29 % in the form of monthly packages and 18 % in other packages.

According to a few of the respondents, other alternative tariffs are tailor-made for individual solutions and business customers.

3.4. Tariffs without roaming

BEREC has collected information on tariffs without any roaming option. 31 % of the responding roaming providers said that they offer such tariffs as pre-paid plans and 42 % said that they offer such tariffs as post-paid plans. These percentages are almost the same to last year's figures. Although this year's questionnaire specified that fixed wireless access should be excluded, some operators have also included such tariffs in their reply.

Figure 17: Tariffs without roaming

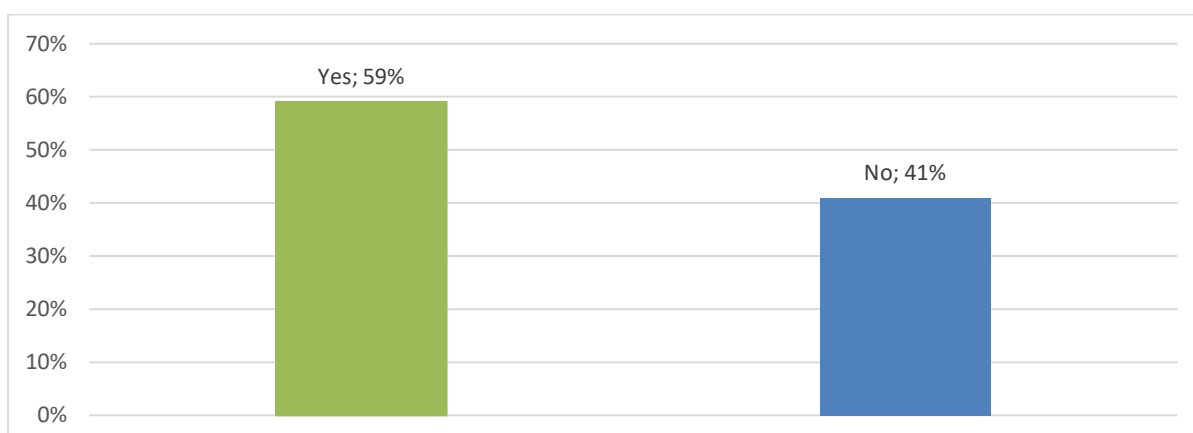


According to the information provided by operators, the tariffs without roaming are mainly data only/mobile broadband plans.

3.5. Non-EEA destinations

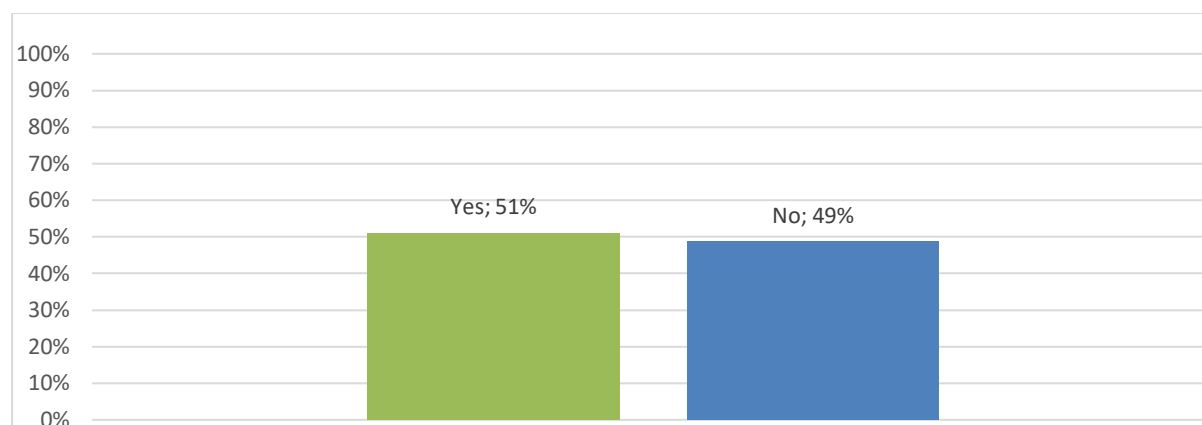
RLAH only applies to the usage of terrestrial networks in the EEA. However, operators may choose to extend RLAH for consumers roaming outside the EEA. BEREC has therefore asked the operators to supply information about this.

Figure 18: Do you include non-EEA destinations in the RLAH FUP in some of your offers?



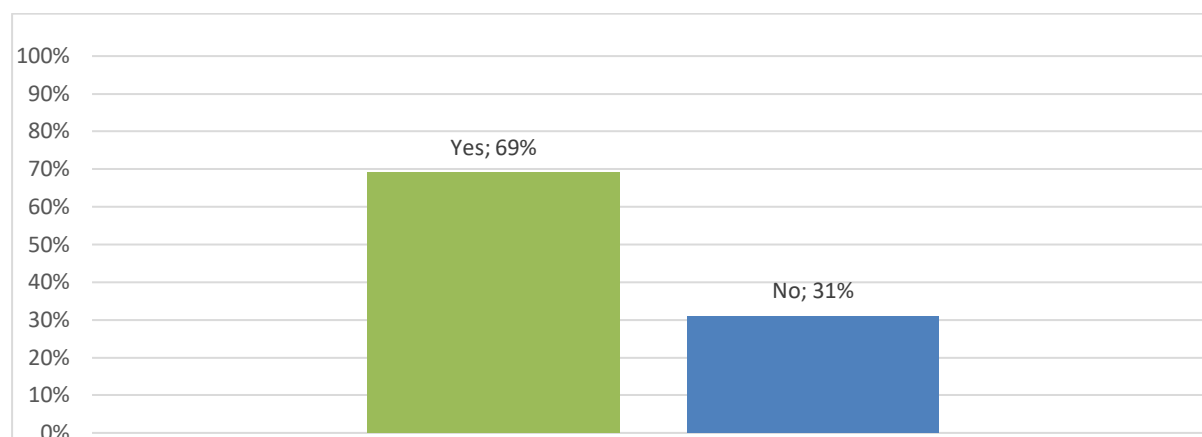
59% of operators stated that they include non-EEA destinations in the FUP of at least some of their users (business/consumer or post-paid/pre-paid), as illustrated in Figure 18. The destination included most often was the UK (53 operators), followed by Switzerland (44 operators) and Monaco (20 operators).

Figure 19: Do you offer a facility for customers to block roaming services in third countries?

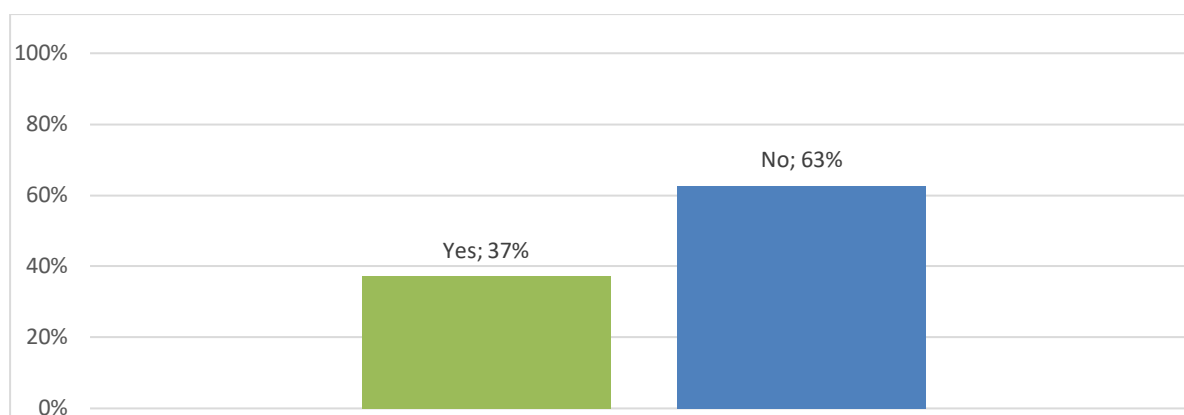


Facilities to block roaming are important tools for consumers to remain in control of their consumption and expenses when travelling to non-EEA destinations. However, operators are not obliged to provide such tools for roaming outside the EEA. As shown in Figure 20, the number of operators which offer facilities for blocking roaming in third countries is slightly higher (51%) than the number of operators which do not offer such facilities (49%).

Figure 20: Do you provide information to customers on how to avoid inadvertent roaming in border regions?



In border regions consumers may experience inadvertent roaming incurring unexpected and high roaming charges. Figure 21 shows that 69 % of the respondent operators provide information to customers on how to avoid inadvertent roaming in border regions while 31 % do not inform their customers about the case of inadvertent roaming.

Figure 21: Do you offer a facility for customers to block roaming on non-terrestrial networks?

When consumers use roaming services aboard ships or planes, they are often automatically handed-over to non-terrestrial networks, which can lead to unexpected and high charges. BEREC has therefore requested information from operators whether their customers have an option to block⁴ roaming on non-terrestrial networks. 63% of the responding operators did not offer such a facility, whereas 37 % of the operators allow their customers to block roaming on non-terrestrial networks (see Figure 22).

4. Transparency of roaming services

4.1. Complaints on transparency issues received by NRAs

The analysis of complaints is based on 29 responding NRAs, the same as the previous period. The questionnaires revealed a decrease from the previous period in the number of responding NRAs that had received complaints on transparency. Since August 2020, 76 % of the NRAs had received complaints compared to 81 % in the previous period. The total number of complaints registered by the NRAs during this reporting period was about 1,000. This implies a decrease of around 45 % compared to the number of complaints observed in the previous period (1800). The number of complaints reported in BEREC's Transparency and Comparability Reports might not give a complete picture of the total number of complaints regarding transparency issues. In some countries, other bodies than the NRA might handle customer complaints.⁵ 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.

