

**BEREC Analysis**  
**Monitoring of the Joint Statement agreed**  
**between Ukraine and EU Operators**

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## Executive Summary

Following the ongoing war against Ukraine, launched by Russia with the invasion of Ukraine on 24 February 2022, the Body of European Regulators for Electronic Communications (BEREC) has closely followed the telecommunications sector's response to the crisis and welcomed the measures voluntarily provided by EU operators. In order to get a full picture of what has been implemented by operators, BEREC already in March 2022 started to collect information from NRAs and operators. In May 2022, BEREC continued with a second data collection exercise, with the aim of gathering more detailed information covering not only the retail measures applied by European Economic Area<sup>1</sup> (EEA) and Ukrainian (UA) operators but also the relevant wholesale measures agreed in the Joint Statement.<sup>2</sup> This Joint Statement establishes a stable framework to help people fleeing the war in Ukraine stay in touch with family and friends back home and maintain access to information. The Joint Statement in the meantime was renewed and prolongs the measures that UA and EEA operators agreed initially in April 2022 for another 6 months.<sup>3</sup> The measures include affordable or free calls, extend the measures to cover calls to fixed line numbers in Ukraine and ensure sustainable inter-operator prices, which allow operators to provide consumers with cross-border calls at an affordable rate. BEREC and the Ukrainian National Regulatory Authority, NCEC, were tasked to monitor the implementation of the agreed measures and therefore launched this third data round of data collection.

Altogether, 7 UA operators and 20 EEA groups and operators signed the Joint Statement that is open to all operators willing to sign. This report includes data from 25 NRAs (24 BEREC members or participants without voting rights plus the Ukrainian National Regulatory Authority NCEC. In particular, the 24 BEREC member NRAs have received replies from 52 mobile and 33 fixed operators. NCEC has received data from 4 mobile operators and 3 fixed operators. All UA operators signed the Joint Statement, hence there is no further differentiation between them.

According to the data received, the termination rates charged to EEA operators which signed the Joint Statement are significantly lower than for EEA operators which have not signed the Joint Statement.<sup>4</sup> Fixed EEA operators in general pay higher termination rates than mobile EEA operators to UA operators, both for fixed and for mobile termination. As a rule, termination rates charged to EEA operators fell during the period covered in this Report. However, termination rates charged to EEA operators are still significantly higher than the Eurorates.

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<sup>1</sup> EU countries plus Iceland, Liechtenstein and Norway

<sup>2</sup> <https://digital-strategy.ec.europa.eu/en/library/joint-statement-eu-and-ukrainian-operators-help-refugees-ukraine-stay-connected>

<sup>3</sup> <https://digital-strategy.ec.europa.eu/en/news/roaming-ukraine-new-statement-signed-ensure-ukrainian-refugees-can-stay-connected>

<sup>4</sup> The questionnaire was targeted to operators that have signed the Joint Statement. In some cases, EEA operators which have not signed the Joint Statement provided data on a voluntary basis, this is however not included in our analysis apart from this general comparison in the executive summary.

Transit rates for voice traffic are highly heterogeneous for operators from different EEA countries, and it seems that mobile operators pay less per minute than fixed network operators. At the same time, there is a significant disparity in transit rates for UA and EEA operators (see Figure 6 and Figure 12). Furthermore, the transit prices do not show tendency to decline, but quite the opposite, in some cases transit rates increased over the observed period.

Wholesale roaming revenues of EEA operators per minute, SMS and GB were very low, in particular for data roaming. Some EEA operators did not provide data on revenues, which could indicate that they provide wholesale roaming for free to the UA operators or that they did not want to share this information. Volumes submitted by these operators were therefore excluded from the calculations.

With regard to termination rates paid and charged by UA operators, it shows that UA operators charge higher averages prices than they have to pay, and the average rates of Joint Statement signatories are significantly lower than those that have not signed the Joint Statement.

The average wholesale roaming payments as well as wholesale roaming revenues made by UA operators per minute, SMS and GB were significantly lower for EEA operators which signed the Joint Statement compared to non-signatories. This confirms the qualitative information provided by both UA and EEA operators that the implementation of the Joint Statement in respect to wholesale roaming is effective. However, the wholesale roaming rates remained stable or slightly increased over the reporting period.

As regards the results of the qualitative analysis, it seems that there are still some cases in which wholesale rates were difficult to negotiate. Both EEA and UA operators mentioned the lack of direct interconnection with UA operators and that interconnection is done via transit carriers as reasons for these difficulties. Others pointed to the lack of coordination and high administrative burden for implementing the Joint Statement.

In order to tackle some of the issues mentioned, EEA operators are suggesting to further improve the Joint Statement by obliging carriers to distinguish between termination, transit rates and mark-ups in the contract and bills. Another suggestion was to (further) align the UA termination rates with the EEA rates. Such measures would also further reduce fraud issues.

Furthermore, a number of EEA operators also mentioned that they are affected by fraud, such as Simbox fraud, where a fixed cellular terminal is used which allows the termination of calls in UA networks that were originated in other networks. Other instances of fraud included inflated SMS traffic and inflated calls as well as arbitrage in a roaming context. Operators also mentioned that they have implemented measures to prevent fraud, such as traffic monitoring, usage limits, blocking of number ranges or SIM cards.

On the retail side, both EEA and UA operators reported that they pass the low wholesale rates on to consumers. EEA operators mentioned that they still offer free SIM cards to refugees, offer free international calls to Ukraine, or monthly packages that can be used in the home country. In addition to the telecommunications services offered by EEA operators, they also

provide smartphones, power banks and laptops to refugees or support charity organisations. UA operators offer free or greatly reduced roaming services to their customers.



# 1. Introduction

## 1.1. Background

Following the Russian invasion of Ukraine on 24 February 2022, BEREC has followed closely the telecommunications sector's response to the crisis. BEREC, among other actions, launched a first data collection through NRAs during March 2022 in order to gather information regarding the support provided by telecommunications operators to Ukraine (e.g. free international calls, free roaming, etc.) and shared this information among its members and with the European Commission (EC). In May 2022, BEREC launched a second data collection. The aim of this data collection was

- a) to gather more detailed information covering not only retail measures applied by operators but also relevant wholesale measures applied between EEA and UA operators and;
- b) to understand the impact of the Joint Statement signed on 8 April 2022.

In April 2023, BEREC launched a third collection to monitor the implementation of the prolonged Joint Statement signed in February 2023<sup>5</sup> (with new parties involved) with the aim:

- a) to monitor the implementation of the Joint Statement, especially the lowering of the wholesale roaming and termination rates charged between EEA and UA operators; and
- b) to understand potential issues of fraud and potential obstacles operators might face in relation to the implementation of the Joint Statement.

Apart from EEA NRAs and operators, NCEC and UA operators were invited to contribute to this exercise, however only those that have signed the Joint Statement were asked to provide data. The results of this data collection are presented in this report.

## 1.2. Joint Statement

With the support of the EC, the European Parliament, BEREC and NCEC, EEA and UA operators signed on 8 April 2022 a Joint Statement to ensure they can sustain their voluntary measures and apply them as widely as possible throughout Europe. The Joint Statement establishes a stable framework to help people fleeing the war in Ukraine stay in touch with family and friends back home and have access to information.

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<sup>5</sup> <https://digital-strategy.ec.europa.eu/en/library/joint-statement-eu-and-ukrainian-operators-help-refugees-ukraine-stay-connected>

The EEA signatories of the statement intend to reduce wholesale roaming charges and termination rates as well as to pass on the full benefits of the reduction of termination rates by UA operators to customers calling from the EEA to Ukraine. On the other hand, the UA signatories intend to gradually reduce international termination rates for calls to Ukraine originated by EEA numbers and calls to Ukraine originated by UA numbers roaming in the EU as well as to pass on the full benefits of the reduction of wholesale roaming charges by EU operators to their customers roaming in the EU.

The number of mobile and fixed operators that have signed the new Joint Statement varies from zero to eight per country. BEREC would like to note that in many cases, the statement is signed on group level and might therefore appear in the statistics more than once.

