Ibergrid Transition to EGI

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www.eu-egee.org

- **A new scenario**
- **Roadmap**
- **International Tasks**
  - Operational Tools
  - Central Services
  - Local Services
- **Global Tasks**

EGI framework:

- **International Tasks**
- **Global Tasks**

Transition from EGEE to EGI:

- **A joint effort between ES-NGI and PT-NGI under the umbrella of IBERGRID**

Common Portuguese/Spanish Iberian infrastructure

– Grid computing, HPC

– Network, Applications

– Volunteer computing

Provides an umbrella for an Iberian regional grid

– Integrating Portuguese and Spanish NGI resources

– Fully interoperable with EGI

IBERGRID has taken the role of EGEE SWE ROC in EGI

– Towards a sustainable model without loosing synergies and advantages

Activities in the aim of the NGIs International Tasks

Portugal Tasks

- Common VO management and coordination
- Operations portal
- Catalogues and services for the VOs
- Certification Authority for Portugal (LIPCA)

Spain Tasks

- Helpdesk (Request Tracker)
- Monitoring and accounting
- Infrastructure database (GOCDB/HGSM)
- Certification Authority (PKIrisGrid)
- Middleware security

Common Tasks

- Core services and redundancy
- Regional information system; Support groups
- Training infrastructure; Operations coordination
- Infrastructure security; Seed resources for new users

EGEE

IBERGRID TRANSITION PLAN TO THE NATIONAL GRID INFRASTRUCTURE BASED MODEL

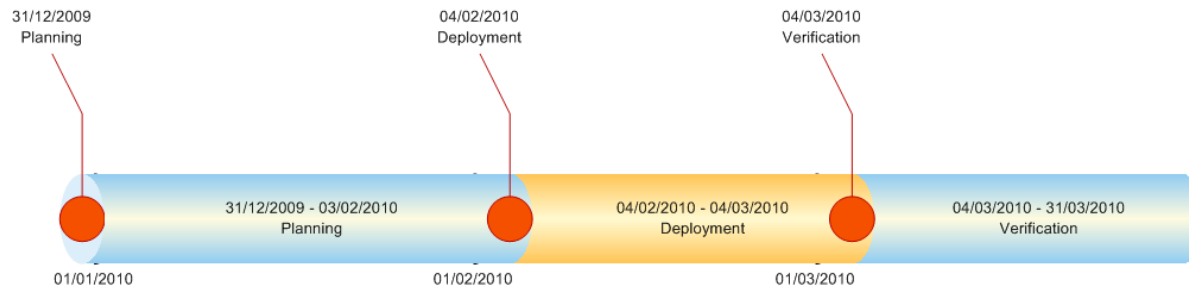|	
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Abstract: This document describes the transition plan to migrate Ibergrid infrastructure into EGI. Ibergrid is composed by NGI-ES and NGI-PT.

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31/12/2009                  04/02/2010                  04/03/2010
Planning                    Deployment                  Verification


      31/12/2009 - 03/02/2010        04/02/2010 - 04/03/2010        04/03/2010 - 31/03/2010
            Planning                       Deployment                     Verification

01/01/2010                  01/02/2010                  01/03/2010
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Ibergrid Transition Schedule

- **The planning phase:**
  - Identification of which critical services should be deployed
  - Identification of the partner with the correct know-how to deploy those services

- **The deployment phase:**
  - Implementation of the predefined strategies
  - Deployment of the critical services

- **The verification phase:**
  - Testing and verification of the availability and reliability of the Ibergrid infrastructure

EGI-Inspire proposal assumes that:

- **Each NGI is committed to a set of International Tasks necessary to integrate their national resources in EGI**

O-N-1	Operations of the NGI topology and configuration repository
O-N-2	Operation of the NGI accounting repository
O-N-3	Operation of monitoring and performance repositories
O-N-4	Operations of the NGI Operations Portal
O-N-5	NGI infrastructure oversight, Operators on duty, etc.
O-N-6	Operations of the NGI ticketing system
O-N-7	Regional Helpdesk
O-N-8	Operation of production core services for international VOs
O-N-9	Operations Coordination at the NGI level

- **To perform these International tasks a certain set of Operational Tools is necessary**

