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 2018

The Overview presents the data for the third quarter of 2018 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 2017 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 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, whereas as of the first quarter 2018, the Agency started to collect data from virtual mobile operators.

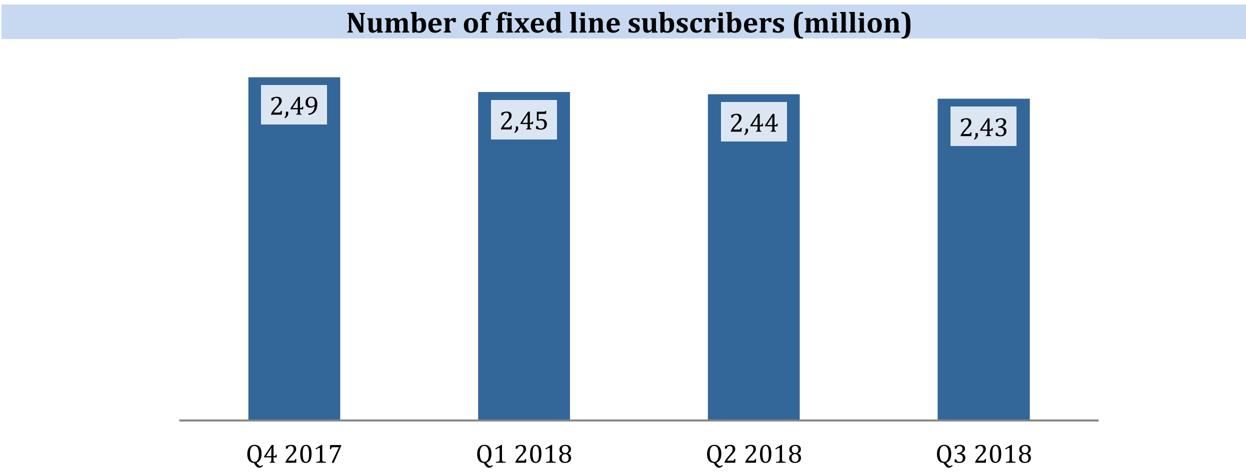
Quarterly electronic communications market indicators referring to Internet services include the data for the leading operators that make up approximately 91% of the market, in terms of the number of subscribers, whereas the data for the remaining 9% of the market were estimated based on the data for 2017 collected in the annual questionnaires.

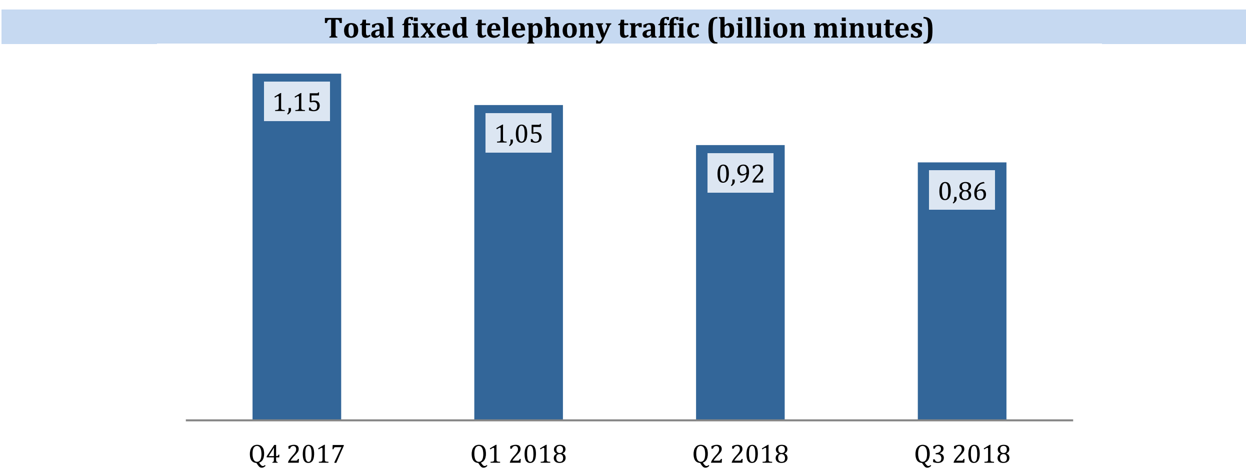
Quarterly electronic communications market indicators referring to media content distribution include the data for the leading operators that make up approximately 93% of the market, in terms of the number of subscribers, whereas the data for the remaining 7% of the market were estimated based on the data for 2017 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 98% of the market, whereas the data for the remaining 2% of the market were estimated based on the data for 2017 collected in the annual questionnaires.

Public Fixed Telecommunications Networks and Services

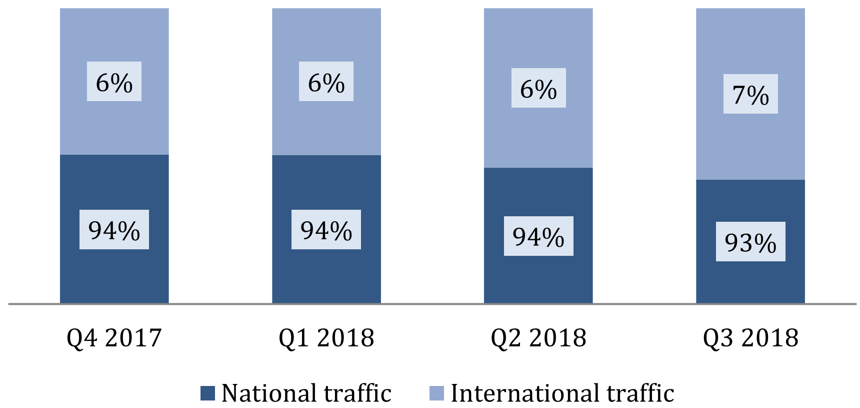
The number of fixed telephony subscribers and the generated traffic have dropped slightly in Q3 2018 compared with the previous quarter. Approximately 2.43 million fixed telephony subscribers generated approximately 860 million minutes of traffic in the last observed quarter, which means that a fixed telephony subscriber on average spends 3.9 minutes a day on calls.





