

# Barometer of mobile Internet connections in Austria.

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!







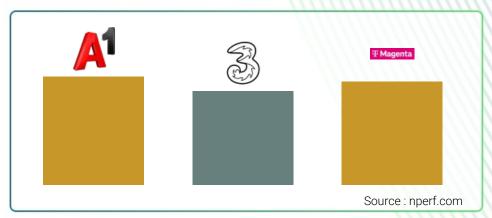
# 2. Executive Summary



The subscribers of A1 and Magenta enjoyed the best mobile Internet performances in Austria during 2023.

	<b>A</b> 1	Drei	Magenta
→ Download bitrates (Mb/s)	141.71	107.46	112.42
△ Upload bitrates (Mb/s)	26.22	19.67	28.00
<b>∢▶</b> Latency (ms)	26.66	28.49	27.16
Web browsing (%)	73.02	69.66	73.04
Youtube streaming (%)	88.04	85.53	87.55
nPerf Score (nPoints)	106 475	96 466	103 355





# 5G Executive Summary



The subscribers of Magenta and A1 enjoyed the best 5G mobile connections in Austria during 2023.

5G mobile connections in	a Austria				
		<b>A</b> 1	Drei	Magenta	
	▼ Download bitrates (Mb/s)	335.22	237.08	234.63	
	▲ Upload bitrates (Mb/s)	51.02	38.62	48.02	
	<b>◀▶</b> Latency (ms)	23.64	26.06	21.01	
	Web browsing (%)	81.03	75.50	82.55	
	Youtube streaming (%)	89.42	88.18	92.45	
	nPerf Score (nPoints)	130 659	117 686	130 742	

Source: nperf.com

## 3. Analysis



In Austria's competitive mobile internet sector, the evaluation of ISPs through comprehensive performance metrics is essential. This analysis delves into the offerings of A1 and Magenta, which stand out in a remarkable tie, along with insights into Drei's performance.

#### A1 and Magenta: neck and neck

A1 and Magenta are virtually indistinguishable in their service excellence, each leading in different aspects. A1 boasts the highest download bitrate at 141.71 Mb/s, ensuring rapid data access and smooth streaming experiences. Its upload speed is also strong at 26.22 Mb/s, facilitating efficient content uploads and online interactions.

Magenta, on the other hand, offers a slightly lower download speed at 112.42 Mb/s but compensates with the best upload speed of 28 Mb/s among the contenders, catering particularly well to users with high upload demands. Both ISPs demonstrate comparable latency, with A1 at 26.66 ms and Magenta closely following at 27.16 ms, ensuring a responsive internet experience.

In terms of web browsing and streaming success rates, both ISPs are nearly identical, with A1 at 73.02% and 88.04% and Magenta at 73.04% and 87.55%, respectively. These figures illustrate their capability to deliver consistent and reliable services. The nPerf scores further reflect their competitive standings,

with A1 at 106,475 nPoints and Magenta at 103,355 nPoints, highlighting their overall performance excellence.

#### **Drei: holding Its ground**

Drei, while not at the forefront, presents a viable option with a download bitrate of 107.46 Mb/s. Its upload speed of 19.67 Mb/s and latency of 28.49 ms, though not leading, are competitive within the market, supporting a range of online activities.

The ISP's web browsing and streaming percentages stand at 69.66% and 85.53%, respectively, indicating a reliable service that meets the needs of most users. With an nPerf score of 96,466 nPoints, Drei showcases its strengths while also pointing to areas for potential improvement.

#### Conclusion: a competitive edge

The tie between A1 and Magenta underscores the highly competitive nature of the Austrian mobile ISP market, with both providers excelling in different metrics. A1's superior download speed and Magenta's leading upload capability demonstrate their respective strengths in catering to diverse user needs. Drei, with its solid performance, remains a strong contender, underscoring the competitive landscape of mobile internet services in Austria.

