

best in test*

For adding something on top in Ireland and reaching an overall score of 935 dots in mobile network benchmarking survey we proudly award this certificate to

Vodafone Ireland

Score 935 out of 1000 in Total

Score 264 out of 270 in Voice Services

Score 221 out of 250 in Crowdsourced Quality

Reliability Score 576 out of 600 in Total

***Two operators reached highest overall score.**

Crescenzo Micheli

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Global Network Benchmarking Lead





Measurement Overview

umlaut tested and measured the performance of its voice and data services on smartphones in comparison to other 5G/LTE mobile radio networks in metropolitan and rural areas of Ireland.

The audit was done as a performance benchmark performed by umlaut between 24.04.2026 – 13.05.2026 in cities and towns as well as on connection roads.

Dedicated measurements were taken via outdoor drive tests using a Samsung Galaxy S24 Ultra.

All data measurements have been performed in 5G preferred mode. Voice measurements have been done in 5G/5G preferred mode on both sides, while call origin has been alternated.

In addition crowdsourced performance data has been collected and evaluated between W49 2025 to W20 2026.

The following pages provide a comparative overview about the performance results observed the different tested service types.

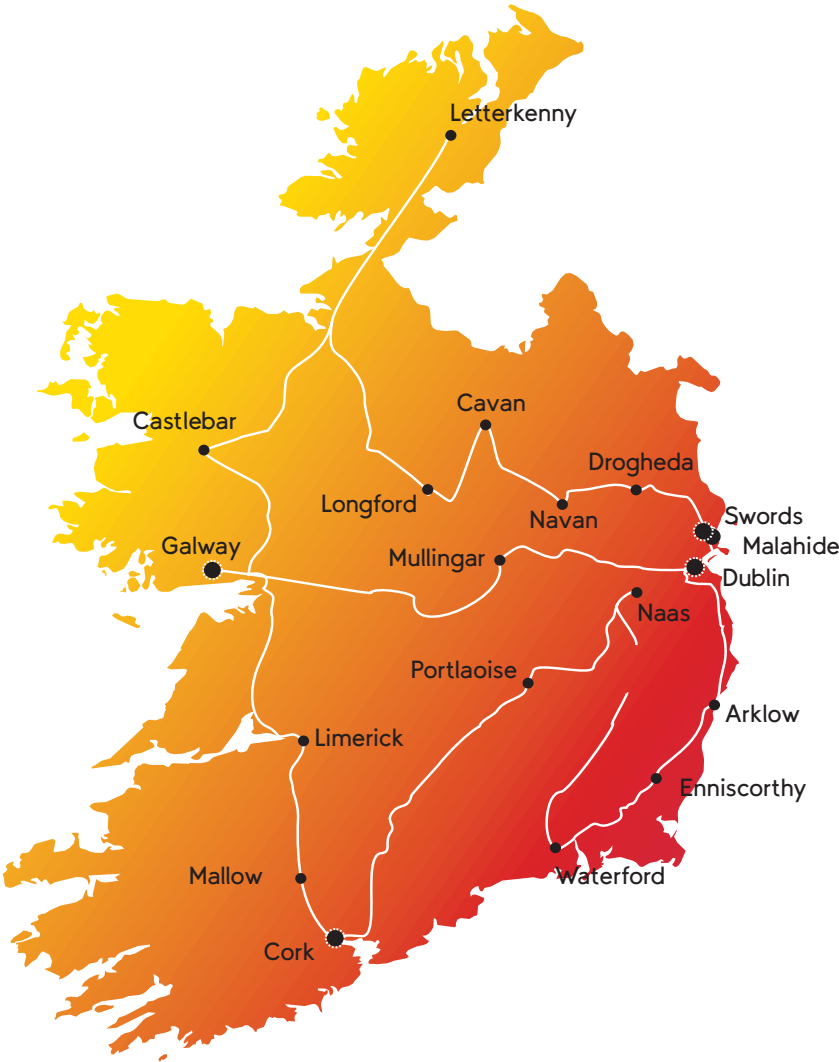


