

EGI_DS

FEEDBACK ON EGI FUNCTIONS DEFINITION

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Abstract: This deliverable provides a succinct overview of the basic functions to be performed in the European Grid Initiative (EGI), adjusted in accordance with all feedback provided by the European NGIs and other stakeholders. In addition, the functions are recontextualised to take into account the ongoing work for preparing the EGI Proposals following the FP7 call structure for Distributed Computing Infrastructures. Finally, the document provides a brief overview of the results of the most recent survey on the implementation of these and other functions for the transition to EGI.

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1. INTRODUCTION

1.1. PURPOSE

This deliverable provides a succinct overview of the functions performed in the context of the European Grid Initiative (EGI), as described in D3.1 [1] and D3.2 [2], adjusted in accordance with the feedback provided by the European NGIs and other stakeholders. In addition, the functions are recontextualised to take into account the ongoing work for preparing the EGI Proposals following the FP7 call structure for Distributed Computing Infrastructures.

The intended audience for this deliverable is currently focused on those EGI “actors and stakeholders” who have participated in the EGI planning and who are working on the various EGI projects described in the text below.

1.2. EDITORIAL RESPONSIBILITIES

Section	Main Providers of material	Responsible editor(s)	Work Package
All	Diana Cresti	Diana Cresti, Laura Perini	WP3
4	A. Candiello, D. Cresti	D. Cresti, L. Perini	WP3

1.3. DOCUMENT ORGANISATION

This deliverable does not provide descriptions of the EGI tasks proposed in D3.2, but merely clusters them by category, accompanied by discussions of any direct feedback received, plus some notes on implementation gleaned from the most recent NGI survey.

Section 2 provides an executive summary of this document. Section 3 gives an overview of new information relevant to the transition and the recontextualisation of the EGI functions. Section 4 presents a schema of the EGI Global tasks (i.e., the tasks performed by personnel at EGI.eu), and provides a discussion of the feedback received, including any implementation notes. Section 5 lists and briefly discusses the NGI International tasks envisioned under the EGI Proper proposal. Section 6 presents the list of functions from D3.2 which were envisioned to be covered by the Middleware Consortia, and briefly discusses how the middleware tasks are recontextualised in light of the new FP7 call structure. Section 7 gives the complete list of User Community Services tasks and discusses very briefly how these are being taken up in the context of the SSC proposals. Section 8 provides a few concluding remarks.

1.4. DOCUMENT AMENDMENT PROCEDURE

Amendments, comments and suggestions should be sent to the authors.

1.5. TERMINOLOGY

This subsection provides the definitions of terms, acronyms, and abbreviations used in this document.

Glossary

AM	Associate Member of the EGI Council
API	Application Programming Interface
ARC	Advanced Resource Connector
CA	Certification Authority
CAO	Chief Administrative Officer
CERN	European Organization for Nuclear Research
COO	Chief Operational Officer
CPU	Central Processing Unit
CTO	Chief Technical Officer
DEISA	Distributed European Infrastructure for Supercomputing Applications
EC	European Commission
EDG	European Data Grid
EGEE	Enabling Grids for E-sciencE
EGI	European Grid Initiative
EGI_DS	European Grid Initiative Design Study
eIRG	e-Infrastructure Reflection Group
ENOC	EGEE Network Operation Centre
ERA	European Research Area
ERI	European Research Infrastructure
EU	European Union
EUGridPMA	European Policy Management Authority for Grid Authentication
FTE	Full Time Equivalent
GGUS	Global Grid User Support
LHC	Large Hadron Collider
M	Million
MC	Middleware Consortia
MCB	Middleware Coordination Board
MoU	Memorandum of Understanding
NGI	National Grid Initiative
NREN	National Research and Education Network
OGF	Open Grid Forum
OMII	Open Middleware Infrastructure Institute for Europe
PB	Policy Board
QA	Quality Assurance

ROC	Regional Operating Centre
SDC	Strategic Discipline Cluster
SLA	Service Level Agreement
SSC	Specialised Support Centres
UCO	User Coordination Officer
UCS	User Community Services
UFSC	User Forum Steering Committee
UMD	Uniform Middleware Distribution
UNICORE	Uniform Interface to Computing Resources
US	United States of America
VDT	Virtual Data Toolkit
VO	Virtual Organisation
WLCG	Worldwide LHC computing Grid Project
WP	Work package

2. EXECUTIVE SUMMARY

The purpose of the WP3 deliverables series is to provide a detailed analysis and description of the functional aspects of EGI, including operations and security, middleware-related tasks, user community services, etc. This analysis was performed in several iterations by members of WP3 in collaboration with a wide range of experts and stakeholders. The first iteration, D3.1, was submitted for feedback to the NGIs and their experts, and was further elaborated, eventually resulting in the publication of the second iteration, D3.2. This latter deliverable was also extensively reviewed by an increasing number of stakeholders, as well as subjected to a series of modifications in connection with a series of workshops on the implementation of the recommended entities (e.g. Specialised Support Centres) and clusters of functions (e.g. collaborations among the Middleware Consortia). As a result, a stable version of D3.2 is currently available (see [2]) which contains a detailed description of EGI tasks which have met with widespread agreement.

Consequently, the feedback that has led to the current deliverable does not focus on the appropriateness of the tasks published in D3.2, but rather on their detailed content and implementation.

In addition to the incorporation of the direct feedback on D3.2, the implementation notes below include some relevant discussion of a recent NGI survey carried out by EGI_DS in the context of the transition to EGI.

The survey in question shows that not only have the EGI functions stabilised, they are proving useful for the implementation phase of EGI.

