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 2019

The Overview presents the data for the first quarter of 2019 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 2018 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, since Q1 2018, for virtual mobile operators as well.

Quarterly electronic communications market indicators referring to Internet services include the data for the leading operators that make up approximately 91% of the market, in terms of the number of subscribers, whereas the data for the remaining 9% of the market were estimated based on the data for 2018 collected in the annual questionnaires.

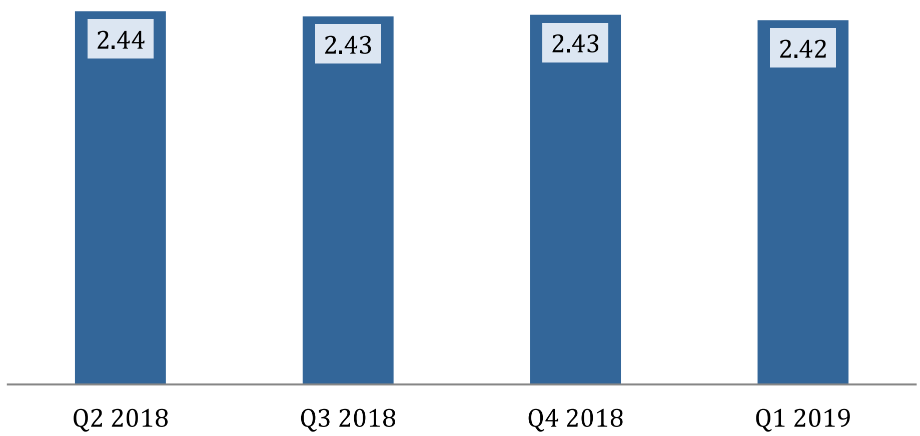
Quarterly electronic communications market indicators referring to media content distribution include the data for the leading operators that make up approximately 91% of the market, in terms of the number of subscribers, whereas the data for the remaining 9% of the market were estimated based on the data for 2018 collected in the annual questionnaires.

Quarterly electronic communications market indicators referring to bundle services include the data for the leading operators that make up approximately 97% of the market, whereas the data for the remaining 3% of the market were estimated based on the data for 2018 collected in the annual questionnaires.

Public Fixed Telecommunications Networks and Services

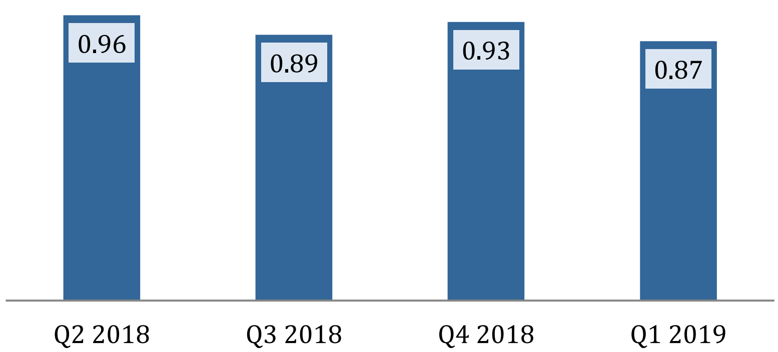
The number of fixed telephony subscribers and the generated traffic slightly decreased in Q1 2019, compared to the previous quarter. Approximately 2.42 million fixed telephony subscribers generated approximately 870 million minutes of traffic in the last observed quarter, which means that a fixed telephony subscriber on average spent 4 minutes a day on calls.

Number of fixed line subscribers (million)*



**Data for Q4 2018 have been aligned with the data from annual questionnaires for 2018.*

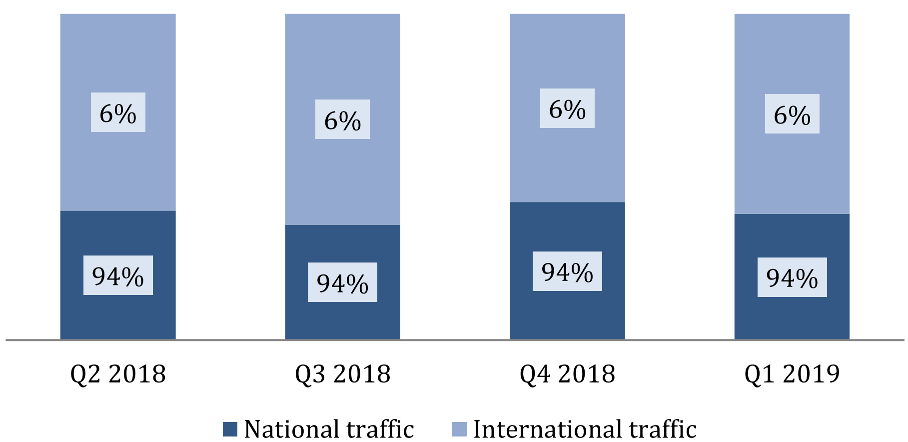
Total fixed telephony traffic (billion minutes) *



**Data for the last three quarters of 2018 have been corrected according to the data from annual questionnaires for 2018.*

88% of the fixed telephony subscribers are natural persons, i.e. private users, while the subscriber structure remains unchanged in the analysed quarters. In all observed quarters, the largest share of the fixed telephony traffic is accounted for by the national traffic, with 94% in Q1 2019.

