



Atos boosts weather forecasting capacity for Finnish Meteorological Institute with its BullSequana supercomputer

Paris, France – May 30, 2022 – Atos today announces that it has been selected by the **Finnish Meteorological Institute (FMI)**, the government agency responsible for gathering and reporting weather data and forecasts in Finland, in a seven-year multi-million-euro deal, to supply, deliver, install and operate a supercomputing system, based on its BullSequana XH2000 architecture. Compared to FMI's current solution the new system will increase its computing power by a factor of 4 and will enable it to provide its clients with enhanced and more precise and reliable forecasting information.

The new supercomputer will be used in different areas of numerical weather prediction (NWP) including short-range weather forecasting and nowcasting (forecasting on a period of up to 9 hours). It will also enable meteorologists to more accurately predict and determine the intensity of severe weather events long before they occur. It will be used to run atmospheric and oceanic computing models such as the HARMONIE-Arome NWP model developed by ACCORD consortium (in cooperation with the European Centre for Medium Range Weather Forecasts (ECMWF)) which is FMI's most computationally demanding and most time-critical workload.

The new supercomputer will enhance the operational NWP collaboration between Norway, Sweden, Estonia and Finland (MetCoOp), in which all the members jointly run a weather forecasting model, to provide the best possible short-range weather forecasts for the region. This shared operational implementation of the HARMONIE-Arome weather model (called MEPS) looks at several forecasts - one of which is run on the FMI system - rather than one single forecast, to predict the probability of extreme weather more effectively.

*"Thanks to this investment, we will now be able to improve the horizontal resolution of our NWP model from 2.5km to 1.3km, which enhances the skill and reliability of prediction and reduces the biases, meaning more accurate information to strengthen our weather warnings, to ensure a weather-ready Nordic society, enhancing safety and security for our citizens" said **Sami Niemelä, Director at Finnish Meteorological Institute (FMI)**.*

*"Weather prediction requires a huge amount of computing power and with our BullSequana XH2000, equipped with the latest generation AMD's EPYC 7003 processors and NVIDIA HDR InfiniBand, FMI will be able to increase its computing capacity to deliver significant improvements in numerical weather predictions", said **Emmanuel Le Roux, Group SVP, Global Head of HPC, AI & Quantum at Atos**.*

The Finnish Meteorological Institute is a part of the Ministry of Transport and Communications, and is an impartial research and service organization with expertise covering a wide range of atmospheric science activities in addition to the gathering and

reporting of weather data and forecasts. It provides weather and climate-related services to the Defence Forces, government departments, the public, civil aviation, shipping, industry, agriculture and commerce.

The BullSequana XH2000 supercomputer will be installed in early 2023.

About Atos

Atos is a global leader in digital transformation with 111,000 employees and annual revenue of c. € 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 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.

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