

best in test.

For adding something on top in Canada and reaching an overall score of 894 dots in mobile network benchmarking survey we proudly award this certificate to

Rogers Communications Canada Inc.

Score 894 out of 1000 in Total
Score 236 out of 270 in Voice Services
Score 430 out of 480 in Data Services
Score 228 out of 250 in Crowdsourced Quality



Hakan Ekmen
Global Networks Lead, Comms Industry





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 Canada.

The audit was done as a performance benchmark performed by umlaut between 19.03.2024 and 17.06.2024 in cities and towns as well as on connection roads.

Dedicated measurements have been executed as drive tests outdoors using a Samsung Galaxy S23 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 25.12.2023 and 09.06.2024.

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



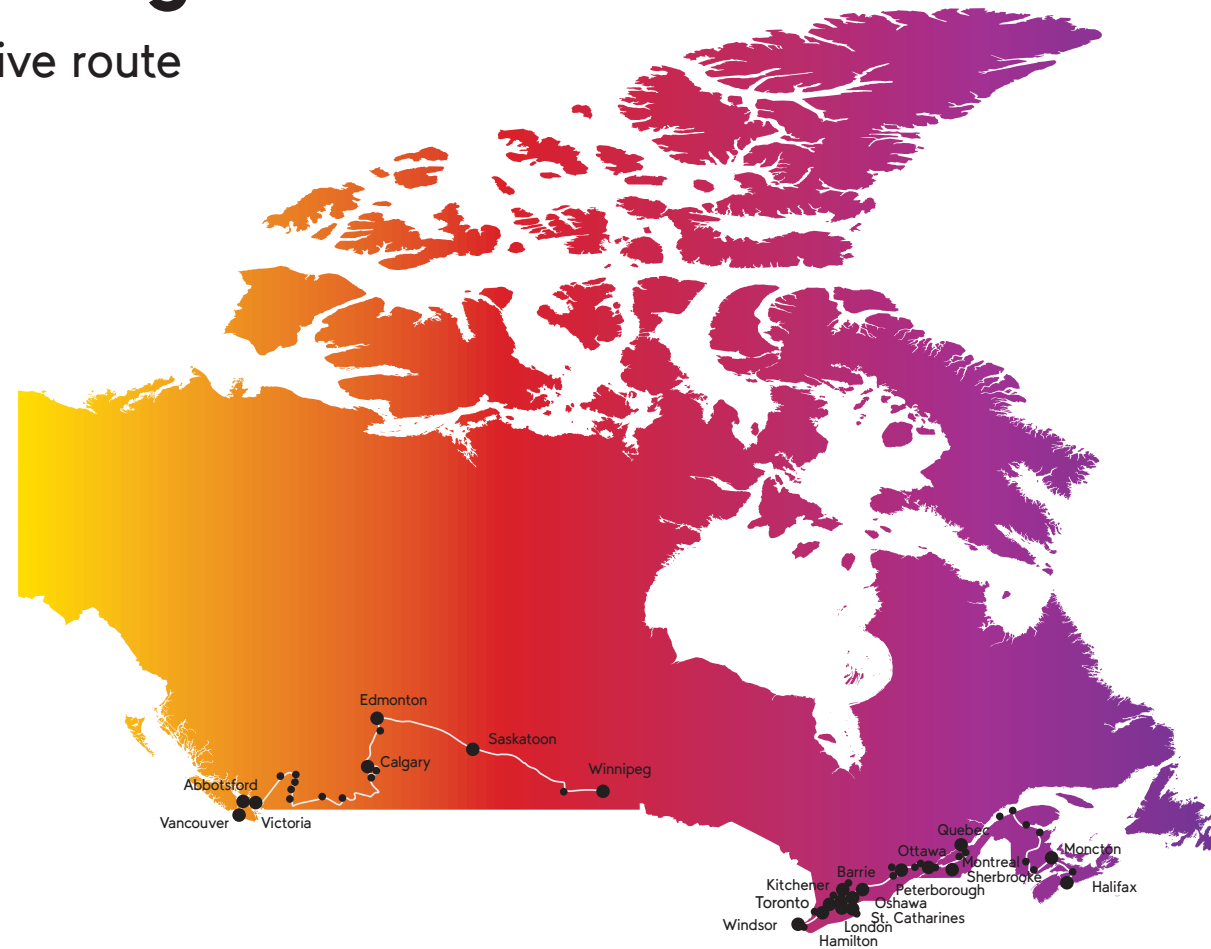
Measurement setup

Drivetest	Voice	Data
Device	Samsung Galaxy S23 Ultra	Samsung Galaxy S23 Ultra
Test Cases	Mobile-to-Mobile (M2M) Side1 (5G preferred: Volte) to Side2 (5G preferred: Volte) 105 sec call window 70 sec call duration 15 sec call setup timeout Multi-RAB traffic injection on both sides	Data 5G preferred CA – Disabled 5G SA HTTP DL datastream 7s HTTP UL datastream 7s HTTP 10MB DL fixed file transfer HTTP 5MB UL fixed file transfer Web Browsing – Kepler ETSI Ref. Page 8 Live web pages Interactive e-Gaming 1 YouTube HD video ~ 45s 1 YouTube live stream ~ 45s
Mobility and Route Types	Drive test 100% 50–70% in Cities, 10–25% in Towns and 10–40% on Roads	
Samples	41,667	337,800
Dates	48 measurement days 19.03.2024 – 17.06.2024	
Crowd Data Assessment	24 weeks 25.12.2023 – 09.06.2024	