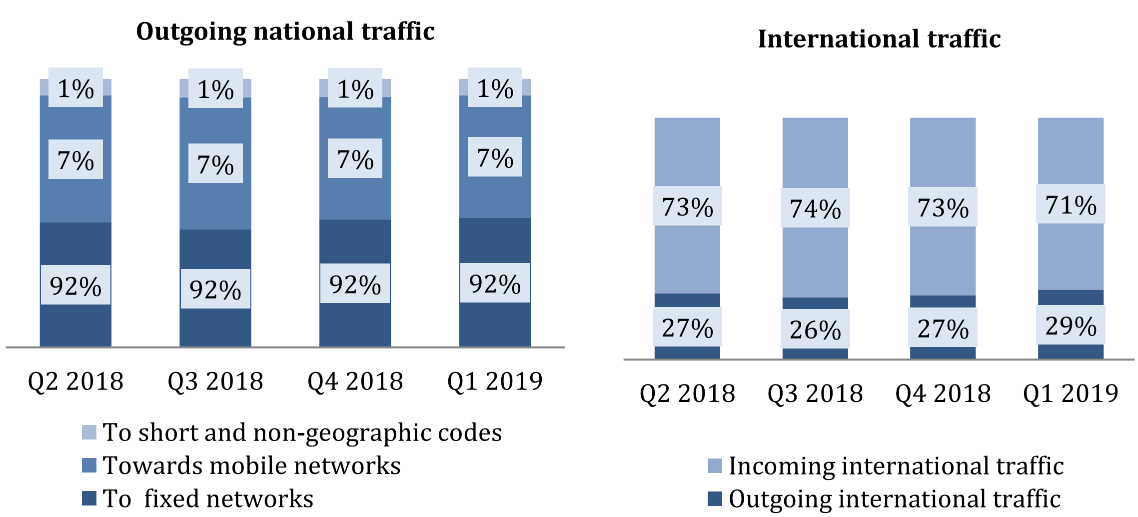
Fixed telephony traffic structure*



**Data for the last three quarters of 2018 have been corrected according to the data from annual questionnaire for 2018.*

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

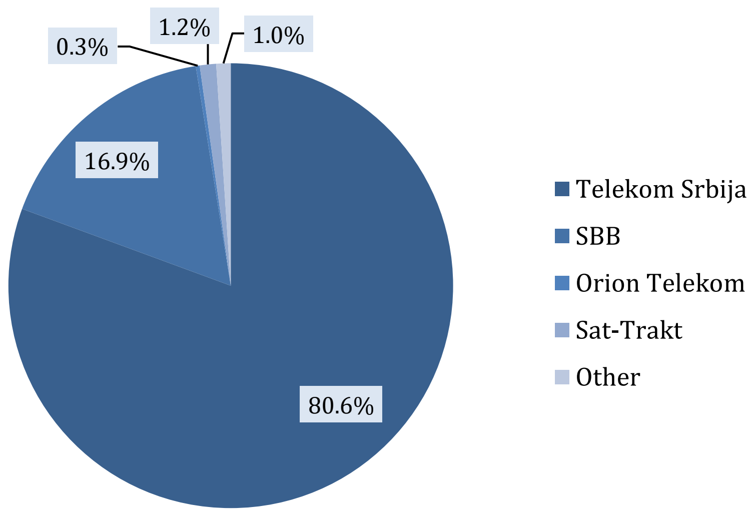
Structure of national and international traffic in fixed telephony*



**Data for the last three quarters of 2018 have been corrected according to the data from annual questionnaire for 2018.*

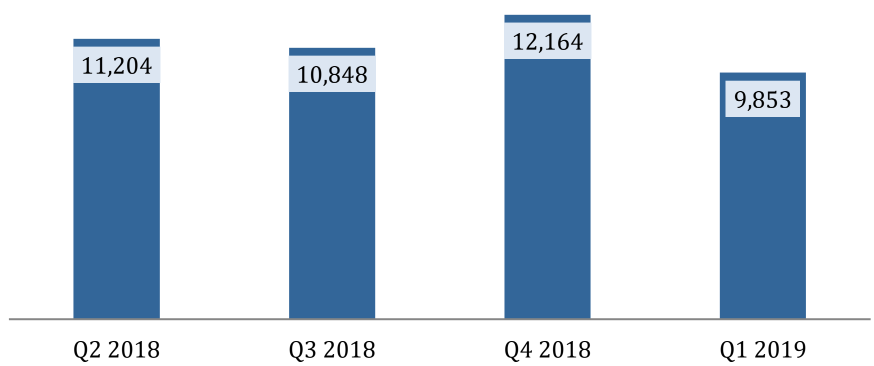
The leading operators' market shares according to the number of subscribers in Q1 2019 are shown below.

Operators' market share according to number of subscribers in Q1 2019



The number of portings in the first quarter of 2019 was approximately 9.9 thousand (around 3.3 thousand a month), showing a slight decrease compared to the previous quarter.

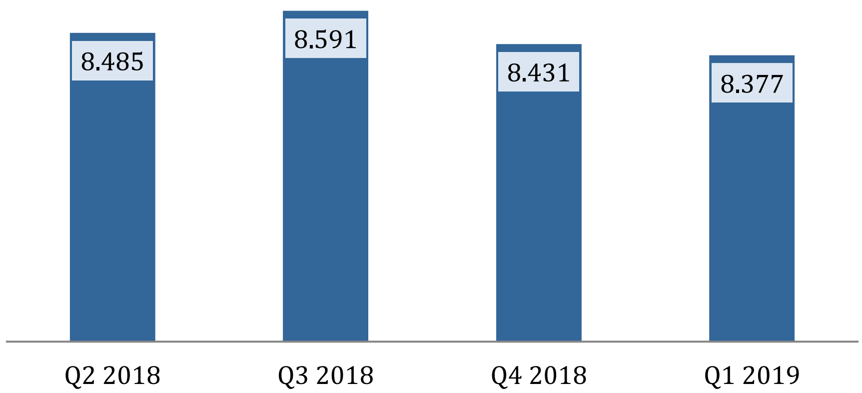
Fixed telephony number portings per quarter