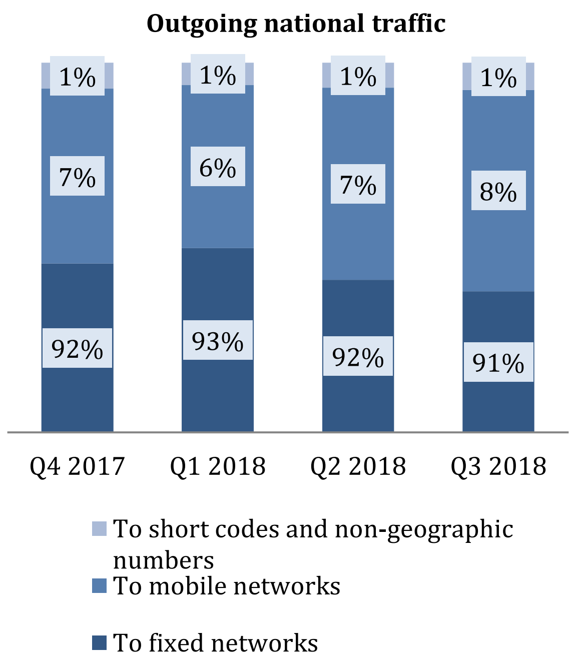
88% of the fixed telephony subscribers are natural persons, i.e. private users, while the subscriber structure remains unchanged in the analyzed quarters. The largest share of the fixed telephony traffic is accounted for by the national traffic, with 93% in Q3 2018.

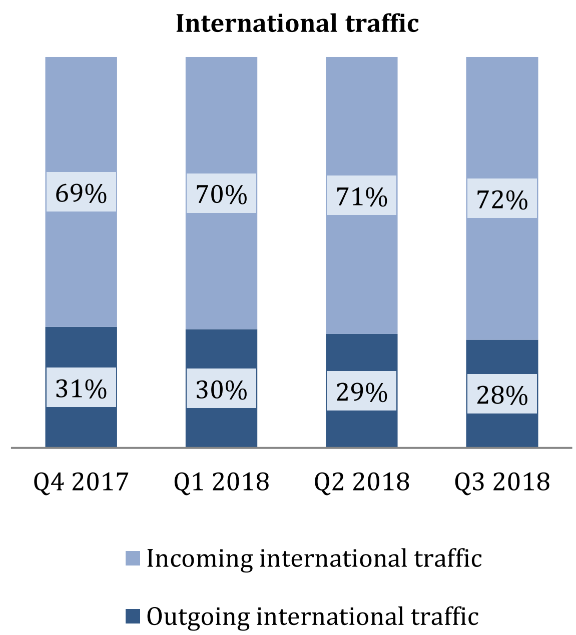
Fixed telephony traffic structure



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

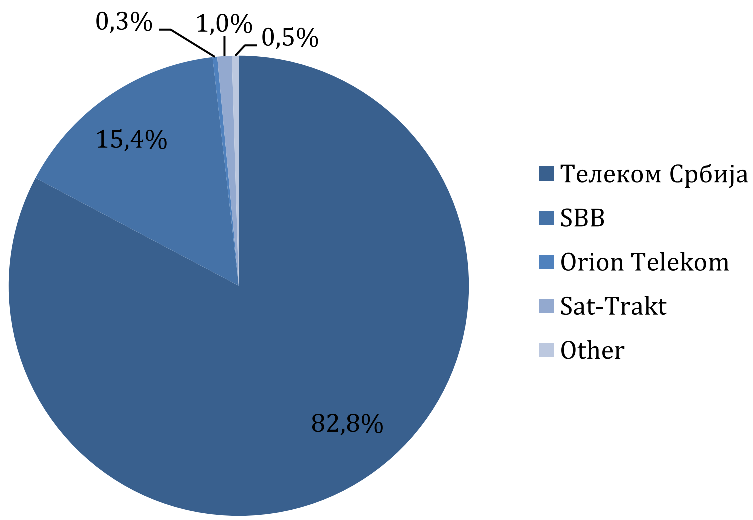
Structure of national and international traffic in fixed telephony





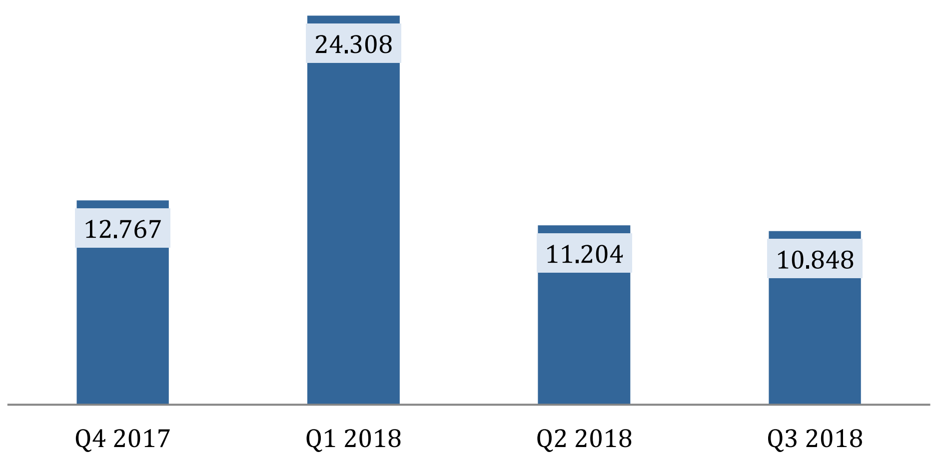
Below is shown the leading operators' market share according to the number of subscribers in Q3 2018.

