



Expanding Capacities & Building Capabilities

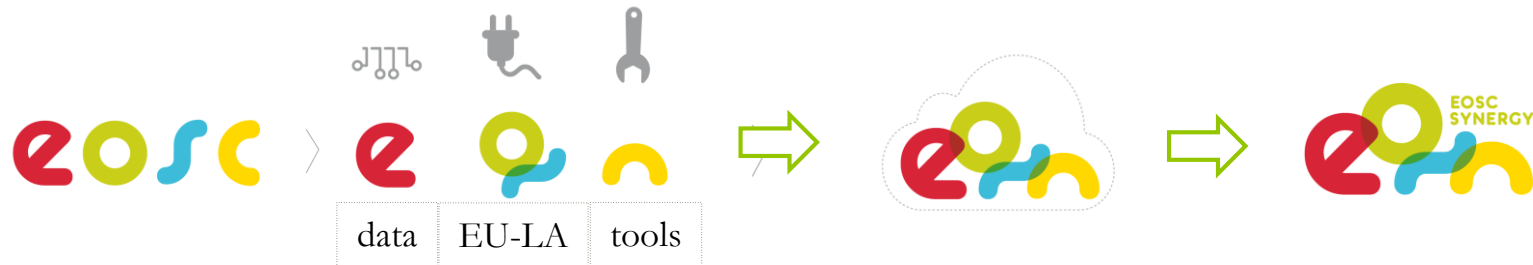
EOSC Workshop
Prague, 3rd December 2019

Luděk Matyska
Masaryk University & CESNET



EOSC-synergy receives funding from the EC via Horizon 2020

Project Vision



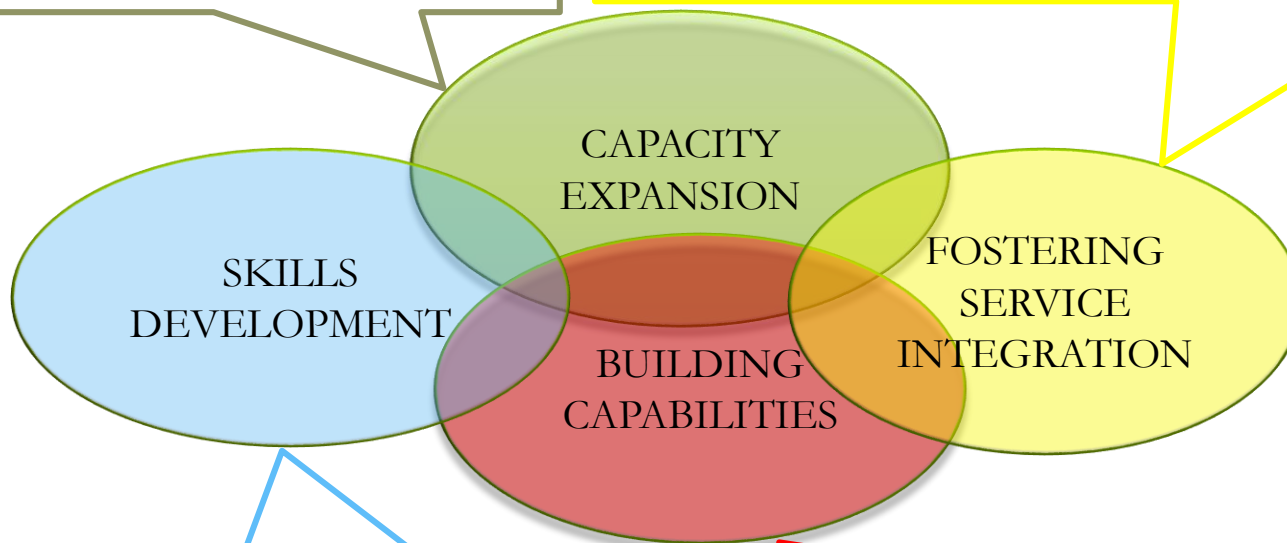
EOSC-synergy will expand the Capacity and Capabilities of EOSC by leveraging the experience, effort and resources of national publicly-funded digital infrastructures in a coherent way, therefore acting also as an incentive for national resource providers.



