

HPC-Europa3 - travel, learn, compute, network



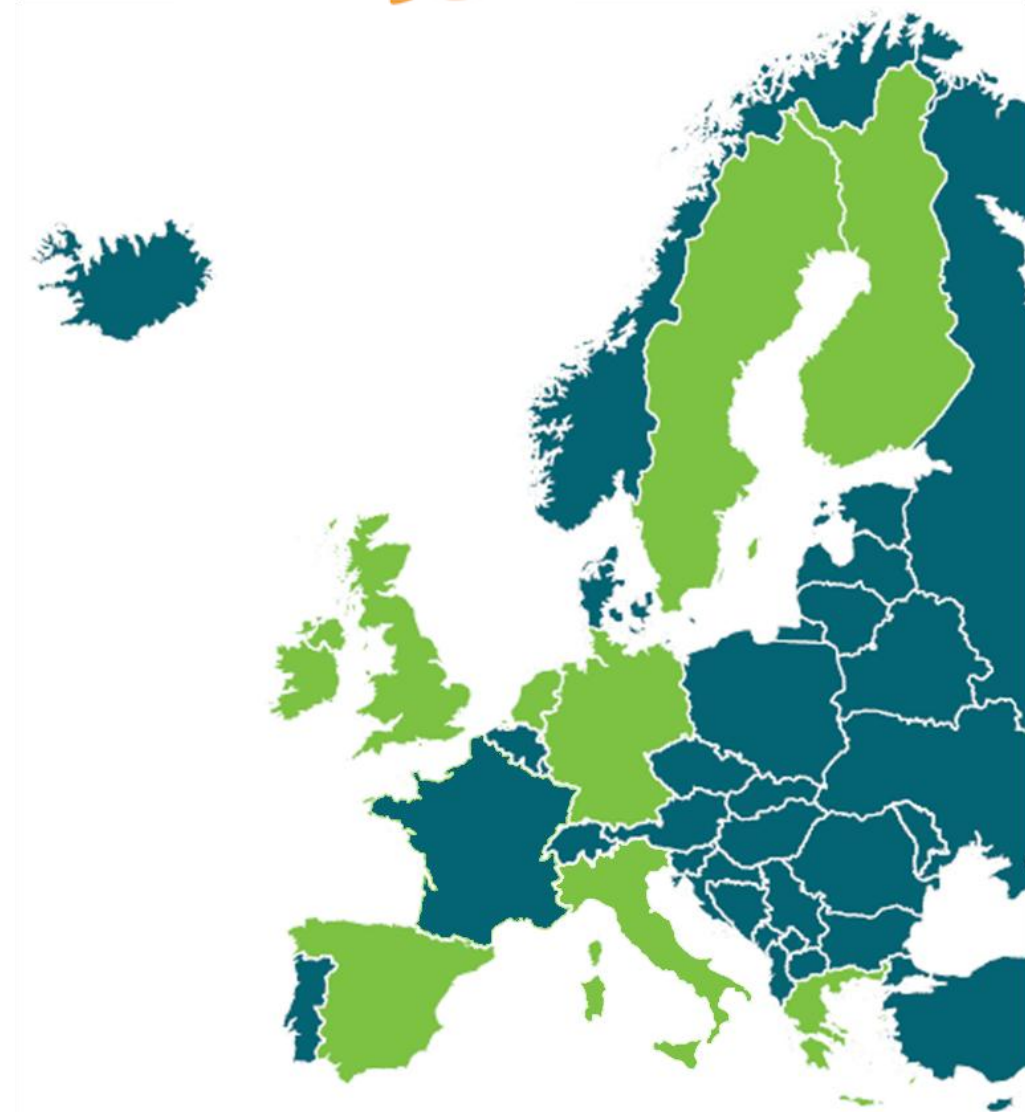
- What is HPC-Europa3?
- What do you get?
- Who can apply?
- Why would you apply?
- Where can you go, who can you invite?
- How do you apply?
- CSC as destination?