3. OVERVIEW AND PREPARATION FOR TRANSITION

3.1. RECONTEXTUALISING THE EGI FUNCTIONS

In the earlier deliverables of this series, D3.1 and D3.2, it was assumed that all the tasks described would be covered under one general “EGI project”. However, given the new knowledge of the EU FP7 call structure, these tasks will be redistributed under a few separate but coordinated projects. It is not the purpose of this deliverable to precisely outline this redistribution of tasks; nevertheless, a few assumptions have emerged which can be briefly illustrated here.

The relevant EU call is **FP7-INFRASTRUCTURES-2010-2**, subsection *1.1.2 ICT-based e-Infrastructures* [3], articulated as shown below:

Schema of FP7-INFRASTRUCTURES-2010-2, 1.1 Support to existing research infrastructures, subsection 1.1.2

1.1.2 ICT-based e-Infrastructures	INFRA-2010-1.2.1: Distributed computing infrastructure (DCI)	1.2.1.1 – European Grid Initiative (EGI) 1.2.1.2 – Service deployment 1.2.1.3 – Middleware and repositories 1.2.1.4 – Access to DCI platforms 1.2.1.5 – Extension of DCI platforms
	INFRA-2010-1.2.2: Simulation software and services	
	INFRA-2010-1.2.3: Virtual Research Communities	

The funding scheme for these calls is a Combination of Collaborative projects and Coordination and Support Actions (CPCSA).

In this schema, section 1.2.1.1 (European Grid Initiative) is expected to be allocated to a single proposal EGI; section 1.2.1.2 (Service Deployment) is also targeted to EGI and is intended to cover the continuation of services for large user communities which are in particular need of a seamless transition to the new EGI environment. Given the strong interdependence of activities under these two subcalls, it is currently hypothesised that 1.2.1.1.+ 1.2.1.2 will be covered by a single proposal, which will be referred to here as the “**EGI Proper**” project proposal. The EGI proper project will include the EGI.eu tasks, the NGI international tasks classified as operations and security related (O-N), but only a limited fraction of the NGI international tasks classified as User Community Services (U-N) will be included, i.e. the ones not covered by the SSC Proposal(s), proposed in a different competitive call. Also the Middleware related functions outside EGI.eu. will be implemented in Project(s) separated by EGI proper. The scenario established by the EU FP7 call structure is described with some more details below, as it defines the boundary conditions for the implementation of the EGI functions. In this scenario the objectives and activities do not change significantly, but for some of them the responsibilities are split in different Projects. Project Agreements and trans-Project coordination bodies will be required for maintaining the coherence and efficient of the EGI function system.

All other subsections of 1.1.2 describe competitive calls. In particular, 1.2.1.3 (Middleware and repositories) is targeted (in part) at middleware development and support; it is expected that there will be at least one proposal to cover the middleware consortia tasks already listed in D3.2 (M-C), plus a set of development tasks not discussed in detail in D3.2. This may be referred to as the **European Middleware Initiative** (EMI) project proposal.

Subsection 1.2.2 (Simulation software and services) is intended for projects covering the integration of scientific software in the European e-Infrastructure, which in the context of the WP3 deliverables is discussed under services for new communities (classified as U-N) and includes all tasks related to **Application Porting Support (APS)**. In recent events it has been established that there should be an SSC for this cluster of activities; thus it is expected that there will be at least one APS project proposal.

Subsection 1.2.3 (Virtual Research Communities) is the central subcall for the **Specialised Support Centres**, in particular those organised by scientific community. This includes the bulk of the U-N tasks, as discussed below. Experts involved in these activities are currently preparing project proposals for several SSCs. Some SSCs may present joint proposals, but it is not clear at the time this Deliverable is prepared whether or not a single joint proposal will be feasible. It should be kept in mind in any case that this call is competitive, and it is not the concern of this deliverable to speak of all possible proposals submitted to this call.

Finally, subsections 1.2.1.4 (Access to DCI platforms) and 1.2.1.5 (Extension of DCI platforms) may be relevant to some of the tasks mentioned here. In particular, a specific proposal for 1.2.1.4 relating to generic technology for **Science Gateways** would be of great benefit to the EGI community.

