

EuroHPC

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EUROPEAN STRATEGY



Communication of the EC April 2016

- *As part of the package of measures for Digitising European industry, the "European Cloud Initiative – Building a competitive data and knowledge economy in Europe" aims to strengthen Europe's position in data-driven innovation, improve its competitiveness and cohesion, and help create a Digital Single Market in Europe.*
- *This initiative will provide European science, industry and public authorities with:*
 - *a world-class data infrastructure to store and manage data;*
 - *high-speed connectivity to transport data; and*
 - *ever more powerful High Performance Computers to process data*

e-Infrastructures

→EOSC

→EuroHPC

EuroHPC JU Activities 2019-2020

EuroHPC – Activities



EuroHPC
Joint Undertaking

Infrastructure & Operations	R&I, Applications & Skills	JU Admin/Running costs	HPC Ecosystem	
~270	min 180	10	486 m€	EC
~290	~186	10	486 m€	Participating States
560	392	20	972 m€	Total
0	~420 (in kind)	2	422 m€	Private Members

■ Infrastructure + Operations

Acquisition of 2 pre-exascale machines and several (tbd) mid-range machines

■ Applications & Skills + R&I

R&I, exascale technologies and systems (incl. low-power processor); applications

■ JU Admin/running costs

■ JU Operation: 2019 to 2026



EuroHPC
Joint Undertaking

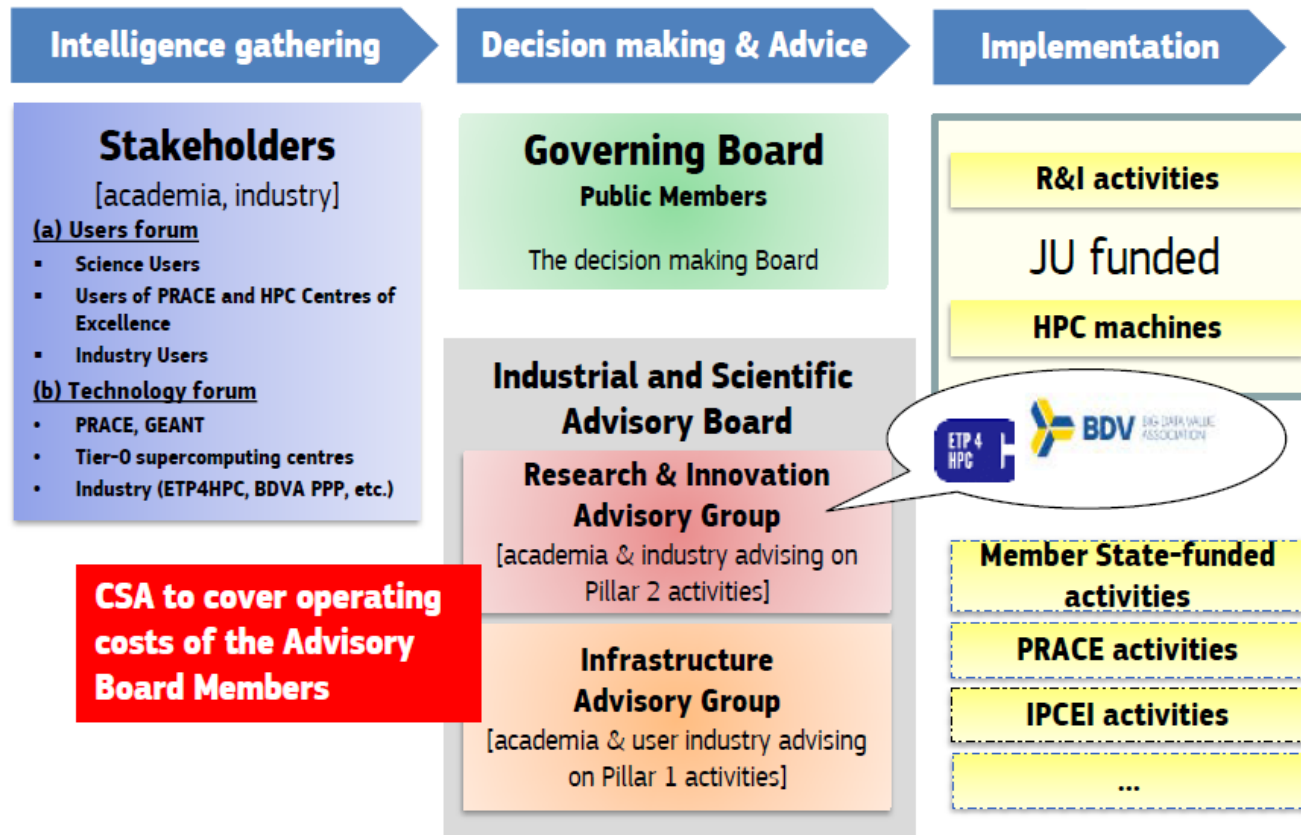
The status of the EuroHPC Joint Undertaking