The Joint Statement is also signed by some International Carriers, which, in response to measures undertaken by EU/EEA operators and Ukrainian operators, intend to pass on the full benefits of the reduction of termination rates to their counterparts. However, these signatories were not contacted in the course of the data collection.

With the prolongation of the Joint Statement in February 2023, for the first time also fixed operators in the Ukraine have signed the Joint Statement.

### **1.3. Operators contributing to the monitoring**

The third round of data collection was restricted to operators that have signed the Joint Statement. The questionnaire therefore was circulated to all EEA operators as well as to UA operators, however only those EEA operators that have signed the Joint Statement were asked to provide data. In some cases, EEA operators which have not signed the Joint Statement provided data on a voluntary basis; however, this information has not been included in the BEREC analysis.

Altogether, 52 EEA mobile operators, 33 EEA fixed operators, 4 UA mobile operators and 3 UA fixed operators have provided data for this data collection.



## 2. Wholesale Measures EEA operators

The data collection included an extensive list of questions as regards wholesale charges (termination and roaming) between EEA and UA operators. The following sections include the main results of the analysis done based on the inputs received by EEA operators.

Several operators provided incomplete data, e.g. by submitting only volumes and not revenues for particular indicators. This could have several reasons: either it was not possible for them to provide data on revenues on short notice, or they did not want to share this data, or they did not achieve revenues with wholesale roaming or termination services. If revenue data were not provided, those operators were not included in the calculations of averages.

### 2.1. Termination

#### 2.1.1. Average price paid for termination by EEA operators to fixed and mobile UA operators

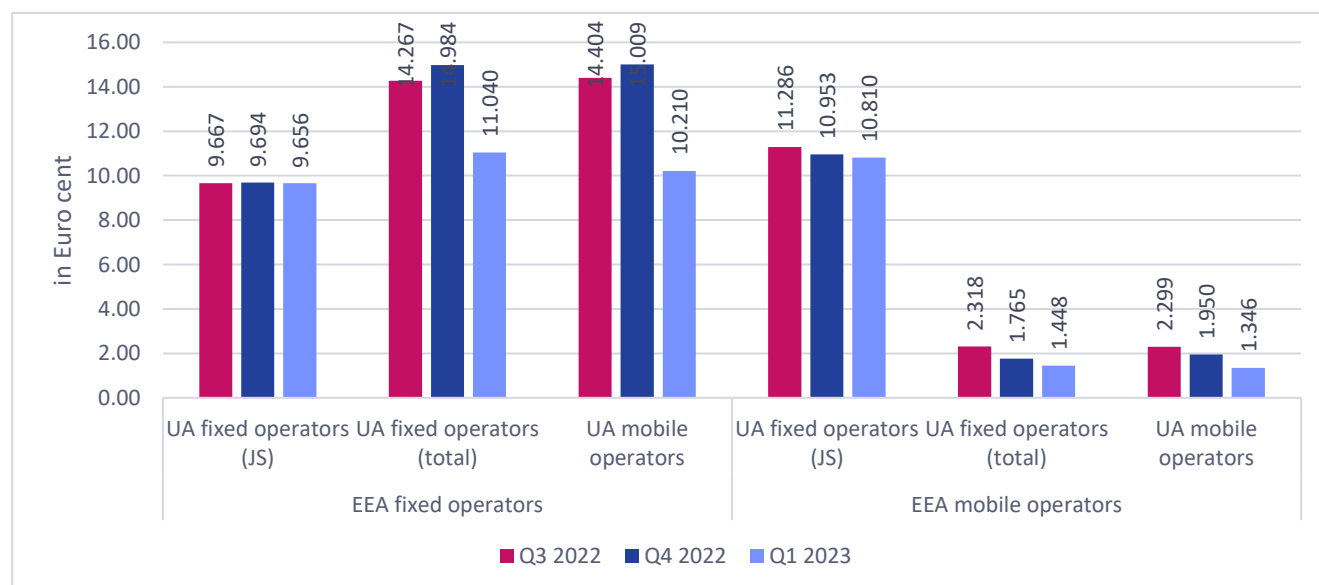


Figure 1: EEA Average price per termination minute paid by EEA fixed and mobile operators that have signed the Joint Statement to UA operators (n=22 fixed EEA operators and 41 mobile EEA operators)



## 2.1.2. Average revenues per unit for termination by EEA operators to fixed and mobile UA operators

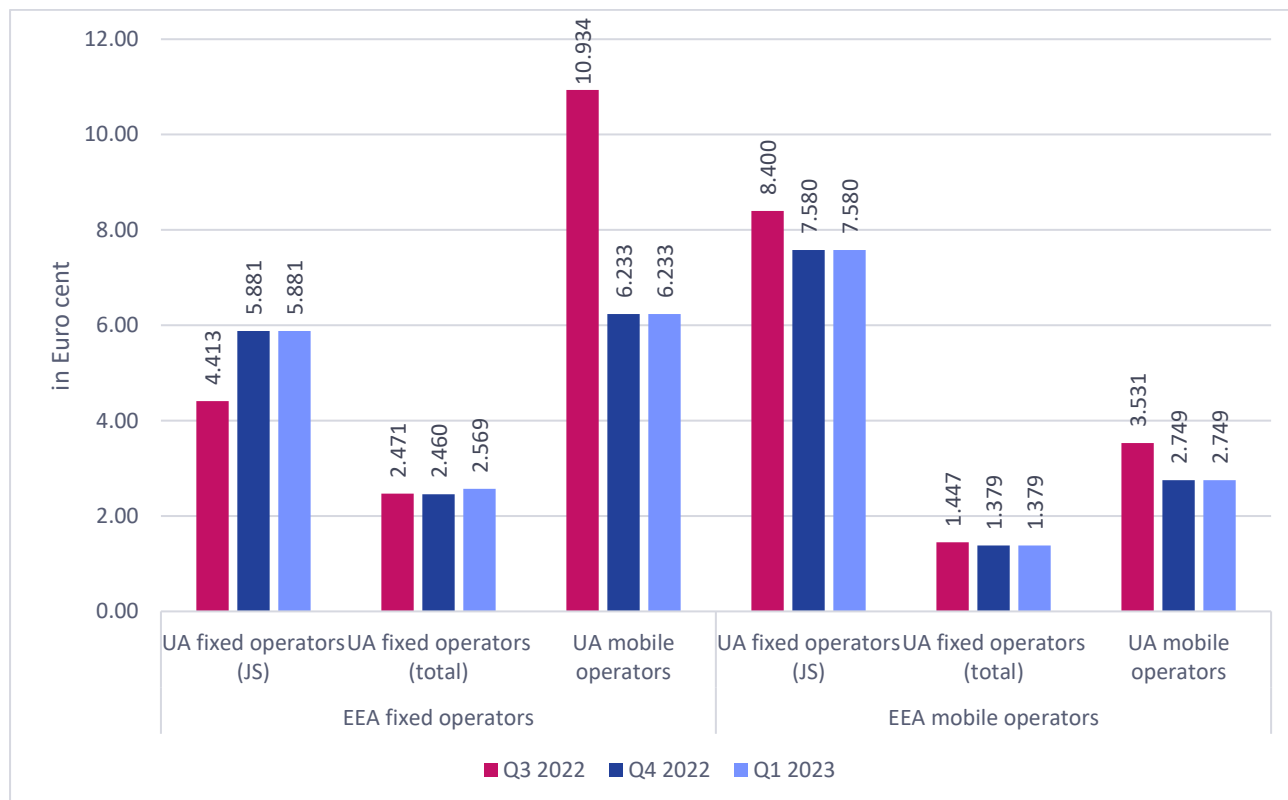


Figure 2: EEA average termination revenues per minute for termination minutes originated in UA<sup>6</sup> (n=27 EEA fixed operators and 32 EEA mobile operators)

<sup>6</sup> ES was excluded from these figures due to inconsistent data.

