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 First Quarter of 2021

The Overview presents the data for the first quarter of 2021 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 2020 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 93% of the market, in terms of the number of subscribers, whereas the data for the remaining 7% of the market were estimated based on the data for 2020 collected in the annual questionnaires.

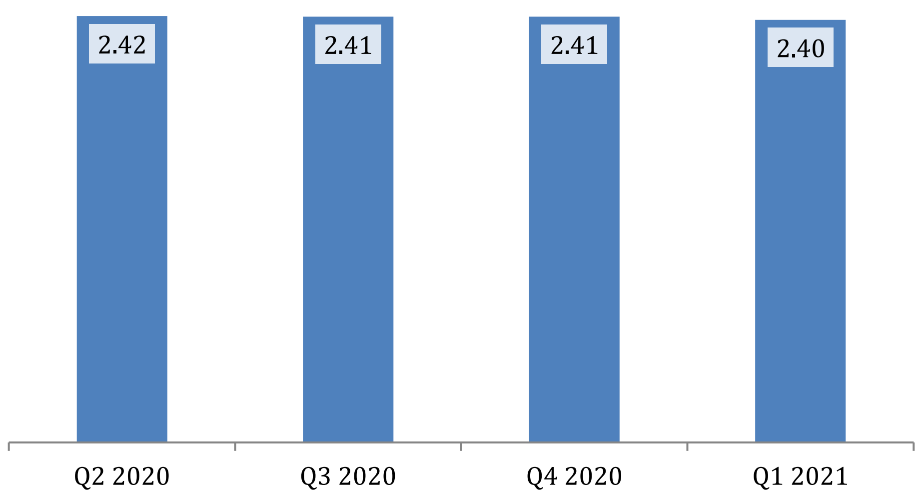
Quarterly electronic communications market indicators referring to media content distribution include the data for the leading operators that make up approximately 95% of the market, in terms of the number of subscribers, whereas the data for the remaining 5% of the market were estimated based on the data for 2020 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 2020 collected in the annual questionnaires.

Public Fixed Telecommunications Networks and Services

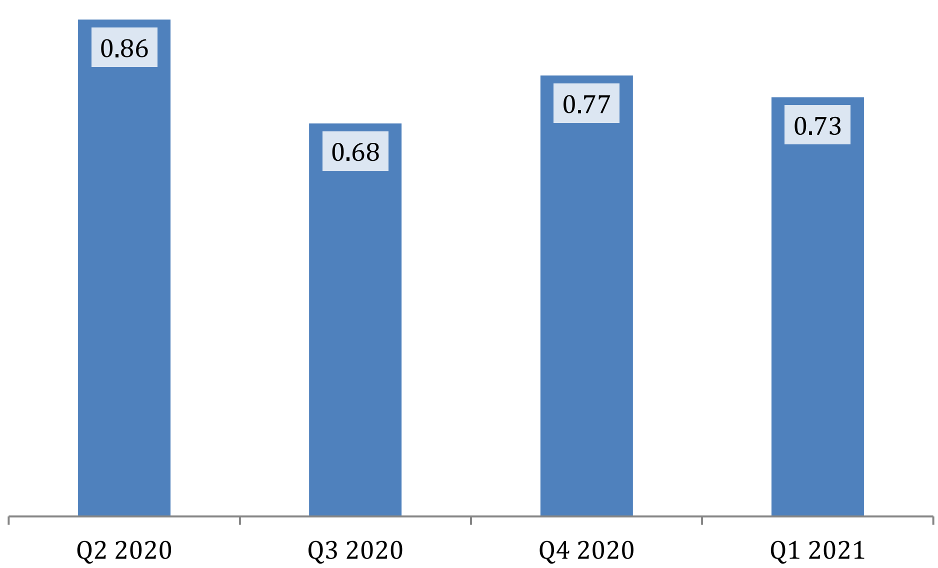
Compared to the previous quarter, both the number of fixed telephony subscribers and the generated traffic in Q1 2021 have decreased. Approximately 2.40 million fixed telephony subscribers generated around 730 million minutes of traffic in the last observed quarter, which means that a fixed telephony subscriber on average spent 3.3 minutes a day on calls.

Number of fixed line subscribers (in million)*



**Data for Q4 2020 were harmonized with those from annual reports for 2020.*

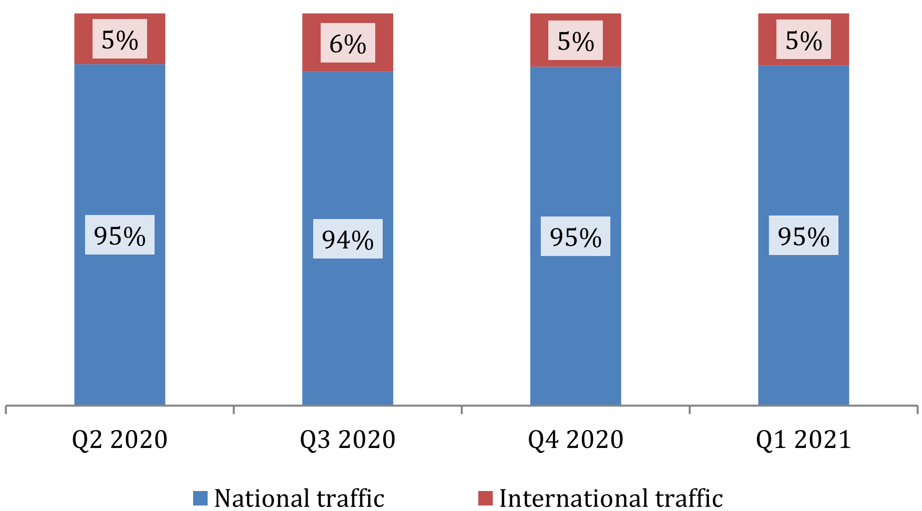
Total fixed telephony traffic (in billion minutes)*



** Data for Q4 2020 were harmonized with those from annual reports for 2020.*

The subscriber structure has not changed over the observed quarters: 88% of the fixed telephony subscribers in Q1 2021 remain to be 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 95% in Q1 2021.

