REPUBLIC OF SERBIA
RATEL
REGULATORY AGENCY FOR ELECTRONIC COMMUNICATIONS AND POSTAL SERVICES

AN OVERVIEW OF THE ELECTRONIC COMMUNICATIONS MARKET

IN THE REPUBLIC OF SERBIA

The Third Quarter of 2022

The Overview presents the data for the third quarter of 2022 along with comparative data for the three previous quarters.

The presented data reflect the overall market status for each given quarter, including the actual quarterly data for the leading electronic communications operators in the Republic of Serbia, whereas the data for the rest of the market were estimated based on the data for 2021 collected in the annual questionnaires. Therefore, the total quarterly report may show discrepancies with respect to the data collected in the regular annual questionnaires. The Agency shall not be held responsible for the correctness of the data submitted by the operators in the quarterly and annual questionnaires.

Quarterly electronic communications market indicators referring to fixed telephony include the data on the operators that make up over 99% of the market, in terms of the number of subscribers. The data on the market situation include CDMA subscribers and the effectuated traffic.

Quarterly electronic communications market indicators referring to mobile telephony include the data on three mobile operators and, as of Q1 2019, the Agency also collects data on virtual mobile operators.

Quarterly electronic communications market indicators referring to Internet services include the data for the leading operators that make up approximately 94% of the market, in terms of the number of subscribers, whereas the data for the remaining 6% of the market were estimated based on the data for 2021 collected in the annual questionnaires.

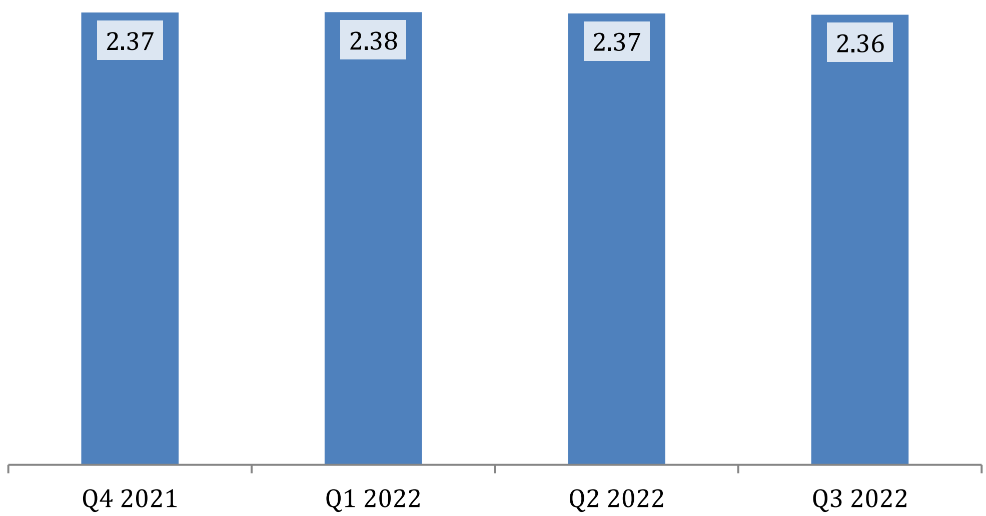
Quarterly electronic communications market indicators referring to media content distribution include the data for the leading operators that make up approximately 97% of the market, in terms of the number of subscribers, whereas the data for the remaining 3% of the market were estimated based on the data for 2021 collected in the annual questionnaires.

Quarterly electronic communications market indicators referring to bundled services include the data for the leading operators that make up approximately 98% of the market, whereas the data for the remaining 2% of the market were estimated based on the data for 2021 collected in the annual questionnaires.

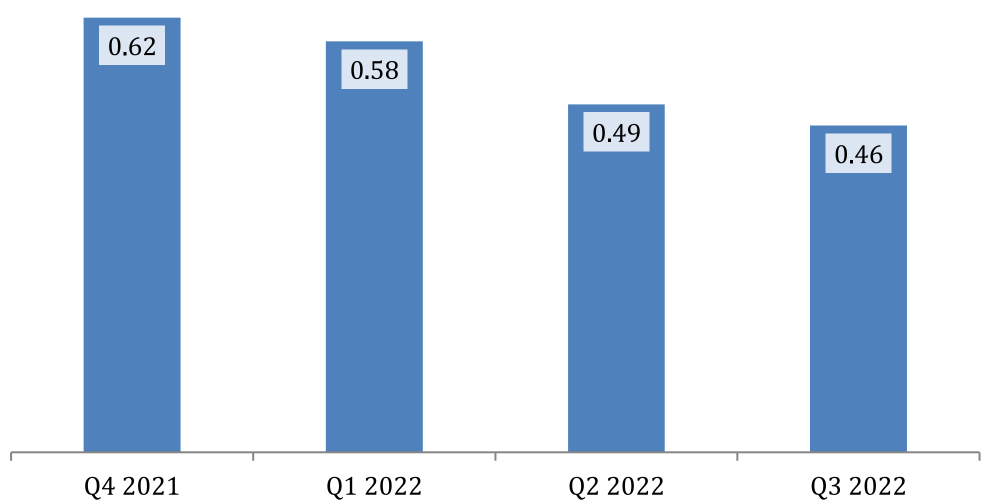
Public Fixed Telecommunications Networks and Services

Both the number of fixed telephony subscribers and generated traffic in the third quarter of 2022 are lower in comparison to the previous quarter. Approximately 2.36 million fixed telephony subscribers generated around 460 million minutes of traffic in the last observed quarter, which means that a fixed telephony subscriber on average spent 2.1 minutes a day on calls.

Number of fixed line subscribers (in million)

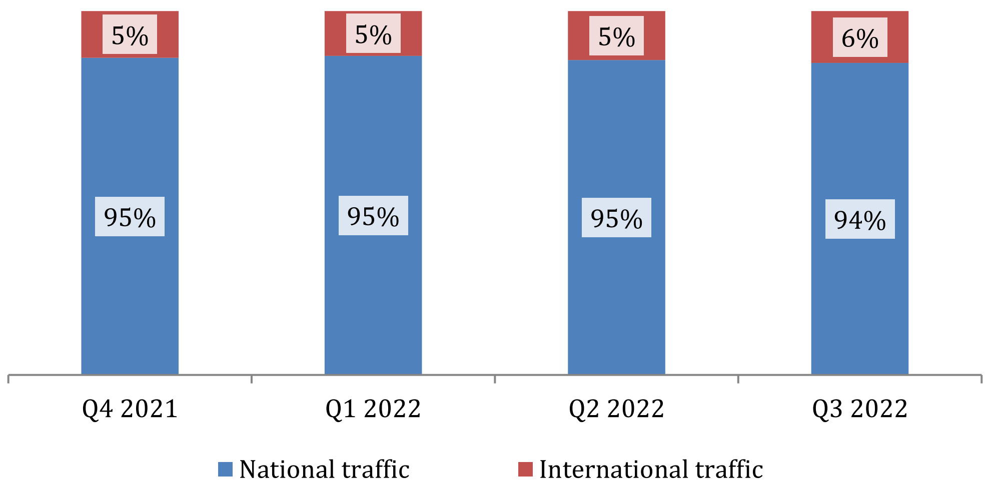


Total fixed telephony traffic (in billion minutes)



The subscriber structure has not significantly changed over the observed quarters: 87% of the fixed telephony subscribers in the third quarter of 2022 are natural persons, i.e. private users. In all observed quarters, the largest share of the fixed telephony traffic is accounted for by the national traffic, with 94% in Q3 2022.

