



**SYSTEMICS PAB**  
Network Quality Experts

# CERTIFICATE

**Systemics-PAB Sp. z o.o.**

Wolodyjowskiego 46 B, 02-724 Warsaw, Poland

hereby certifies that

**Orange România S.A.**

Europe House, Bulevardul Lascăr Catargiu, nr. 47-53, Sector 1, București, România

Received the title for

## THE BEST ROMANIAN MOBILE NETWORK IN THE TEST

This certificate is based on the results of measurement campaign, which was carried out by Systemics-PAB between June and July 2018. The measurement campaign assessed the quality of experience of mobile services in Romania. We also tested Carrier Aggregation (presence of 2 carriers) coverage for all operators in Romania: Orange Romania S.A. (Orange), RCS & RDS S.A. (Digi), Telekom Romania Mobile Communications S.A. (Telekom) and Vodafone Romania S.A. (Vodafone). Systemics-PAB performed the benchmarking measurements throughout Romania covering 22 largest cities as measured by population, and national roads across the country. The measurements were carried out using SwissQual Diversity system equipped with Sony Xperia Z5 terminals for voice tests, Samsung Galaxy S7 and Samsung Galaxy S8 for VoLTE tests performed for networks with VoLTE available and HTC 10 for data tests. For the coverage assessment Rohde and Schwarz radio scanners were used. Voice tests were done in mobile to mobile mode.

The assessment of quality of services was done using international standards and Systemics-PAB expert knowledge.

The results of the measurements showed Orange as operator achieving the highest overall result for the quality of experience of mobile services in Romania.

Orange Romania S.A. can therefore be certified as the operator with the highest overall quality of mobile services in the test.

Certificate Date: 24.07.2018

  
Jan Kondej  
Chief Technical Officer