Operators' market share according to number of subscribers in Q3 2018



The number of portings in the second quarter of 2018 was approximately 10.8 thousand (around 3.5 a month), showing a decrease compared with the previous quarter.

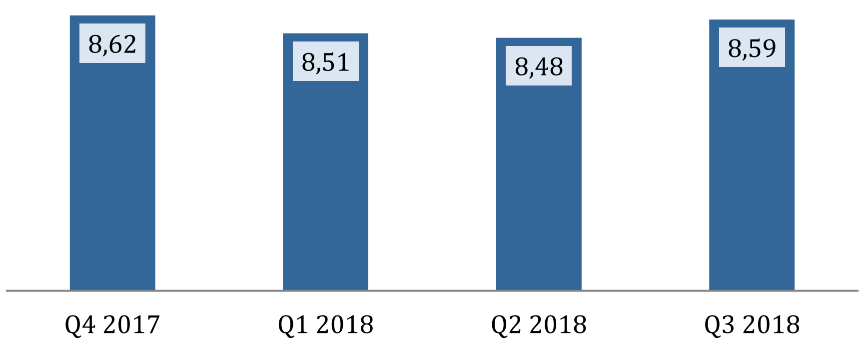
Fixed telephony number portings per quarter



Public Mobile Telecommunications Networks and Services

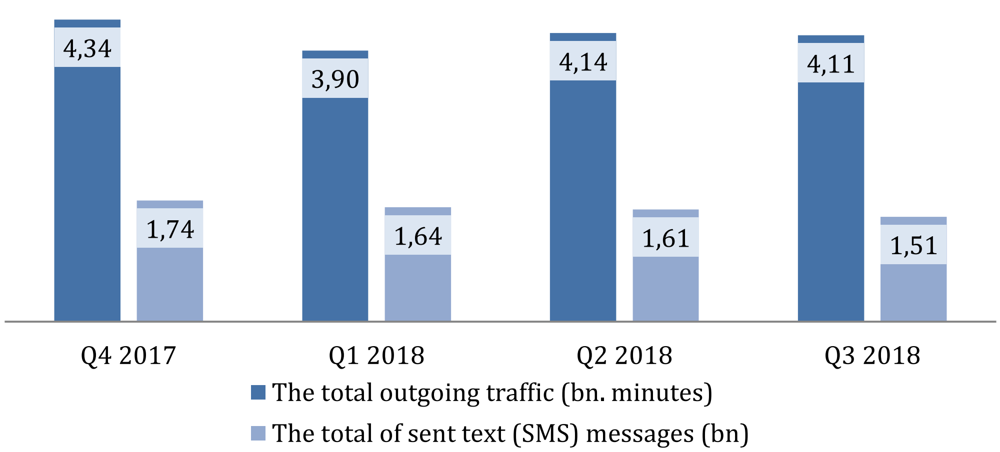
In Q3 2018, there were 8.6 million active mobile telephony subscribers, which generated approximately 4.1 billion minutes of national and international voice traffic and sent approximately 1.5 billion SMS messages. On average, a mobile user spends 5.3 minutes a day on calls and sends 2 text messages. On the mobile networks market, a slight increase in the number of active mobile telephony subscribers has been observed in Q3 2018, by approximately 1.3%.

Total number of active mobile telephony subscribers (million)



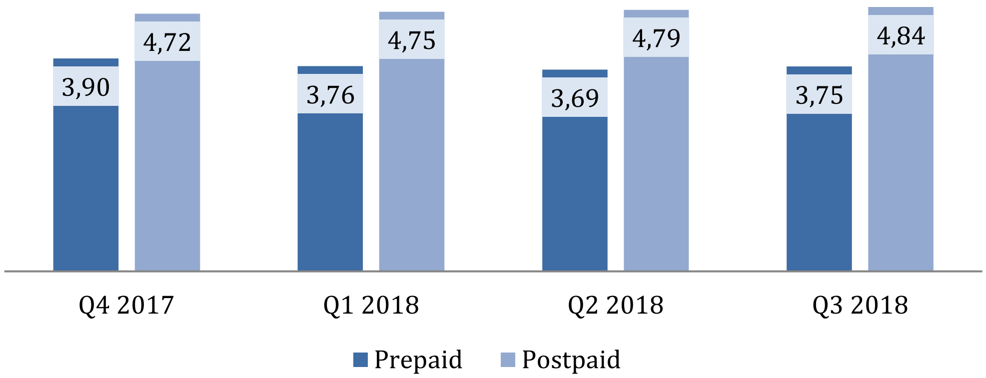
Compared with the previous quarter, the generated voice traffic in mobile telephony showed a slight drop. SMS traffic continued to drop in Q3 2018.

Generated voice and SMS mobile telephony traffic



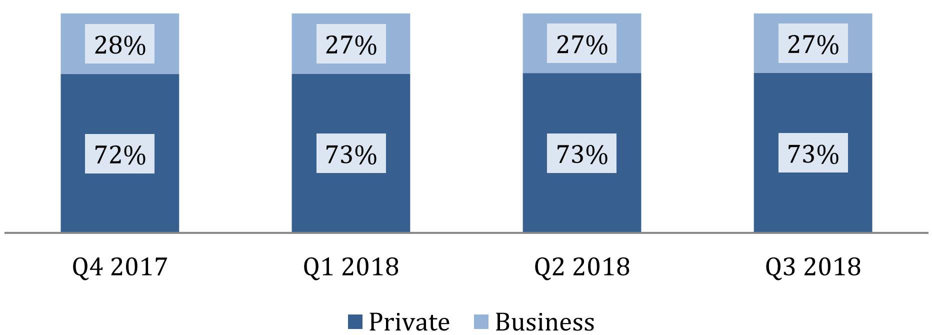
The number of prepaid and postpaid users increased in Q3 2018, compared with the second quarter 2018.