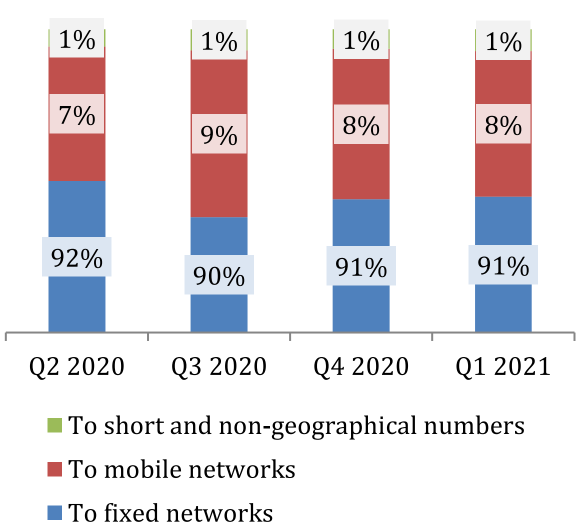
Fixed telephony traffic structure



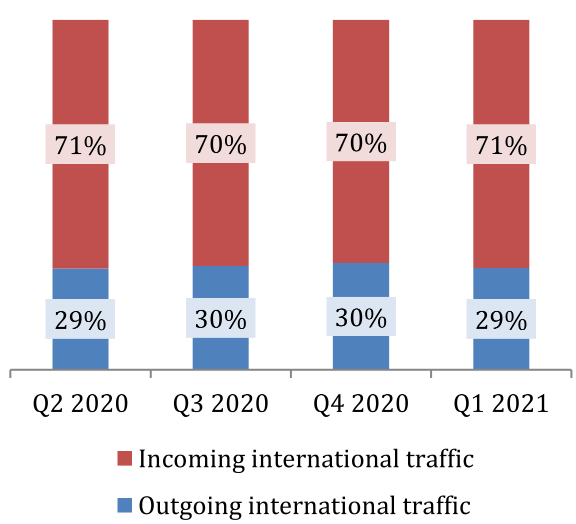
The outgoing calls from fixed network are mostly directed towards other fixed networks, while the international traffic is dominated by incoming calls.

Structure of national and international traffic in fixed telephony

Outgoing national traffic



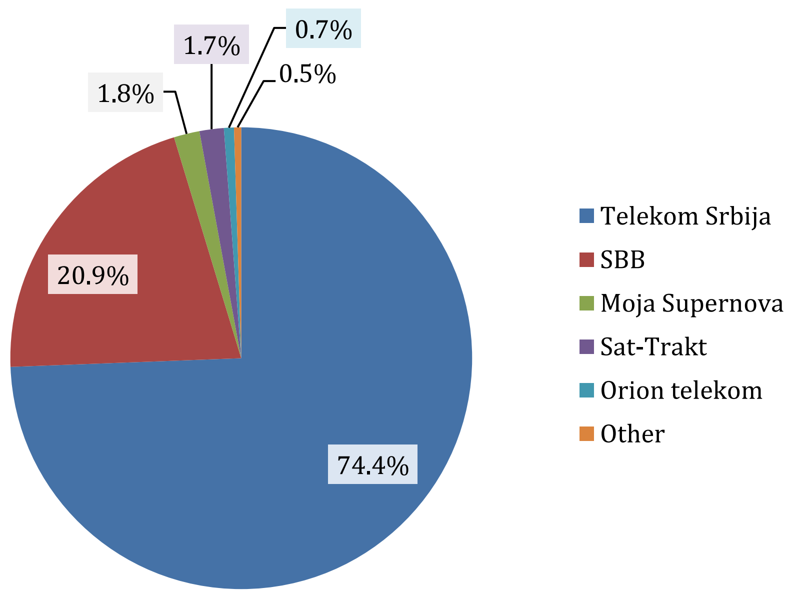
International traffic*



** Data for the last three quarters of 2020 were corrected in accordance with data from annual reports for 2020.*

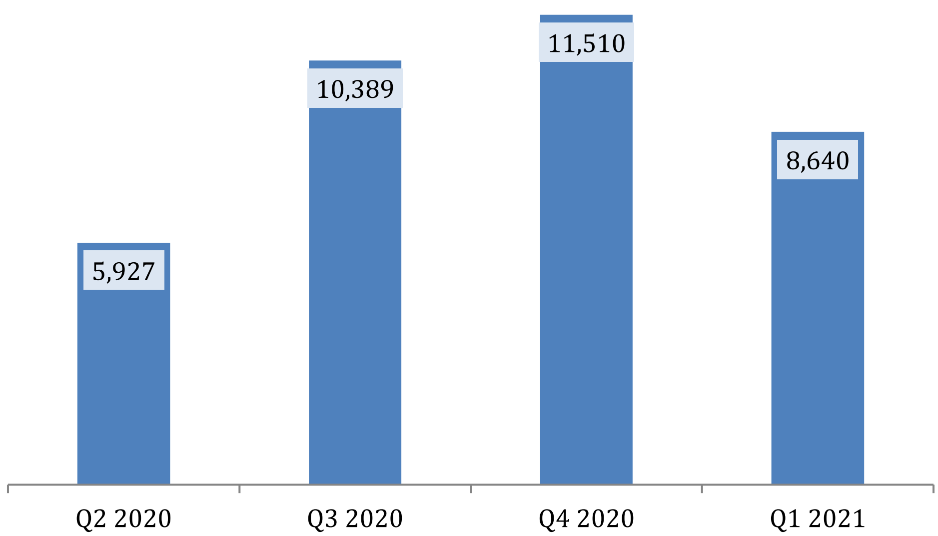
Below is shown the leading operators' market share in terms of the number of subscribers in Q1 2021.

Operators' market share by number of subscribers in Q1 2021



The number of portings in the first quarter of 2021 was 8.6 thousand (around 2.8 thousand a month), showing a decrease compared to the previous quarter.

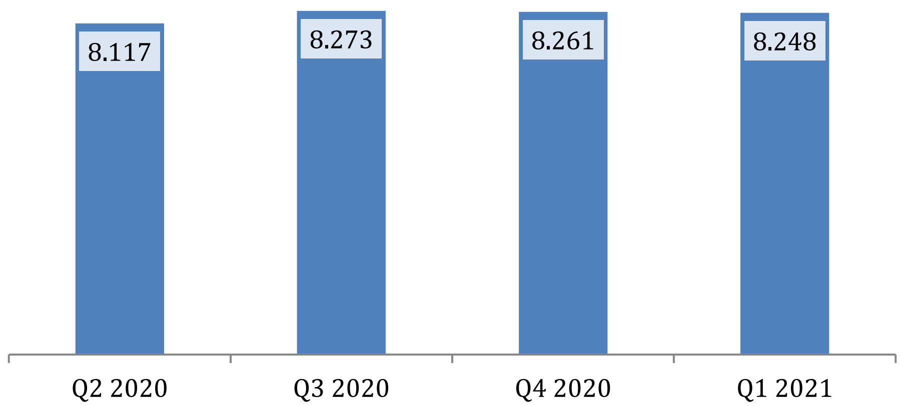
Fixed telephony number portings per quarter