Project Vision: Rationale and Key ideas

- Deployment of an **EOSC-enabled digital infrastructure with a critical mass**
- Designing a **rational strategy** to deploy **FAIR National Data Repositories**

- Definition of an **EOSC software quality baseline**
- Service Quality Assurance as a Service: **SQAaaS**
- **FAIRness** checking “as a Service”



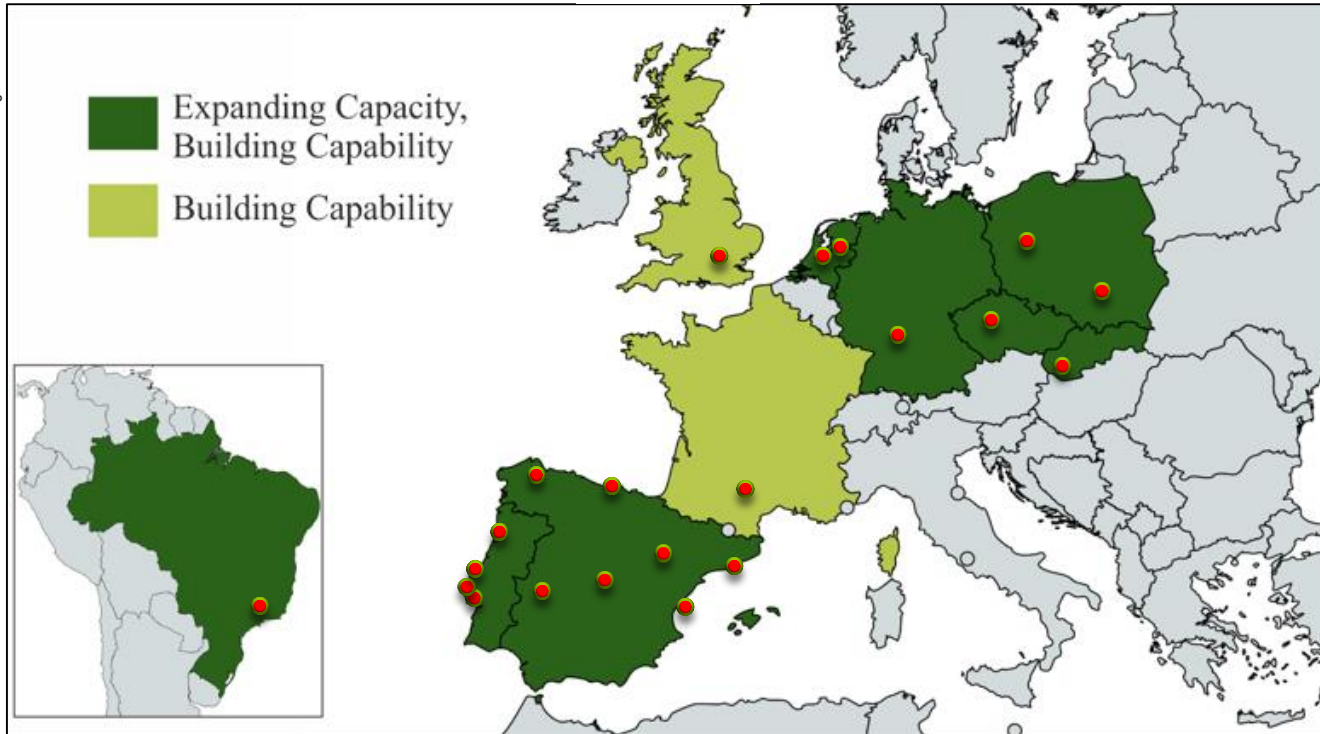
- Enable **auto-training** in EOSC
- Explore and **implement a MooC** solution following a **Marketplace approach**

- Integration of production-level **National Thematic Services in EOSC**
- Thematic service **certification based on SQAaaS**.

Project Consortium



LABORATÓRIO NACIONAL
DE ENGENHARIA CIVIL



Bridging EOSC to South America

The Iberian area has a long history of cooperation in distributed computing with South America

Creating a sustainable international - European and Brazilian - cooperation activity in the area of Cloud services for Big Data analytics

ATMOSPHERE
Adaptive, Trustworthy, Manageable, Orchestrated, Secure Privacy-assuring Hybrid, Ecosystem for REsilient Cloud Computing