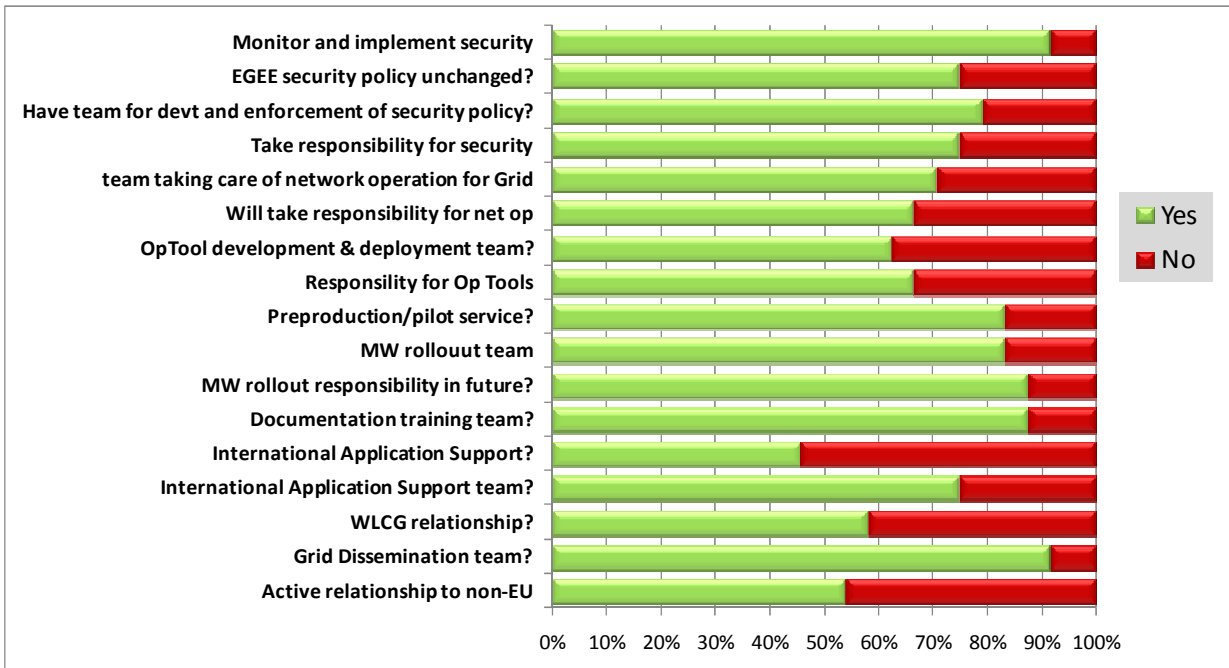
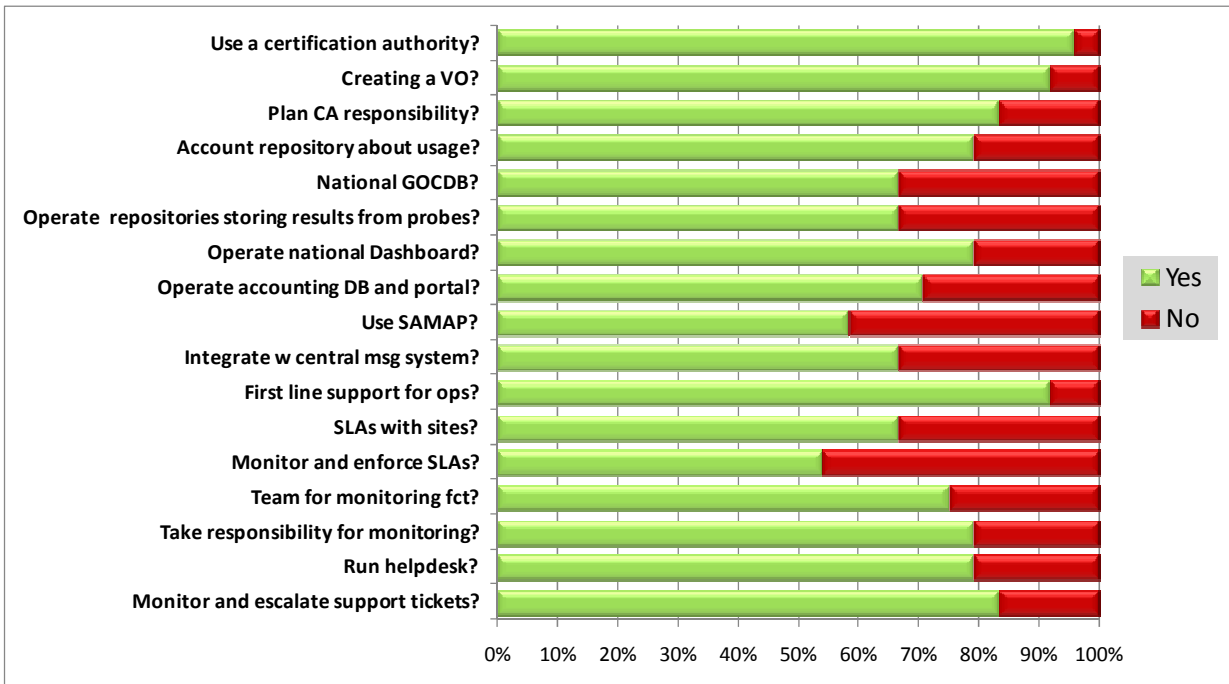
3.2. TRANSITION WORK AND RELATED FEEDBACK

