



Press Release

Atos' energy-efficient supercomputer expands HPC system at Technische Universität Dresden

Munich (Germany), Paris (France) – January 13 2022 – Atos today announces that it has been awarded a new contract to supply and install a new supercomputing cluster at [Technische Universität Dresden](#) (TU) in Germany. The supercomputer will be used for data intensive HPC tasks and data analysis at the Center for Information Services and High-Performance Computing (ZIH). Based on Atos' powerful [BullSequana XH2000](#) architecture, researchers at TU Dresden will use the new supercomputer for computational tasks in environmental research, life sciences, materials sciences and engineering, as well as for basic research in physics, chemistry and mathematics. It is scheduled to start operations in autumn 2022.

"We are pleased to continue to support TU Dresden with HPC expertise via our BullSequana XH2000 installation and to continue to enable cutting-edge research. The new system is extremely energy efficient thanks to our patented and world leading warm water cooling solution," **says Dr. Martin Matzke, Senior Vice President Big Data & Security at Atos Central Europe.**

"In addition to the innovative hot water cooling, which will lead to an encouraging increase in the energy efficiency of the system, the balanced architecture and the exceptionally powerful infrastructure for the fast input/output of data are to be highlighted, which sustainably advance important research fields of ours such as modeling, simulation, and data analytics," **explains Prof. Dr. Wolfgang E. Nagel, TU Dresden/ZIH.**

HPC energy-efficiency to support ecological sustainability

The new supercomputer features Atos' water-cooled patented Direct Liquid Cooling (DLC) solution, which uses 35°C warm water to cool the system. This feature enables TU Dresden to minimize the energy consumption of the cooling and at the same time benefit from processors with the highest compute performance. The lost heat from the BullSequana XH2000 systems will be used to heat surrounding buildings and thus has a positive contribution towards the ecological sustainability on TU Dresden's campus.

This new HPC installation includes more than 600 nodes of Intel's upcoming CPU generation "Sapphire Rapids" with large main memory and high memory bandwidth. TU Dresden will thus be able to perform high-quality data analyses and simulations in a timely and flexible manner.

Atos and TU Dresden have been working together since 2013 when Atos delivered and installed the "Taurus" HPC system at ZIH and then the expansion of the system in 2015, whose energy efficiency has also been the subject of scientific research. The new HPC system will replace the Taurus.

###

About Atos

Atos is a global leader in digital transformation with 107,000 employees and annual revenue of over € 11 billion. European number one in cybersecurity, cloud and high performance computing, the Group provides tailored end-to-end solutions for all industries in 71 countries. A pioneer in decarbonization services and products, Atos is committed to a secure and decarbonized digital for its clients. Atos is a SE (Societas Europaea), listed on Euronext Paris and included in the CAC 40 ESG and Next 20 Paris Stock indexes.

The [purpose of Atos](#) is to help design the future of the information space. Its expertise and services support the development of knowledge, education and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.

Press contacts

Germany: Stefan Pieper | stefan.pieper@atos.net | +49 178 4686875

Global : Laura Fau | laura.fau@atos.net | +33 (0) 6 73 64 04 18