Testing areas

Drive route

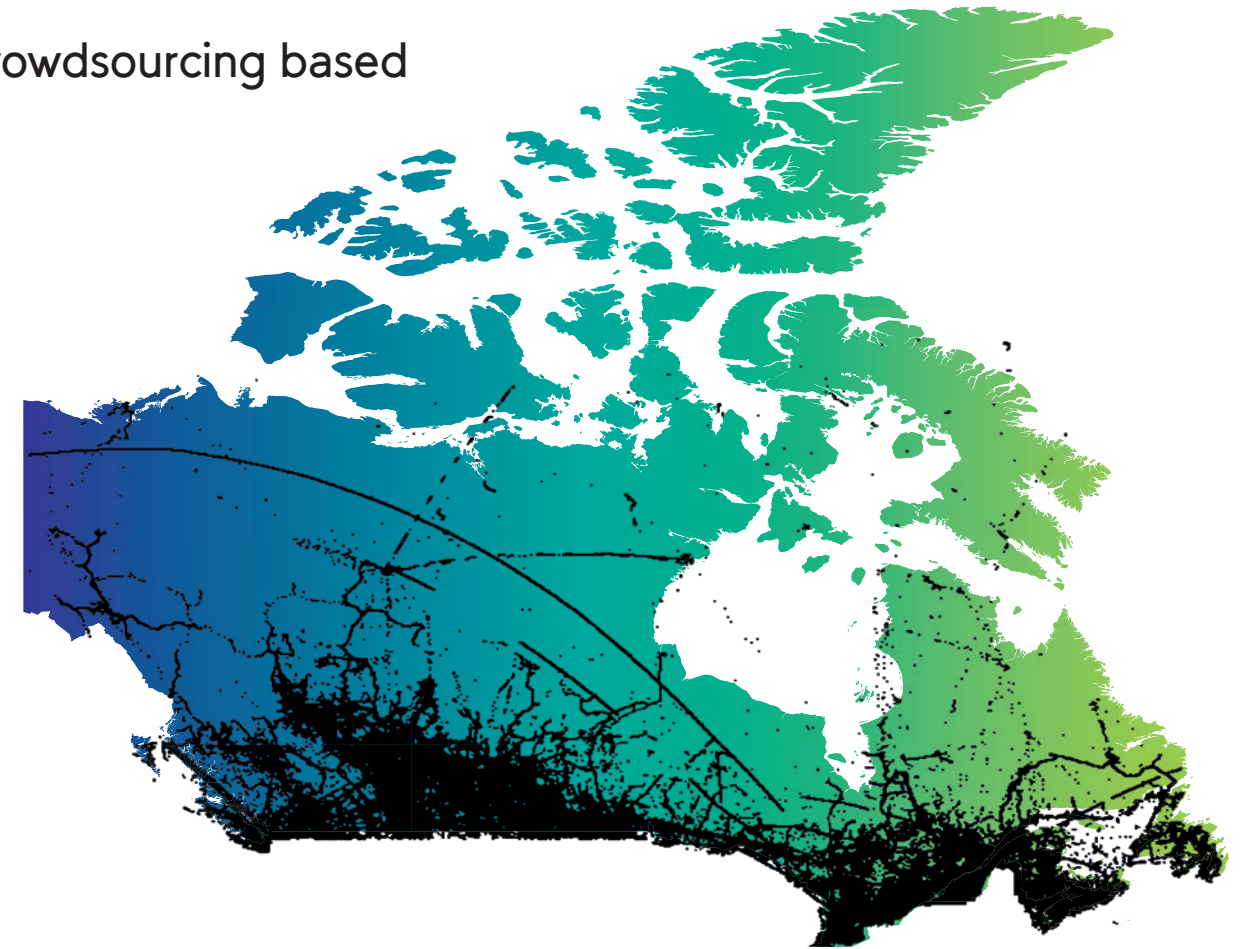



 **32.000 km**
measuring distance


 **61 %**
of population measured


Cities measured: Windsor, London, St. Catharines, Hamilton, Kitchener, Toronto, Oshawa, Barrie, Peterborough, Ottawa, Montreal, Sherbrooke, Quebec, Moncton, Halifax, Victoria, Vancouver, White Rock, Abbotsford, Calgary, Edmonton, Saskatoon, Winnipeg **Towns measured:** Amherstburg, Leamington, Strathroy, Welland, Port Colborne, Fort Erie, Fergus, Halton Hills (Georgetown), Georgina (Keswick), Innisfil (Alcona – Lefroy – Gilford), Orillia, Carleton Place, Arnprior, Hawkesbury, Saint-Canut, Beloeil, Thetford Mines, Sainte-Marie, Rimouski, Matane, Campbellton, Bathurst, Fredericton, Saint John, Truro, Ladner, Aldergrove, Chilliwack, Kamloops, Salmon Arm, Vernon, Kelowna, Penticton, Nelson, Cranbrook, High River, Okotoks, Strathmore, Chestermere, Wetaskiwin, Beaumont, Warman, Brandon

Crowdsourcing based



 **98.9 %**
of the 'built-up area' covered

 **98.7 %**
of the 'Population area' covered

 **733,542 km²**
size of tested area



Claims




Best in test
Rogers Communications
Canada Inc.



Best in data
Rogers Communications
Canada Inc.



Best in reliability
Rogers Communications
Canada Inc.



Methodology

The leader in mobile benchmarking, umlaut, has analyzed the mobile networks of Canada with regards to mobile network performance. We measure smartphone voice and data performance based on extensive drivetests – from major metropolitan areas to smaller cities and connection roads.

We objectively define the routes and test methodology and publish the results through certificates or public benchmark reports. In addition crowdsourced performance data has been collected and evaluated.

As the de-facto industry standard, our benchmarking methodology focuses on customer-experienced network quality and covers a wide range of mobile services.