## 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.

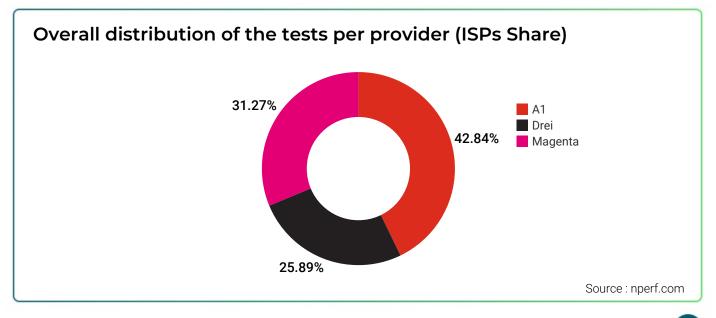
#### **Streaming performance:**

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.

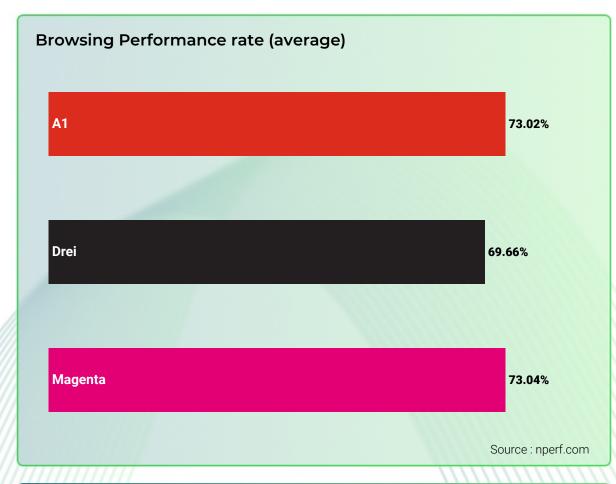
We only include national Internet service providers with test share above 5% share. The chart below shows the overall test distribution for each service provider.



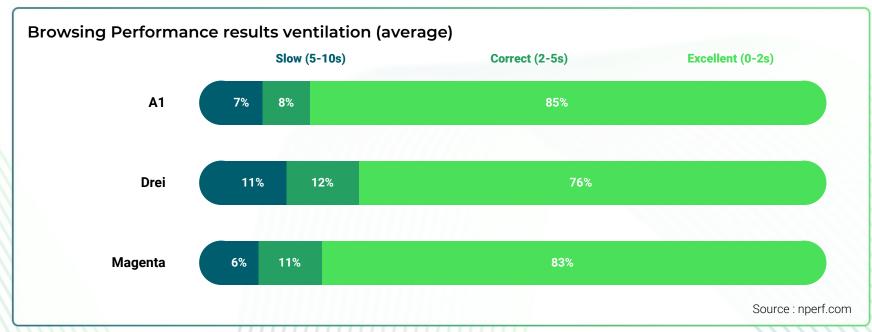


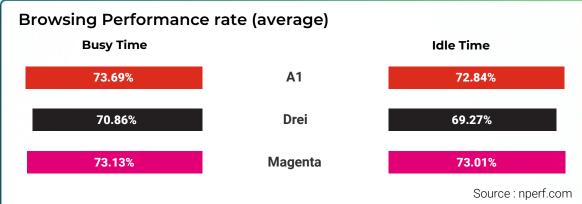
# **Quality of Experience: Browsing**

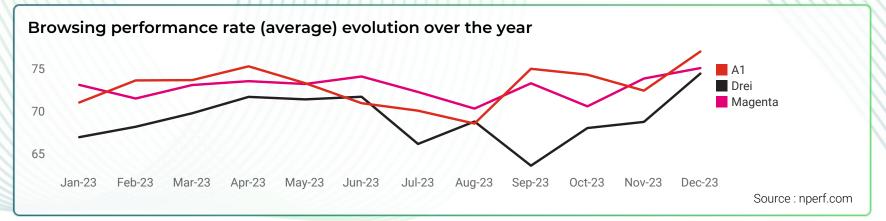




The subscribers of Magenta and A1 enjoyed the best mobile Internet browsing performance in 2023.