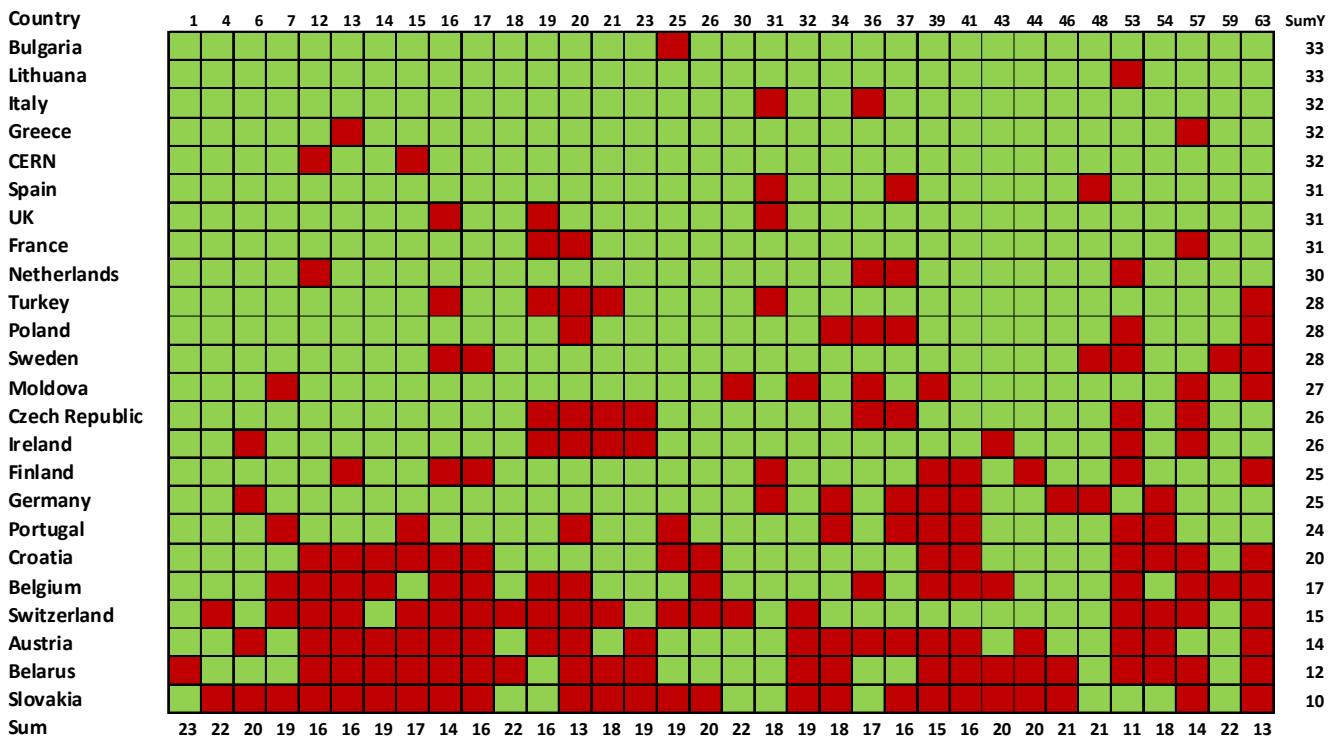
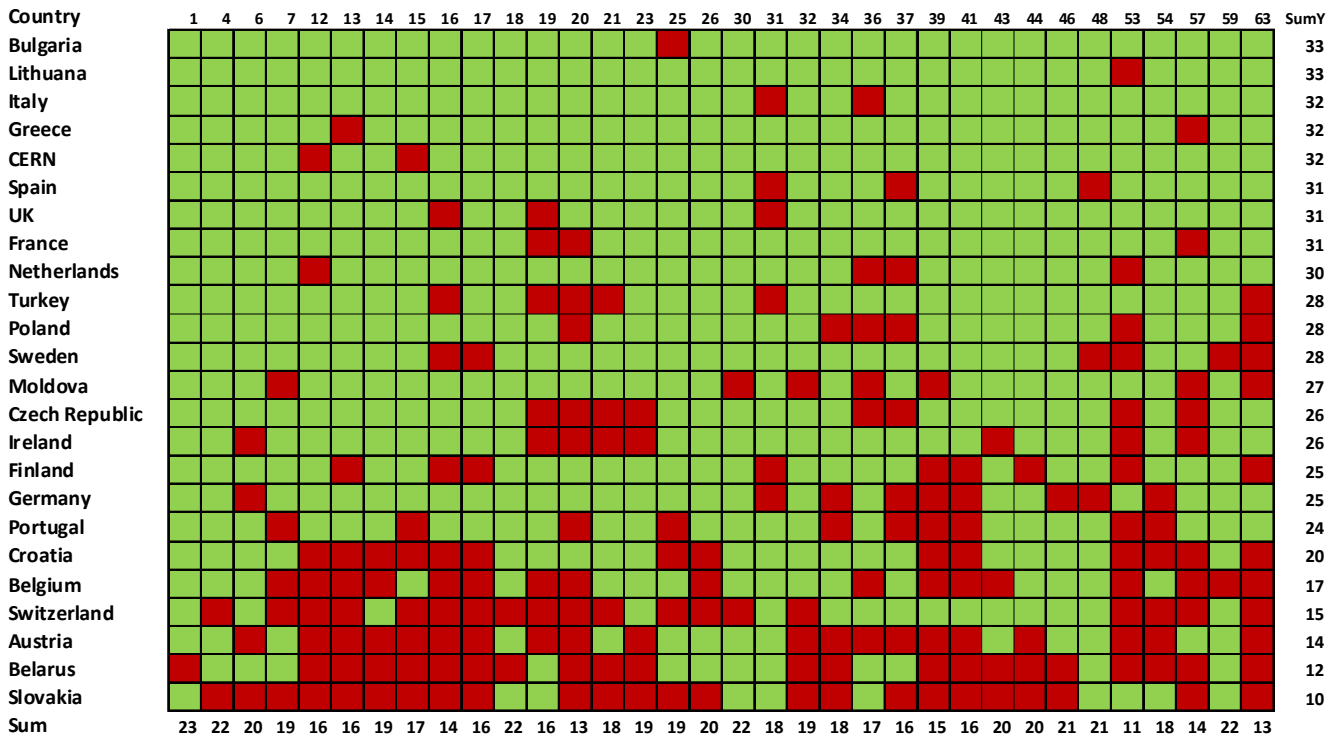
The EGI functions, as described in D3.2, have already begun to serve as a basis for the EGI transition teams to build their proposals. The appointed proposal editors began to prepare a request for bids on these functions to the NGIs, at which time a final formal request for feedback on these functions was made.

This latest round of feedback was essential as a last check of the appropriateness of the functions, so that gaps in functionalities would not be revealed after the bidding process. There were **no requests for modifications** of these functions, although some comments on their implementation were received. These are discussed where relevant.

During the spring 2009, the EGI_DS project conducted a joint WP3-WP5 survey on the implementation of these functions by the NGIs in view of the EGI transition planning. The survey also contained questions regarding some NGI national tasks, which are not covered in D3.2.

