EURO

Strengthening the European HPC communities by addressing the skills and competence level

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The aim of this session

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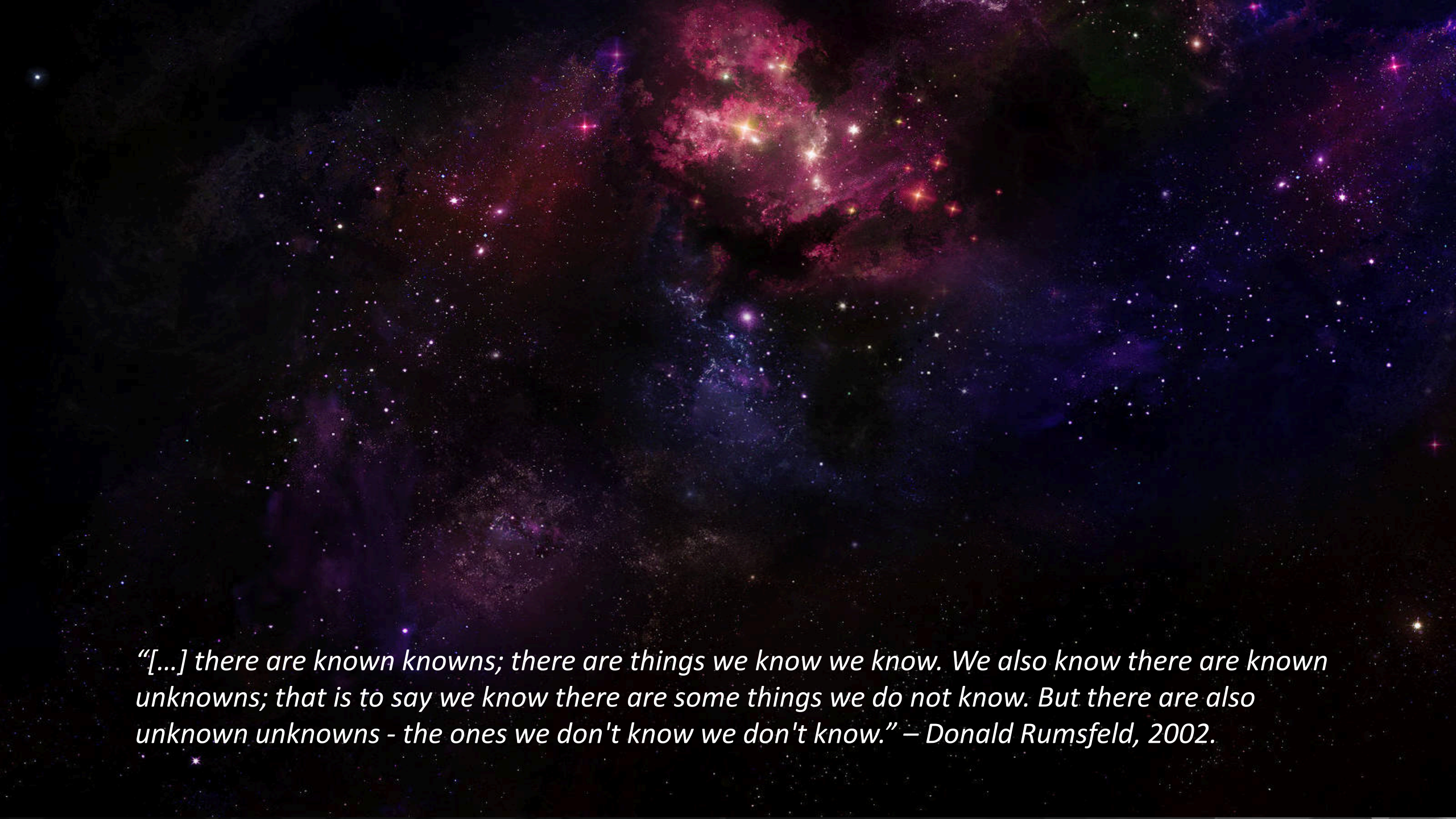
- To inform you about the mission and goals of the activities to implement National Competence Centres (NCCs)
- To provide you with an update on what has happened so far
- To give you insight on
  - Why we are doing this
  - What the benefit for the NCCs is
  - What the benefit for the HPC communities is

