Access to HPC resources in Italy and Europe

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Access to HPC resources: CINECA aims and basic principles

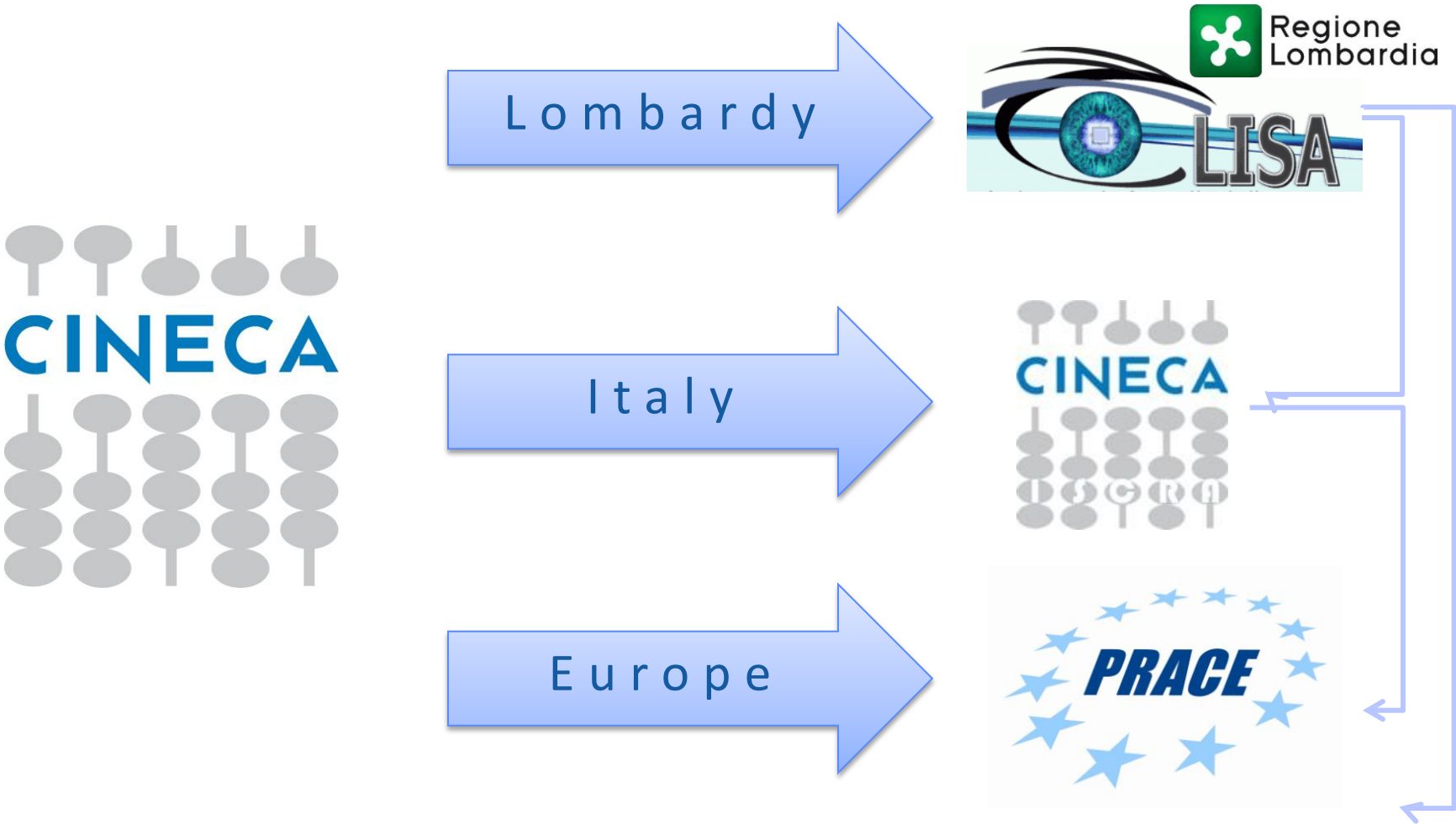
Our objectives:

- ✓ Providing Italian and European researchers with an advanced computational environment
- ✓ Supporting Italian researcher for increasing their competitiveness
- ✓ Following Italian researchers in their path towards Tier 0
- ✓ Soliciting large-scale and computationally intensive projects

Basic principles:

- ✓ Transparency
- ✓ Fairness
- ✓ Conflict of Interest management
- ✓ Confidentiality

HPC Offer


CINECA
Lombardy
Regione Lombardia
LISA
Italy
CINECA
Europe
PRACE

HPC offer in Italy

HPC offer in Italy: ISCRA
Italian SuperComputing Resource Allocation

The aim of ISCRA is to ensure adequate support to Italian scientists and engineers.

The allocation is of 600M core hours per year on

- FERMI

The access is by

- Online submission of proposals
- Peer-review process by an international panel

The proposal are scientifically evaluated by international reviewers and technically evaluated by Cineca experts.

