

Barometer of mobile Internet connections in Switzerland.

01/01/2023 - 31/12/2023

















1. Introducing nPerf



Expert in the telecom network optimization

nPerf is an independent French company based in Lyon (France). For over a decade, nPerf has been a trusted partner for both fixed and mobile operators, providing comprehensive network testing solutions and analysis. Our mission is to accurately measure, evaluate, and enhance the understanding of Internet connectivity around the world.







Test your Internet connection with nPerf!

nPerf allows you to test the quality of your fixed, mobile, or Wi-Fi Internet connections up to 10 Gb/s! Dowload our app or visit our website!







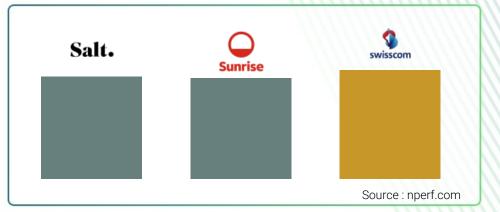
2. Executive Summary



The subscribers of Swisscom enjoyed the best mobile Internet performances in Switzerland during 2023.

	Salt	Sunrise	Swisscom
Download bitrates (Mb/s)	103.76	119.39	191.35
Upload bitrates (Mb/s)	26.52	28.75	33.74
► Latency (ms)	24.28	28.78	32.08
Web browsing (%)	74.15	74.89	75.42
Youtube streaming (%)	89.50	86.84	87.43
nPerf Score (nPoints)	105 719	104 119	110 198





Executive Summary



The subscribers of Swisscom, Salt and Sunrise enjoyed the best 5G mobile connections in Switzerland during 2023.

5G mobile connections in S	witzerland				
		Salt	Sunrise	Swisscom	
	▼ Download bitrates (Mb/s)	173.43	218.53	292.63	
	Upload bitrates (Mb/s)	41.26	46.93	45.89	
	◀▶ Latency (ms)	21.19	24.10	26.80	
	Web browsing (%)	81.99	81.97	81.88	
	Youtube streaming (%)	92.26	88.91	89.46	
	nPerf Score (nPoints)	124 864	124 359	126 726	

Source : nperf.com

3. Analysis



Swisscom confirms its leadership position

Swisscom stands out as the leader in Switzerland's 2023 mobile network, boasting the highest overall nPerf score. The company not only excels in the total market with an impressive download speed of 191.35 Mb/s but also shines in the 5G arena, showcasing a remarkable download speed of 292.63 Mb/s. Swisscom's commitment to superior user experience, particularly in browsing, solidifies its position as the top service provider.

5G Insights: Swisscom's advanced position

In the realm of 5G, Swisscom takes a significant lead in download speeds, although competitors are not too far behind. This underscores Swisscom's ability to stay at the forefront of next-generation network technology while upholding high service quality standards.

Sunrise - the agile challenger

Sunrise secures the second position in the market, displaying robust performance across various metrics. Its 5G download speed of 218.53 Mb/s indicates strong competition in the advanced technology sector, foreshadowing a potentially dynamic race for the top spot in the near future.

Salt - strong contender

Salt, holding the third position in the market, demonstrates commendable performance, particularly on streaming with 89.5%. While not leading in the 5G category, Salt's consistent service quality across other metrics highlights a solid foundation and potential for future enhancements.

Conclusion:

As we enter 2024, Switzerland's mobile network landscape is characterized by Swisscom's dominant performance in both standard and 5G technologies. However, the emergence of Sunrise and Salt in the 5G sector signifies a market ripe for competition and innovation. This environment promises a bright future for the Swiss mobile network industry, with advancements focusing on enhancing connectivity and user experiences.

4. Methodology



nPerf provides a **free tool to assess Internet connection quality** via its website and mobile apps (Android, iOS). Daily, thousands of people rely on nPerf for speed tests in their country, contributing to a comprehensive crowdsourced database covering all operators.

The study employs a strong filtering method to reflect real customer experiences on a specific network (mobile or fixed line). Measures are taken to prevent probes and measurement robots from affecting the results.

For mobile connections, we assess:

Download bitrate:

Indicates the amount of data your connection can receive in one second from the nPerf server. The highest the measured value, the best is the bitrate of your connection.

Upload bitrate:

Indicates the amount of data your connection can send in one second from the nPerf server. The highest the measured value, the best is the bitrate of your connection.