www.hpc-europa.eu



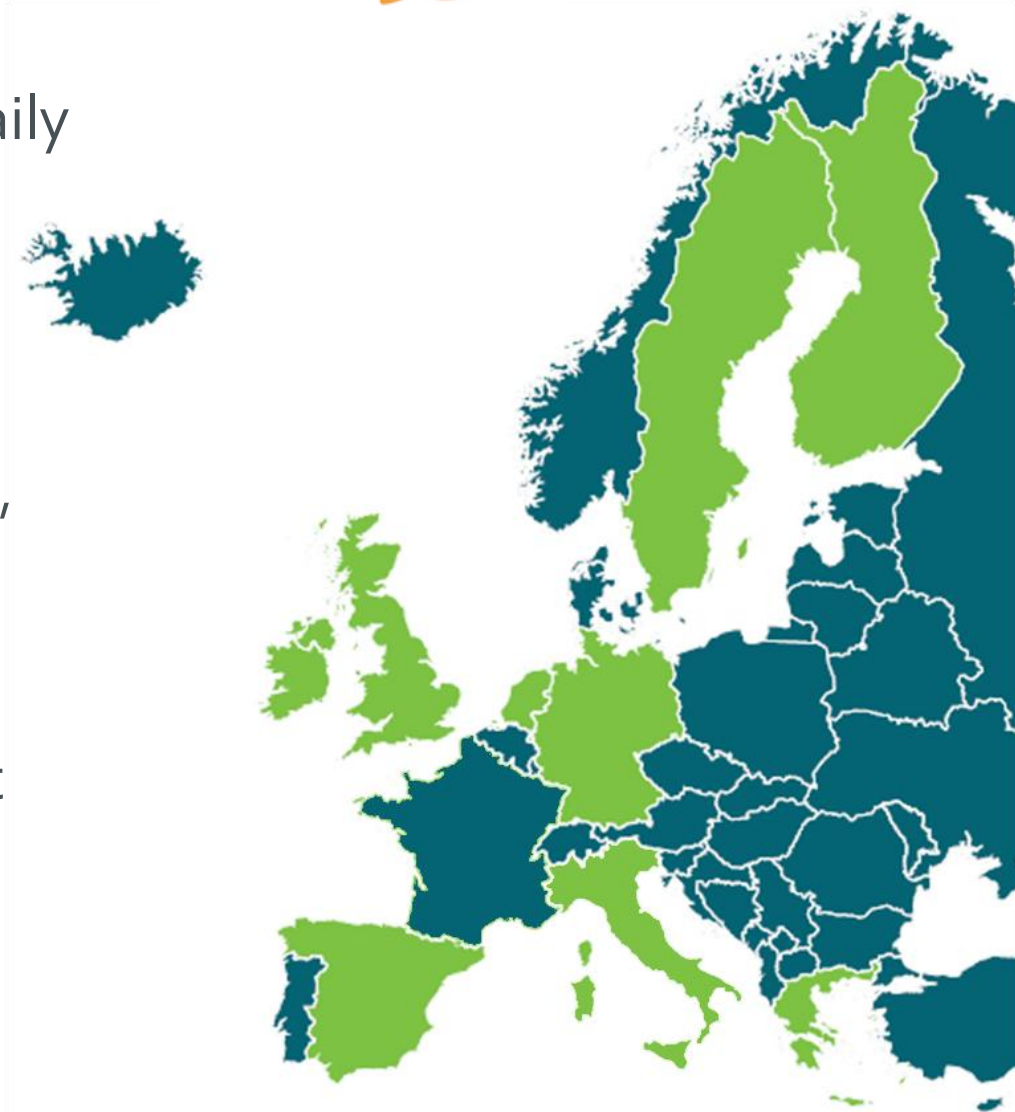
What is HPC-Europa?

- EC programme to foster international research collaboration using High Performance Computing (HPC)
- Continuation to HPC and HPC2 (ended in 2014)
- Facilitates adopting HPC to new scientific disciplines
- Funds research visits using HPC
- Explores containers as a means for taking your code and workflows with you