 **EU Brazil Cloud Connect**
EU Brazil Cloud Computing for Science



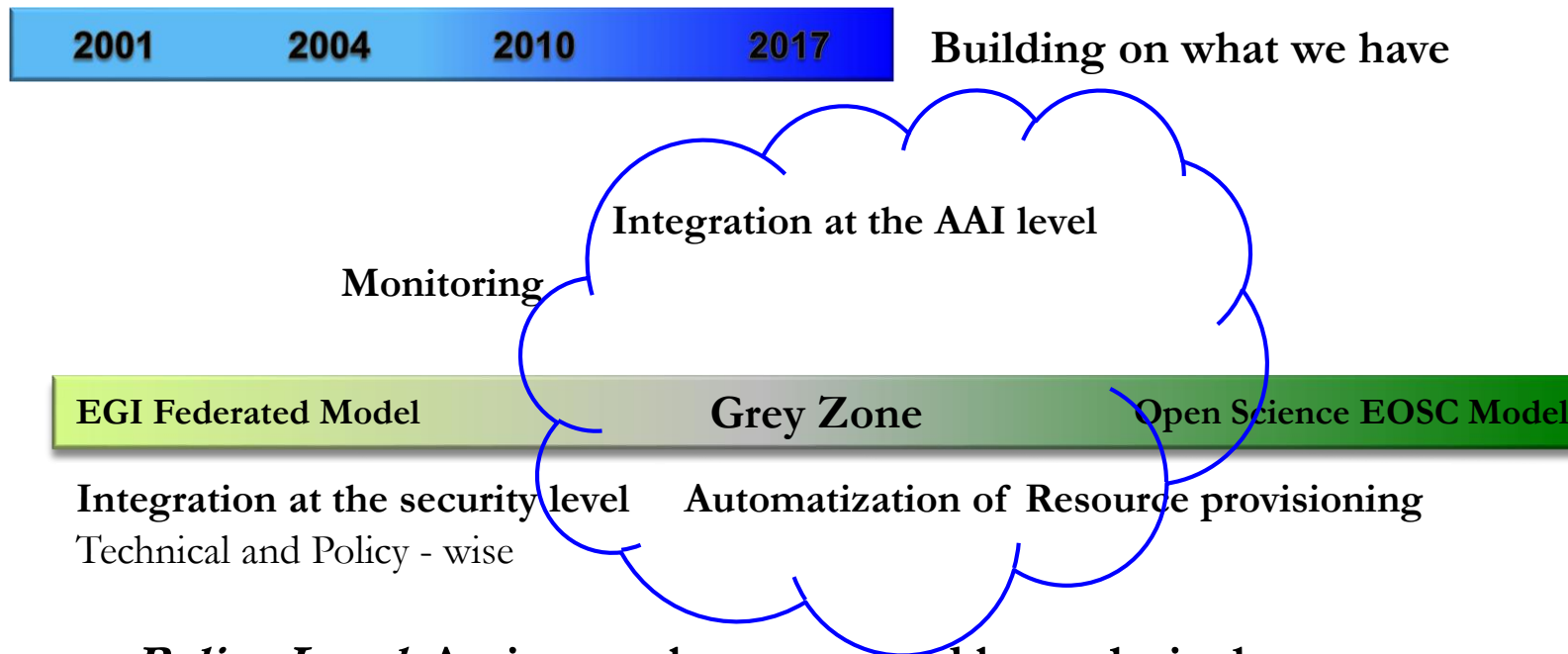
EUBRA BIGSEA
EUROPE - BRAZIL
COLLABORATION OF BIG DATA
SCIENTIFIC RESEARCH THROUGH
CLOUD-CENTRIC APPLICATIONS



