

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



ETP4HPC MAIN REMIT

Main remit:

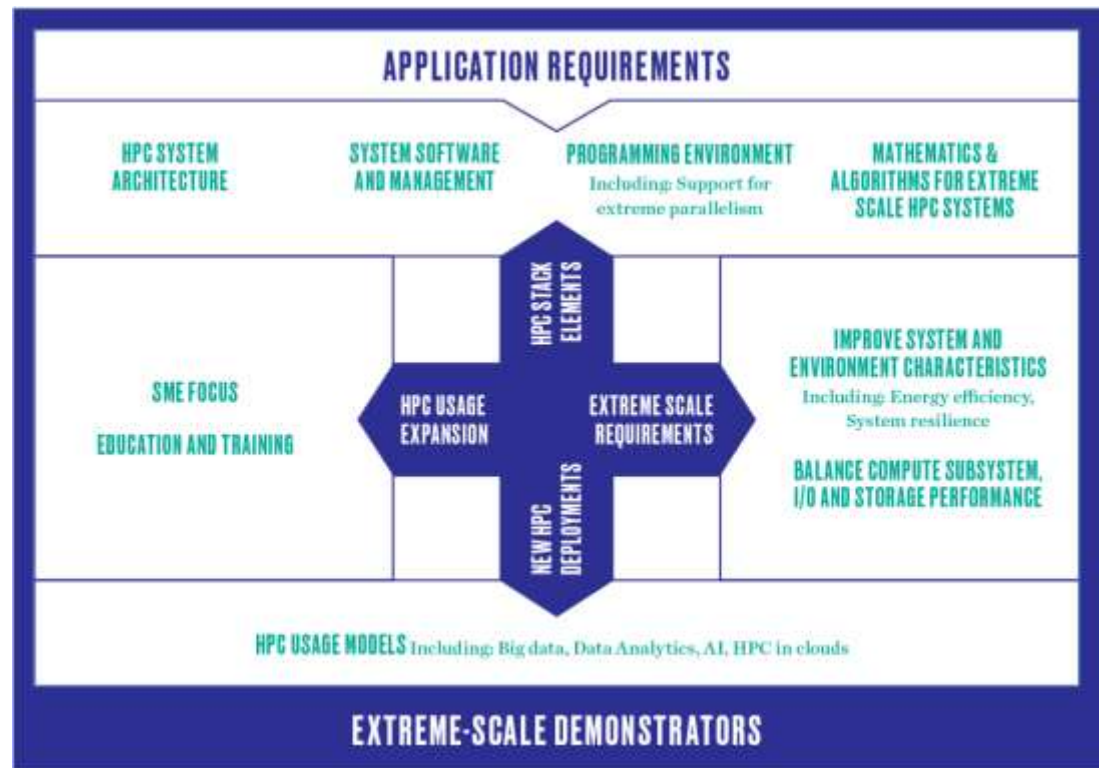
Provide input to define H2020 HPC R&D programmes funded and operated by the EC

Tool = “Strategic Research Agenda” – SRA

<http://www.etp4hpc.eu/en/sra.html>

Other activities

HPC global ecosystem development (cf EXDCI)