Public Mobile Telecommunications Networks and Services

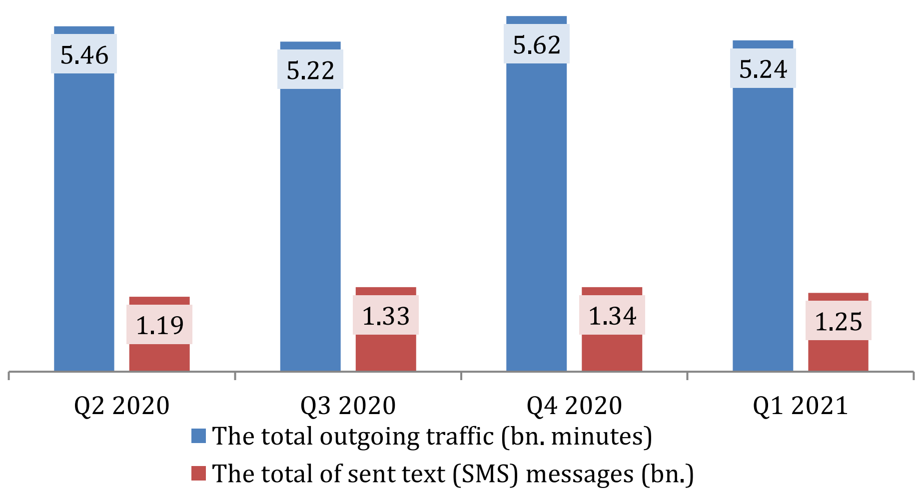
In the first quarter of 2021, there were approximately 8.25 million active mobile telephony subscribers that generated around 5.2 billion minutes of national and international traffic and sent around 1.25 billion SMS messages. On average, in Q1 2021, a mobile user spent around 7 minutes a day on calls and sent 1.7 text messages. On the mobile networks market, a slight decrease in the number of active mobile telephony subscribers has been observed in Q1 2021.

Total number of active mobile telephony subscribers (in million)



In Q1 2021, both the effectuated voice traffic in mobile networks and the SMS traffic have decreased compared to the previous quarter.

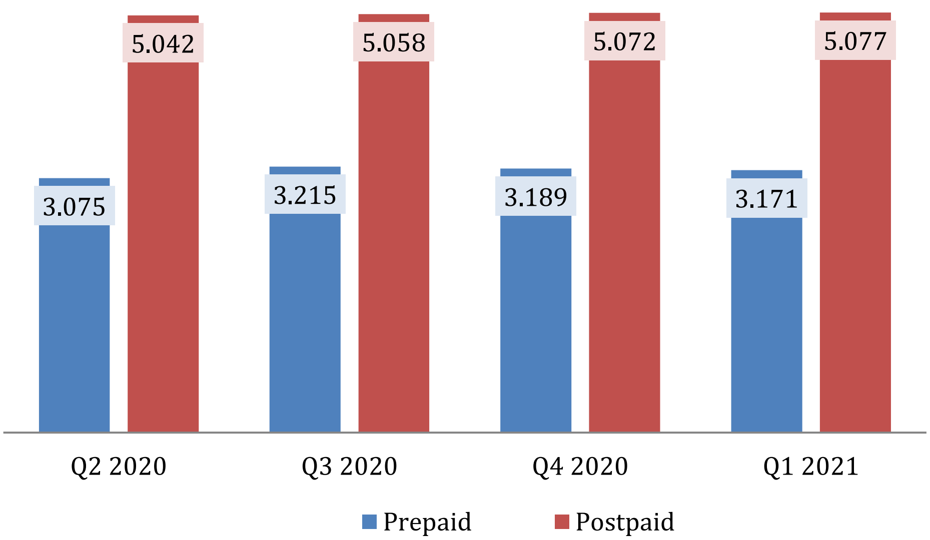
Generated voice and SMS mobile telephony traffic*



** Data for the last three quarters of 2020 were corrected in accordance with data from annual reports for 2020.*

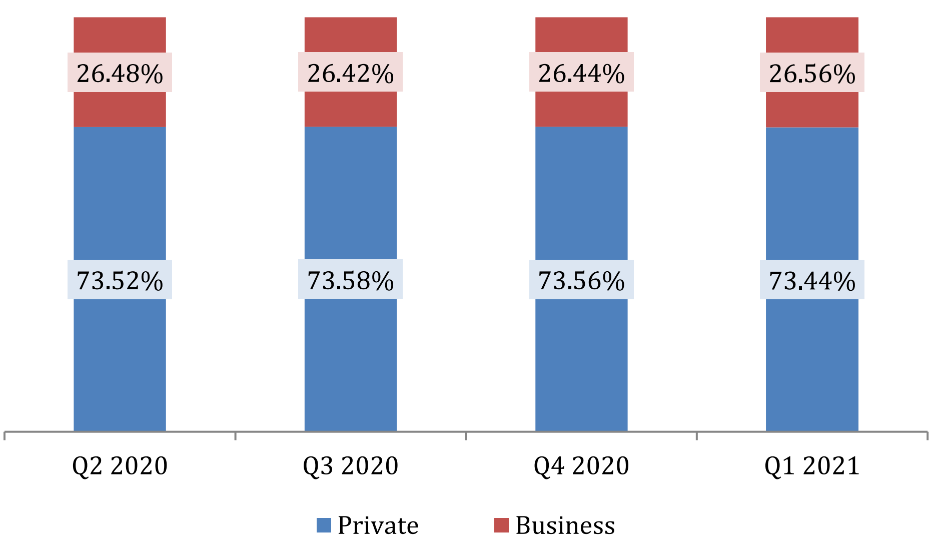
In Q1 2021, the number of postpaid subscribers has increased compared to the previous quarter, with the number of prepaid users in decline.

Number of prepaid and postpaid subscribers (in million)



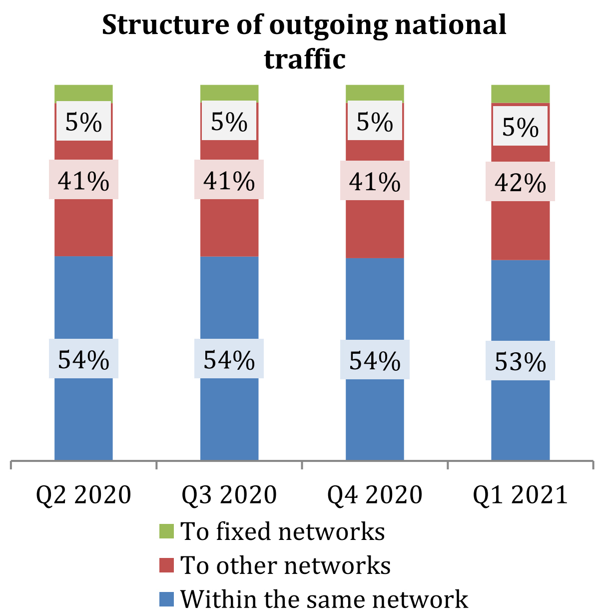
The majority of postpaid subscribers are natural persons, accounting for around 73%, much the same as in other observed quarters.