Public Mobile Telecommunications Networks and Services

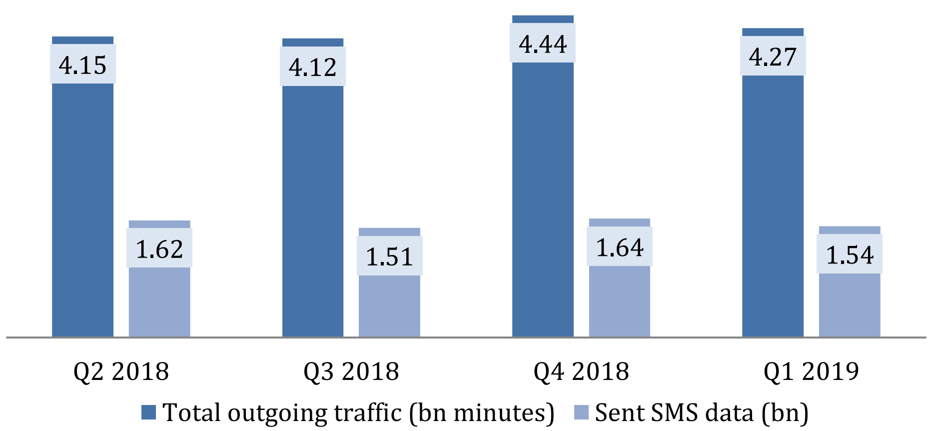
In Q1 2019, there were 8.4 million active mobile telephony subscribers, that generated approximately 4.3 billion minutes of national and international voice traffic and sent approximately 1.5 billion SMS messages. On average, a mobile user spends 5.6 minutes a day on calls and sends 2 text messages. On the mobile networks market, a slight increase in the number of active mobile telephony subscribers has been observed in Q1 2019, by approximately 0.6%.

Total number of active mobile telephony subscribers (million)



In Q1 2019, the effectuated voice traffic in mobile networks dropped by approximately 4%, while the SMS traffic, was lower by approximately 4, compared with the previous quarter%.

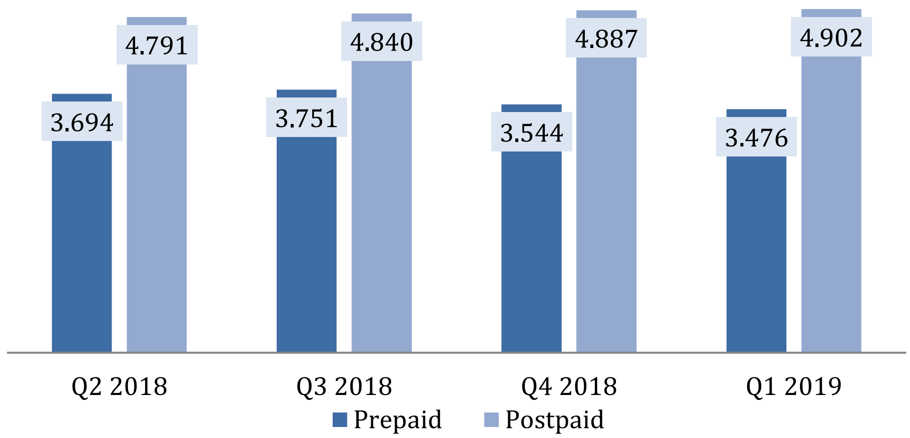
Generated voice and SMS mobile telephony traffic (billion minutes) *



**Data for the last three quarters of 2018 have been corrected according to the data from annual questionnaire for 2018.*

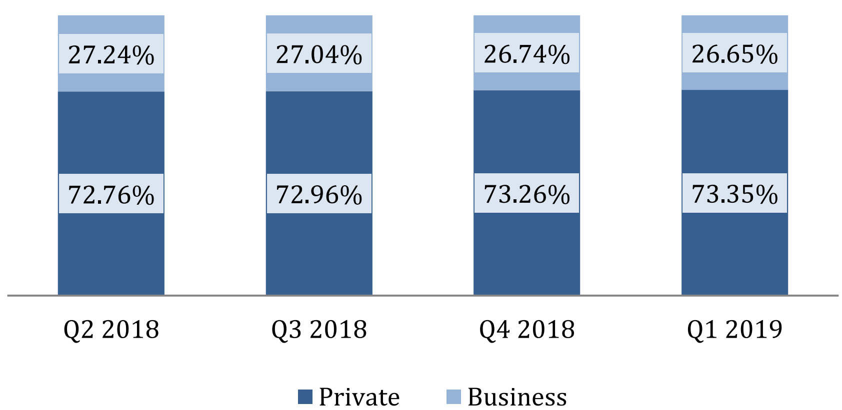
In Q1 2019, the number of postpaid subscribers increased slightly, whereas the number of prepaid users is somewhat lower compared with the previous quarter.

Number of prepaid and postpaid subscribers (million)



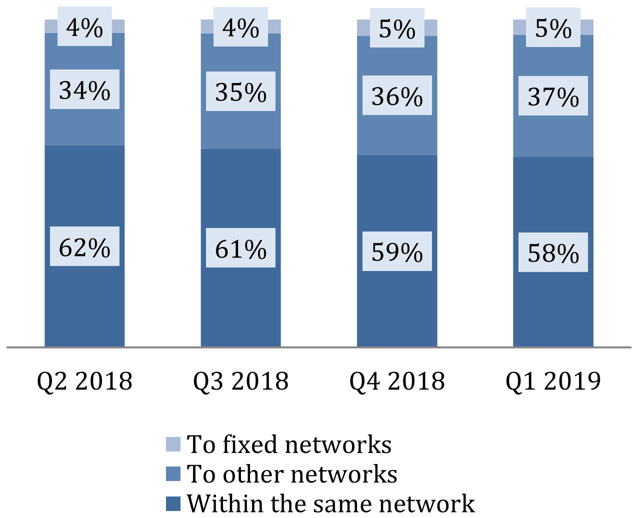
The majority of postpaid subscribers are natural persons, accounting for around 73%, pretty much the same as in other observed quarters.