Drive Test	Voice	Data
Device	Samsung Galaxy S24 Ultra	
Test Cases	Mobile-to-Mobile - Side1 (VoLTE, 5G pref.) to Side2 (VoLTE, 5G pref.) 105 sec call window 70 sec call duration 15 sec call setup timeout - Multi-RAB traffic injection on both sides	Data 5G preferred - HTTP 7s DL & HTTP 7s UL - HTTPS 10MB DL & HTTPS 5MB UL - Web Browsing (4 international pages, 4 local pages, 1 ETSI reference, 1 umlaut reference page) 2 YouTube videos (VOD and Live video) - Interactivity eGaming & Video Chat - Conversational App
Mobility & Route Types	100% Drivetest ~64% in Cities, ~16% in Towns and ~20% on Roads	
Samples	8,898 Voice Samples	90,227 Data Samples
Dates	Crowd Data : 24 Weeks Assessment : CW49 2025 – CW20 2026	



Testing area

Driving Route



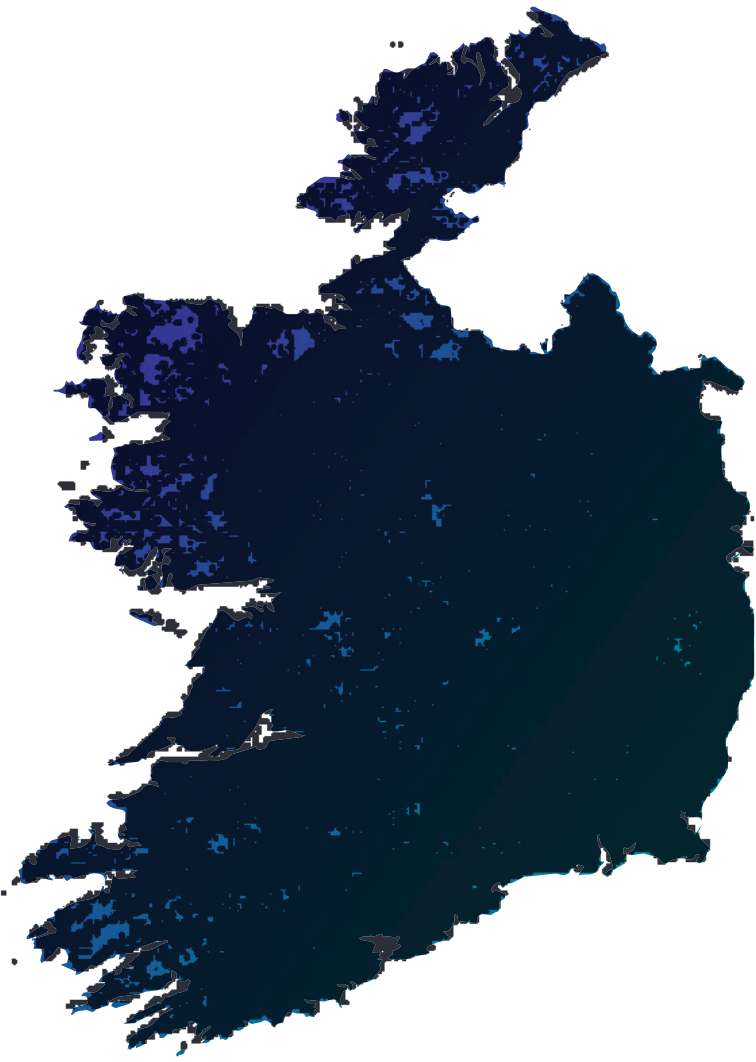
~40%
of population measured



5,410 km
measuring distance



Crowdsourcing based test area



99.5%
of the 'Built-up area'
covered



99.8%
of the 'Population area'
covered



66,414 km²
size of tested area



Claims



***Two operators reached highest overall score.**



Best in test*
Vodafone Ireland
Operator 2



Best in voice
Vodafone Ireland



Best in crowd-sourced quality
Vodafone Ireland



Best in Reliability
Vodafone Ireland



Methodology

As the de-facto industry standard, umlaut’s benchmarking methodology focuses on customer-perceived network quality and covers a wide range of mobile and fixed broadband services.

