

Atos' BullSequana XH2000 chosen for the EuroHPC peta-scale system in Slovenia

The new peta-scale supercomputer named Vega after the Slovenian mathematician Jurij Vega scheduled to enter into production in March 2021 will be provided by Atos, a global leader and a major European player in HPC. It will be jointly operated by the Institute of Information Science Maribor and the EuroHPC Joint Undertaking and will provide its capacity both to the Slovenian National Supercomputing Network SLING and to EuroHPC users. Vega will be among the five first petascale EuroHPC systems. With 6.8 petaflops it will rank among the 50 fastest supercomputers in the world.

MARIBOR, LUXEMBURG, PARIS, 1ST OF OCTOBER 2020. The Institute of Information Science Maribor ([IZUM](#)) and [the EuroHPC Joint Undertaking](#) have selected Atos as the vendor for the new Slovenian and European supercomputer, confirming the selection with the signing of the procurement contract. Atos, a global leader in digital transformation, headquartered in France, is a major European HPC provider and innovator.

Dr. Aleš Bošnjak, director of IZUM, said: “With this new BullSequana supercomputer from Atos we will be able to fulfil our HPC RIVR project design goals and ensure that a new generation of experts and developers, as well as the wider Slovenian community, can meet new challenges within our national consortium [SLING](#) (Slovenian National Supercomputing Network) and further contribute to the regional and European HPC initiatives.”

The new supercomputer has been planned as a part of the Slovenian HPC RIVR programme under the coordination of the University of Maribor, with the Institute of Information Science Maribor and the Faculty of Information Science Novo Mesto as partners, and the national HPC consortium SLING as the supporting entity. Since the initial investment has been augmented when the project evolved to become the Slovenia-based EuroHPC peta-scale system, one third of the investment is provided by the EuroHPC Joint Undertaking and the system will be available to EuroHPC users.

Mr. Anders Dam Jensen, executive director of EuroHPC Joint Undertaking, stated: “Thanks to this signature, the Vega supercomputer will increase the computing power available in Slovenia and in Europe as a whole by early next year. It will support European researchers and users from the public and industry sector, wherever they are in Europe. Vega will drive innovation and help Europe compete globally in strategic domains including artificial intelligence, high performance data analytics (HPDA), personalised medicine, bio-engineering, fight against climate change, or drug and material design.”

The new supercomputer will be named Vega, after the Slovenian mathematician Jurij Vega and for 17.2 million Euro it will provide 6.8 petaflops, wide bandwidth for data transfers to other national and international computing centres (up to 500 Gbit/s) as well as both fast and long-term storage (24 PB in total). The bandwidth provided by GÉANT and its data-lake based repositories will allow Vega to support open science and FAIR data and facilitate its users in participating in European information-intensive scientific and research projects. Vega is scheduled to start production in March 2021.

Slovenia initialised its HPC RIVR programme not just to procure new systems and improve available computing capacity of its HPC community, but also to ensure that a new generation of experts and developers is engaged within the project as well as the wider Slovenian community and its national consortium SLING. The Ministry of Education, Science and Sport has been using this mechanism to promote regional, European and international cooperation, including the work within PRACE and EuroHPC, where SLING became one of the funding partners of the Leonardo Consortium, the hosting entity of one of the EuroHPC pre-exascale systems at CINECA in Bologna. Since EuroHPC has also been accelerating the adoption of new technologies by supporting the establishment of national centres of excellence in HPC, the new capabilities will be made more readily available to academic as well as scientific and industrial users.

The computing power of Vega will soon be complemented by four additional EuroHPC petascale supercomputers to be built in the following supercomputing centres: [LuxProvide](#) in Luxembourg, [Sofiatech](#) in Bulgaria, [IT4Innovations National Supercomputing Centre](#), in the Czech Republic, [Minho Advanced Computing Centre](#) (MACC) in Portugal, and three EuroHPC pre-exascale supercomputers located at the following supercomputing centres: [Barcelona Supercomputing Centre](#) in Spain, [CSC-IT Center for Science](#) in Finland and [CINECA](#) in Italy, with Slovenia participating in the hosting Leonardo Consortium.

More information :

- EuroHPC Joint Undertaking press release: <https://eurohpc-ju.europa.eu/news/vega-new-eurohpc-world-class-supercomputer-slovenia>
- More information at IZUM: Branko Zebec <branko.zebec@izum.si> TEL: +386 2 2520 422

