EGI Compendium 2012

Welcome

The EGI Compendium is a body of knowledge updated on an annual basis about NGIs/EIROs part of the European Grid Infrastructure. This survey aims to collect the data for 2012 in order to prepare a new edition of this document. The collected data refers to key areas such as legal form, users, services, resources, technology and sustainability.

The objectives of the EGI Compendium are:
- to increase the transparency about organisational structure, status and plan of NGIs/EIROs
- to provide an essential body of information for the various stakeholders to better support strategic planning
- to provide more clarity about the EGI.eu partnership with the NGIs/EIROs outside the EGI community

The survey is structure in the following sections:
- Identity and contact
- Strategy
- Governance
- Funding and Cost of the National Coordination (NGI-only)
- Funding of the NGI/EIRO e-Infrastructure
- Cost of the NGI/EIRO e-Infrastructure
- Policy
- Outreach and publications
- Services
- Users
- Infrastructure
- Technology

This survey should be filled by each NGI/EIRO that is a member of EGI.eu. In order to answer some question, NGIs need to collect data from the respective members. Therefore, we suggest to circulate an internal survey to collect the necessary information (especially those in section "Funding and Cost of the NGI/EIRO e-Infrastructure").

Some questions have been already answered by the participating NGIs/EIROs during the last edition. IIf you have participated in the EGI Compendium 2011 questionnaire, we invite you to check your answers and report or update the data in this survey (see EGI Compendium 2011).

FAQ:

Q1. In which ways I can submit the answers to EGI.eu? A1. We invite you to submit the answers solely through this online survey; each NGI/EIRO is provided with a unique link that you can use to return on you survey and add/modify the data when needed

Q2. Should I wait to have all the data before entering them into the online survey? A2. We recommend you to add the data incrementally as soon as they are available. We will periodically check the advancement status and partial information can be very useful.

Q3. I need to collect info from many people and I would like to circulate an offline version of the questionnaire. Is this available? A3. An offline version of the questionnaire is available as editable PDF document at the following URL:

Q4. Some of the data have been already provided or is already available through tools like the EGI Operations or Accounting portals, why are these asked again? A4. The EGI.eu staff will take care of pre-filling the information already available before asking NGIs/EIROs to fill the survey; this will give the opportunity for them to validate the data and provide updates where needed

Q5. I would like to draft the answers in a collaborative way with my colleagues, is there any option for collaborative editing? A5. You can create a google docs based on the template that we prepared; before sharing the document that you create from the template, we suggest you to copy into it the data that we already collected for you in order to be validated. Here is the link to the template: http://go.egi.eu/egi-compendium-2012-template

EGI Compendium 2012

1. With this survey, are you providing information on behalf of an NGI or EIRO?

○ NGI

○ EIRO

2. What is the represented country? (NGI-only question)

3. Who should we contact for clarifications about the answers given in this surveyt?

Name:

Email Address:

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Identity and Contacts

4. What is the full name of the NGI/EIRO? (in English)

5. What is the abbreviation of the full name in English of the NGI/EIRO?

6. What is the full name and abbreviation of the NGI/EIRO in the national language(s)?
For each national language, specify, e.g.:
Language (in English), full name of the NGI/EIRO (in the national language),
abbreviation (in the national language)

7. In what year the NGI/EIRO was established?

8. *In what year Grid Operations started in the NGI country (or EIRO)?

9. What is the website URL of the NGI/EIRO?

10. What is the URL to the logo of the NGI/EIRO?

11. This page contains the EGI Council Members. For your organisation, are the primary and secondary contacts correct?

   ○ Yes

   ○ No (please, clarify the needed change)

12. This page contains the NGI International Liaisons contacts. For your organisation, are the primary and deputy contacts correct?

   ○ Yes

   ○ No (please, clarify the needed change)

13. The EGI GocDB contains the operations manager primary and secondary contacts. For your organisation, are the primary and deputy contacts correct?

○   Yes

○   No (please, clarify the needed change)

14. Please, briefly describe the history of the NGI/EIRO as related to the Grid activities or add a URL to a web page.

15. Do you have comments or suggestions on this section? (e.g. how to improve the questions, missing information that would be interested to capture)

Strategy

16. Is the NGI/EIRO resognised in government national e-Infrastructure strategies or plans related to computational and data infrastructures for research and innovation?

○ No

○ Yes

If yes, add the URL to the document

____

17. Does the NGI/EIRO have a defined strategy document for computational and data infrastructures for research and innovation?