If you build it, *they* will come

This image was originally posted to **Flickr** by werkunz1 at https://www.flickr.com/photos/35375520@N07/3599784525


“[…] there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns - the ones we don't know we don't know.” – Donald Rumsfeld, 2002.

About Competences

An (or a set of) important skill(s) that is/are needed to do a job

The ability to do something well

Not necessarily attached to a certain domain

Something, which often needs a long learning phase (with trial & errors)

About HPC+ Competences

- Combining the levels

Shaping the European Competence Level

Addressing the challenge

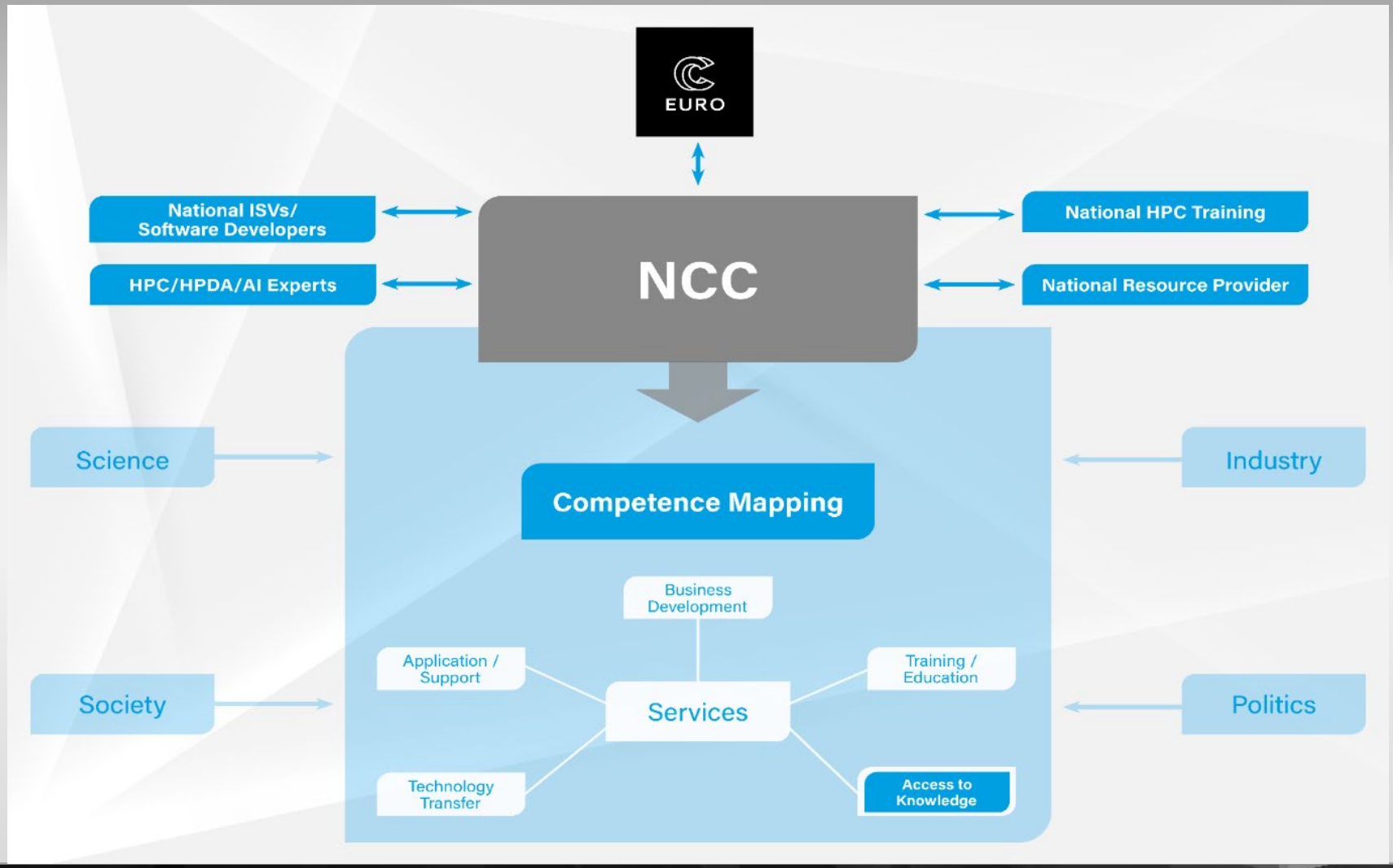
- Mission I: To set up National Competence Centres (NCCs)
  - Consideration of the different levels of maturity and activities in the individual participating nations.
  - The first phase is the creation of a structure to identify existing competences and to provide the necessary framework for the establishment of the NCCs.
- Mission II: To support the NCCs in the best possible way and to coordinate their interactions
  - Support the stimulation of national developments
  - Strengthen the European level of skills, qualifications and competences