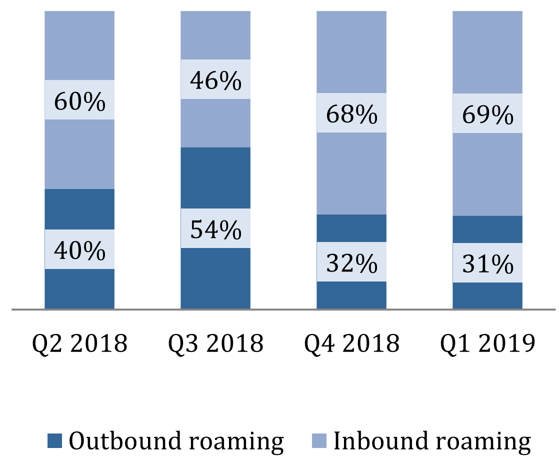
Postpaid subscriber structure



Most of the outgoing traffic in Q1 2019 has been generated within the same network (58%). As for the roaming, the subscribers of foreign networks generated more roaming traffic than the subscribers of national networks abroad.

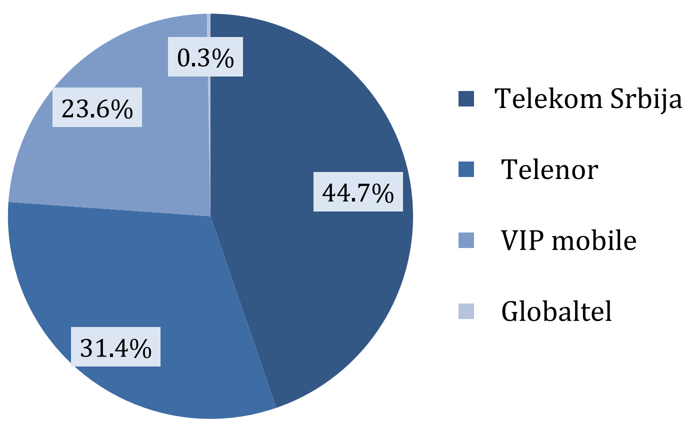
Structure of mobile networks outgoing traffic





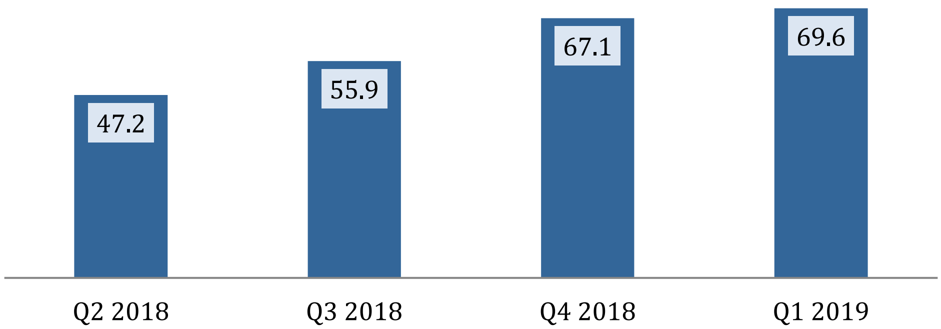
There haven’t been any significant changes in market shares in terms of the number of users, compared with the previous quarter.

Market share in terms of number of users in Q2 2019



Data transmission over mobile network has shown growth in the analysed period, amounting to 69.6 million GB in Q1 2019, which means that a mobile broadband subscriber used on average 134 MB daily, or almost 4 GB a month.

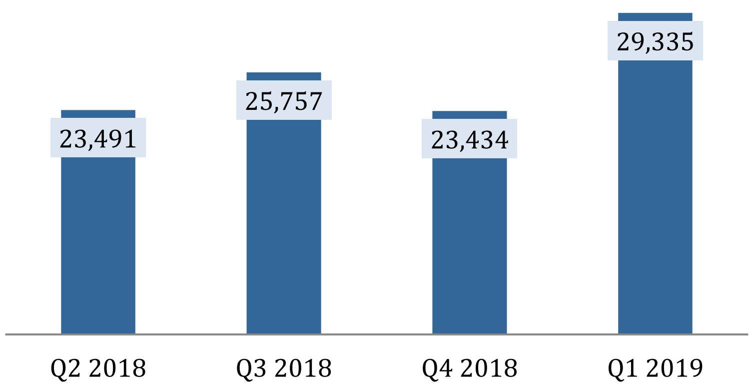
Mobile Internet traffic (million GB) *



**Data for the last three quarters of 2018 have been corrected according to the data from annual questionnaire for 2018.*

The number of mobile telephony number portings was approximately 29.3 thousand in the second quarter 2019, or around 9.8 thousand per month, which is a slight decrease compared to the previous quarter.