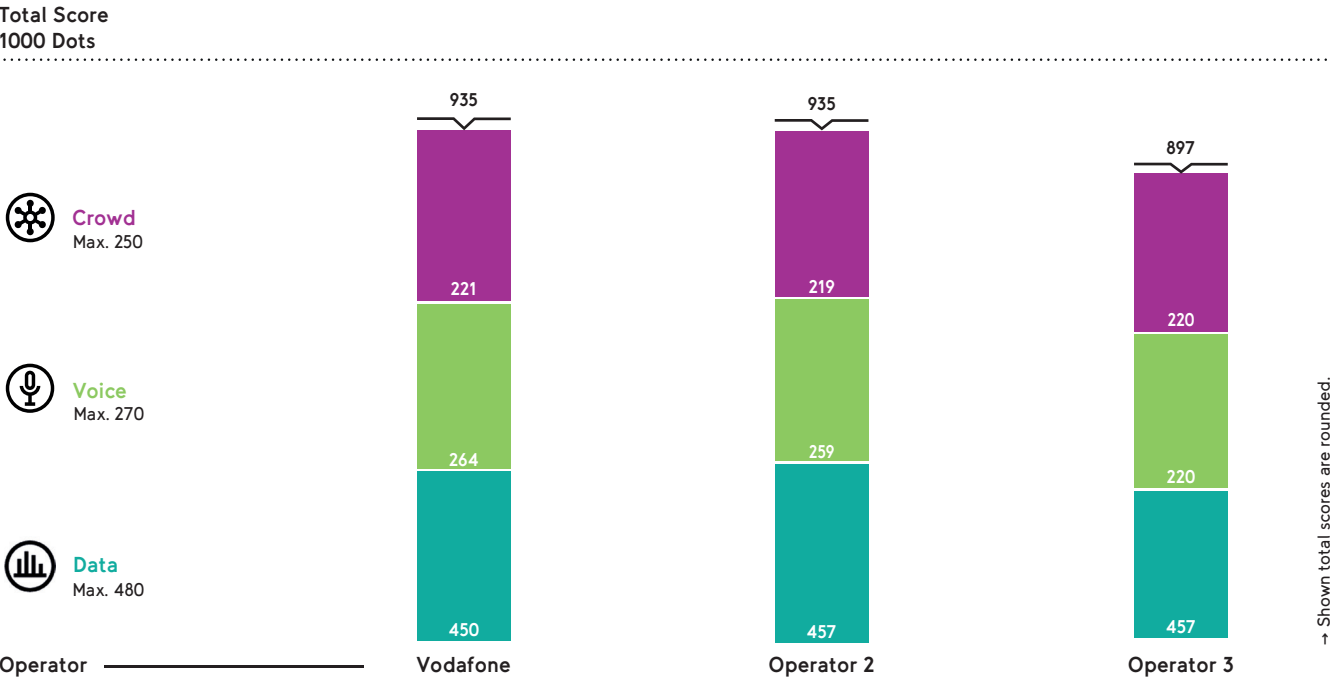
For the collection of crowd-data used for this certification report, we have integrated a background diagnosis processes into thousands of diverse Android apps. If one of these applications is installed on the end-user’s phone, data collection takes place 24/7, 365 days a year. We focus on the user experience. Our data collection is compliant with the GDPR, since we do not include any personal user data. This unique crowdsourcing technology allows us to collect data about real-world experience wherever and whenever customers use their smartphones to consume data services or place phone calls.

The umlaut benchmarking framework is based on a unified measurement method for true international comparability combined with the umlaut-Score approach. Our top priority is to fairly and transparently assess the global development of networks, push their quality and performance with our benchmarks and ultimately achieve improvements for every customer.