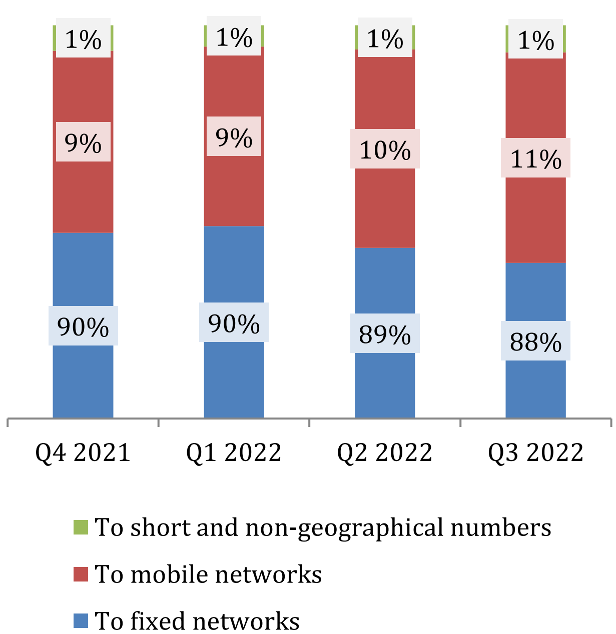
Fixed telephony traffic structure



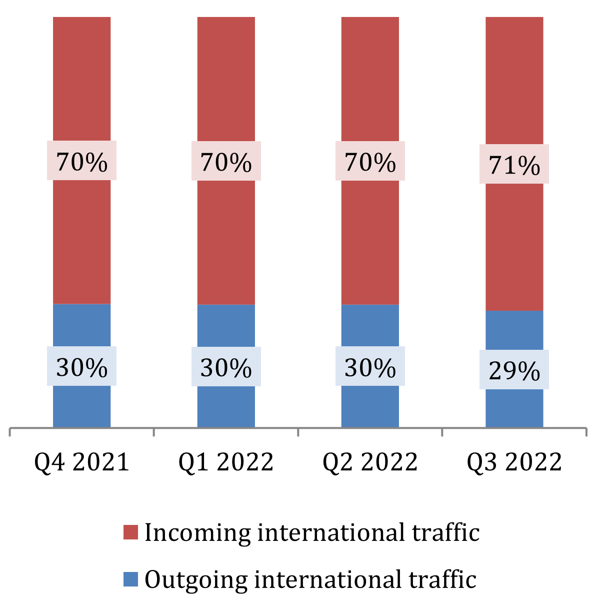
The outgoing calls from fixed network are mostly directed towards other fixed networks, while the international traffic is dominated by incoming calls.

Structure of national and international traffic in fixed telephony

Outgoing national traffic

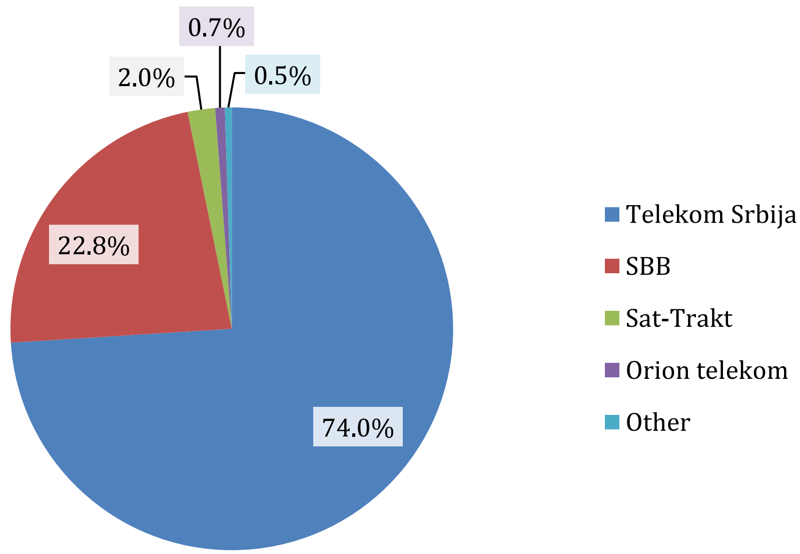


International traffic



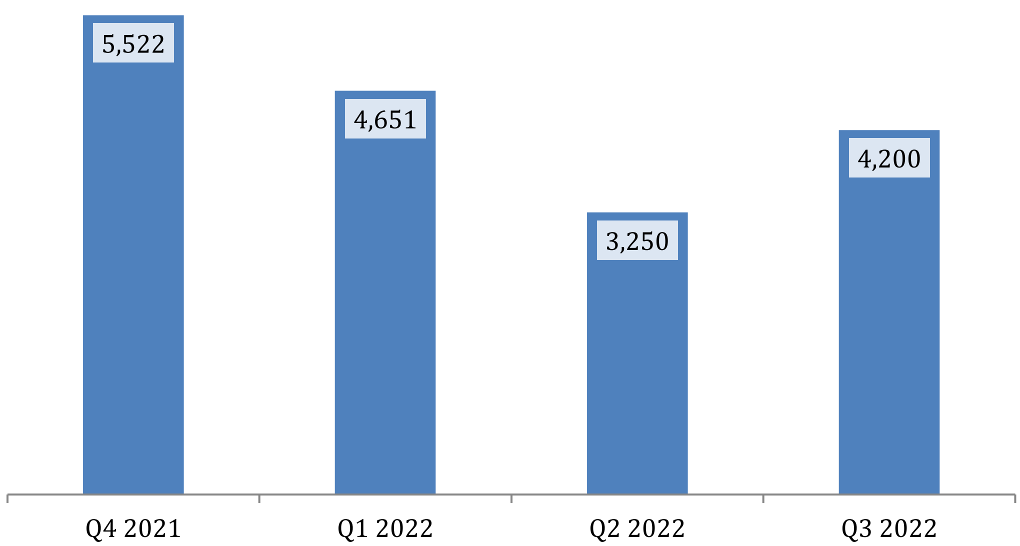
Below is shown the leading operators' market share in terms of the number of subscribers in Q3 2022.

Operators' market share by number of subscribers in Q3 2022



The number of portings in Q3 2022 was 4.2 thousand (almost 1.4 thousand a month), showing a growth compared to the previous quarter.

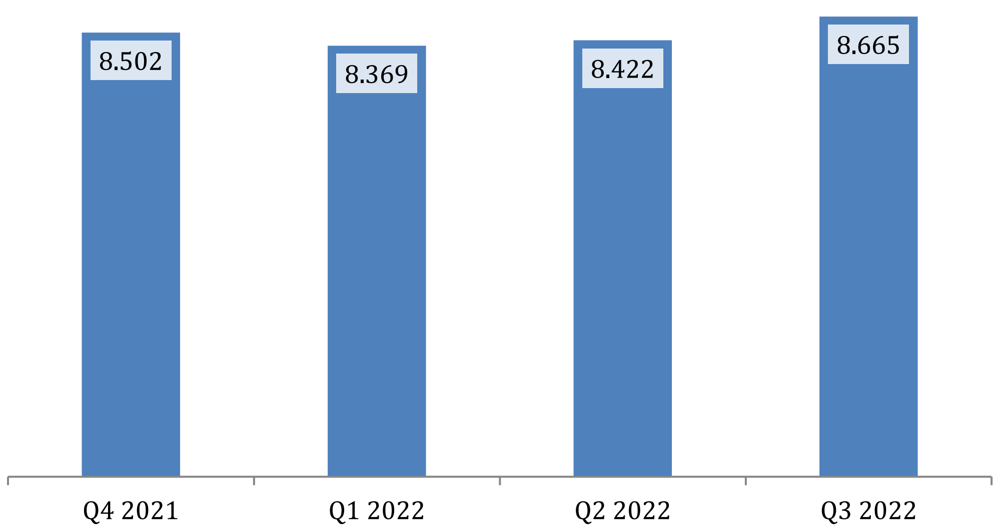
Fixed telephony number portings per quarter



