

Press release

With INA, Sopra Steria and Telefónica are propelling the telecommunications industry into the quantum era and revolutionising network management

Paris – 17 November 2023 – Sopra Steria, a major player in the European tech sector, working closely with Telefónica, is revolutionising network management and planning with the launch of the Intelligent Network Analyzer (INA). This digital twin solution shows how quantum technology can improve mobile service and make networks more energy-efficient.

Leveraging the Azure Quantum solution, Sopra Steria and Telefónica are harnessing the latest breakthroughs in quantum technology to optimise telecoms networks in Germany, showing how they can boost their technological performance while becoming more energy-efficient and sustainable.

This quantum simulation, which was successfully carried out with Telefónica's mobile network data, combines real-time mapping and dynamic traffic management within a single system. It speeds up and optimises network planning, which up until now had been handled manually by operators. With millions of possible combinations, mapping the network was a major challenge for classical computers and required a significant amount of computing time. By processing multiple calculations in parallel, quantum computing now offers real-time analysis of network capacity to optimise traffic flow.

The INA project will also help to prevent network overload while at the same time reducing the number of unused redundant connections. By identifying potentially superfluous connections and reallocating the load to different parts of the network, INA helps to fully exploit network capacity without the need for hardware upgrades or extensions.

INA is set to significantly reduce Telefónica's energy and environmental footprint in Germany, resulting in a more sustainable network, while improving the quality of service for its mobile users.

Sven Wißmann (Global Industry Lead Telecommunications) at Sopra Steria, commented: "The INA project is more than just a breakthrough in mobile network analysis. It's a demonstration how partners use innovative technology and the power of co-creation to generate a positive and measurable impact in the telecoms industry. In collaboration with Telefónica, we've developed a unique solution that simultaneously boosts the performance, operational efficiency and sustainability of mobile networks. We're extremely proud of this joint accomplishment, which exemplifies our commitment to a more responsible digital world, and redefines the standards of our respective industries."

Bernhard Walther (Manager Transport Network Performance) at Telefónica, added: "We can test things and see the effect directly. This is network management of the future, and it's already happening today. Thanks to INA, our network engineers can find the fastest routes for data and they can simulate network configurations and construction activities on the computer. We know what will happen before technicians and crews get to work. This saves time and money, and we improve our service for our customers."

About Sopra Steria

Sopra Steria, a major Tech player in Europe with 55,000 employees in nearly 30 countries, is recognised for its consulting, digital services and software development. It helps its clients drive their digital transformation and obtain tangible and sustainable benefits. The Group provides end-to-end solutions to make large companies and organisations more competitive by combining in-depth knowledge of a wide range of business sectors and innovative technologies with a fully collaborative approach. Sopra Steria places people at the heart of everything it does and is committed to putting digital to work for its clients in order to build a positive future for all. In 2022, the Group generated revenues of €5.1 billion.

The world is how we shape it

Sopra Steria (SOP) is listed on Euronext Paris (Compartment A) – ISIN: FR0000050809
For more information, visit us at www.soprasteria.com

About Telefónica Deutschland

Telefónica Deutschland is one of the leading integrated telecommunications providers in Germany, with more than 44 million mobile telephone lines and 2.3 million broadband lines. We offer mobile and fixed network services for private and business customers as well as innovative digital solutions based on our infrastructure and the analysis of mobile data.

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