

# EGEE

## ROC IMPLEMENTATION

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**Abstract:** This document describes the draft implementation for the EGEE ROC.

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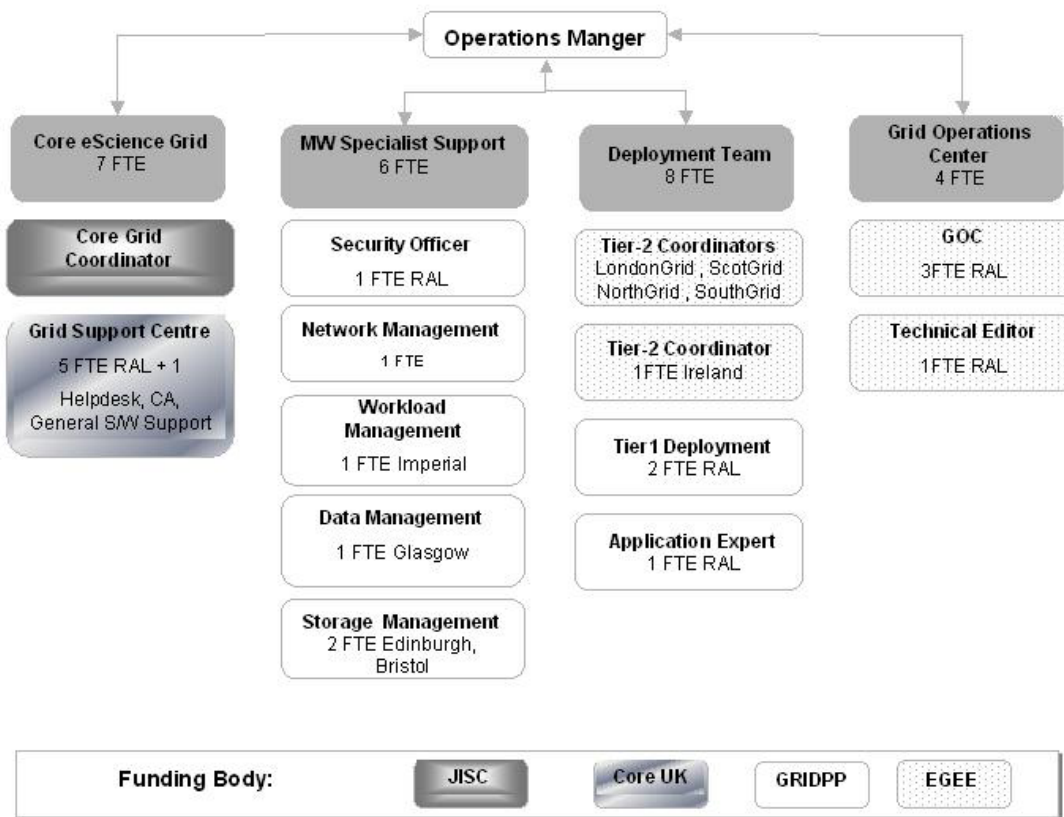
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## 1 IMPLEMENTATION

The activities of the ROC will be handled collectively by five teams of people.

- The Management Team
- The Deployment Team
- The Operations and User Support Team
- The Security Team
- The Specialist Support Team

### 1.1 ORGANISATION MODEL



**FIGURE 1:** THE KEY COMPONENTS TO THE MANAGEMENT MODEL FOR THE ROC AND CIC IN THE UK AND IRELAND PARTNER REGION. FUNDING FOR THESE POSTS COMES FROM FOUR AREAS: CORE UK E-SCIENCE PROGRAM, JISC, GRIDPP (PPARC) AND EGEE.

### 1.2 ROLES AND RESPONSIBILITIES

- Clarify the roles and responsibilities of these people
- Describe how they interact with each other
- Use-case scenarios would be helpful?
- Timescales to get these people appointed

This team of about xxx FTE, will be led by a production manager who will oversee all operations in the UK and Ireland, and will perform the dual role of functioning as an EGEE ROC and CIC. The production manager will be also be responsible for negotiating SLAs with resource centres in the region and will report to the ROC coordination manager (Italy) and to the OAG.

### **1.3 DEPLOYMENT TEAM**

This team, consisting of about 8 people, will be responsible for the deployment of grid technology through the Tier centres, coordinating the local effort as appropriate, and will liaise closely both with the middleware developers and with complementary support teams (UK Grid Support Centre, European Grid Support Centre, EGEE Operations and Support Centres).

- Who is involved?
- How many FTEs ?
- When do we expect these people to be in place?

### **1.4 THE MIDDLEWARE SPECIALISTS TEAM**

- Who is involved?
- How many FTEs ?
- When do we expect these people to be in place?

