ETP4HPC UPDATE
@ 68TH HPC USER FORUM

TGCC - March 6, 2018

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ETP4HPC ASSOCIATION

“Building a globally competitive European world-class HPC technology value chain”

Industry-led think tank founded in 2012
Private partner of the HPC cPPP with the European Commission

December 2017:
86 Members
44 Private / 29 SMEs
38 Research organisations

http://www.etp4hpc.eu/  office@etp4hpc.eu
**ETP4HPC MAIN REMIT**

**Main remit:**
Provide input to define H2020 HPC R&D programmes funded and operated by the EC
Tool = “Strategic Research Agenda” – SRA

**Other activities**
HPC global ecosystem development (cf EXDCI)

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"Exascale" target seen as driver for technology excellence in:

- scalability
- resiliency
- energy efficiency
- programmability
- usability

- ETP4HPC’s roadmap covers research for entire performance spectrum
  
  Extreme scale only does not make up a market

- Incentive for Europe’s HPC technology providers (HW/SW), incl. many SMEs
CURRENT PORTFOLIO
PROJECTS FUNDED IN 2015-2017

... COMING SOON (NEXT WEEK)

2017 ACTIVITY REPORT
EXTREME-SCALE DEMONSTRATORS

**HPC Centers**
- Participate in the co-design process
- Manage system deployment
- Operate
- Validate and characterise the system

**Technology Providers**
- Ensure the integration of the technologies
- Perform the testing and quality/performance assurance
- Perform the maintenance and service

1. Integrate results of R&D projects into fully integrated systems prototypes.
2. Establish proof-points for the readiness, usability and scalability of the technologies

**Application owners**
- Define application requirements
- Port and optimise applications

**EsD 2018:**
- **technology advancements**
  - designpoint: 500-1000 PF
  - power eff.: 35kW/PFLOPS
  - density: 1PF/rack
  - I/O balanced design

**EsD 2020 (?)**
- **technology:** next generation
- **new deployment areas:**
  - HPDA / ML
  - ....