

ETP4HPC

PRACE Industrial Seminar

15th April 2013

Stuttgart



ETP4HPC

Agenda

- Promoting a Europe leadership in HPC
- SRA
- Way Forward

allinea

ARM

BSC
Barcelona
Supercomputing
Center
Centro Nacional de Supercomputación

BULL

CAPS

cea

CINECA

EUROTECH
Imagine. Build. Succeed.

Fraunhofer

IBM

intel

JÜLICH
FORSCHUNGSZENTRUM

lrz

PARTEC
CLUSTER
COMPETENCE
CENTER

life.augmented

xyratex

MAXELER
Technologies
MAXIMUM PERFORMANCE COMPUTING

INFN
Istituto Nazionale
di Fisica Nucleare

epcc

gnodal

numascale

Inria
Institut National de Recherche en Informatique et en Automatique

Ter@tec

ROGUE WAVE
SOFTWARE

KALRAY

HLRS

NVIDIA

TF

FINMECCANICA



Timeline

- June 2012
 - Announcement of the creation of the ETP
 - Vision Paper
- September 2012
 - Meeting with VP of European Commission Neelie Kroes
- June 2012 January 2013
 - Strategic Research Agenda preparation
- February 2013
 - First General Assembly
- H1 2013
 - Discussion with European Commission on the HPC position in Horizon 2020
- September 2013
 - General Assembly and election of the next board



Contact with the EC

- Letter to VP Neelie Kroes June 14th
 - Announcement of the creation of ETP4HPC and Vision Paper
- Meeting with VP Neelie Kroes September 27th
 - Economical impact of HPC
 - ETP4HPC objective
 - Potential impact of EC policy
- Document from the ETP4HPC November 1st
 - Europe achieving HPC leadership
- Letter from VP Neelie Kroes
 - Positive feedback



Europe achieving leadership in HPC

- Importance and impact of HPC
- 3 axes :
 - Development of HPC technology
 - Existence of world-class HPC e-infrastructure
 - Development of HPC application and use
- 3 key success factors
 - Coordination
 - Education and training
 - Focus on SMEs
- PPP could leverage all the stakeholder actions
- Budget for HPC technology development of 150 M€



NEELIE KROES

VICE-PRESIDENT OF THE EUROPEAN COMMISSION

Brussels,
Ares(2012)

11 DEC 2012

Thank you for your plan for the development of HPC in Europe. As I already said during our meeting on 27 September, your efforts are fully aligned with the implementation of the Commission strategy for HPC. I am therefore positive about your suggestion to prepare the grounds for a Public-Private Partnership in this area in Horizon 2020. Such an initiative should include the three elements of the strategy: development of exascale technologies, access to world-class HPC facilities and services for both industry and academia; and excellence in HPC applications. I encourage you to continue working with all stakeholders, to encompass these three components.

These plans are, of course, subject to availability of resources in Horizon 2020. The ambitious goals of the HPC strategy will need substantial means, and in this sense I also count on a strong mobilisation of your constituency to support the Commission's ambitious budget proposal for research and innovation 2014-2020, and to actively champion HPC in Council and Parliament.