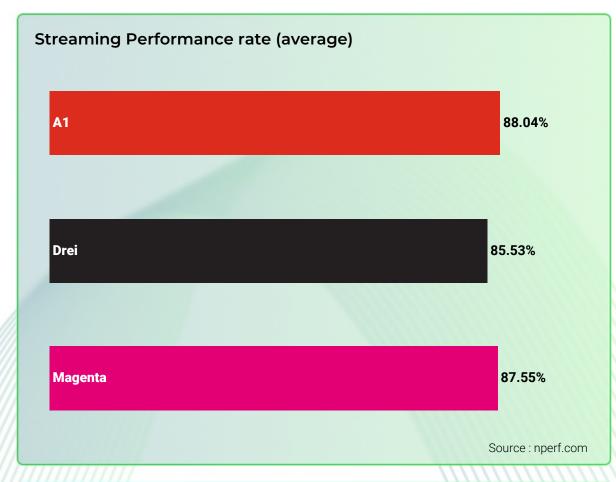




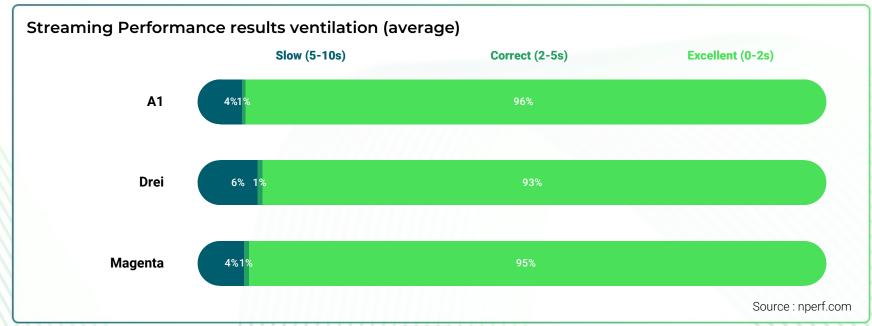


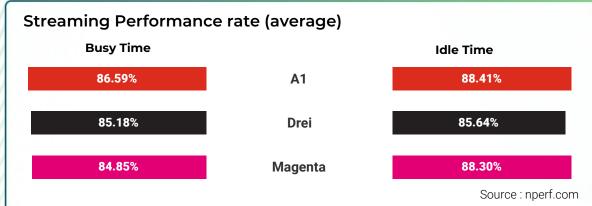
# **Quality of Experience: Streaming**

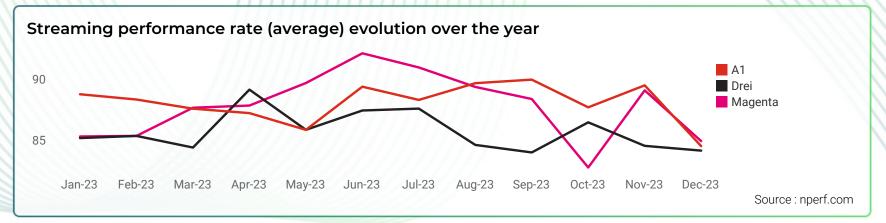




The subscribers of A1 and Magenta enjoyed the best mobile Internet streaming performance in 2023.



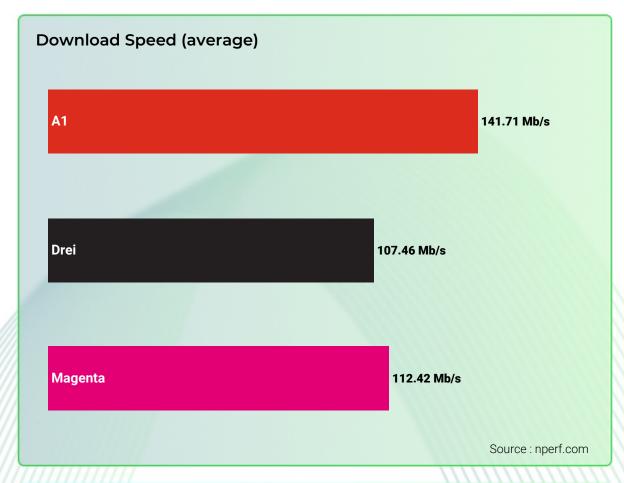






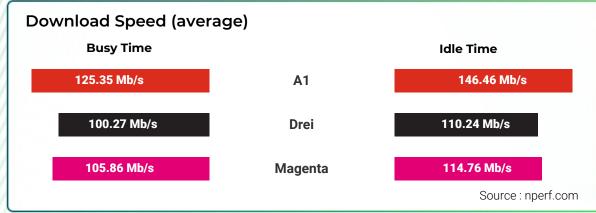
# Speed: Download

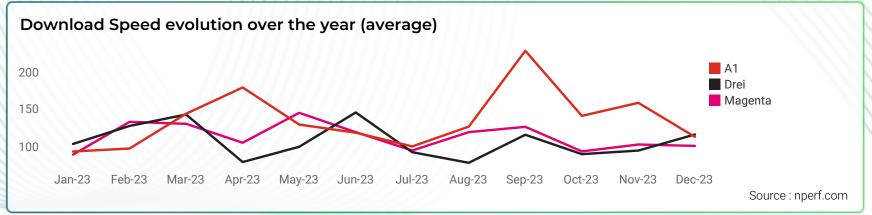




The subscribers of A1 enjoyed the best average mobile Internet download speed in 2023.