### 2.1.3. Comparison of average payments with the average revenues

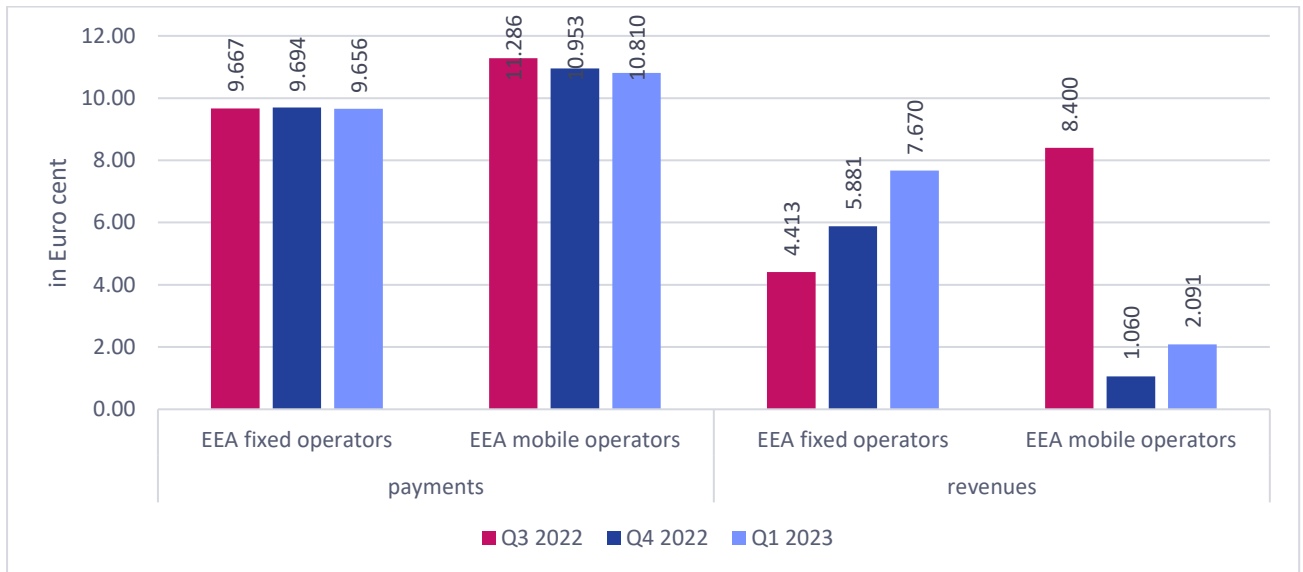


Figure 3: Average termination rates paid and charged by EEA operators (fixed and mobile) to/from fixed UA operators (JS signatories) for termination (payments: n=22 fixed EEA operators and 41 EEA mobile operators; revenues: n=27 EEA fixed operators and 32 EEA mobile operators)

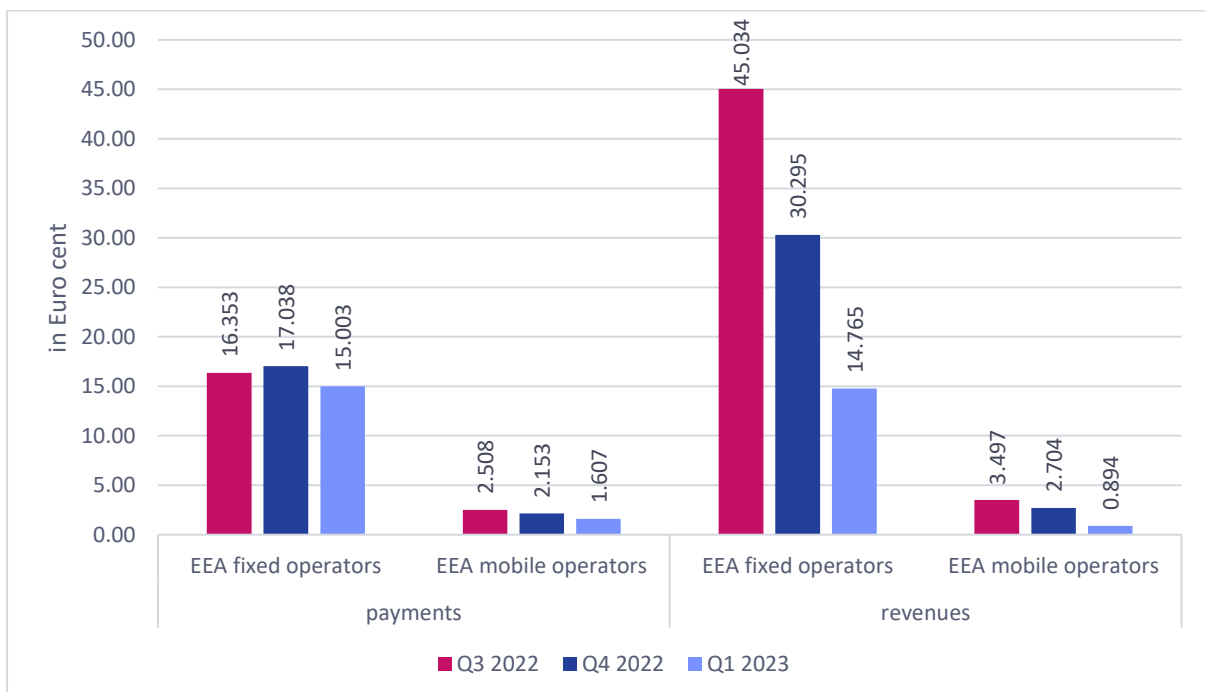


Figure 4: Average termination rates paid and charged by EEA operators (fixed and mobile) to UA mobile operators (Joint Statement signatories) for termination (payments: n=22 fixed EEA operators and 41 EEA mobile operators; revenues: n=27 EEA fixed operators and 32 EEA mobile operators)

## 2.2. Transit

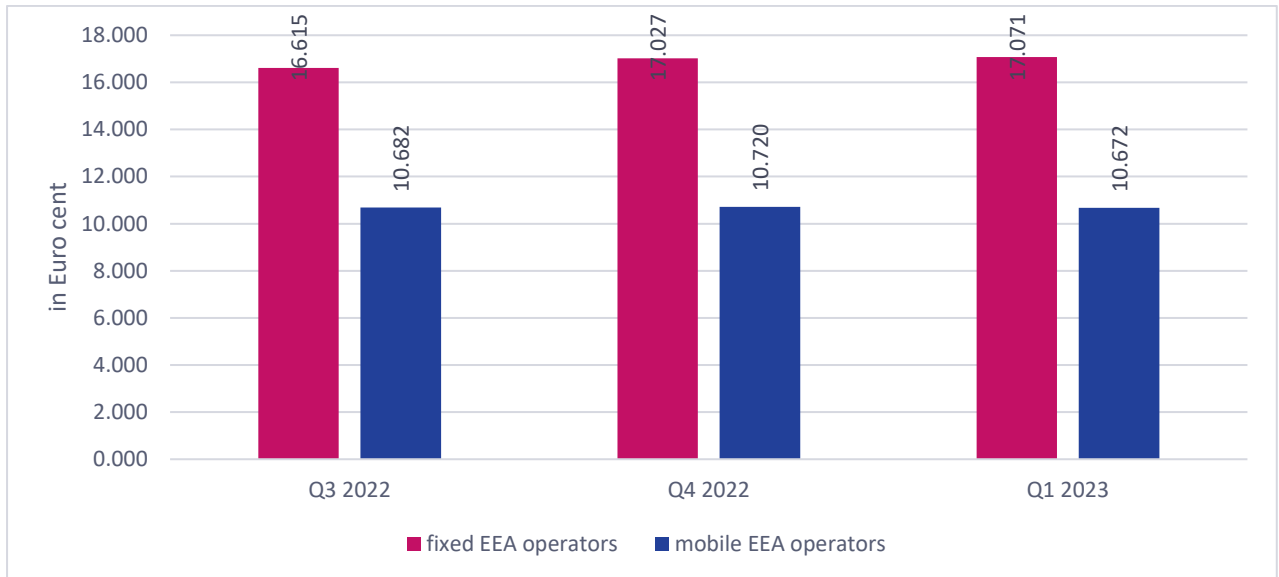


Figure 5: Average transit rates paid by EEA operators (fixed and mobile) (n=9 EEA fixed operators and 15 EEA mobile operators)