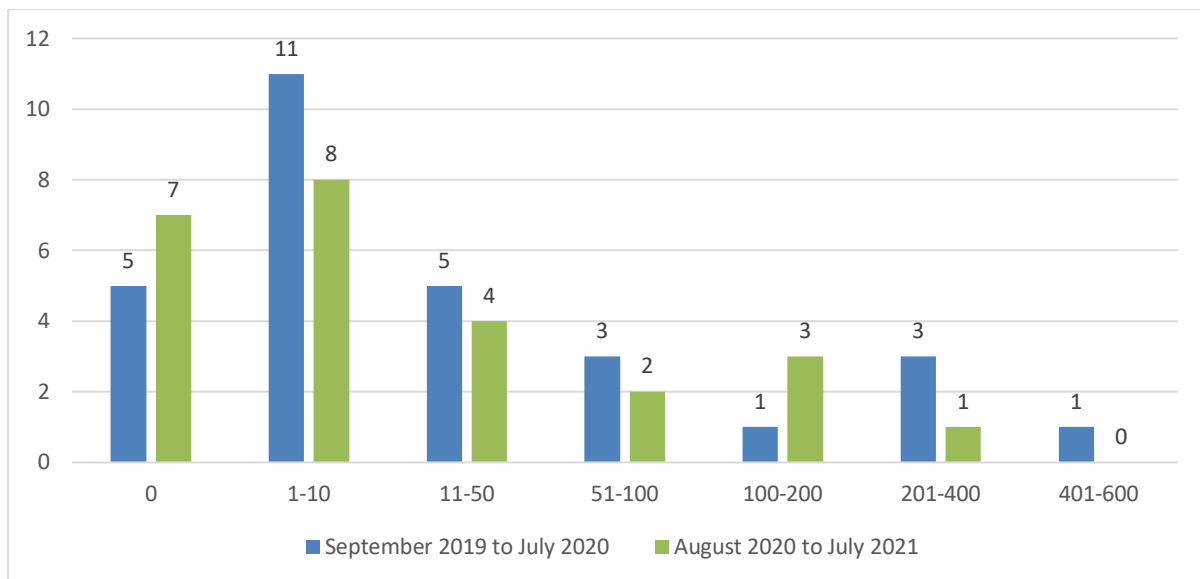
Figure 23 shows the NRAs grouped by the number of complaints they received.⁶

⁴ From the questionnaire it is not clear whether operators refer to an automatic facility

⁵ The complaints reported by CNMC for this report have been provided by the Ministry of Economic Affairs and Digital Transformation. This Ministry has the competences related to end-users complaints in electronic communications services in Spain.

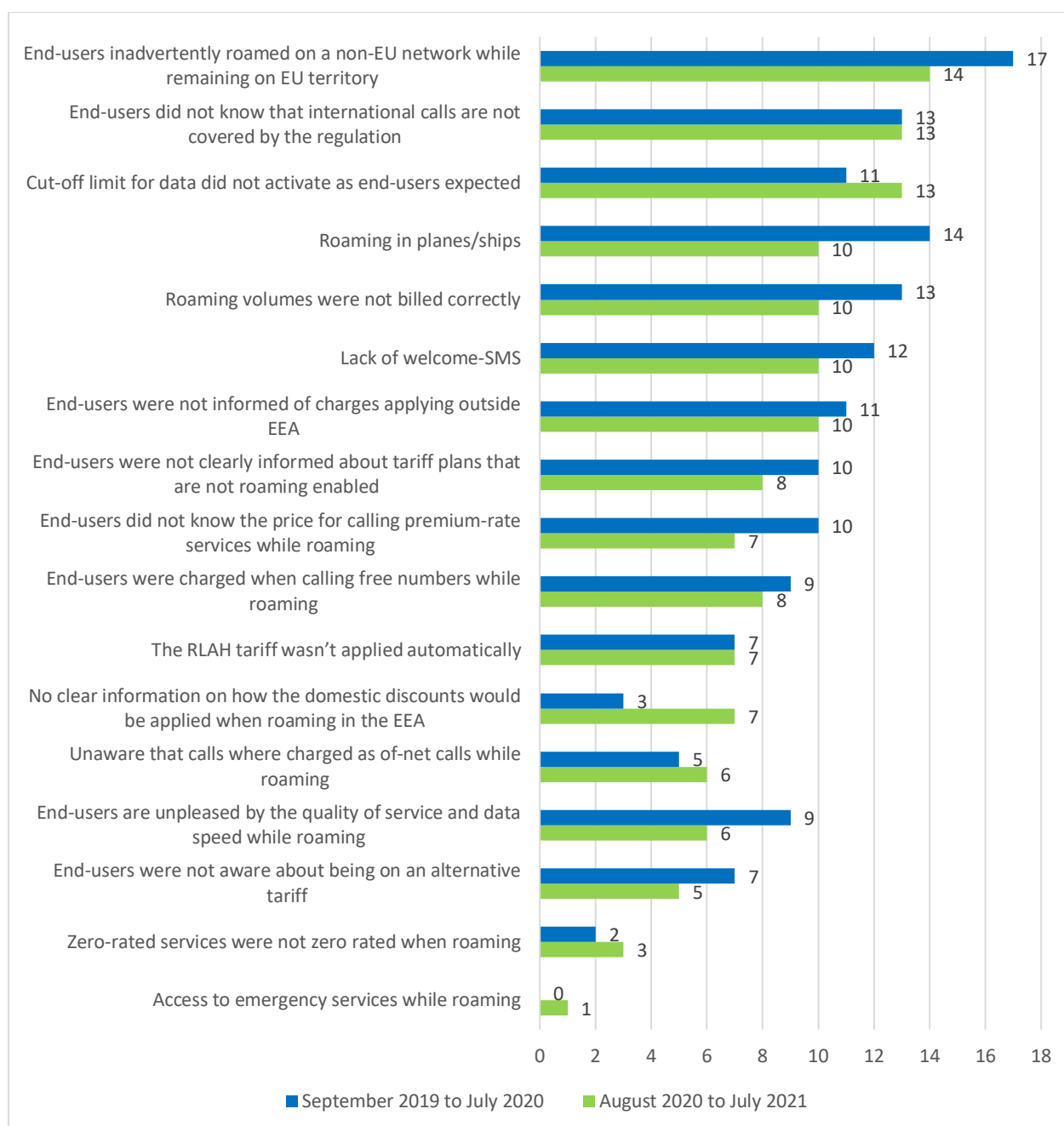
⁶ Three NRAs did not have data on the number of complaints

Figure 22: NRAs grouped by number of complaints



The trend during this period is that more NRAs did not receive complaints at all and in general a decrease in the number of complaints per NRAs.

The figure below shows how many NRAs received and registered complaints on each of the defined categories. 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.

Figure 23: Number of NRAs that have received complaints on various categories of transparency issues

Inadvertent roaming refers to end-users inadvertently roamed on a non-EEA network while remaining on EEA territory. This was the largest category of complaints during this period. Around 48 % (14) of the responding NRAs received complaints on this issue. This is, however, a decrease from the previous period. One NRA received close to 100 complaints, two NRAs received around 30 complaints and one NRA just stated they received many complaints on this issue (out of a total of more than 200 complaints).

Around 45 % (13) of responding NRAs have received complaints from customers that did not know that international calls are not covered by the regulation, however the number of complaints in each country was low (less than ten). The same share of responding NRAs have

received complaints from customers who had the experience that the cut-off limit did not activate as expected. Two NRAs stated that they receive many complaints on this issue and three NRAs had around 15 complaints each on this issue. For the rest of the NRAs the number of complaints was below ten.

Complaints regarding roaming on board planes and ships still arise in many countries. This year BEREC looked deeper into this topic to find out more about the reason for the complaints. The responses to the questionnaire reveals that five NRAs received complaints from end-users that actively used roaming services on planes/ships without being aware of the price and six NRAs received complaints from end users that inadvertently roamed on planes and ships. The number of complaints on these issues are low in each of the countries.

Around 34 % (10) of responding NRAs still receive complaints regarding the billing of roaming. One NRA received around 20 complaints on this issue, another NRA more than 70 complaints and another just stated many. A lack of welcome SMS appears also as a reason for complaints in around 35 % of the NRAs. One NRA received many complaints on this issue, another NRA received more than 30 complaints. A lack of information regarding charges applying outside the EEA is also a source for complaints for 34 % of the NRAs; however, the number of complaints in each country is low (less than 10) and in general, there is a slight decrease in the number of NRAs that have received complaints in all of the three categories.

Around 27 % (8) of responding NRAs received complaints from end-users that were not clearly informed about roaming tariffs that are not roaming enabled or end-users that were charged when calling free-phone numbers while roaming.

Around 24 % (7) of responding NRAs received complaints from end-users that did not know the price for calling premium rate services while roaming, or were not informed about how domestic discounts apply while roaming. This last category has had an increase from last year where only 10 % of responding NRAs received such complaints. One country reported to have many complaints in this category. Otherwise, the number of complaints in these categories are low (less than 10 in each country).

Around 20 % (6) NRAs received complaints from end-users that were unaware that calls were charged as on-net calls while roaming. One NRA received many complaints on this issue, but the rest of the NRAs received low number of complaints. Around 20 % of the NRAs also received complaints on the quality of services and data speed while roaming. Three NRAs received 15-20 complaints, for the rest of the NRAs the numbers were less than ten. Around 17 % (5) of the NRAs received complaints from end-users that were not aware of having alternative tariffs.

Three NRAs have received complaints on zero-rated services that were not zero-rated while roaming, which amounts to one more than previous period. The number of complaints in each country were low.

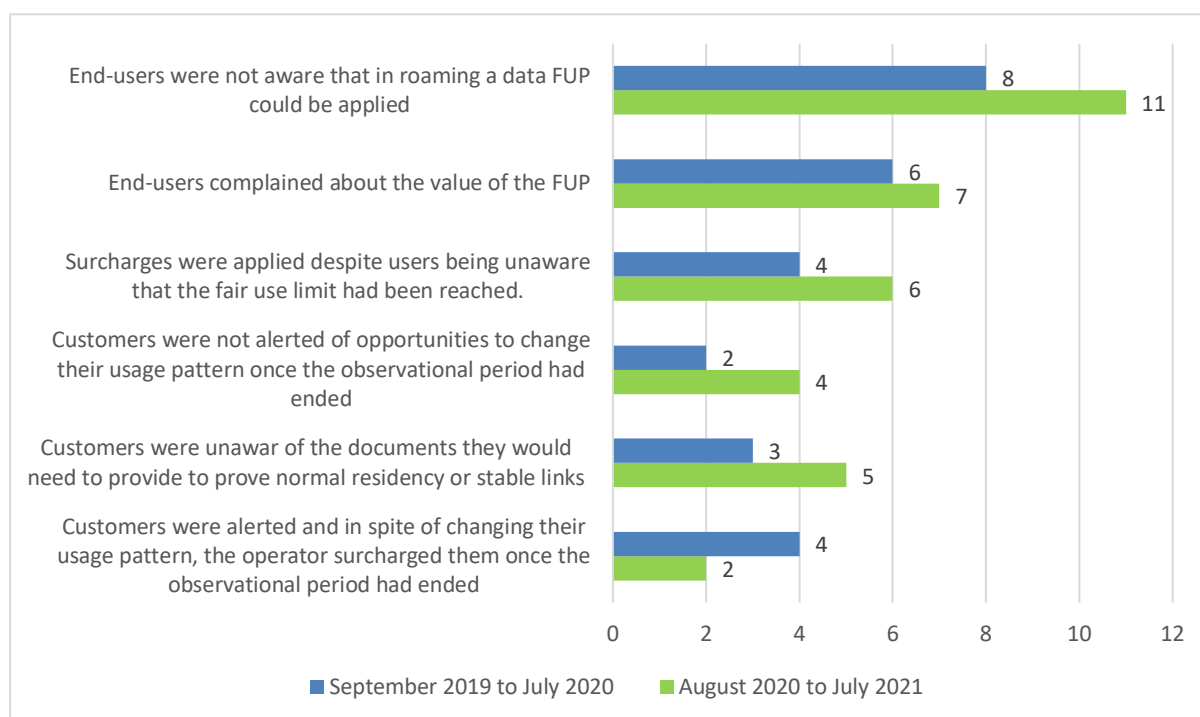
There were no complaints regarding the access to emergency services while roaming in the previous period, whereas one NRA received complaints in this category this year.