- **Most Operational Tools have been working in their regionalization**

- **Unfortunately not all of them are ready yet to be deployed regionally**

Service	Responsible	Status
Regional Nagios	CESGA	Ready
HGSM	CESGA	Ready
Regional Accounting Portal	CESGA	Ready
Operations Portal	LIP	Under deployment
RT Ticketing System	IFCA/IFIC/RedIris	To be installed
SWE Helpdesk	IFIC	Ready
Infrastructure security	LIP/RedIris	Teams in place
Middleware security	UAB	Teams in place

- **Information System (TopBDII):**
  - Support for Ibergrid-only sites: *custom* Ibergrid TopBDII
  - Failover: IFCA, LIP, CESGA
- **VOMS Services:**
  - PT-NGI and Ibergrid: LIP
  - ES-NGI: IFCA
  - Failover: read-only VOMS backup server, CESGA
- **LFC**
  - PT-NGI: LIP
  - ES-NGI: IFCA
  - Failover: read-only, to be deployed at CESGA
- **MyProxy**
  - LIP and IFCA
- **RGMA Registry/Flexible Archiver**
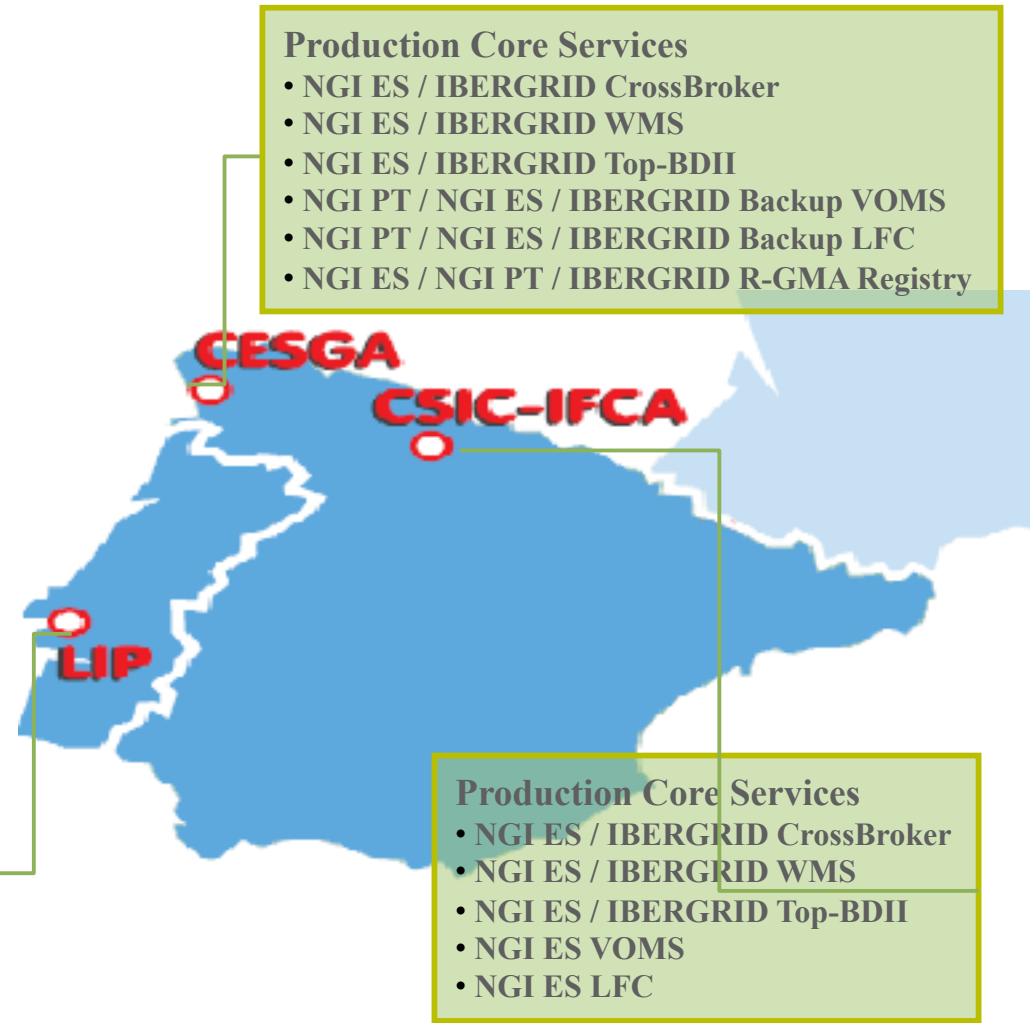 - CESGA

