## EUROPEAN HIGH PERFORMANCE COMPUTING JOINT UNDERTAKING



Luxembourg, 23/10/2023 EUROHPC JU

## To Whom It May Concern

Subject: Study on hyper-connectivity of High Performance Computing (HPC) resources

The European High Performance Computing Joint Undertaking (EuroHPC JU) has appointed the "EuroHyPerCon" consortium to perform the above-mentioned study in line with its policy framework.

Over the past 5 years, the EuroHPC JU has made significant investments in developing, deploying, and sustaining a world-class integrated supercomputing and data infrastructure in Europe, composed of a series of national and multinational HPC systems. The aim is to create a hyper-connected, federated, and secure HPC and quantum computing service and data infrastructure ecosystem. Therefore, the hyper-connectivity of the EuroHPC ecosystem, i.e. the ultra-fast connectivity across the different EuroHPC systems, along with the interconnection of other major national or regional HPC/data centres across Europe that are not part of the EuroHPC undertaking, is crucial for creating such an ecosystem.

The expected outcome of the study is to provide a comprehensive analysis of the communication and/or connectivity needs between EuroHPC systems and other relevant European and national supercomputing and data infrastructures (e.g., European common data spaces), the available technology and service providers, and the landscape of users. It should also facilitate a view of the implementation options, including the description of services to be provided, network architecture, implementation instruments, and budgeting. Finally, the study should provide detailed specifications for the provisioning of the hyper-connectivity services to be provided to the EuroHPC JU.

In this context, the consultants are expected to gather relevant information and opinions through interviews with stakeholders both from public and private organisations. We would welcome your involvement in supporting the goals of the study, and encourage you to provide the consultants with appropriate input and assistance, as requested. Your valuable cooperation in this initiative is much appreciated.

In line with its competencies in HPC, the EuroHPC would take into account the specifications from the study for an appropriate follow-up.

Yours faithfully,

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