Public Mobile Telecommunications Networks and Services

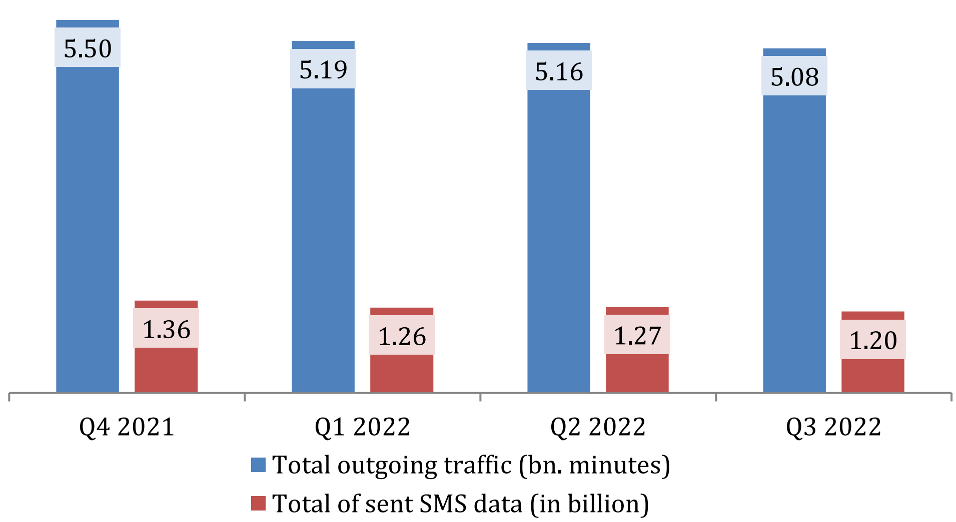
In the third quarter of 2022, there were approximately 8.665 million active mobile telephony subscribers that generated around 5.1 billion minutes of national and international traffic and sent around 1.2 billion SMS messages. On average, in Q3 2022, a mobile user spent around 6.4 minutes a day on calls and sent 1.5 text messages. On the mobile networks market, an increase in the number of active mobile telephony subscribers has been observed in Q3 2022.

Total number of active mobile telephony subscribers (in million)



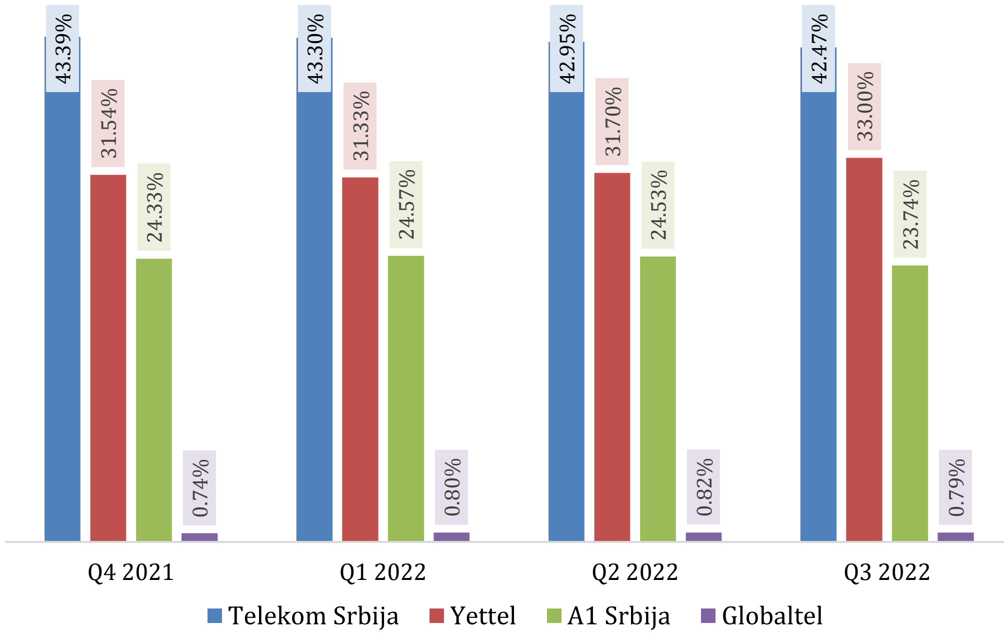
In Q3 2022, both the effectuated voice traffic in mobile networks and the SMS traffic were on decline, compared to the previous quarter.

Generated voice and SMS mobile telephony traffic



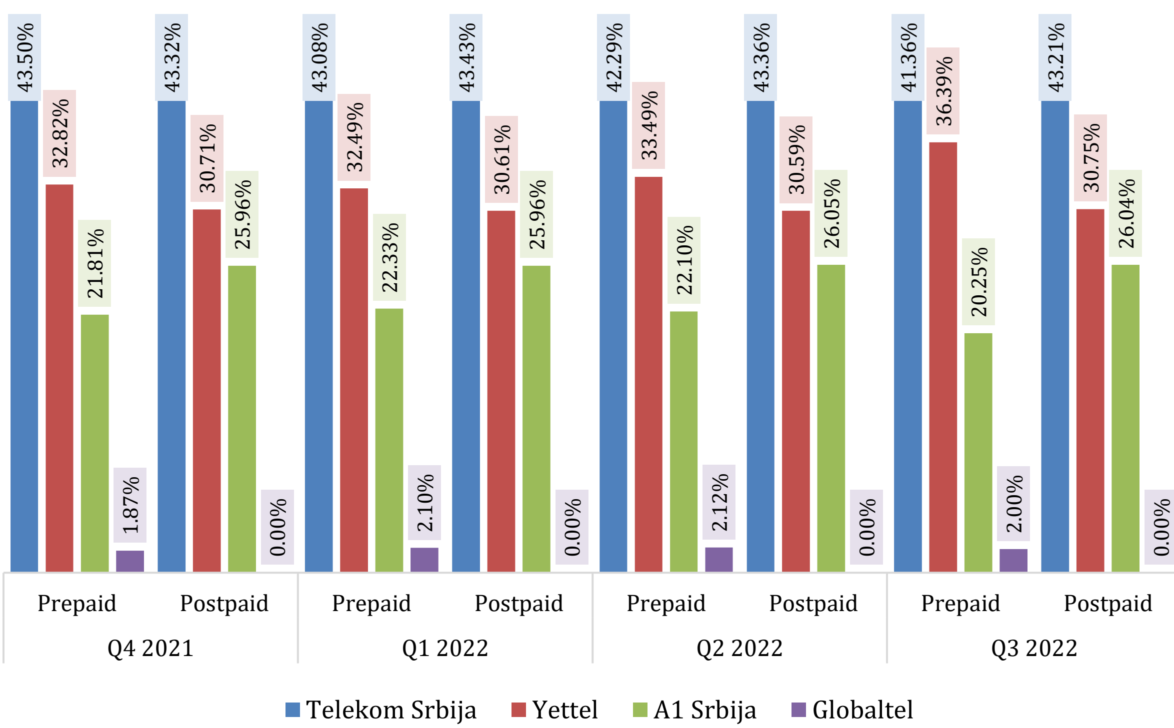
Below are the operators' shares in the total number of active subscribers.