Applications and codes are evaluated on the basis of their computational readiness.

HPC offer in Italy: ISCRA

Class A: Large Projects; two calls / year

>5M core hours

typical request 15M core hours

duration: 12 months

Class B: Standard Projects; two calls / year

>2M core hours

typical request 3M core hours

duration: 12 months

HPC offer in Italy: ISCRA

Class C: Small Projects

continuous submission, 2 selection per year

>50K core hours

typical request 1M

only one C project approved per year

duration: 9 months

Trial: on demand

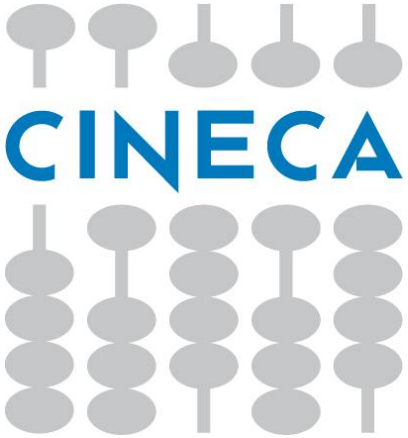
Call for Projects A e B

- Next deadline 26 March 2013

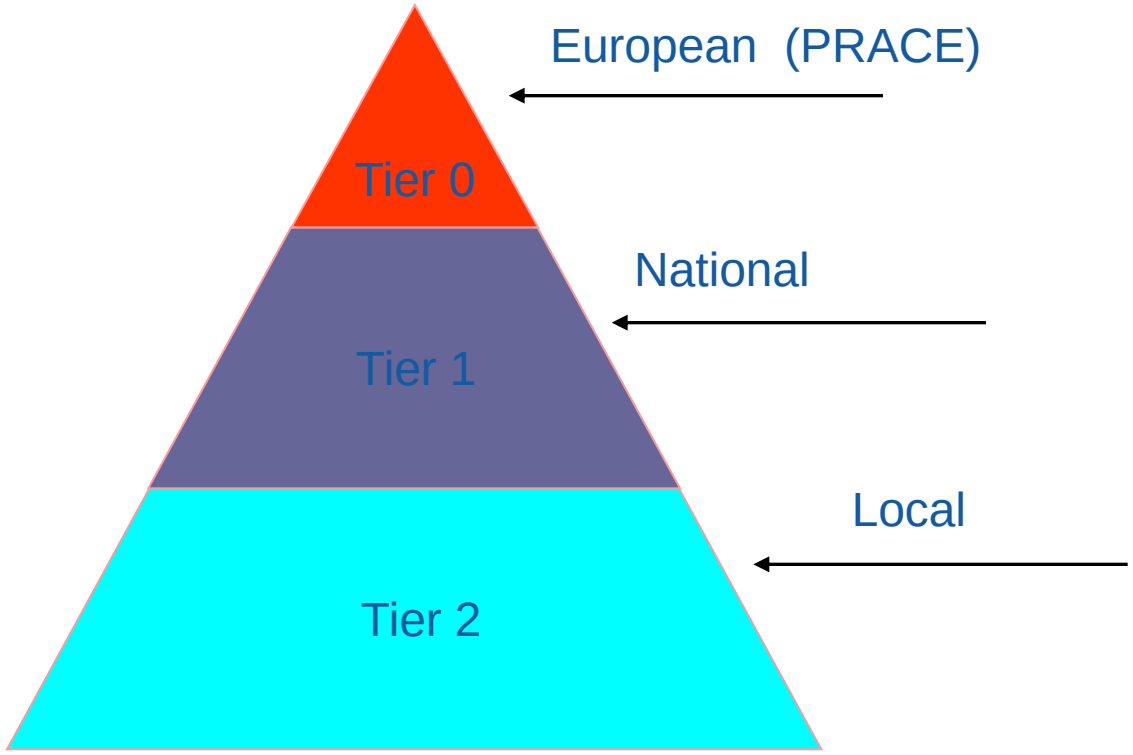
Call for Projects C

- continuously open, evaluation every 6 months
- next evaluation on 31 August 2013

HPC offer in Europe: PRACE



Computing provisioning pyramid



PRACE offers access to Tier 0 (and Tier 1) systems

PRACE Tier 0 Access

- **Preparatory Access**
  - Intended for preliminary resource use required to prepare proposals for Project Access
  - Technical review

- **Project Access**
  - Intended for individual researchers and research groups including multi-national research groups
  - Technical and Scientific review

PRACE Tier 0 Access: CURRENT CALL

- Applications accepted on call
- For projects which use codes that have been previously tested and must have demonstrated high scalability and optimisation
- Next call
  - Opening: February 13th, 2013
  - **Closing: March 26th, 2013, 12:00 CEST**
  - Access starting date: September 3rd, 2013
- Final report mandatory after the end of the access

Call for Proposals for 7° PRACE Project Access (Tier-0)