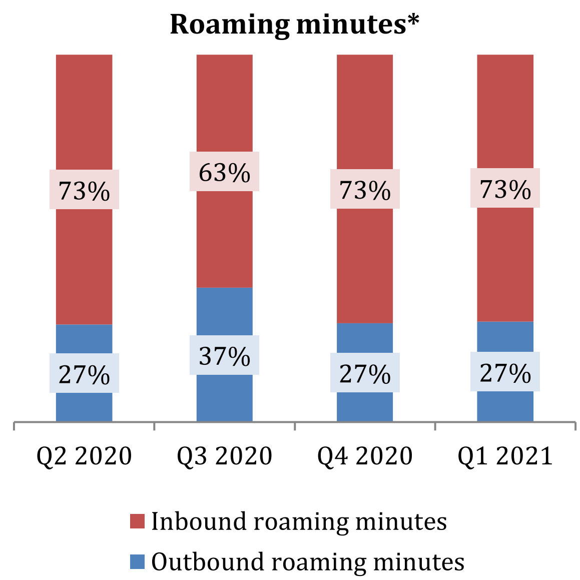
Postpaid subscriber structure



Most of the outgoing traffic in Q1 2021 has been generated within the same mobile network (53%). As for the roaming, the subscribers of foreign networks generated more traffic than the subscribers of national networks abroad.

Structure of mobile networks outgoing traffic

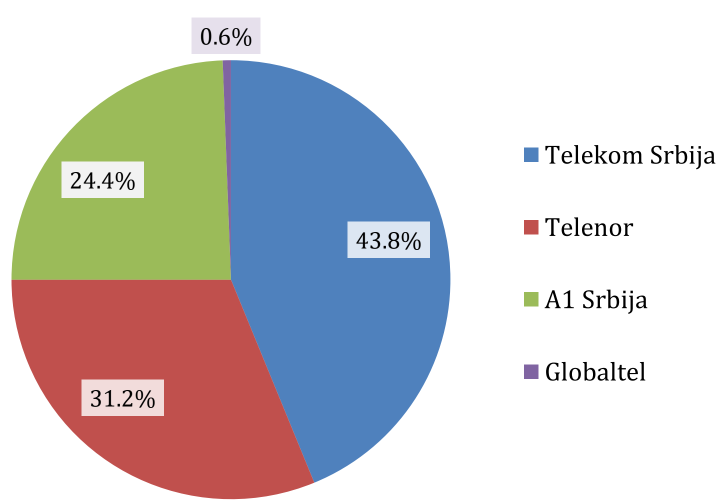




** Data for the last three quarters of 2020 were corrected in accordance with data from annual reports for 2020.*

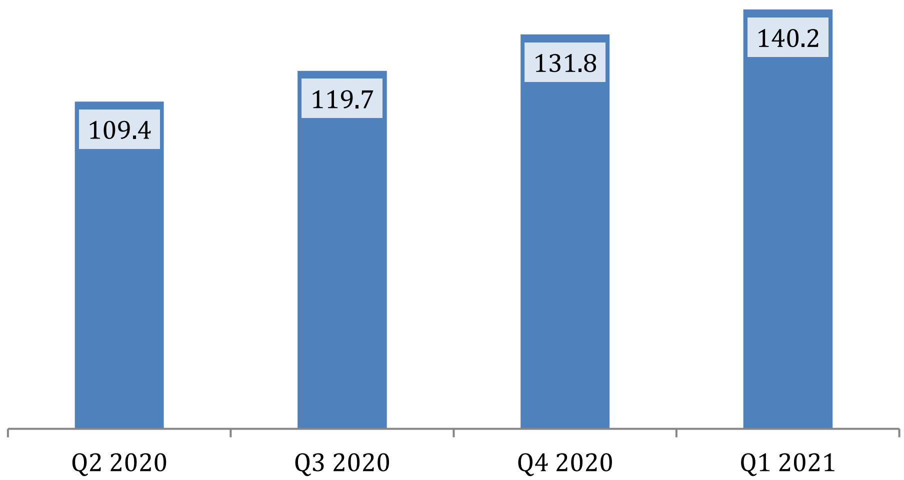
There have not been any significant changes in market shares in terms of the number of users, compared with the previous quarter.

Market share in terms of number of users in Q1 2021



Data transmission over mobile network has shown growth in the analyzed period, amounting to 140.2 million GB in Q1 2021, which means that a mobile broadband subscriber used on average 240 MB daily, or around 7.27 GB a month.

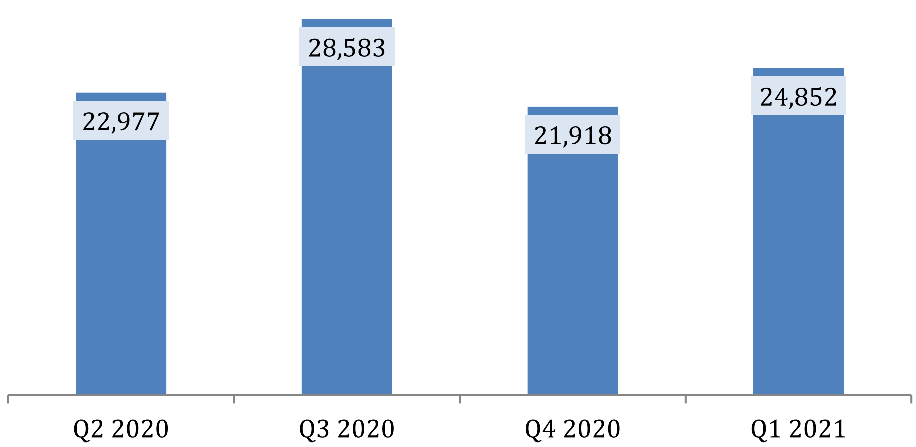
Mobile Internet traffic (in million GB)*



** Data for the last three quarters of 2020 were corrected in accordance with data from annual reports for 2020.*

The number of mobile telephony number portings was approximately 24.9 thousand in the first quarter of 2021, or approximately 8.3 thousand per month, representing an increase compared to the previous quarter.