Number of prepaid and postpaid subscribers (million)



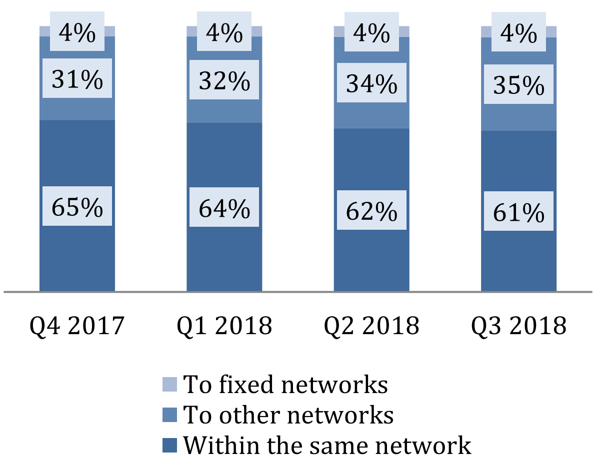
The majority of postpaid subscribers are natural persons, the same as in other observed quarters.

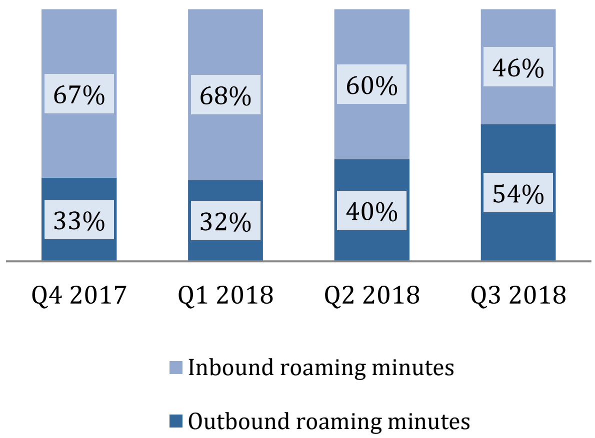
Postpaid subscriber structure



Most outgoing traffic is generated within the same network (61% in Q3 2018). As for roaming, the subscribers of national networks abroad generated more roaming traffic than the subscribers of foreign networks, which is usual for holiday season.

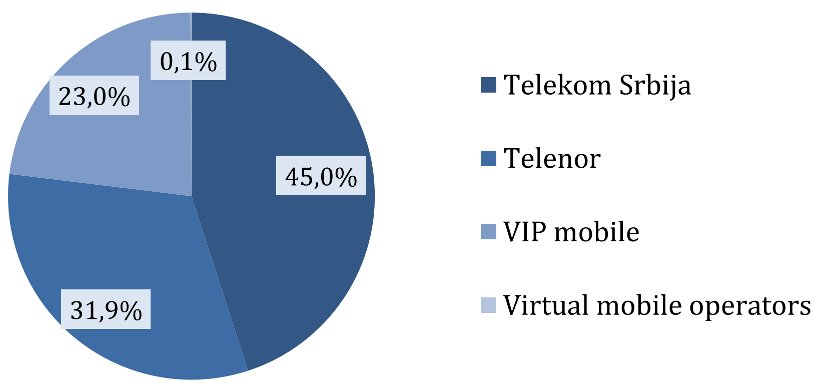
Mobile networks outgoing traffic structure





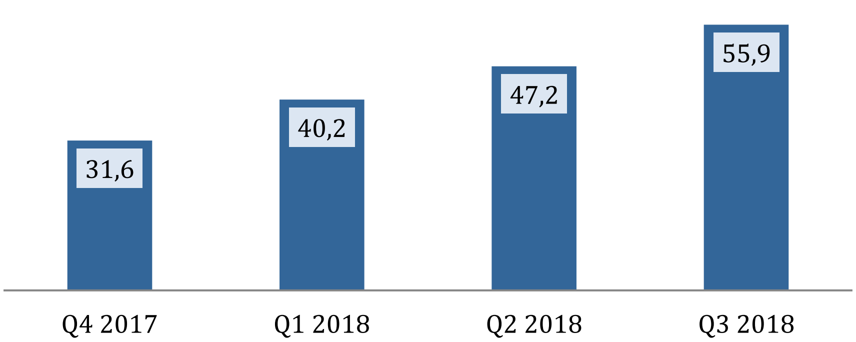
There haven't been any significant changes in market shares in terms of the number of users, compared with the previous quarter.

Market share in terms of number of users in Q3 2018



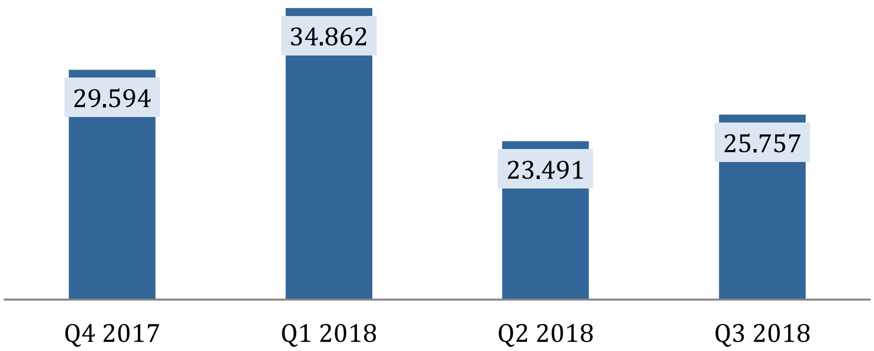
Data transmission over mobile network showed growth in the analyzed period, amounting to over 56 million GB in Q3 2018, which means that a mobile broadband subscriber used on average 107 MB daily, or approximately 3.3 GB a month.