BEREC also asked NRAs if they had received complaints from end-users on issues related to the FUP during the period from August 2020 to the end of July 2021. This could be restrictions

either imposed on the roaming data volumes or on the control mechanisms for permanent roaming. Around half of the responding NRAs (15) received complaints regarding the FUP during this period, which is an increase since the previous period where 12 NRAs had received complaints.

Figure 25 shows how many NRAs received complaints in each of the defined categories of complaints related to the FUP compared to the previous period.

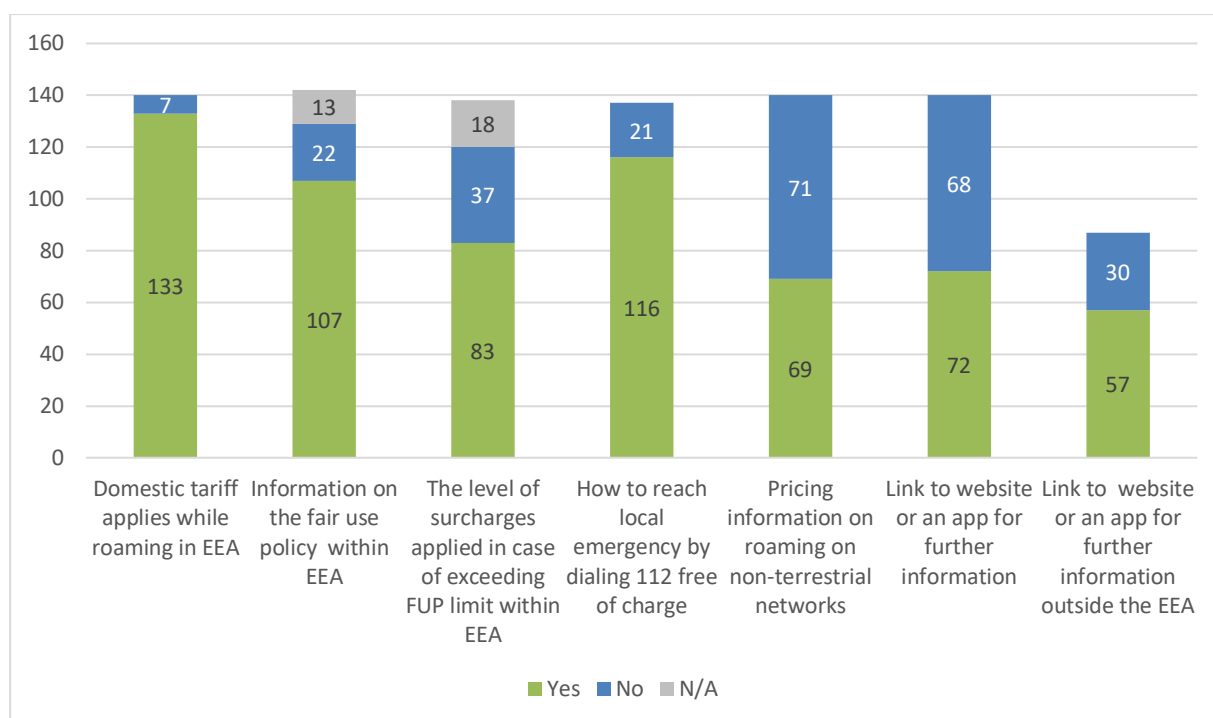
Figure 24: Number of NRAs that have received complaints on the FUP



The number of complaints received in each of the categories was in general low (less than 10), except for one NRA which received around 25 complaints from customers unaware that a data FUP could be applied while roaming.

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 obligation applies both inside and outside the EEA. BEREC has investigated what kind of pricing information operators are providing in their Welcome SMS. Figure 26 below shows the results of the providers' responses.

Figure 25: Information provided by operators (Welcome SMS)

About 95 % (133) 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 FUP the roaming customer is subject to and any surcharges that apply in excess of the FUP. Around 82 % (107) of the operators applying a FUP provide information regarding the FUP in the Welcome SMS. This is at the same level as the previous reporting period.

The Welcome SMS should also include information on how to reach local emergency by dialling 112 free of charge. 85 % (116) of the operators confirm to provide this information in the Welcome SMS. This is an increase from the previous reporting period, where 78 % of the operators provided such information.

To include pricing information for roaming on non-terrestrial networks is not an obligation according to the Roaming Regulation; however, 49 % of operators answered that they include this type of information.

Around 50 % (72) of the operators include a link to their website or provide an app for further pricing information. Around 65 % (57) include such a link in the welcome SMS outside the EEA, however BEREC received fewer responses in total for this question, so there might be some ambiguities.

The operators were also asked what basic pricing information they include in the Welcome SMS when their customers travel outside the EEA. Most of the operators (93 %) give information on the actual prices for the visited country. Some operators (7 %) said they gave no pricing information about prices outside EEA, however some of these might include a link as mentioned above.

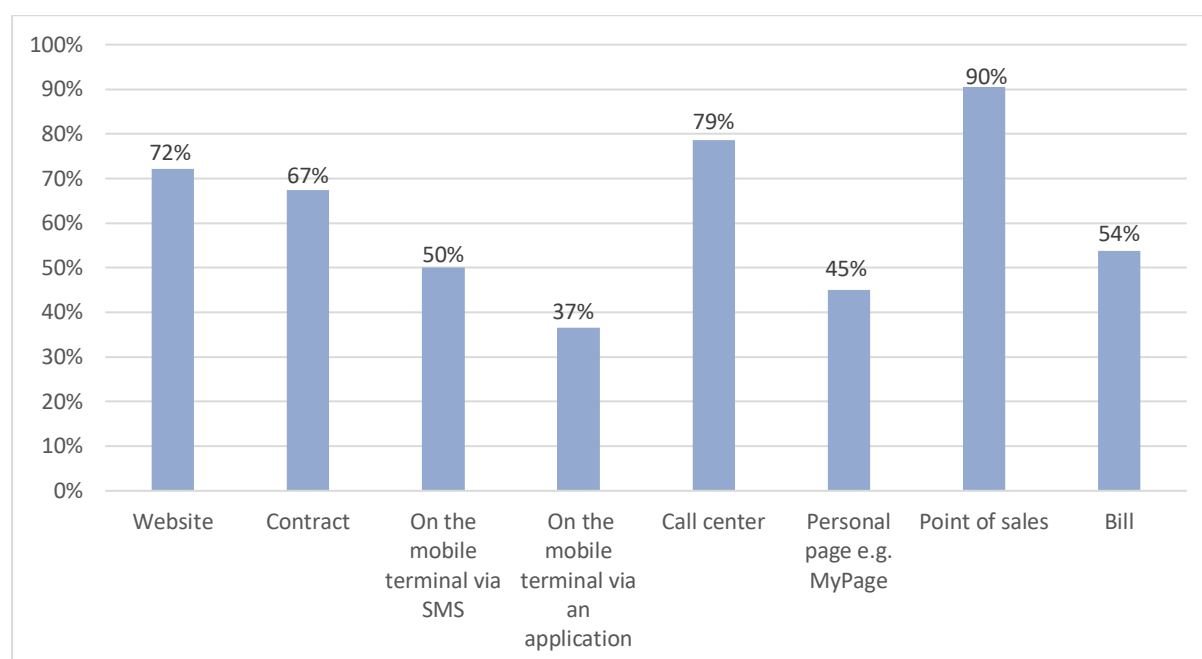
4.3. Information when providing alternative tariffs

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. These could involve surcharges for EEA roaming in combination with the inclusion of countries other than the EEA Member States (e.g. UK, Switzerland), a different data roaming allowance, or daily or monthly packages, see Chapter 3. 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.

Around 60 % of the responding roaming providers inform end-users that have opted for such tariffs about the regulated tariff. Most of the operators that inform about the regulated tariff (95%) inform their customers on a yearly basis. A few operators (5 %) do so every month.

The most common ways to inform customers about the regulated tariff are at point of sales, call centres and websites. The figure below shows various sources of information that is used to inform customers about the regulated tariff.

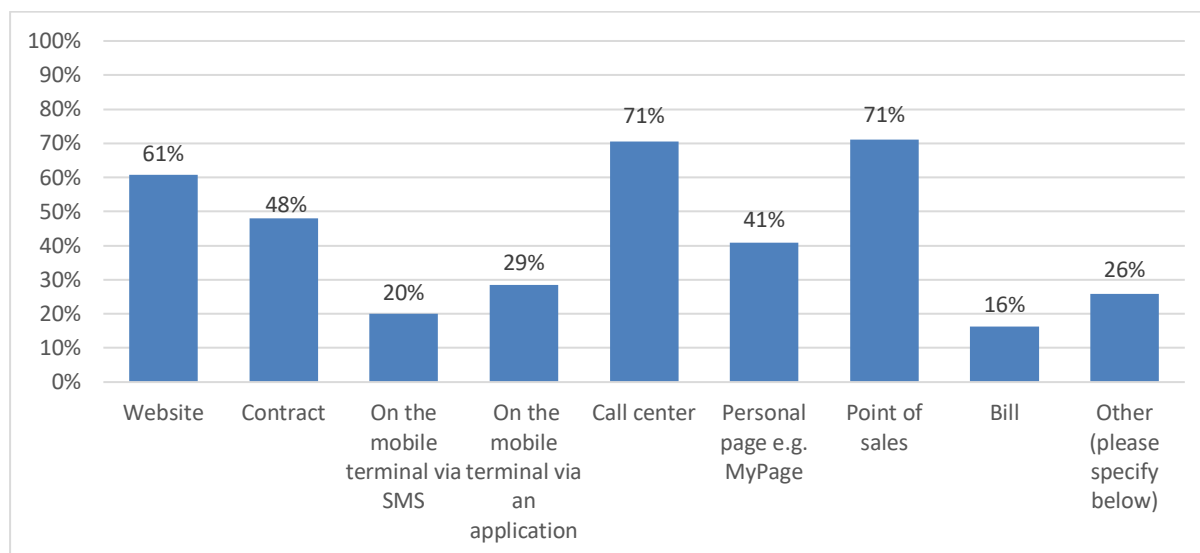
Figure 26: Source of information about regulated tariffs for customers subscribed to an alternative tariff



4.4. Information about switching between tariffs

Operators use various methods to provide information on the possibility for end users to switch between tariffs. The questionnaire sought to gain more information about how this information is provided in practice.