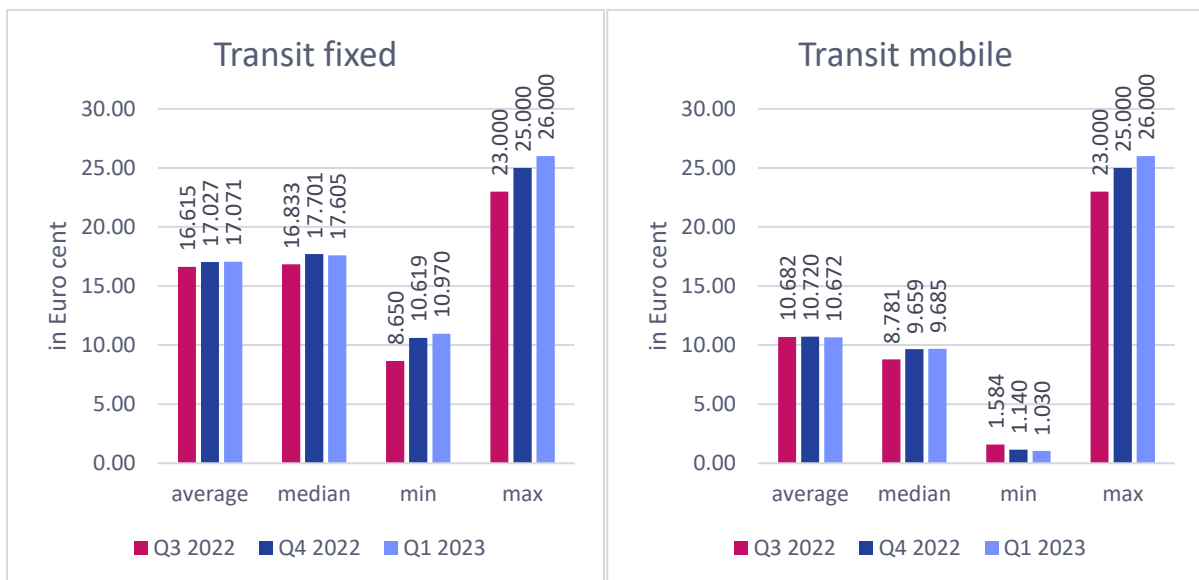


Figure 6: Transit rates paid by EEA operators (average, median, minimum and maximum) (n=9 EEA fixed operators and 15 EEA mobile operators)

## 2.3. Wholesale roaming

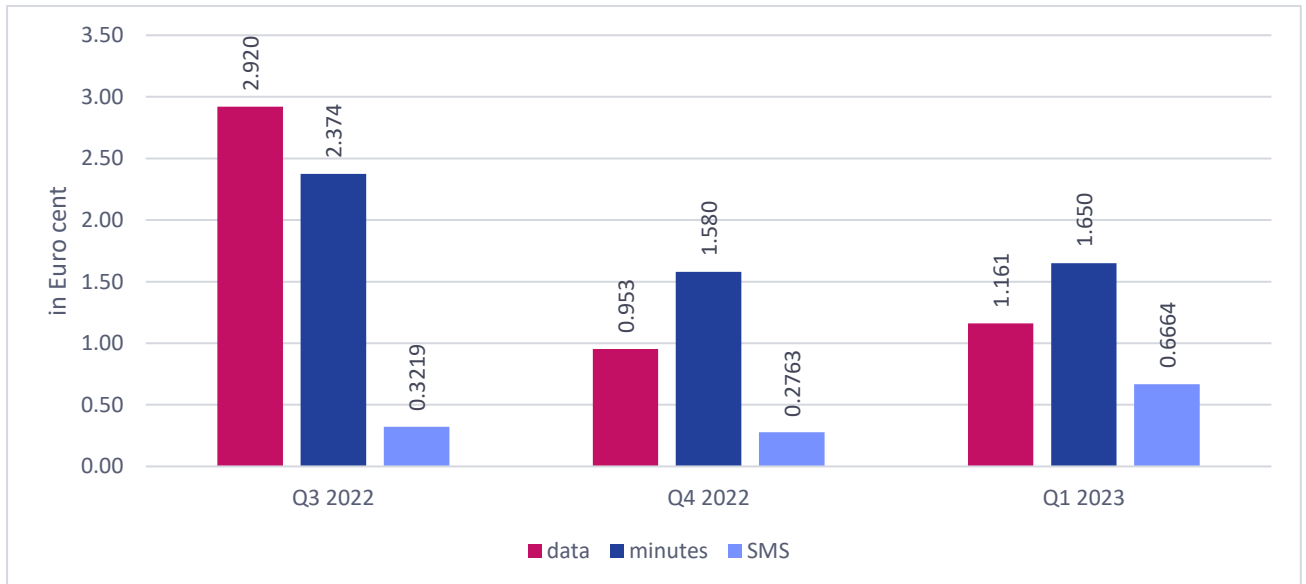


Figure 7: Average wholesale roaming revenues per unit received by EEA operators from UA operators per GB, minute and SMS (n=33 EEA operators)

## 3. Wholesale Measures UA operators

### 3.1. Termination

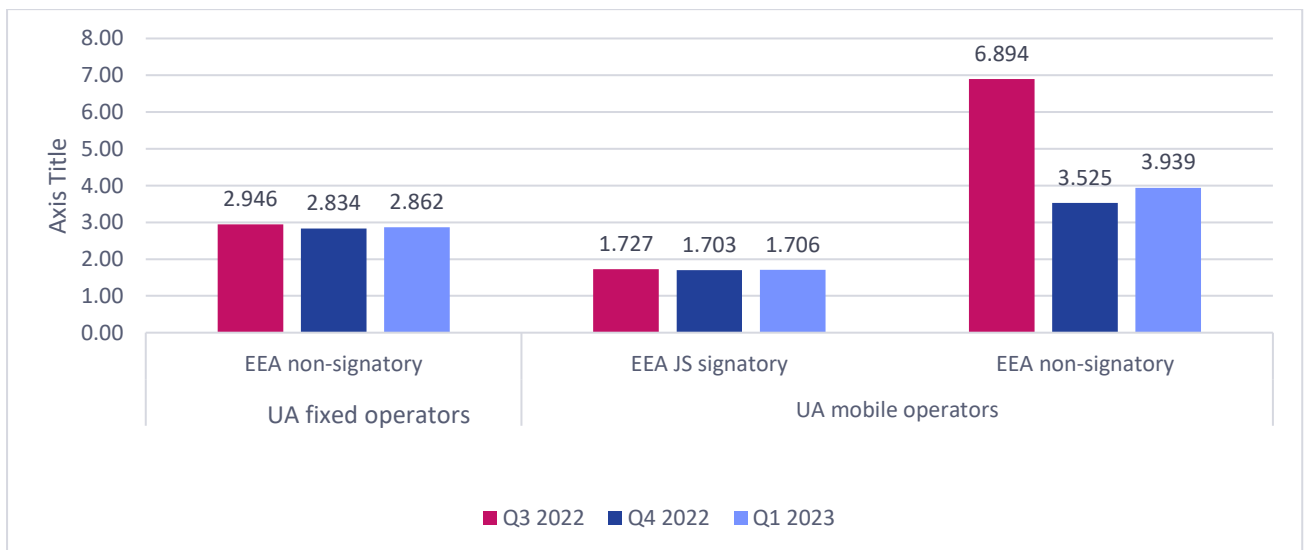


Figure 8: Average termination rates paid by UA operators (fixed and mobile) for terminating minutes in fixed networks in the EEA (signatories of the Joint Statement vs. non-signatories)

