



Design Study



EGI_DS

NGI GUIDELINES

WP4 DESIGN STUDY OF THE EGI LEGAL AND ORGANISATIONAL OPTIONS

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Abstract: This document defines the set of functions and interfaces that a National Grid Initiative (NGI) must fulfil in order to be reliably EGI-compliant. The implementation of these functions is the choice of the NGI itself provided the results are EGI-compliant. It is our belief that this document will ease considerably the formation of the various NGIs, allowing them to have as many variants as the various countries will require but possessing all the same interfaces to EGI.



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For more information on EGI_DS, its partners and contributors please see www.eu-egi.org

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INTRODUCTION

1.1. PURPOSE

The European Grid Initiative (EGI) Design Study represents an effort to establish a sustainable grid infrastructure in Europe which shall be coordinated and operated through the EGI.

The main foundations of EGI are the National Grid Initiatives (NGI), which operate the grid infrastructures in each country. EGI will link existing NGIs and will actively support the setup and initiation of new NGIs.

Many countries have launched National Grid Initiatives to establish national Grid infrastructures. They all aim at providing in the long-term a common e-Science Infrastructure in support of all sciences, but with wide expected variations in maturity level and in implementation schemes. This document will not try to define the best way to set up an NGI, but will list all functions that a NGI must fulfil in order to be reliably EGI-compliant. The purpose of this document is to ease considerably the formation of the various NGIs, allowing an NGI to have as many variants as the various countries will require but possessing all the same interfaces to EGI.

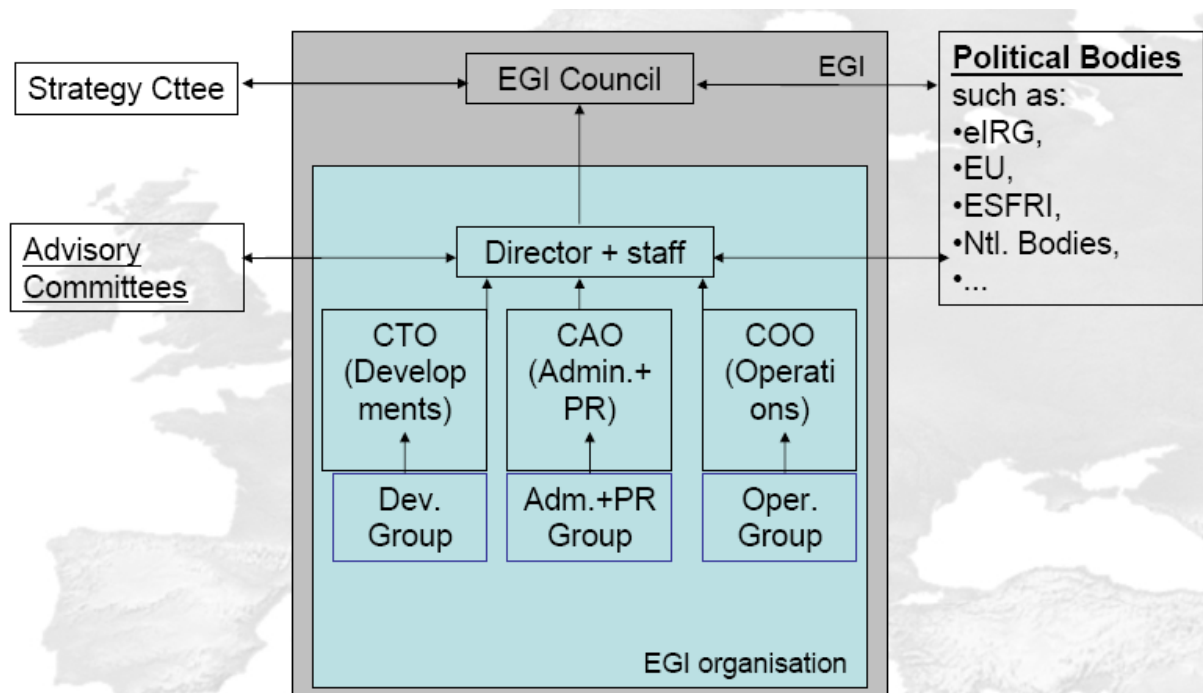


Figure 1: Proposed Structure of the EGI organisation (from D5.1 “Draft definition of EGI organisation”)

The main body of the EGI organisation is the EGI Council, which is comprised by representatives from all member NGI organisations.

CTO= Chief Technical Officer

CAO= Chief Administrative Officer

COO= Chief Operation Officer

1.2. DOCUMENT ORGANISATION

This document is organised around three parts defining:

1. the requirements NGIs have to fulfil
2. what NGIs are responsible of
3. an assumption on the creation calendar for NGIs

1.3. APPLICATION AREA

This document is principally meant for the future NGIs in order to help them in their creation and inform them on their future relationship with the EGI organisation.

1.4. REFERENCES

Table 1: Table of references

R 1	D5.1 Draft definition of EGI Organisation
R 2	D5.2 Draft Statutes of the EGI organisation

1.5. DOCUMENT AMENDMENT PROCEDURE

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

1.6. TERMINOLOGY

This subsection provides the definitions of terms, acronyms, and abbreviations required to properly interpret this document.