Figure 27: Source of information about switching between tariffs



As Figure 27 illustrates, points of sale, call centres, and websites are the three most used channels through which the roaming providers inform their customers about the possibility to switch between tariffs.

The overwhelming majority (about 95 %) 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, 85 % 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 quite a high percentage, however there is still room for improvement.

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, 86 % of the operators inform their customers about the charges that apply to out-of-bundle consumption. Furthermore, 92 % of the operators notify their customers when they reach the limit of the bundle, while 82 % 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, 86 % of the operators inform their customers about the tariffs/charges they have to pay for roaming services out-of-bundle. BEREC has hoped for a more positive development for this parameter as in practice, 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 it 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 FUP

Article 4 of the CIR states that roaming providers are allowed to implement a FUP. Providing transparent information on volume limits due to a FUP and any surcharges specified by the FUP is important.

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 the roaming data consumption at domestic prices for such open-data bundles. After exceeding the fair use roaming allowance, roaming providers are allowed to employ a surcharge for the additional use of the data service.

Figure 28: Information about charges and consumption within a FUP in case roaming volumes are calculated according to the open-data bundle rule

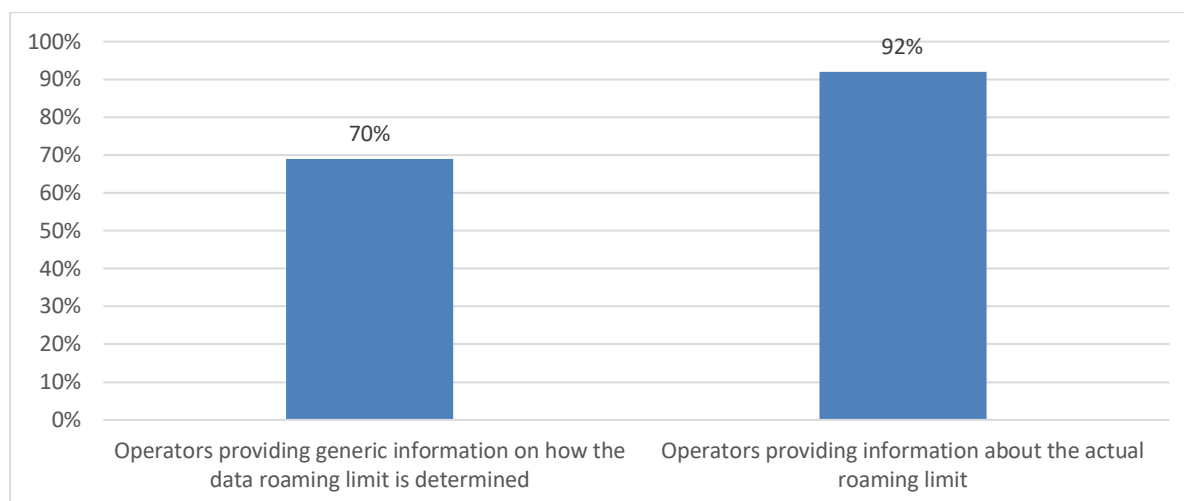
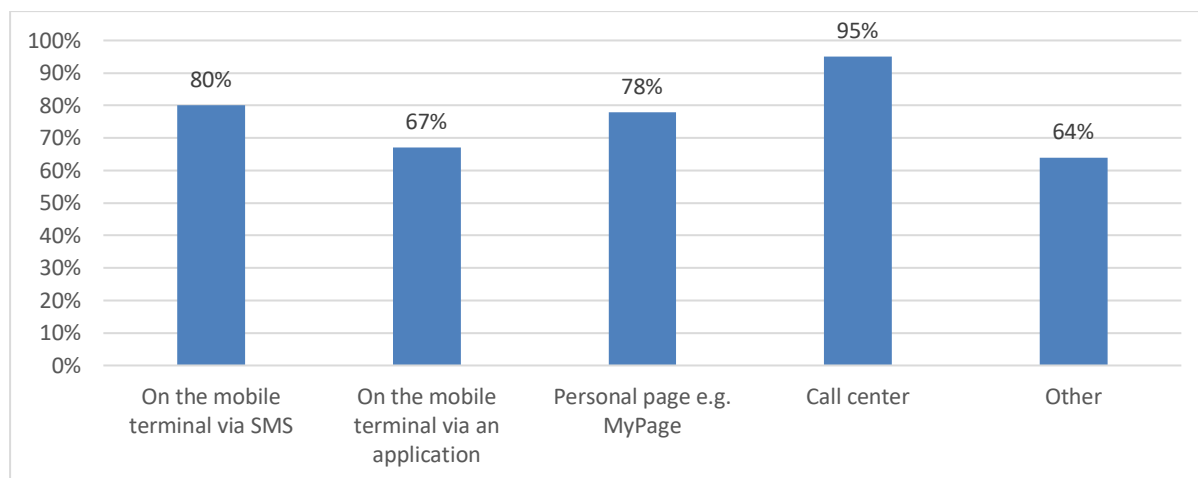


Figure 28 shows that 70 % of the responding roaming providers which apply a FUP according to Article 4 (2) of the CIR inform their customers about how the roaming allowance is calculated. Furthermore, 92 % of the roaming providers which established a FUP according to the open-data bundle rule provide information for customers about their actual roaming volumes. As summarised in Figure 29, roaming providers make use of various information channels to provide information about FUP for data bundles.

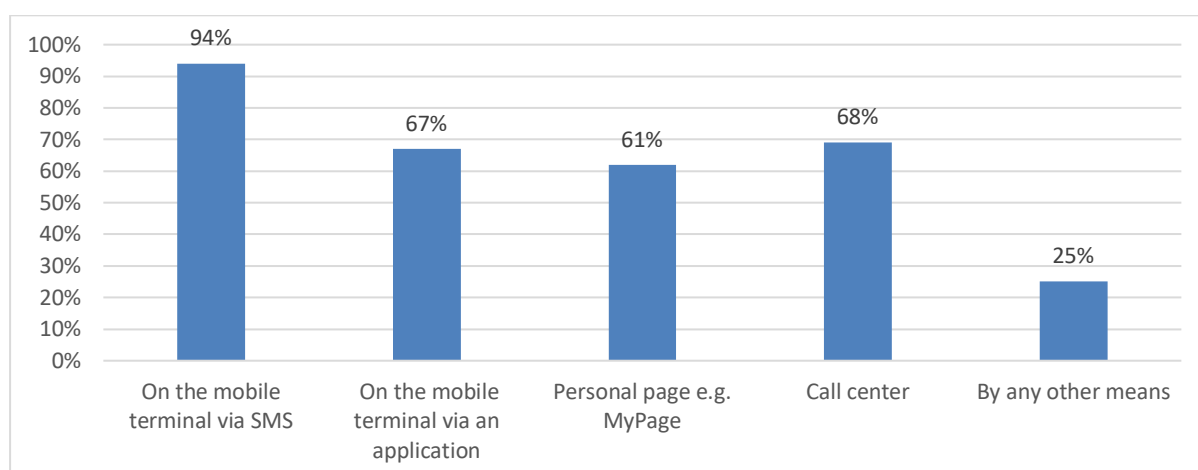
Figure 29: Means used by the (relevant) operators for providing information about available roaming data volumes, when these are calculated according to the open-data bundle rule



As illustrated above, call centres are still the channel that is used by the largest number of respondents for providing information. Sending SMS directly to the customer's terminal has now risen to the second most popular method, pushing use of personal pages to third place. Note that quite a high number of respondents use other methods beside the ones mentioned in the figure to inform customers on available roaming data volumes.

Information collected through the questionnaire reveals that 95 % of the relevant operators inform end-users actively when they reach the roaming limits included in the open-data bundle. This is largely at the same level as in the previous reporting period. Providing information directly to the end-user's mobile terminal, either through SMS or an application, are still among the dominant information channels. This is positive as it brings this important information directly to the terminal without end-users having to actively seek this out.

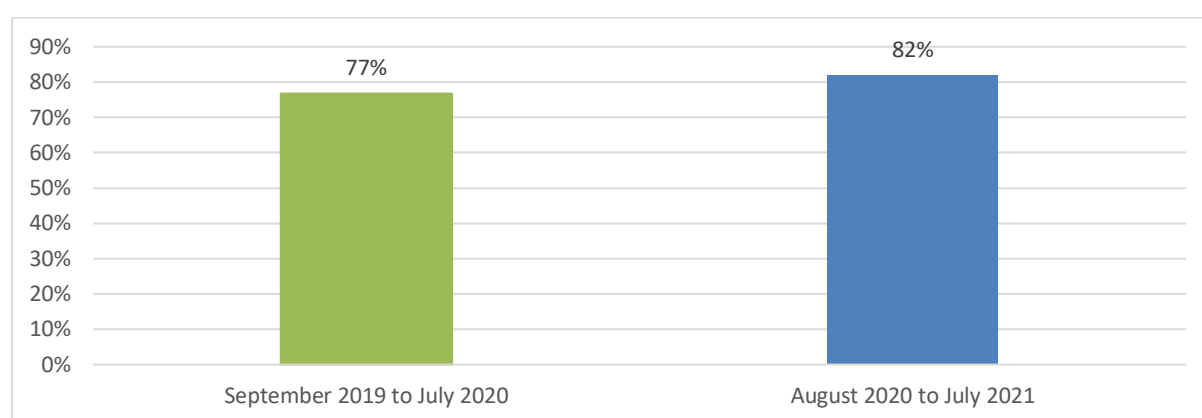
Figure 30: Operators' means of actively informing end-users when they reach the roaming limits included in the open-data bundle



4.5.2. Objective indicators

In addition to the open-data bundle FUP, roaming providers are also allowed to implement a control mechanism over an observation period of at least four months. This control mechanism includes two objective indicators, namely the consumption and the presence of customers. Should a customer have 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 their behaviour. If no changes either in consumption or presence are detected by the operator during 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 31: In case control mechanism is applied, do you provide information within the observation period?