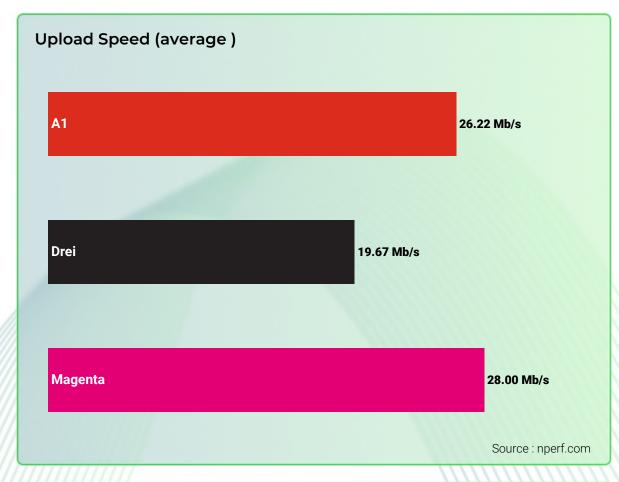






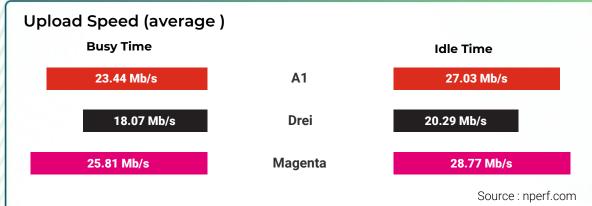
# Speed: Upload

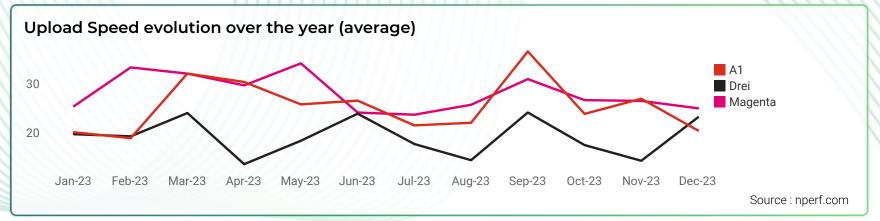




The subscribers of Magenta enjoyed the best average mobile Internet upload speed in 2023.