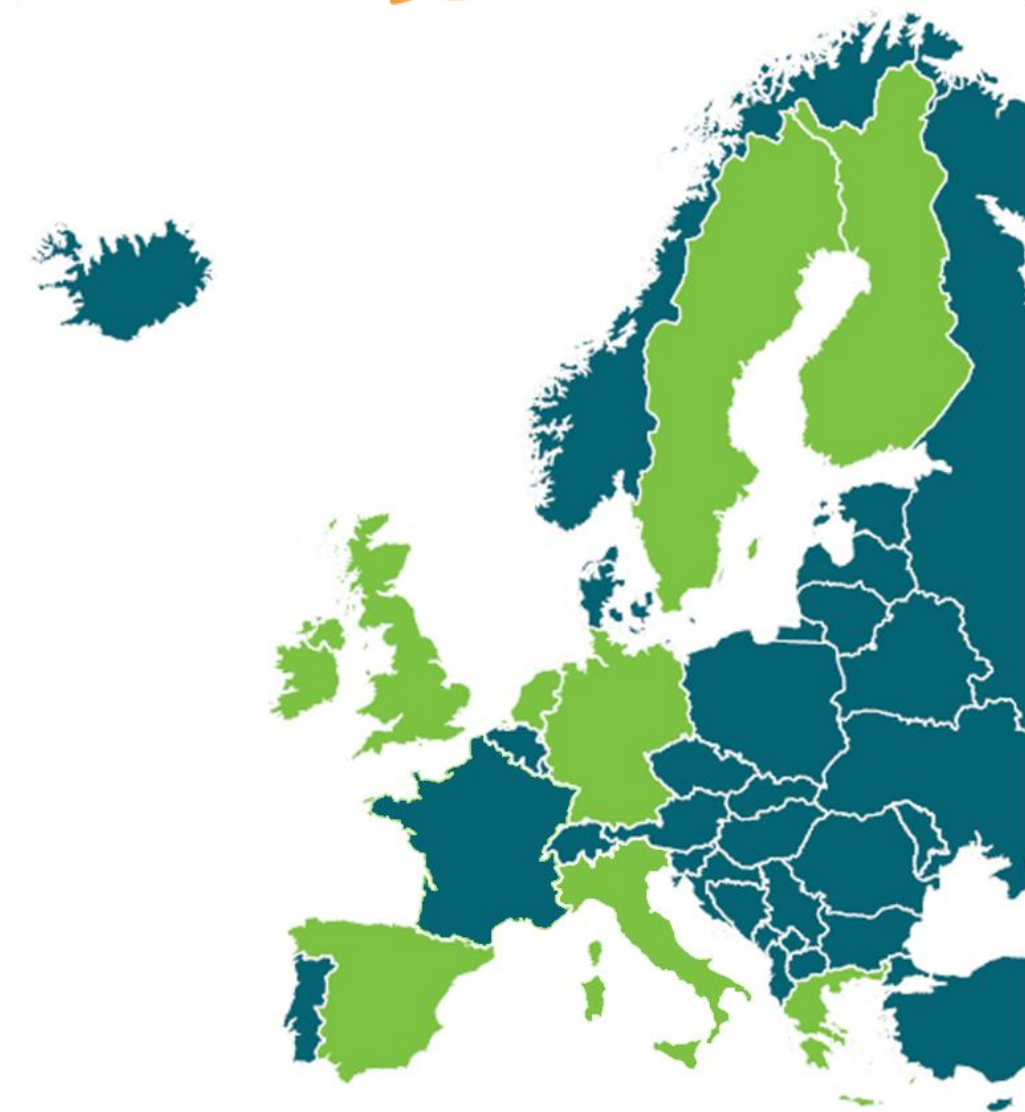
What do you get?

- Travel and accommodation costs covered + small daily allowance
- Computational resources and support from target country supercomputing center
 - BSC, CINECA, CSC, EPCC, GRNET, HLRS, ICHEC, KTH-PDC, SurfSARA
- Visit duration 3-13 weeks (max 13 weeks in 4 years)
- Supervision from host for your collaboration project
- HPCE3 aims to fund 1220 visits in 4 years
 - Acceptance ratio is high and management overhead low