Score and breakdown

Vodafone and Operator 2 both achieved the highest rounded overall score among competitors with 935 dots out of 1000.



Overall score considering Crowdsourcing, Voice and Data.



Total Scores

		Vodafone	Operator 2	Operator 3
Crowd	max. 250	221	219	220
Broadband Coverage	100	91%	88%	87%
Download speed (Service Category)	19	90%	92%	90%
Upload speed (Service Category)	19	69%	73%	82%
Download Speed (Data Rates)	19	88%	84%	80%
Upload Speed (Data Rates)	19	87%	90%	92%
Latency	50	87%	87%	90%
Voice	10	96%	95%	94%
Stability	15	96%	95%	96%
Voice	max. 270	264	259	220
Cities drive test	122	98%	95%	82%
Cities walk test	41	97%	98%	84%
Towns drive test	54	98%	97%	84%
Roads drive test	54	98%	96%	76%
Data	max. 480	450	457	457
Cities drive test	216	96%	96%	96%
Cities walk test	72	97%	97%	97%
Towns drive test	96	95%	95%	96%
Roads drive test	96	86%	92%	91%
Total	1000	935	935	897

Shown scores are rounded.



Achieved percentage of the maximum score in each of the different data services.

Data	Service group	Max.	Vodafone	Operator 2	Operator 3
Cities drive test	Web Browsing	37.8	99%	99%	98%
	File Download	43.2	98%	98%	98%
	File Upload	43.2	94%	93%	96%
	YouTube	36.7	98%	98%	97%
	OTT	55.1	91%	94%	93%
Cities walk test	Web Browsing	12.6	98%	99%	98%
	File Download	14.4	98%	98%	98%
	File Upload	14.4	98%	95%	98%
	YouTube	12.2	97%	99%	99%
	OTT	18.4	94%	96%	95%
Towns	Web Browsing	16.8	98%	97%	98%
	File Download	19.2	97%	96%	97%
	File Upload	19.2	93%	91%	95%
	YouTube	16.3	98%	96%	97%
	OTT	24.5	91%	93%	92%
Roads	Web Browsing	16.8	95%	95%	95%
	File Download	19.2	85%	93%	90%
	File Upload	19.2	84%	88%	90%
	YouTube	16.3	86%	92%	88%
	OTT	24.48	82%	93%	89%

