



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 Fourth Quarter of 2020**

The Overview presents the data for the fourth quarter of 2020 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 2019 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 98% 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 2019 collected in the annual questionnaires.

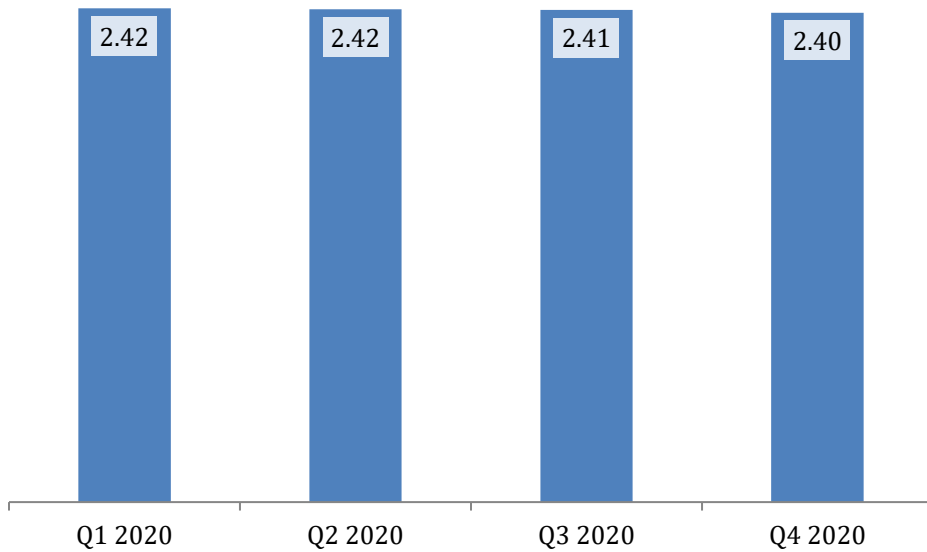
Quarterly electronic communications market indicators referring to media content distribution include the data for the leading operators that make up approximately 94% of the market, in terms of the number of subscribers, whereas the data for the remaining 6% of the market were estimated based on the data for 2019 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 2019 collected in the annual questionnaires.

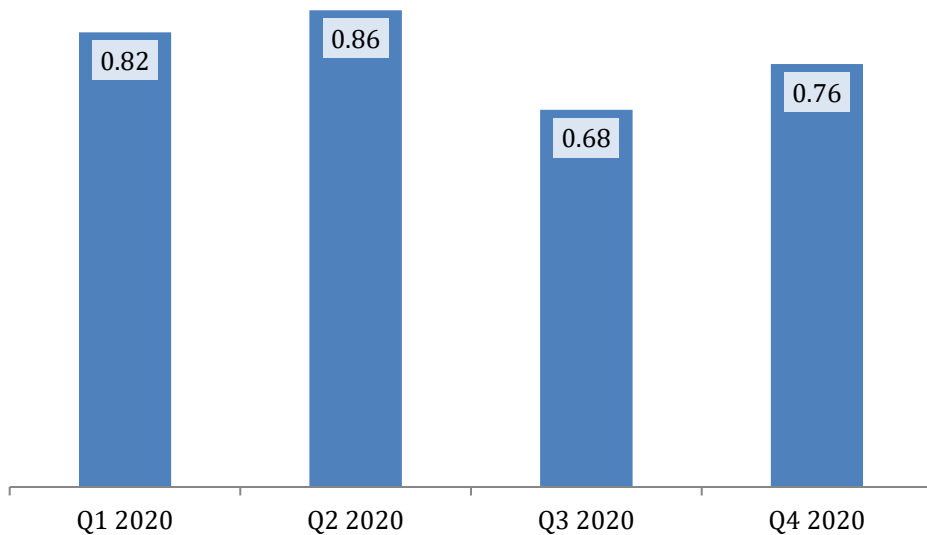
Public Fixed Telecommunications Networks and Services

Compared to the previous quarter, the number of fixed telephony subscribers in Q4 2020 has decreased, whereas the generated traffic has slightly augmented. Approximately 2.40 million fixed telephony subscribers generated around 760 million minutes of traffic in the last observed quarter, which means that a fixed telephony subscriber on average spent 3.5 minutes a day on calls.

Number of fixed line subscribers (in million)

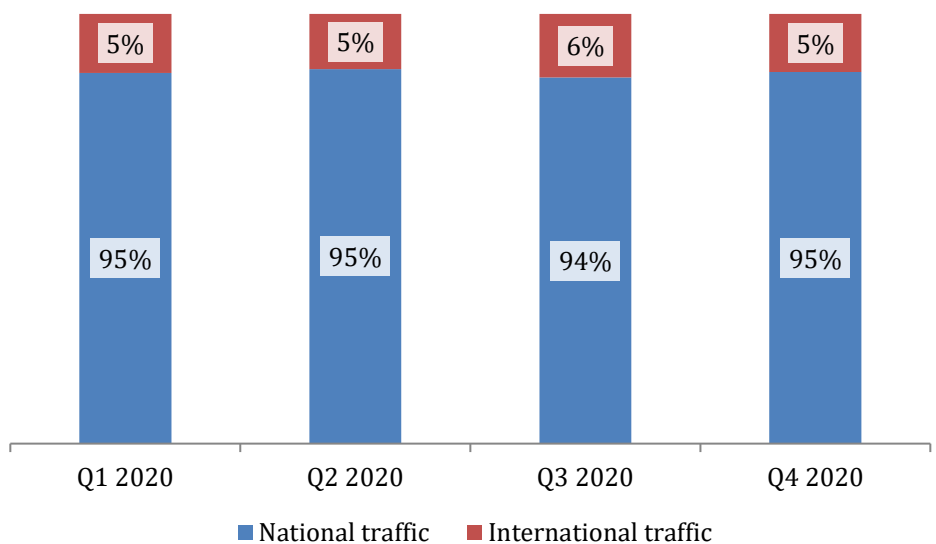


Total fixed telephony traffic (in billion minutes)