Mobile Internet traffic (million GB)



The number of mobile telephony number portings was approximately 25.8 thousand in the third quarter 2018, or around 8.6 thousand per month, which is a slight increase compared with the previous quarter.

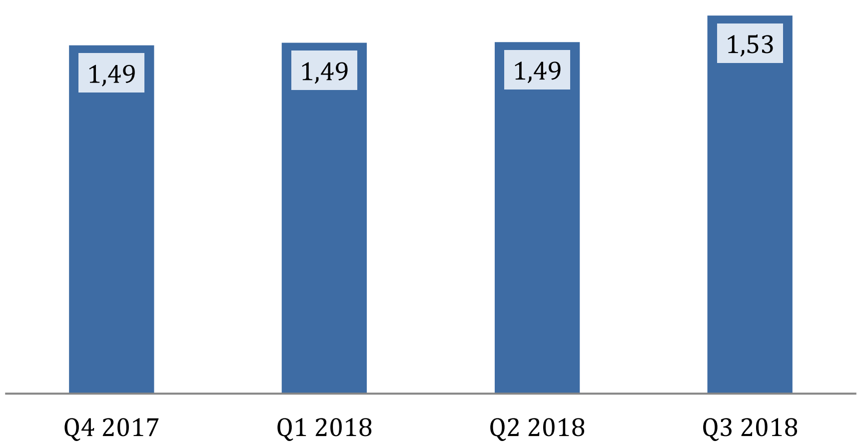
Mobile telephony number portings per quarter



Broadband Internet Access

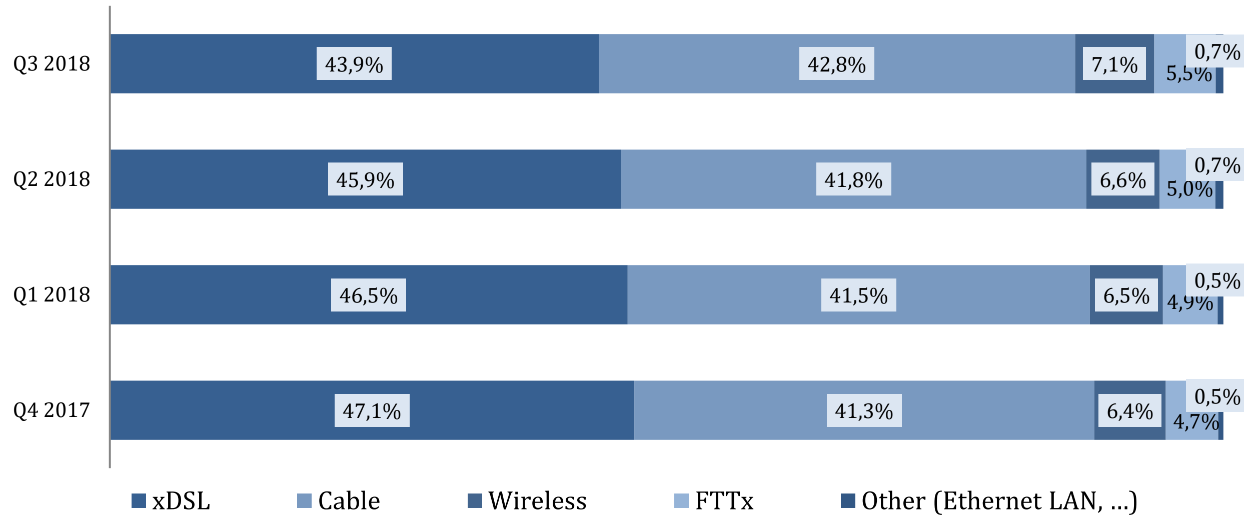
The number of fixed broadband Internet access users in Q3 2018 has increased compared with the previous quarter, with approximately 1.53 million subscribers.

Number of fixed broadband Internet subscribers (million)



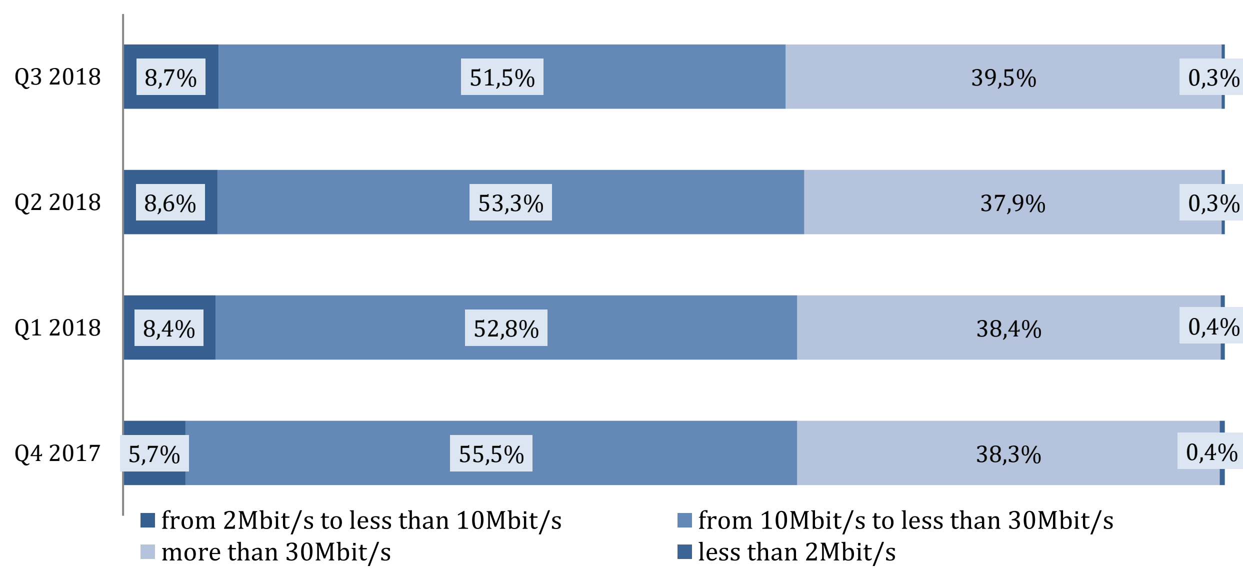
The majority of fixed broadband subscribers have xDSL or cable access. The number of xDSL subscribers is marked by a slight drop, whereas the cable access has somewhat increased in the analyzed period.

