EuroHPC - the European strategy for supercomputing

Update for HPC User Forum Sept 2019
The EuroHPC Joint Undertaking (EuroHPC JU)

A legal and funding agency created by the European Council

- EU + 29 Participating States
- Site: Luxembourg
- Budget (2019-2020): ~1 Billion Euros (half from EU)
- Operational: Nov. 2018 to end 2026

Mission: Establish an integrated world-class supercomputing & data infrastructure and support a highly competitive and innovative Supercomputing and Big Data ecosystem
EuroHPC delivers a leading European supercomputing infrastructure

High-range Supercomputers

3 sites selected
performance: 150-200 Pflops

Investment: ~€650 million (CAPEX+OPEX)
50% from EU and 50% from Consortium

Sites and supporting Consortia
- Kajaani (FI) – FI, BE, CZ, DK, NO, PL, SE, CH, EE
- Barcelona (ES) – ES, HR, PT, TR, IE
- Bologna (IT) – IT, SI, HU

EuroHPC JU is the owner
- Open procurement starts in Q4 2019
- expected installation Q4 2020)

Medium-to-high range Supercomputers

5 sites selected
performance: at least 4 Pflops

Investment: 180 million Euros (CAPEX)
34 Million from EU

Sites and supporting Consortia
- Bissen (LU) – LU
- Minho (PT) – PT, ES
- Ostrava (CZ) – CZ
- Maribor (SI) – SI
- Sofia (BG) – BG

EuroHPC JU is co-owner
- Open procurement starts in Q4 2019
- expected installation by Q2-Q3 2020)
R&I Activities for strengthening the HPC Ecosystem

More than 360 M€ for R&I activities in 2019-2020

- **Technologies, Systems and Applications for extreme computing**
  - Next generation low-power microprocessors
  - Novel computing architectures, software, and tools (including mixed HPC, AI, Big Data workloads)
  - Pilot system demonstrators towards Exascale
  - HPC and Big Data application platforms in strategic European industrial sectors
  - Support to (science-based) Centres of Excellence

- **Supporting large-scale HPC capacity building and widening HPC use**
  - A network of national HPC competence centres and their coordination
  - Support to innovative SMEs
  - Support to large-scale training and skills building