



EXDCI workshop

CoEs: Way forward

Prague, 9th May 2016

Andrea Feltrin, DG CONNECT, European Commission

Maximise Value

Press release (project as a whole and also by at least by some of the partners locally)

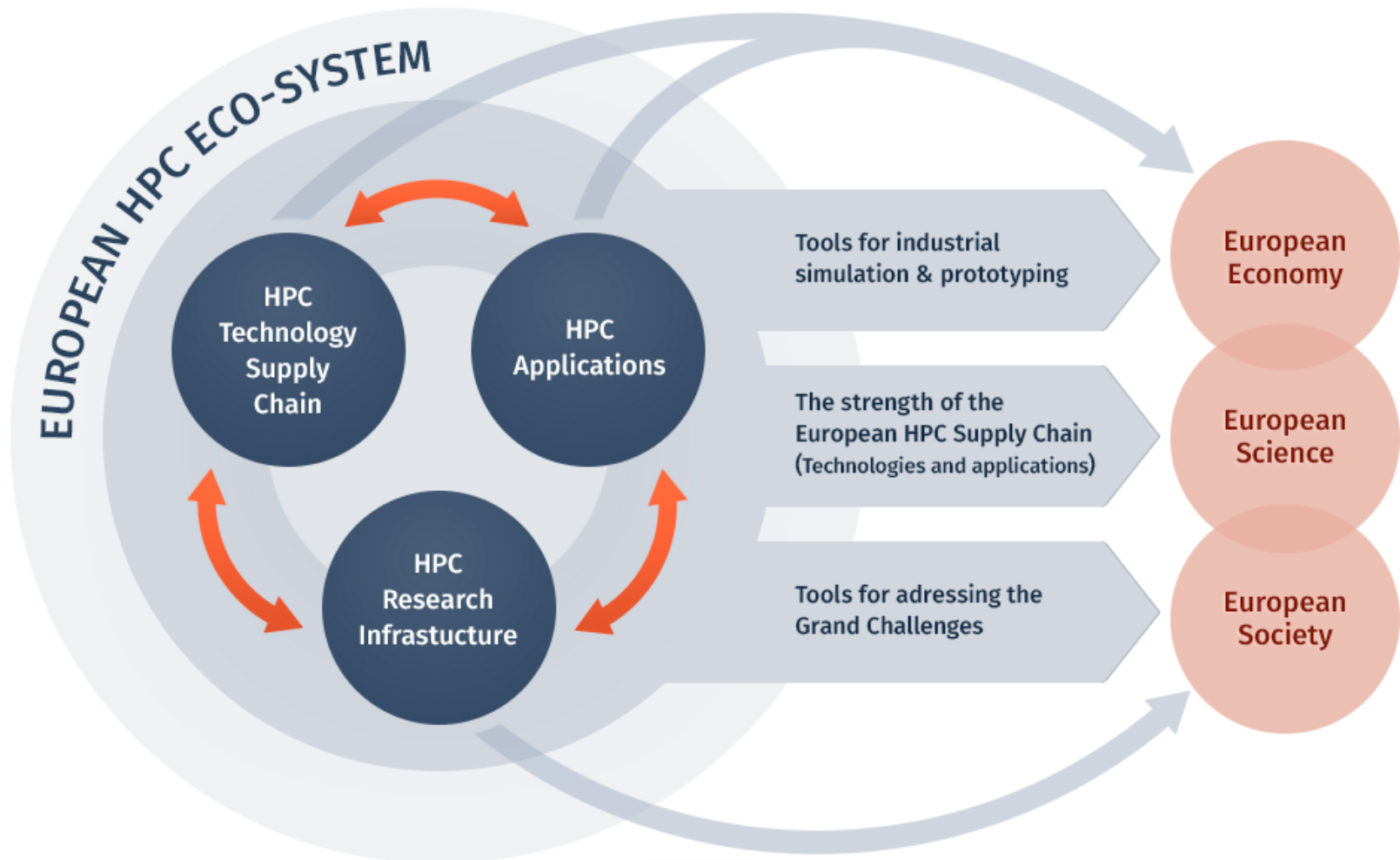
Website for the project (as soon as the project starts)

Brochure and easily understandable information of the project

Mobilise the stakeholders/constituents

Critical mass (ie how the project can stand out as a major force in that sector, and identify steps to be taken to build it)