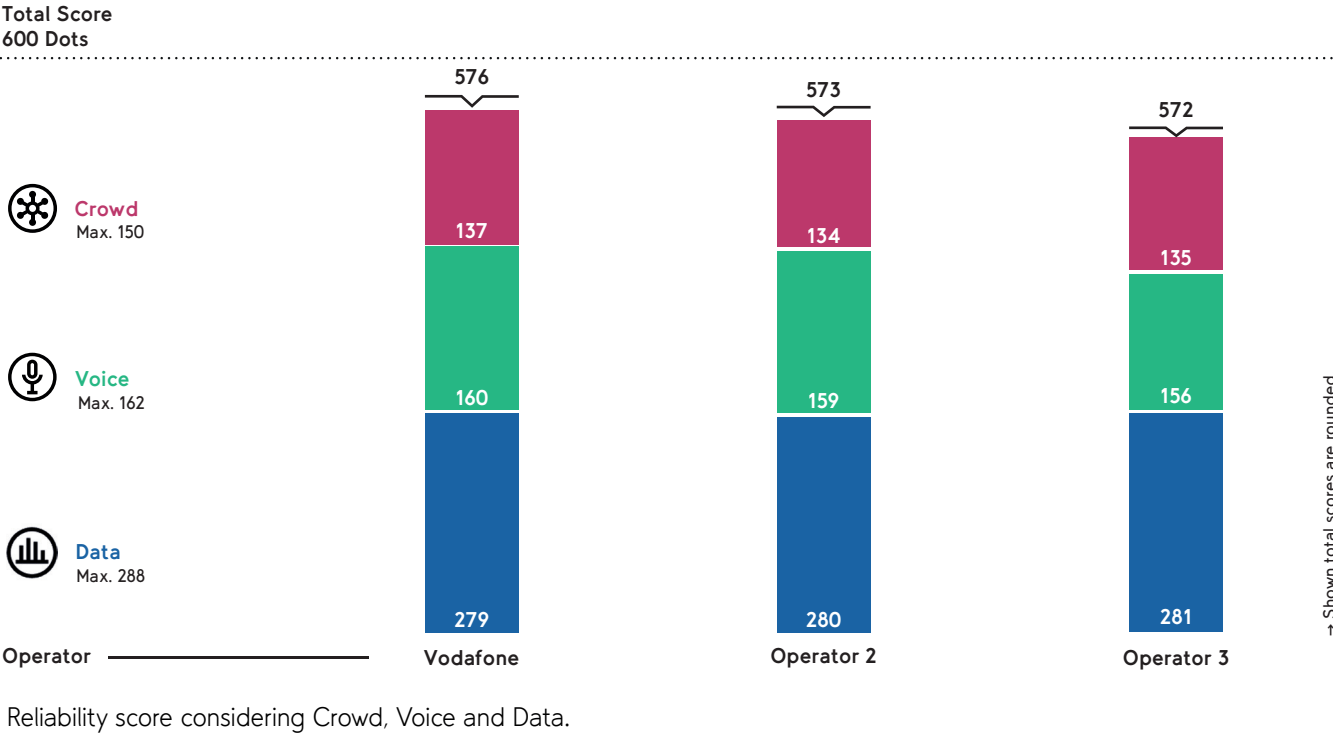


Achieved percentage of the maximum score in each of the different crowdsourcing services.

Crowd	Service group	Max.	Vodafone	Operator 2	Operator 3
Crowdsourced Quality	Broadband Coverage	100	91%	88%	87%
	Download speed (Service Category)	19	90%	92%	90%
	Upload speed (Service Category)	19	69%	73%	82%
	Download Speed (Data Rates)	19	88%	84%	80%
	Upload Speed (Data Rates)	19	87%	90%	92%
	Latency	50	87%	87%	90%
	Voice	10	96%	95%	94%
	Stability	15	96%	95%	96%



Reliability



Total Scores

	Service group	Max.	Vodafone	Operator 2	Operator 3
Reliability	Crowd	150	91%	89%	90%
	Voice	162	99%	98%	96%
	Data	288	97%	97%	97%

Score achievement in school grades:
outstanding (95%), very good (85% and <95%), good (75% and 85%), satisfactory (65% and <75%), sufficient (55% and <65%).



Voice KPI overview

Achieved values of all networks under test in each of the relevant Voice Key Performance Indicators (KPIs) for the geographical categories "Cities", "Towns" and "Roads".

Voice	Service group	Unit	Vodafone	Operator 2	Operator 3
Cities drive test	Qualifier	[%]	99.9%	99.7%	99.8%
	Call Setup Time (P90)	[s]	1.9	1.7	1.3
	Speech Quality (P10)	[MOS–LQO]	4.5	4.1	4.6
Cities walk test	Qualifier	[%]	100%	99.8%	100%
	Call Setup Time (P90)	[s]	1.7	1.9	1.3
	Speech Quality (P10)	[MOS–LQO]	4.4	4.6	4.7
Towns	Qualifier	[%]	100%	100%	100%
	Call Setup Time (P90)	[s]	1.7	2.0	1.4
	Speech Quality (P10)	[MOS–LQO]	4.1	4.5	4.6
Roads	Qualifier	[%]	99.8%	99.8%	98.3%
	Call Setup Time (P90)	[s]	1.7	2.1	1.4
	Speech Quality (P10)	[MOS–LQO]	4.0	4.4	4.4



Data Service KPI overview

Achieved values of all networks under test in each of the relevant Data Key Performance Indicators (KPIs) for the geographical category "Cities drive test".