The full text of the questions in this survey is given in Appendix A. The results are shown below, as fraction of the answering NGIs (24) that implement the function/ perform the activity described





4. EGI GLOBAL TASKS: EGI.EU

The EGI global tasks are those fulfilled by the central EGI.eu personnel. These have been classified into five categories:

- Operations – O-E tasks
- Middleware maintenance and certification – M-E tasks
- User Community Services – U-E tasks
- External Liaison – E-E tasks
- Directorate (management) – D-E tasks

With respect to the EGI.eu (formerly EGI.org) management structure, these categories can be identified as in **Figure 1**:

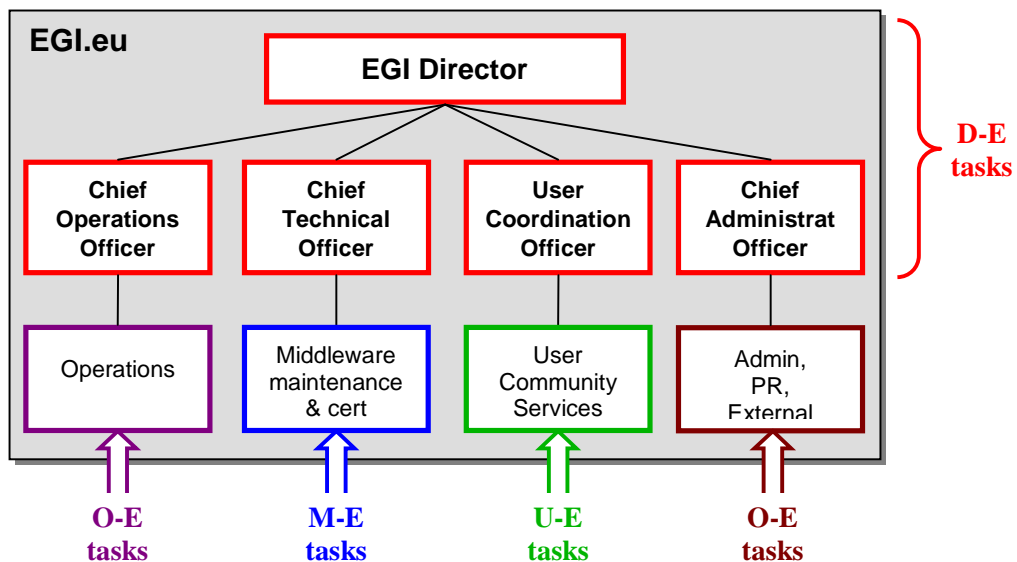


Figure 1. Mapping of -E- tasks to EGI.eu functional units

Note that all the NGI members of the EGI Council have been asked if they wanted to propose changes or integrations or comments on the global tasks (except D-E) in the context of the preparation of the document for the bidding of this tasks for the EGI Proposal, and no changes were proposed.

4.1. O-E TASKS: OPERATIONS AND SECURITY

The bulk of tasks in EGI.eu is in operations and security. These tasks are also the only category that received some detailed feedback and suggestions for implementation, as discussed below. The notes on these tasks should also be kept in mind when considering the implementation of the related O-N tasks.

Operation of tools and Services

O-E-1	Operation of the grid topology and configuration repositories	1 FTE
O-E-2	Operation of accounting repositories for international VOs	1 "
O-E-3	Operation of the grid repositories storing monitoring and performance data, and other related information	2.5 "
O-E-4	Operation of the grid operations portals	0.5 "
O-E-5	Grid operation and oversight of the e-Infrastructure	1 "

These basic operational tasks are in general widely accepted, and used as basis for the preparation of the EGI proposals. It was noted that the technical quality of a number of interfaces is not satisfactory, and that there should be services available via the Web Service technology, which relies on standards (XML schema, SOAP, WSDL) which do not appear to be currently implemented.

Several other improvements to operational tools, or integration of new ones, were suggested – e.g. accounting for SLA compliance monitoring, storage space accounting, monitoring repositories, dashboard services, etc.

This further justifies the need for the development task O-E-17 below, appropriately supplemented by external contributions.

Support

O-E-6	Central and regional Grid support, operation of a ticketing system and of a document repository	2 FTEs
O-E-7	Triage of incoming problems	2
O-E-8	Gathering of requirements for user support tools and processes	0.5

Again, the tasks themselves are not in question; the feedback received is about some specific details of these tasks. One concerns the extension of the current GGUS database to integrate knowledge from NGIs and to complete the support data with the knowledge regarding already applied solutions. In addition, there is a recommendation to extend the adoption of automatic triage, which would provide more space for the elaborative 1st line support.

Other Tasks

O-E-9	Coordination of middleware roll-out and deployment, middleware pilot and certification testbeds	1 FTE
O-E-10	Coordination of resource allocation and of brokering support for VOs from NGIs	0.5
O-E-11	Coordination of interoperations between NGIs and other grids.	0.5
O-E-12	Coordination of network support	0.5
O-E-13	Coordination of definition of best practices, operations procedures, operations requirements	0.5

O-E-14	Operation of production grid core software services, catch-all services for international VOs, catch-all CA	1
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With respect to O-E-9, and the related work by the middleware teams, there is some concern about problems related to the deployment of new middleware releases. Some NGIs expressed a strong interest in providing assistance in the form of some “early adopter” sites. The latest NGI survey also shows that a majority of NGIs are heavily involved in preproduction services and have their own deployment teams.

Concerning O-E-10, it is again pointed out that current models are too complex and could benefit from some streamlining and automation. Similar comments apply to O-E-13 and O-E-14.