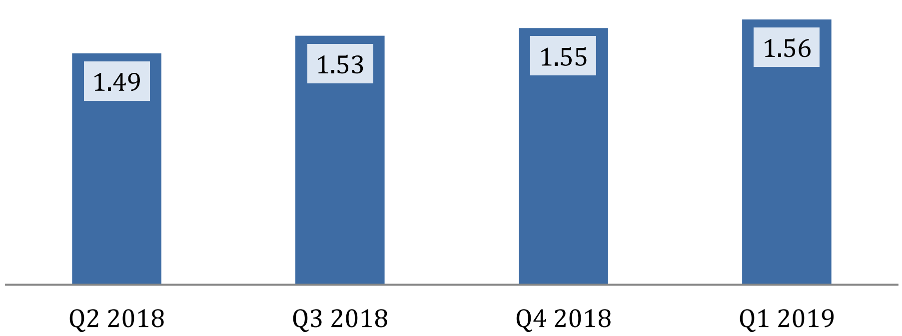
Mobile telephony number portings per quarter



Broadband Internet Access

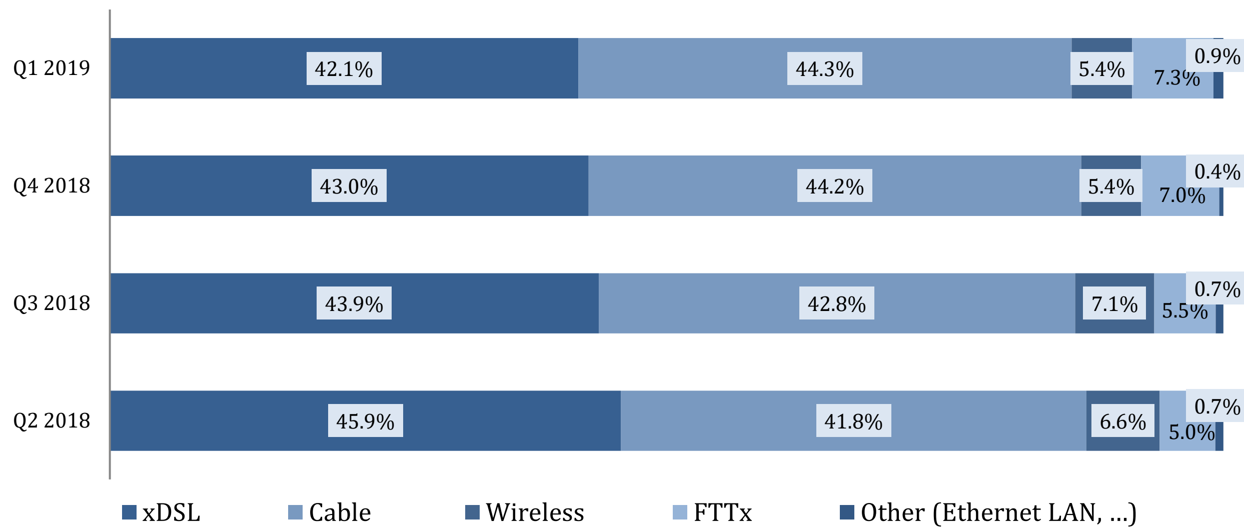
Compared to the previous quarter, the number of fixed broadband Internet access users in Q1 2019 has slightly increased, amounting to approximately 1.56 million subscribers.

Number of fixed broadband Internet subscribers (million)



The majority of fixed broadband subscribers have xDSL or cable access. The number of xDSL subscribers has seen a slight drop and cable access a slight increase in the analysed period.

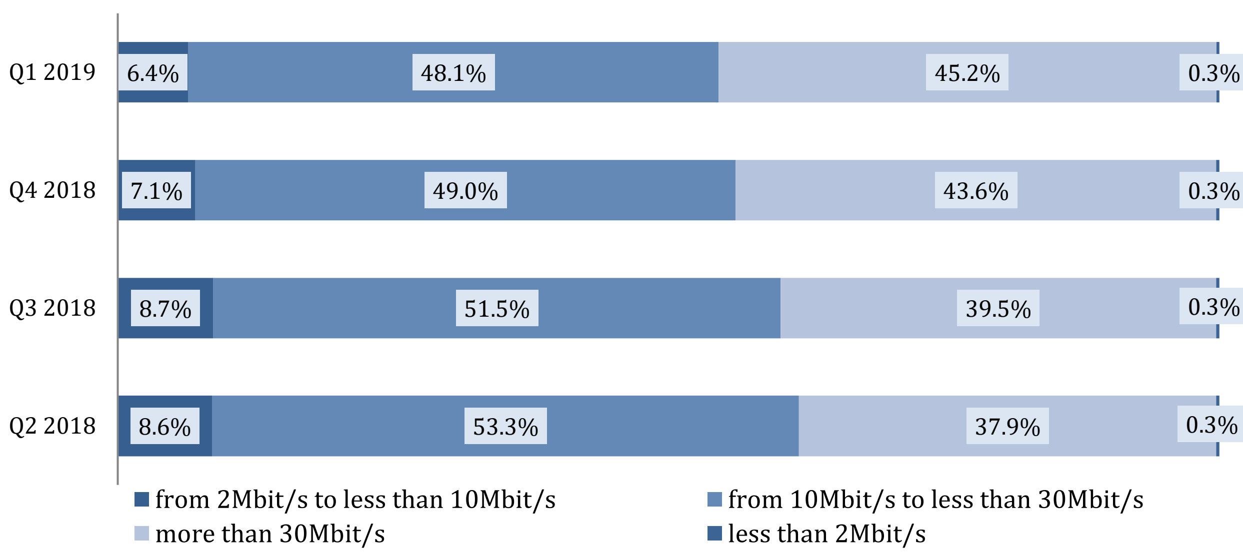
Number of subscribers according to type of access*



**Data for the last three quarters of 2018 have been corrected according to the data from annual questionnaire for 2018.*