Number of subscribers according to type of access



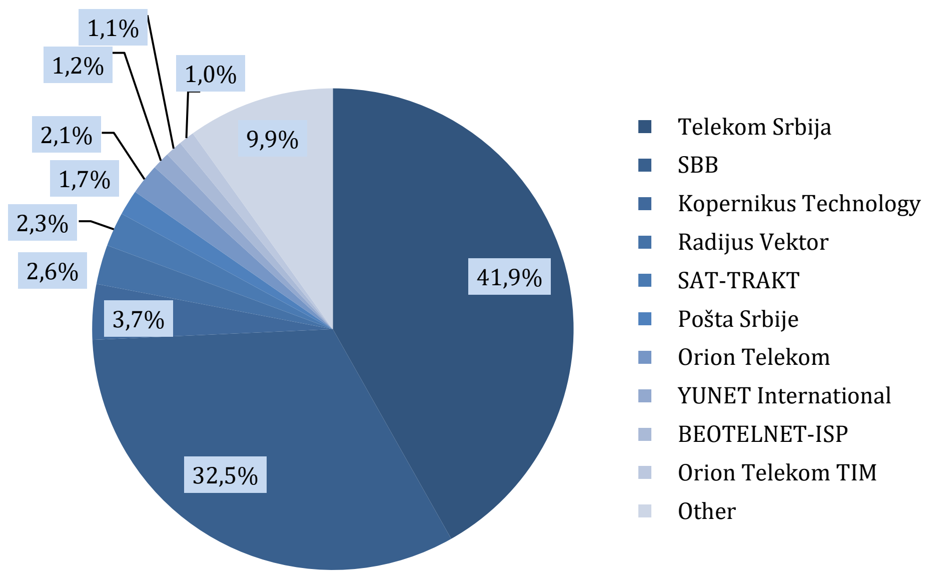
The majority of subscribers in all four analyzed quarters had Internet access rates between 10 Mbit/s to less than 30 Mbit/s, while the number of subscribers using access rates of over 30 Mbit/s has shown a sight growth compared with Q2 2018.

Number of fixed broadband Internet subscribers according to access rate



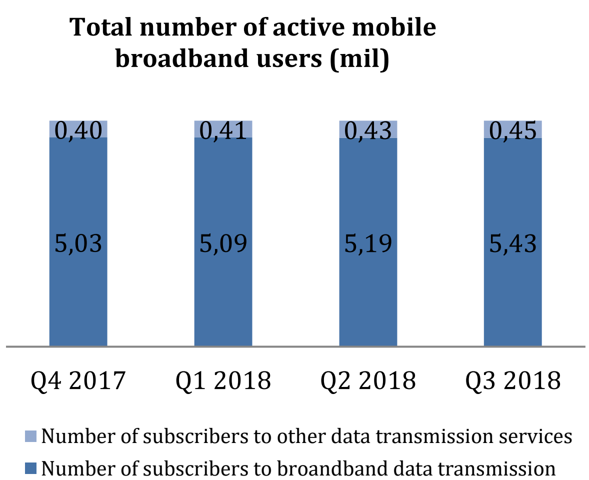
In Q3 2018, there haven't been any significant changes in the leading operators' market shares, in terms of the number of subscribers, compared with the previously observed quarters.

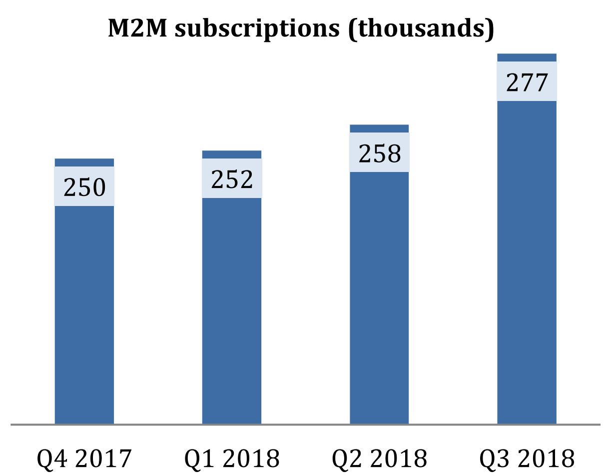
Market share in terms of number of fixed broadband subscribers in Q3 2018



The number of active mobile broadband subscribers in Q3 2018 has slightly increased compared with the previous quarter, reaching 5.9 million. In addition, dominant share goes to the mobile broadband data transfer users (around 92%). The number of M2M subscriptions is on the rise as well, reaching around 277 thousand in Q3 2018.