Operators' market shares by number of active subscribers



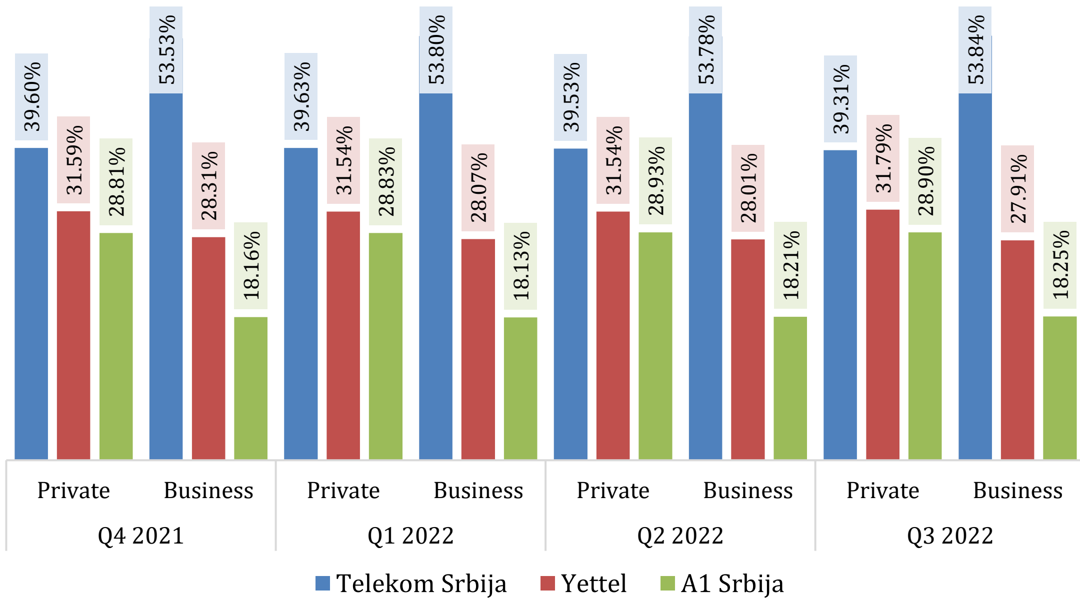
Both the number of postpaid subscribers, amounting in Q3 2022 to 5.210 million and the number of prepaid users, reaching 3.454 million, are showing an increase compared to the previous quarter. Below are the operators' shares in the volume of postpaid and prepaid subscribers.

Operators' shares in total number of prepaid and postpaid users



The postpaid users structure in Q3 2022 has not changed significantly compared to the previous quarters. The number of private postpaid users amounts to 3.814 million and the number of business postpaid subscribers 1.396 million. Below are the operators’ shares in the total number of private and business subscribers.

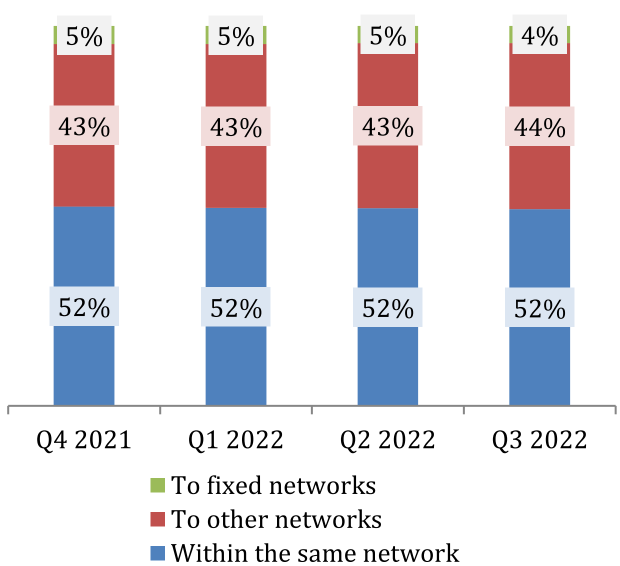
Operators’ shares in total number of private and business users



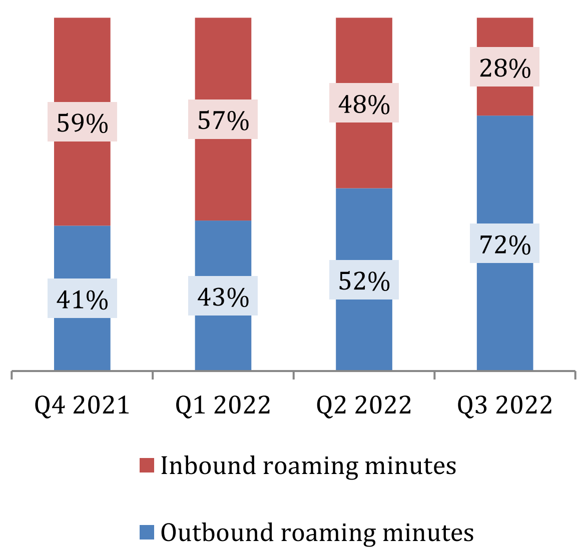
Most of the outgoing traffic in the third quarter of 2022 was generated within the same mobile network (52%). As for the roaming, more traffic was generated by the national mobile subscribers abroad than the users from abroad.

Structure of mobile networks outgoing traffic

Structure of outgoing national traffic

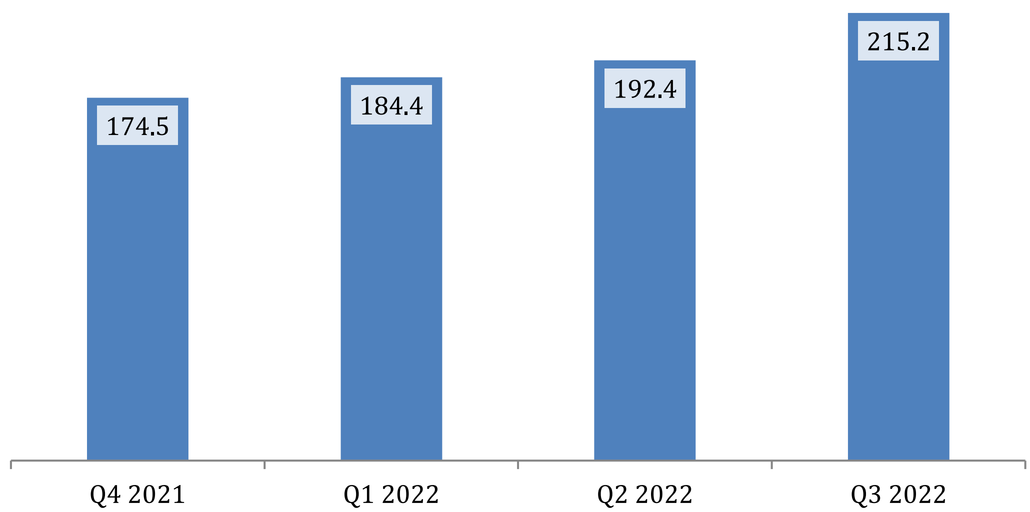


Roaming minutes



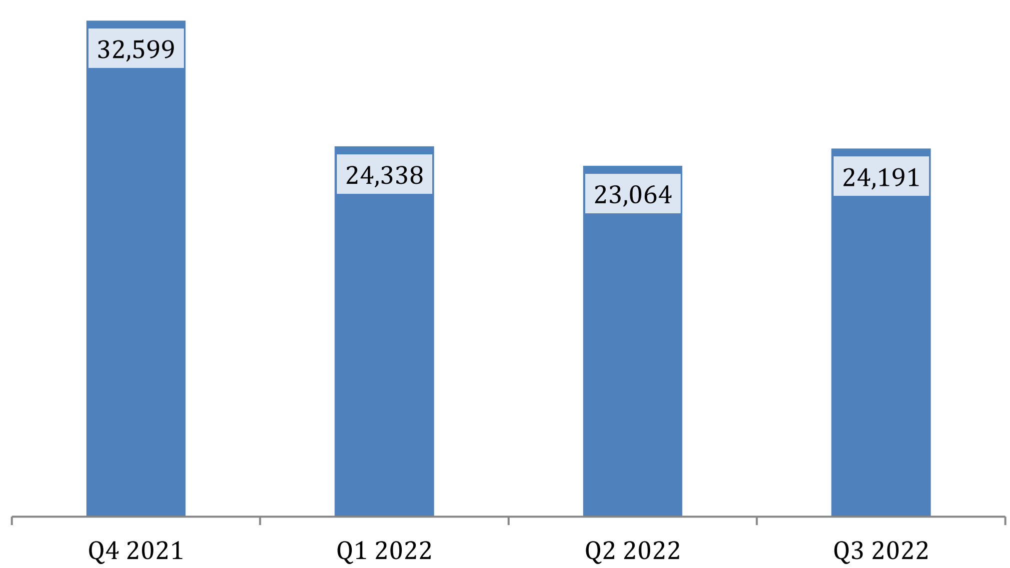
Data transmission over mobile network has increased in the analyzed period, amounting to 215.2 million GB in the third quarter of 2022, which means that a mobile broadband subscriber used on average around 327 MB daily, or approximately 9.68 GB a month.