♦▶ Latency (ping) :

It indicated the delay a small packet of data requires to make a round-trip from your computer to the nPerf server. The shorter the delay, the most reactive your connection is. The main is the minimum value.

Browsing performance:

The browsing test assesses the load time of the fully loaded pages, including images, JavaScript, CSS, and fonts, for the five most popular sites. This indicator reflects the user's perceived quality of the Internet network.

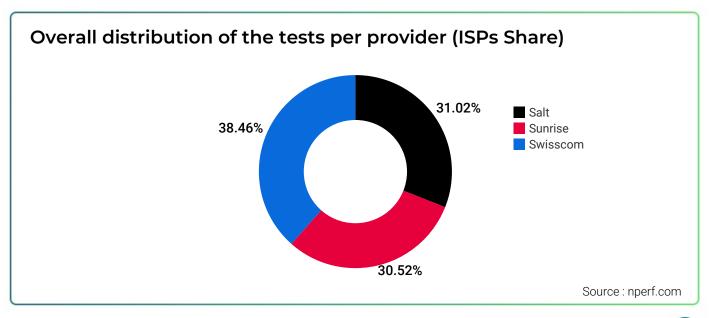
Streaming performance:

The video streaming test gauges the load time of a fully loaded video in three resolutions on YouTube, considering stalls during playback. This indicator reflects the user's perceived quality of the Internet network.

Statistical precision is crucial in accurately determining winners. At nPerf, we prioritize test quality, precise reporting, and transparency. Analyzing a large volume of tests in this study, we've achieved 3 % precision for absolute values and 1 point for percentage-based results, highlighting the reliability and accuracy of our data.

For a more comprehensive understanding of the user experience, our report features test results during both Busy hours (6 PM to 11 PM) and Idle hours (the rest of the day). Busy hours, marked by network strain, can impact user experience through congestion. This approach helps in understanding how network performance fluctuates throughout the day.

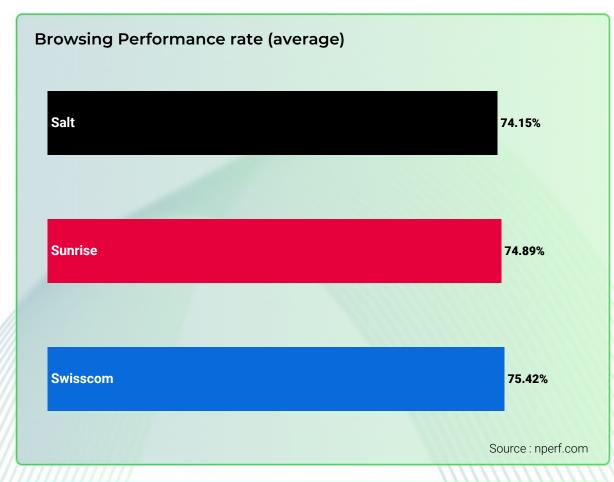
We only include national Internet service providers with test share above 5% share. The chart below shows the overall test distribution for each service provider.