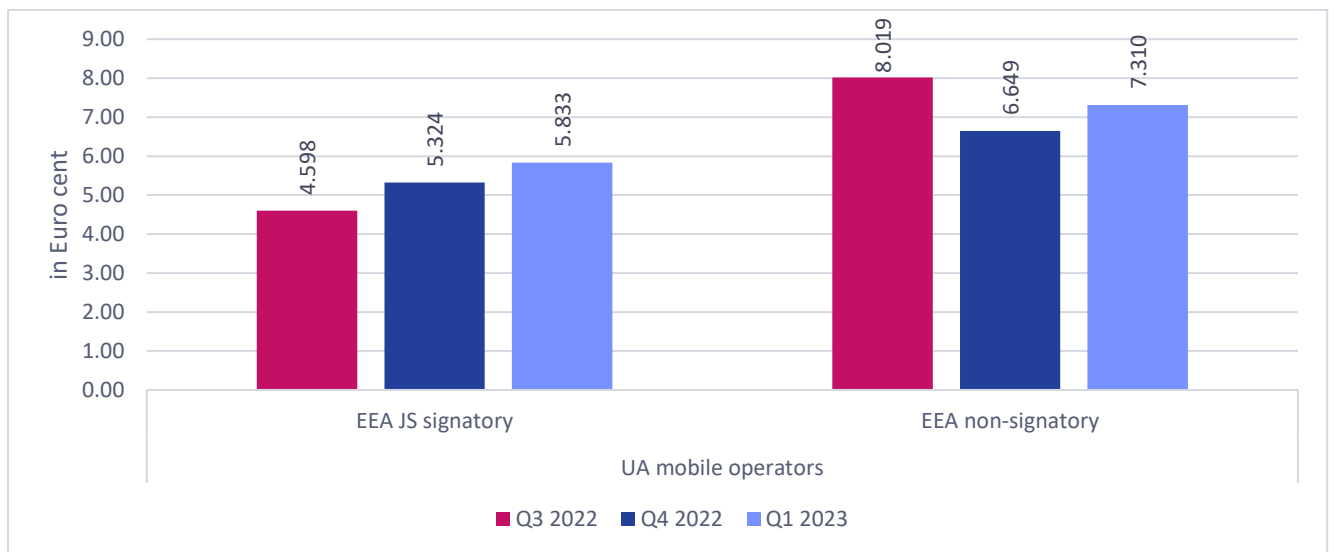


Figure 9: Average termination rates charged by UA mobile operators for terminating minutes originated by EEA fixed operators (signatories of the Joint Statement vs. non-signatories) (n=4 UA mobile operators)

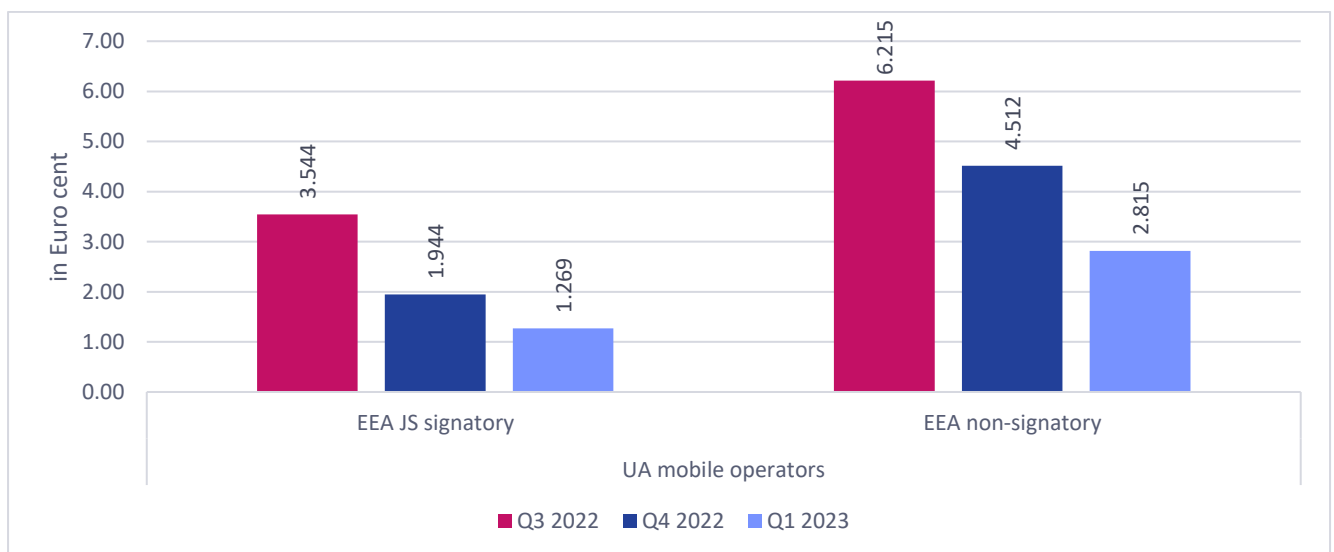


Figure 10: Average termination rates paid by UA fixed and mobile operators for terminating minutes in mobile networks in the EEA (signatories of the Joint Statement vs. non-signatories)<sup>7</sup>

<sup>7</sup> UA fixed operators did not provide data on mobile termination rates paid to EEA operators who had signed the Joint Statement.

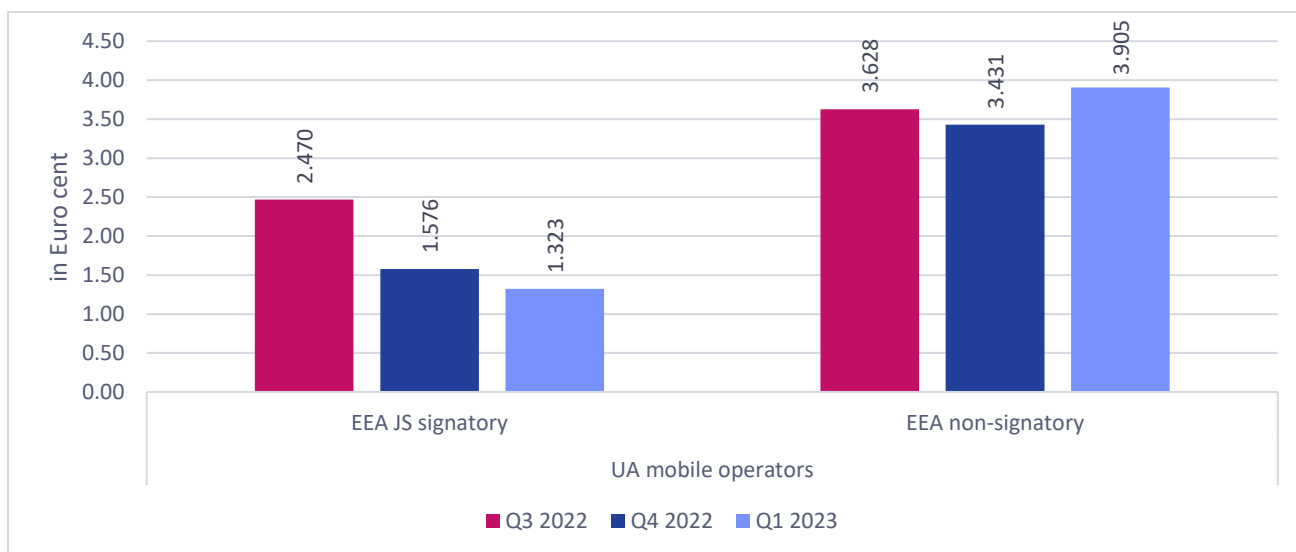


Figure 11: Average termination rates charged by UA mobile operators for terminating minutes originated by mobile EEA operators (signatories of the Joint Statement vs. non-signatories)<sup>8</sup>