Yours sincerely,



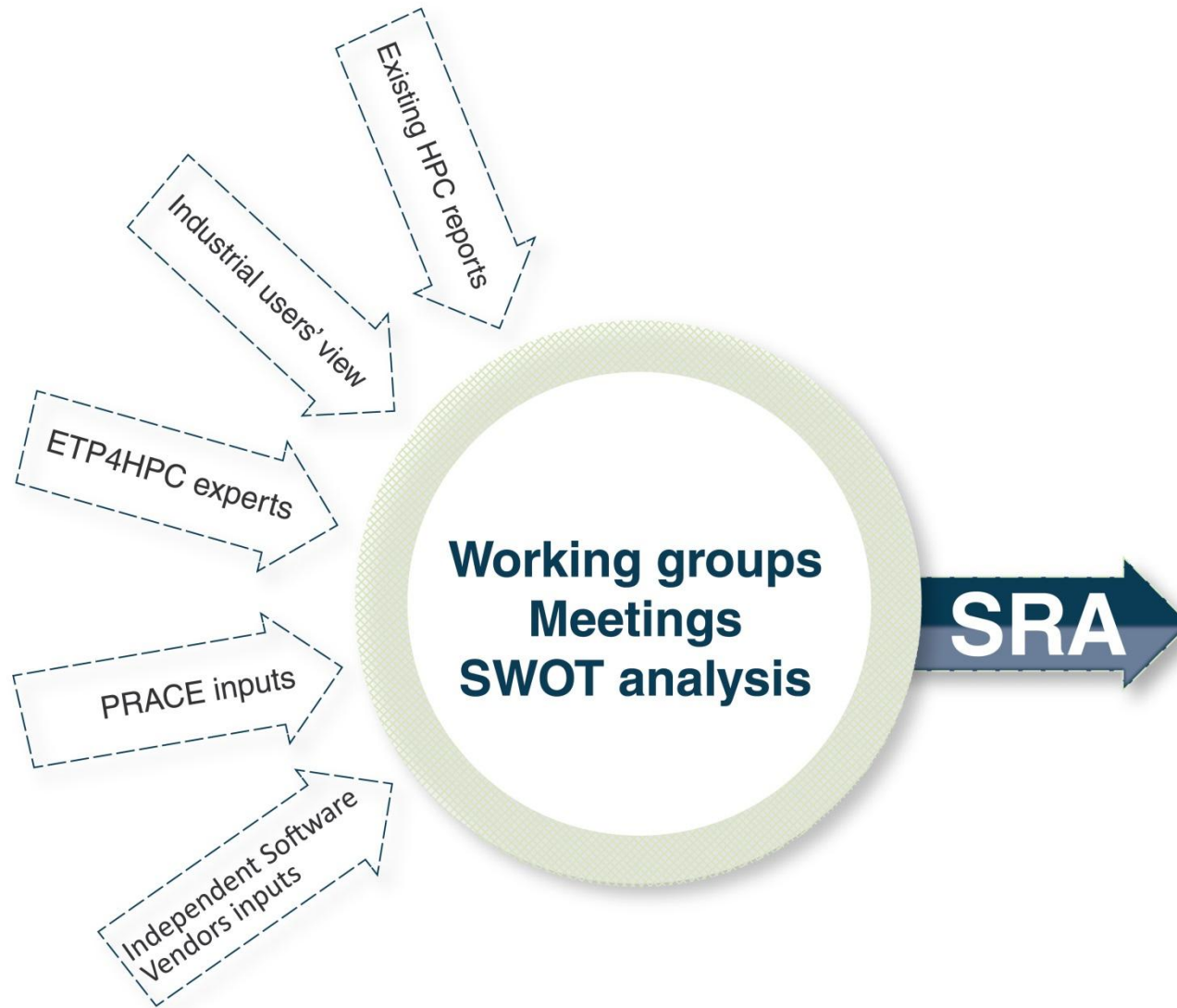
TP 4 HPC

Strategic Research Agenda

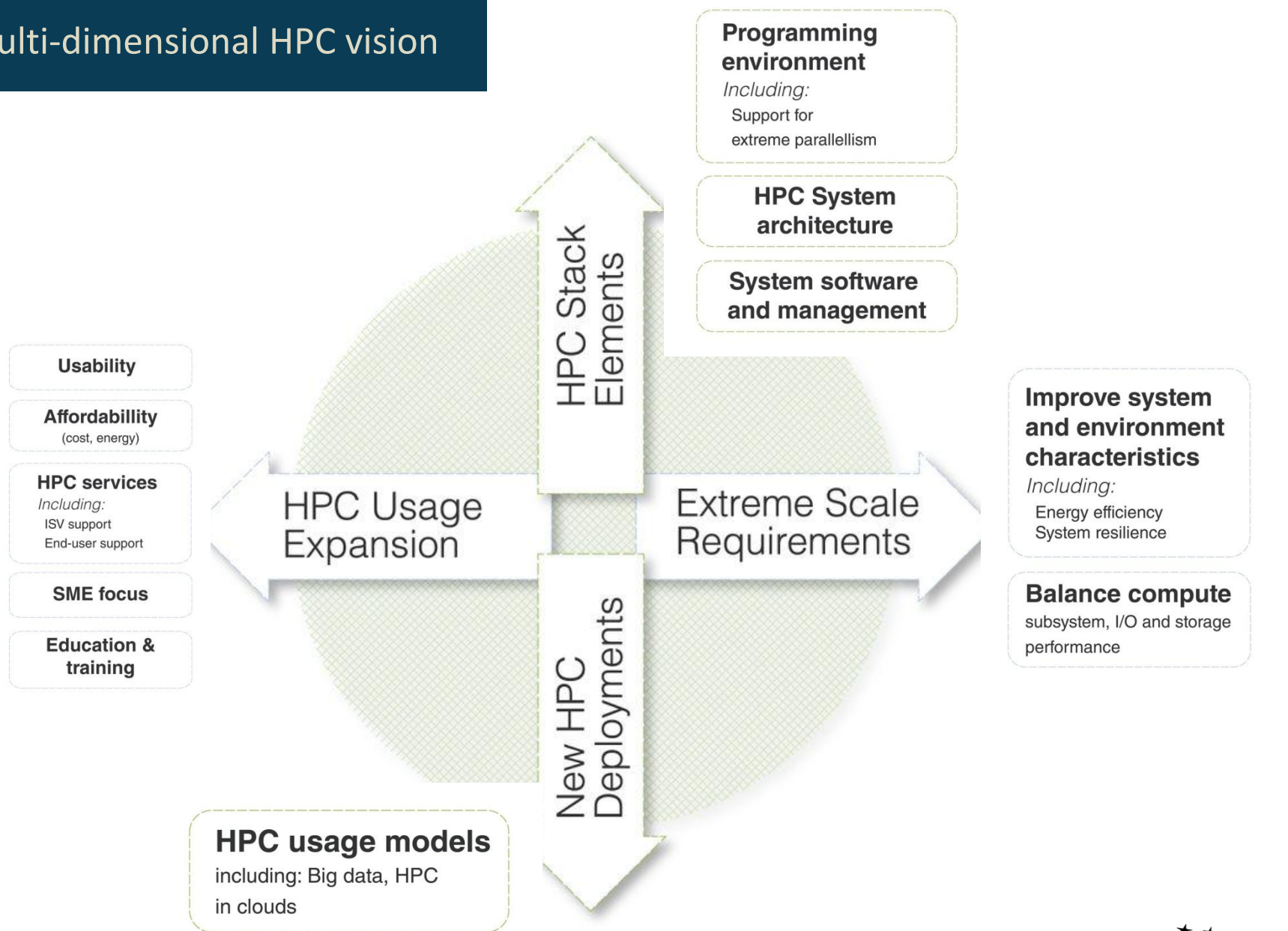
- Road map to develop HPC Technology in Europe
- Position of HPC within Horizon 2020 will be decided in the 4 coming months