Number of active mobile broadband subscribers* and M2M subscribers



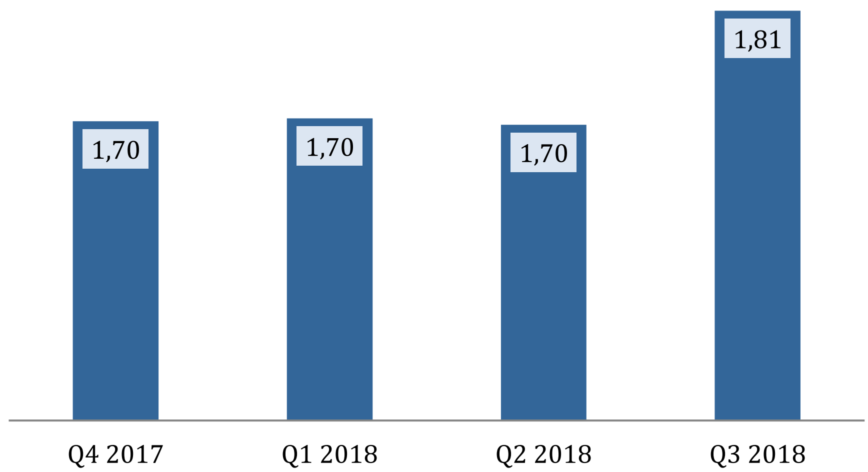


* Active mobile broadband subscribers include subscribers of data transmission services contracted together with voice services, or as an additional package to the voice tariff plan, whereas subscribers of other data transmission services represent mobile broadband transfer users with single service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

Media Content Distribution

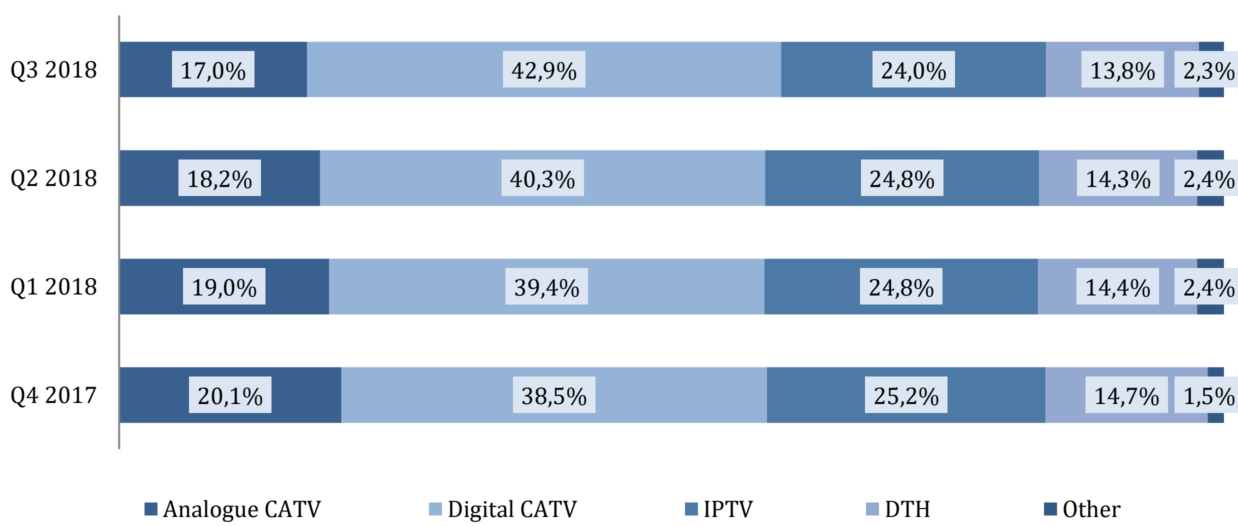
The number of media content distribution service subscribers has increased in the observed period due to the increase in the number of subscribers of the leading operators, amounting to approximately 1.81 million in Q3 2018.

Number of media content distribution service subscribers (million)



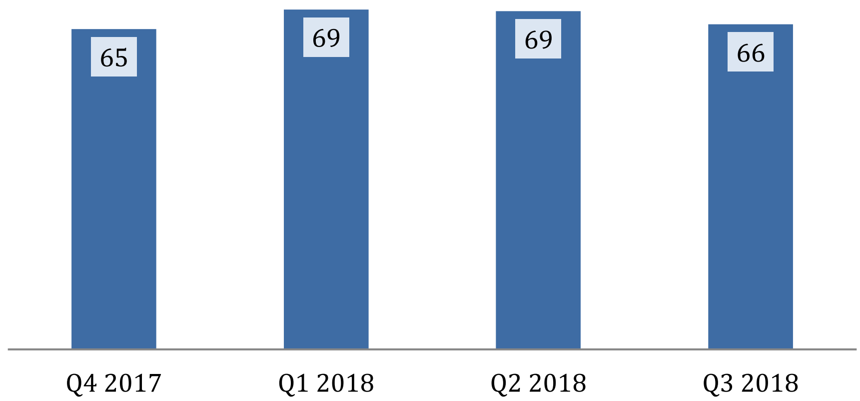
In Q3 2018, the majority of subscribers used CATV distribution, either analogue or digital (60%), whereas wireless network or Internet content distribution were the least used.

Media content distribution subscribers by type of distribution



The number of met requests for additional services, including video on demand (VoD), content recording, TV on mobile devices, playback etc, has dropped in Q3 2018 and amounts to approximately 66 million requests, or around 18 requests a month per user. The number of met VoD requests in Q3 2018 was around 2.6 million.