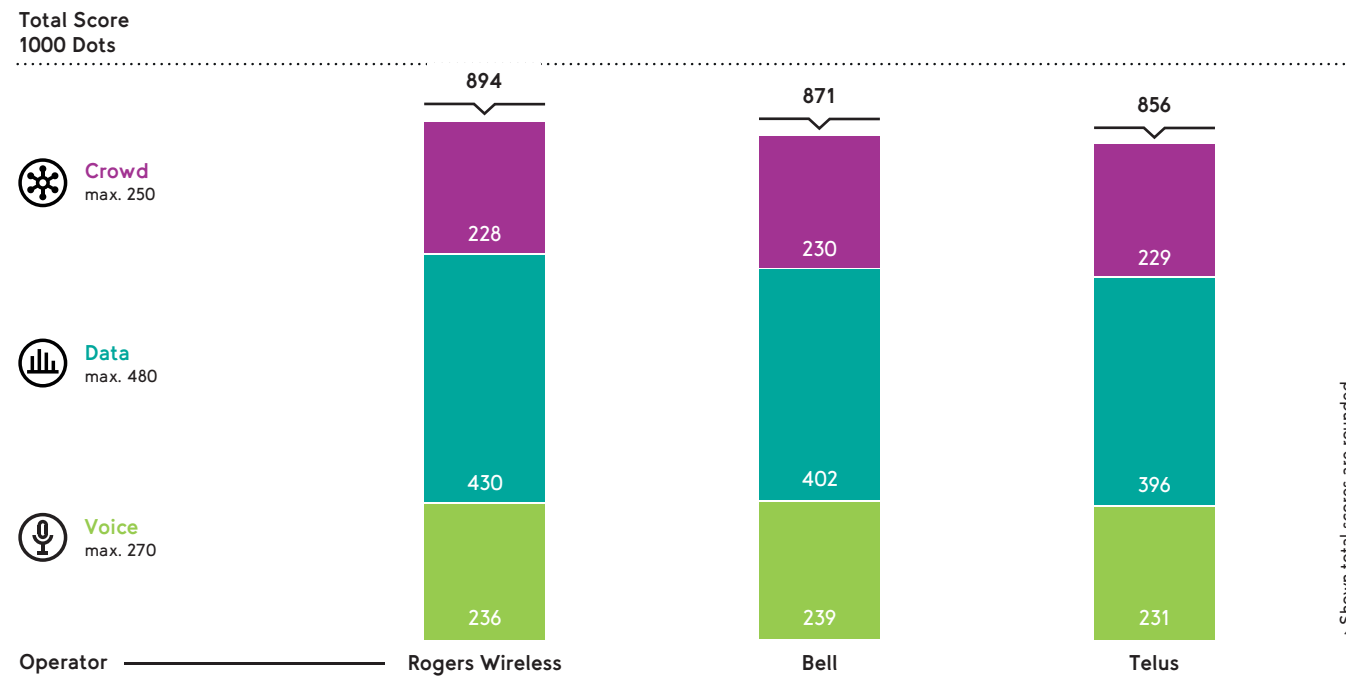
Today, more than 200 mobile networks in more than 120 countries are being evaluated by our unique scoring methodology.

It allows a technical analysis that is unprecedented in its level of detail and enables comparisons between the network performance and capability of each mobile network. Our public benchmarks as well as the certificate benchmarks help network operators to demonstrate how well they are delivering wireless connections to consumers, business users and enterprises and reveals the areas of improvement.



Score and breakdown

Rogers Communications Canada Inc. achieved the highest overall score among competitors with 894 dots out of 1000.



→ Shown total scores are rounded.

Overall score considering Voice, Data and Crowdsourcing.