Key partners



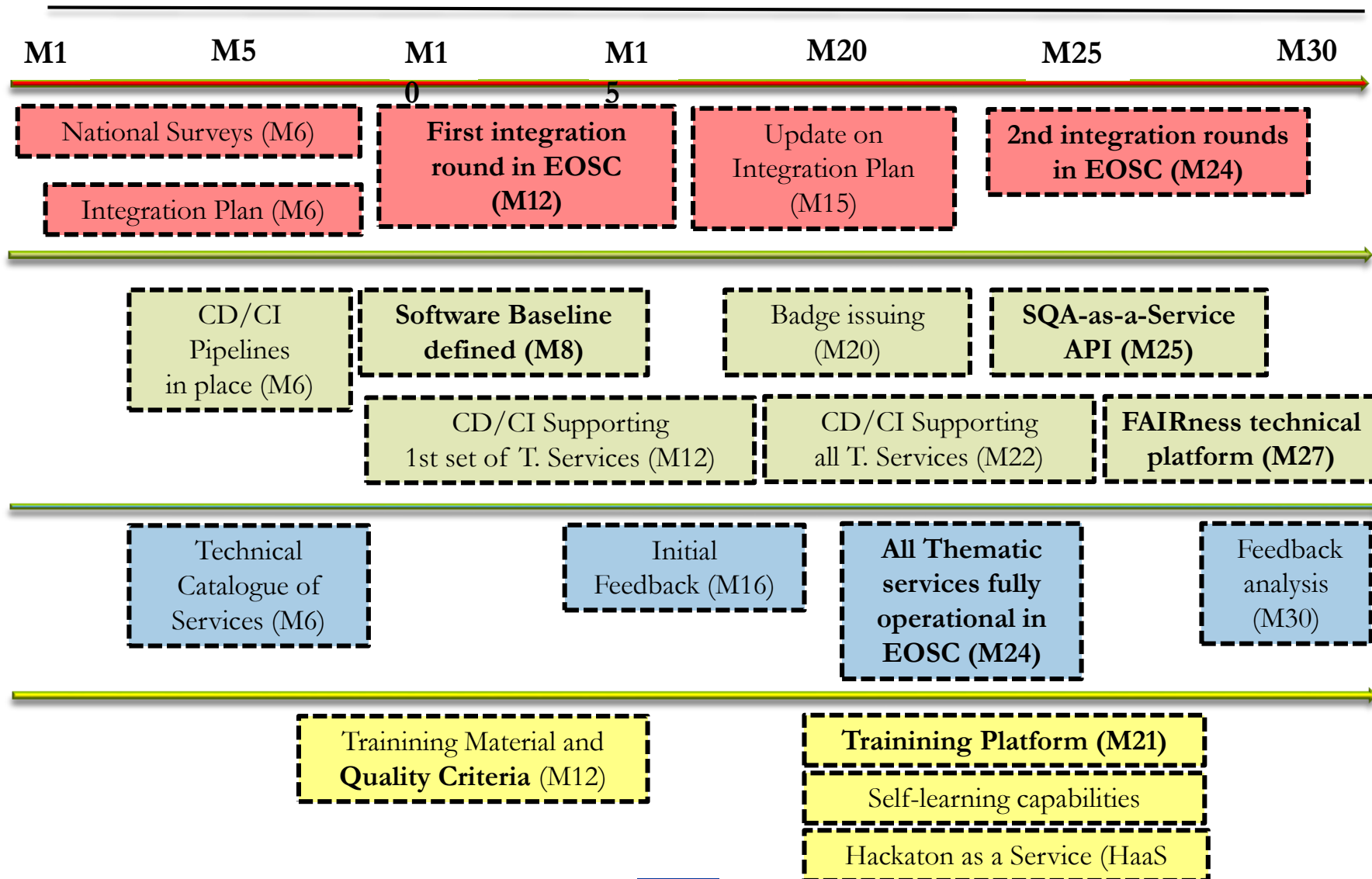
Technical Standpoint: Making the leap to EOSC



- ***Policy Level:*** Actions to be supported by technical developments, notably in the front of Security (data privacy policies) and access policies
- ***Technical Integration Level:*** work to be done/extended, building on the previous experience