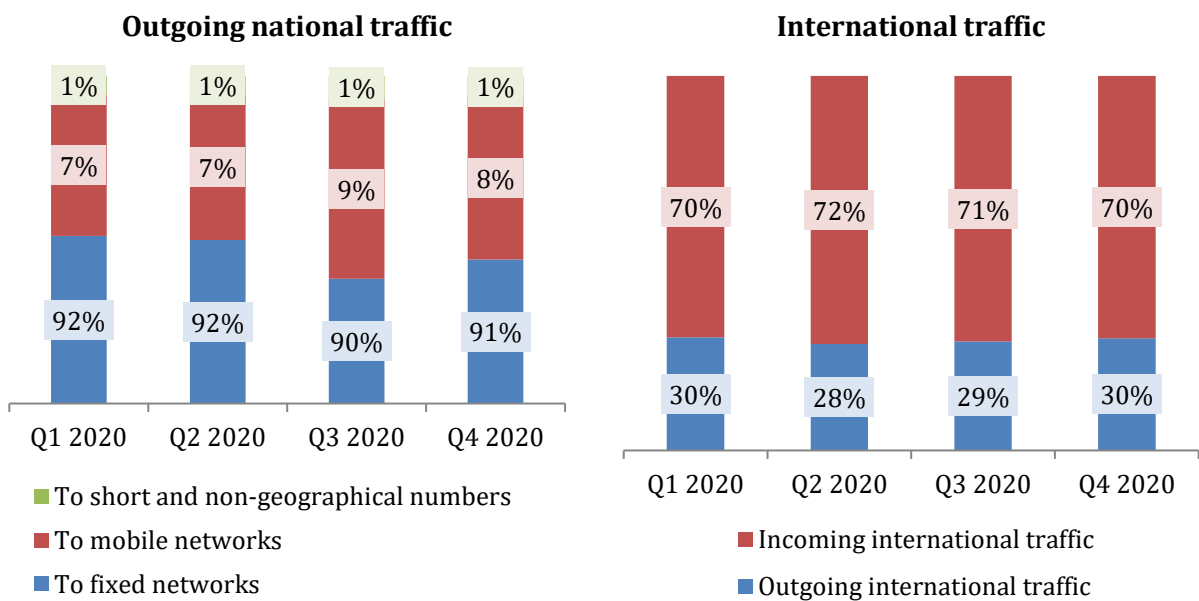
The subscriber structure has not changed over the observed quarters: 88% of the fixed telephony subscribers in Q4 2020 remain to be natural persons, i.e. private users. In all observed quarters, the largest share of the fixed telephony traffic is accounted for by the national traffic, with 95% in Q4 2020.

Fixed telephony traffic structure



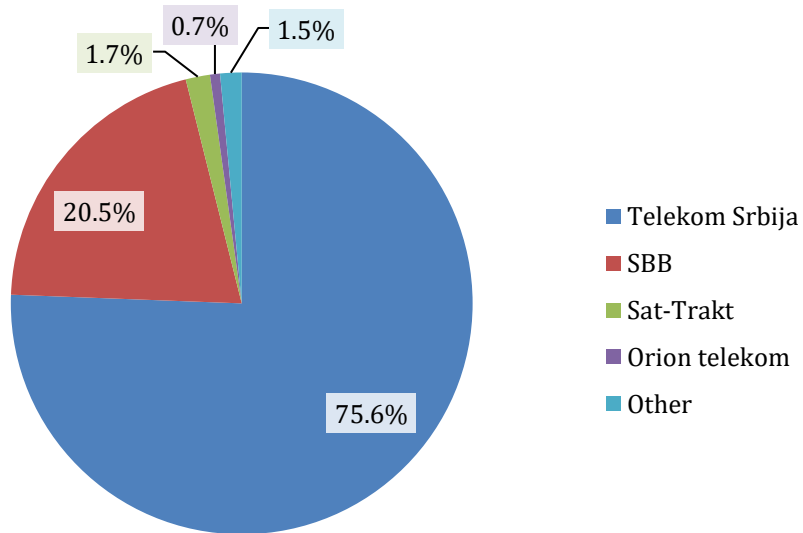
The outgoing calls from fixed network are mostly directed towards other fixed networks, while the international traffic is dominated by incoming calls.

Structure of national and international traffic in fixed telephony



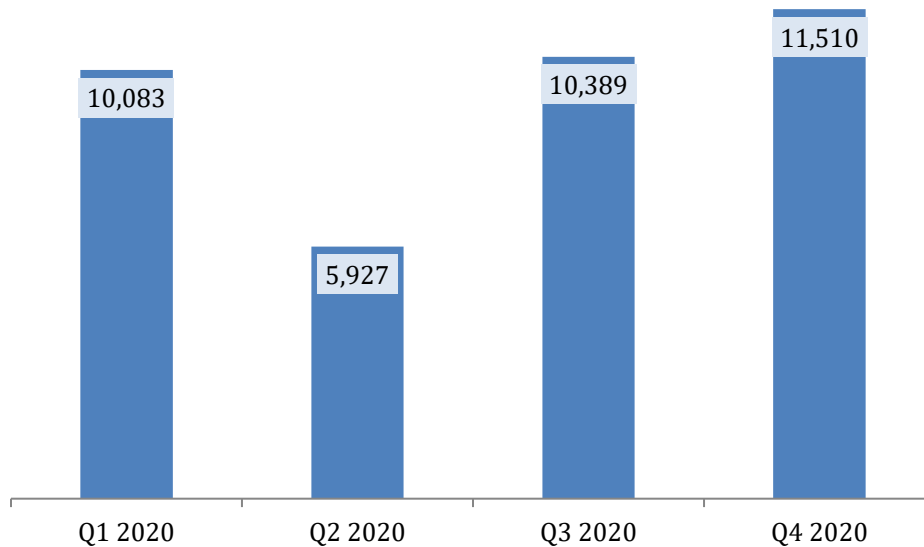
Below is shown the leading operators' market share in terms of the number of subscribers in Q4 2020.

Operators' market share by number of subscribers in Q4 2020



The number of portings in the fourth quarter of 2020 was approximately 11.5 thousand (around 3.8 thousand a month), showing an increase compared to the previous quarter.

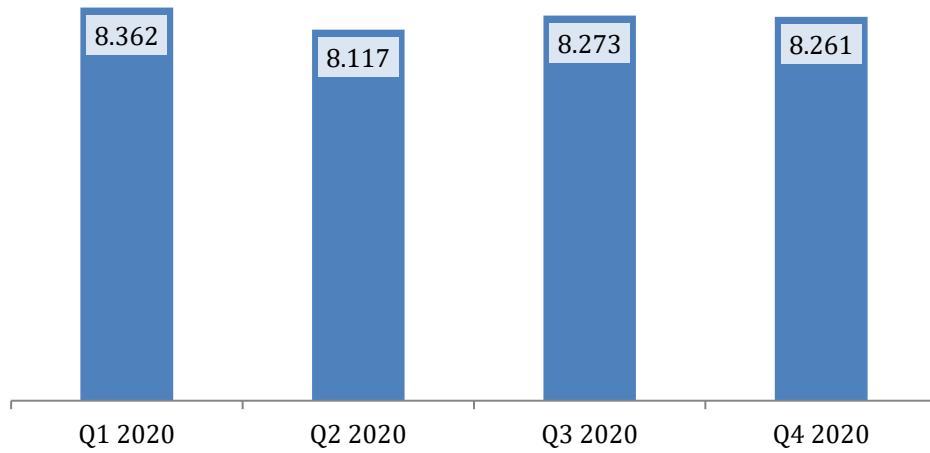
Fixed telephony number portings per quarter



