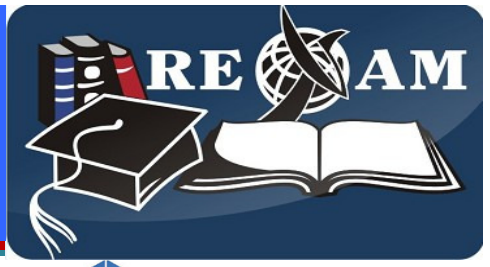
Lansarea Apelurilor 2013 a PC7 al Comunității Europene pentru Cercetare şi Dezvoltare Tehnologică



HP-SEE
High-Performance Computing Infrastructure for South East Europe's Research Communities

eInfrastructure Calls in FP7 Capacities specific programme

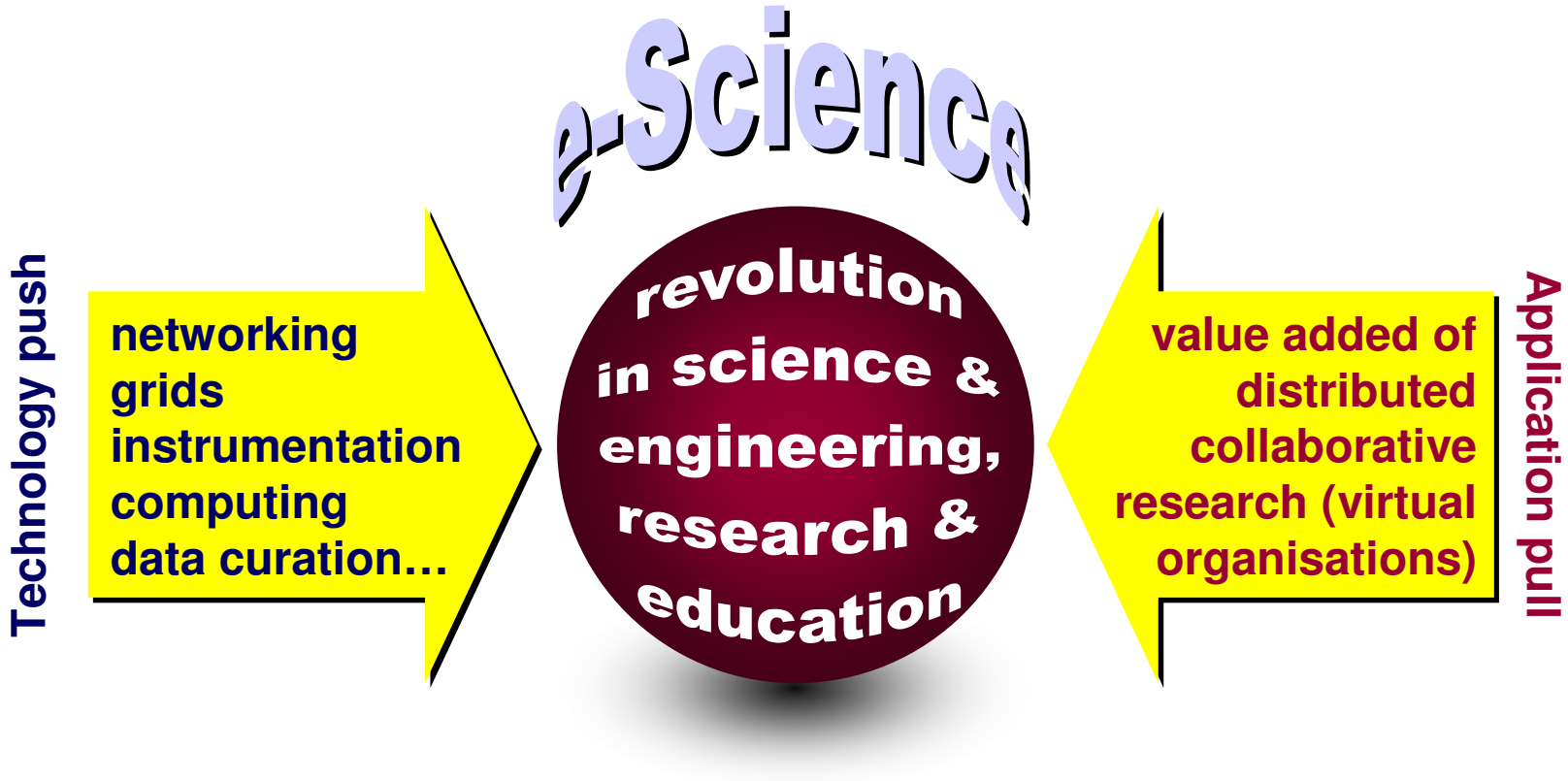
Dr. Petru Bogatencov

www.renam.md

Research Infrastructures

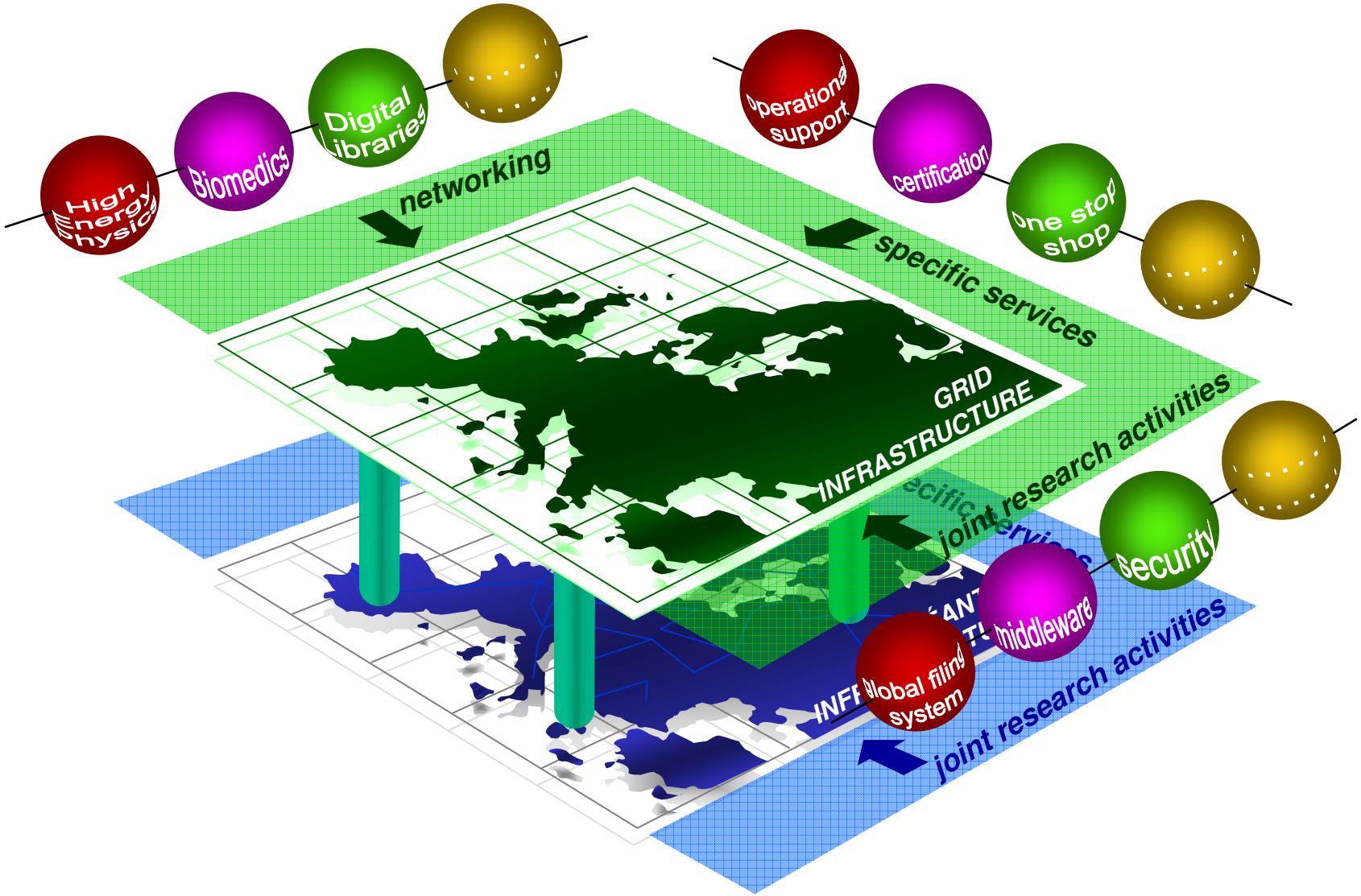
- Capacities specific programme aim is support of development of Research Infrastructures
- Capacities – related activities:
  - ESFRI – European strategic forum on Research Infrastructures;
  - eIRG – eInfrastructure reflection group.
- eInfrastructure is important component of Capacities specific programme focused on implementation modern ICT achievements to support research activities in Europe

