IBERGRID

IBERGRID Operations

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Outline

- **<u>IBERGRID:</u> Political agreement between the Portuguese and Spanish governments**
  - ► **Grid Computing; HPC**
  - ► **Network; Applications**
  - ► **Volunteer Computing**

- **Provides an umbrella for an Iberian regional grid**
  - ► **Integrationg Portuguese and Spanish resources**
  - ► **Fully interoperable with EGI**

- **IBERGRID has taken the role of EGEE SWE federation**
  - ► **Towards a sustainable model without losing the cooperative work and synergies from the past**

Portuguese grid initiative   **Spanish grid initiative**

Activities in the aim of the NGIs International Tasks

- ❑ **Portugal Tasks**
  - ▶ **Common VO management and coordination**
  - ▶ **Operation portal**
  - ▶ **Catalogues and services for the VOs**
  - ▶ **Certification authority for Portugal**
- ❑ **Spanish Tasks**
  - ▶ **Helpdesk (RT)**
  - ▶ **Monitoring and accounting**
  - ▶ **Infrastructure DB**
  - ▶ **Certification authority for Spain**
  - ▶ **Middleware security**
- ❑ **Common Tasks**
  - ▶ **Core services and redundancy**
  - ▶ **Regional information system**
  - ▶ **Support groups; Training infrastructure**
  - ▶ **Operation coordination**
  - ▶ **Infrastructure security; seed resources**

EGEE

**IBERGRID TRANSITION PLAN
TO THE NATIONAL GRID
INFRASTRUCTURE BASED MODEL**

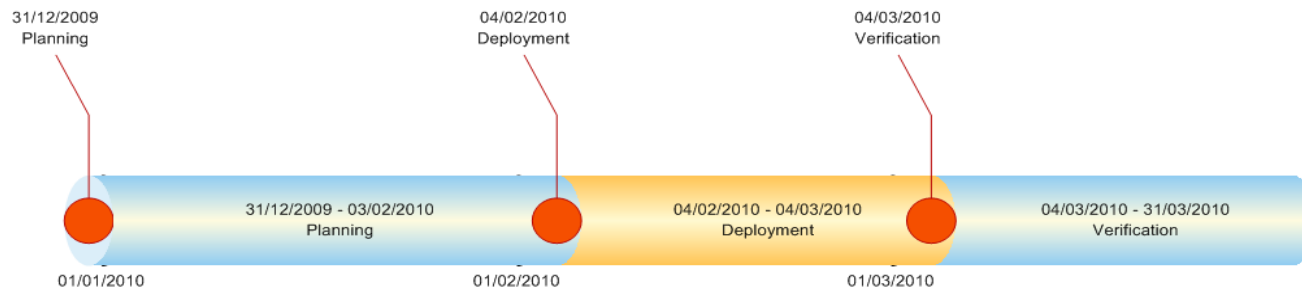|	
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Abstract: This document describes the transition plan to migrate Ibergrid infrastructure into EGI. Ibergrid is composed by NGI-ES and NGI-PT.

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IBERGRID Transition Roadmap

- **The planning phase:**
  - ▸ **Identification of which critical services should be deployed**
  - ▸ **Identification of the partner with 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**

31/12/2009 Planning	04/02/2010 Deployment	04/03/2010 Verification
31/12/2009 - 03/02/2010 Planning	04/02/2010 - 04/03/2010 Deployment	04/03/2010 - 31/03/2010 Verification
01/01/2010	01/02/2010	01/03/2010

IBERGRID

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

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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

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- **To perform these International tasks a certain set of Operational Tools is necessary**
  - ▶ **Most "Operational Tools Staff" have been working in their regionalization.**
  - ▶ **Unfortunately not all of them are ready yet to be deployed regionally**
    - ▪ **It is not clear when these tools will be available**
  - ▶ **The picture is still not completely clear regarding the scope of regional operation tools**
    - ▪ **Regional GGUS**
    - ▪ **Regional GOCDB**
    - ▪ **Regional Dashboard**