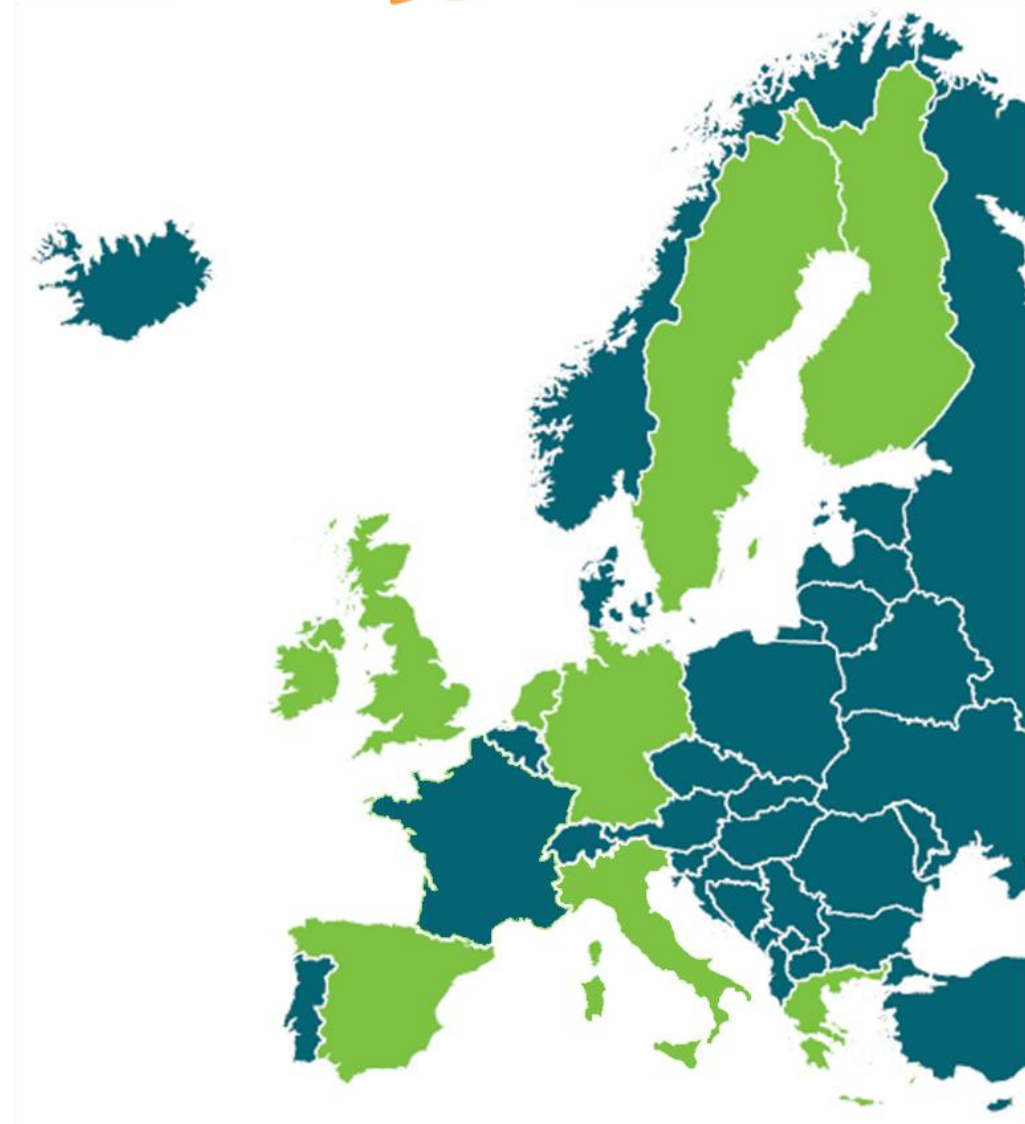
Who can apply?

- Researchers at all levels from master students to professors - also from commercial companies
- Home organization in EU or associated state (or even elsewhere upto 20% of resources)
- For non-proprietary research requiring high performance computing
- Those wishing to start or strengthen collaboration, working on common HPC code, etc. make a valid "case for HPCE₃"