Public Mobile Telecommunications Networks and Services

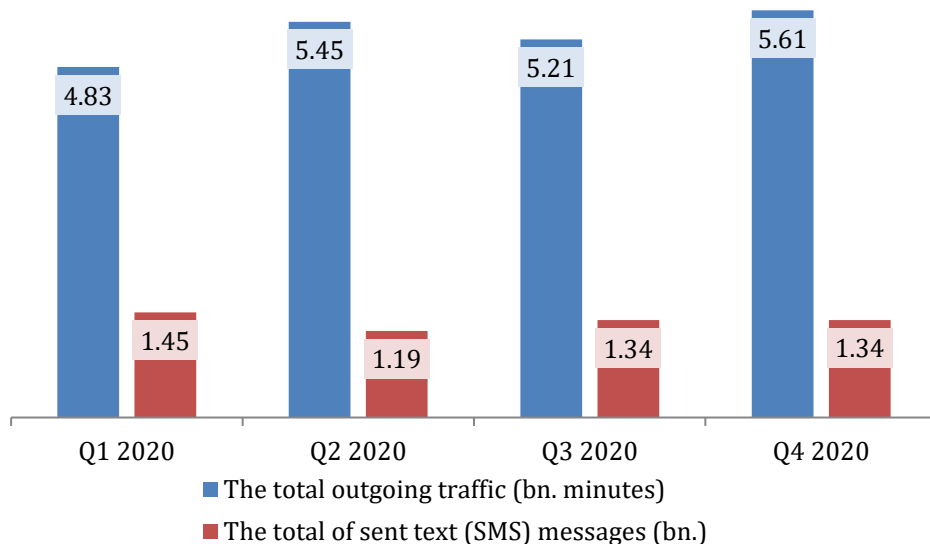
In the fourth quarter of 2020, there were approximately 8.26 million active mobile telephony subscribers that generated around 5.6 billion minutes of national and international traffic and sent around 1.3 billion SMS messages. On average, in Q4 2020, a mobile user spent 7.5 minutes a day on calls and sent 1.8 text messages. On the mobile networks market, a slight decrease in the number of active mobile telephony subscribers has been observed in Q4 2020.

Total number of active mobile telephony subscribers (in million)



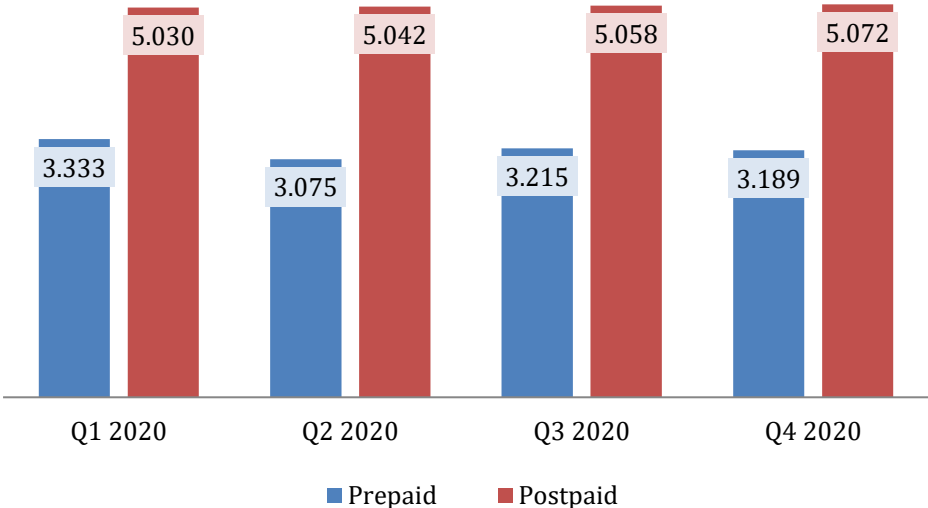
In Q4 2020, the effectuated voice traffic in mobile networks has increased, whereas the SMS traffic remained on the same level as in the previous quarter.

Generated voice and SMS mobile telephony traffic



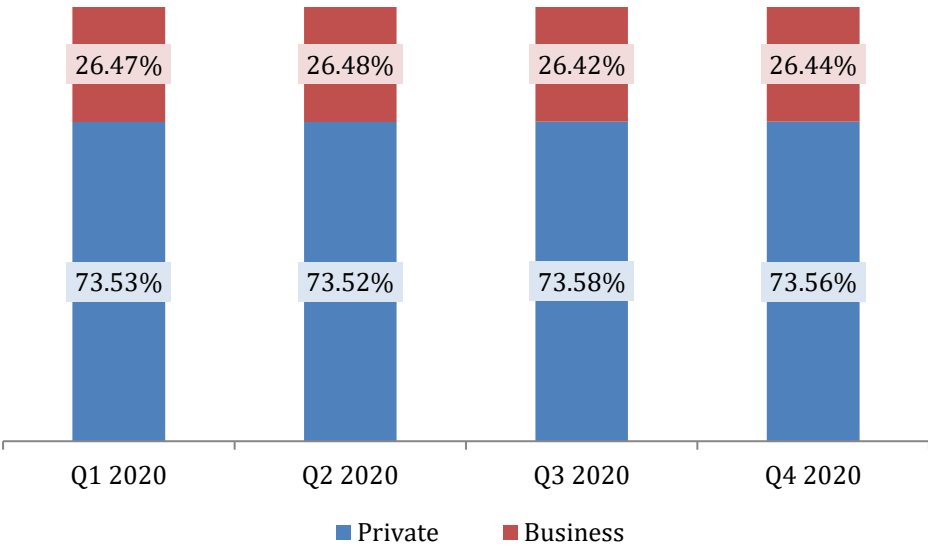
In Q4 2020, the number of postpaid subscribers have increased compared to the previous quarter, with the number of prepaid users in decline.

Number of prepaid and postpaid subscribers (in million)



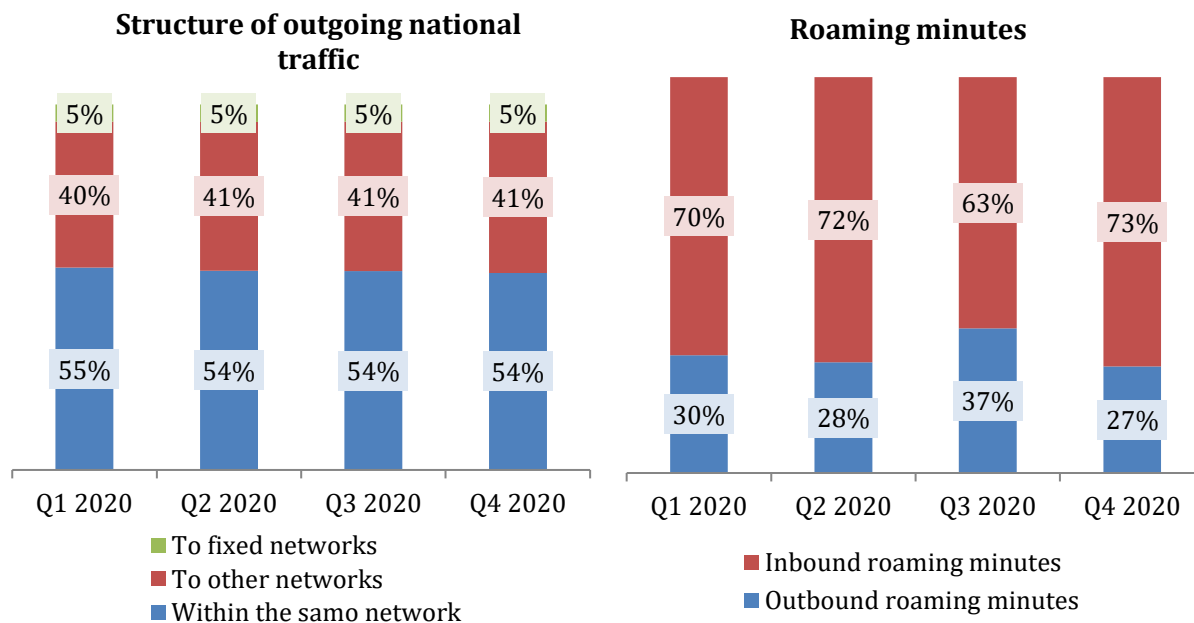
The majority of postpaid subscribers are natural persons, accounting for around 74%, much the same as in other observed quarters.