Operation tools status

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) + WMS**
  - ▶ **EGI view + IBERGRID view**
  - ▶ **Failover: IFCA, LIP, CESGA**
- **VOMS Services:**
  - ▶ **PT-NGI + IBERGRID: LIP; ES-NGI: IFCA**
  - ▶ **Failover: read-only VOMS backup server, CESGA**
- **LFC**
  - ▶ **PT-NGI + IBERGRID: LIP; ES-NGI: IFCA**
  - ▶ **Failover: read-only instance to be deployed at CESGA**
- **MyProxy**
  - ▶ **LIP and IFCA**
- **RGMA Registry/Flexible Archiver**
  - ▶ **CESGA**

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Core services status

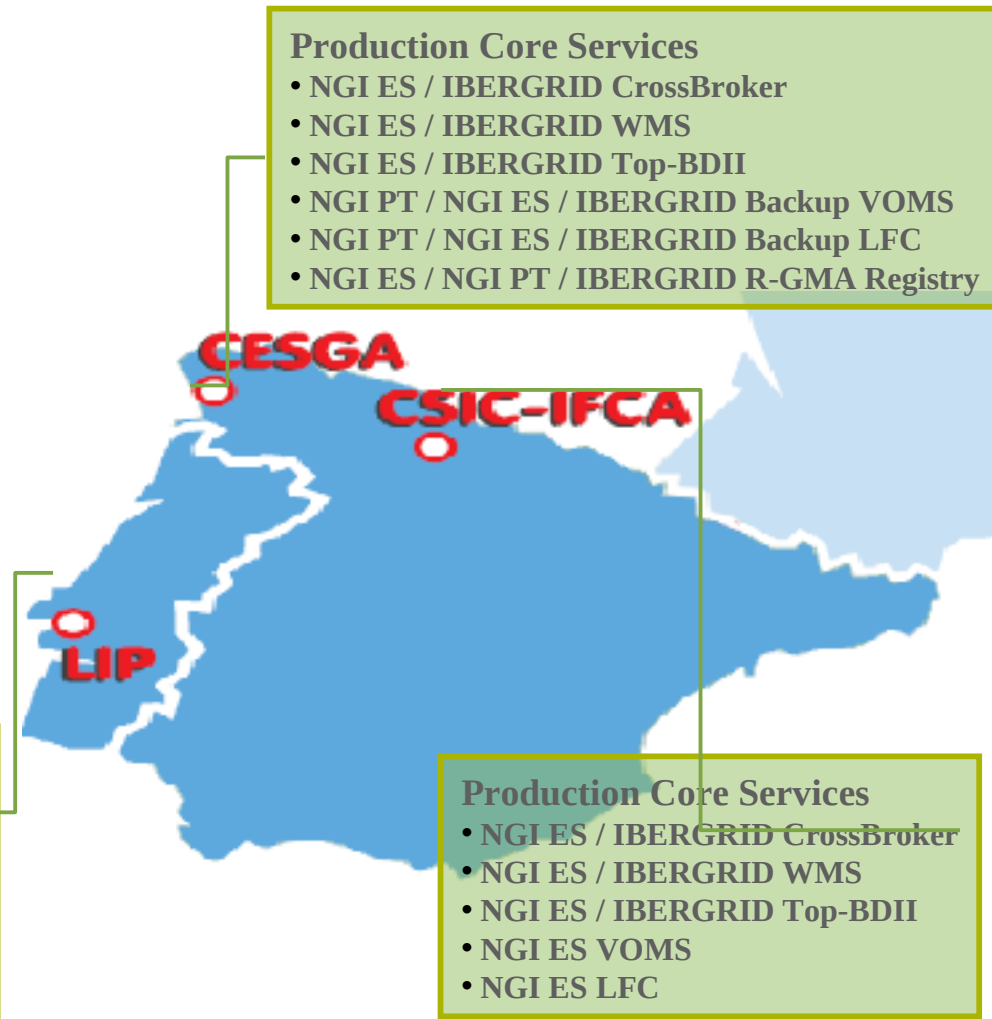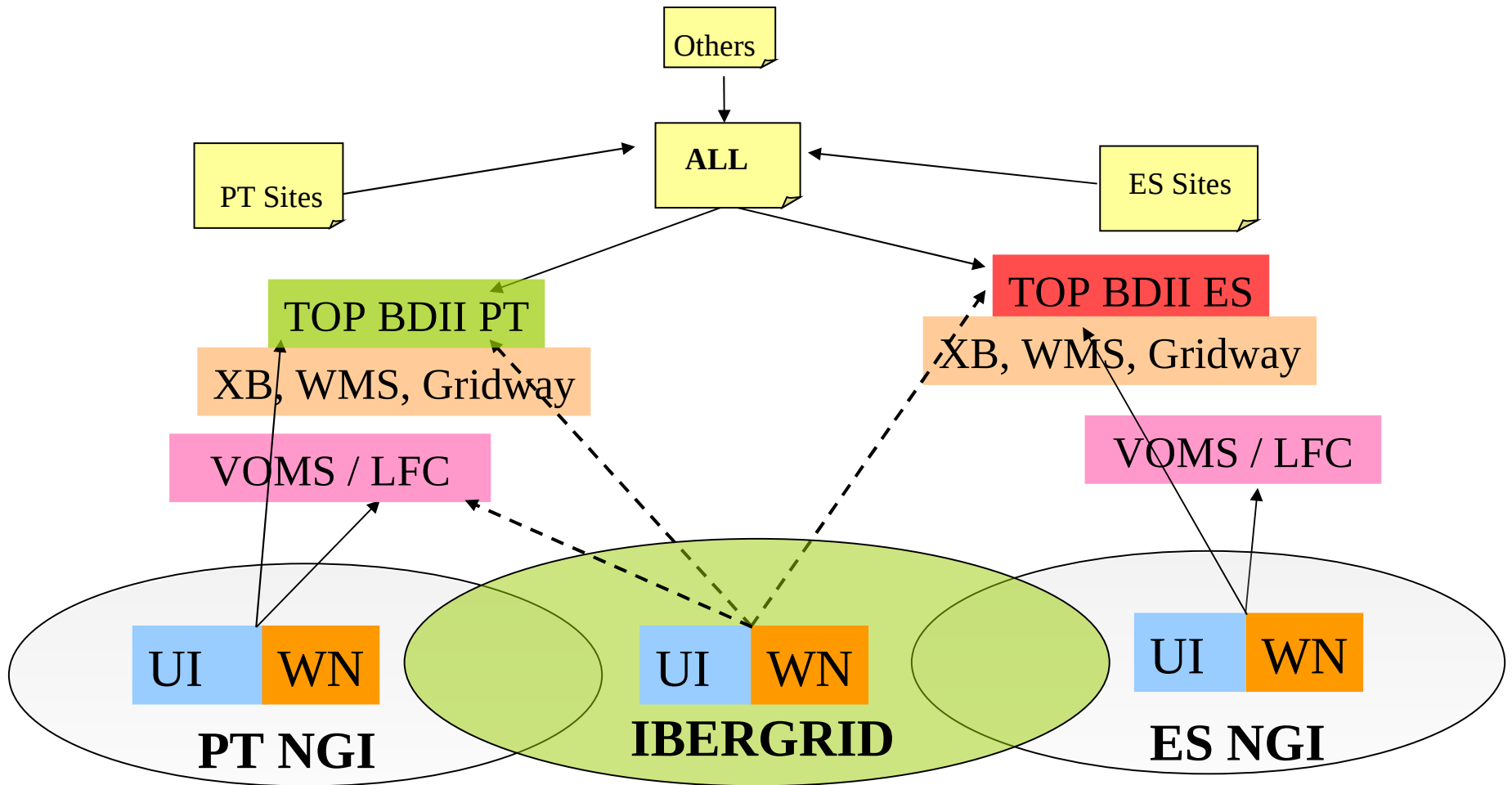| Service	Instances	Status
WMS	CESGA/LIP/IFCA	**Up and running**
CrossBrokers	CESGA/LIP/IFCA	**Up and running**
TopBDII	CESGA/LIP/IFCA	**Up and running**
Main VOMS	LIP/IFCA	**Up and running**
Backup VOMS	CESGA	**Up and running**
LFC	LIP/IFCA	**Up and running**
Backup LFC	CESGA	**Under deployment**
My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