Services	KPI name	Unit	Vodafone	Operator 2	Operator 3
HTTP Web page DL Smart–phone	Qualifier	[%]	100.0%	100.0%	99.9%
	Overall session time	[s]	1.0	0.9	1.0
HTTP 10MB DL Smartphone	Qualifier	[%]	100.0%	100.0%	100.0%
	Average session time	[s]	0.9	0.8	1.0
	90% faster than	[Mbit/s]	68.5	89.3	73.8
	10% faster than	[Mbit/s]	270.2	301.7	260.1
HTTP 5MB UL Smartphone	Qualifier	[%]	100.0%	100.0%	100.0%
	Average session time	[s]	2.2	2.0	2.0
	90% faster than	[Mbit/s]	9.8	10.9	11.7
	10% faster than	[Mbit/s]	75.4	79.4	66
HTTP DL FDTT	Qualifier	[%]	100.0%	100.0%	100.0%
	10% faster than	[Mbit/s]	751.8	634.3	522.3
	Faster than 20Mbits/s	[%]	98.6%	99.7%	98.9%
	Faster than 100Mbits/s	[%]	91.3%	93.5%	91.1%
HTTP UL FDTT	Qualifier	[%]	99.9%	99.5%	100.0%
	10% faster than	[Mbit/s]	138.9	122.1	101.7
	Faster than 2Mbits/s	[%]	99.7%	99.3%	100.0%
	Faster than 5Mbits/s	[%]	98.5%	98.0%	99.2%
YouTube	Qualifier	[%]	100.0%	99.7%	99.8%
	Start time	[s]	1.7	1.6	1.6
	Average resolution	[p]	1080.0	1080.0	1079.8
YouTube live smartphone	Qualifier	[%]	99.9%	99.9%	99.7%
	Start time	[s]	1.7	1.6	1.7
	Average resolution	[p]	1080.0	1080.0	1080.0
Interactivity EGaming	Qualifier	[%]	98.6%	97.0%	98.5%
	Interactivity score	[%]	81.0%	85.0%	81.6%
Interactivity videochat	Qualifier	[%]	93.3%	96.6%	95.5%
	Interactivity score	[%]	81.6%	89.2%	89.2%
Conversational app	Qualifier	[%]	100.0%	100.0%	99.9%
	Speech quality (P10)	[MOS–LQO]	3.9	4.0	3.7



Data Service KPI overview

Achieved values of all networks under test in each of the relevant Data Key Performance Indicators (KPIs) for the geographical category "Cities walk test".

Services	KPI name	Unit	Vodafone	Operator 2	Operator 3
HTTP Web page DL Smart–phone	Qualifier	[%]	99.9%	100.0%	99.9%
	Overall session time	[s]	1.0	1.0	1.0
HTTP 10MB DL Smartphone	Qualifier	[%]	100.0%	100.0%	100.0%
	Average session time	[s]	0.9	0.9	0.9
	90% faster than	[Mbit/s]	72.5	84.6	85.2
	10% faster than	[Mbit/s]	272.1	279.7	278.9
HTTP 5MB UL Smartphone	Qualifier	[%]	100.0%	100.0%	100.0%
	Average session time	[s]	1.6	1.7	1.5
	90% faster than	[Mbit/s]	18.1	15.8	17.3
	10% faster than	[Mbit/s]	86	79.2	71.2
HTTP DL FDTT	Qualifier	[%]	100.0%	100.0%	100.0%
	10% faster than	[Mbit/s]	860	627.8	590.3
	Faster than 20Mbits/s	[%]	99.6%	98.8%	98.8%
	Faster than 100Mbits/s	[%]	96.5%	96.5%	91.8%
HTTP UL FDTT	Qualifier	[%]	100.0%	99.6%	100.0%
	10% faster than	[Mbit/s]	152.2	134.1	119.8
	Faster than 2Mbits/s	[%]	99.6%	99.2%	100.0%
	Faster than 5Mbits/s	[%]	99.6%	98.0%	99.6%
YouTube	Qualifier	[%]	100.0%	100.0%	100.0%
	Start time	[s]	1.6	1.7	1.7
	Average resolution	[p]	1079.0	1080.0	1080.0
YouTube live smartphone	Qualifier	[%]	99.6%	100.0%	100.0%
	Start time	[s]	1.7	1.7	1.7
	Average resolution	[p]	1080.0	1080.0	1080.0
Interactivity EGaming	Qualifier	[%]	99.2%	98.4%	99.6%
	Interactivity score	[%]	84.3%	85.5%	82.8%
Interactivity videochat	Qualifier	[%]	97.7%	98.1%	96.5%
	Interactivity score	[%]	80.3%	92.0%	90.2%
Conversational app	Qualifier	[%]	100.0%	100.0%	99.8%
	Speech quality (P10)	[MOS–LQO]	4.1	4.3	4.0