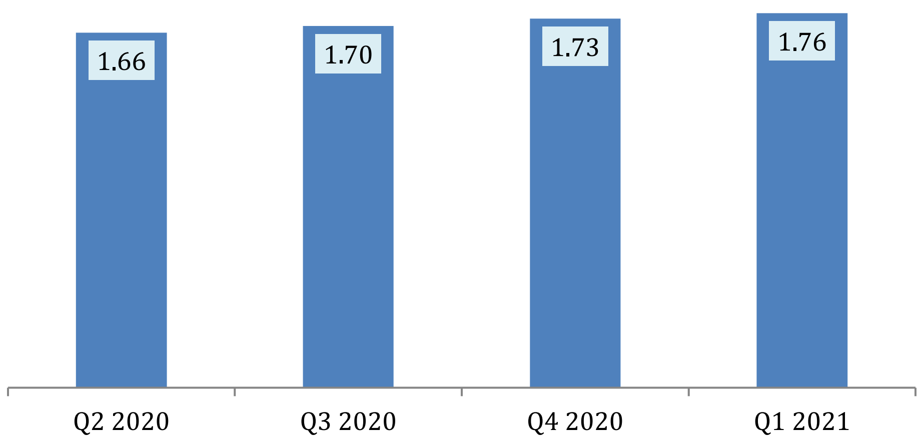
Mobile telephony number portings per quarter



Broadband Internet Access

Compared to the previous quarter, the number of fixed broadband Internet access users in Q1 2021 has increased, amounting to approximately 1.76 million subscribers.

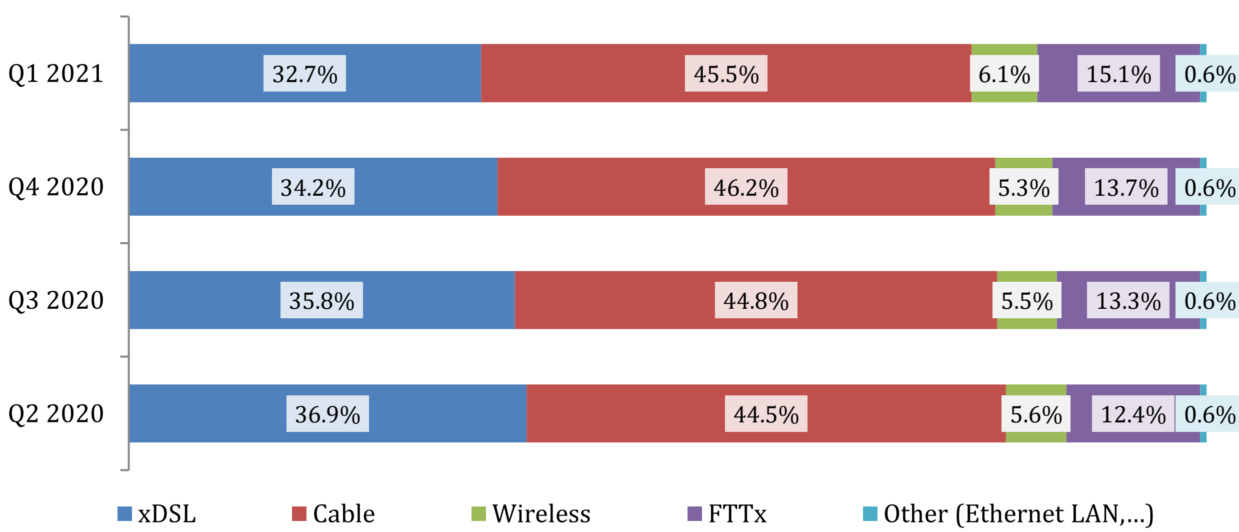
Number of fixed broadband Internet subscribers (in million)



** Data for Q4 2020 were harmonized with those from annual reports for 2020.*

Most fixed broadband Internet subscribers have xDSL or cable access. The number of both xDSL subscribers and cable access subscribers has been marked by a slight drop in the analyzed period.

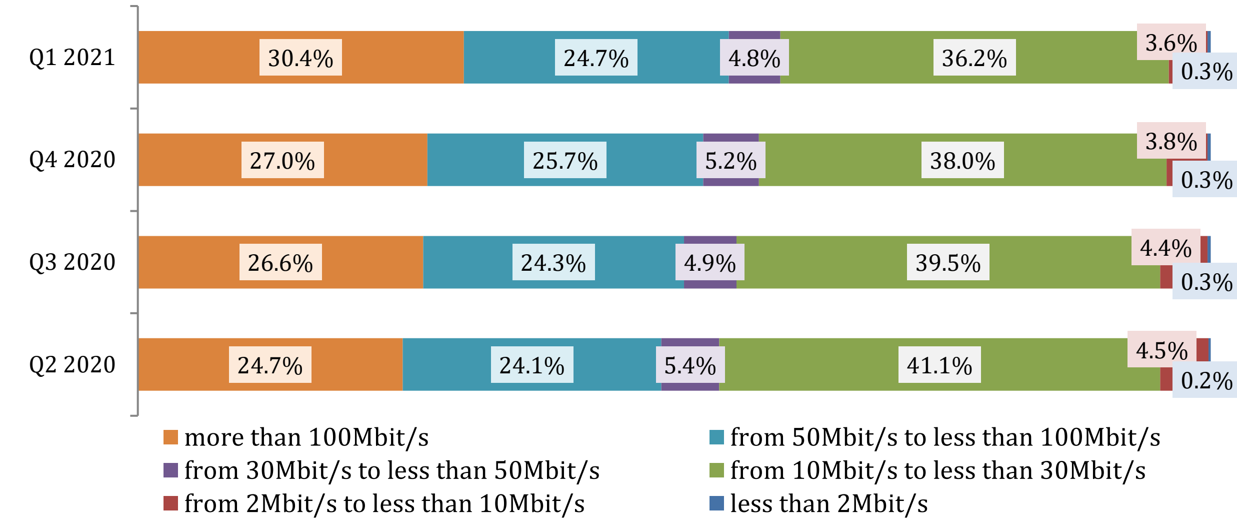
Number of subscribers by type of access*



** Data for the last three quarters of 2020 were corrected in accordance with data from annual reports for 2020.*

In Q1 2021, the majority of subscribers used Internet speed between 10 Mbit/s to less than 30 Mbit/s over 50 Mbit/s and Internet access rate of more than 100 Mbit/s.