### 3.2. Transit

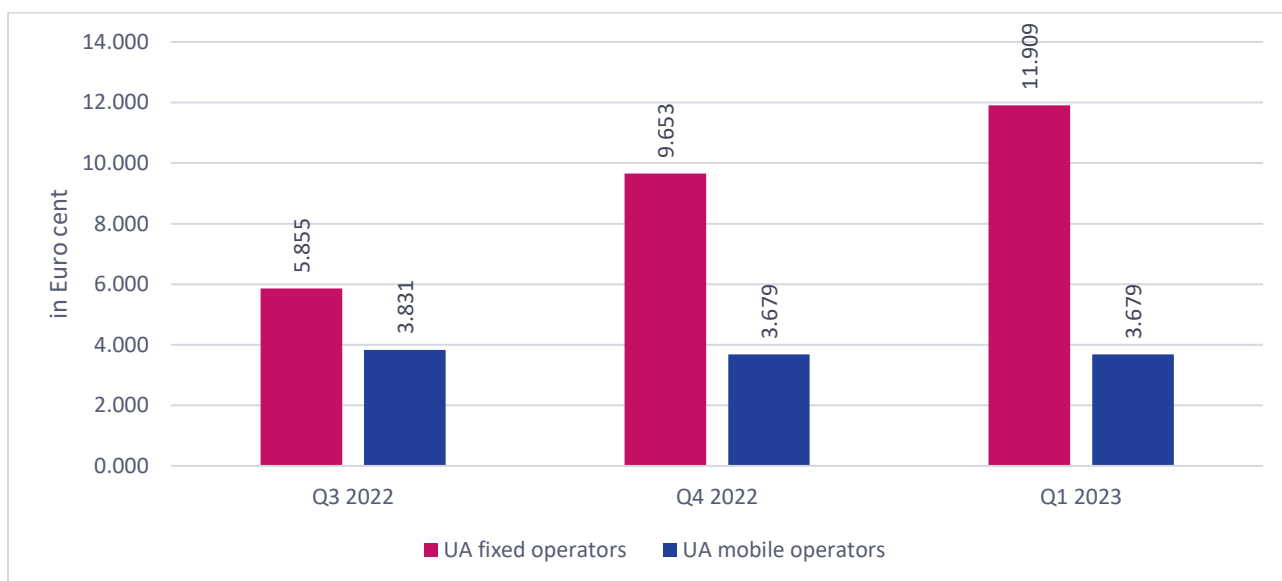


Figure 12: Average transit rates paid by UA operators (fixed and mobile)

<sup>8</sup> UA fixed operators did not provide data on revenues from fixed termination rates charged to mobile EEA operators.

### 3.3. Wholesale roaming

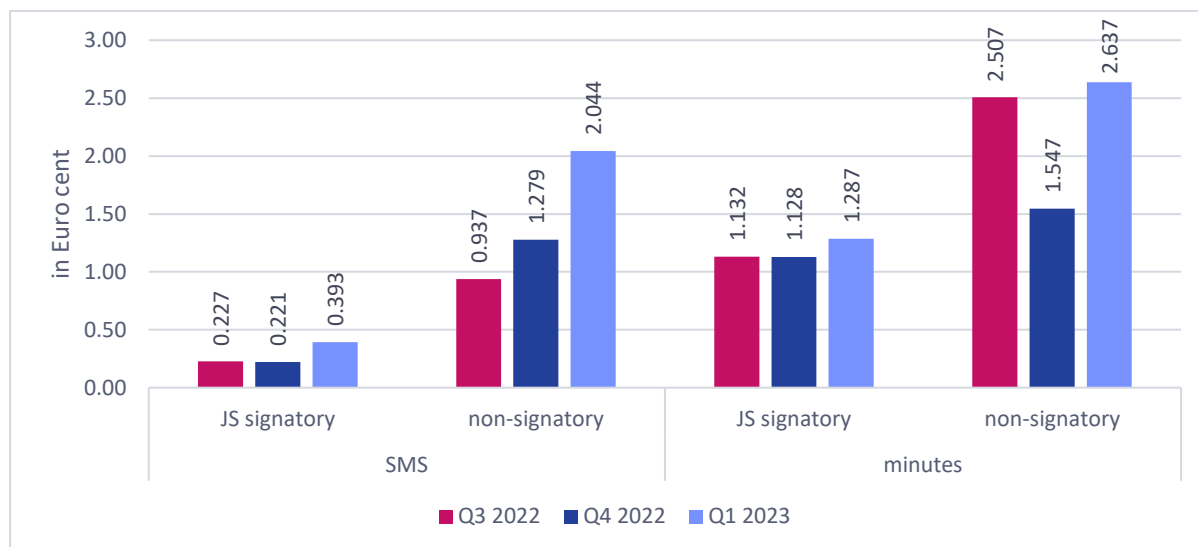


Figure 13: Average rates paid by UA operators to EEA operators (signatories of the Joint Statement and non-signatories) per wholesale roaming SMS and minute

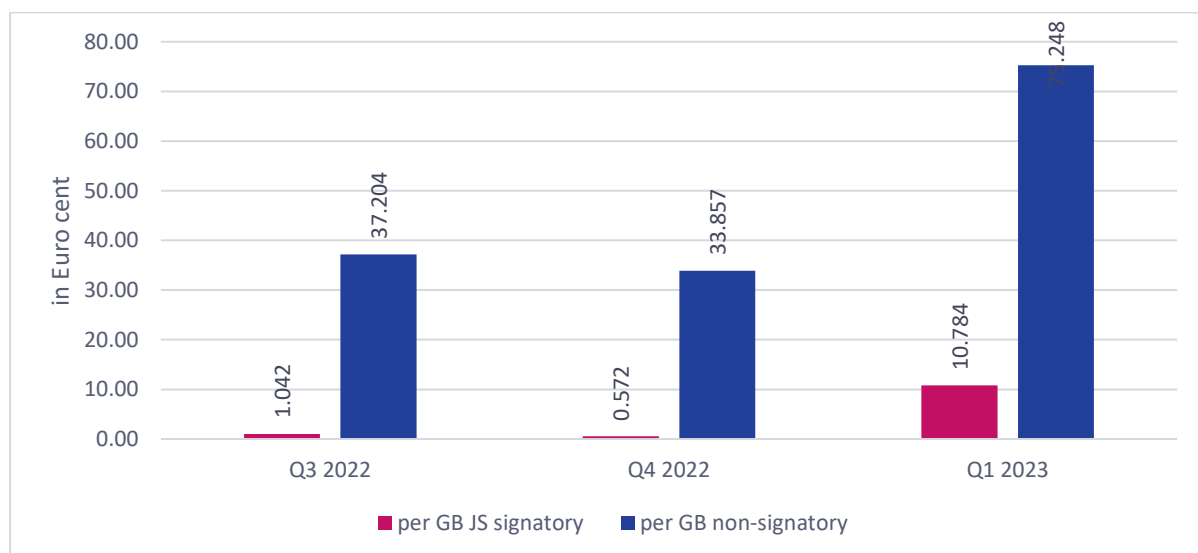


Figure 14: Average rates paid by UA operators to EEA operators (signatories of the Joint Statement and non-signatories) per wholesale roaming GB<sup>9</sup>

<sup>9</sup> The low GB price could be explained because some operators do not charge Ukrainian operators for providing wholesale roaming services.