IBERGRID infrastructure

- **Core Resources**
  - ▸ **Geographically spread**
  - ▸ **Redundancy to failovers**
- **34 sites in total**
  - ▸ **8 Portuguese sites**
  - ▸ **25 Spanish sites**
    - ▪ **16 sites in Certified status in GOCDB**
    - ▪ **Some GLOBUS sites**

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

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- **All sites contributing resources to IBERGRID should:**
  - **Register in HGSM**

  - **Configure IBERGRID VOs**
    - **Support operations VO: ops.vo.Ibergrid.eu**

  - **Setup their resources to link to IBERGRID core service**
    - **Custom TOP-BDIIs**
    - **WMS, LFC, VOMS**

  - **Sites not registered in GOCDB are asked to register even if they do not wish to share there resources at European level**

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Integration in EGI operations

- **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 (GGUS #57990)**
  - **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
  - **Certification of the regional Nagios instance (GGUS #57066)** — 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 / Start operating as IBERGRID**

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Operations Activities

- ❑ **LIP was one of the teams testing the regional version of the Operations Portal**

- ❑ **IBERGRID (LIP,IFCA,CESGA) ROD responsibilities fulfilment**
  - ▶ **Support sites with open alarms in the central Dashboard**
    - ▪ **Alarms < 24H (warn and support)**
    - ▪ **Alarms > 24h (tickets and support)**

- ❑ **Weekly meetings and internal mailing lists**
  - ▶ **Operational problems and technical discussions**
  - ▶ **General status of the integration in EGI**
  - ▶ **Technical discussions: How to adapt procedures; How to configure resources; …**
  - ▶ **Security procedures migration from SWE EGEE to IBERGRID**

IBERGRID WIKI

- **Coordination staff is overload until new funding arrives**
- **The full regional model for operations is still not in place**
  - **Regional Operation Portal not available**
    - **Expecting for a regional release in the next month**
    - **Do we really need a regional dashboard?**
  - **Regional version of the GOCDB not available**
    - **It will not be present before the end of 2010**
    - **We are using HGSM**
    - **Is it worth to test HGSM integration with GOCDB?**

- **WhishList**
  - **Use the same tools / framework to monitor all resources (national and international) of the same NGI(s)**
  - **Only propagate the metrics for the international resources**

- ❑ **Support model**
  - ▶ **Regional ROD are also working as the regional 1ˢᵗ support staff**
  - ▶ **On a weekly basis LIP is looking for the status of GGUS tickets**
    - ▪ **Have they been routed properly?**
    - ▪ **Are they being treated in time?**
    - ▪ **Provide documentation to the users / site admins**
  - ▶ **Mailing lists support: ibergrid-rollout@listas.cesga.es**
    - ▪ **Where the regional experts are sitting**
  - ▶ **Other central mailing lists**

- ❑ **Training model**
  - ▶ **Dedicated VO for training: tut.vo.ibergrid.eu**
  - ▶ **Worthless CAs deployed at small number of sites**
  - ▶ **Short limited certificates emitted under this worthless CA**

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Governance and OLA

- **The coordination of IBERGRID initiative is a joint effort from**
  - ▶ **LIP, CSIC-IFCA, CESGA**
  - ▶ **Participation in the "Operations Managers Meeting" (once a month) will be assured by any member of those institutes**
  - ▶ **OTAG participation**
    - ■ **CESGA is the responsible for the accounting tools**
    - ■ **CESGA / LIP may provide feedback for JRA1**

- **OLA**
  - ▶ **Availability of core middleware and core operational services?**
  - ▶ **Response time of operations staff to trouble tickets ?**
  - ▶ **Response time of the NGI CSIRT?**
    - ■ **We would like to see what are the minimum values proposed before commiting to something**

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

- **An initial set of operational tools has been deployed**
  - ▸ **Additional tools may be required but IBERGRID specific needs will be evaluated after the transition**

- **Still a lot of uncertainty surrounding EGI and EMI**
  - ▸ **EMI started May 1**
  - ▸ **EGI-Inspire starts June 1**

- **Currently we are facing manpower issues while waiting for new EGI contracts**
  - ▸ **Huge load to unfounded EGI staff**

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