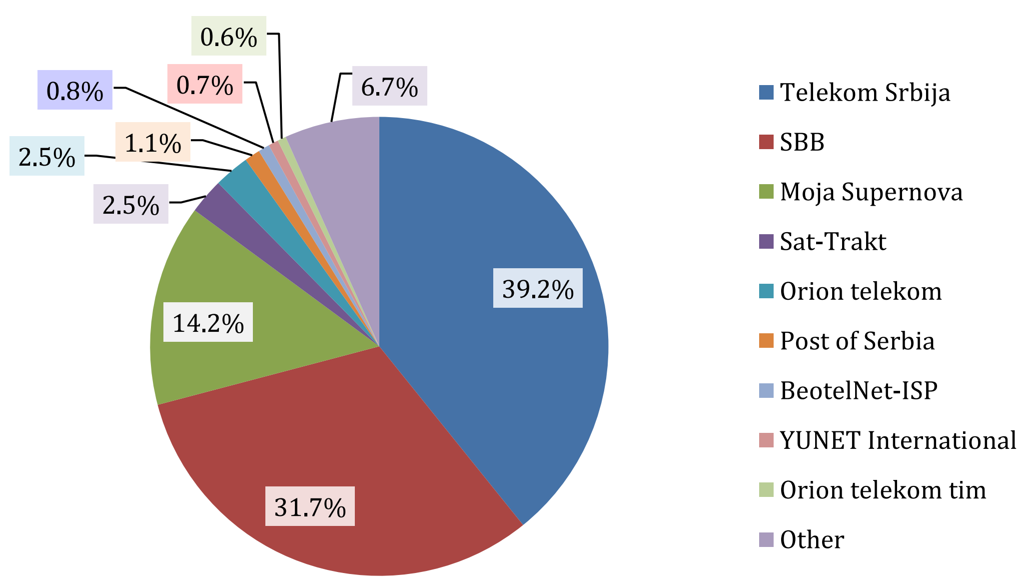
Number of fixed broadband Internet subscribers by access rate*



** Data for the last three quarters of 2020 were corrected in accordance with data from annual reports for 2020.*

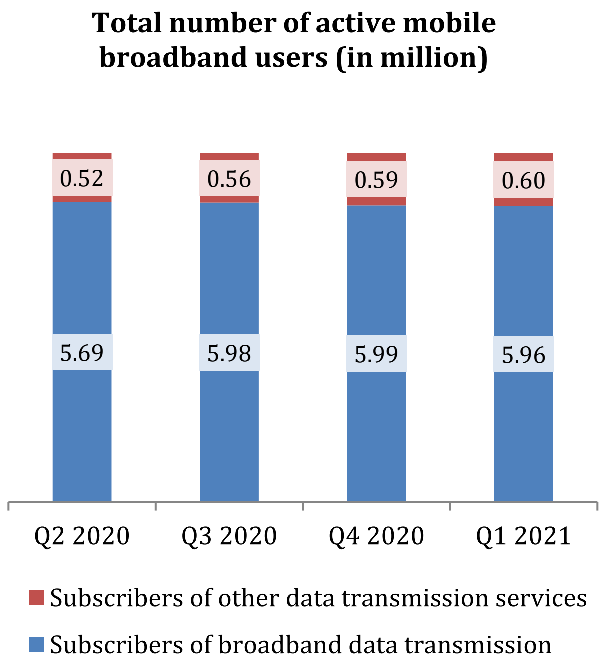
The following figure shows the leading operators' market shares for Q1 2021, in terms of the number of subscribers.

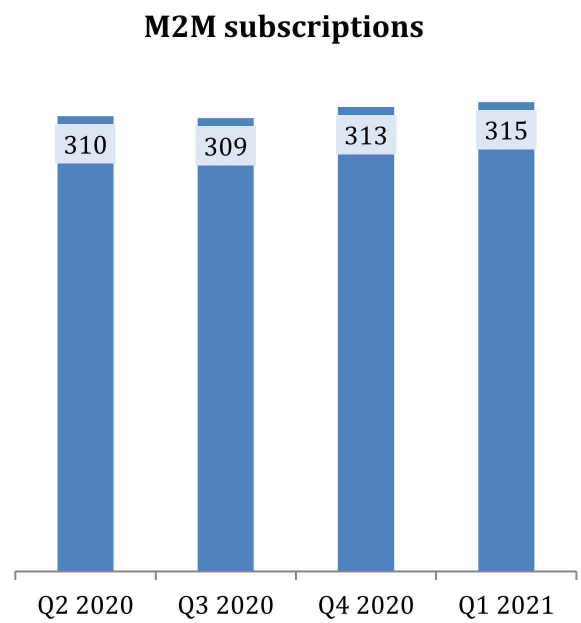
Market share in terms of number of fixed broadband subscribers in Q1 2021



The number of active mobile broadband subscribers in Q1 2021 has slightly decreased compared to the previous quarter, amounting to 6.55 million. The number of M2M subscriptions has marked a slight growth, amounting to 315 thousand in the first quarter of 2021.

Number of active mobile broadband users and M2M subscribers



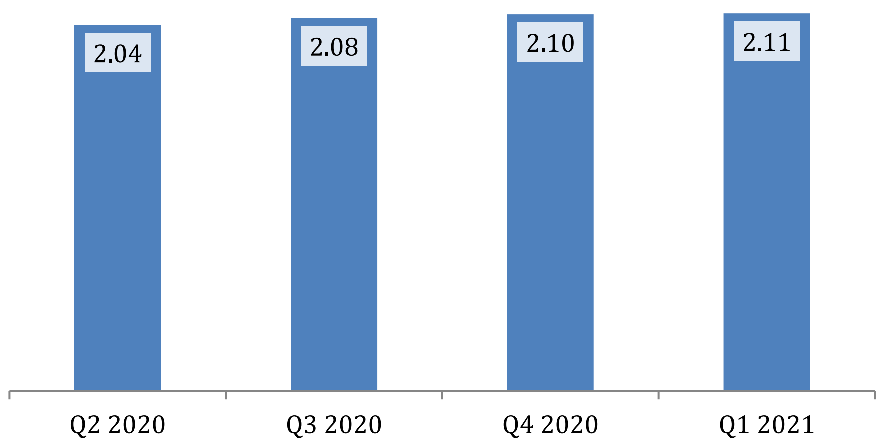


** Active mobile broadband users include subscribers of data transmission services contracted together with voice services, or as an additional package to the voice tariff plan, whereas subscribers of other data transmission services represent mobile broadband transfer users with single service agreement,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

Media Content Distribution

Compared to the previous period, the number of media content distribution service subscribers has increased, amounting to approximately 2.11 million in Q1 2021.