Mobile Internet traffic (in million GB)



The number of mobile telephony number portings was around 24 thousand in the third quarter of 2022, or approximately 8.06 thousand per month, representing an increase compared to the previous quarter.

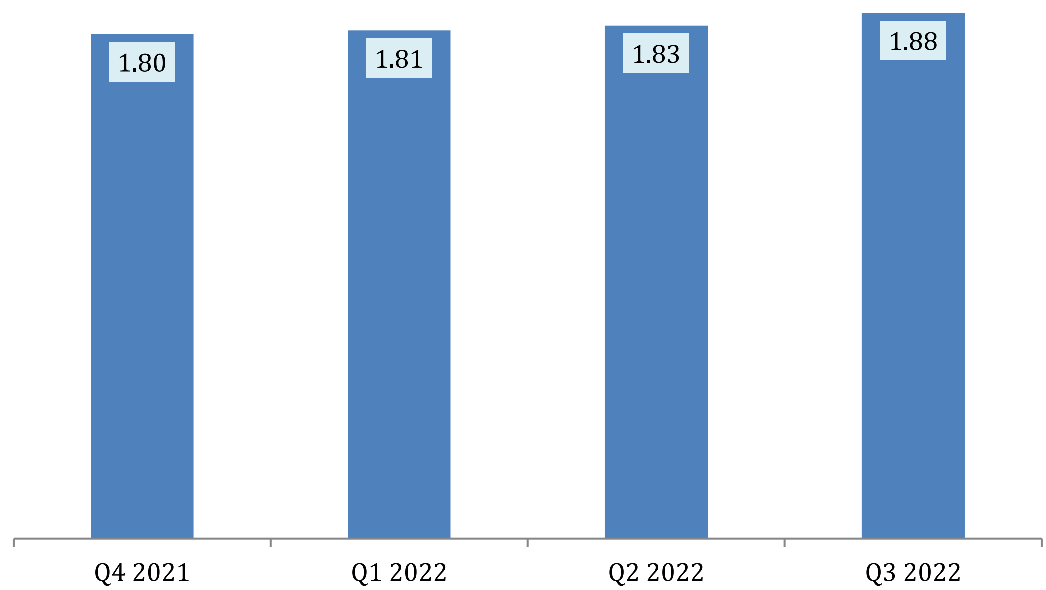
Mobile telephony number portings per quarter



Broadband Internet Access

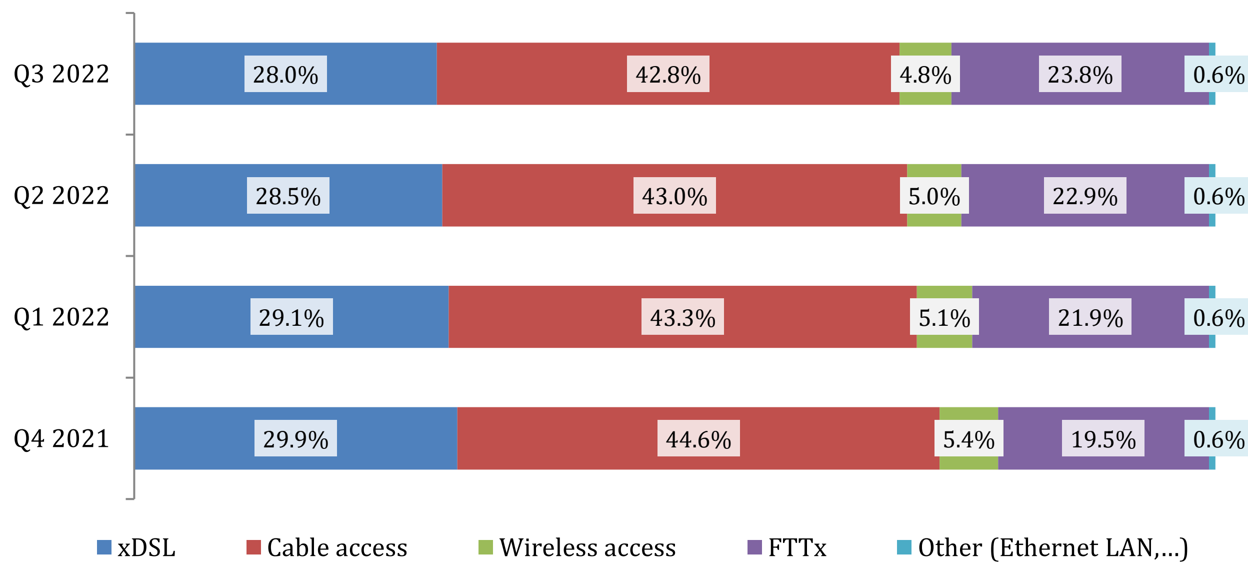
Compared to the previous quarter, the number of fixed broadband Internet access users in Q3 2022 has slighly increased, reaching approximately 1.88 million subscribers.

Number of fixed broadband Internet subscribers (in million)



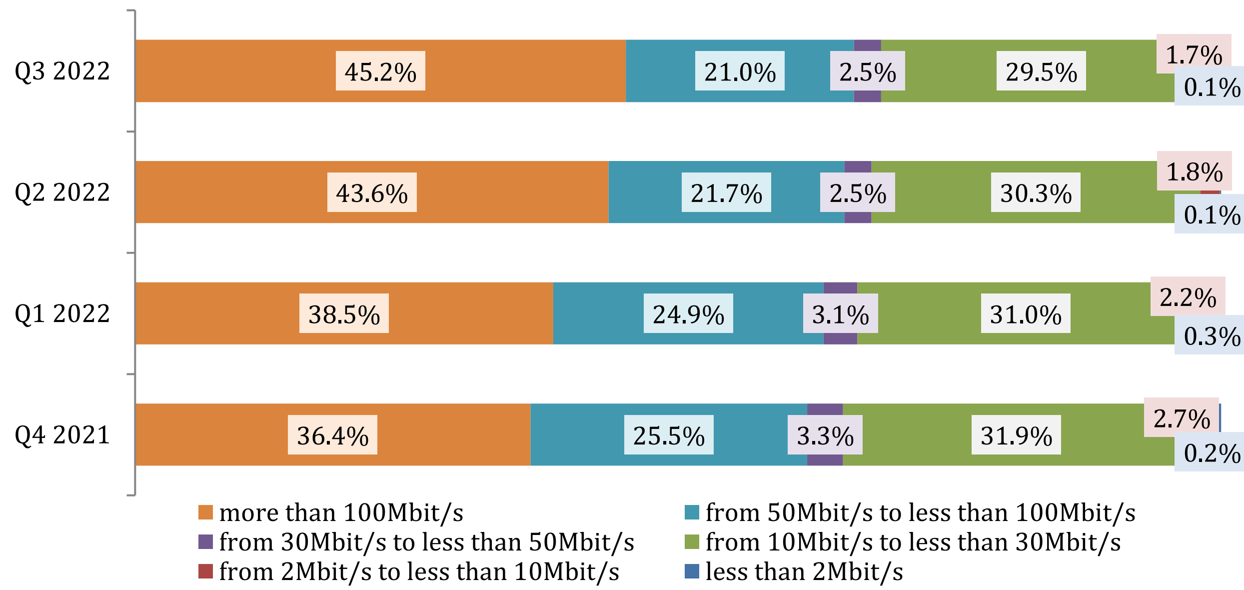
Most fixed broadband Internet subscribers have xDSL or cable access, with the number of both xDSL subscribers and cable access subscribers showing a slight drop in the analyzed period.