Postpaid subscriber structure



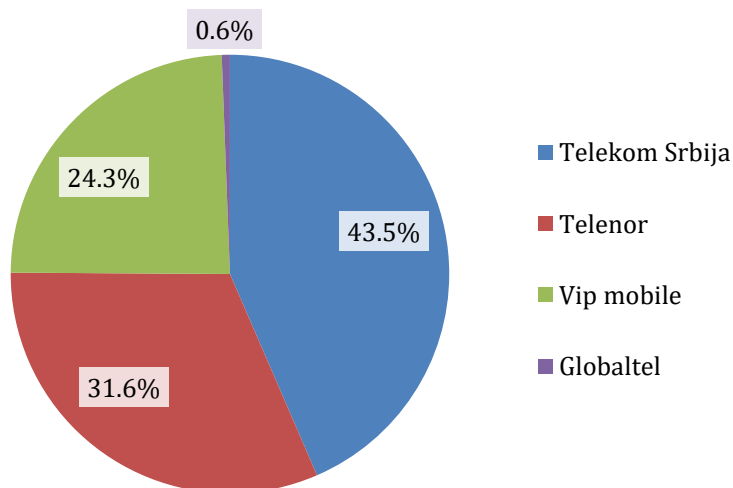
Most of the outgoing traffic in Q4 2020 has been generated within the same mobile network (54%). As for the roaming, the subscribers of foreign networks generated more traffic than the subscribers of national networks abroad.

Structure of mobile networks outgoing traffic



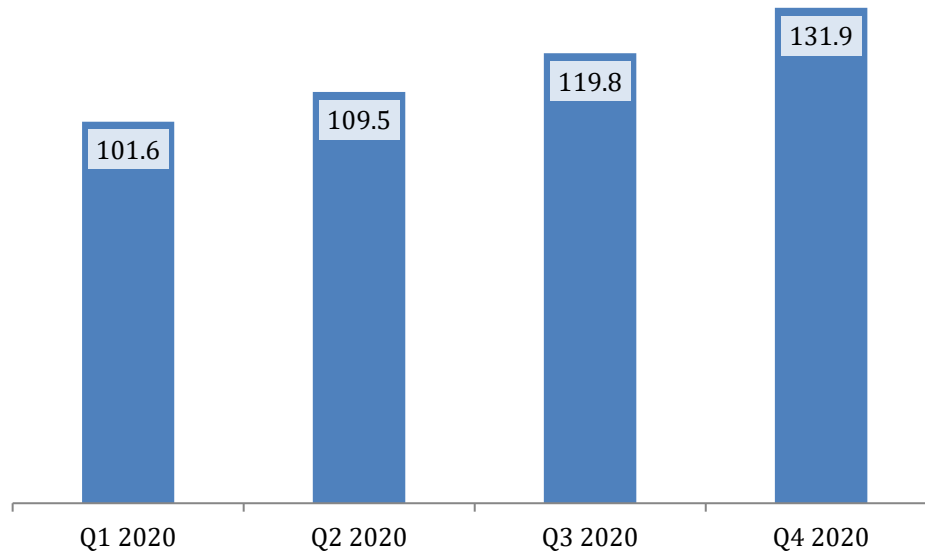
There have not been any significant changes in market shares in terms of the number of users, compared with the previous quarter.

Market share in terms of number of users in Q4 2020



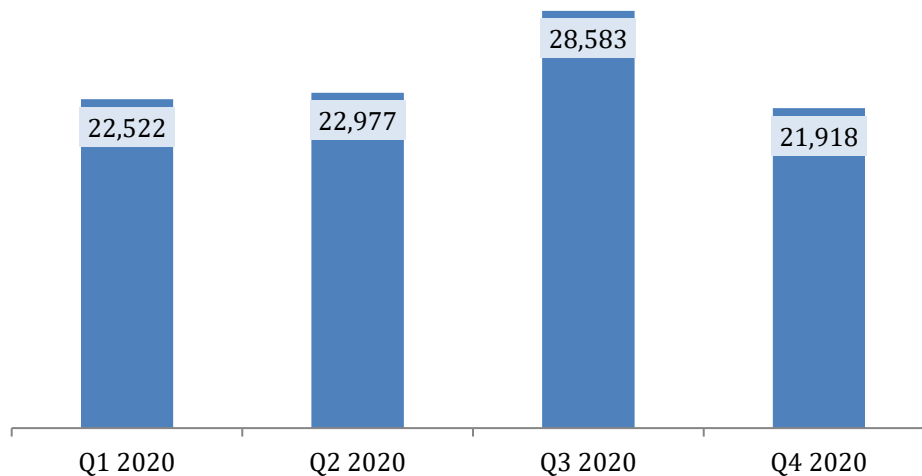
Data transmission over mobile network has shown growth in the analyzed period, amounting to 131.9 million GB in Q4 2020, which means that a mobile broadband subscriber used on average 225 MB daily, or around 6.84 GB a month.

Mobile Internet traffic (in million GB)



The number of mobile telephony number portings was approximately 21.9 thousand in the fourth quarter of 2020, or approximately 7.3 thousand per month, representing a decrease compared to the previous quarter.