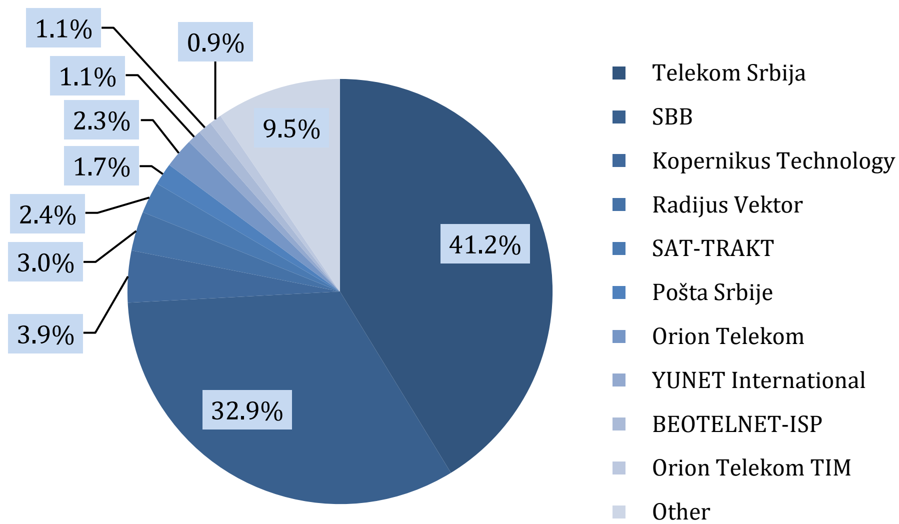
Around 48% of subscribers have had Internet access rates between 10 Mbit/s to less than 30 Mbit/s, while the number of subscribers using access rates of over 30 Mbit/s has continued to grow during Q1 2019 as well.

Number of fixed broadband Internet subscribers according to access rate



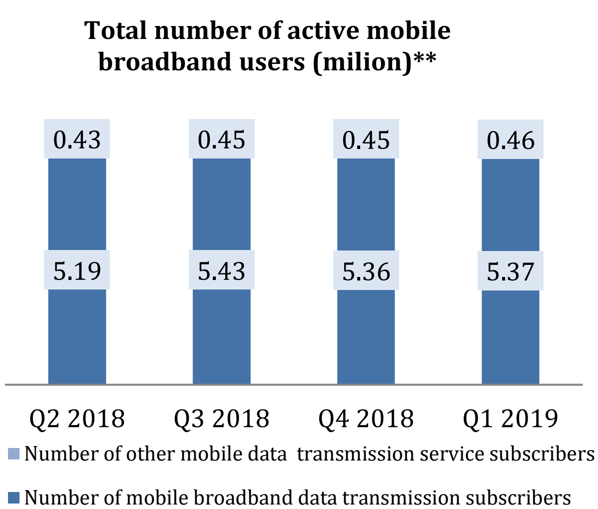
In Q1 2019, there haven't been any significant changes in the leading operators' market shares, in terms of number of subscribers, compared with the previously observed quarters.

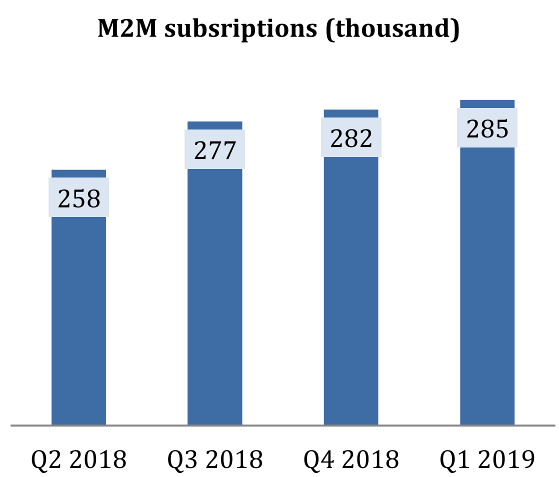
Market share in terms of number of fixed broadband subscribers in Q1 2019



There haven't been any significant changes in the number of active mobile broadband subscribers in Q1 2019 compared to the previous quarter, amounting to approximately 5.8 million. The number of M2M subscriptions is on the rise, reaching approximately 285 thousand.

Number of active mobile broadband subscribers and M2M subscribers **





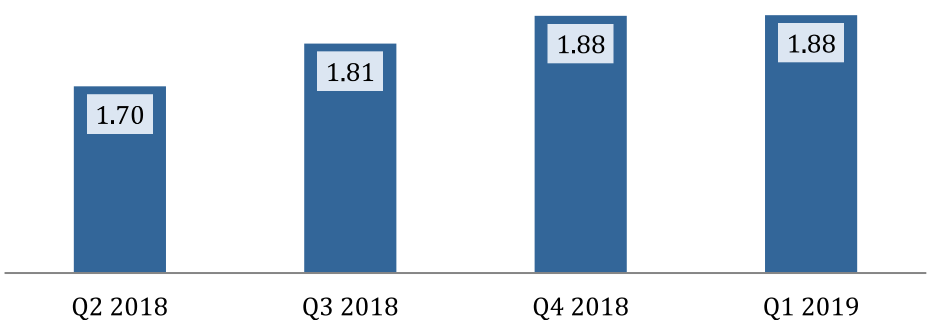
** Active mobile broadband subscribers include subscribers of data transmission services contracted together with voice services, or as an additional package to the voice tariff plan, whereas subscribers of other data transmission services represent mobile broadband transfer users with single service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

***Data for the last three quarters of 2018 have been corrected according to the data from annual questionnaire for 2018.*