Number of subscribers by type of access



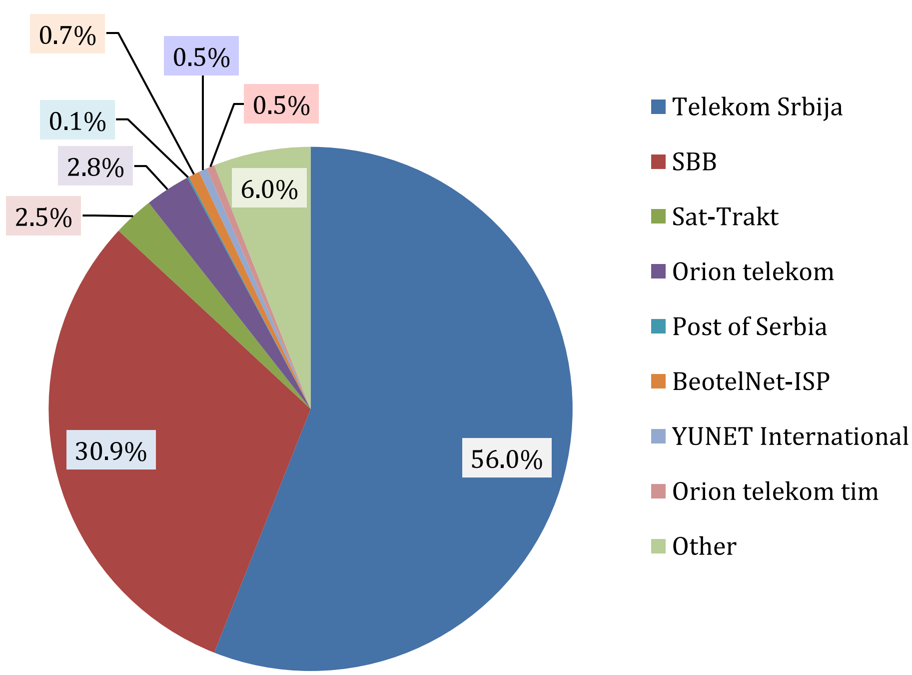
In Q3 2022, the majority of subscribers used Internet speed of more than 100 Mbit/s and between 10 Mbit/s to less than 30 Mbit/s.

Number of fixed broadband Internet subscribers by access rate



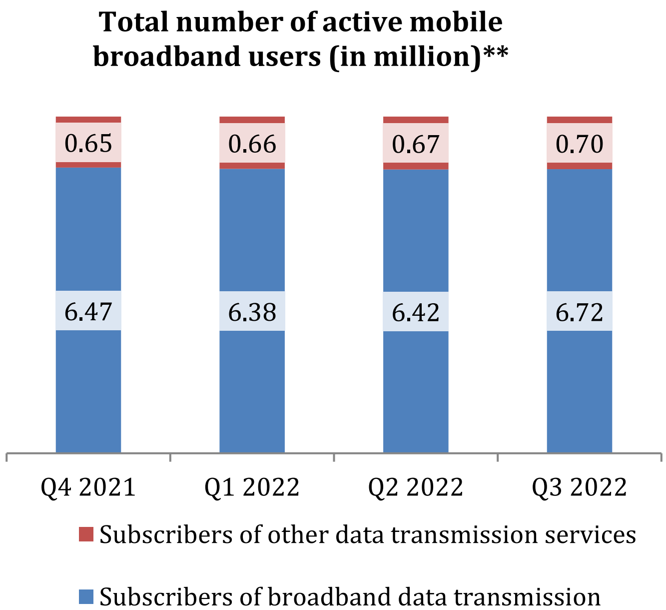
The following figure shows the leading operators' market shares for Q3 2022, in terms of the number of subscribers.

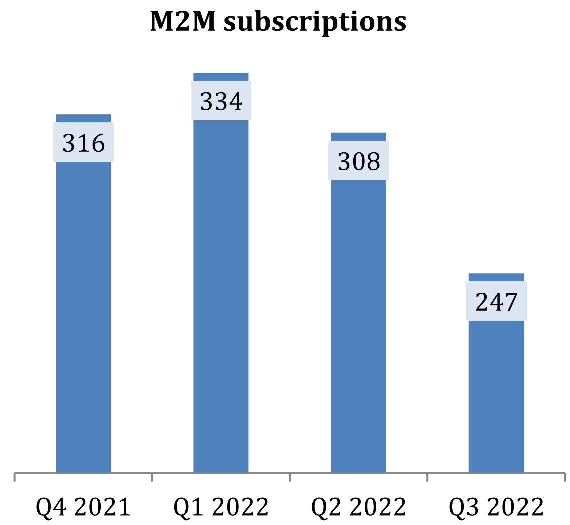
Market share in terms of number of fixed broadband subscribers in Q3 2022



The number of active mobile broadband subscribers in Q3 2022 has increased compared to the previous quarter, reaching 7.42 million. The number of M2M subscriptions has dropped, amounting to 247 thousand in the third quarter of 2022.

Number of active mobile broadband users and M2M subscribers





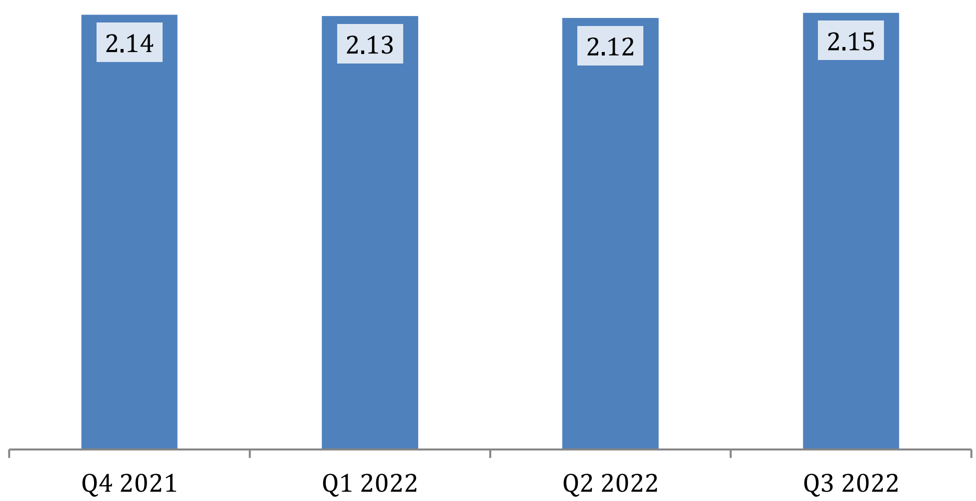
** Active mobile broadband users include subscribers of data transmission services contracted together with voice services, or as an additional package to the voice tariff plan, whereas subscribers of other data transmission services represent mobile broadband transfer users with single service agreement, separate from voice service (data card subscriptions, USB modem/dongle subscriptions, tablet subscriptions and similar).*

*** Corrected number of subscribers in the second quarter od 2022 following additional corrected data provided by the operators.*