For the current reporting period, the number of operators that provide information to the end-user within the observation period increased in comparison to the previous period. This is positive as it allows users to be aware of how they match up against the observation window and gives them a chance to potentially change their roaming behaviour before surcharges might set in.

Figure 32: Do you provide information within the observation period and if so: for which indicators?

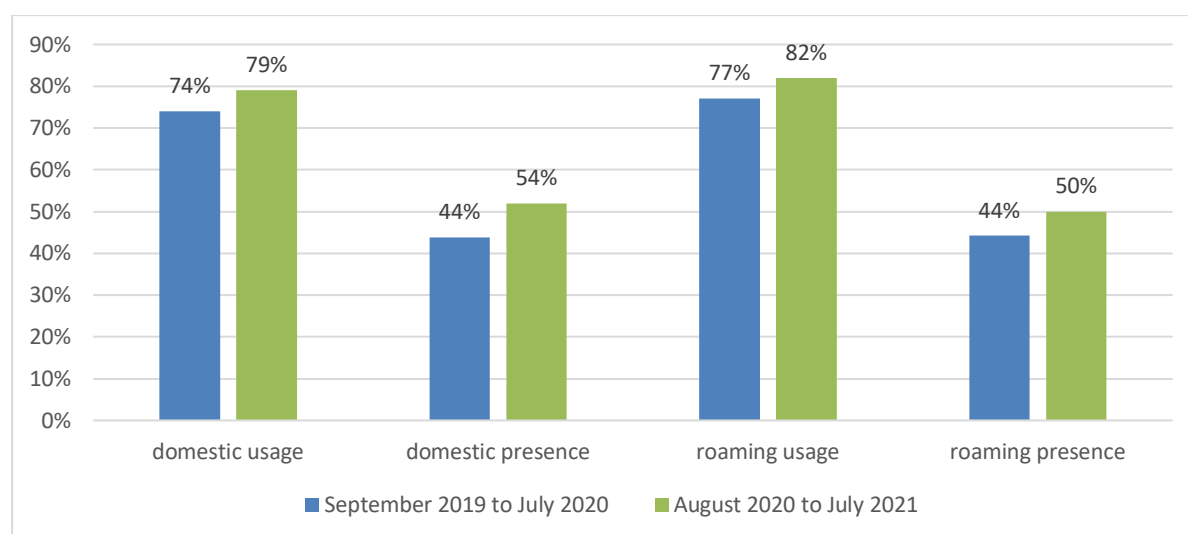


Figure 32 shows the indicators about which operators give information to their end-users. As in the previous reporting period, it is the usage indicators that are most often used to keep customers up to date. About half of the relevant responders answered that they give information about their end-users' roaming and/or domestic presence.

Figure 33: How is such information provided (domestic services)?

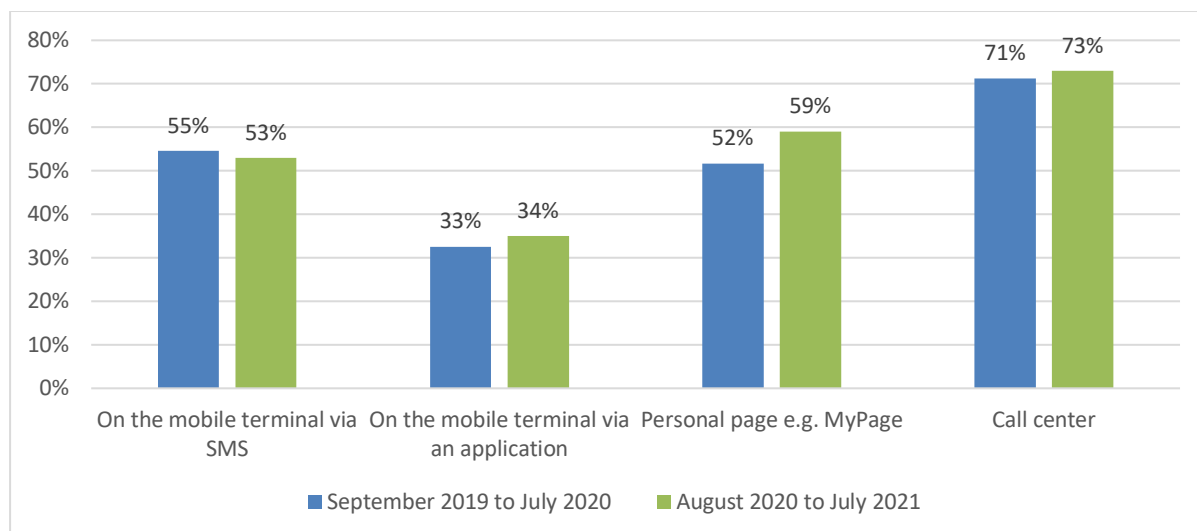
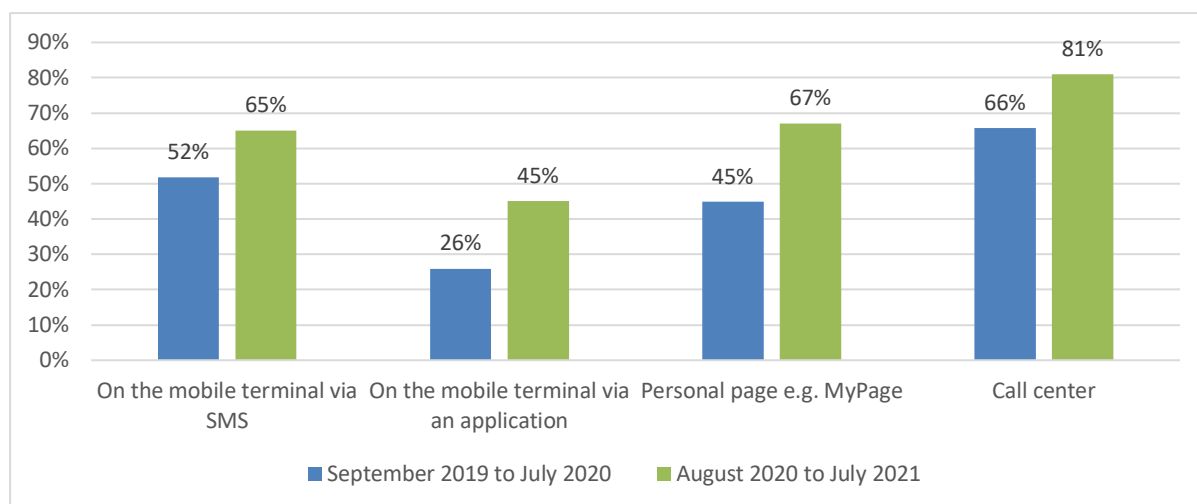


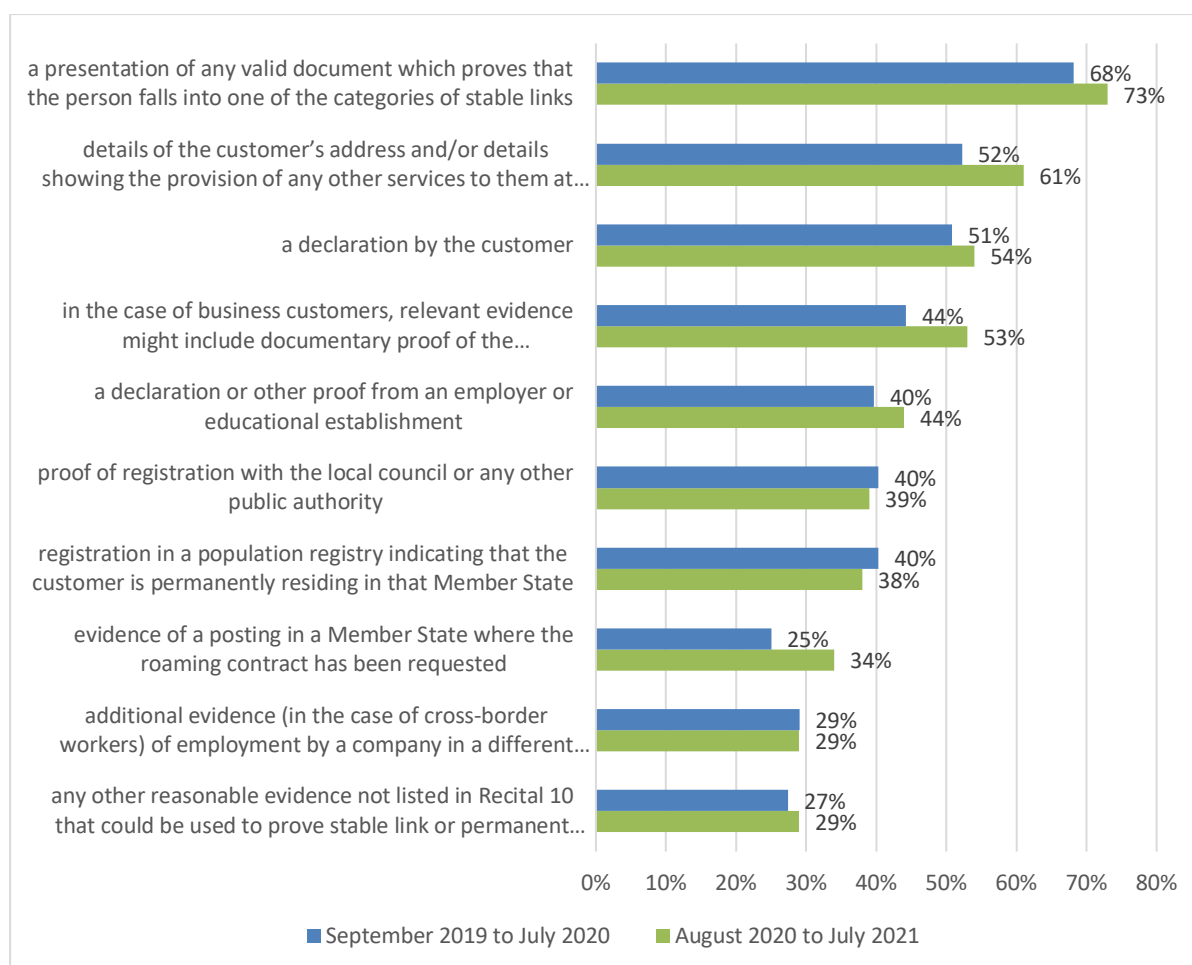
Figure 33 summarises the results of the responses on how operators inform their customers about the objective indicators. The most common are call centers to provide information on end-users' domestic services. The next most frequently used tool is now the personal page.

