

Strategia italiana per una infrastruttura di calcolo comune

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Toward an integrated e-Infrastructure

Very difficult task. The process will start with few pilots to study different use cases

- ☐ European Open Science Cloud (EOSC)
- European Data Infrastructure

European Open Science Cloud (EOSC)

- Goals:
 - place EU in a leading role in scientific & data infrastructure
 - give European Scientists services for storage, management, analysis and re-use of research data
- Pilot call opening soon infradev-04-2016 (~10 MEuro)
- INFN among proponents of a proposal



"... launch of a pilot action that should demonstrate how wide availability of scientific data and data-analysis services for European researchers can be ensured through a cloud infrastructure"

European Data Infrastructure

- Goals:
 - world-class supercomputing, high-speed connectivity, leading-edge data storage also for industry (including SMEs) and the public sector
 - underpin EOSC
- Pilot project: Important Project of Common European Interest
- on High Performance Computing and Big Data Enabled Applications
- Italy participates with the "The Italian Data Infrastructure" lead by INFN

The Italian Ministry of Economic Development, the Ministry of Education, University and Research, the Ministry of Public Function, the regional Ministry of Emilia-Romagna, the regional Ministry of Piemonte, the regional Ministry of Trentino, the regional Ministry of Lazio and the regional Ministry of Marche



The Italian Data Infrastructure











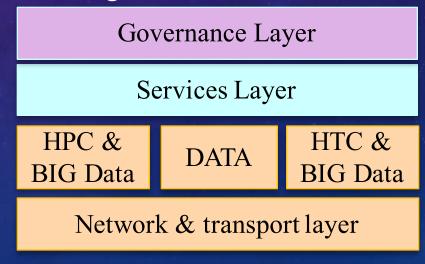
INFN is coordinating the activities

Possible implementation scheme to:

 make accessible and usable to users the centers

Users

manage the resources



Donatella Lucchesi

The Italian Data Infrastructure: business model

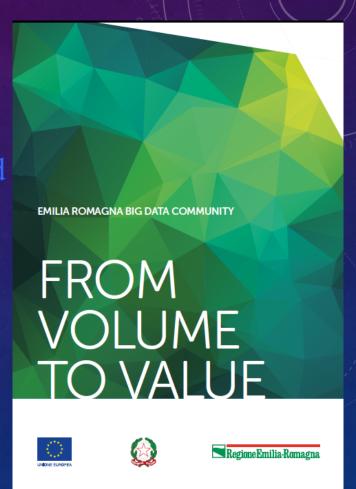
- ☐ Funds directly from the research agency, INFN, CNR, GARR, CINECA
- □ National funds, MIUR, MISE and Structural funds
- Regional funds, Emilia Romagna, Marche, Piemonte, Puglia, Trentino,..
- European funds, H2020, ESFI, special projects

First pilot on Emilia Romagna Region

Process supported by Regional (EU) funds:

- •Survey of:
 - research computing capacities
 - competences in HPC, Big Data and software development
 - research communities
- Design and implementation test bed:
 - Definition of applications domain: Research, PA, Health, education,
 - involvement of the partners (i.e. private companies, SMEs)

INFN among the major players





Progetto CIPE

Finanziamento di 13,5 M€ (di cui 1 M€ di cofinanziamento) per la creazione di un sistema HPC

Primo anno 8,5 M€ di cui 0,7 M€ di cofinanziamento Secondo anno 5,0 M€ di cui 0,3 M€ di cofinanziamento

Coinvolge anche CMCC (Centro Euro-Mediterraneo sui Cambiamenti Climatici) e CIRA (Centro Italiano Ricerche Aerospaziali) ma senza obblighi specifici

In fase di studio (nell'ottica del progetto IPCEI) e con attenzione all'industria italiana

17/03/2016