Media Content Distribution

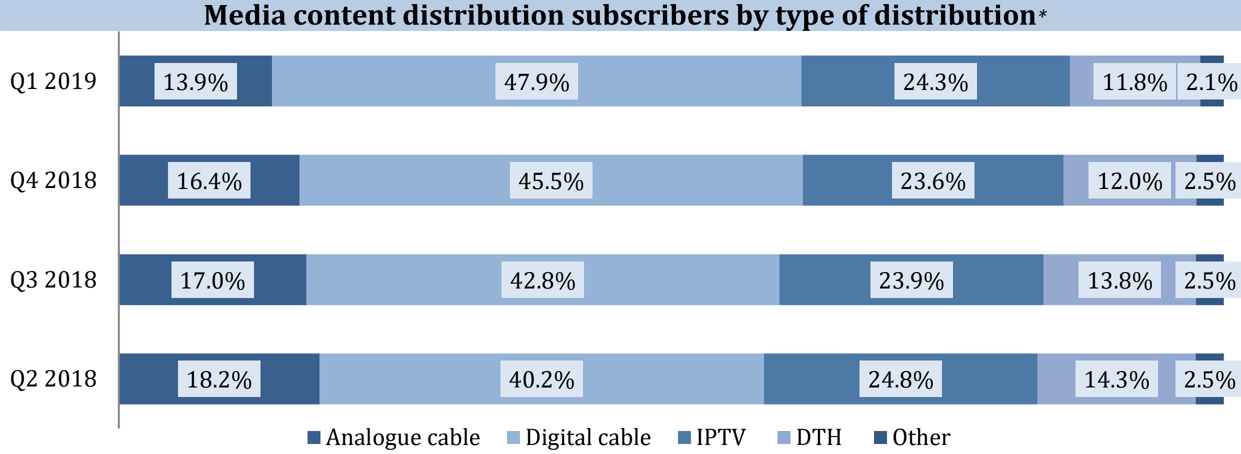
The number of media content distribution service subscribers has slightly increased in the observed period, amounting to approximately 1.88 million in Q1 2019.

Number of media content distribution service subscribers (million)



In Q1 2019, the majority of subscribers used CATV distribution, either analogue or digital (around 62%). The number of IPTV subscriptions has also slightly increased, whereas wireless network or Internet content distribution were the least used.

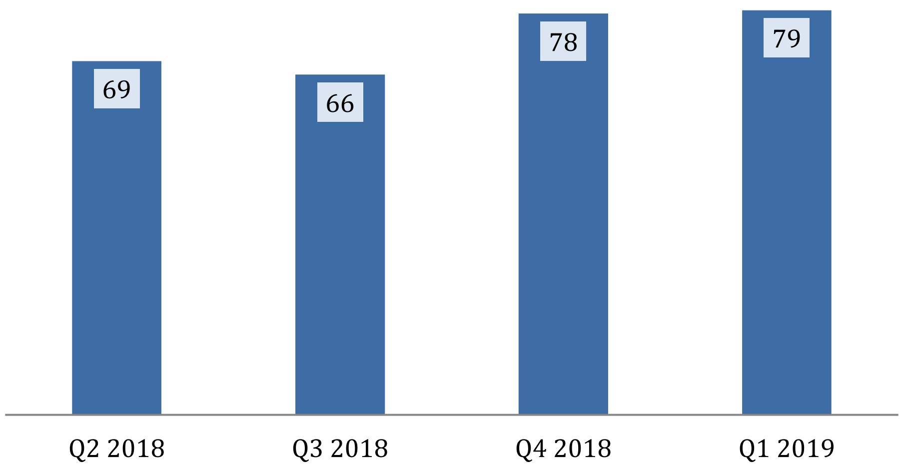
Media content distribution subscribers by type of distribution*



**Data for the last three quarters of 2018 have been corrected according to the data from annual questionnaire for 2018.*

The number of met requests for additional services, including video on demand (VoD), content recording, TV on mobile devices, playback etc, has slightly increased in Q1 2019 compared to Q4 2018, amounting to approximately 79 million requests, or 19 requests a month per user. The number of met VoD requests in Q1 2019 was around 3.7 million.

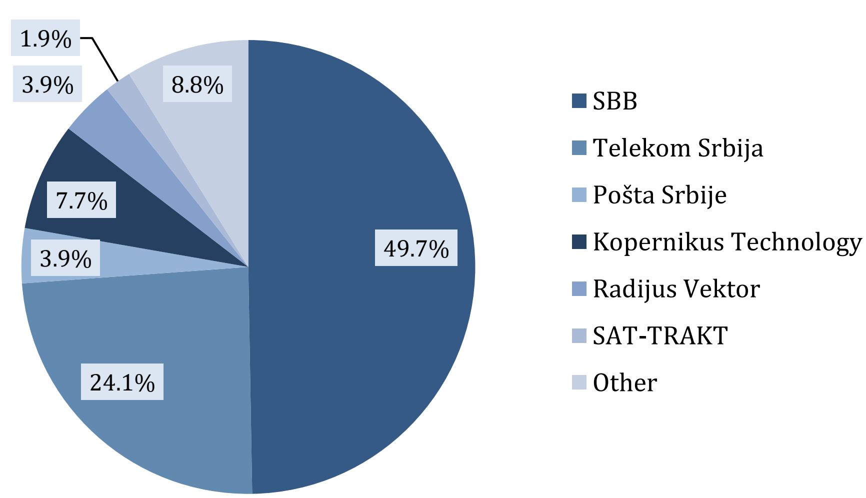
Number of met requests for additional services (million)



In Q1 2019, around 35% of media content distribution subscribers with the possibility to have additional channels, subscribed to such programmes.