September 1st 2019 → 30 Months



Structure of work



WP1: Project management and exploitation

WP2: Capacity expansion at the infrastructure level

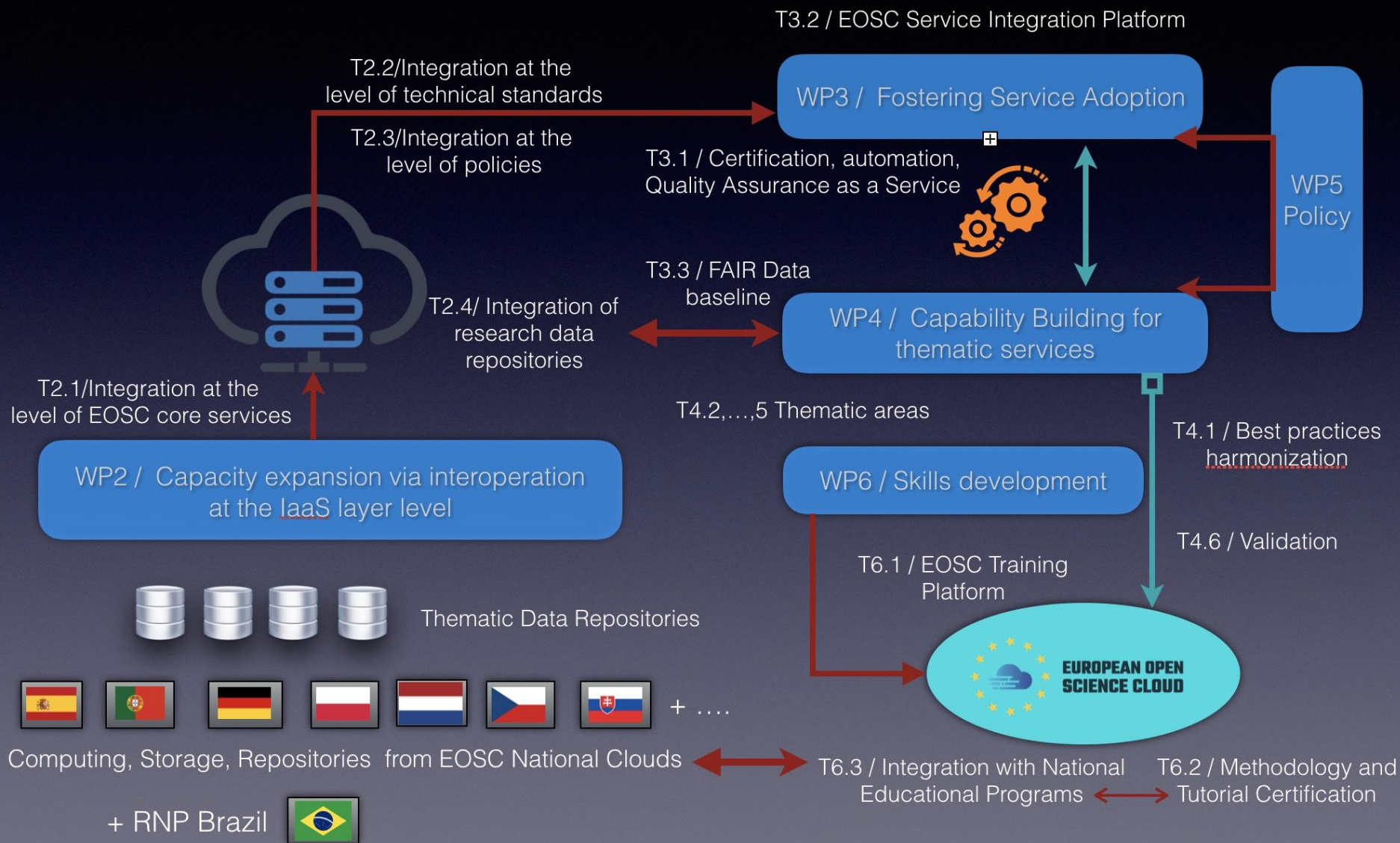
WP3: Fostering Service Adoption

WP4: Thematic Services Integration

