DECLARATION

Cooperation framework on High Performance Computing

Bundesrepublik Deutschland

and

República Portuguesa

and

République française

and

Reino de España

and

Repubblica Italiana

and

Grand-Duché de Luxembourg

and

Koninkrijk der Nederlanden

The signing Member States agree to work together towards making available across the EU an integrated world-class high performance computing (HPC) infrastructure, which in combination with European data and network infrastructures would upraise Europe's scientific capabilities and industrial competitiveness.

On 19 April 2016 the European Commission adopted the Communication *'European Cloud Initiative – Building a competitive data and knowledge economy in Europe'*. The Communication calls on the European Commission and Member States to create a leading European High Performance Computing and Big Data ecosystem, underpinned by a world-class high performance computing, data and network infrastructure. Such infrastructure will also *support the EU to rank among the world's top supercomputing powers by realising exascale supercomputers around 2022, based on EU technology. Europe should aim to have at least two sources of this technology.*

In June 2016, the European Council called for *swift and determined progress to create the right conditions for stimulating new business opportunities by coordinating EU efforts on high-performance computing.*

This Declaration builds on the progress made by the Pan-European High Performance Computing infrastructure and services (PRACE), and in particular on PRACE-2, federating existing supercomputing centres and agencies in Europe and offering world class computing and data management resources for science.

This Declaration recognises the progress made by the trans-European network (GÉANT) and National Research and Education Networks (NREN) providing high speed, high bandwidth computing and data connectivity across Europe.

This Declaration also recognises the work towards setting up an Important Project of Common European Interest on "*High Performance Computing and Big Data enabled Applications*" (IPCEI on HPC and BDA). The IPCEI is under preparation by Luxembourg, France, Italy and Spain, is open to other Member States to join, and will include the development of industrial applications that need exascale supercomputing and data infrastructures.

The participating Member States:

- Agree to work towards the establishment of a cooperation framework – EuroHPC – for acquiring and deploying an integrated exascale supercomputing infrastructure that will be available across the EU for scientific communities as well as public and private partners, no matter where supercomputers are located.

- Agree, in the context of EuroHPC, to work together and with the European Commission to prepare, preferably by the end of 2017, an implementation roadmap for putting in place the above-mentioned exascale supercomputing infrastructure that would address the following:

  1. The technical and operational requirements and the financial resources needed for acquiring such infrastructure.

  2. The definition of appropriate legal and financial instruments for such acquisition.

  3. The procurement processes for the acquisition of two world-class pre-exascale supercomputers preferably starting on 2019-2020, and two world-class full exascale supercomputers preferably starting on 2022-2023.

  4. The development of high-quality competitive European technology, its optimisation through a co-design approach and its integration in at least one of the two exascale supercomputers.

  5. The development of test-beds for HPC and big data applications for scientific, public administration and industrial purposes.

- Invite the European Commission to participate in this endeavour and work together on how it can be best supported at EU level.

- Agree that the target exascale supercomputing infrastructure will address the growing needs of the scientific community, and to look also for ways and conditions to open the availability of
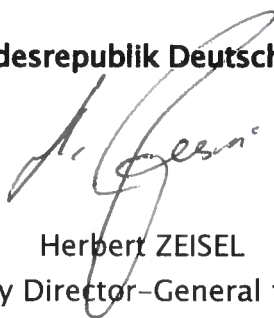
this infrastructure to users from industry and the public sector, while guaranteeing the best use of the infrastructure for scientific excellence and an innovative and competitive industry.

- Agree to enable the development of applications and services, for example those proposed in the IPCEI on HPC and BDA.

- Invite all Member States and Associated Countries to join EuroHPC.
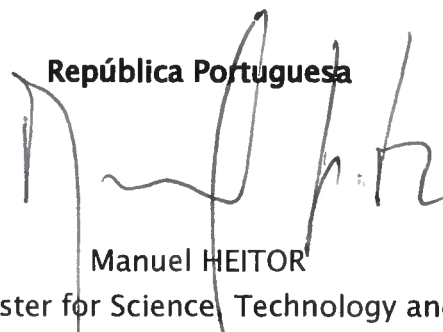
Additional signatories may adhere at any time.
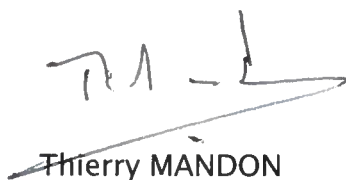
For the

Bundesrepublik Deutschland

Herbert ZEISEL
Deputy Director-General for Key
Technologies for Growth, Ministry of
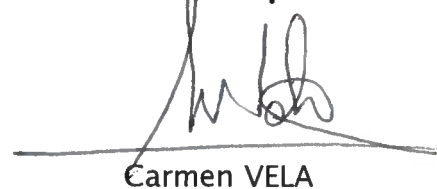Education and Research

República Portuguesa

Manuel HEITOR
Minister for Science, Technology and
Higher Education

République française

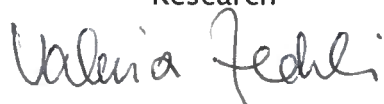Thierry MANDON
Secretary of State for Higher Education
and Research

Reino de España

Carmen VELA
Secretary of State for Research,
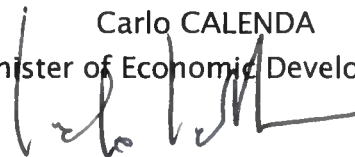Development and Innovation

Repubblica Italiana   **Repubblica Italiana**

Valeria FEDELI
Minister of Education, University and
Research

Carlo CALENDA
Minister of Economic Development

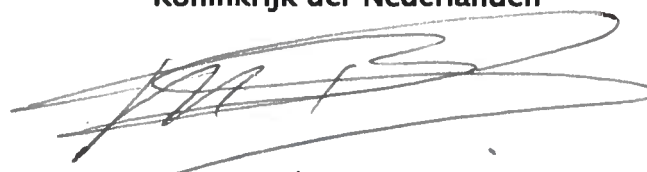**Grand Duché de Luxembourg**   **Koninkrijk der Nederlanden**

Étienne SCHNEIDER
Deputy Prime Minister,
Minister of the Economy

Mark BRESSERS
Director for ICT policies, Ministry of
Economic Affairs

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language