This further adds to the importance of task O-E-17, keeping in mind that some newer-generation tools already exist and could be extended to the larger community. Many of the surveyed NGIs are also ostensibly prepared to provide significant contributions to these tasks.

Security

O-E-15	Coordination of security policy development and maintenance	0,5
O-E-16	Coordination of security and incident response	1

Development

O-E-17	Coordination of development and maintenance of operational tools	1
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4.2. M-E TASKS: COORDINATION OF MIDDLEWARE DEVELOPMENT AND SUPPORT

M-E-1	Maintain and document processes and quality criteria common to all middleware providers.	1
M-E-2	Provide and support tools to enable and monitor the processes	1
M-E-3	Define quality and conformance criteria for UMD components. Verify that accepted components are certified according to the agreed process and satisfy the quality and conformance criteria	3
M-E-4	Maintain a repository of certified middleware components or references thereto.	2
M-E-5	Follow the daily execution of the strategic plan endorsed by the MCB. Promote the EGI participation in standardisation bodies.	1

No changes to the Global Middleware tasks were proposed by the NGIs

4.3. U-E TASKS: USER COMMUNITY SERVICES

U-E-1	User Forum Support	1
U-E-2	Coordination of SSC activities	2
U-E-3	Event Organisation	1
U-E-4	Grid Planning & MCB	1
U-E-5	Technical Coordination – User Technical Support	1
U-E-6	Technical Coordination – Informational and and High-level tools	1

U-E-7	Documentation Review Coordination	1
U-E-8	Coordination of Training	1
U-E-9	Services for new communities & Front Desk coordination	2

No changes to the Global UCS tasks were proposed by the NGIs

4.4. E-E TASKS: PUBLIC RELATIONS AND EXTERNAL LIAISON

E-E-1	EGI.org Dissemination team	2
E-N-2	Dissemination in regional / NGI level	0,5 per NGI
E-E-3	Industry Take-up	d)
E-E-3	Other External relations	2

These tasks did not receive requests for modification. From an implementation perspective, most NGIs are in a good position to contribute to dissemination activities, and a few have expertise in external relations.

4.5. D-E TASKS: DIRECTORATE

D-E-1	Director	1
D-E-2	Assistant of Director and secretaries	3
D-E-3	Chief Technical Officer, CTO	1
D-E-4	Chief Operational Officer, COO	1
D-E-5	User Coordination Officer, UCO	1
D-E-6	Chief Administrative Officer, CAO and staff	4

These tasks did not receive direct feedback, nor was it specifically requested.

5. NGI INTERNATIONAL TASKS IN “EGI PROPER” PROJECT

The “N” tasks – O-N-x and U-N-x – were originally designed to be **NGI international tasks** to be performed within the hypothesised single “EGI project”. Of these, the Operations tasks (O-N) are still assumed to be covered by the EGI Proper project, while the User Community Services (U-N) will be in large part subsumed under one or more SSC-related projects, to be organised in coordination with core EGI assumptions but financially sustained independently. It is still possible that some U-N tasks may be of a general enough nature to enter into the EGI Proper project, as discussed in 5.2 below.

5.1. O-N TASKS: OPERATIONS AND SECURITY

This list of O-N tasks is considered to include all necessary operational tasks to be performed by an NGI in the EGI context. One NGI commented that this list does not include some security related tasks, such as operations of national CAs and the work of a security officer for the NGI.

Clearly, the work of an NGI is not limited to the tasks listed here. However, it cannot be assumed *a priori* that an NGI would, for instance, operate its national Certification Authority. Interestingly, many NGIs actually do carry out this task, as evidenced by the results of the WP3-WP5 survey.

Operations

O-N-1	Operation of the NGI grid topology and configuration repositories
O-N-2	Operation of the NGI accounting repository
O-N-3	Operation of repositories storing monitoring and performance data, and other related information
O-N-4	Operation of the NGI operations portal
O-N-5	NGI e-Infrastructure oversight. 1 st and 2 nd line support.
O-N-9	Operations coordination at NGI level

Support

O-N-6	Operation of the NGI ticketing system, gathering of new requirements for user support tools in the region
O-N-7	Regional helpdesk

Other Tasks

O-N-8	Operation of production grid core software services
O-N-9	Operations coordination at the NGI level

5.2. U-N TASKS: USER COMMUNITY SERVICES

As mentioned above, a part of the U-N tasks is included in the EGI Proper project. The rationale for this inclusion should typically be the need for manpower to perform UCS tasks that are, not specifically related to any particular SSC, and felt to be necessary to the entire EGI community.

One example of such a task is taking care of certain informational tools, such as

U-N-14	Application Database
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While this task is expected to cover the collaborative management of content by the NGIs and SSCs, the administration of the database itself requires some global effort. The estimation of whether such effort should be assigned may depend on the workload of EGI.eu employees, particularly in the area of U-E-6.

Another class of examples of such general U-N tasks is that of **User Technical Support**, which complements some of the Operations tasks such as Help Desk and VO support:

U-N-9	VO Registration and VO Database
U-N-10	Site Validation Tests
U-N-11	Core VO Service Provision
U-N-12	Help Desk and Direct User Support

Finally, some NGIs do not currently have a partnership with any SSC, yet are (or intend to be) fully integrated in the UCS activities and wish to contribute to such activities, from various forms of content management (wikis, repositories) to dissemination, help desk, etc. The participation in an SSC was not intended to be a mandatory condition to be able to perform the U-N tasks.

