



# **The European HPC strategy – the European Data Infrastructure (EDI)**

**Forum Teratec 2017 - 27/06/17**

Khalil Rouhana  
Deputy Director General  
DG CONNECT  
European Commission

# HPC - High on the European agenda



## European Commission President Jean-Claude Juncker

*"Our ambition is for Europe to become one of the top 3 world leaders in high-performance computing by 2020"*

Paris, 27 October 2015

## Vice-President Andrus Ansip

*"I encourage even more EU countries to engage in this ambitious endeavour"*

*Ministers from seven MS (France, Germany, Italy, Luxembourg, Netherlands, Portugal and Spain) sign a declaration to support the next generation of computing and data infrastructures -**EUROHPC***



Digital Day Rome, 23 March 2017

# EuroHPC - Rome Declaration

23 March 2017



- **EUROHPC** → A multi-government agreement for acquiring and deploying an integrated *exascale supercomputing infrastructure* available across the EU for scientific communities, public and private partners
- *Prepare by the end of 2017, an implementation roadmap addressing:*
  - Requirements and funding resources
  - Legal and financial instruments
  - Procurement process of two pre-exascale supercomputers (2019-2020) and of two full exascale supercomputers (2022-2023)
  - Development of high-quality competitive European technology, its optimisation through co-design and its integration in at least one of the two exascale systems
  - Test-beds for scientific, public administration and industrial applications
- **Invite all Member States and Associated Countries to join**

# The European HPC strategy



## To develop a thriving European HPC ecosystem:

- 1. Capacity of acquiring leadership-class computers**
  - making available HPC infrastructure and services to a wide range of scientific, industrial and public sector users
- 2. Securing our own independent HPC system supply,**
  - i.e. by developing new European technology such as low power HPC chip
- 3. Excellence in HPC applications, and widen the HPC use**
  - developing, preparing and optimising the HPC codes and applications for future exascale systems, and actions for increasing the innovation potential of industry and SMEs

# Resources for the HPC strategy



- HPC-related Horizon 2020 activities supporting the full HPC ecosystem development covering:
  - Technology development (*including a FPA in low-power HPC processor*)
  - Co-design and integration (*prototypes, Extreme Scale Demonstrators*)
  - Applications (*Centres of Excellence on HPC, large scale test-beds and pilot applications*)
  - HPC infrastructure development (*PRACE, Public Procurement for Innovation on HPC*)
  - Widening use of HPC
- Connecting Europe Facility (CEF) for a new generation of HPC and data-powered public services



European  
Commission

**THANK YOU!**