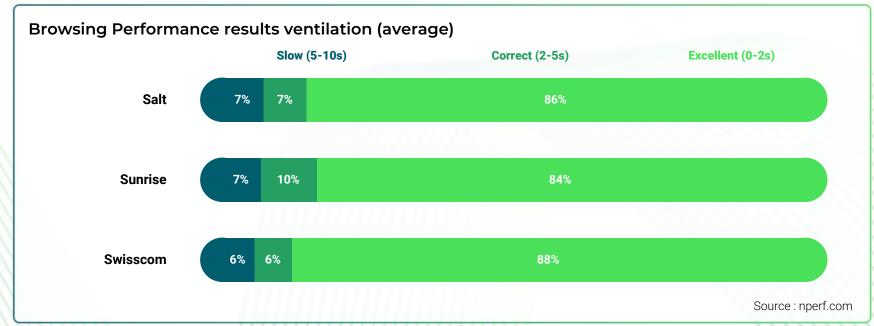


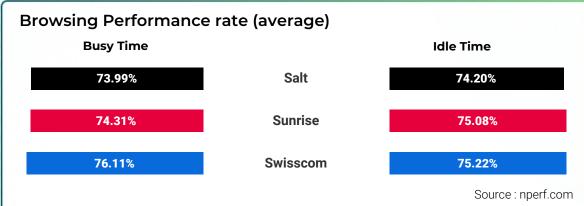
Quality of Experience: Browsing

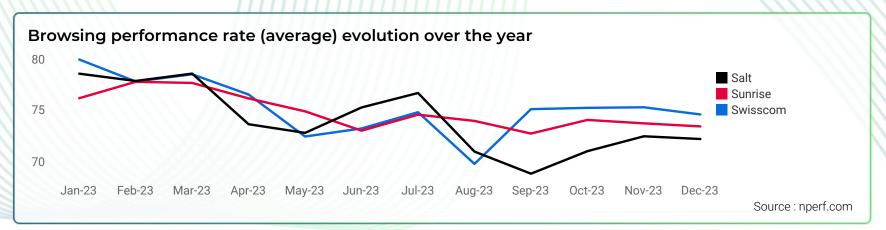




The subscribers of Swisscom and Sunrise enjoyed the best mobile Internet browsing performance in 2023.



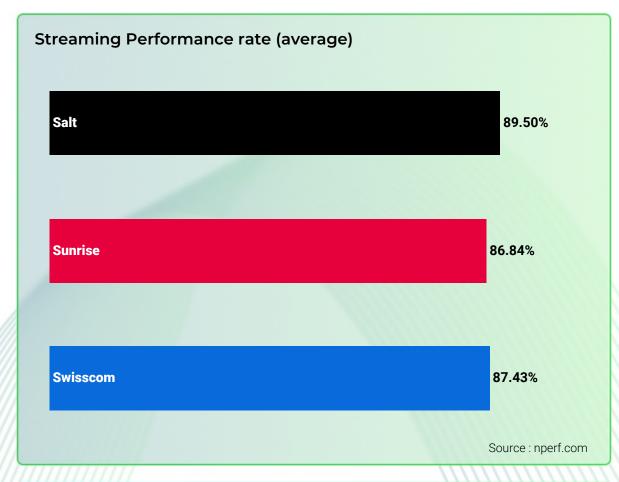




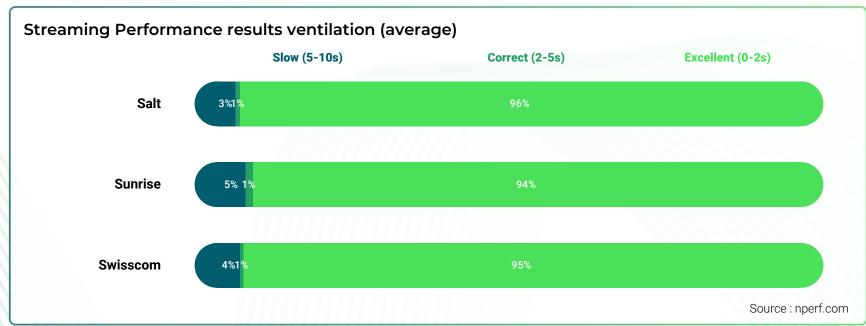


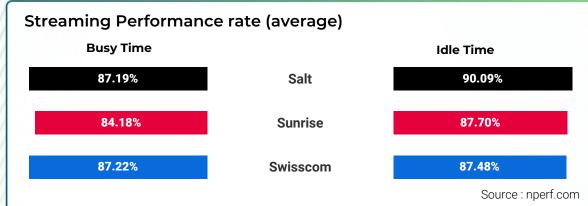
Quality of Experience: Streaming

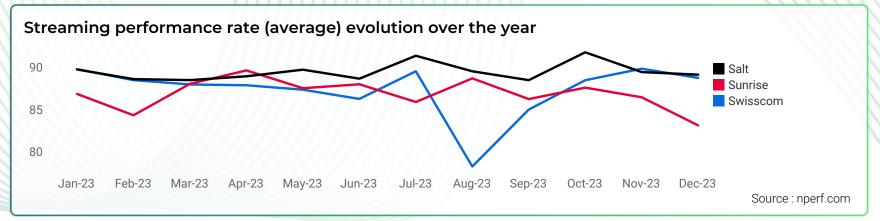




The subscribers of Salt enjoyed the best mobile Internet streaming performance in 2023.