Media Content Distribution

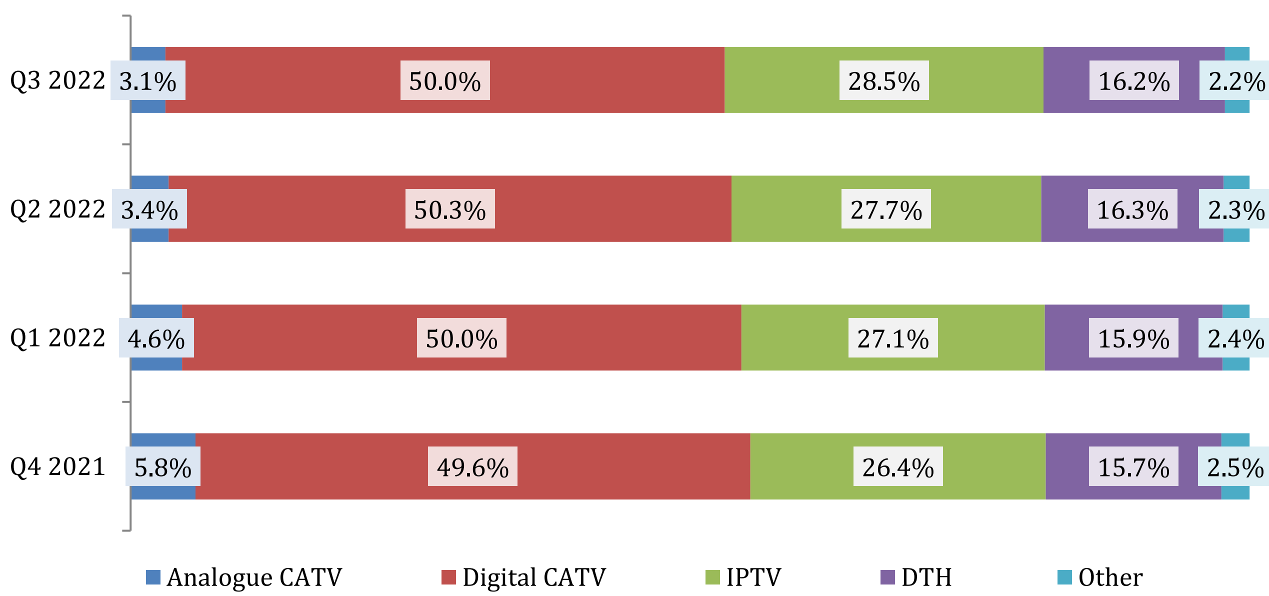
Compared to the previous period, the number of media content distribution service subscribers increased in Q3 2022, amounting to approximately 2.15 million.

Number of media content distribution service subscribers (in million)



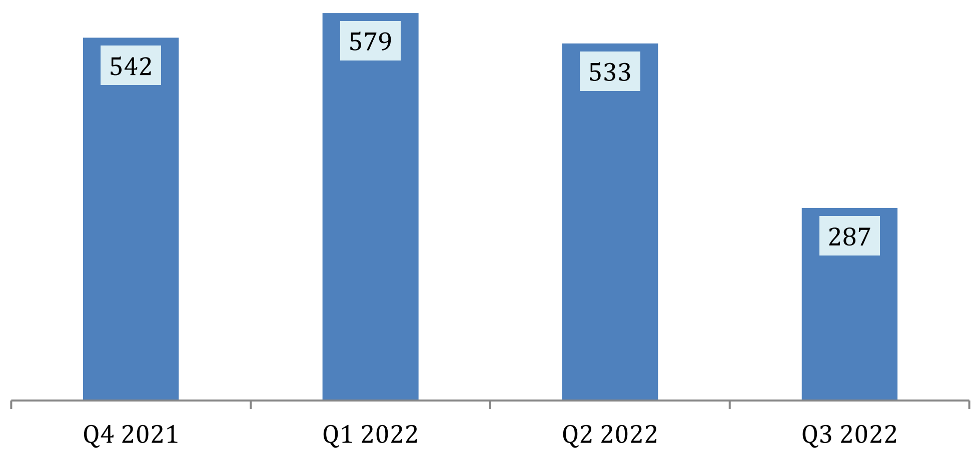
In the third quarter of 2022, most subscribers used digital CATV distribution (around 50%). The number of IPTV subscribers is on the rise, while the number of DTH subscribers has slightly dropped. The wireless network and Internet media content distribution services were the least used.

Media content distribution subscribers by type of distribution



The number of met requests for additional services, such as video on demand (VoD), content recording, TV on mobile devices, playback etc, has decreased in Q3 2022 compared to Q2 2022, amounting to approximately 287 million requests, or some 55 requests per user a month. The number of met VoD requests in Q3 2022 was around 8.5 million.

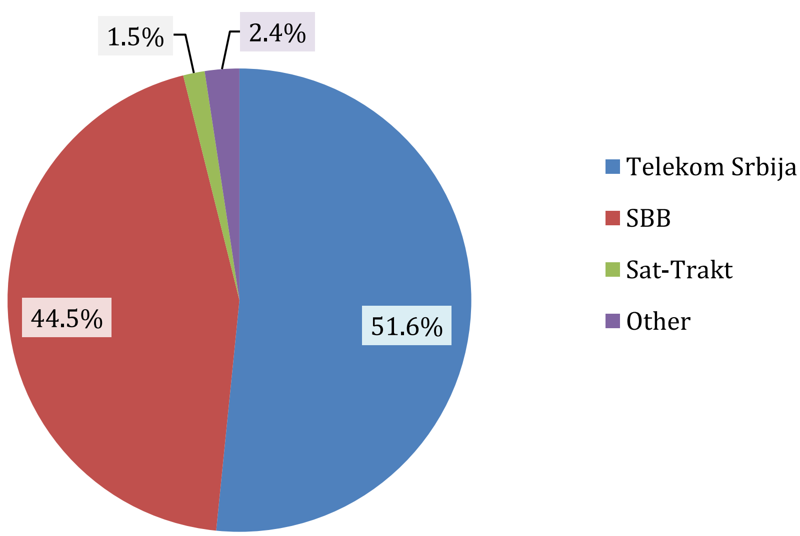
Number of met requests for additional services (in million)



In the third quarter of 2022, around 28% of media content distribution subscribers with the possibility to have additional channels, subscribed to such programmes.

The following figure shows the leading operators' market shares for Q3 2022, in terms of the number of subscribers.

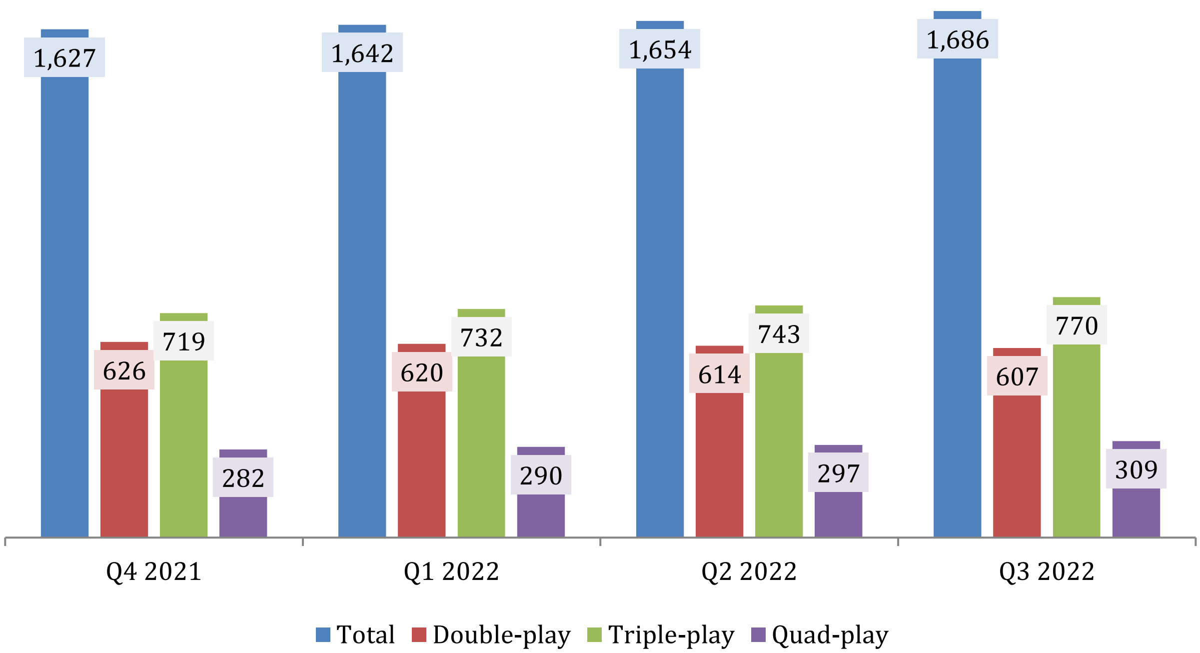
Operators' market share in by number of subscribers in Q3 2022