- COUNCIL REGULATION (EU) 2018/1488 of 28 September 2018 establishing the European High Performance Computing Joint Undertaking
- Published in OJ on 08 October
- Enter into force: the twentieth date after OJ publication (Article 30 of the JU Regulation)
- EuroHPC Web site: <http://eurohpc-ju.europa.eu/>
- Twitter account: @EuroHPC_JU

Governing Structure



EuroHPC
Joint Undertaking



MEMBERS

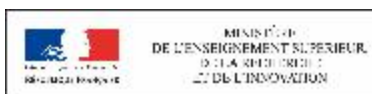
Governing Board Members Present:



EuroHPC
Joint Undertaking

	Austria	Ingo Hegny
	Belgium	Geert Van Grootel
	Bulgaria	Ivan Dimov
	Switzerland	Peter Brönnimann
	Croatia	Slaven Mihaljević
	Czech Rep.	Vít Vondrák
	Denmark	Lars Christensen
	Estonia	Toivo Räim
	European Commission	Thomas Skordas
	Finland	Erja Heikkinen
	France	Michel Raffay
	Germany	Stefan Mengel
	Greece	Panayiotis Tsanakas, Alikki Pappa
	Hungary	Tamás Maray
	Ireland	Barry Hennebry, Jean-Christophe Desplat

	Italy	Nando Minnella Marco Aldinucci
	Latvia	Jānis Paideris
	Lithuania	Juozas Šulskus
	Luxembourg	Jean-Marie Spaus
	The Netherlands	Mirjam M.P. Lieshout-Vijverberg Wendy Hoogeboom
	Norway	Kim Davis
	Poland	Mariusz Sterzel, Rafal Duczmal
	Portugal	Sofia Azevedo
	Romania	Dragos Barbu
	Slovakia	Miloš Koterec
	Slovenia	Peter Sterle
	Spain	Jose Manuel Silva Rodriguez, Clara Eugenia Garcia Garcia
	Sweden	Jonas Björck Hanifeh Khayyeri
	Turkey	Mehmet Mirat Satoğlu



Observers

	Cyprus	
	Malta	Richard Blundell
	United Kingdom	Nick Trigg

Composition



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Members

1. *Claus Axel Müller (Chair)*
2. *Sinead Ryan (Vice-Chair)*
3. *Daniel Verwaerde*
4. *Sanzio Bassini*
5. *Sergi Girona*
6. *Stoyan Markov*
7. *Norbert Meyer*
8. *Peter Michielse*
9. *Zoe Cournia*
10. *Minna Palmroth*
11. *Branislav Jansík*
12. *Lene Krøl Andersen*

Observers

1. *Dana Petcu*
2. *Peter Kacsuk*
3. *Manuel Fiolhais*
4. *Gunnar Bøe*
5. *Jožef Duhovnik*
6. *Herbert Störi*

EUROHPC RI-AG

RIAG members: Appointed by Private Members



EuroHPC
Joint Undertaking

Name	Gender	Affiliation		Nationality	Proposed by
Axel Auweter	male	Megware		DE	ETP4HPC
Carlo Cavazzoni	male	CINECA		IT	ETP4HPC
Jean Gonnord	male	CEA		FR	ETP4HPC
Thomas Hahn	male	Siemens		DE	BDVA
Jean-Pierre Panziera	male	ATOS		FR	ETP4HPC
Maria Perez	female	Technical University of Madrid	of ES		BDVA

EUROHPC RI-AG

RIAG members: Main shortlist



Name	Gender	Affiliation	Nationality	Proposed by
Tomi Ilijaš	male	Arctur	SI	SI, LV
Catherine Lambert	female	CERFACS	FR	FR
Thomas Lippert	male	JSC	DE	EC
Elisa Molinari	female	Modena & Reggio Emilia University	IT	IT, LT
Kenneth Ruud	male	Arctic University of Norway	NO	CZ
Mateo Valero	male	BSC	ES	EC, ES