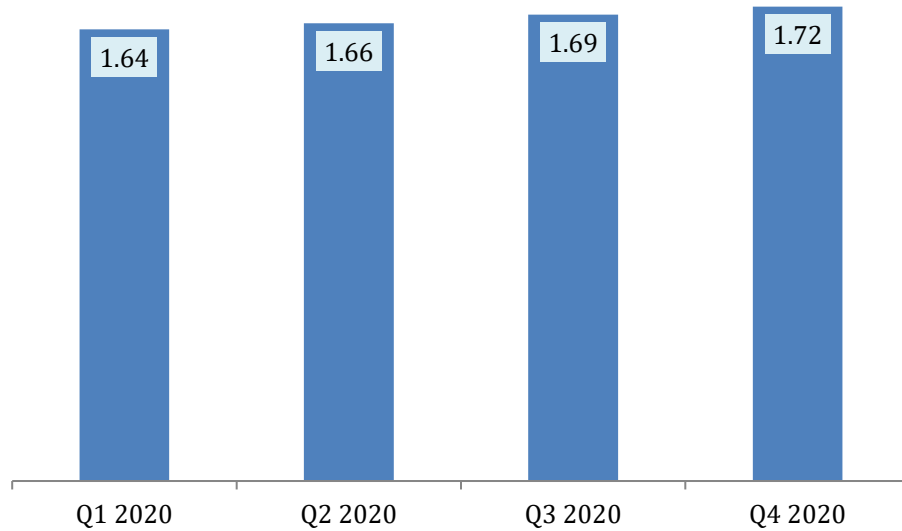
Mobile telephony number portings per quarter



Broadband Internet Access

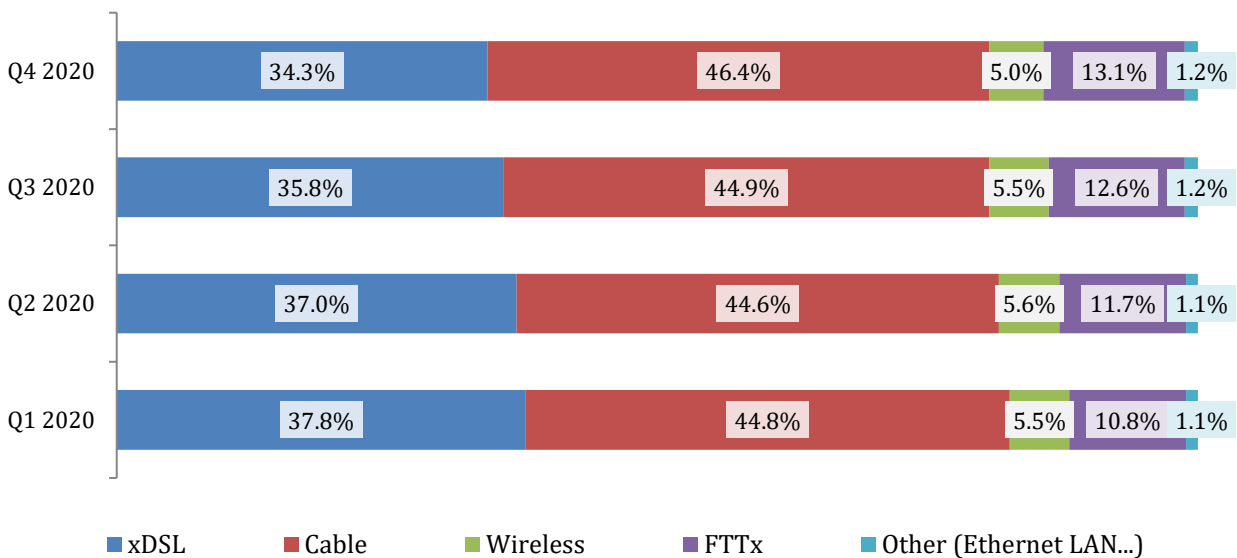
Compared to the previous quarter, the number of fixed broadband Internet access users in Q4 2020 has increased, amounting to approximately 1.72 million subscribers.

Number of fixed broadband Internet subscribers (in million)

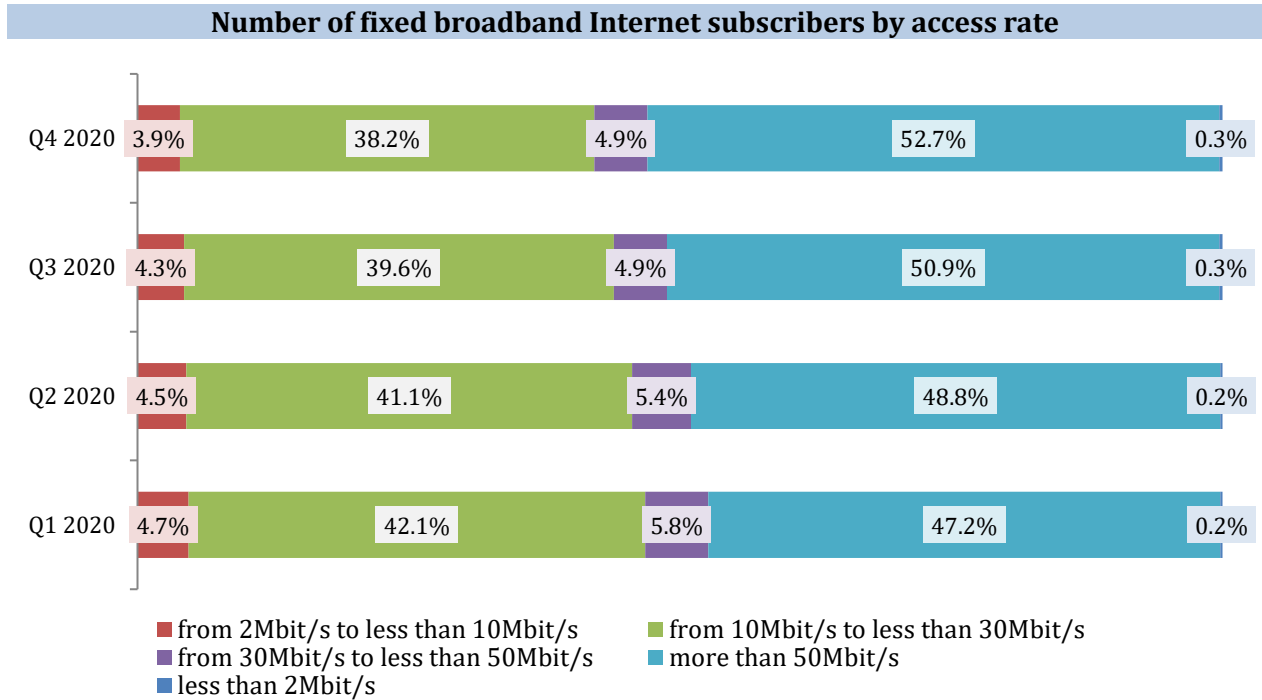


Most fixed broadband Internet subscribers have xDSL or cable access. The number of xDSL subscribers has been marked by a slight drop, whereas the share of cable access subscribers has increased in the analyzed period.