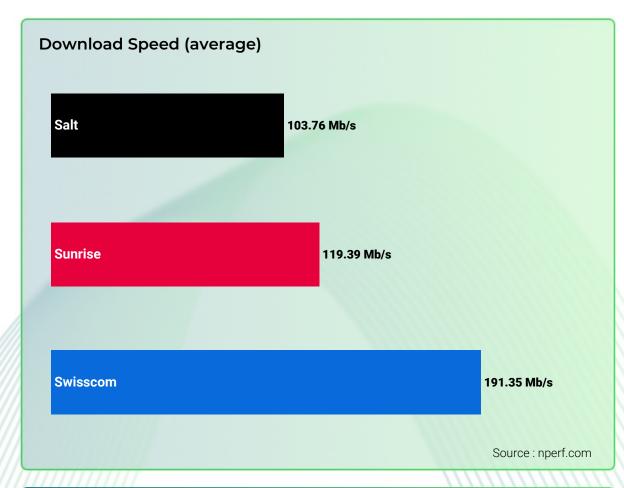




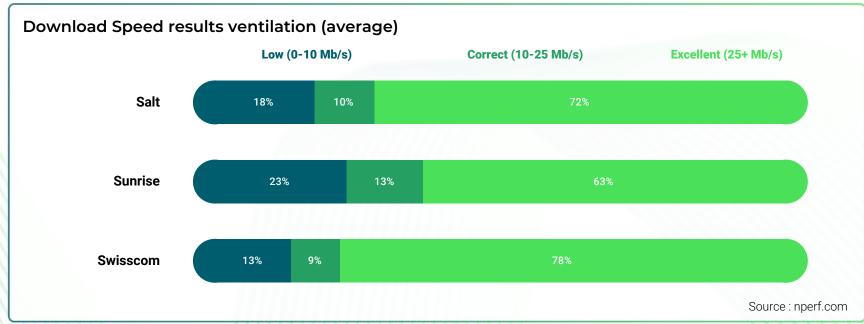


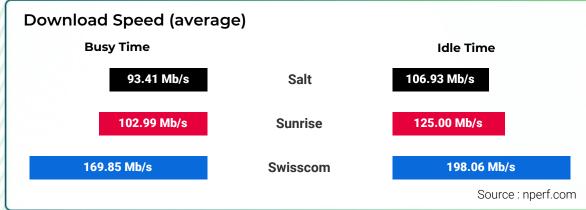
Speed: Download

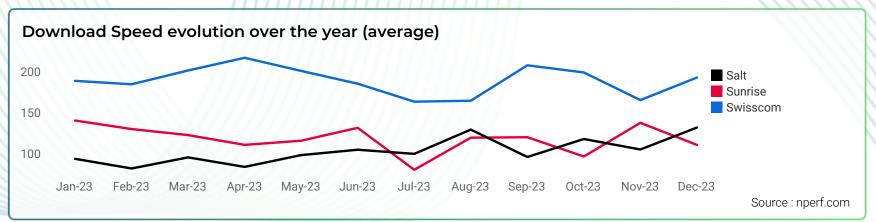




The subscribers of Swisscom enjoyed the best average mobile Internet download speed in 2023.