eInfrastructure - new way of doing Science



a new way for all scientists to work on research challenges that would otherwise be difficult to address

e-Infrastructure - Implementation blocks



New FP7 eInfrastructure Call for 2013

- New EC call for proposals for eInfrastructure was published on 10 July 2012. The call identifier is Call N° 11 - FP7-INFRASTRUCTURES-2013-1, topic INFRA-2013-1.2.1: GÉANT
- The Call fiche and other supporting documentation can be found here

http://ec.europa.eu/research/participants/portal/page/capacities?callIdentifier=FP7-INFRASTRUCTURES-2013-1

The call will close on 5 December 2012 at 17:00 (Brussels local time)

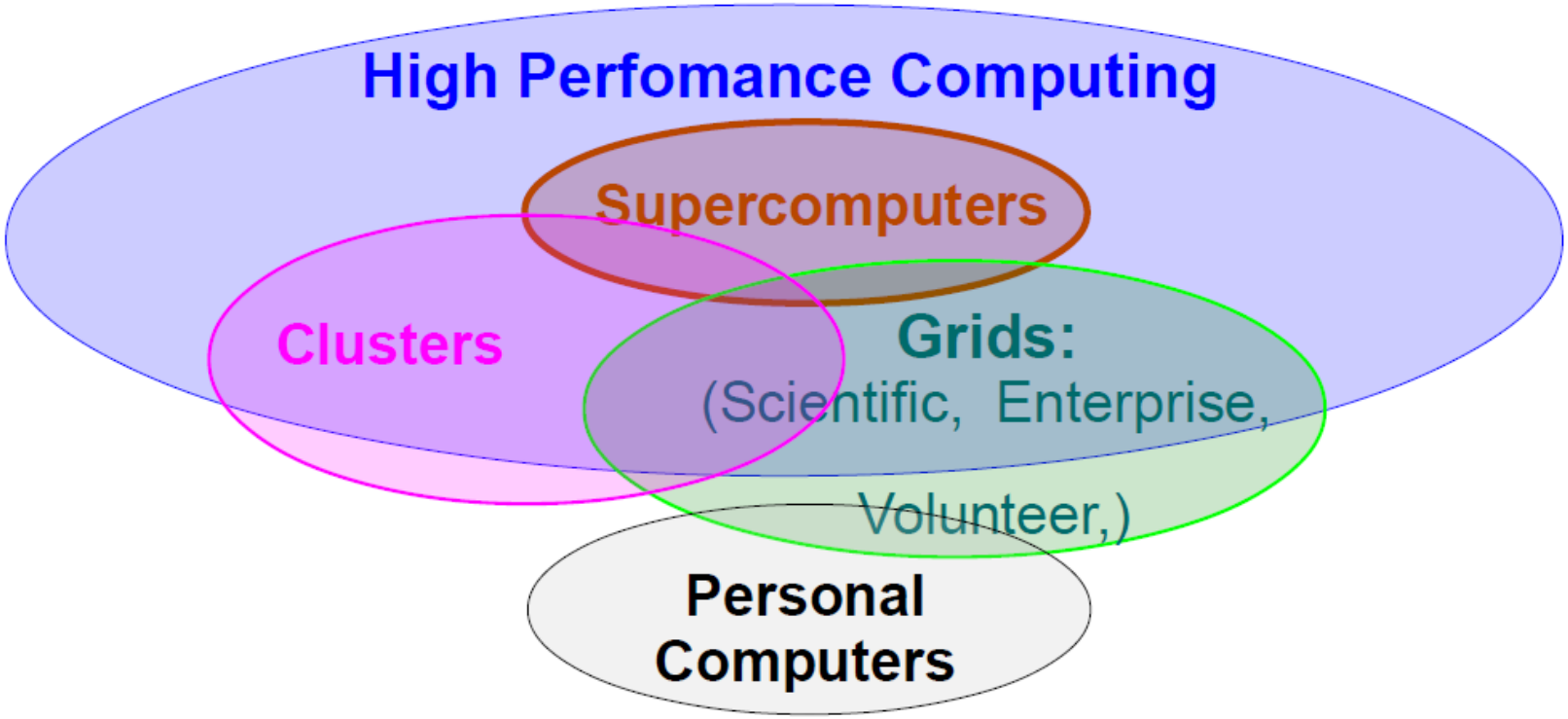
eInfrastructure Call for 2013 - specific requirements