Figure 34: How is such information provided (roaming services)?



For roaming services, the same trend can be observed: call centres are preferred ahead of a personal page.

Stable links are a collection of means for the operators to verify if a customer is eligible to enter into a contract that includes (regulated) roaming services. There are numerous ways for an operator to check this and the respondents gave the following answers when asked about what evidence they accept.

Figure 35: What kind of evidence is requested to assess stable links?

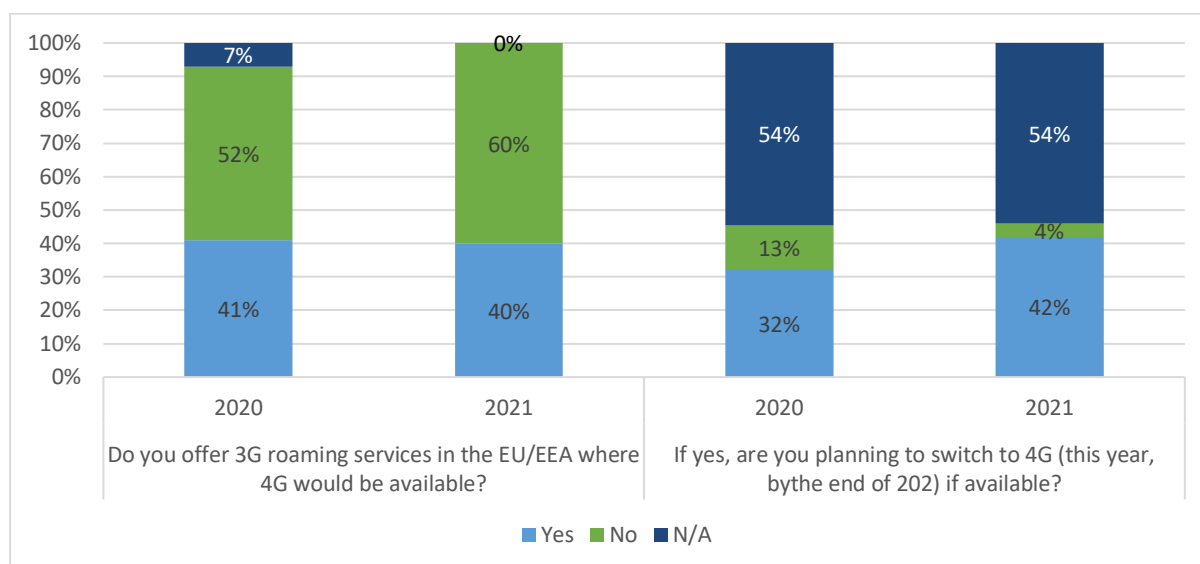
The table provides an overview into what kinds of evidence on stable links are accepted by the operators. These are: a presentation of any valid document which proves that the person falls into one of the categories of stable links (73 %, up from 68 %), details of the customer's address and/or details showing the provision of any other services to them at the given address, e.g. a utility bill (61 %, up from 52 %), a declaration by the customer (54 %, up from 51 %), registration in a population registry indicating that the customer is permanently residing in that Member State (38 %, down from 40 %), proof of registration with the local council or any other public authority (39 %, slightly down from 40 %), a declaration or other proof from an employer or educational establishment (44 %, up from 40 %), additional evidence (in the case of cross-border workers) of employment by a company in a different country of residence (steady at 29 %), 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 (29 %, up from 27 %).

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 (53 %, up from 44%), or evidence of a posting in a Member State where the roaming contract has been requested (34 %, up from 25 %). Evidence like driver's license and operators' own loyalty cards were also mentioned by some of the respondents.

4.6. Quality of service in roaming

BEREC was also interested in the network technology that was used for providing roaming services. 40 % of the operators stated⁷ that they offer 3G roaming services in the EU/EEA even where 4G would be available in 2021, whereas it was 41 % in 2020.⁸

Figure 36: Availability of 3G and 4G roaming services



58 % of the operators that offer 3G services (even if 4G is available) are not planning to provide 4G roaming services by the end of 2021 or did not specify any plans to improve their quality. Last year 68 % of the operators claimed they would not improve the QoS in roaming, so it's a positive trend in this area.

Currently, operators are implementing 5G technology across Europe. At the end of 2020, 5G commercial services were available in twenty-three Member states. There is, however, a wide diversity amongst Member States in the advance of these implementations.⁹ BEREC notes that none of the operators in the EU countries have achieved nation-wide 5G coverage thus far. In some countries, most populated areas are already being covered, and in most other countries the deployment has only been advanced to some populated areas.

Regarding the information provided to end-users about QoS during intra-EU roaming, 85 % of the answering operators did not provide separate itemized information, while only 15 % of operators provided this information.

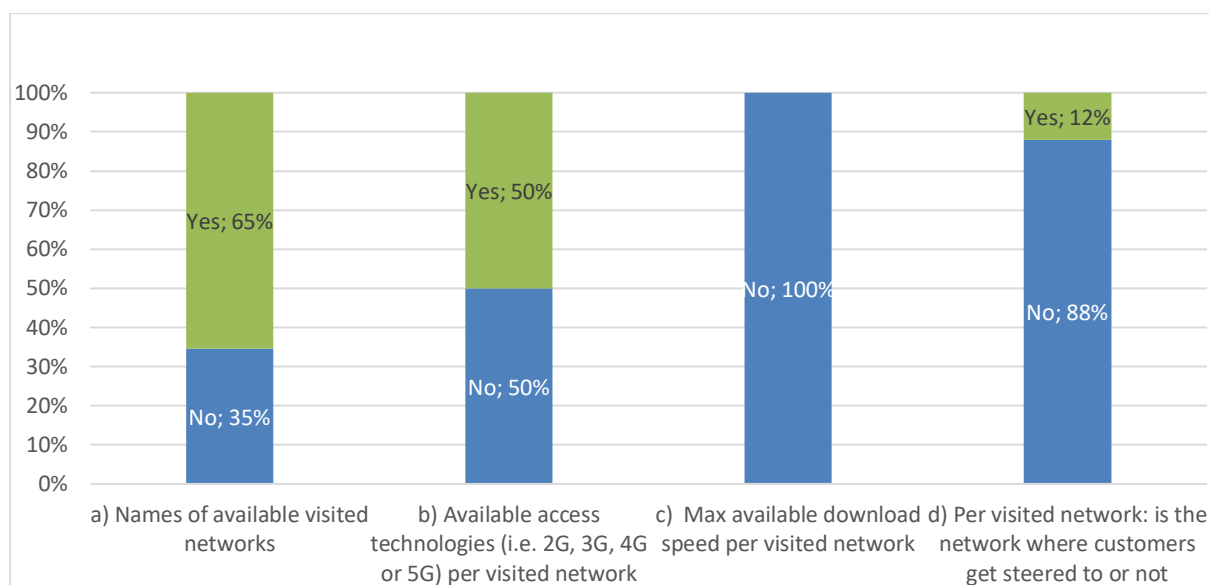
Figure 37 shows the type and granularity of information that is provided to end-users during intra-EEA roaming regarding QoS.

⁷ 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.

⁸ "The end-user will typically experience much higher data rates with 4G technology than with 3G technology.

⁹ <http://5gobservatory.eu/wp-content/uploads/2021/01/90013-5G-Observatory-Quarterly-report-10.pdf>

Figure 37: If the itemized information on QoS during intra-EEA roaming is supplied per visited network, what kind of information is provided?



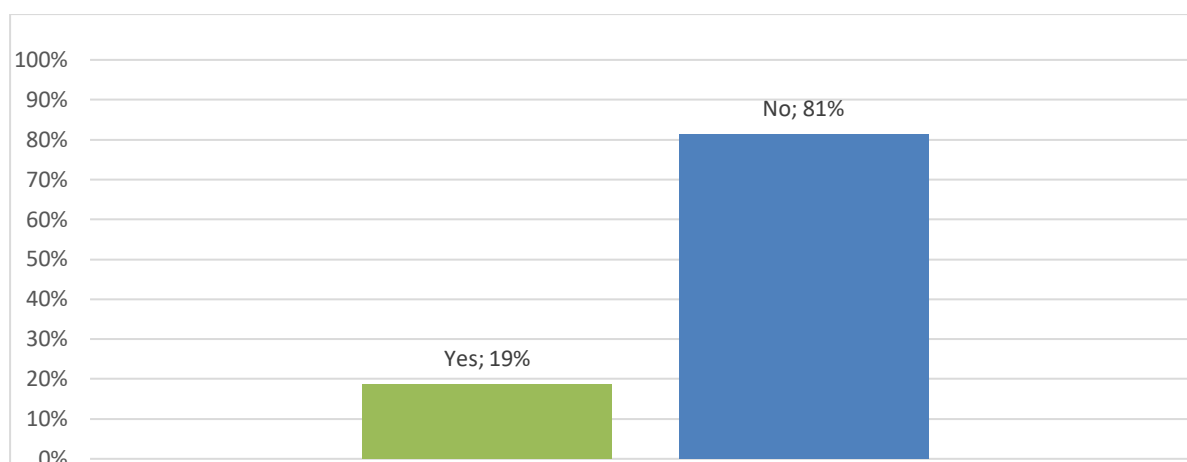
The issue about QoS while roaming was also analysed in the last two BEREC Opinions/Inputs,¹⁰ where it was identified as an issue which BEREC proposed to be addressed in the recast of the Roaming Regulation.