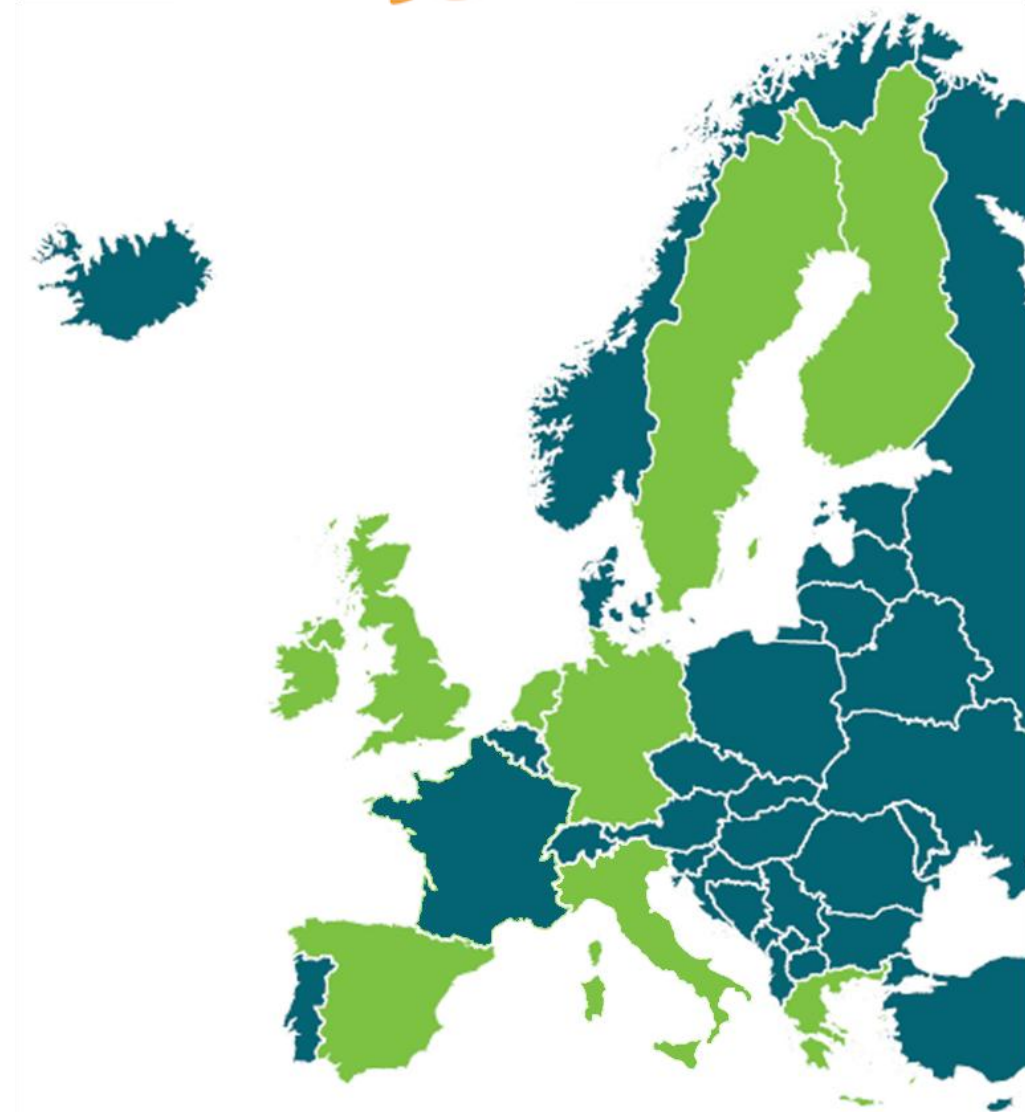
Why would you apply (or invite)?

- Excellent opportunity to start international collaboration - paid by EC
 - learn or teach a new method (consultation)
 - contribute to a code (optimisation, development)
 - access resources not available locally
 - porting, benchmarking, production runs
 - participate in training
 - ...
- Extend your professional network
 - And build the base for future work / post doc location
 - Strengthen existing collaboration