BUILDING A SUSTAINABLE HPC ECO SYSTEM

“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

HTTP://WWW.ETP4HPC.EU/SRA.HTML



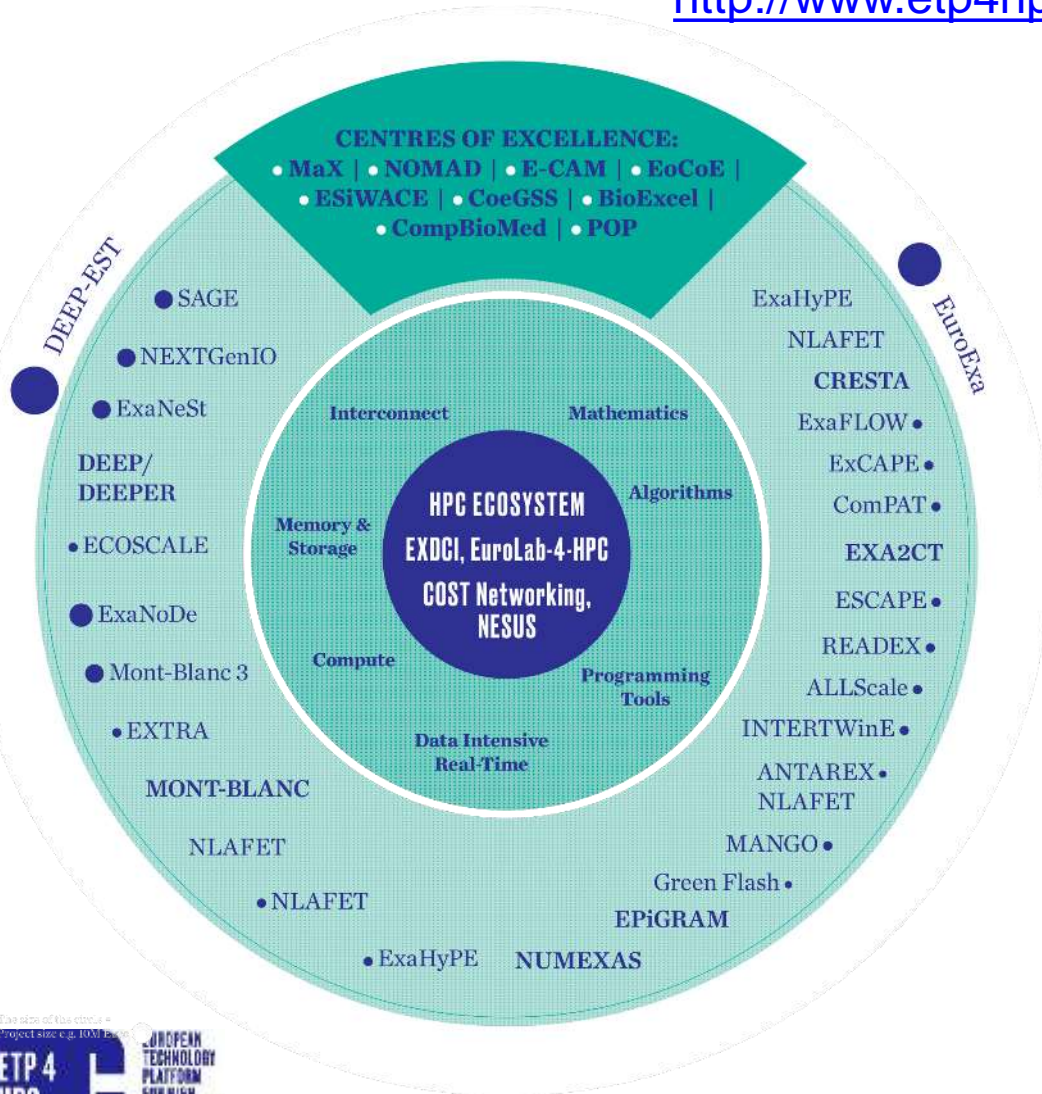
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CURRENT PORTFOLIO

PROJECTS FUNDED IN 2015-2017

<http://www.etp4hpc.eu/en/european-hpc-handbook.html>



2017 EUROPEAN HPC HANDBOOK

Our 2017 European HPC Handbook is available. This professional publication details the HPC Technology and Applications Projects within the European HPC ecosystem. It will be distributed at our Supercomputing 2017 Birds-of-a-Feather Session in Denver (14th Nov 2017, 5.15pm).

If you wish to receive a hard copy, please contact the Office:

... COMING SOON (NEXT WEEK)

2017 ACTIVITY REPORT



**EUROPEAN TECHNOLOGY
PLATFORM FOR HIGH
PERFORMANCE COMPUTING**

WWW.ETP4HPC.EU

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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
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