4.7. Value-added services (VAS) in roaming

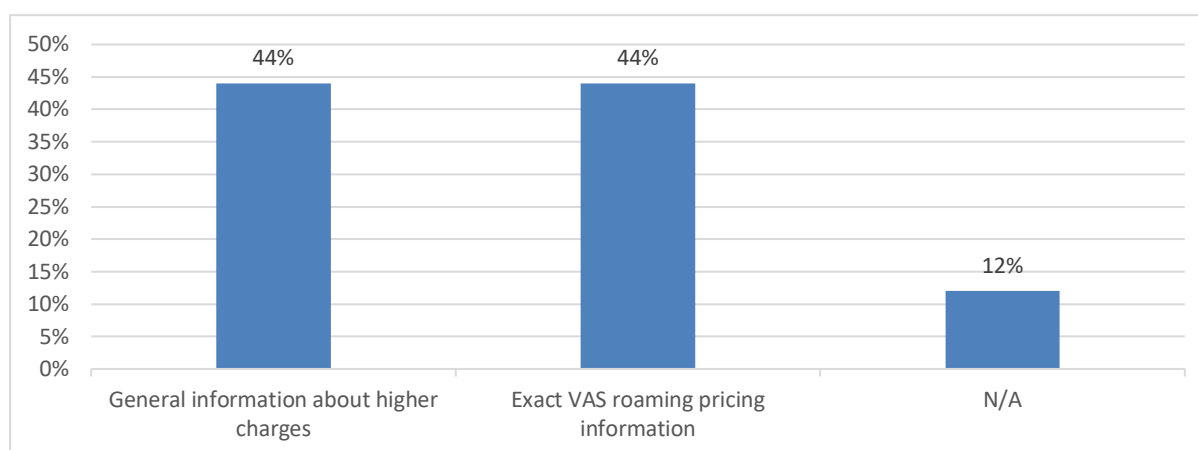
As BEREC has detailed in two recent Opinions on roaming, value-added services (VAS) pose a particular challenge for roaming consumers as they are usually unfamiliar with local value-added service numbers, which may often lead to unexpected charges. Telecommunications providers, on the other hand, may face challenges when communicating these different charges to consumers and may themselves be faced with unexpected and high wholesale costs due to different prices for regulated and unregulated roaming calls or SMS.

One of the solutions proposed by BEREC for issues at retail level concerns increasing the transparency of VAS charges for consumers. BEREC has therefore asked operators whether they provide information to consumers regarding VAS charges and if so, how this information is made available. When asked whether operators provide information on prices for calling value-added services in roaming, only 19 % of operators answered that they provided this information to the customers during the reporting period.

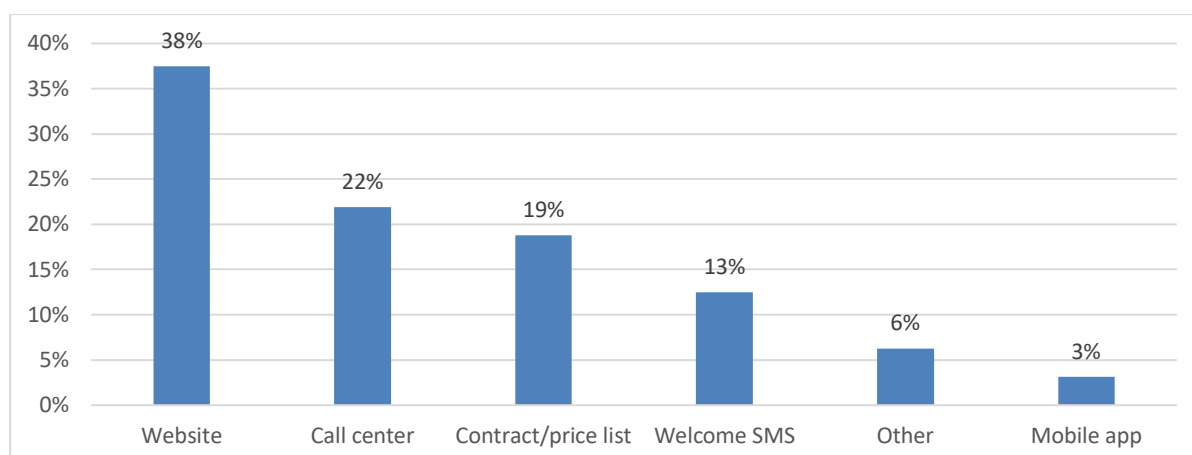
¹⁰ BEREC Opinion on the functioning of the roaming market, as input to the Commission's evaluation BoR (19) 101 13 June 2019 and BEREC input on EC's request for the preparation of the legislative proposal for the new roaming regulations BoR (20) 131 30 June 2020.

Figure 38: Do you provide information on prices for calling value added services while roaming?

Of those telecommunications providers which offer information about higher charges in connection with value-added services, 44% provide consumers with general information and the same percentage provides them with exact VAS roaming pricing information.

Figure 39: If yes, how specific is the information provided on prices for calling value added services while roaming?

The most popular option for providing either general or detailed information is via the website (38%), followed by call centres (22%) and contracts or price lists (19%). Only 13% of operators providing information on VAS charges use the Welcome SMS, and 3% offer this information in a mobile app. This indicates that operators generally prefer to use “pull” information services (website, call centre, mobile application) rather than “push” services (Welcome SMS), as discussed in BEREC Opinion BoR (20) 131. Information in contracts could be useful for consumers, however, it is questionable whether consumers will consult their contracts before making use of roaming services.

Figure 40: If information is provided on prices for calling value added services, by what means?

5. Comparability of international roaming tariffs

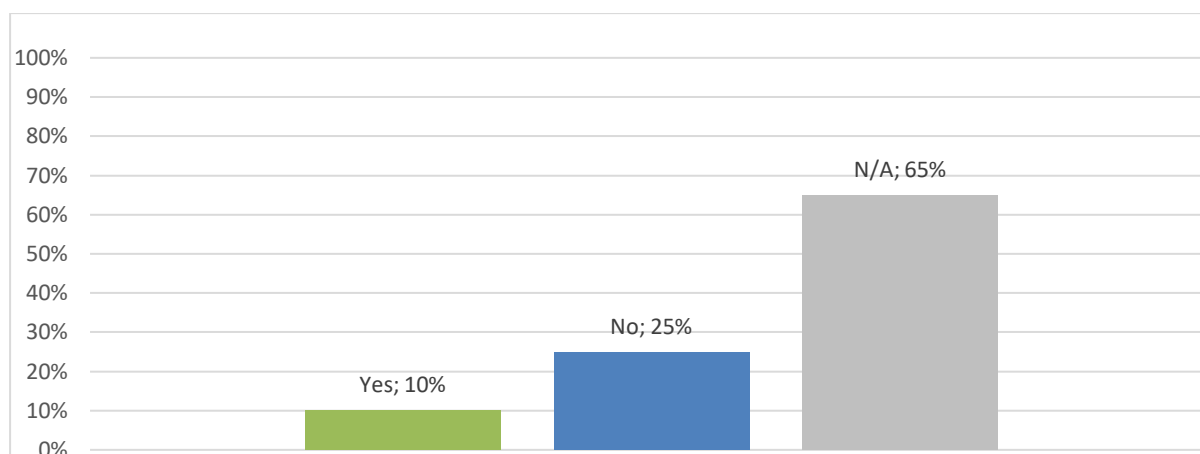
Roaming services have generally been sold as additional services in a bundle which included domestic mobile services. In the retail market, the focus of competition has been on domestic services due to the fact that for the majority of end-users, domestic services are of prime importance. The abolition 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 FUP 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 made any tables or tools available on their websites that allow customers to compare alternative roaming tariffs with regulated ones. The results are presented in Figure 41 below.

Figure 41: Is there any table/tool/application for end-users comparing alternative tariffs with regulated roaming tariffs available on your website?



Among the providers that offered alternative tariffs, 10 % reported that they enabled such solutions.

5.2. Tables and assessment from consumer associations and other organizations

BEREC asked NRAs if consumer associations or any other organisation 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.

Only two of the responding NRAs are aware of such comparison tables or information. In addition, two of the 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. The responding NRAs were not aware of any publicly available report provided by consumer associations or other organisations which compares international roaming tariffs. Only one NRA reported the availability of an application to help end-users decide which type of tariff to select based on their international roaming consumption patterns.

5.3. Tables on NRAs' websites comparing tariffs

BEREC asked NRAs a set of questions about the range of information available to end-users on their websites which may enable them to compare tariffs.

33 % of the responding NRAs reported that they featured up to date information on their website comparing domestic tariffs including intra-EEA roaming provided by different operators, thereby facilitating a comparison of RLAH tariffs which is more than in previous year (24 %). Similarly as the year before, 15 % of the responding NRAs reported that they 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. Less than half of the responding NRAs granted derogations to apply sustainability surcharges and only two of them reported that they provide updated information on their websites comparing tariffs that have a sustainability surcharge. 15 % of the responding NRAs reported that they provide updated information on their websites comparing roaming tariffs for non-EEA-countries.

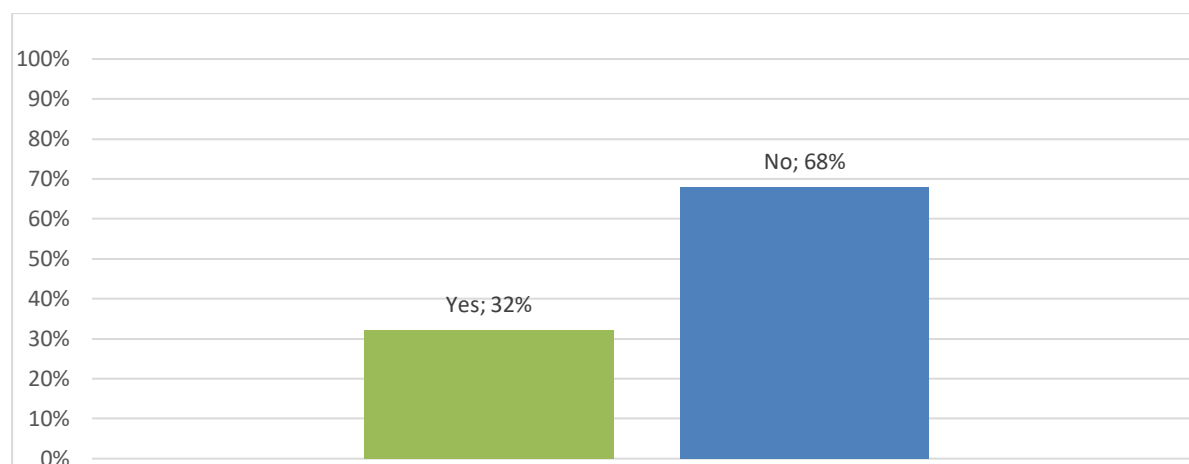
Before RLAH was implemented in the EU/EEA Member States, providing tables and reports comparing tariffs for international roaming between operators was resource intensive as it required monitoring a variety of tariff plans in order to keep the information updated. However, the implementation of RLAH from 15 June 2017 has made the roaming regime more transparent for end-users 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 only small percentage of NRAs and consumer associations provide customers with such tables. It is also noticeable that the situation has not changed substantially since the publication of the previous report.