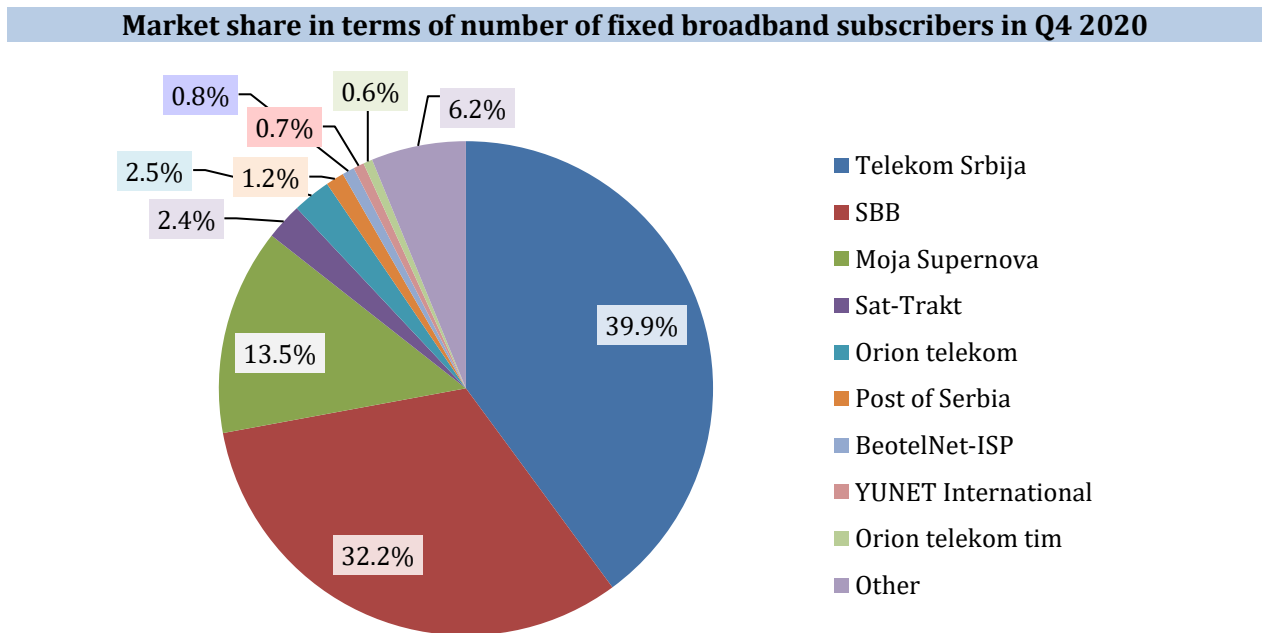
Number of subscribers by type of access



In Q4 2020, the majority of subscribers used Internet access rate over 50 Mbit/s (almost 53%) and between 10 Mbit/s to less than 30 Mbit/s (around 38%).

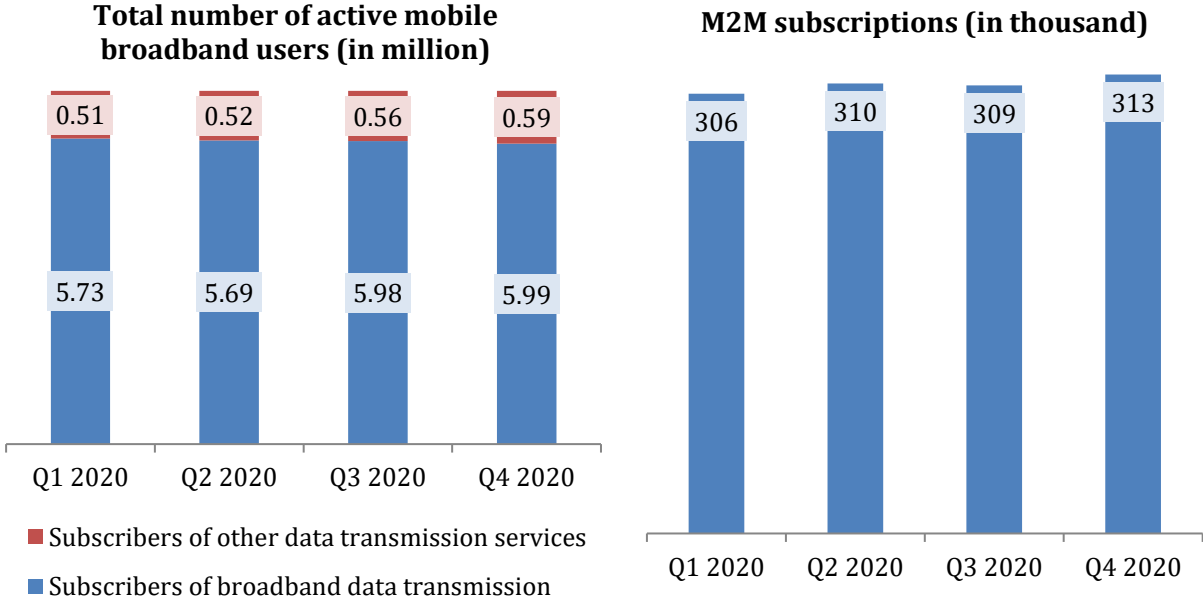


The following figure shows the leading operators' market shares, in terms of the number of subscribers for Q4 2020.



The number of active mobile broadband subscribers in Q4 2020 has slightly increased compared to the previous quarter, amounting to 6.58 million. The number of M2M subscriptions has equally grown, amounting to 313 thousand in the fourth quarter.

Number of active mobile broadband users and M2M subscribers

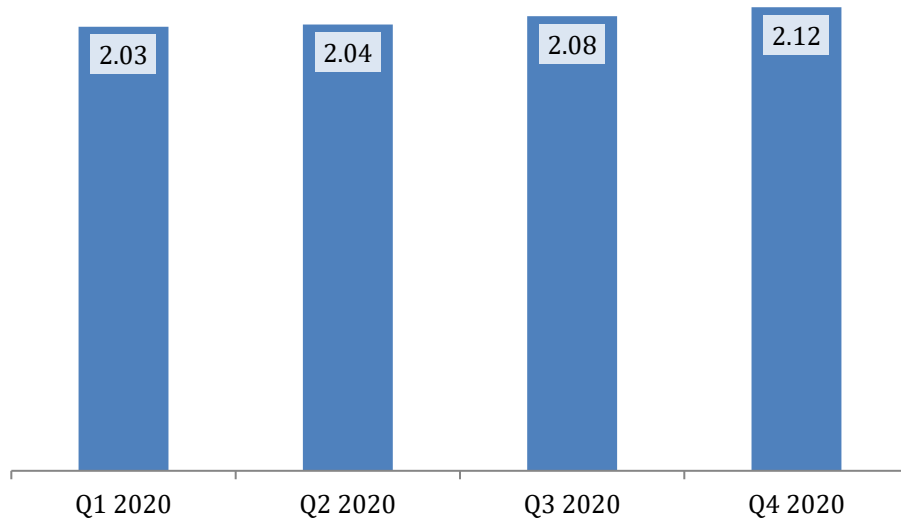


**Active mobile broadband users include subscribers of data transmission services contracted together with voice services, or as an additional package to the voice tariff plan, whereas subscribers of other data transmission services represent mobile broadband transfer users with single service agreement,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