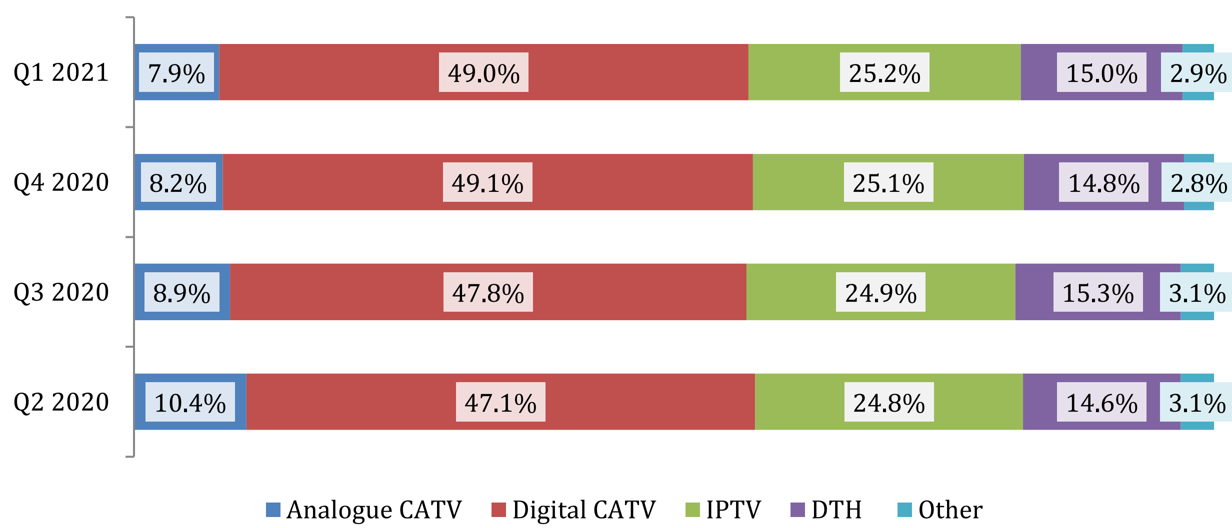
Number of media content distribution service subscribers (in million)*



** Data for Q4 2020 were harmonized with those from annual reports for 2020.*

In Q1 2021, most subscribers used CATV distribution, either analogue or digital (around 57%). The number of both IPTV subscribers and DTH subscribers has slightly increased, while the services of wireless network and Internet media content distribution were the least used.

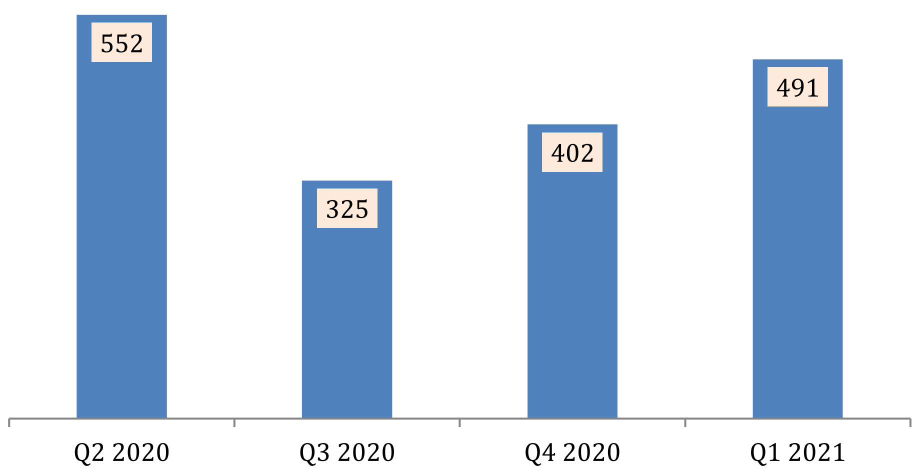
Media content distribution subscribers by type of distribution*



** Data for Q4 2020 were harmonized with those from annual reports for 2020.*

The number of met requests for additional services, such as video on demand (VoD), content recording, TV on mobile devices, playback etc, has increased in Q1 2021 compared to Q4 2020, amounting to approximately 491 million requests, or some 69 requests a month per user. The number of met VoD requests in Q1 2021 was around 17.3 million.

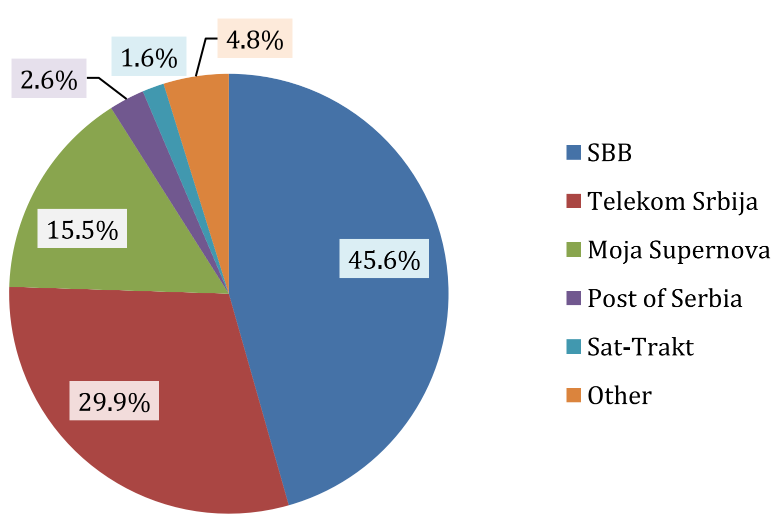
Number of met requests for additional services (in million)



In the first quarter of 2021, around 35% 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 Q1 2021, in terms of the number of subscribers.

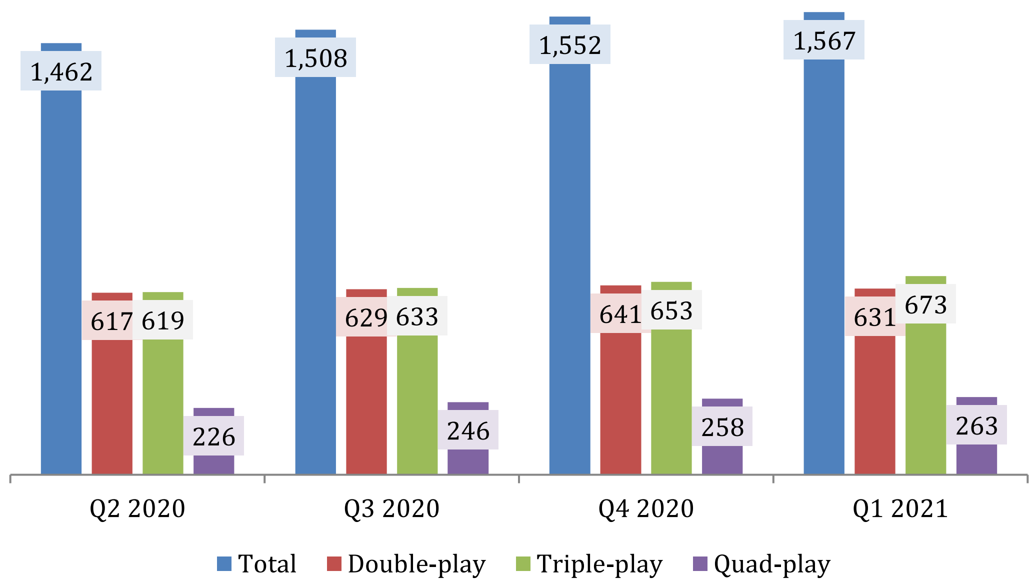
Operators' market share in terms of number of subscribers in Q1 2021