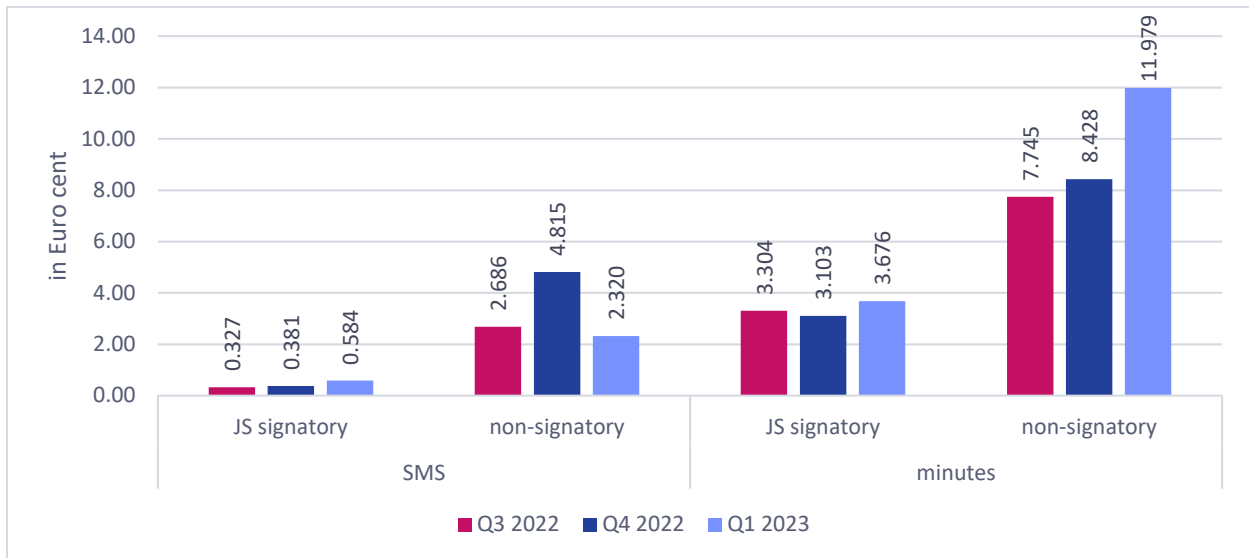


Figure 15: Average rates charged by UA operators to EEA operators (signatories of the Joint Statement and non-signatories) per wholesale roaming SMS and minute

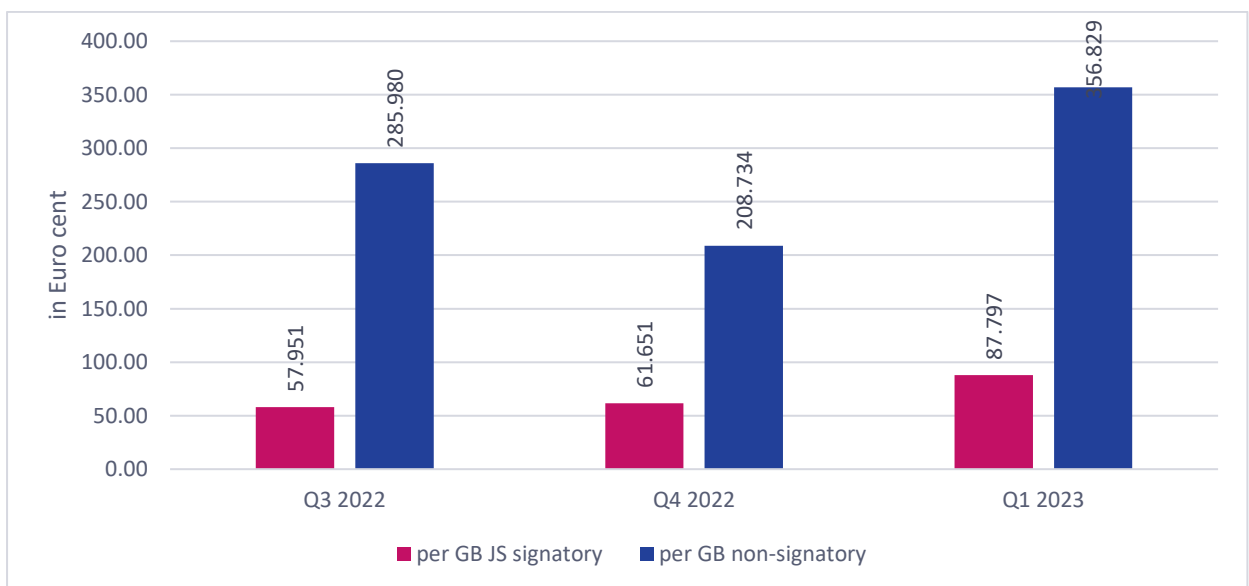


Figure 16: Average rates charged by UA operators to EEA operators (signatories of the Joint Statement and non-signatories) per wholesale roaming GB





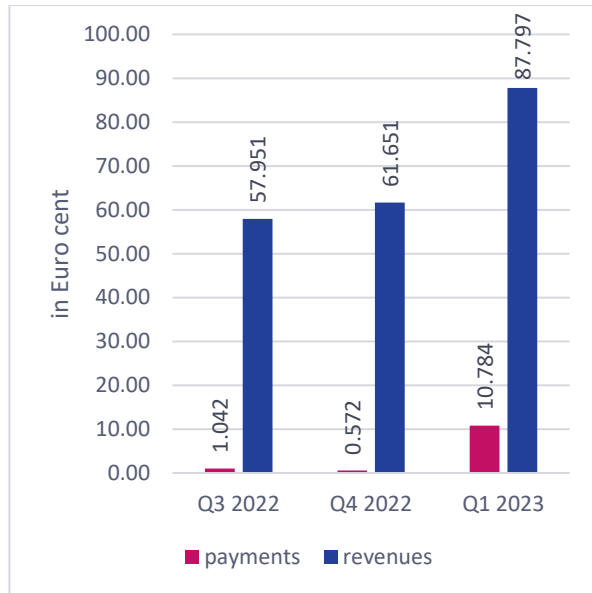


Figure 17: Comparison of wholesale roaming payments and revenues of UA operators per GB (only through EEA operators which signed the Joint Statement)

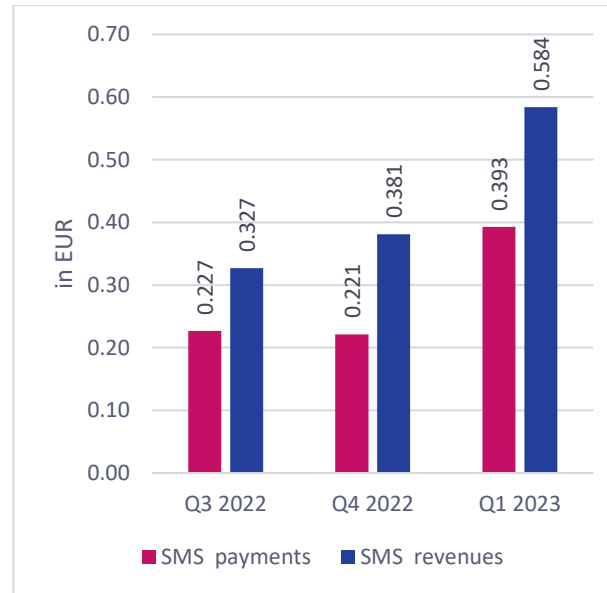


Figure 18: Comparison of wholesale roaming payments and revenues of UA operators per SMS (only through EEA operators which signed the Joint Statement)

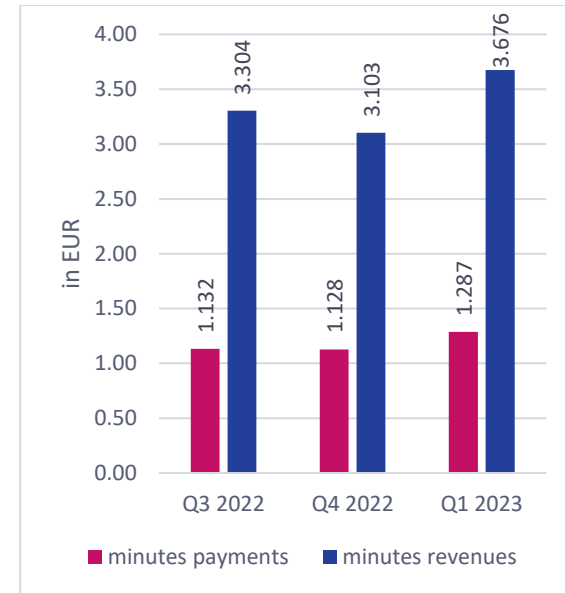


Figure 19: Comparison of wholesale roaming payments and revenues of UA operators per minute (only through EEA operators which signed the Joint Statement)

## 4. General comments raised by operators

### 4.1. EEA operators

#### 4.1.1. Fraud

Overall, the majority of EEA operators did not experience fraud cases related to the implementation of the Joint Statement (over three quarters of all fixed operators and nearly two-thirds of mobile operators). The cases that were mentioned mostly revolved around Simbox fraud, where a fixed cellular terminal is used which allows the termination of calls in Ukrainian networks that were originated in other networks. Other instances of fraud included inflated SMS traffic and inflated calls as well as arbitrage in a roaming context. From the responses received, these cases seem to have been resolved.