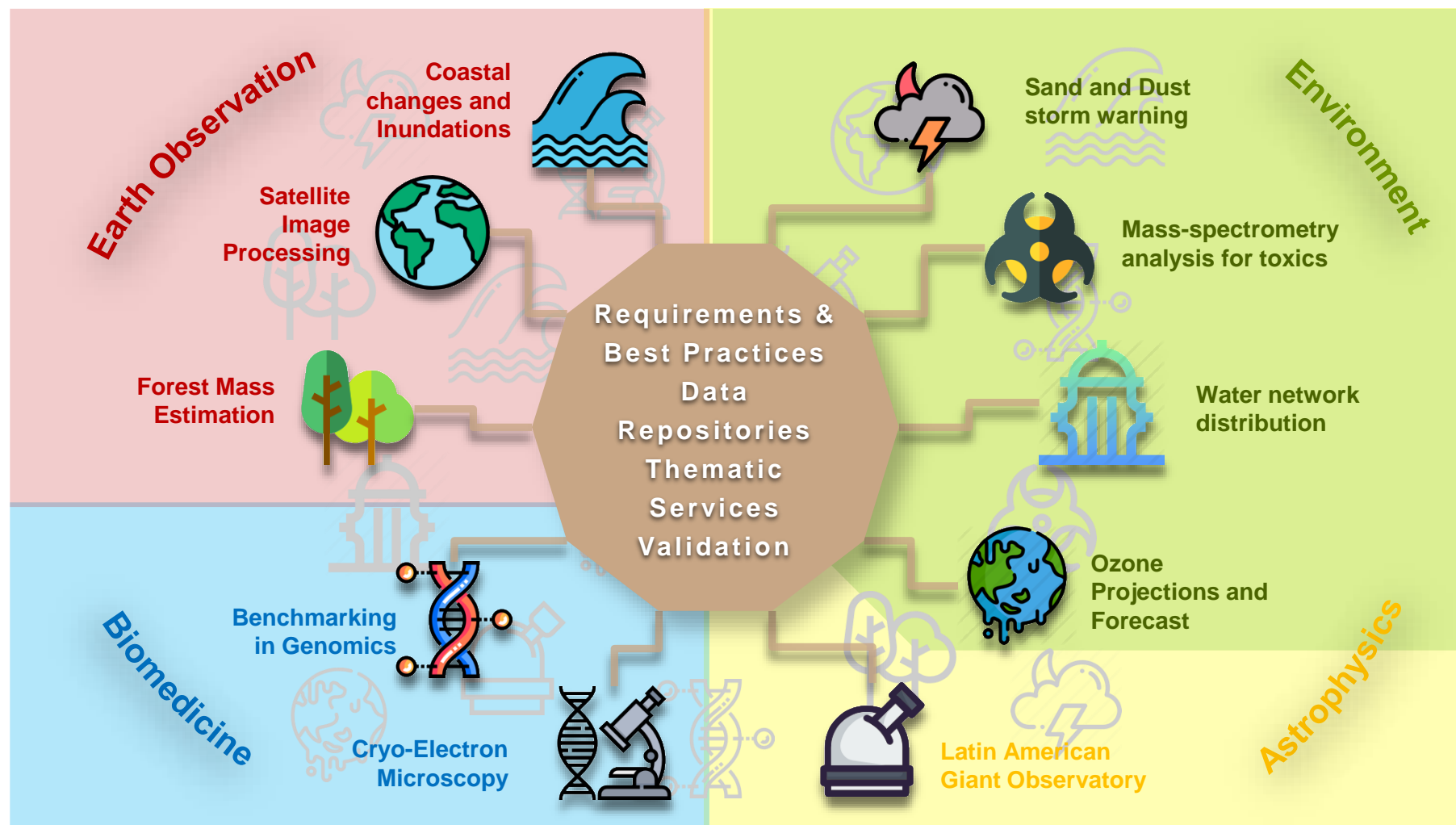
WP5: Alignment at the policy level

WP6: Skills development

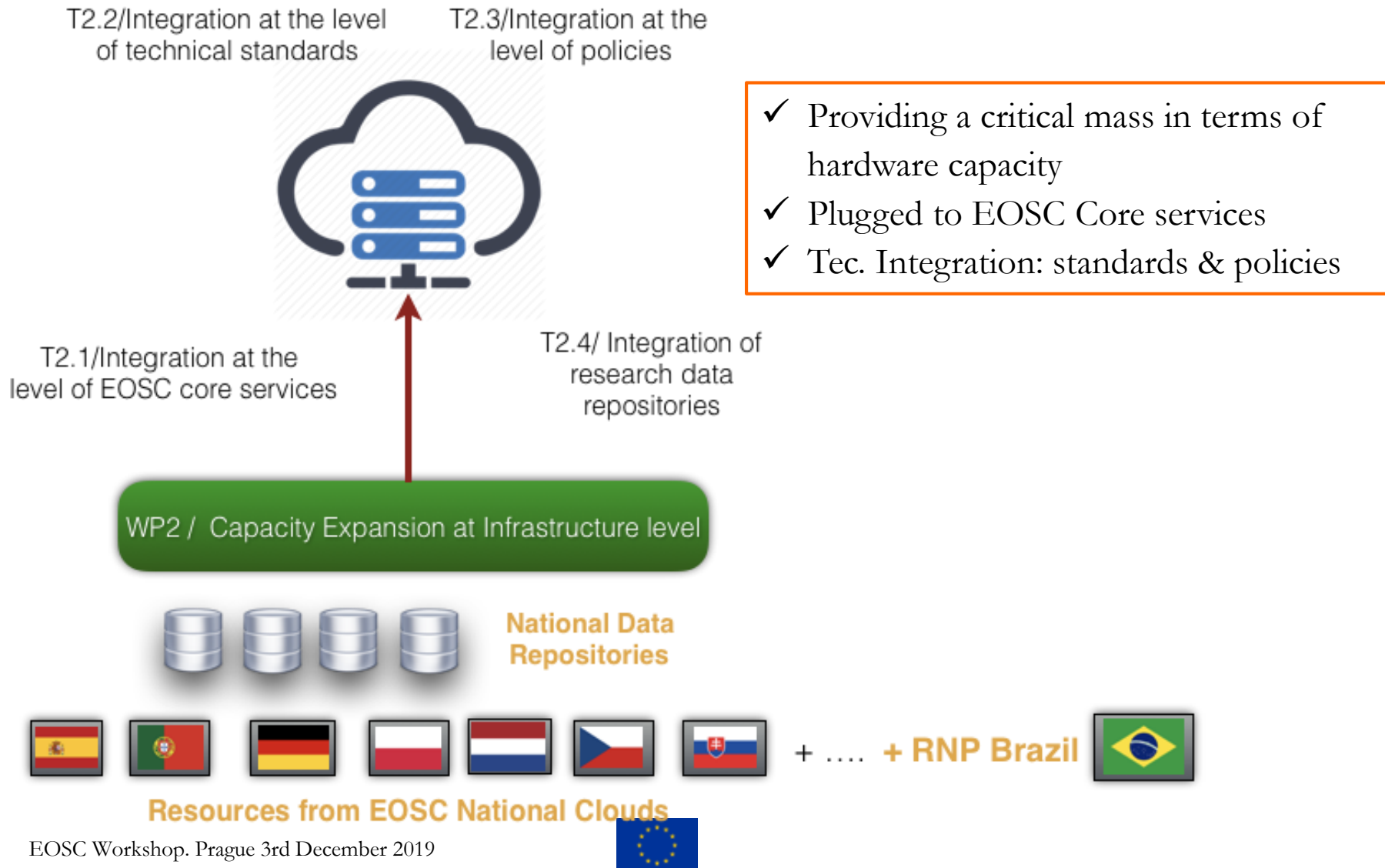




Thematic Services



Capacity Expansion at the Infrastructure level



National Data Repositories