Media Content Distribution

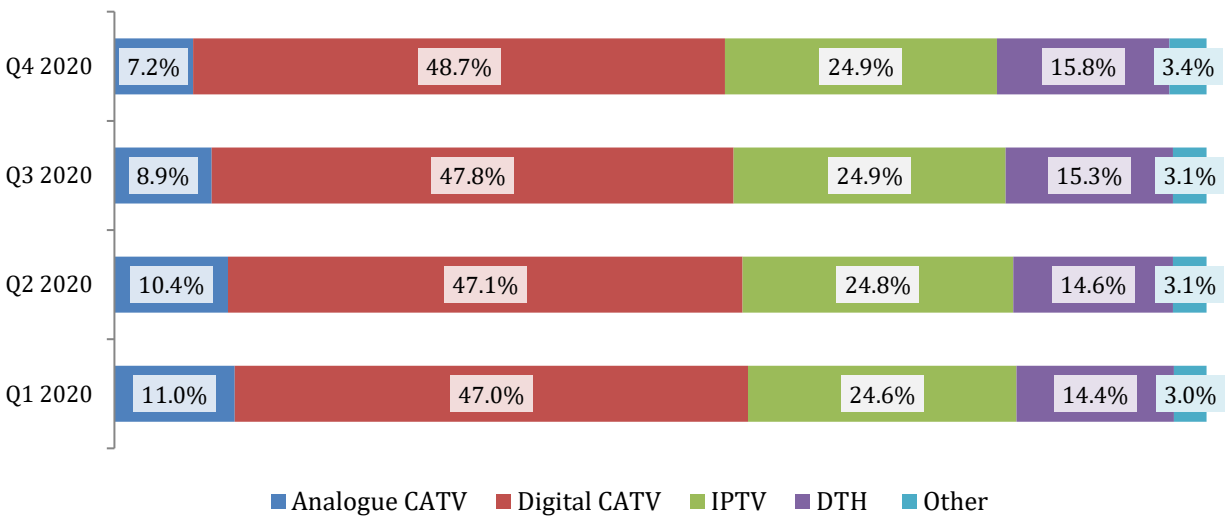
Compared to the previous period, the number of media content distribution service subscribers has increased, amounting to approximately 2.12 million in Q4 2020.

Number of media content distribution service subscribers (in million)



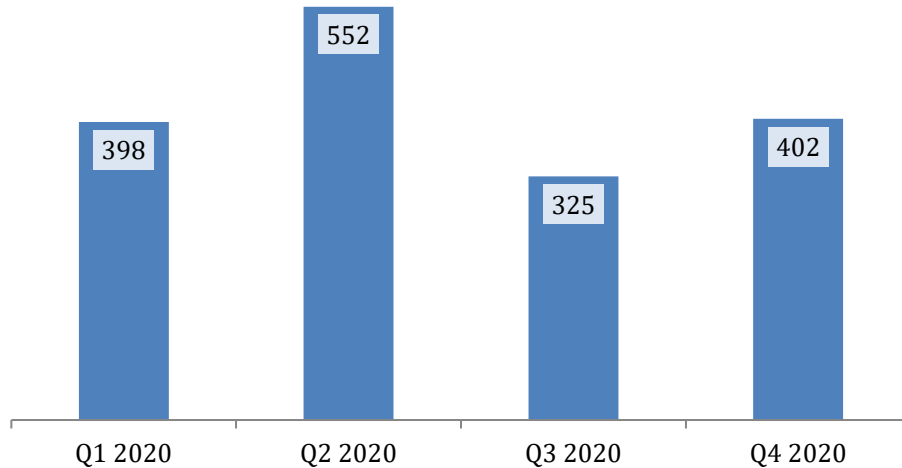
In Q4 2020, most subscribers used CATV distribution, either analogue or digital (around 56%). The number of IPTV subscribers has remained the same as in the previous quarter, the share of DTH subscriptions has slightly increased, while the services of wireless network and Internet media content distribution were the least used.

Media content distribution subscribers by type of distribution



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 Q4 2020 compared to Q3 2020, amounting to approximately 402 million requests, or some 82 requests a month per user. The number of met VoD requests in Q4 2020 was around 16.3 million.

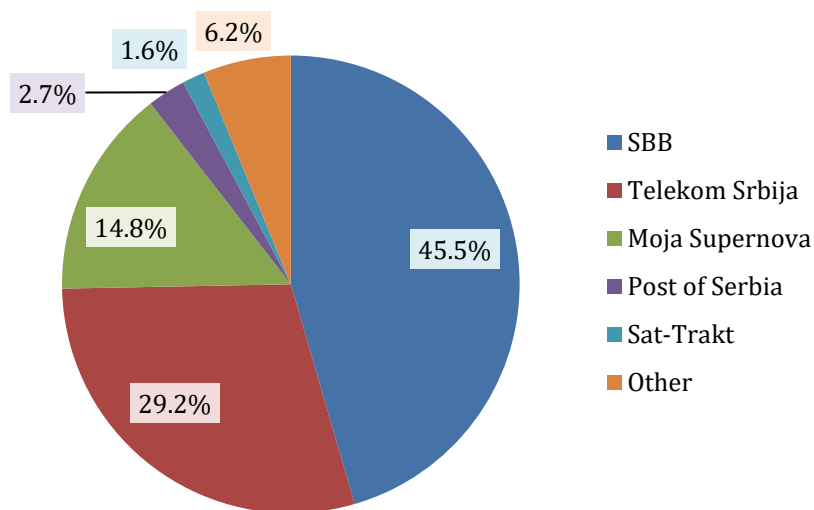
Number of met requests for additional services (in million)



In the fourth quarter of 2020, around 34% of media content distribution subscribers with the possibility to have additional channels, subscribed to such programmes.