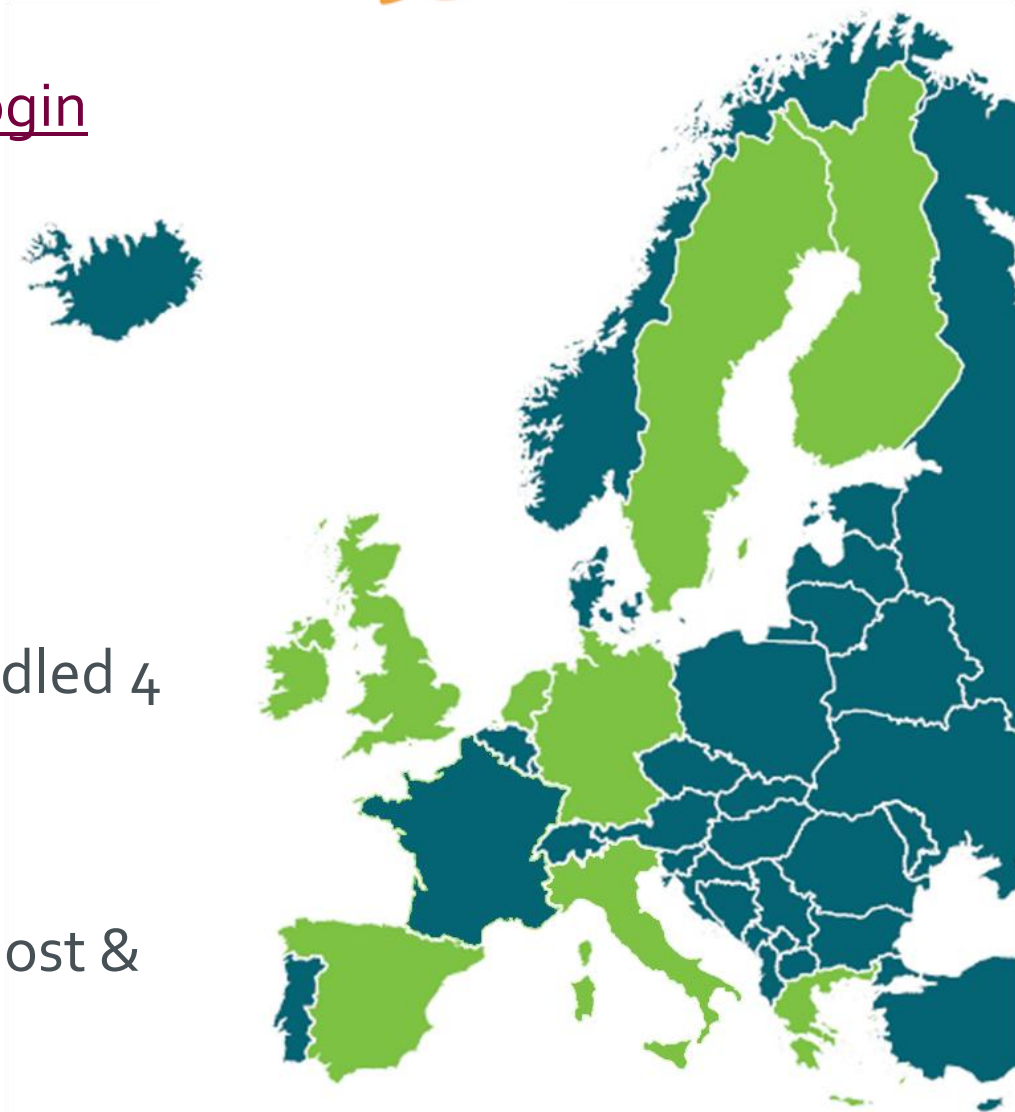
Where can you go, who can you invite?

- To any of the green countries
- There are hundreds of research groups signed up as Hosts
- See web for introduction to each country:
http://www.hpc-europa.eu/transnational_access
- If you're not listed as a Host yet, sign up at
<https://hpc-europa.cineca.it/host/login>
- Typically you'd be hosted by a research group (or a company), sometimes the HPC center



How can I apply?