- That is dedicated Call for support and development of the existing components of European eInfrastructures:
  - Proposals shall be submitted solely by legal entities operating the NRENs or legal entities created by the NRENs to contribute to the deployment of connectivity and services on a pan-European scale (e.g. DANTE, TERENA, NORDUnet).
  - Proposals shall address all the three categories of activities (networking activities, service activities, joint research activities)
- To select potential partners eligible for this Call from Eastern Europe Countries (including Moldova) the special feasibility study was performed
- NREN of Moldova was invited to become a member of the new consortium that is elaborating the proposal for this Call

Participation of Moldova in eInfrastructure development initiatives

- Moldova is participating in the following EC supported eInfrastructure development project focused on national computational resources development and access providing for research and educational communities:
  - EGI-Inspire (www.egi.eu) – developing European distributed computing infrastructure and providing access to is resources
  - HP-SEE (www.hp-see.eu) – providing access to the regional HPC infrastructure
- The mentioned projects have the aim to develop Scientific computing facilities based on parallel architectures and used for running complex applications:
  - HPC - Clusters' systems;
  - HPC - Supercomputers;
  - Distributed computing – Grids;
  - Scientific Clouds…
  - Parallel Algorithms Design and Programming
  - Complex Computing Applications Development
  - Scientific Computing architecture is a bridge for building modern virtualized computing systems – scientific clouds

High-performance computing is a branch of applied computer science that is dealing with the finding of solutions to problems that require a large amount of computing resources.



Scientific Computing – organizational structure for access to computing resources

- **Virtual research communities (VRCs):**

  VRCs are groups of like-minded individuals organised by discipline or computational model. VRCs typically have an established presence in their field and represent a well-defined scientific or research community.

  VRCs are self-organised research communities which give individuals within their community a clear mandate to represent the interests of their research field within the computing ecosystems. They can include one or more virtual organisations and act as the main communication channel between the researchers they represent computing resources providers (EGI, PRICE, etc.).

- **Virtual organisations (VOs)**

  Virtual organisations (VOs) are groups of researchers with similar scientific interests and requirements, who are able to work collaboratively with other members and/or share resources (e.g. data, software, expertise, CPU, storage space), regardless of geographical location.

  Researchers must join a VO in order to use European grid computing resources. Each virtual organisation manages its own membership list, according to the VO's requirements and goals.

