

Joint statement by Vice-President Ansip and Commissioner Gabriel on the progress to build European supercomputers

Vice-President for the Digital Single Market Andrus **Ansip** and Commissioner for Digital Economy and Society Mariya **Gabriel** welcomed the Council's decision to support the Commission's plans to invest jointly with the Member States in building a world-class infrastructure for supercomputing in Europe:

"Today's endorsement of our proposal by the Council is another major step towards closer cooperation and more investments in the field of supercomputing. Joining forces for building European supercomputing capacity is essential for the EU's competitiveness and independence in the data economy.

Currently the EU is at risk of falling behind in the global supercomputing race: at the moment we do not have any supercomputers in the world's top ten and European scientists and industry increasingly process their data outside the EU because their needs are not matched by the computation time or computer performance available in the EU.

With the new legal and funding structure – the EuroHPC Joint Undertaking – we aim to create world-class High-Performance Computing infrastructure in Europe by 2020, and to be at the forefront of developing new supercomputing technology and the skills and applications associated with it.

Supercomputing is already changing the lives of European citizens, be it through personalised medicine or energy saving, or by helping to tackle global challenges through climate change modelling, preventing and controlling epidemics, and advancing neuroscience. As no European country has the capacity to develop these resources individually, cooperation, knowledge-sharing and the pooling of resources at European level are essential."

Next steps

The European Parliament will vote on the Commission's proposal to create the EuroHPC Joint Undertaking in July, before the Regulation is formally adopted by the Council of the EU.

Background

The [EuroHPC Joint Undertaking](#) was proposed by the European Commission on 11 January 2018. It is a legal and funding instrument that will pool EU and national resources and private investment at a level comparable with global competitors with the goal of:

- acquiring and providing across Europe by 2020 a world-class pre-exascale

- (10^{17} calculations per second) and petascale (10^{15} calculations per second) supercomputing infrastructure, in order to match the demanding application requirements of Europe's scientific and industrial users;
- supporting the development of European supercomputing technology, including research and innovation for building hardware as well as the applications (software) to run on them. For example, this includes developing the first generation of European low-power microprocessor technology and the co-design of European exascale machines (capable of at least a billion billion or 10^{18} calculations per second);
 - fostering advanced skills development and wider use of supercomputing across the EU;
 - supporting the creation, networking and coordination of national High-Performance Computing centres across the EU.

The Joint Undertaking builds on the [European declaration on High-Performance Computing](#) launched in 2017. Currently, [20 European countries](#) have signed the EuroHPC Declaration; other members are able to join at any moment, provided that they pledge a financial contribution.

The EU's contribution to EuroHPC Joint Undertaking will be around €486 million under the current Multiannual Financial Framework, matched by a similar amount from Member States and associated countries. Overall, it is envisaged that around €1 billion of public funding will be invested by 2020, and private members of the initiative may also add in-kind contributions.

The Joint Undertaking is expected to start operating in 2019 and remain operational until the end of 2026. It will provide financial support, in the form of procurement and research and innovation grants to participants following open and competitive calls. The new infrastructure will be jointly owned and operated by the Joint Undertaking members.

For More Information

Press release: [Cooperation for building a world-class supercomputers infrastructure in Europe](#)

[European declaration on High-Performance Computing](#)