RIAG members: Reserve shortlist



Name	Gender	Affiliation	Nationality	Proposed by
Mario Kovac	male	Zagreb University	HR	HR
Luis Silva	male	Lisbon University	PT	PT
Joost Vande Vondele	male	CSCS, ETHZ	BE	DK, BE
Erik Lindhal	male	Stockholm University	SE	FI, NO, EE
Marek Michalewicz	male	University of Warsaw	PL	PL

EUROHPC PILLAR-1



Calls Published in <https://eurohpc-ju.europa.eu/participate.html>
Q&A Pre-Exa: <https://eurohpc-ju.europa.eu/questions-and-answers-PE.html>
Q&A Peta: <https://eurohpc-ju.europa.eu/questions-and-answers-PT.html>

EUROHPC PILLAR-1

The Infrastructure Pillar: Supercomputers



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Precursors to exascale



*At least 2 Precursors to
exascale*



*EU contribution:
≤50% of CAPEX and ≤50% of
OPEX
MAX EU budget: 250 M€*

Petascale



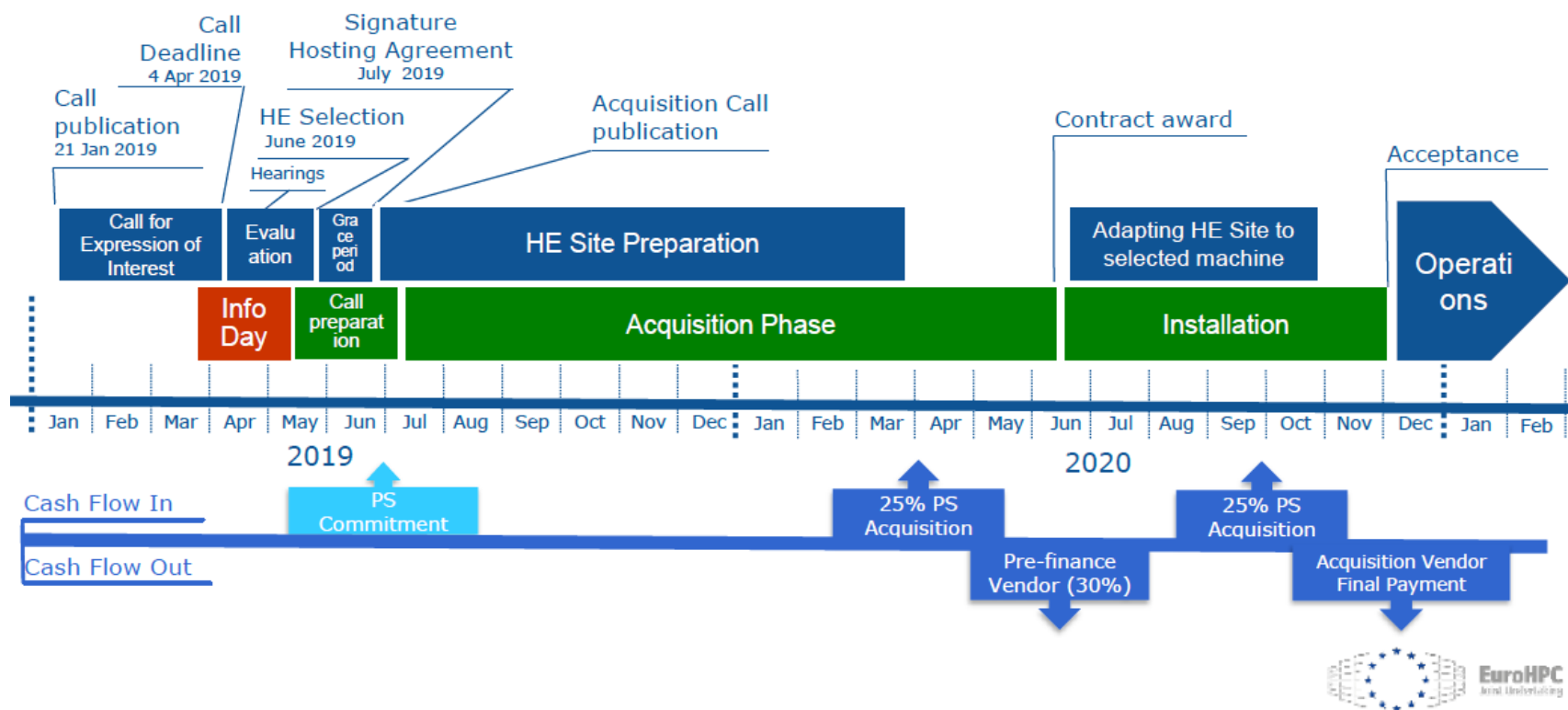
At least 2 Petascale



*EU contribution:
≤35% of CAPEX
MAX EU budget: 30 M€*

EUROHPC PILLAR-1

Acquisition Pre-exaScale – Indicative timeline



PRE-EXASCALE CONSORTIUMS

(pre)-exascale candidates for EuroHPC

- Pre-exascale – Finland led consortium
- Pre-exascale – Italy & Slovenia
- Pre-exascale – Spain led consortium
- Exascale – Germany
- Exascale – France
- Other EuroHPC countries