Open Access policies generated discussions at the country level.

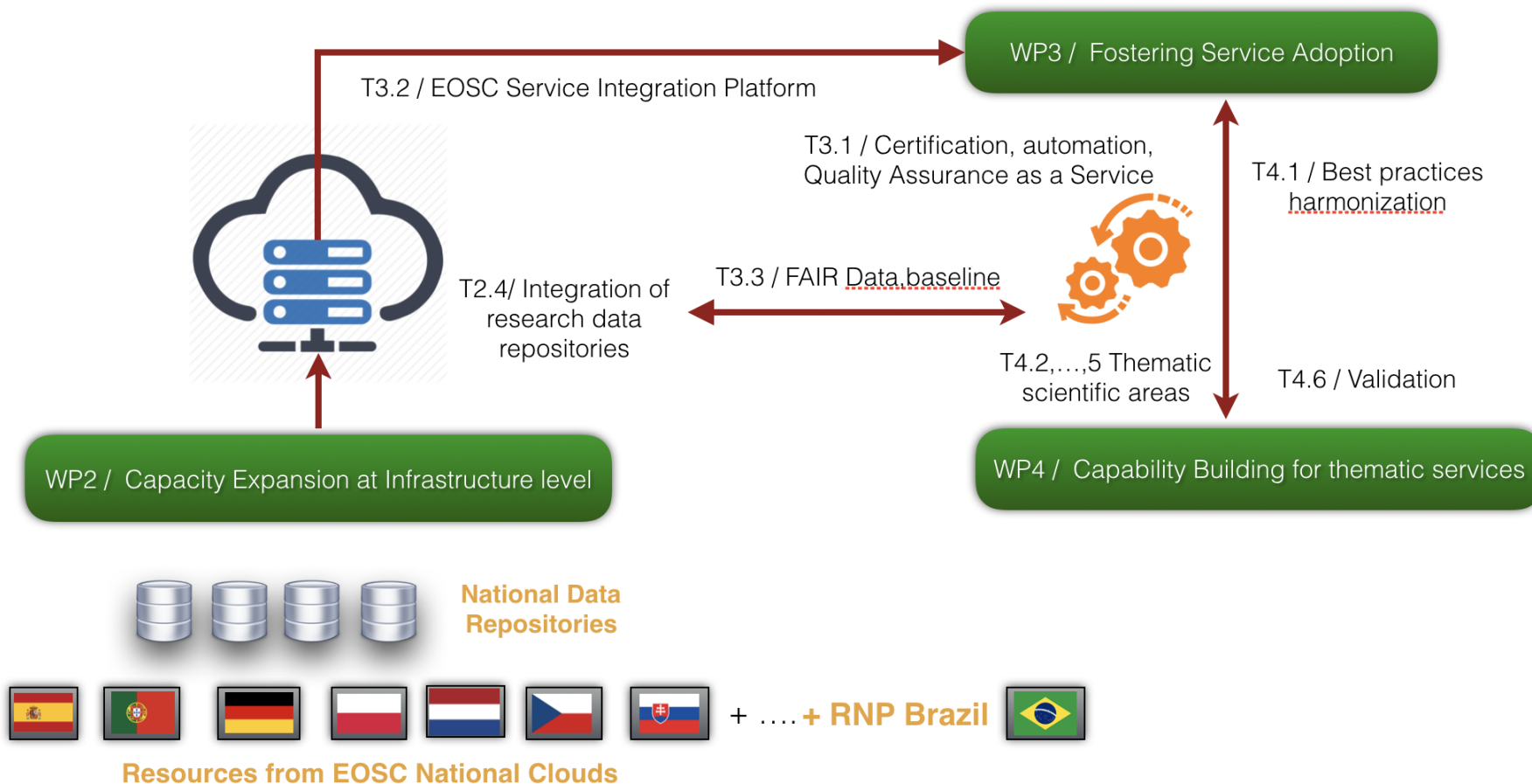
- Open Access to **documental information** is one **thing** (scholarly communications)
- Open Data Access to **Scientific Data** is something **else**