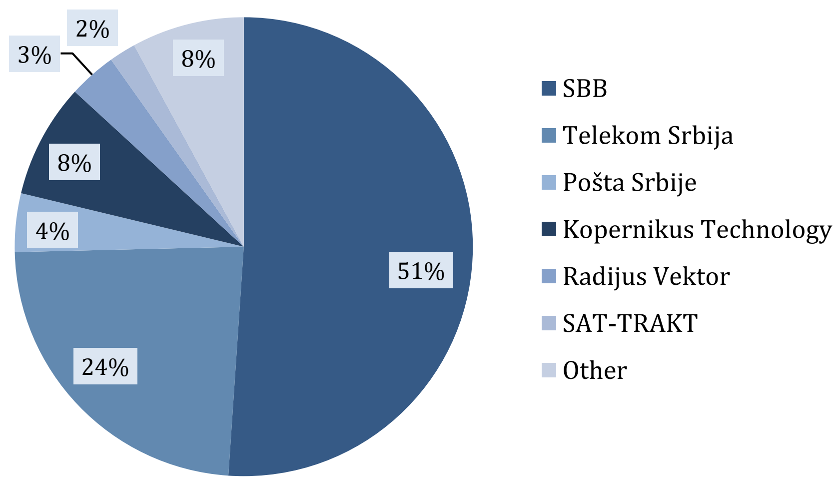
Number of met requests for additional services (million)



In Q3 2018, around 32% of media content distribution subscribers with the possibility to have additional channels, subscribed to such programmes.

As for market shares of the leading operators, in terms of the number of subscribers, an increase in market share of Kopernikus Technology has been observed, resulting, according to the operator, from the increase in the number of subscribers and acquisition of several cable operators. The market shares of other leading operators remain virtually the same compared with Q2 2018.

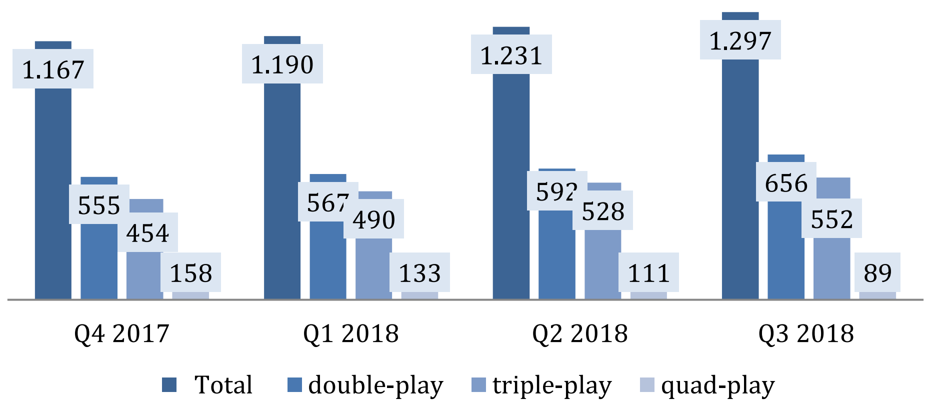
Operators' market share in terms of number of subscribers in Q3 2018



Bundled Services

The number of bundled service subscribers in Q3 2018 is on the rise, reaching almost 1.3 million. Packages offering two services were most used, whereas least used were quad-play packages that additionally include mobile telephony.

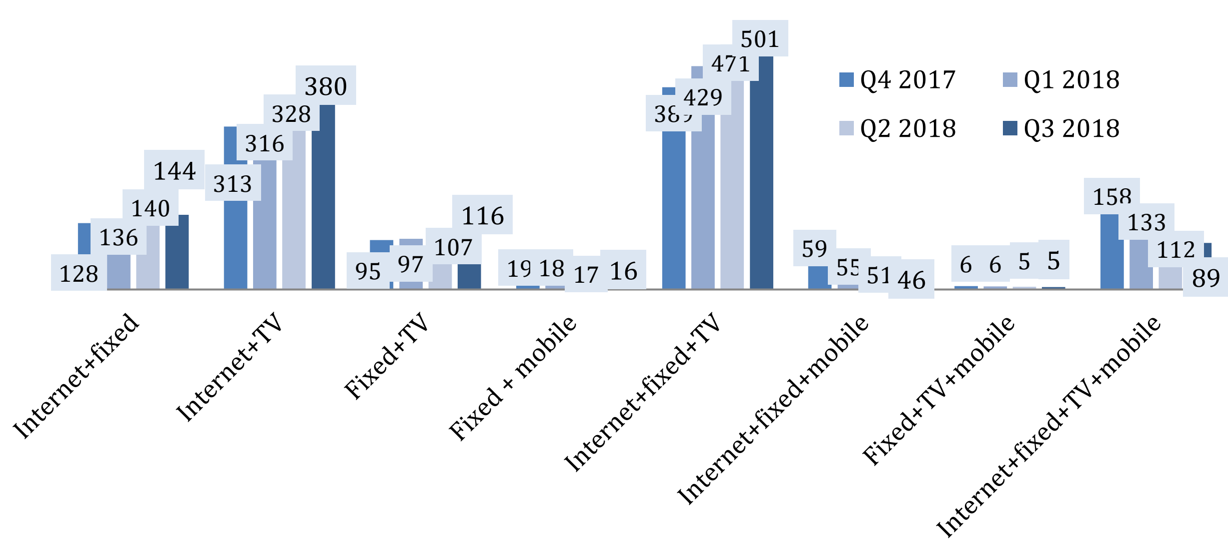
Number of bundled service users (thousands)



Most subscribers of double-play bundles used packages offering broadband Internet and media content distribution (around 58%), whereas the most popular triple-play package included broadband Internet, fixed telephony and media content distribution (around 91%). The number of quad-play subscribers is in decline, as expected, because this service package has not been available on the market to new subscribers since mid 2017.

In terms of type of service, the most popular are double-play packages with Internet and media content distribution (around 16% users), whereas bundles offering mobile telephony services have dropped – again as expected - because they have not been available on the market since mid 2017.

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



Internet 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 Q3 2018