Grid and HPC Initiatives. MD-Grid NGI Aims and Tasks

- **MD-Grid NGI** participates in strategic European Programs for the development of transnational grids and in initiatives for the completion of SEE eInfrastructures. The operation of the MD-Grid NGI implements the general EU policy on the development of national initiatives for the coordination of actions related to eInfrastructures and Grids.
- **The integration** of Grid actions (infrastructures, middleware and applications) with the broadband research and technology network into a standard e-Infrastructures system. Optimization of exploitation of advanced network resources and services, which can serve the new e-Science generation and will attract the greater users community of the Information Society to the mass adoption of advanced services provided by Grid architectures.
- **Permanent development** and administration of Grid infrastructure in Moldova
- **Organization access** for national R&E community to the regional and European computational resources (HPC, Grid, scientific clouds, etc.)
- **Preparing** (educational, training events organization) and **support** of national users' communities

Memorandum of Understanding for High-Performance Computing resource sharing in the region of South Eastern Europe

This Memorandum of Understanding (MoU) is made on February 23rd 2012 hereinafter referred to as the "effective date"

BETWEEN Resource Coordinators and Beneficiaries:

For Moldova: RESEARCH AND EDUCATIONAL NETWORKING ASSOCIATION OF MOLDOVA

The following principles will be followed within this resource sharing model:

A. *Partners should allocate as a minimum 5% of the total core hours of their HPC systems offered for resource sharing, per year for regional use.*

B. Cycles are allocated to users via the peer review system.

C. Calls for access can be either continuous or are announced periodically (yearly or twice a year), based on the demand and the capacity of the peer review system.

This MoU is intended to remain into effect for at least 3 years from the effective date.

The duration of the MoU is automatically extended for one year after the end of the initial 3 years period or after the end of each yearly extension.

Call for proposals for access to HP-SEE infrastructure

- There are two procedures of applications selection for offering resources of the regional HPC infrastructure:
- Twice a year are announcing applications submitting calls for long term HPC resources allocation (for 1 year and more). Scientific and technical advisory boards are considereng proposed application using submitted forms with applications description.
- The second procedure is Fast Track Process for Access to HP-SEE Resources of New Emerging User Communities. This procedure is dedicated to the support of new software applications for new scientific communities:
- To promote the usage of HPC in general and the HP-SEE services in particular to new user communities.
- To provide a platform to the user communities in order to evaluate new technologies.

The text of the call for proposals for fast track access to regional HPC resources for new user communities has been published on the HP-SEE web page, at http://www.hp-see.eu/hp-see-fast-track

The applications can be submitted any time at http://survey.ipb.ac.rs/hp-see-fast-track

Concurs pilot comun de proiecte regionale SEERA-EI. Cercetarea şi crearea capacităţilor în Cloud Computing ştiinţific

2012-05-23Academia de Ştiinţe a Moldovei anunţă **concursul pilot comun al proiectelor regionale SEERA-EI în domeniul cercetării şi creării capacităţilor în Cloud Computing ştinţific**.**Ţările eligibile:** Bulgaria, Grecia, Moldova, România, Serbia şi Turcia

Organizaţii eligibile din Republica Moldova: organizaţiile din sfera ştiinţei şi inovării acreditate
Număr minim de parteneri în proiect: cel puţin 3 organizaţii din cel puţin 3 ţări
Durata unui proiect: 12 sau 24 luni
Bugetul unui proiect: maxim 150 mii Euro
Bugetul unei organizaţii-partener din Republica Moldova: maxim 150 mii lei

Data limita de depunere a propunerilor de proiecte: 5 septembrie 2012Propunerile de proiect se elaborează în limba engleză şi se depun de către coordonator online prin intermediul unui sistem elaborat pentru apelul dat.Detalii privind concursul, documentele necesare şi depunerea online pot fi accesate la http://www.seera-ei-pjc.asm.md/.

Thank you!

Questions?

www.renam.md
www.grid.md