5.4. Guidance for end-users to estimate data traffic and tools to select a tariff

The major factor determining the price of tariffs offered to end-users is the volume of data included in the package. Therefore, it is important that customers can estimate their capacity needs in order to be able to make an informed choice. Any tool estimating future data usage is supposed to help customers choose the most suited tariff.

In order to review the availability of any resources which aids informed decision-making, 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 given estimated consumption.

Figure 42: Do you provide end-users with information on how to estimate data services consumption based on the use of Internet services



About one third of the responding operators confirmed 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 and 16 % of the responding operators confirmed that they provided applications to help end-users select the most adequate tariff, including intra-EEA roaming based on their estimation of consumption.

As the above numbers show that only a minority of providers actually have interactive tools where the customers' consumption patterns are the starting point for selecting the most adequate tariff. Most likely, the demand for this type of service is not sufficient to attract operators to introduce them due to the wide availability of consumption history for the customers and also a range of external comparison engines throughout the internet.

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 1 August 2020 to 31 July 2021)		
	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
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/VAS 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 actively used roaming services on planes/ships but were not aware of the price	
2.2.15.	End-users inadvertently roamed on planes and ships	
2.2.16.	Other reasons for complaint relating to roaming on non-terrestrial networks	
2.2.17.	End-users are displeased by the quality of service and data speed while roaming	
2.2.18.	Zero-rated services were not zero rated when roaming, (deducted from the bundle)	
2.2.19.	End-users inadvertently roamed on a non-EEA network while remaining on EEA territory	
2.2.20.	Access to emergency services while roaming	
2.2.21.	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
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 1 August 2020 to 31 July 2021)			
		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 1/08/2020 to 31/07/2021	
5.1.	How many applications have you received?		
5.2.	How many applications were granted?		
	For each application (from 1/08/2020 to 31/07/2021), please inform about:	Application granted #1	Application granted #2
		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 1/08/2020 to 31/07/2021	
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-EEA)			
2.1. Quality of retail service			
2.1.1.	Do you offer 3G roaming services in the EU/EEA where 4G would be available?		
	If yes, are you planning to move soon (i.e. within this year (by the end of 2021) to 4G roaming services wherever 4G is available in the EU/EEA?		
	If no (ie you are not planning), please explain the main reason for excluding 4G roaming		
2.1.2.	Do you offer 5G roaming services?		
2.1.3.	If no, please explain why.		
2.2 Fair Use Policy			
2.2.1.	Does your company offer tariff plans applying a FUP according to the Commission Implementing Regulation (CIR)?		
2.2.2.	Does your company apply stable link criterion according Art. 4 (1) CIR?		
2.2.2.1.	If yes, for which kind of tariff plans?		
2.2.2.2.	Has your company levied surcharges due to Art. 4 (1) CIR?		
	a) for voice		
	b) for SMS		
	c) for data		
2.2.3.	Does your company apply open data bundle FUP according Article 4 (2) CIR?		
2.3.2.1.	Is the data roaming limit calculated according to the calculation laid down in the CIR		
2.3.2.2.	If the limit is different to the calculation according to Art. 4 (2) CIR please specify:		
2.3.2.3.	Has your company levied surcharges for data roaming services due to Art. 4 (2) CIR?		
2.2.4.	Does your company apply a data roaming limit for pre-paid offers according to Art. 4 (3) CIR?		
2.2.4.1.	Has your company levied surcharges for data roaming services due to Art. 4 (3) CIR?		
2.2.5.	Does your company apply a control mechanism / objective indicators according Article 4 (4) CIR (ie prevailing domestic consumption or prevailing domestic presence) ?		
2.2.5.1.	For which kind of tariff plans?		
2.2.5.2.	How long is the observation window?		
2.2.5.3.	Which roaming services does your company observe?		
	a) voice		
	b) SMS		
	c) data		
2.2.5.4.	Has your company levied surcharges for roaming services due to Art. 4 (4) CIR?		
	a) for voice		
	b) for SMS		
	c) for data		
2.2.6.	Does your company apply other objective indicators (eg. long inactivity and/or subscription and sequential use of multiple SIM cards)?		
2.2.6.1.	If yes, please specify		
2.2.6.2.	Has your company levied surcharges for roaming services based on other objective indicators?		
2.3 Derogation			
2.3.1.	Has your company applied for a derogation?		
2.3.2.	If yes, does your company make use of the derogation you have been granted?		
2.3.3.	If yes, does your company apply derogation surcharges to		
2.3.4.	Which roaming services are subject to a surcharge based on derogation?		
	a) voice		
	b) SMS		
	c) data		
2.4 Non-EEA destinations			
2.4.1.	Do you include non-EEA destinations in the RLAH FUP in some of your offers?		
2.4.2.	If yes, list non-EEA destinations included in the RLAH FUP		
2.4.3.	c) Please specify in the comment box the approximate share of your customer base covered by RLAH offers including non-EEA countries		
2.4.4.	Do you offer a facility for customers to block roaming services in third countries?		
2.4.5.	Do you provide information to customers on how to avoid inadvertent roaming in border regions		
2.4.6.	What measures do you have in place to protect customers from paying roaming charges for inadvertently accessed roaming services while situated in a Member State?		
2.4.7.	Do you offer a facility for customers to block roaming on non-terrestrial networks?		

2.5 Structure of alternative roaming tariffs according to Article 6e (3)			
Please see BEREC Guidelines 87-93 for further information			
	Available Yes/No	Comment	
2.5.1	Do you offer any alternative tariffs in line with Article 6e (3)?		
2.5.2	In which segment(s) are alternative tariffs offered? (mostly consumer, mostly business, similarly both segments)		
2.5.3	Does your company offer daily packages under the structure of alternative tariffs?		
2.5.4	Does your company offer weekly packages under the structure of alternative tariffs?		
2.5.5	Does your company offer monthly packages under the structure of alternative tariffs?		
2.5.6	Does your company offer other tariffs under the structure of alternative tariffs? Please give a short description		
2.5.7	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?		
2.5.8	If yes, please list those destinations		
2.5.9	If you offer other types of alternative tariffs, please give a short description		
2.6 Tariffs without roaming (excluding fixed wireless access tariffs)			
	Available Yes/No	Comment	Percentage of customers without roaming
2.6.1	Do you offer pre-paid tariffs without roaming? (Fixed wireless access should not be included)		
2.6.2	Do you offer post-paid tariffs without roaming? (Fixed wireless access should not be included)		
2.6.3	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		

3. Information provided by operators			
3.0	When do you notify the application of a fair use policy to your NRA?		
3.1 Welcome SMS			
3.1.1	Do you inform your customers in the welcome SMS that the domestic tariff is applied while roaming in the EEA?		
3.1.2	Do you provide information on the fair use policy in your welcome SMS within the EEA?		
3.1.3	Do you provide information on the level of surcharges applied in case of exceeding FUP limit in your welcome SMS within EEA?		
3.1.4	Do you provide information on how to reach local emergency services by dialing 112 free of charge?		
3.1.5	Do you include pricing information on roaming on non-terrestrial networks?		
3.1.6	Do you include a link to your website or an app from which the customer could get further information?		
	If yes, is this link included also in welcome SMS outside the EEA		
3.1.7	What basic pricing information do you include in welcome SMS outside the EEA?		
3.2 Alternative tariffs			
Alternative tariffs and regulated tariffs (only reply to these questions if your answer to 2.5.1 is yes)		Yes/No	
3.2.1	Do you inform end-users that have opted for alternative tariffs about the regulated tariff?		
3.2.2	If yes, how do you inform them:	Yes/No	
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)		
3.2.3	If yes, how often do you remind end-users with alternative tariffs about the regulated tariff?	Please indicate period	
	If other period indicated, please specify below.		
Alternative tariffs (only reply to these questions if your answer to 2.5.1 is yes)		Yes/No	
3.2.4	Are there any activation charges applied when switching between alternative tariffs?		
3.2.5	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?		
3.2.6	Do you inform end-users actively when they		
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 (only reply to these questions if your answer to 2.5.1 is yes)			
3.3.1	Is the customer allowed to switch back to RLAH in case they have an alternative tariff according to Article 6e (3)?	Yes/No	
3.3.2	Where do you provide information concerning switching between tariffs ?	Yes/No	
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 (please specify below)		

3.4 Information about charges and consumption within FUP			
In case roaming volumes are calculated according to the open data bundle rule ... (Should only be answered if the answer to question 2.2.3 is yes)		Yes/No	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 ... (Should only be answered if the answer to question 2.2.5 is yes)			
3.4.6 Do you provide information to end users within the observation period?		Yes/No	Comment
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
	a) On the mobile terminal via SMS		Comment
	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)		

What kind of evidence is requested to assess stable link and/or normal residence? (Should only be answered if the answer to question 2.2.2 is yes)			
3.4.8		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 of 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; please 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 provided)	Yes/No, N/A	
4.1.2	If yes, please, provide the link		
4.2 Tool 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		
4.3.3	Which/what type of financial (or so called cut-off) limits do you offer roaming customers, according to Article 15(3)? Please specify the financial limits and other types of limits, e.g. volume based		
	How many customers use such a facility?		
4.3.4	Which financial limit is the most common?		
4.3.5	Does the financial limit also cover charges for roaming on non-terrestrial networks?		

4.4 Information for end-users about Quality of Service during intra-EU roaming					
		Yes/No			
4.4.1	Do you provide separate itemized information on the quality of service during intra-EU roaming				
	If yes, is the information per country or per visited network per country or in general				
	If the information is per network what kind of information is provided:				
	a) Names of available visited networks				
	b) Available access technologies (i.e. 2G, 3G, 4G or 5G) per visited network				
	c) Max available download speed per visited network				
	d) Per visited network: is the network where customers get steered to or not				
	If replying yes in question 4.4.1, please provide the URL where this information is available				
4.5 Information for end-users about Value Added Services (VAS)					
		Yes/No			
4.5.1	Do you provide information on prices for calling value added services while roaming				
	If yes, how specific is the information?				
	If yes, by what means				
5. Any other input that can be considered useful by the provider (e.g. impact of Covid-19 on your tariff portfolio)					