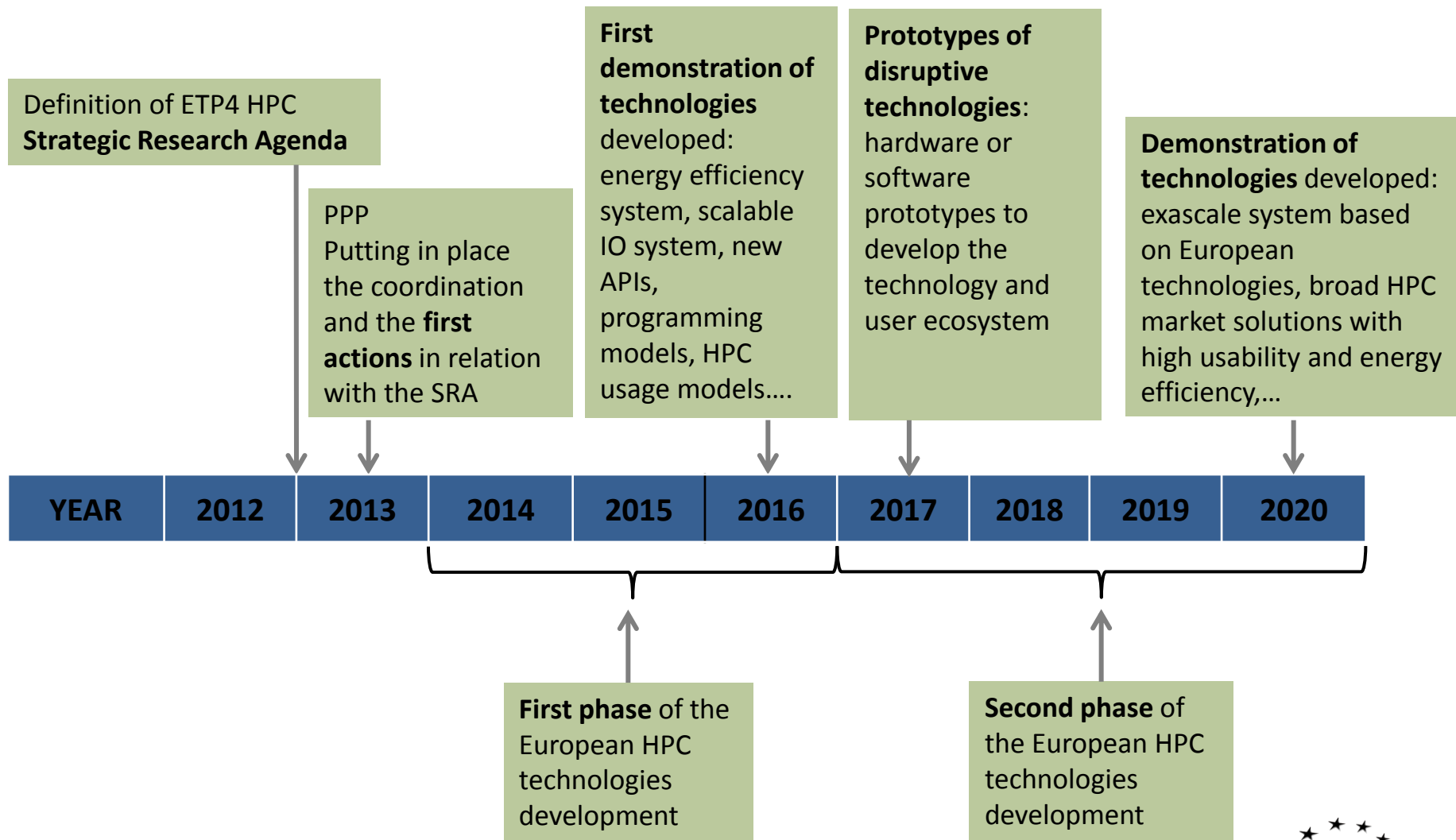
Creation of the SRA



A multi-dimensional HPC vision



The time line of the R&D program



2013 directions

- Making it happen
 - Working with stakeholders and EC to make the HPC development plan a reality
- Strengthening our ecosystem
 - Recruit new members
 - Creation of 2 workgroups : SMEs, Education and training
- Coordination
 - PRACE
 - Centres of Excellence
 - Future common JU Artemis+Eniac+EPoSS
 - Prospect, Teratec, EESI2



HPC in Horizon 2020

- Translate research priorities as described in SRA in project calls
- Promote HPC at all political levels (member states, European parliament,...)
- Prepare the right framework for the stakeholder coordination : working group for a common proposal from PRACE and ETP4HPC



Work groups

- SMEs:
 - To leverage for our ecosystem the EU support initiative for SMEs
 - Communication of successful HPC SMEs
 - Facilitate HPC development and testing infrastructure for SMEs...
- Education and training
 - Consolidate educational needs
 - Develop education and training directions
 - Encourage the establishment of E&T programs...



Questions ?