6. MIDDLEWARE CONSORTIA

Under the hypothesis of a unique “EGI project”, the middleware maintenance, support and planning was separated out from the development tasks. The maintenance and support were assumed to be taken up by the Middleware Consortia (ARC, gLite, UNICORE and possibly others) within the “EGI project”, while the development would be under separate funding and not the direct concern of EGI aside from requests by grid planning groups such as the Middleware Coordination Board (MCB).

Thus the M-E tasks described above are mostly concerned with planning, certification and definition of quality criteria, while the maintenance tasks below would be taken up by the consortia.

6.1. M-C TASKS: MIDDLEWARE MAINTENANCE

M-C-6	Maintenance and support of security middleware components
M-C-7	Maintenance and support of data management middleware components
M-C-8	Maintenance and support of job management middleware components
M-C-9	Maintenance and support of information management middleware components
M-C-10	Other middleware maintenance related activity

Under the new funding scheme, it is expected that there will be at least one project for the support **and** development of middleware. Thus the tasks above will be subsumed under such project(s), such as the EMI project, under specific agreements with EGI.

The NGIs did not provide direct feedback on these tasks. On the other hand, the middleware consortia and many interested parties from the NGIs have undertaken regular activities in preparation of the EMI project proposal, and are currently active in their collaboration with the teams working on the EGI Proper proposal.

7. SPECIALISED SUPPORT CENTRES

The concept of a Specialised Support Centre (SSC) was introduced to allow the user communities to organise themselves by specialty, be it scientific area or type of service (e.g. training, application porting support). In the original single “EGI project” the list of NGI international tasks under User Community Services – the U-N tasks – was envisioned to be partly taken up by SSCs.

Given the FP7 call structure, these tasks will be largely outside the scope of the EGI Proper project.

The NGIs themselves did not provide feedback on the U-N tasks, other than to point out that not all of this effort should be absorbed by the SSCs, as some NGIs are not (yet) part of any such projects. This is a valid point that was discussed above.

On the other hand, the user communities and their representatives have provided extensive feedback on these functions at all stages of the preparation of D3.1 and D3.2. There have also been several workshops (see [4], [5], [6] and materials therein), in which all the UCS tasks have been discussed, readjusted, clarified and classified. As a result, these functions, as described in D3.2, are not only stable but are providing some useful guidelines for the various SSC proposals.

7.1. U-N TASKS FULFILLED BY SSCs AND POSSIBLY OTHER PARTIES

Below is the complete list of U-N tasks without further comment.

Representation and Networking (User Forum)

U-N-1	User Forum Representation
U-N-2	General Coordination
U-N-3	Feedback
U-N-4	User Conference and other Events
U-N-5	Public Relations

Grid Planning and MCB

U-N-6	Development of Services
U-N-7	Coordination of Grid Planning
U-N-8	Technical Feedback

User Technical Support

U-N-9	VO Registration and VO Database
U-N-10	Site Validation Tests
U-N-11	Core VO Service Provision
U-N-12	Help Desk and Direct User Support

Informational and High Level Tools

U-N-13	Case Studies
U-N-14	Application Database
U-N-15	Science Gateways / Portals

Documentation and Training Coordination

U-N-16	Documentation
U-N-17	Training Coordination

Front Desk / Services for New Communities

U-N-18	Consulting for New Communities
U-N-19	Assistance for Application Porting

8. CONCLUSIONS

The work undertaken by EGI_DS WP3 in establishing the functional aspects of the EGI ecosystem has resulted in a stable list of tasks, which have proven essential in building the new environment.

The tasks are described in detail in D3.2 and reorganised, clustered and briefly discussed here in the light of (a) new information about the relevant EU FP7 call structure, and (b) a final round of feedback to the NGIs.

The NGIs are currently bidding on these tasks – in particular the Global tasks and NGI International tasks. From the recent survey described in subsection 3.2, the tasks are appropriate and recognisable for the NGIs, who are ready to implement these functions both at a national and European level.

Similarly, the UCS tasks are satisfactory to the user communities who are currently working on proposals for SSCs based on these tasks.

The category of tasks that will see a significant addition is that of the middleware tasks, where development activities need to be added to the relevant project proposals.

9. REFERENCES

1. EGI_DS D3.1 First EGI Functions Definition <http://www.eu-egi.eu/functions.pdf>
2. EGI_DS D3.2 Final EGI Functions Definition <http://web.eu-egi.eu/fileadmin/public/Deliverables/d3.2-postrev-v3.2.pdf>
3. **FP7-INFRASTRUCTURES-2010-2**, subsection *1.1.2 ICT-based e-Infrastructures*, http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.CapacitiesDetailsCallPage&call_id=263
4. User Community Transition from EGEE to EGI, 17 Dec 2008, <http://indico.cern.ch/conferenceDisplay.py?confId=45736>
5. SSC Workshop, 05-06 May 2009, <http://indico.cern.ch/conferenceDisplay.py?confId=55097>
6. SSC Workshop, 01 July 2009, <http://indico.cern.ch/conferenceDisplay.py?confId=60563>