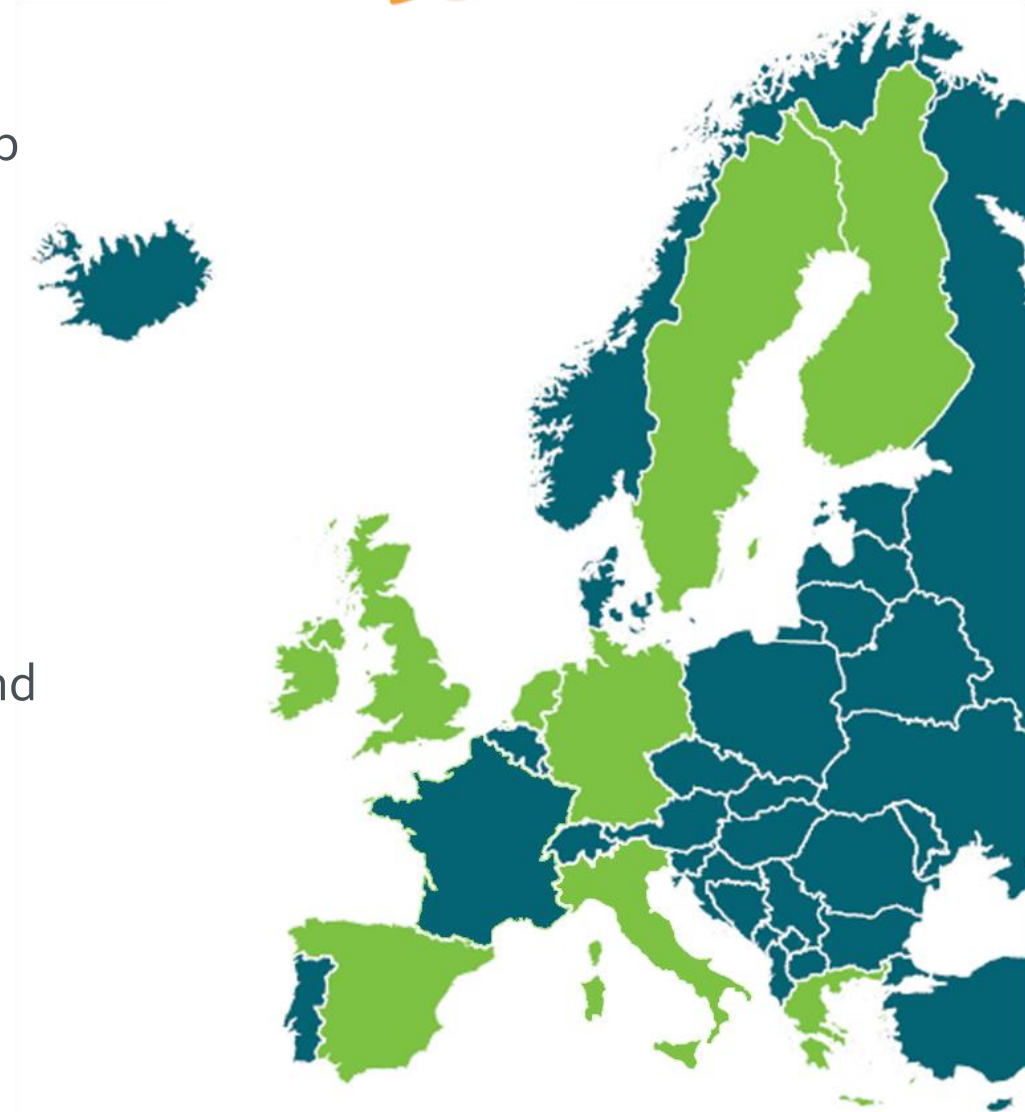
- Visitor, at <https://hpc-europa.cineca.it/researcher/login>
- Look for a host from the list or suggest a new one
 - It's a good idea to contact the host before submitting your application
- Fill in the application online
 - If you have questions, ask for help: staff@hpc-europa.org
- The call is open all the time, applications will be handled 4 times a year
 - DLs shown on main website: <http://www.hpc-europa.org/>
- Selection is made by international panel based on Host & receiving HPC center reviews



HPC-Europa3 - travel, compute, network



- Four calls every year until April 2021
 - Visit a group or invite a (coming) collaborator to your group
- Requirements:
 - Non-proprietary research
 - Affiliated at an EU-country or associated country
 - Project can make use of HPC resources
- Provided:
 - Support for accommodation, travel costs for 3-13 weeks and a small daily allowance
 - Resources and support from local HPC-center
- <http://www.hpc-europa.org> main site
- hpc-europa@csc.fi ask from us at CSC