Carrying out the mission

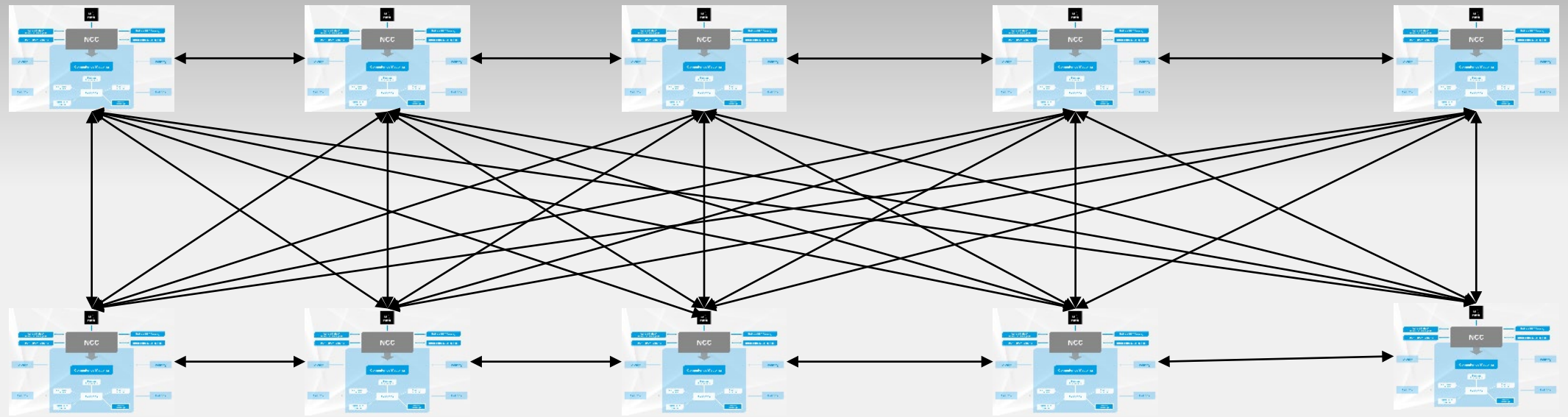
- Focus on commonalities (as identified in preparative discussions)
  - Training and Skills Development
  - Technology Transfer/Business Development
  - Industrial Collaboration
  - Competence Mapping
  - Facilitation of access to scientific and technical expertise and knowledge pools
  - Awareness Creation

- Each NCC to adopt a common approach in Phase 1
  - Simplifying the interaction of the cross-NCC levels

Example Structure of an NCC



Complexity of interaction



We currently have 33 National Competence Centres!