Bundled Services

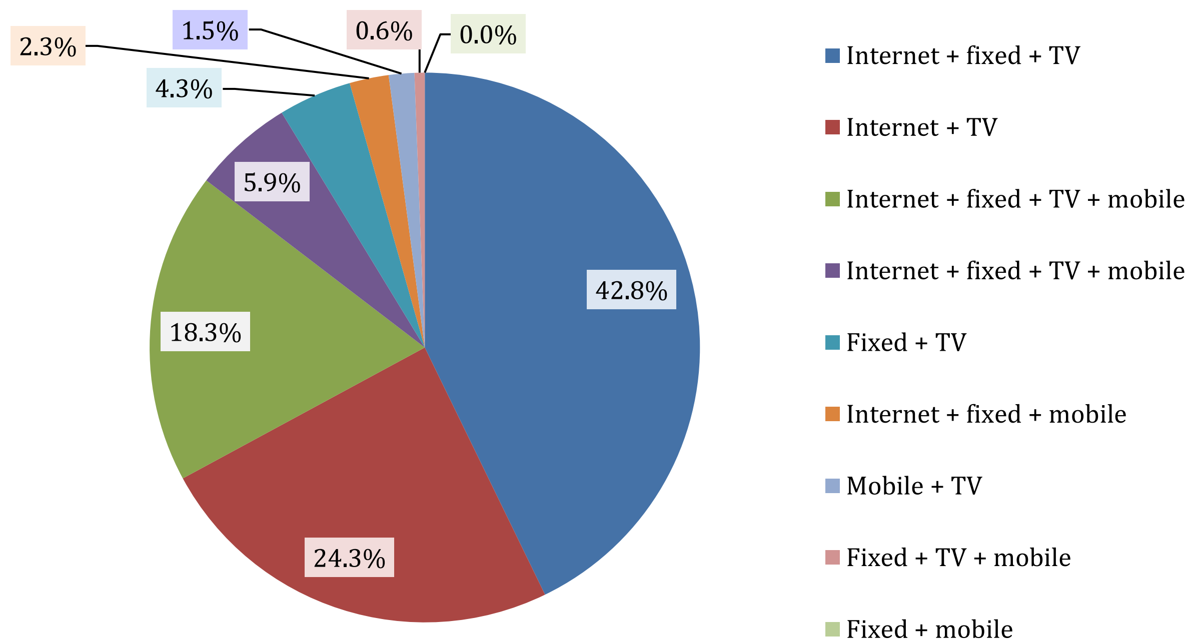
The number of bundled service subscribers in Q3 2022 has increased compared to the previous quarter, reaching approximately 1.69 million. Packages offering three services were most used, whereas least used were packages with four services.

Number of bundled service users (in thousand)



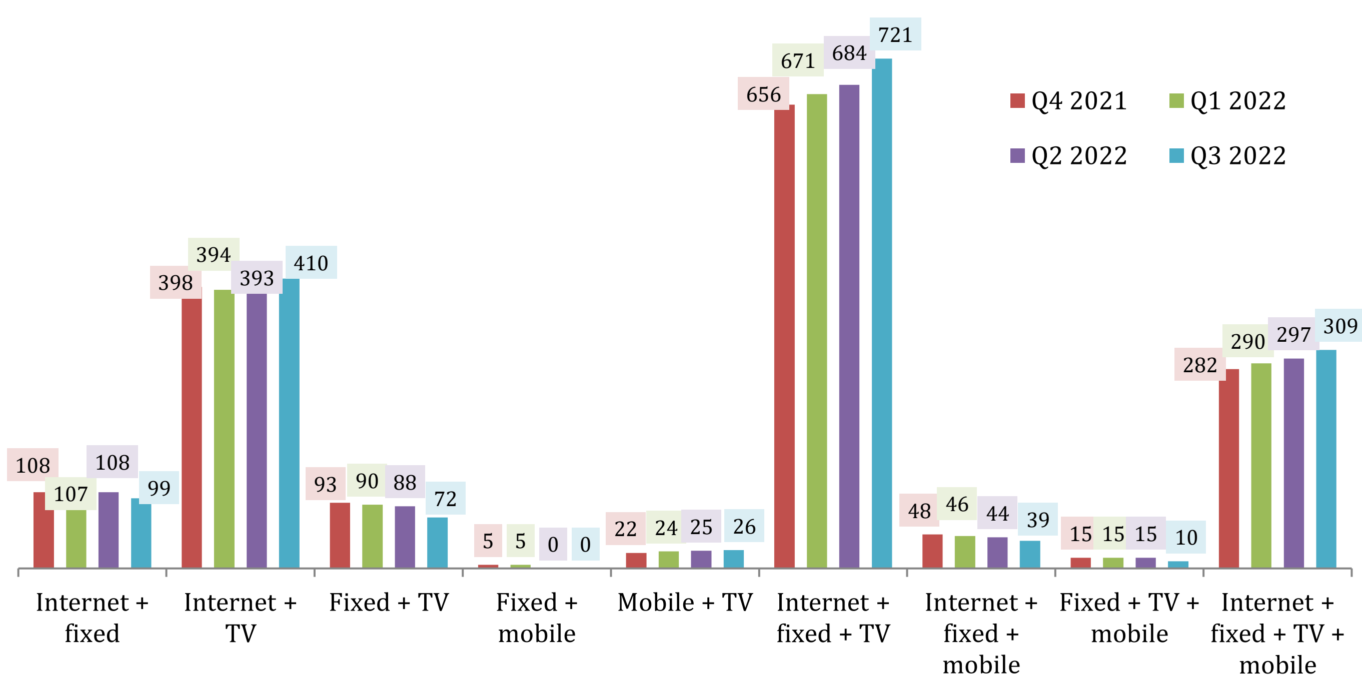
Of all bundled services offered by operators in Q3 2022, the most popular was the package with broadband Internet access, fixed telephony and TV, followed by a double-play offering broadband Internet access and TV, as well as the only available quad-play package including broadband Internet access, fixed telephony, TV and mobile telephony. The biggest growth in Q3 2022 was achieved by a triple-play offering broadband Internet, fixed telephony and TV. A double-play with fixed and mobile telephony, a triple-play offering fixed and mobile telephony and TV, as well as a package including mobile telephony and TV had the lowest number of subscribers. The shares of different bundled services in terms of the number of subscribers are given below.

Share of bundled services in Q3 2022



Changes in different packages' number of subscribers can be seen below.

Number of bundled service users by type of service (in thousand)



Broadband Internet access is mostly purchased as a bundled service, whereas mobile telephony is generally purchased as a stand-alone service.

Share of stand-alone and bundled services purchased in Q3 2022