PETASCALE CONSORTIUMS

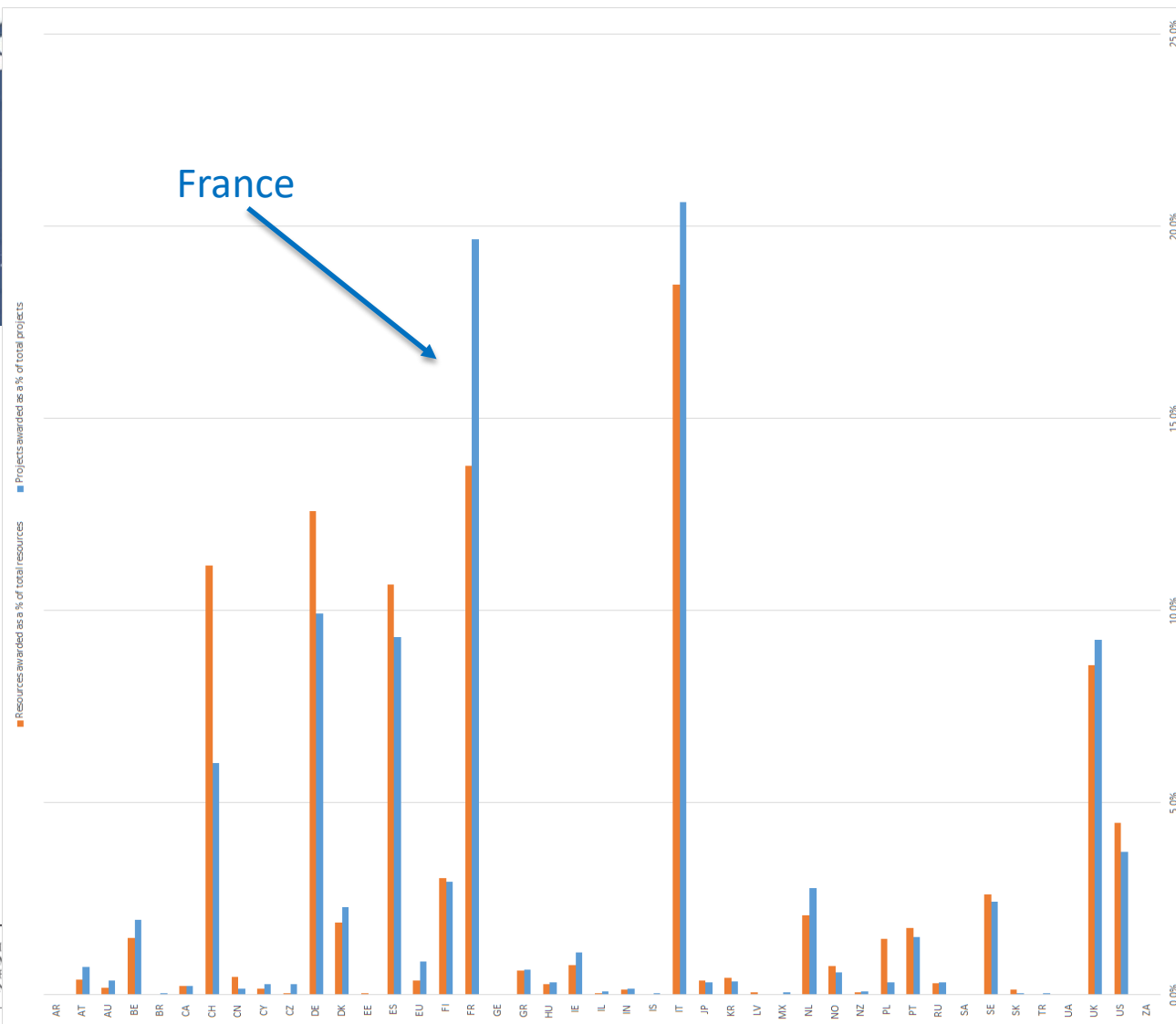
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- Exascale – France
- Other EuroHPC countries