Data Service KPI overview

Achieved values of all networks under test in each of the relevant Data Key Performance Indicators (KPIs) for the geographical category "Town".

Services	KPI name	Unit	Vodafone	Operator 2	Operator 3
HTTP Web page DL Smart–phone	Qualifier	[%]	99.9%	99.8%	99.9%
	Overall session time	[s]	1.1	1.0	1.0
HTTP 10MB DL Smartphone	Qualifier	[%]	100.0%	100.0%	100.0%
	Average session time	[s]	1.3	1.1	1.1
	90% faster than	[Mbit/s]	43.8	69.3	75.1
	10% faster than	[Mbit/s]	212.4	247.8	247.7
HTTP 5MB UL Smartphone	Qualifier	[%]	100.0%	100.0%	100.0%
	Average session time	[s]	2.7	2.2	2.1
	90% faster than	[Mbit/s]	8.9	10	11.2
	10% faster than	[Mbit/s]	70.9	69.1	63.8
HTTP DL FDTT	Qualifier	[%]	100.0%	99.7%	100.0%
	10% faster than	[Mbit/s]	658.4	553.3	559
	Faster than 20Mbits/s	[%]	98.6%	97.8%	97.2%
	Faster than 100Mbits/s	[%]	84.0%	90.0%	87.8%
HTTP UL FDTT	Qualifier	[%]	100.0%	99.5%	100.0%
	10% faster than	[Mbit/s]	121.8	109.4	100.9
	Faster than 2Mbits/s	[%]	99.4%	98.9%	99.7%
	Faster than 5Mbits/s	[%]	95.2%	96.1%	99.2%
YouTube	Qualifier	[%]	100.0%	99.5%	100.0%
	Start time	[s]	1.8	1.7	1.7
	Average resolution	[p]	1078.9	1080.0	1080.0
YouTube live smartphone	Qualifier	[%]	100.0%	100.0%	99.7%
	Start time	[s]	2.0	1.7	1.8
	Average resolution	[p]	1079.4	1079.7	1080.0
Interactivity EGaming	Qualifier	[%]	98.9%	98.4%	98.4%
	Interactivity score	[%]	77.8%	80.9%	80.1%
Interactivity videochat	Qualifier	[%]	93.0%	95.8%	93.9%
	Interactivity score	[%]	83.1%	86.9%	89.6%
Conversational app	Qualifier	[%]	100.0%	100.0%	100.0%
	Speech quality (P10)	[MOS–LQO]	3.9	4.0	3.8



Data Service KPI overview

Achieved values of all networks under test in each of the relevant Data Key Performance Indicators (KPIs) for the geographical category "Road".