As for the leading operators' market shares, in terms of the number of subscribers, there haven't been any significant changes in Q1 2019 compared to the previous quarter.

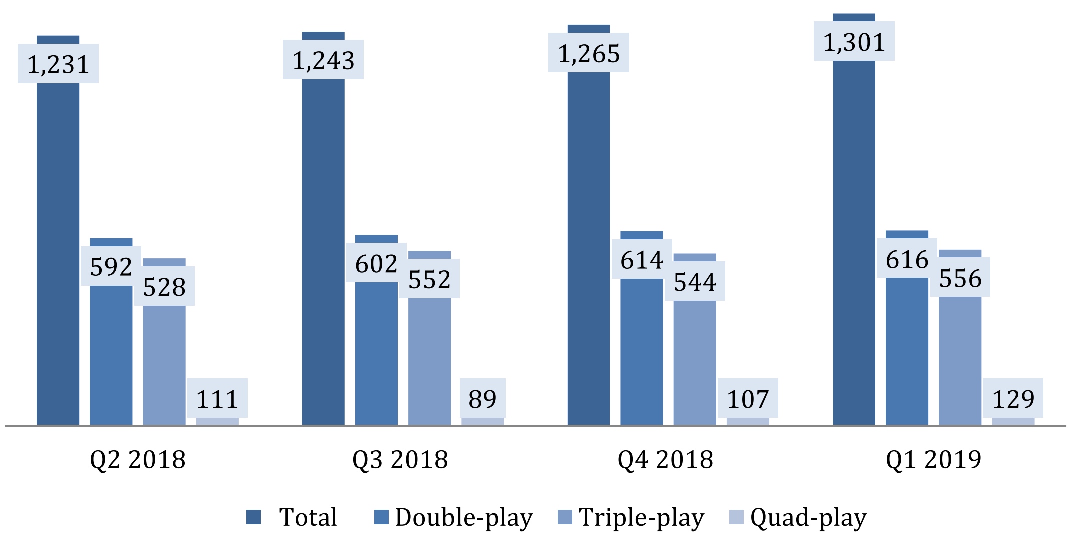
Operators' market share in terms of number of subscribers in Q1 2019



Bundled Services

The number of bundled service subscribers in Q1 2019 increased slightly, compared to the previous quarter, amounting to approximately 1.3 million. Packages offering two services (double-play) were most used, whereas least used were packages with four services (quad-play), which also include mobile service.

Number of bundled service users (thousands) *



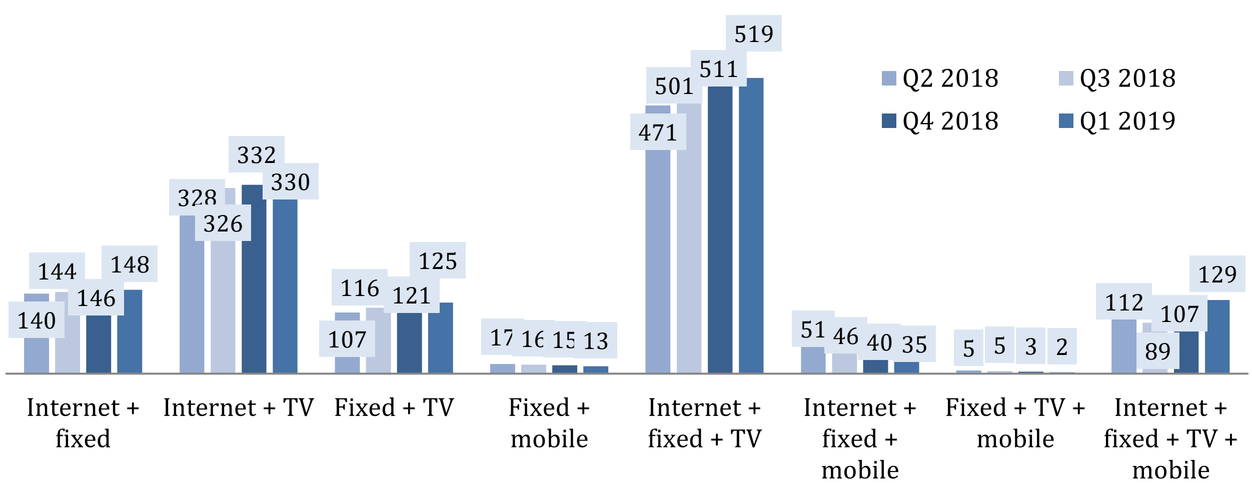
**Data for the last three quarters of 2018 have been corrected according to the data from annual questionnaire for 2018.*

Most subscribers of double-play bundles used packages offering broadband Internet and media content distribution (around 54%), whereas the most popular triple-play package included broadband Internet, fixed telephony and media content distribution (around 93%). Since the quad-play packages, which include broadband Internet access, fixed telephony, media content distribution and mobile telephony, had become available for new users again in Q4 2018, the number of subscribers has been on the rise.

The highest absolute subscriber growth is due precisely to quad-play services, despite their share in the total number of subscribers remaining on a relatively low level. Packages including broadband Internet and media content distribution are the only double-play service subscriptions which are on the rise. Slightly increasing are also triple-play package subscriptions offering broadband Internet, fixed telephony and media content distribution (3%). Among triple-play packages, the one offering broadband Internet, fixed telephony and media content distribution is the only one with a slight increase in the number of subscribers (around 2%).

Packages offering broadband Internet, mobile and fixed telephony have experienced the highest drop in the number of subscribers in Q1 2019.

Number of bundled service users by type of service (thousands) *



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

Share of bundled and stand-alone services purchased in Q1 2019