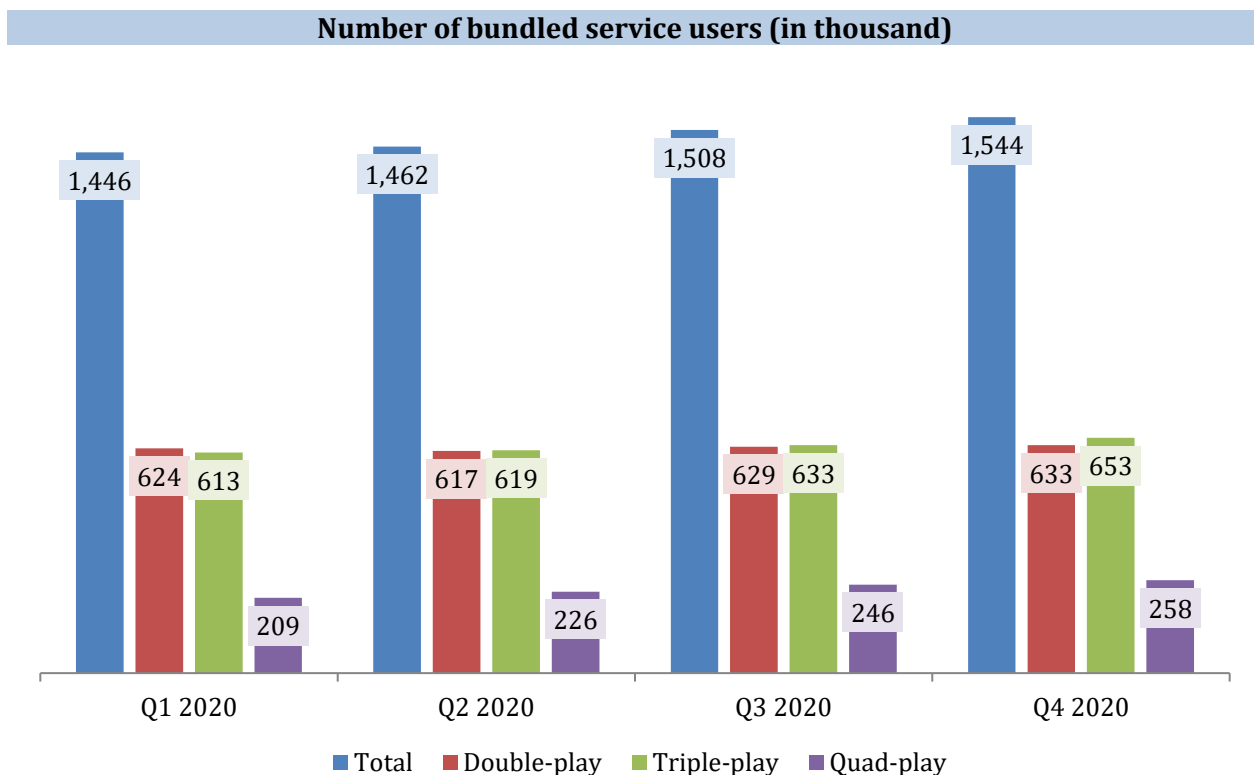
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Operators' market share in terms of number of subscribers in Q4 2020



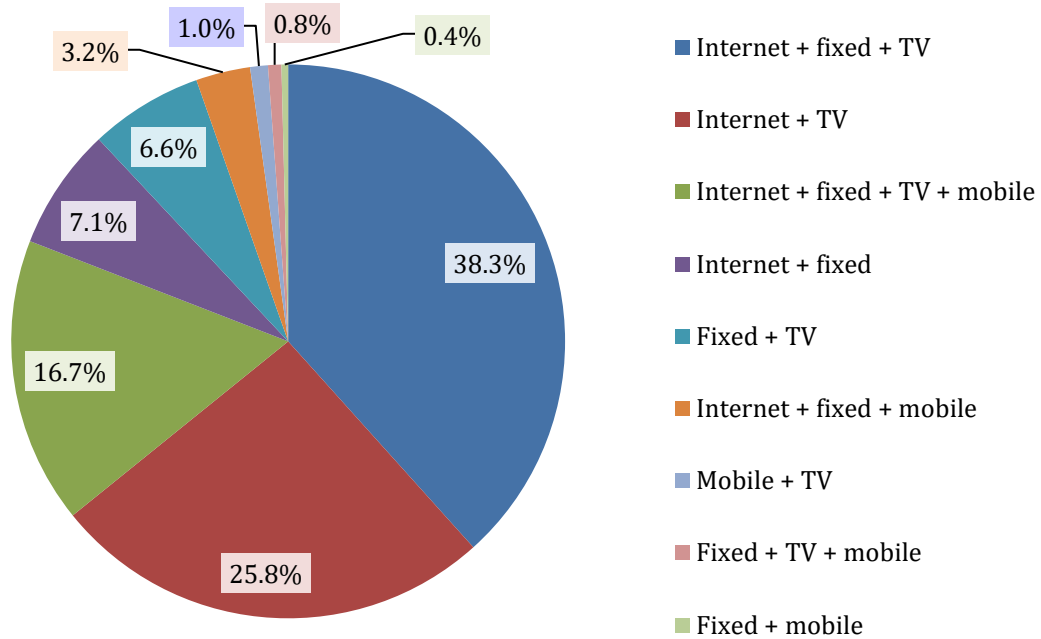
Bundled Services

The number of bundled service subscribers in Q4 2020 has increased compared to the previous quarter, amounting to approximately 1.54 million. Packages offering three services were most used, whereas least used were packages with four services.



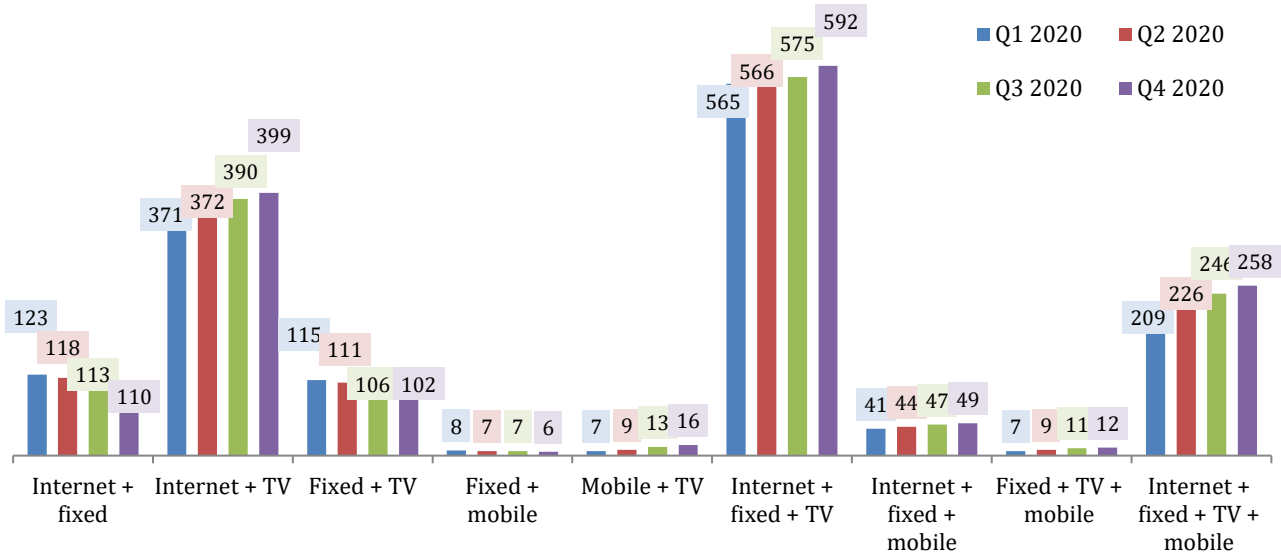
Of all bundled services offered by operators in Q4 2020, the most popular was the package with broadband Internet access, fixed telephony and TV, followed by a double-play offering broadband Internet access and TV, as well as the only available quad-play package including broadband Internet access, fixed telephony, TV and mobile telephony. These packages also have continued to have the highest subscriber growth rate in Q4 2020, with triple-play service offering broadband Internet access, fixed telephony and TV growing the fastest. 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 Q4 2020



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 Q4 2020