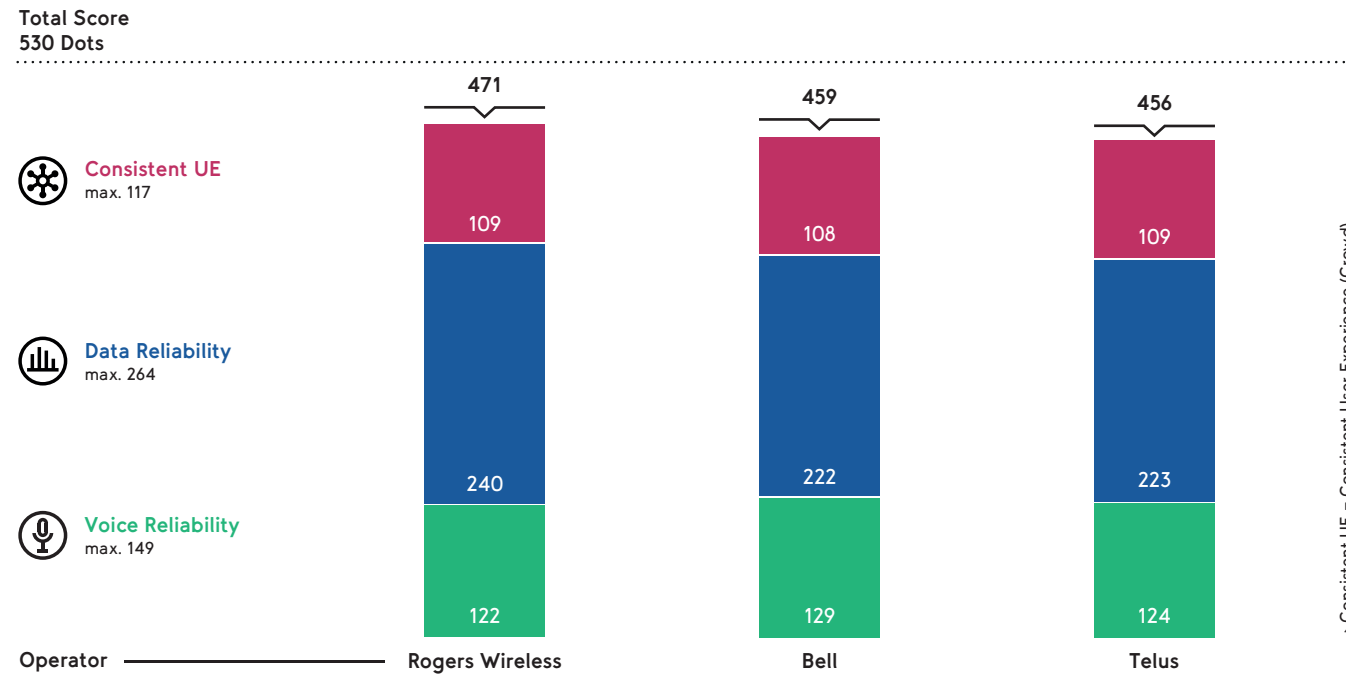
Total score

		Rogers Wireless	Bell	Telus
Voice	max. 270	236	239	231
Cities Drivetest	162	92%	94%	91%
Towns Drivetest	54	90%	91%	89%
Roads Drivetest	54	72%	71%	66%
Data	max. 480	430	402	396
Cities Drivetest	288	96%	92%	90%
Towns Drivetest	96	92%	82%	81%
Roads Drivetest	96	69%	63%	61%
Crowdsourced Quality	max. 250	228	230	229
Broadband Coverage	100	92%	94%	94%
Download Speed	56	93%	92%	92%
Upload Speed	19	91%	88%	86%
Latency	50	87%	88%	88%
Voice	11	95%	97%	96%
Stability	14	96%	95%	95%
Total	1000	894	871	856

Shown scores are rounded.



Reliability



Reliability score considering Voice Reliability, Data Reliability and Consistent UE.

Total score

	Service Group	max	Rogers Wireless	Bell	Telus
Reliability	Voice Reliability	149	82%	87%	84%
	Data Reliability	264	91%	84%	84%
	Consistent User Experience	117	94%	93%	93%

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



umlaut – Part of Accenture

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