CoEs role in HPC ecosystem

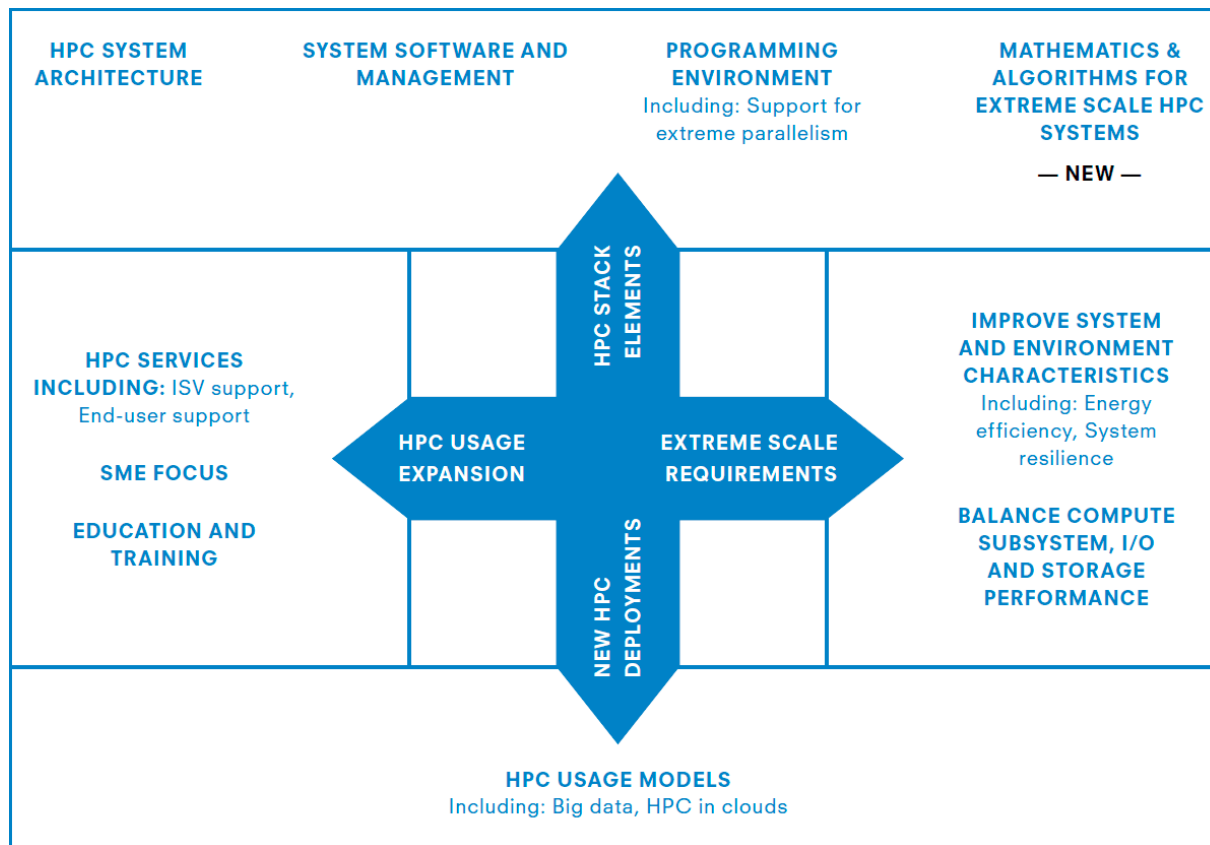


World-wide HPC revenue (IDC)

15.5B\$ by 2019

WW High-Performance Systems Revenue by Verticals/Application Areas			
	2015	2019	CAGR 14-19
Bio-Sciences	1,097,528	1,378,060	4.0%
CAE	1,307,487	1,726,271	8.1%
Chemical Engineering	189,023	220,766	6.8%
DCC & Distribution	709,349	871,773	6.6%
Economics/Financial	618,338	850,892	19.9%
EDA / IT / ISV	812,236	1,100,507	11.2%
Geosciences	843,387	1,149,844	10.4%
Mechanical Design	61,460	64,136	4.2%
Defense	1,147,661	1,559,968	10.0%
Government Lab	1,999,262	3,018,993	8.2%
University/Academic	2,056,107	2,759,222	8.6%
Weather	496,854	626,445	6.4%
Other	95,495	142,916	8.2%
Total Revenue	11,434,186	15,469,792	8.6%

Input to HPC Strategic Research Agenda



Considerations for the future

CoEs to reflect on:

- the experience of the call organized in 2015
- sectorial roadmaps in collaboration with ETP4HPC

Window now to give input over the next months and contribute to the next work programme 2018-2020.



European Cloud

Communication published by the European Commission on April 19th 2016.

Key elements relating to HPC:

HPC infrastructure with exascale capacity to process data

Storage capacity to access & preserve large and complex data and software

High-speed connectivity to link and access data and software

The objective is to endow Europe with a trusted and world class data infrastructure.

Type of actions

High Performance Computing

- European native knowledge base to build key basic components and associated software (low power chip)
- Prototype EU HPC pre-exascale systems followed by fully operational HPC exascale machines
- Connect/upgrade HPC Tier 0 nodes and link them with the data infrastructure
- Support HPC centres of excellence for software and platforms adaptation to exascale

Data and software

- Rationalise and upgrade data centres and link them to HPC software centres of excellence
- Install the EU Data/CoE exascale storage node
- Operate a pan-European long term preservation infrastructure
- Support core services across domains (discoverability, long term preservation, access control)

Networking

- Upgrade network capacity from backbone to the campus and researcher desk to respond to the exascale challenge
- Rooted European platform for innovative big data-driven services in different application areas
- Balance better and extend geographic coverage



"Notre ambition c'est que d'ici 2020, l'Europe se classe dans le top 3 mondial du calcul à haute performance."

"Our ambition is that by 2020, Europe is in the world top 3 of high performance computing."

27 October 2015

European Commission President
Jean-Claude Juncker

Thank you for your attention