Glossary

CERN	European Center for Nuclear Research
EC	European Commission
EGEE	Enabling Grids for E-scienceE
EGI	European Grid Initiative
eIRG	e-Infrastructure Reflection Group
ERI	European Research Infrastructure
ESFRI	European strategic Forum on Research Infrastructures
NGI	National Grid Initiative
WP	Workpackage

2. EXECUTIVE SUMMARY

The main foundations of EGI.org will be the National Grid Initiatives (NGI), which will operate or coordinate the grid infrastructures in each country. EGI.org will link existing NGIs and will actively support the setup and initiation of new NGIs in countries where they do not yet exist.

Many countries have launched National Grid Initiatives to establish national Grid infrastructures. They all aim at providing in the long-term a common e-Science Infrastructure in support of all sciences, but with wide expected variations in maturity level and in implementation schemes. This following section will not try to define the best way to set up an NGI, but will list all requirements that an NGI must fulfil in order to become a member in EGI.org.

To become a member of EGI.org an NGI **must**:

- (a) have the capacity to sign the Statutes of EGI.org – either directly or through a legal entity representing it.
- (b) have a mandate to represent its national Grid community in all matters falling within the scope of EGI.org
- (c) be the **only** organisation having the mandate described in (b) for its country and thus provide a single contact point at national level.
- (d) be able to commit to EGI.org financially i.e. to pay EGI.org membership fee and – if there is a demand for such services in the NGI – order EGI.org services and pay for these services.
- (e) nominate a representative duly authorised to deliberate, negotiate and decide on all matters falling within the mandate of the EGI.org Council.
- (f) have a sustainable structure or represented by a legal structure which has a sustainable structure in order to commit to EGI.org in the long term.

Technically and organisation-wise NGIs will have to ensure that:

- storage and computing resources (as well as baseline services to share and use them) are provided
- the national Grid Infrastructure is permanently operated and maintained to an agreed level of service
- user communities are registered and supported
- resource owners/providers are registered and supported
- standards and other consensus accepted by EGI (on supported middleware stacks for example) are implemented
- EGI policies are implemented

NGIs fulfilling these requirements should ideally exist by spring 2009.

3. REQUIREMENTS

3.1 PROBLEM DESCRIPTION

EGI is organising a collaborative approach for the provisioning and further development of a Grid infrastructure spanning the whole of Europe. The EGI collaboration has the EGI organisation as a legal entity binding together National Grid Initiatives (NGIs) by giving them the role of the constituency of the EGI organisation. The NGIs own the EGI organisation and voice their views on any major EGI strategy through the EGI council. Furthermore NGIs may buy services from the EGI organisation, which will organise these services for the NGIs.

It is clear that there are implicit assumptions about the NGIs structure. The aim of this paragraph is to describe and argue those assumptions. This should help NGIs, which are in the state of creation to understand what is expected from them when joining the EGI collaboration, i.e. joining the EGI organisation as a member.

There are mandatory requirements which will be described in the following paragraph.

3.2 MANDATORY REQUIREMENTS

Following the idea of the EGI collaboration an NGI **must**:

- (a) have the capacity to sign the Statutes of EGI.org – either directly or through a legal entity representing it.
- (b) have a mandate to represent its national Grid community in all matters falling within the scope of EGI.org
- (c) be the **only** organisation having the mandate described in (b) for its country and thus provide a single contact point at national level.
- (d) be able to commit to EGI.org financially i.e. to pay EGI.org membership fee and – if there is a demand for such services in the NGI – order EGI.org services and pay for these services.
- (e) nominate a representative duly authorised to deliberate, negotiate and decide on all matters falling within the mandate of the EGI.org Council.
- (f) have a sustainable structure or represented by a legal structure which has a sustainable structure in order to commit to EGI.org in the long term.

Some explanations of these mandatory requirements follow:

- (a): In order to become member of EGI, an NGI must have the capacity to sign the Statutes of EGI and to commit to the EGI financially. It is our belief that the best and easiest way to achieve this mandatory goal would be for the NGIs to have an independent legal entity. However, it doesn't matter how the NGIs arrange this with their national funding agencies, state authorities or research organisation, as long as this criteria is fully achieved. Any organisation or institution delegating this mandate to an NGI should be fully aware of the consequences of becoming member of an independent legal entity such as EGI will be, therefore this point should be thoroughly discussed at national level.
- (b): Structuring the EGI organisation by national bodies – the NGIs – is obviously only possible if this organisation has a political mandate. It is up to the national Grid communities how they organise that delegation process. It could be done by a ministerial

decree or a decision by a high-level scientific council or any other form which is appropriate. The NGI should convey this to the other NGIs in an appropriate form when applying for membership in the EGI organisation, a draft is following.