Towards cross-NCC collaboration

- Each NCC has one or more experts in a specific topic (champions principle)
- Need: one approach to bring these experts together (per topic)
- Approach:
  - Provide a forum by organizing working groups at European level
  - Involve the NCCs in the selection and definition of workshops within these working groups (on common topics of interest)
  - Initiate first working groups on
    - Training, Twinning, Mentoring
    - Industrial Interaction and Business Development
    - Awareness Creation and Outreach
- Goal:
  - Develop best practices that can be adopted by NCCs.
  - Provide access to knowledge, expertise and success stories of other NCCs
  - Facilitate discussions and solution finding for the problems of the NCCs

Driven by the NCCs!

From concepts to implementation

- EuroCC kicked-off as Research & Innovation Action in September 2020
- 36 Beneficiaries – 33 nations
- https://www.eurocc-access.eu/
- LinkedIn: EuroCC
- Twitter: @EuroCC_project
- Germany, Bulgaria, Austria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Greece, Hungary, Ireland, Italy, Lithuania,
  Latvia, Poland, Portugal, Romania, Slovenia, Spain, Sweden, United Kingdom, France, Netherlands, Belgium, Luxembourg, Slovakia, Norway, Switzerland, Turkey, Republic of North Macedonia, Iceland, Montenegro

From concepts to implementation

- CASTIEL kicked-off as Coordination and Support Action in September 2020
- 6 Beneficiaries – 5 nations
- https://www.eurocc-access.eu/
- LinkedIn: CASTIEL
- Twitter: @CASTIEL_project
- Close link and collaboration with EuroCC
- Germany, Italy, Spain, Belgium, France