Services	KPI name	Unit	Vodafone	Operator 2	Operator 3
HTTP Web page DL Smartphone	Qualifier	[%]	99.5%	99.3%	99.4%
	Overall session time	[s]	1.4	1.2	1.2
HTTP 10MB DL Smartphone	Qualifier	[%]	100.0%	100.0%	100.0%
	Average session time	[s]	3.9	2.3	3.0
	90% faster than	[Mbit/s]	8.1	17.6	11.6
	10% faster than	[Mbit/s]	136.1	182.4	176.2
HTTP 5MB UL Smartphone	Qualifier	[%]	100.0%	100.0%	99.8%
	Average session time	[s]	5.7	4.5	3.6
	90% faster than	[Mbit/s]	2.9	3.7	5.6
	10% faster than	[Mbit/s]	46.4	52.3	50.6
HTTP DL FDTT	Qualifier	[%]	99.8%	99.3%	99.5%
	10% faster than	[Mbit/s]	231.6	320.1	281.3
	Faster than 20Mbits/s	[%]	74.3%	90.1%	85.4%
	Faster than 100Mbits/s	[%]	37.3%	53.2%	56.3%
HTTP UL FDTT	Qualifier	[%]	99.0%	99.8%	99.8%
	10% faster than	[Mbit/s]	65.1	72.9	77.4
	Faster than 2Mbits/s	[%]	95.5%	96.6%	98.3%
	Faster than 5Mbits/s	[%]	88.6%	87.9%	90.7%
YouTube	Qualifier	[%]	98.3%	98.5%	98.5%
	Start time	[s]	2.1	2.0	2.1
	Average resolution	[p]	1076.4	1079.4	1076.0
YouTube live smartphone	Qualifier	[%]	96.8%	98.5%	97.3%
	Start time	[s]	2.4	2.0	2.3
	Average resolution	[p]	1076.9	1079.1	1077.3
Interactivity EGaming	Qualifier	[%]	89.8%	96.1%	94.4%
	Interactivity score	[%]	70.9%	78.7%	75.3%
Interactivity videochat	Qualifier	[%]	82.2%	91.1%	89.5%
	Interactivity score	[%]	80.8%	86.9%	85.0%
Conversational app	Qualifier	[%]	100.0%	100.0%	99.5%
	Speech quality (P10)	[MOS–LQO]	3.5	3.7	3.6



Crowd KPI overview

Achieved values of all networks under test in each of the relevant Crowd Key Performance Indicators (KPIs) for the categories "Broadband Coverage", "Download Speed", "Upload Speed", "Latency". "Voice Crowd" and "Stability".

Category	KPI name	Unit	Vodafone	Operator 2	Operator 3
Broadband Coverage	Coverage Reach	[%]	92.3 %	91.1 %	88.8 %
	Time on broadband	[%]	97.4 %	96.3 %	96.3 %
Download Speed (Service Category)	Basic internet class	[%]	98.2 %	97.4 %	96.7 %
	HD video class	[%]	91.0 %	88.9 %	87.7 %
	UHD video class	[%]	54.3 %	68.0 %	64.9 %
Upload Speed (Service Category)	Basic internet class	[%]	90.5 %	91.4 %	94.3 %
	HD video class	[%]	74.0 %	76.3 %	81.2 %
Download Speed (Data Rates)	P10 data rate	[Mbit/s]	6.5	5.5	4.9
	P90 data rate	[Mbit/s]	242.9	307.2	238.7
	AVG data rate	[Mbit/s]	88.1	113.7	86.1
Upload Speed (Data Rates)	P10 data rate	[Mbit/s]	2.3	2.4	3.2
	P90 data rate	[Mbit/s]	43.0	57.3	48.5
	AVG data rate	[Mbit/s]	18.8	24.7	22.1
Latency	OTT voice class	[%]	97.6 %	97.3 %	97.5 %
	Gaming class	[%]	88.8 %	91.0 %	91.5 %
	Egoshoooter class	[%]	3.7 %	4.7 %	19.3 %
Voice	HD voice	[%]	97.5 %	96.4 %	95.6 %
Stability	Transaction Success	[%]	96.2 %	95.2 %	95.8 %



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