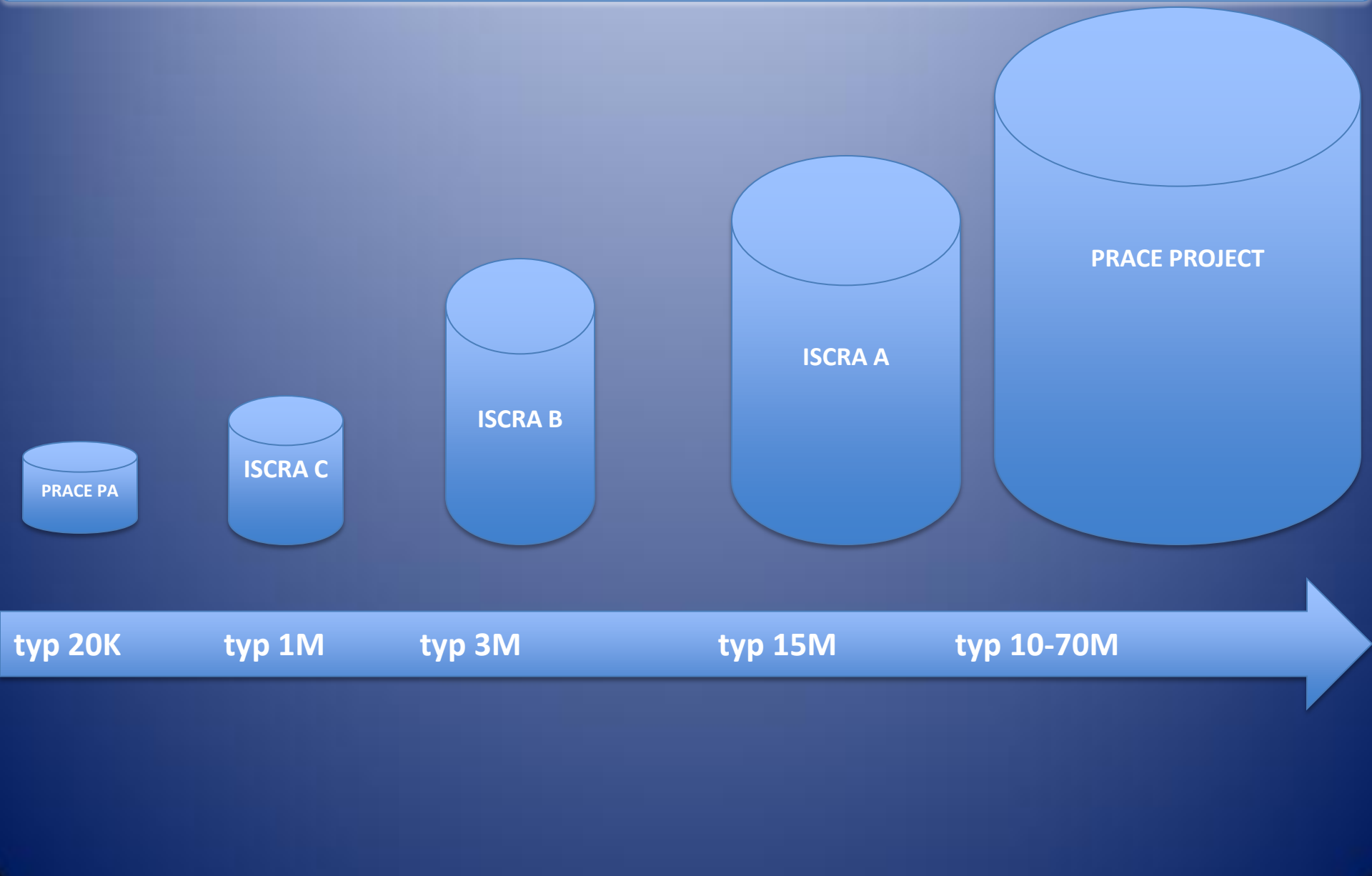
- "FERMI" (CINECA, Italy) IBM Blue Gene/Q
- "JUQUEEN" (GCS@Jülich, Germany) IBM Blue Gene/Q
- "CURIE" (GENCI@CEA, France) Bull x
- "HERMIT" (GCS@HLRS, Germany) Cray X6E
- "SuperMUC" (GCS@LRZ, Germany) IBM System x iDataPlex
- "MareNostrum" (BSC, Spain) IBM System X iDataplex

About 1.300M core hours available

PRACE call on the web

- http://www.prace-project.eu/
- http://www.prace-project.eu/IMG/pdf/prace_call_7_terms_of_reference.pdf
- http://www.prace-project.eu/IMG/pdf/technical_guidelines_for_applicant_call7.pdf

Projects dimension



Useful links

- ISCRA: http://www.hpc.cineca.it/services/iscra
- PRACE: www.prace-ri.eu/hpc-access?lang=en
- p.alberigo@cineca.it iscra@cineca.it
- f.garofalo@cineca.it