10. APPENDIX A: COMPLETE LIST OF SURVEY QUESTIONS

Page: 1. Operation Functions

1. Does your organisation use a certification authority which is recognised by the IGTF and which institution is providing that service?
2. What will be the relationship between the national CA and your organisation?
3. Please provide a contact person for this function in your organisation.
4. Does your organisation have a body that helps national communities in creating a VO and in getting for their users the authorization to use resources – either owned by the respective community or other by some other entity on a compensation basis?
5. How many FTEs cover the technical part of this service, and which institution is presently supporting them?
6. Is your organisation planning to assume some responsibility with respect to this function, either undertaking it directly or coordinating it or in other ways?
7. Does your organisation keep an account repository about usage of compute, storage etc. resources, where the accounting data of the computing centres supporting Grid users are collected, and their integrity and correctness is granted?
8. Are these accounting data transmitted presently to the EGEE GOC?
9. How many FTEs provide this service, and which institution is presently supporting them?
10. Is your organisation planning to take on some responsibility with respect to this function, either undertaking it directly or coordinating it in other ways?
11. Please provide a contact person for this function in your organisation.
12. Does your organisation operate or plan to operate a national configuration repository (GOCDB)?
13. Does your organisation operate or plan to operate Grid repositories storing metric results from probes (metric DB and availability calculator)?
14. Does your organisation operate or plan to operate a national dashboard / alarm DB?
15. Does your organisation operate or plan to operate an accounting DB and accounting portal?
16. Does your organisation operate or plan to operate debugging tools like SAMAP?
17. Does your organisation integrate or plan to integrate your tools with a centralised messaging system? If so, which centralised messaging system if not the one used by EGEE?
18. Do you run first line support for operation problems?
19. Do you have SLAs in place with your sites?
20. If you do, do you monitor and enforce SLAs?
21. Does your organisation have a team taking care of these functions?
22. How many FTEs provide these functions, and which institution is presently supporting them?

23. Is your organisation planning to take on some responsibility with respect to this function, either undertaking it directly or coordinating it in other ways?
24. Please provide a contact person for this set of functions in your organisation.
25. Does your organisation run a helpdesk?
26. Does your organisation triage, monitor and escalate user support tickets? Are you working on your own user support tools? If you are please, describe the tool(s) and what it does.
27. Does your organisation have a team taking care of these functions?
28. Is your organisation planning to take on some responsibility with respect to this function, either undertaking it directly or coordinating it in other ways?
29. Please provide a contact person for this set of functions in your organisation.
30. Do you monitor and implement the security policies defined by EGEE's security bodies?
31. Have you found that you need to develop and maintain your own modifications to these security policy and procedures? If so, what are the changes you have had to make?
32. Does your organisation have a team taking care of development and enforcement of the grid security policies in your sites?
33. How many FTEs are included in this team, and which institution is presently supporting them?
34. Is your organisation planning to take on some responsibility with respect to this function, either undertaking it directly or coordinating it in other ways?
35. Please provide a contact person for grid security in your organisation.
36. Does your organisation have a team taking care of network operation and assessment, complementing the NREN with special emphasis on Grid? How many FTEs are included in this team, and which institution is presently supporting them?
37. Is your organisation planning to take on some responsibility with respect to this function, either undertaking it directly or coordinating it in other ways?
38. Please provide a contact person for network in your organisation.
39. Does your organisation have a team developing and deploying country specific operation tools? If so, please describe the tool(s) and what they do?
40. How many FTEs are included in this team, and which institution is presently supporting them?
41. Is your organisation planning to take on some responsibility with respect to this function, either undertaking it directly or coordinating it in other ways?
42. Please provide a contact person for Operation Tools in your organisation.
43. Does your organisation run pilot / pre-production services?
44. Does your organisation have a team responsible for middleware roll-out and updates?
45. How many FTEs are included in this team, and which institution is presently supporting them?

46. Is your organisation planning to take on some responsibility with respect this function, either undertaking it directly or coordinating it in other ways?
47. Please provide a contact person for Middleware Deployment in your organisation.

Page: 2. User Community Support Functions

48. Does your organisation have a team developing and maintaining documentation, preparing and giving training courses, for typically different audiences like “new users”, “application developers”, intended for national VO users or national members of the international VOs? How many FTEs are included in this team, and which institution is presently supporting them?
49. Is your organisation planning to take on some responsibility with respect to this function, either undertaking it directly or coordinating it in other ways?
50. Please provide a contact person for User Documentation and Training in your organisation.
51. On average how many applications are supported locally in your organisation?
52. Do you keep a national registry of all grid applications ported to either the regional/national grid infrastructure? If yes provide the URL? How many applications are currently listed? Who has developed and maintained it?
53. According to your knowledge, is there any support provided by international application support teams like EGEE’s Application Porting Group, Direct User Support team etc?
54. Does your organisation have a team providing the above functions? How many FTEs are included in this team, and which institution is presently supporting them?
55. Is your organisation planning to take on some responsibility with respect to this function, either undertaking it directly or coordinating it in other ways?
56. Does your organisation have a relationship to WLCG?
57. Please summarize the role your organisation plays in WLCG.
58. Please provide a contact person for User and Application Support in your organisation.

Page: 3. External Liaison Functions

59. Does your organisation have a team preparing and maintaining dissemination material about your Grid-related activities and participation to related projects, targeted to the different national audiences (educational, general public, decision makers) and presenting this material in the proper events? Do you prepare dissemination material in your national language(s)? Is the dissemination material also distributed online? If yes, is it collected in a centralised web site? Could you provide the relevant links?
60. How many FTEs are included in this team, and which institution is presently supporting them?
61. Is your organisation planning to take on some responsibility with respect to this function, either undertaking it directly or coordinating it in other ways?
62. Please provide a contact person for dissemination in your organisation.

63. Does your organisation have specific contacts/relationships for grid matters with non-European countries (i.e. US, Latin Americas, Asia)?
64. Do these contacts/relationships include common projects, EC co-funded or others? Please specify.
65. How many FTEs are involved in these activities, and which institution is presently supporting them?
66. Is your organisation planning to take on some responsibility with respect to this activity, either undertaking it directly or coordinating it or in other ways?
67. Please provide a contact person for “contacts with extra-EU grids” in your organisation.