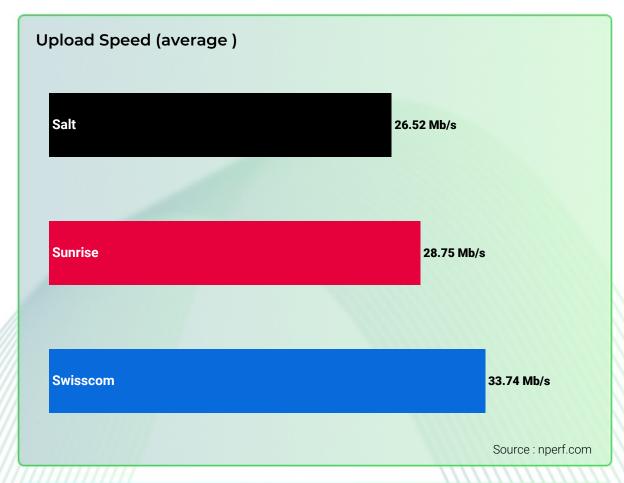




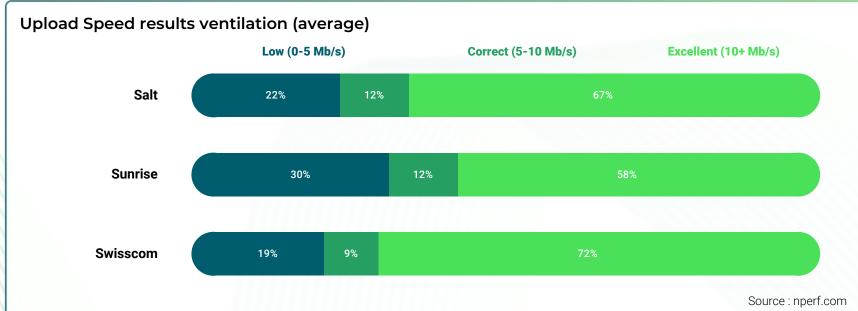


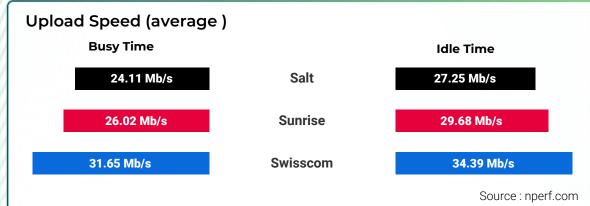
Speed: Upload

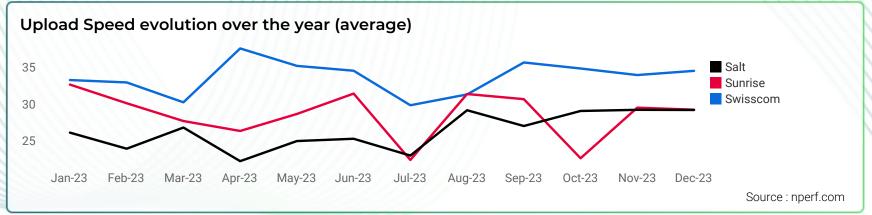




The subscribers of Swisscom enjoyed the best average mobile Internet upload speed in 2023.



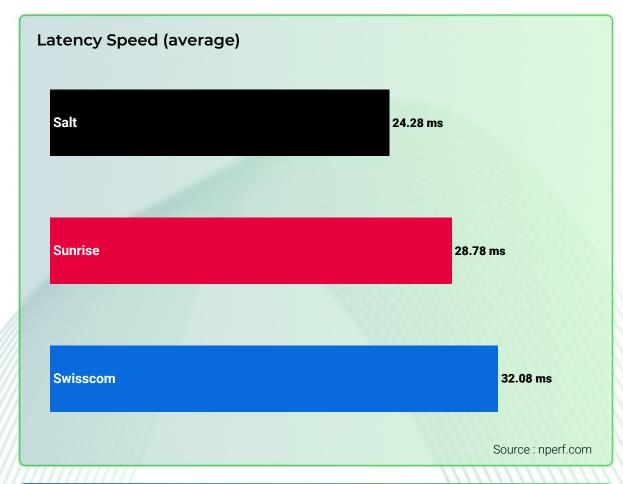




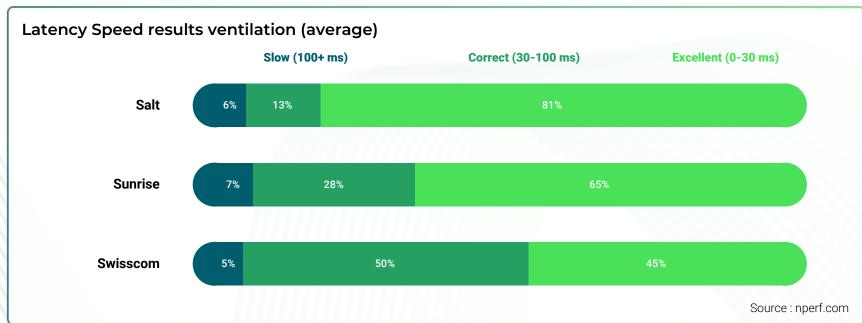


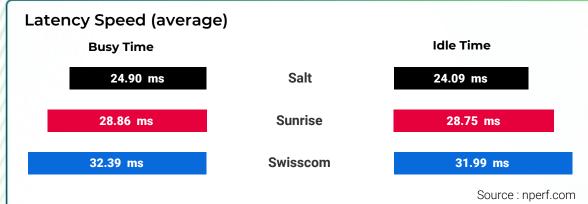
Speed: Latency

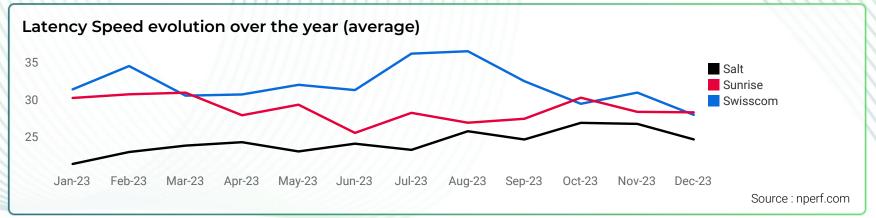




The subscribers of Salt enjoyed the best average mobile Internet latency speed in 2023.