- (c): It is clear that there can be only one organisation per country (**the** NGI) which represents the national Grid community in EGI.
- (d): Membership fees are necessary to guarantee a minimum financial flexibility for actions of the EGI organisation. Even if the option of payments “in kind” is implemented, there are limitations to that sort of “payments” as there are items, which in the long term must be paid by the EGI organisation in “cash” (like office space etc.). This is the rationale for demanding a budget with an EGI related budget line for an NGI. It is however the NGIs responsibility to find funding, i.e. through national funding agencies or membership fees from VOs and users.
- (e). It is necessary to have one person as formal representative of the NGI in EGI (being substituted by a deputy, if necessary).
- (f). *“The EGI shall ensure the long-term sustainability of the European Grid infrastructure.”* (EGI Draft Statutes, Article I) For EGI to be sustainable, it is of utmost importance that NGIs are also sustainable structures and that they commit to be members of EGI on the long term. EGI will not require from its members that they present a funding plan for the first years following the creation of EGI, but this point should be clear on the national level.

A clause might be added to the actual draft Statutes that any NGI signing them will thus commit to being a member of EGI (including a financial commitment) for at least the first three years of its operation.

It is not mandatory that an NGI has its own Grid related development program.

3.3 DRAFT LETTER FOR APPLICATION TO EGI MEMBERSHIP

The following draft is meant as an example application letter, which could be phrased also in a different way. However any application letter should contain a clear declaration on the items described as mandatory requirements above.

Dear EGI Council Chairman,

on behalf of the National Grid Initiative (NGI) <name of NGI> of <country name> I herewith confirm that <name of NGI>

- has the only mandate to speak on behalf of the national Grid community of <country name>. This was confirmed by <name of official authority> on <date>,*
- is applying for membership in EGI,*
- will follow the duties of an NGI formulated in <reference to this document (final version)>*
- and will as far as it is possible within <name of NGI>'s options follow policies developed in EGI and agreed in the EGI council,*
- <name and title> will be the representative of the <name of NGI> in EGI.*

...perhaps additional text....

Best Regards

4. RESPONSIBILITIES AND CONTRIBUTION OPTIONS

4.1 RESPONSIBILITIES

EGI will be in charge of the overall coordination of the Grid infrastructure in Europe. It will be a single contact point at European level for interfaces with the other international bodies following a similar goal. NGIs will be the EGI's relay at national level and will be responsible for the operation of the national Grid. NGIs are free to organize and to distribute their various functions among their community as they want. They must have a single contact point at national level but need not perform national operational functions directly, as long as they ensure the organisation of the operations according to an agreed quality of service.

Specifically NGIs have to make sure that:

- storage and computing resources (as well as baseline services to share and use them) are provided
- the national Grid Infrastructure is permanently operated and maintained to an agreed level of service
- user communities are registered and supported
- resource owners/providers are registered and supported
- standards and other consensus accepted by EGI (on supported middleware stacks for example) are implemented
- EGI policies are implemented

4.2 CONTRIBUTION OPTIONS

Within the framework of EGI, NGIs will have the possibility to take part in EGI functions in various ways:

a) In-kind contribution: EGI can delegate some central functions to a specific NGI team, by means of a bilateral written agreement between EGI and the NGI that will have to be approved by the EGI Council and Director. The agreement will specify the precise tasks transferred to the NGI and its financial value to EGI. This value will be credited to that NGI account. NGIs may be submitted to special obligations relative to that task, such as posting job openings induced by that task in other NGIs and potentially hiring these foreign personal. NGI will have to report the task execution to EGI management.

b) Staff contribution: NGI can contribute to the EGI organisation staff by detaching personnel to EGI. This process must be under the strict control of the EGI management and Council that will publish the list of such positions and select the personnel. Since this mechanism can be a win-win situation for both NGI and EGI, it is recommended that an NGI is able to detach for a two or three year period trained personal to the EGI central site, with a minimum of formalities.



4.3 RELATIONSHIP TO EGI

- **Financial**

NGIs must pay membership fees to EGI, in order to finance EGI's central management and main functions for co-ordination.

EGI will provide a range of services. NGIs ordering these services will have to pay extra service charges, which are independent of the membership fees.

More information on the transversal relationships between EGI and NGI functions will be provided in the next deliverable (D4.4 EGI Blueprint).



5. CALENDAR

It is important that NGIs be created and EGI compliant by the time of the creation of EGI, i.e. the signature of the statutes. According to the EGI_DS Description of Work, WP5 should start obtaining the Agreements of the NGIs on the Statutes in October 2008 (D5.3). However, the Statutes cannot be completed as long as the legal structure is not defined, which cannot be done until the location is known. A bidding process is to be launched in order to define the future location of the EGI central office, but there is as yet no precise schedule for its implementation. Therefore a strict deadline concerning the creation of the NGIs cannot be issued. However, assuming that the location selection process will last between 4 and 6 months after the reception of expressions of interest in Autumn 2008, we prescribe that NGIs start their creation process in 2008, aiming at being ready by Spring 09.

A procedure will be presented within the EGI Statutes to allow new or late NGIs to join after the creation of EGI. However, since the operation of the Grid may not be interrupted at the time of the transition from EGEE III to EGI and that the creation of EGI heavily depends on the formation of the NGIs, we do insist this schedule be met at best.