## Systemics-PAB did the extensive benchmarking test of mobile services in Romania

Systemics-PAB performed the extensive benchmarking test of mobile services in Romania. The quality of services in networks of RCS&RDS S.A. (Digi), Orange Romania S.A. (Orange), Telekom Romania Mobile Communications S.A. (Telekom) and Vodafone Romania S.A. (Vodafone) was measured.

The aim of the project was to find how operators satisfy its customers with the quality of voice and data services and how far are they from reaching the perfection set by expected quality of services. The assessment matrix was used to fulfil that task. It covered essential mobile services. The measurements were done in the manner simulating the use of the network as the customer does.

Measurements were performed in a drive test mode, all mobile networks were measured at the same time and on the same drive test routes using Sony Xperia Z5 for voice tests and HTC 10 for data tests.

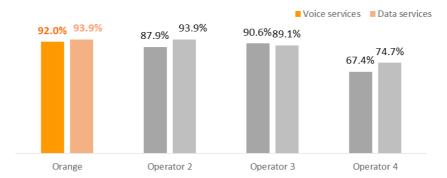
As well as the voice service the most representative data services were measured during benchmarking:

- HTTP File Transfer download of 3MB and upload of 1MB files
- FDTT HTTP Capacity Transfer 10s continuous download and upload
- HTTP browsing the most popular web pages in Romania and reference Kepler page:
- YouTube live streaming testing using most advanced ITU recommendation J343.1

The analysis of the results shown that Orange Romania offers the service quality closest to the perfection level achieving 93.1 % overall score with the expected quality.

	Max Overall Score	Orange	Operator 2	Operator 3	Operator 4
Results	100%	93.1%	91.5%	89.7%	71.8%

Orange Romania scored 92.0% of the voice perfection level and 93.9% of the data perfection level.



In voice service testing Orange scored the best result due to the highest percentage of successful calls, shortest call setup time. Orange presented similar speech quality to its major competitors.

For data services Orange achieved the best results for downloading data and browsing of the most popular web pages. The quality of video streaming was on almost same quality level.

Measurements took the place in December 2017 and January 2018. Benchmarking project covered 22 largest cities and selected national roads across the country.

During the campaign, around 3,800 voice calls and 1,500 data sessions were performed for each type of data test in operators' networks across all technologies.

