

New EuroHPC research and innovation call

- Opening: 16 April 2020

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Closing: 16 April 2020

The European High Performance Computing Joint Undertaking (EuroHPC JU) is continuing its efforts to complete the European supply value chain and develop a world-class supercomputing ecosystem in Europe.



EuroHPC JU

The EuroHPC JU call for proposals (H2020-JTI-EuroHPC-2020-01: Advanced pilots towards the European exascale supercomputers) covers two topics in accordance with the annual EuroHPC Work Plan of the year 2020:

Advanced pilots towards the European supercomputers (closing date: 15 Septembre 2020)

With a total budget of EUR 74 million, the objective of this sub-topic EuroHPC-2020-01-a is to demonstrate the integration of European technology building blocks developed for example in the European Processor Initiative (EPI) and in previously funded EU Research & Innovation (R&I) actions into fully integrated pilot supercomputing systems aiming at exascale performance (supercomputers able to perform one trillion (10^{18}) operations per second). The pilots will have to demonstrate the power efficiency, usability, resiliency and scalability potential when deployed in conjunction with market technologies in a co-design approach. Pilot systems should maximise the integration of European hardware and software technologies, and foster, to the extent possible, the development of solutions based on European open hardware and open-source software. Two complementary pilot supercomputing systems are expected to be supported under this topic:

- One leveraging the efforts on European low power general purpose processing technologies;
- A complementary one leveraging the efforts on European open hardware solutions.

Pilot on quantum simulator (closing date: 28 July 2020)

With a total budget of EUR 12million, the aim of this sub-topic EuroHPC-2020-01-b is to deploy a quantum simulation infrastructure based on European technology, accessible to the European scientific and industrial user community. The action will cover the acquisition of one such quantum simulator and its maintenance, the development of the interconnection between a classical supercomputer and the quantum simulator and the development of the necessary cloud access and middleware for programming and running applications in the quantum simulator.

The call is open to any organisation that can make a contribution to the R&I objectives of the programme. More details are available on the EuroHPC JU website.

Next steps

Two other calls related to the R&I programme will follow in 2020:

- H2020-JTI-EuroHPC-2020-02: Framework Partnership Agreement in European low-power microprocessor technologies (Phase 2), follow-up to EPI phase 1.
- H2020-JTI-EuroHPC-2020-03: Training and Education on High Performance Computing. A Coordination and Support Action (CSA) aiming at developing a quality-controlled educational master programme for HPC and industrial applications of pan-European reach. This would be developed and launched in close cooperation with the relevant European industry players (supply and user industry), HPC Competence Centres, HPC Centres of Excellence and PRACE (Partnership for Advanced Computing in Europe) in order to provide a programme that addresses concrete industry needs in HPC.

Background

The EuroHPC JU was established by Council Regulation (EU) 2018/1488 and entered into force on 28 October 2018. 32 European countries are currently taking part in the initiative.

The mission of the EuroHPC JU is to develop, deploy, extend and maintain an integrated world-class supercomputing and data infrastructure in the European Union (EU) and to develop and support a highly competitive and innovative HPC ecosystem.

The EuroHPC JU aims at equipping the EU by 2020 with an infrastructure of petascale and precursors to exascale supercomputers, and developing the necessary technologies and applications for reaching full exascale capabilities around 2022 / 2023.

Related topics

HPC

Investing in network and technologies

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