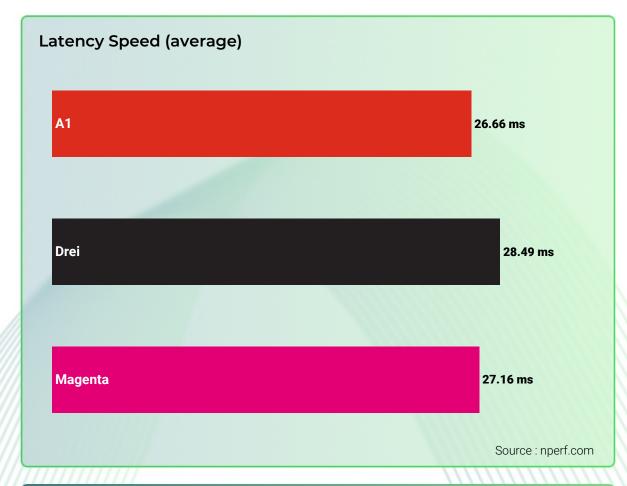






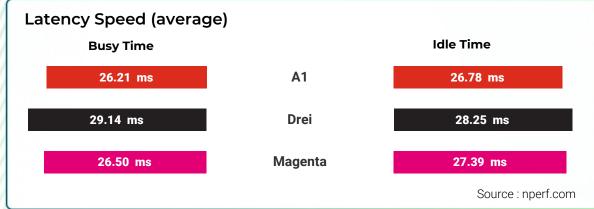
# Speed: Latency

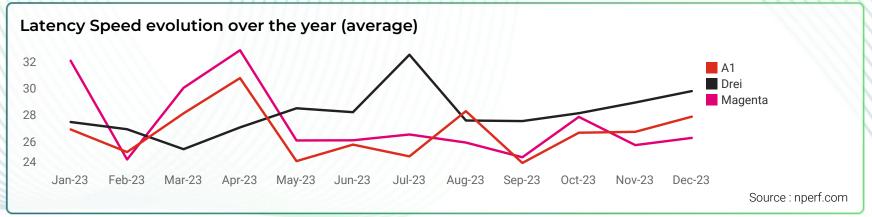




The subscribers of A1 and Magenta enjoyed the best average mobile Internet latency speed in 2023.

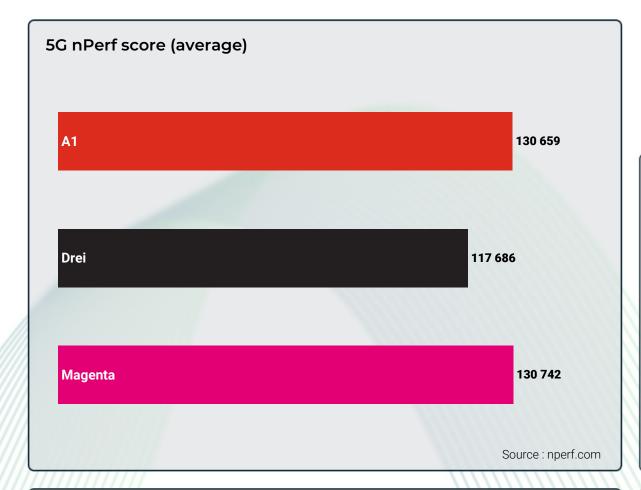






# Internet service performance



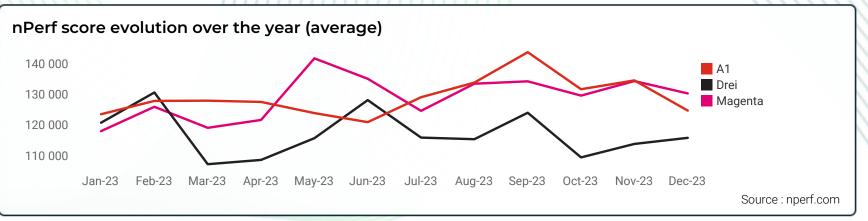


The subscribers of Magenta and A1 enjoyed the best 5G mobile connections in Austria during 2023.

- Best 5G Mobile Performance: Magenta (130 742 nPoints) and A1 (130 659 nPoints)
- Best 5G Mobile Download speed: A1 (335.22 Mb/s)
- Best 5G Mobile Upload speed: A1 (51.02 Mb/s)
- Best 5G Mobile Latency speed : Magenta (21.01 ms)
- Best 5G Mobile Browsing experience : Magenta (82.55 %)
- Best 5G Mobile Video experience : Magenta (92.45 %)

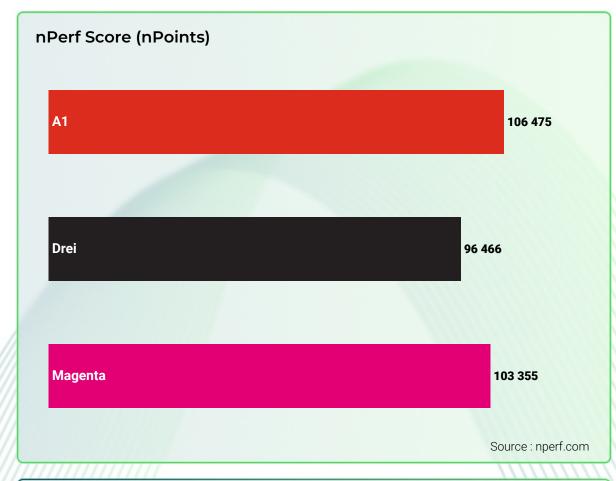






## Mobile Internet performance in Austria





The subscribers of A1 and Magenta enjoyed the best mobile Internet performances in Austria 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