Central Services Status

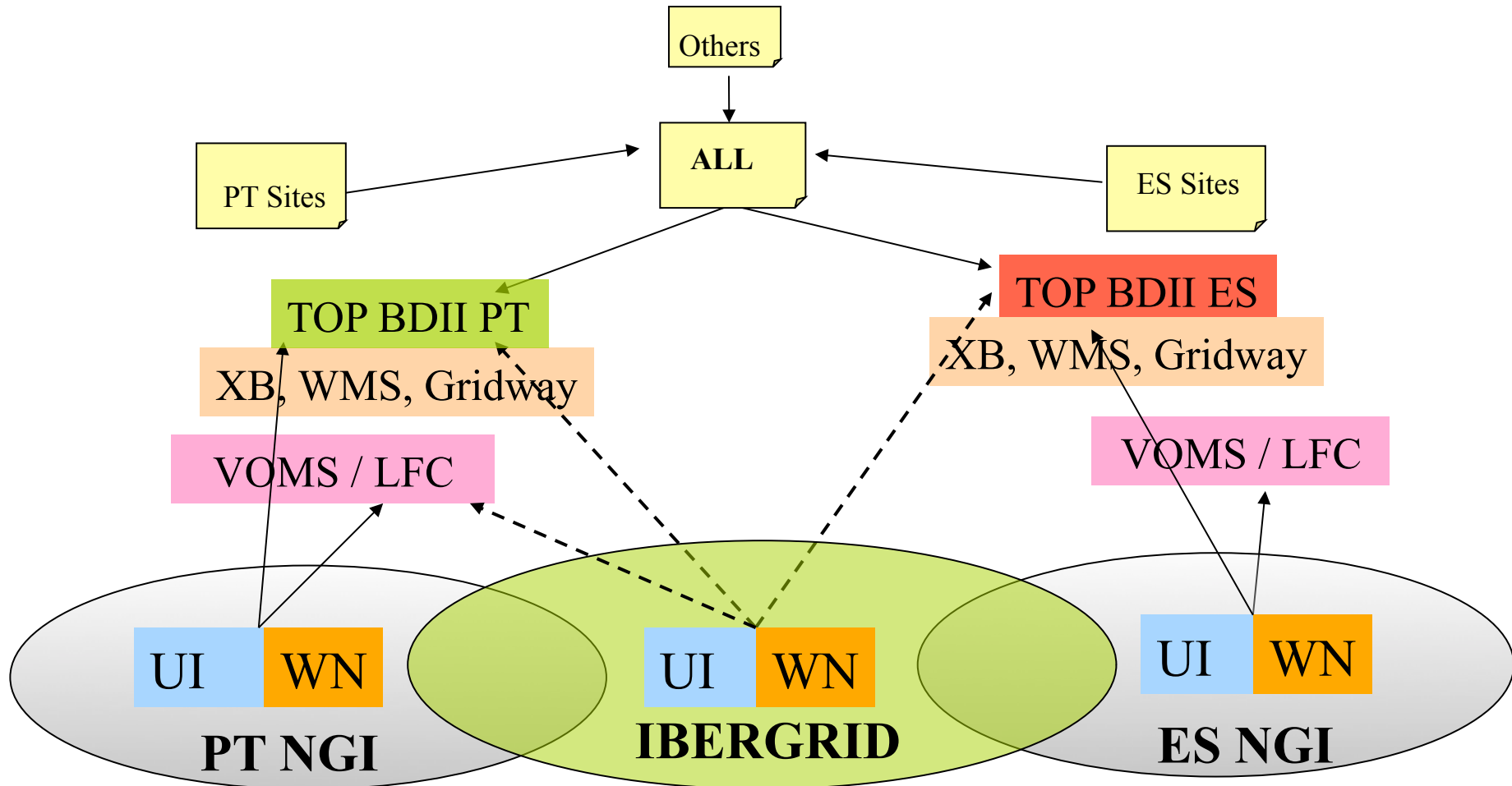| Service	Instances	Status
WMS	CESGA/LIP/IFCA	Up and running
CrossBrokers	CESGA/LIP/IFCA	Up and running
TopBDII	CESGA/LIP/IFCA	Up and running
Main VOMS	LIP/IFCA	Up and running
Backup VOMS	CESGA	Up and running
LFC	LIP/IFCA	Up and running
Backup LFC	CESGA	Under deployment
My Proxy	LIP	Up and running
RGMA Registry	CESGA	Up and running