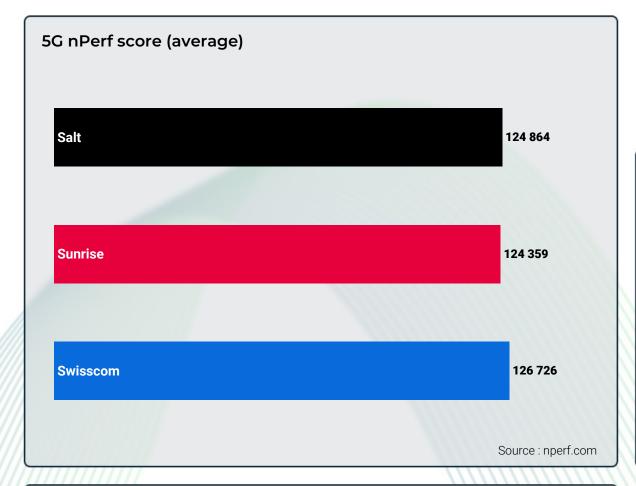






Internet service performance





The subscribers of Swisscom, Salt and Sunrise enjoyed the best 5G mobile connections in Switzerland during 2023.

- Best 5G Mobile Performance: Swisscom (126 726 nPoints), Salt (124 864 nPoints) and Sunrise (124 359 nPoints)
- Best 5G Mobile Download speed: Swisscom (292.63 Mb/s)
- Best 5G Mobile Upload speed: Sunrise (46.93 Mb/s) and Swisscom (45.89 Mb/s)
- Best 5G Mobile Latency speed : Salt (21.19 ms)
- Best 5G Mobile Browsing experience: Salt (81.99 %), Sunrise (81.97 %) and Swisscom (81.88 %)
- Best 5G Mobile Video experience : Salt (92.26 %)

 5G nPerf score (average)

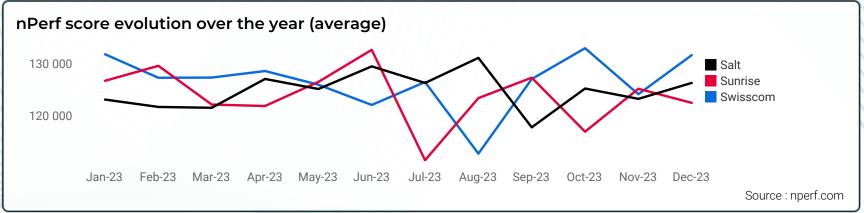
 Busy Time
 Idle Time

 120 724
 Salt
 126 082

 120 573
 Sunrise
 125 646

 123 725
 Swisscom
 127 675

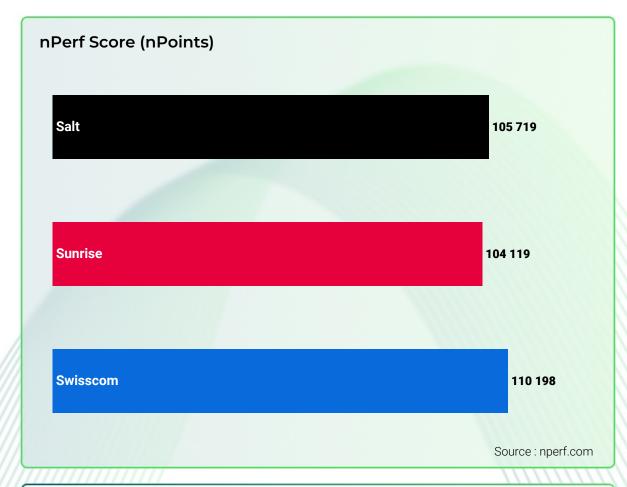
 Source : nperf.com



Source: nperf.com

Mobile Internet performance in Switzerland





The subscribers of Swisscom enjoyed the best mobile Internet performances in Switzerland during 2023.

The nperf score takes into account the measured bitrates, the latency and the Qoe tests. The value of the points for the rates and the latency is calculated on a logarithmic scale, to better represent the perception of the user.

Thus, this score reflects the overall quality of the connection experienced by the user.

Source: nperf.com