 Petascale



EUROHPC AND PRACE



EUROHPC PILLAR-2 : WORK PROGRAM R&I

- Vote lors du GB de juin

- Input du RI-AG à l'Executive Director : SRA

- Proposition de l'Executive Director

- Itérations et vote du GB

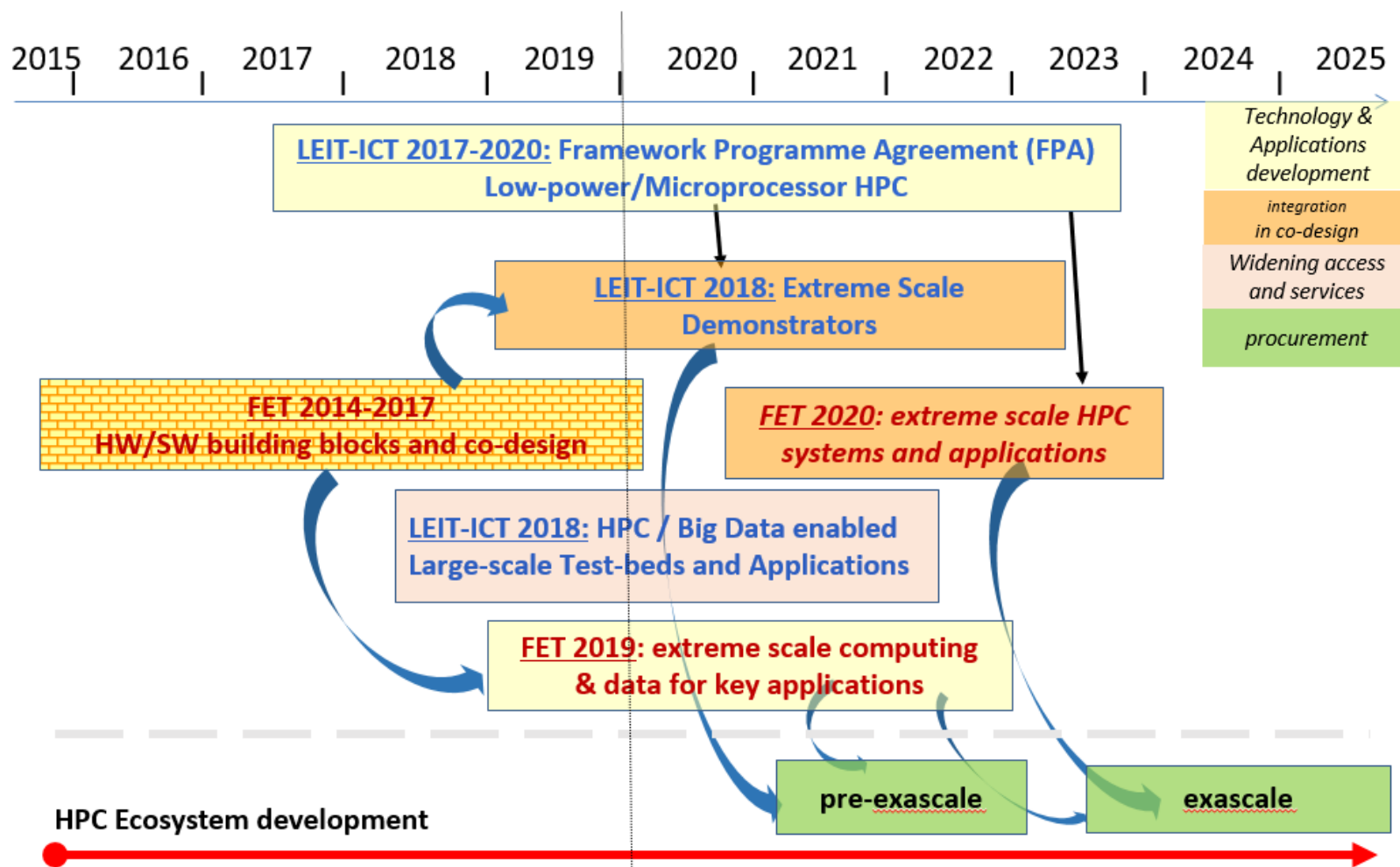
} Process d'élaboration
et de décision

- Plusieurs call largement inspirés de calls précédemment programmés au sein de H2020 (WP FET et ICT)

- Des nouveautés sur les applications, les Centres de Compétences

- Questions au sujet des modes de financement

WP R&I : CALLS REPRIS DE H2020



EUROHPC – AUTRES POINTS

<https://eurohpc-ju.europa.eu>

Questions ?