Regarding the impact of fraud, the vast majority reported no impact or a negligible impact (nearly all fixed operators and over two-thirds of mobile operators). Of those that reported a financial impact, the losses incurred ranged from approx. 2,500 Euro to a maximum of around 110,000 Euro.

Operators responding to the questionnaire have implemented a wide variety of measures to counter fraud. For the most part, these involve traffic monitoring and control, often on a real-time basis. A few respondents had implemented regular reporting on traffic to/from Ukraine using e.g. KPIs. Some respondents have implemented alert limits and reporting specifically for Ukraine-bound traffic, while others use the same fraud management system as for other countries. A few operators blocked UA B-number ranges or set up alerts specifically for number ranges reported as risky due to their high termination costs, including international premium rate numbers. In particular, many mobile operators mentioned close cooperation with other mobile operators and specifically with UA mobile operators as a measure to prevent or swiftly act against fraud. In this context, tariff adjustments by an UA operator and an increase in tariffs for this operator to align prices with wholesale termination costs were mentioned as effective. In other cases, SIM cards (mostly pre-paid) were blocked upon detection of fraudulent activity or a requirement was introduced to prevent the usage of SIM cards prior to the deposit of a minimum charge. Many respondents mentioned that they blocked traffic identified as fraudulent, and one reported closing down any point of sales involved in fraud cases.

#### 4.1.2. Obstacles

About half of fixed operators and about half of mobile operators reported that they did not have any obstacles to lowering the termination rates. For some of these respondents, however, it was not possible to negotiate termination rates caused by the fact that they do not have direct interconnection agreements with UA operators; in these cases, transit operators negotiated

the wholesale termination rates. One operator noted that it is only possible to decrease voice termination charges in its network if all other national providers charge similar rates due to the potential for misuse of its transit rates (which are linked to the termination rates through its billing setup).

For those operators, which did experience difficulties, some mentioned that negotiations had been very difficult early on in March 2022, but there had been improvements over time. One operator, however, noted that after signing the Joint Statement, the termination rates offered to them by UA operators suddenly increased. Several respondents indicated that the negotiations were particularly difficult with one of the large UA mobile operators and with the UA fixed operators. This can be confirmed by the quantitative data received.

The administrative cost of negotiations, including the amendment of contracts, changes in billing and setting up monitoring and reporting, was mentioned by some of the respondents as burdensome, in particular because negotiations had to be conducted bilaterally with each operator to find a bespoke agreement. Several mentioned the additional cost incurred through transit, the considerable delay in implementing lower rates on the part of transit providers, and the difficulty of switching international carriers to get better rates. Some of the respondents highlighted that they could only lower wholesale roaming charges if the mobile termination rate decreases, while others stressed that termination rates should be reciprocal. In one case, separate rates for additional traffic in comparison to 2021 levels had been negotiated, allowing this operator to offer special conditions to refugees. In a different case, an agreement was reached to set rates according to the country code of the originating number. One operator mentioned that the process of interconnecting, in particular the technical testing, is very time consuming and requires significant resources.

#### **4.1.3. Suggestions for further improvement of the Joint Statement**

EEA operators in their responses also provided suggestions to further improve the Joint Statement and would support to further reduce fraud and increase transparency with regard to termination and transit prices. One of the suggestions is to oblige carriers to distinguish in the contracts/bills between the MTR/FTR, transit and the mark-up. Another suggestion would be to align the Ukrainian termination rates with the EU rates. Some respondents highlighted that the support provided by the EC and BEREC were helpful for market negotiations, especially in 2022.

#### **4.1.4. Voluntary measures**

The most popular measures are free SIM cards for refugees and a certain number of free international calls/SMS to Ukraine. Some of the respondents have continued offering a basic package free of charge to refugees who use these free SIM cards. In some cases, charges have since been re-introduced for calls and SMS to Ukraine, albeit at reduced rates, but the majority of operators have continued offering a certain number of free calls/SMS to Ukraine



for post-paid (and often also pre-paid) subscribers. A few operators noted that subscribers received access to these offers upon presenting a Ukrainian tax number.

Additionally, a large share of operators has voluntarily extended the RLAH regime and offers free-of-charge roaming in Ukraine to their own subscribers. Several providers stated that they increased 2G capacities around refugee housing, provided mobile routers to refugees or orphanages, or deployed mobile base stations to border regions to improve connectivity.

Some providers have collected devices such as smartphones, power banks or laptops and distributed them to refugees. Several respondents showcased the donations they collected to support charity organisations working to resolve the crisis or the paid time off available to employees who wished to volunteer, while others supported various hotlines aiming to support refugees through translation, financial advice or psychological support. Others included Ukrainian TV programmes in their TV offers, created educational programmes (for children or specific topics, e.g. fake news or crisis communication with youth), or provided temporary housing for their Ukrainian employees.

## **4.2. UA operators**

### **4.2.1. Benefits**

Mobile operators reported that they pass on the benefits to their subscribers.

### **4.2.2. Fraud**

The majority of respondents reported that they had not detected cases of fraud in connection with the Joint Statement. One operator had detected CLI refiling using UK numbers, while another observed fraud using its SIM cards while roaming and the bypass of termination traffic through the use of EEA numbers.

### **4.2.3. Fraud impact**

One operator stated that the impact due to fraud amounted to approx. 2 % of its revenues from international interconnection (however, from the answer it seems that this covers fraud in general, and not only in conjunction with the implementation of the Joint Statement), while another estimated fraud to lead to losses amounting to less than 1 % of its total revenue. Other operators did not experience financial impacts from fraud.

### **4.2.4. Fraud measures**

Several respondents mentioned implementing the fraud detection and prevention recommendations of the GSMA. These included a 24/7 fraud management unit and a fraud management system. One respondent explained that since it mainly experienced issues with

the disguise of international traffic as national traffic (and thus subject to a national mobile termination rate), it had implemented detection and blocking of incoming traffic.

#### **4.2.5. Obstacles**

Some operators mentioned a lack of direct interconnection agreements as a barrier to lowering termination rates and difficulties in negotiating such agreements. Others pointed to the lack of coordination between UA operators in passing on reduced termination rates. One respondent mentioned that routing settings were too inflexible, which made it difficult to implement interconnection. Another respondent highlighted the administrative burden of implementing individually negotiated agreements. With regards to roaming, one respondent expressed its concerns that the regulated price of 2 Euro/GB does not reflect the Ukrainian market levels.

#### **4.2.6. Voluntary measures**

UA operators continue to offer affordable or free roaming services to their customers (around 4 million Ukrainian refugees in the reported period). In fact, UA operators offer RLAH to their subscribers with a sufficient volume of services in roaming, and often even not introducing any limits on the volume of services consumed.

#### **4.2.7. Additional input from NCEC**

According to NCEC, some UA operators documented cases of connections of their subscribers in international roaming with subscribers of several illegally operating telecom networks established by authorities of the Russian Federation in the temporarily occupied territories of Ukraine, with the illegal use of “+380 71”, “+380 72” codes from the Numbering Plan of Ukraine. Such cases were identified in the ECNs of several EEA Member states, in particular Austria, Bulgaria, Croatia, Czech Republic, Germany, Poland. According to the information available to NCEC, Ukrainian operators already informed their counterparts in the EEA of these cases.

NCEC would like to raise the awareness of EEA operators about these cases so as to be prepared to take any required action if needed.