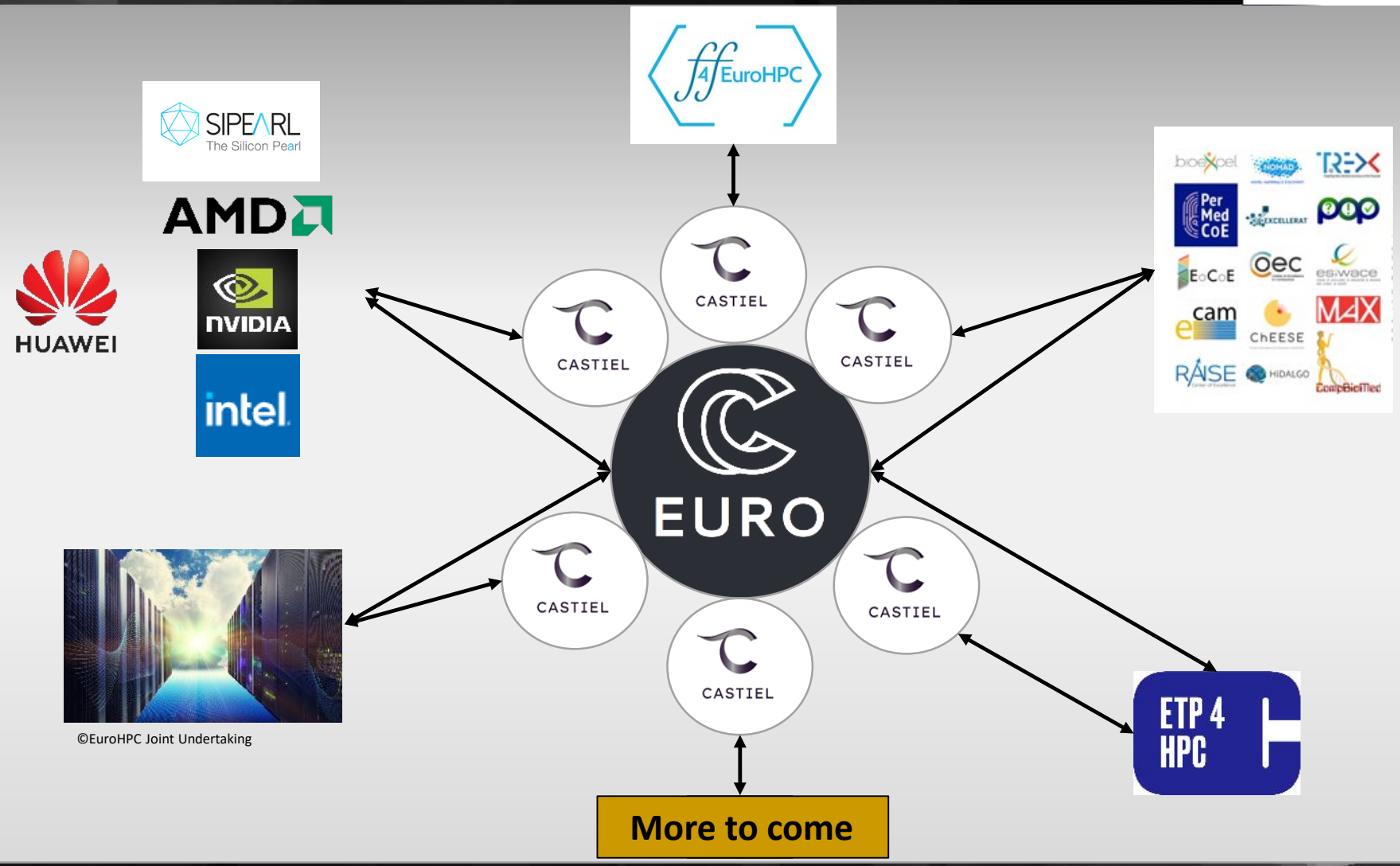
Some Numbers

- Many activities on the NCC level
  - > 50 workshops organized
  - > 85 training courses organized
  - > 75 interactions with industry

Competence Mapping

- National and European Level
  - Identification and collection of competence holders and their inclusion in the portfolio
- National Level
  - So far 153 detailed competences identified (which can be grouped into 53 sub-categories)
- Aim:
  - Integration of the NCC competence maps into the EuroAccess portal
    - NCCs as single access point at national level
    - EuroAccess as single access point at European level
    - Both interlinked