EOSC-synergy is an opportunity to pilot concrete implementations

- **DANS** is a **key partner** to bring in expertise in this domain (direct link to FAIRsFAIR)
- **DIGITAL.CSIC** has the mandate to pilot Open Access in Spain
- **FCT** in Portugal wants to pilot data repositories for the long tail of science (large organized communities have their own solutions)
- **JISC**, **CESNET** (resp. **MU**), **PSNC** and **IISAS** playing key policy roles on their respective countries as well



Thematic Services Integration



Alignment at the Policy level



- Landscape analysis
 - Focused on barriers to the transnational access and data/resource sharing
- Gap analysis and recommendations
 - What we can learn from the landscape analysis
 - Technical and policy level integrated
- National and international liaisons
 - With whom to interact



Policy spans technical and national networking



Skills development

WP2 / Capacity Expansion at Infrastructure level



National Data
Repositories



Resources from EOSC National Clouds

+ RNP Brazil



T4.2,...,5 Thematic scientific areas

WP4 / Capability Building for thematic services

T6.1 / EOSC Training Platform



WP6 / Skills development

T6.3 / Integration with
National Educational Programs



T6.2 / Methodology
and Tutorial Certification

Adding training as fully-fledged EOSC Portal component



T4.2,...,5 Thematic scientific areas

WP2 / Capacity Expansion at Infrastructure level

WP4 / Capability Building for thematic services

CURRENT SITUATION

- Lack of a global EOSC wide coherent approach to training.
- Training materials scattered.
- Lack of funding for training in situ.

2 / Methodology
Tutorial Certification

EOSC-SYNERGY will

- ✓ Add training as fully-fledged EOSC Portal component.
- ✓ Provide guidelines and recommendations for high-quality training materials, oriented to training the trainers.
- ✓ Provide infrastructure to support self-learning.
- ✓ Provide infrastructure for massive open online courses (MOOCs).

WP2: Capacity expansion at the infrastructure level

National data repositories; Policy (WP5) liaison

WP4: Thematic Services Integration

CryoEM; Mass Spectroscopy

WP5: Alignment at the policy level

WP leadership; Gap analysis and recommendations

WP6: Skills development

Infusion of project results into university curriculum

Formal partner CESNET, but most skills taken from MU as part of the e-INFRA CZ collaboration



Thank you
Questions?



<https://www.eosc-synergy.eu>