Core Resources

- Geographically spread
- Redundancy to failovers

34 sites

- 8 Portuguese sites
- 1 site from Marroco
- 25 Spanish sites
  - 16 sites in Certified status in GOCDB

Production Core Services
- NGI ES / IBERGRID CrossBroker
- NGI ES / IBERGRID WMS
- NGI ES / IBERGRID Top-BDII
- NGI PT / NGI ES / IBERGRID Backup VOMS
- NGI PT / NGI ES / IBERGRID Backup LFC
- NGI ES / NGI PT / IBERGRID R-GMA Registry

CESGA

CSIC-IFCA

LIP

Production Core Services
- NGI PT / IBERGRID CrossBroker
- NGI PT / IBERGRID WMS
- NGI PT / IBERGRID Top-BDII
- NGI PT / IBERGRID VOMS
- NGI PT / IBERGRID LFC
- NGI PT / IBERGRID MyProxy

Production Core Services
- NGI ES / IBERGRID CrossBroker
- NGI ES / IBERGRID WMS
- NGI ES / IBERGRID Top-BDII
- NGI ES VOMS
- NGI ES LFC

All sites contributing resources to Ibergrid <u>should</u>:

- **Register in HGSM**
- **Configure Ibergid VOs**
- **Support operations VO: ops.vo.Ibergrid.eu**

A small number of sites should support the training VO:

- **Tut.vo.Ibergrid.eu**

O-E-2	Accounting Repositories	CESGA
O-E-9	Middleware Rollout	LIP/IFCA/CESGA
U-E-5	User Technical Services	UPV/LIP
M-E-1	Documentation of the overall process	IFCA/LIP/CESGA
M-E-3	Definition and Assessment of Quality Criteria	IFCA/LIP/CESGA

- **IBERGRID has taken over EGEE SWE federation**
  - Still using EGEE operation tools (like other federations / NGIs):
    - Operation portal / Dashboard; GOCDB; Nagios
- **The transition to EGI operations**
  - Creation of the IBERGRID entity in GOCDB **OK**
  - Creation of the IBERGRID entity in SAMAP **OK**
  - Creation of the IBERGRID entity in CIC Dashboard **OK**
  - Creation of a new support unit in GGUS for IBERGRID **OK**
  - Certification of the ROD team **OK**
  - Add IBERGRID sites to the IBERGRID Central Nagios **In Progress**
  - Move EGEE SWE sites to IBERGRID in GOCDB **Waiting**
  - Stop operations as EGEE SWE and start operating as IBERGRID **Waiting**

- **IBERGRID teams started to accomplish ROD responsibility**
  - ► Check open alarms (Nagios tests failures) in the central Dashboard
  - ► Warn sites about alarms < 24H
  - ► Open tickets to sites with alarms > 24h
  - ► Escalate unsolved problems to EGI COD staff
  - ► Good metric to get the health status of the infrastructure

- **Weekly meetings**

  - ► Operational problems and Technical discussions
  - General status of the integration in EGI
  - Technical discussions: How to adapt procedures; How to configure resources; …

  https://web.lip.pt/wiki-IBERGRID

- **The full regional model for operations is still not in place**
    - Verification of the Regional Nagios by the Central Nagios team done
    - ▶ Regional Operation Portal not available
        - Expecting for a regional release in the next month
    - ▶ Regional version of the GOCDB not available
        - It will not be present before the end of 2010
        - HGSM integration with GOCDB under testing
- **Workarounds**
    - ▶ In the meanwhile sites have to register in GOCDB
        - EGEE SWE sites will be migrated to IBERGRID GOCDB entity
        - Sites not registered in GOCDB should do it under the IBERGRID entity

- **A plan has been established to guarantee a smooth transition of Ibergrid to the new EGI ecosystem**

- **An initial set of <u>operational tools</u> has been deployed**

- **Additional tools may be required but Ibergrid specific needs will be evaluated after the transition**

- **Still <u>a lot of uncertainty</u> surrounding EGI and EMI**
  - EMI started May 1
  - EGI-Inspire starts June 1

- **Currently we are facing <u>manpower issues</u> while waiting for new EGI contracts**