Interactions with running activities



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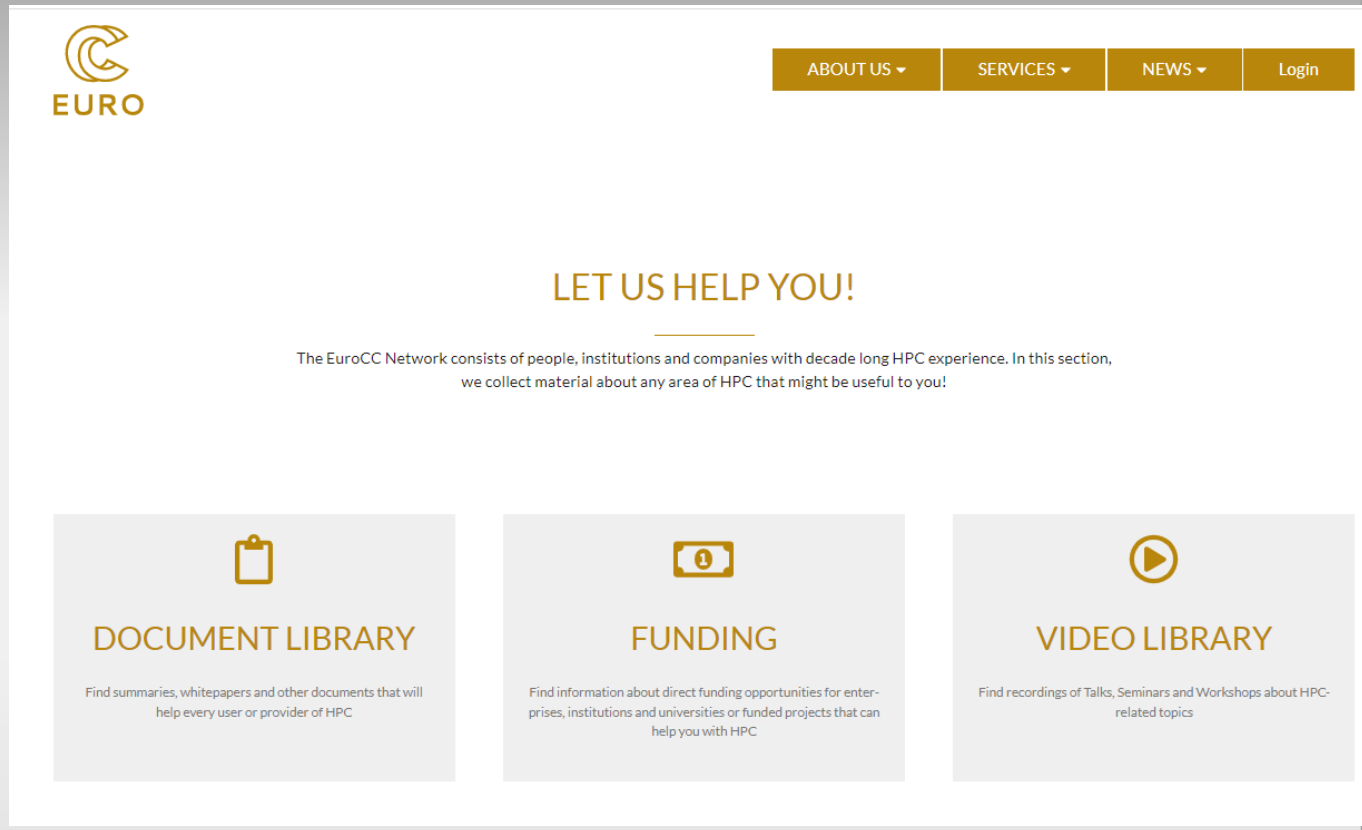
EuroCC Access

- The online portal to access
  - NCCs
  - Information
  - Competences
  - Trainings
  - Events
  - Contents
    - Documents as results of workshops
    - Funding opportunities
    - Videos from events and workshops
  - …

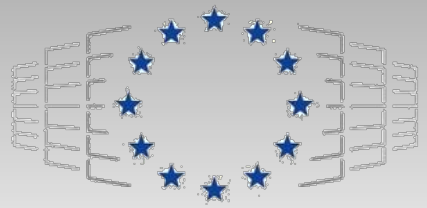


https://www.eurocc-access.eu/

Outlook

- EuroCC and CASTIEL end at 12/2022
- New call published to continue the NCC action
  - This time also covering coordination and support of the Centres of Excellence
- The successful establishment of the NCCs and the European exchange will
  - promote the use of HPC+ in Europe
  - create numerous success stories
  - provide guidance to ensure the best possible use of Peta-, Pre-Exascale and Exascale systems and their capabilities
- Competences not only in terms of technology, but also, for example, in terms of interaction with potential users (e.g. industry)

Thank You!



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Joint Undertaking

EUROCC: This project has received funding from the European High-Performance Computing Joint Undertaking (JU) under grant agreement No 951732. The JU receives support from the European Union's Horizon 2020 research and innovation programme and Germany, Bulgaria, Austria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Greece, Hungary, Ireland, Italy, Lithuania, Latvia, Poland, Portugal, Romania, Slovenia, Spain, Sweden, United Kingdom, France, Netherlands, Belgium, Luxembourg, Slovakia, Norway, Switzerland, Turkey, Republic of North Macedonia, Iceland, Montenegro

CASTIEL: This project has received funding from the European High-Performance Computing Joint Undertaking (JU) under grant agreement No 951740. The JU receives support from the European Union's Horizon 2020 research and innovation programme and Germany, Italy, Spain, France, Belgium