CSC's services



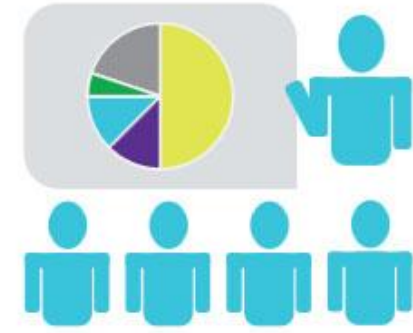
Scientific Computing and Software



Funet Network Services



Identity and Access Management



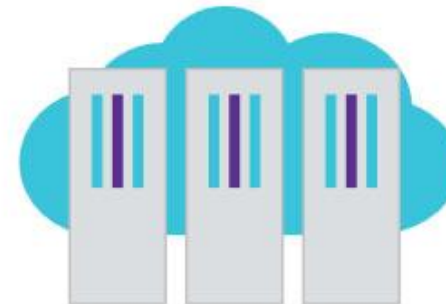
Training services



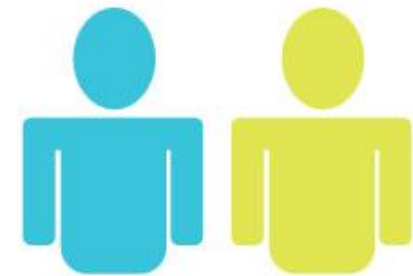
Research Information Management



Education Management and Student Administration Services

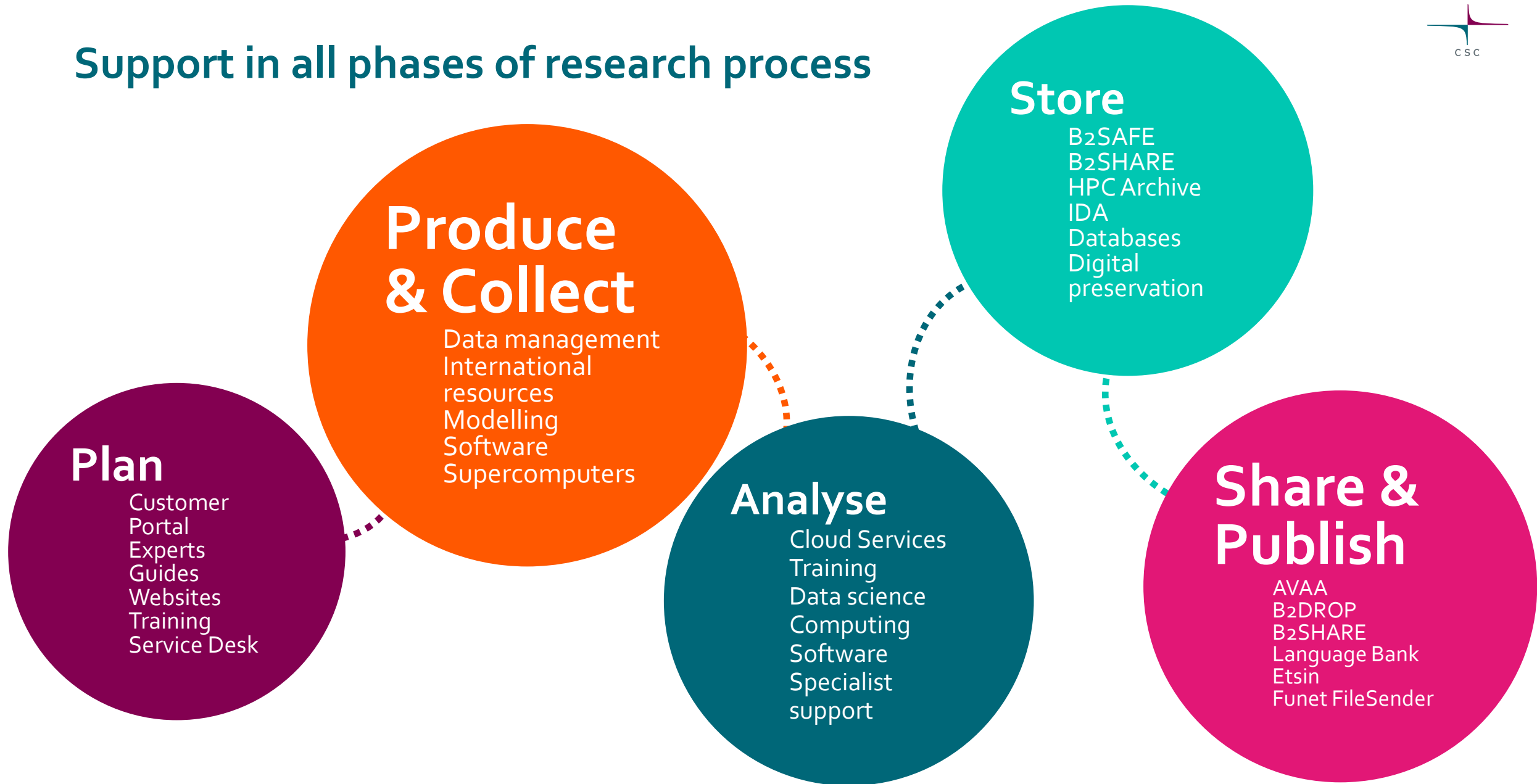


Datacenter and Capacity Services



Consultation and Tailored Solutions

Support in all phases of research process



CSC's Current Computing Services



High Performance

- Sisu
- Massive parallelism
- Fast interconnect

Capacity

- Taito
- General use
- Large memory
- >100 applications

Accelerated

- Taito extension
- Visualization
- Special codes
- Nvidia GPU

Cloud

- cPouta + ePouta
- Build your own
- OpenStack IaaS

Hosting

- Kajaani
- Espoo
- Efficient and secure datacenters
- Virtual and physical servers

Storage Services: Backup, Fast parallel storage, Archiving

Training portfolio