This is a team dealing with specific issues regarding the middleware and is concerned primarily with the operation and smooth running of services. The team will provide customised releases based on the official release to the resource centres.

#### **1.4.1 Data and Storage Management**

Responsible for providing a first point of contact for system managers in the areas of data and storage management. They will provide expertise and support.

#### **1.4.2 Work Load and Management System**

This FTE will be responsible for providing WLMS expertise to the EGEE and LCG projects. Decisions as to number and locations of the WLMS nodes will be made by this FTE, in conjunction with the Grid Operations Team, the Tier 2 Coordinators and the experiments. This FTE will work closely with the Grid Operations Team in order to debug problems associated with the WLMS and is expected to give general support in this area. Understanding of the EDG WLMS architecture, along with practical experience of its support will be important for the rapid provision of this service. Finally, this post will be expected to produce a set of monitoring tools that will publish information about the state and history of WLMS on the Web.

### **1.4.3 Security Officer**

The Security Officer post will provide expert support to the RC's in matters of security, with particular attention to responding to security vulnerabilities and incidents. The duties will also include the negotiation of security policies and procedures acceptable to the member institutes, Tier 1 and Tier2 centres, the applications and Grids such as LCG, EGEE, US HEP and the UK core programme Grid.

The Security Officer will also have a role in co-ordinating security policies and procedures between GridPP, LCG, EGEE, US HEP and the Tier-2/Tier-1 sites where necessary, and where possible will represent the requirements of the partner sites in the wider LCG, EGEE and other Grid contexts.

Other possible tasks include providing advice on firewall configuration for secure Grid operation, the investigation and deployment of Grid intrusion detection and monitoring tools, the investigation, development and deployment of Grid service security analysis tools.

### **1.4.4 Networking**

- Providing expertise and assistance in the deployment and configuration of all network related middleware components, most of which will follow the LCG/EGEE definition, implementation and deployment schedule.
- Performing proactive performance monitoring, and aiding in diagnosis and reporting of performance problems through the normal channels
- Assembling statistics on all Tier-2 network connection capacities and usage and building an appropriate traffic planning model.
- To represent the needs of all Tier 2 centre in respect of networking at all appropriate meeting.

### **1.4.5 Virtual Organization Management and Services**

To be completed

## **1.5 USER SUPPORT TEAM**

The Grid Support Centre (GSC) will provide general support to the user community. They will manage the local CA providing certificates to users and resources, address general queries concerning globus technology through a helpdesk and provide training in the relevant areas. This team may also run core services for the ROC such as a regional VOMS.

## **1.6 OPERATIONS TEAM**

The operations team will also provide front-line monitoring of resources distributed throughout the ROC. This includes managing site information, proactive monitoring and SLAs.

The operations team will also provide monitoring for any core grid-wide services distributed throughout the ROC.

## 1.7 STAFFING

To be completed

## 1.8 TASK BREAKDOWN

### Management

- Execution Plan (EGEE PM6)
- Quarterly Reports
- Cost Claims
- Recruitment
- Oversee deployment of grid middleware through the region

### Deployment

- Rollout of Middleware
- Certification of New Sites
- Provide Immediate Support to Resource Centres
- Review Platform Requirements
- Assess New Middleware

### Grid Operations

- Monitoring Resource Centres
- Tool Development
  - Custom Monitoring for ROCs
  - Proactively Monitoring (Nagios)
  - Integrate Available Tools
- Packaging
- Documentation
  - Procedures Document
  - GOC Installation Guide

## 1.9 DELIVERABLES FOR 1<sup>ST</sup> 3 MONTHS

### Management

- Complete Execution Plan
- Complete UK/I ROC Web Page
- Complete Recruitment

- Complete Quarterly Reporting 1 and Cost Claim 1
- Agree Responsibilities with other ROCs

#### Deployment

- Rollout (Install, Certify) LCG2 Middleware to Resource Centres
  - Goal is to have at least 1 Site/ Tier2
- Provide Support
- Interact With All Resource Centres

#### Grid Operations

- Monitor Resources Deployed in the UK/I and Other ROCs
  - Establish a Prototype GOC
- Package Monitoring Software
- Establish a Second GOC (Taipei)
- Establish CA and Helpdesk

#### 1.10 MILESTONES FOR 1<sup>ST</sup> 3 MONTHS

- UK/I ROC Web Pages
- CIC Services Defined
- Preliminary Implementation of Tailored Monitoring (UK Only, GridPP)
- UKI Helpdesk
- Recognised Certificate Authorities in both UK and Ireland
- N Sites Certified (  $\geq$  1 Site/T2)