Bundled Services

The number of bundled service subscribers in Q1 2021 has increased compared to the previous quarter, amounting to approximately 1.57 million. Packages offering three services were most used, whereas least used were packages with four services.

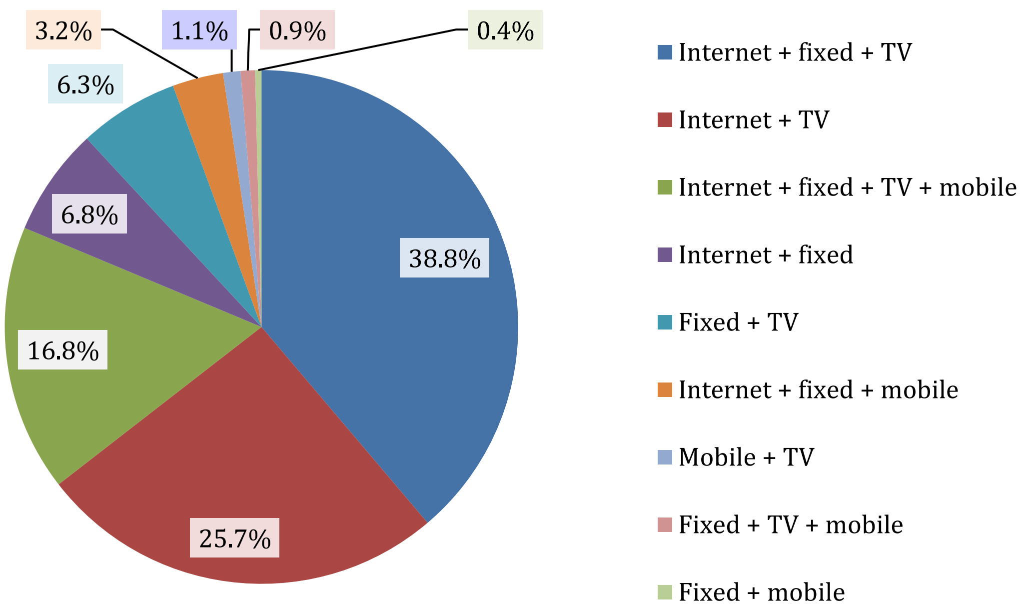
Number of bundled service users (in thousand)*



** Data for Q4 2020 were harmonized with those from annual reports for 2020.*

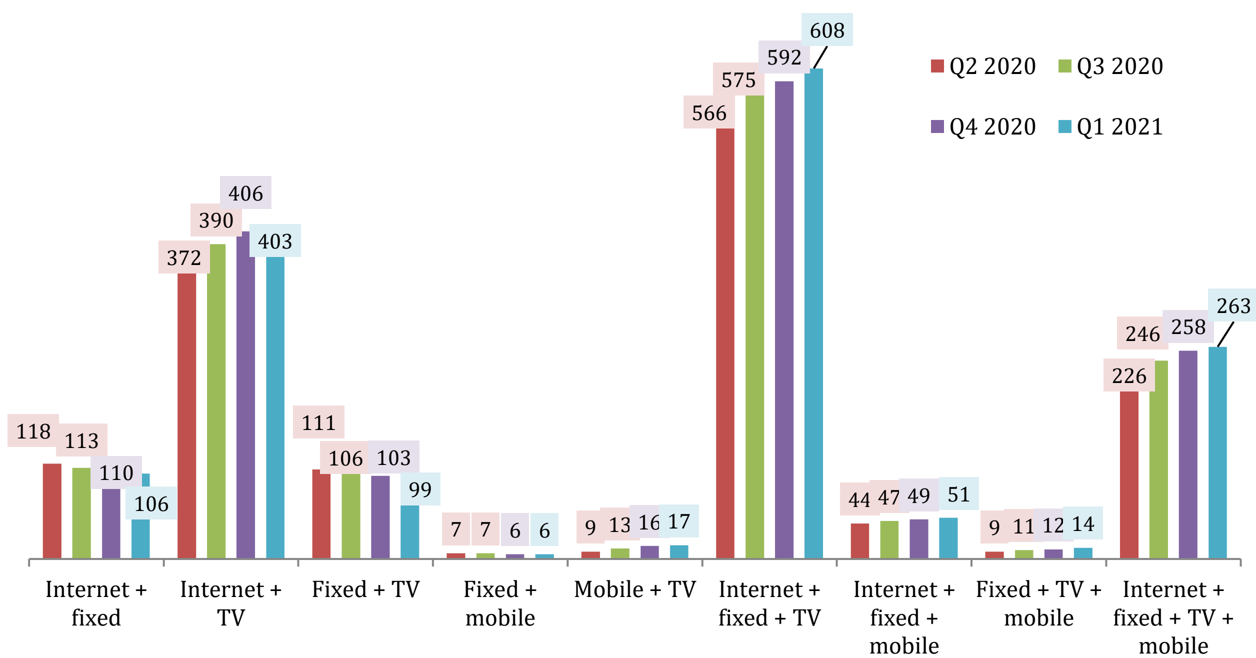
Of all bundled services offered by operators in Q1 2021, the most popular was the package with broadband Internet access, fixed telephony and TV, followed by a double-play offering broadband Internet access and TV, as well as the only available quad-play package including broadband Internet access, fixed telephony, TV and mobile telephony. A triple-play service offering broadband Internet access, fixed telephony and TV accounted for the highest subscriber growth rate in Q1 2021. A double-play offering fixed and mobile telephony, triple-play offering fixed and mobile telephony and TV, as well as a recently introduced package including mobile telephony and TV have 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 Q1 2021



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

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



** Data for Q4 2020 were harmonized with those from annual reports for 2020.*

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 Q1 2021