○ No

○ Yes

If yes, add the URL to the document

____

18. What is the NGI/EIRO vision for computational and data infrastructures for research and innovation?

(The vision is an aspirational description of what the NGI/EIRO would like to achieve or accomplish in the mid-term/long-term future, and should serve as a clear guide for choosing current and future courses of action;see also the EGI Vision definition in http://go.egi.eu/EGI2020)

19. What is the NGI/EIRO mission?

(The mission is a written declaration of the NGI/EIRO's core purpose and focus that normally remains unchanged over time. Properly crafted mission statements (1) serve as filters to separate what is important from what is not, (2) clearly state which markets will be served and how, and (3) communicate a sense of intended direction to the entire organisation. A mission is different from a vision in that the former is the cause and the latter is the effect; a mission is something to be accomplished whereas a vision is something to be pursued for that accomplishment; see also the EGI Mission definition in http://go.egi.eu/EGI2020)

20. What are the NGI/EIRO core values? (max 5)

(Core values are guiding beliefs that guide the [Q1]'s internal conduct as well as its relationship with the external world; see also the EGI Core Values definition in http://go.egi.eu/EGI2020)

1. [   ]

2. [   ]

3. [   ]

4. [   ]

5. [   ]

21. Please, provide a short description of the major changes that occurred in the organisation and/or services during 2012 or that you foresee for the coming year (e.g., structural changes, changes in your mandate or remit, major technology upgrades, changes in the user base)

[   ]

22. Do you have comments or suggestions on this section? (e.g. how to improve the questions, missing information that would be interested to capture)

[   ]

Governance

23. What is the legal form of the NGI/EIRO?

○ Legal national entity (for profit)

○ Legal national entity (non-profit)

○ Legal international entity (for profit)

○ Legal international entity (non-profit)

○ Group of interest (not a legal entity)

If not a legal entity, please explain if and when the legal entity is planned to be formalised

24. What is the duration of the legal agreement that established the NGI/EIRO?

○ not a legal organisation

○ unlimited

○ limited

If limited, please specify the last year of validity for the current agreement

25. Which roles are covered by the NGI/EIRO? (see https://wiki.egi.eu/wiki/Glossary for definitions)

☐ National coordinating body

☐ Resource Infrastructure Provider (RP)

☐ Resource Centre (RC)

☐ Technology Provider (TP)

☐ Platform Integrator (PI)

☐ Platform Operator (PO)

Comments

26. What is the name of the organisation representing the NGI/EIRO in the EGI Council?

27. What is the name of the lead organisation of the NGI/EIRO?

28. How many organisations are member of the NGI/EIRO?

29. What is the name of the NGI/EIRO governing body? (e.g. Council)

30. What types of stakeholders are represented in the governing body?

☐ Academic institutions

☐ Research institutes

☐ National governments

☐ Intergovernmental organisations

☐ Industry

☐ User communities

☐ VOs

☐ Resource centres

☐ Other (please specify)

31. Does the NGI/EIRO have an advisory board?

◉ Yes

◉ No

Comments

32. What are the types of stakeholder included in the advisory board?

☐ Academic institutions

☐ Research institutes

☐ National governments

☐ Intergovernmental organisations

☐ Industry

☐ User communities

☐ VOs

☐ Resource centres

☐ Other (please specify)

33. What type of relation has the NGI with the national government? (or the EIRO with the national governments?)

- ○ Hierarchical (e.g. you are subordinate to a responsible government body)
- ○ Direct/Formal (e.g. board member; contact with Ministry)
- ○ Informal/Indirect (e.g. gov't liaison; proposals; tenders)
- ○ Non existent
- ○ Other (please specify)

34. Do you have a Web page describing the governance model of the NGI/EIRO?

- ○ No
- ○ Yes, please specify the URL

35. Do you have comments or suggestions on this section? (e.g. how to improve the questions, missing information that would be interested to capture)

Funding and Cost of the National Coordination (NGI-only)

36. What are the funding sources to suppor the national coordination?

☐ European Public Funding

☐ National Public Funding

☐ Institutes

☐ Donations

☐ Private investments

☐ Membership Fees

☐ Paying Users

☐ Royalties

☐ Other (please specify)

37. If the NGI is a legal organisation, what are its funding types?

☐ project-based

☐ recurrent from funding organisations

☐ subscription fee from user communities

☐ subscription fee from resource centres

☐ direct charge of services to users

☐ other (please specify)

38. How many FTEs were dedicated in 2012 to the national coordination of the NGI?

39. What is the overall annual budget dedicated to the national coordination of the NGI?

2012

2013

40. For how many years the funding for national coordination is guaranteed? (add 99 for indefinite)

41. Do you have comments or suggestions on this section? (e.g. how to improve the questions, missing information that would be interested to capture)

Funding of the NGI/EIRO e-Infrastructure

42. What are the funding sources for the NGI/EIRO e-infrastructure?

- ☐ European Public Funding
- ☐ National Public Funding
- ☐ Institutes
- ☐ Donations
- ☐ Private investments
- ☐ Membership Fees
- ☐ Paying Users
- ☐ Royalties
- ☐ Other (please specify)

43. What are the funding types for the NGI/EIRO e-infrastructure?

- ☐ project-based
- ☐ recurrent from funding organisations
- ☐ subscription fee from user communities
- ☐ subscription fee from resource centres
- ☐ direct charge of services to users
- ☐ Other (please specify)

44. Please, give an estimate of the sources of the 2012 budget for the NGI/EIRO e-infrastructure (in percentage)

European Public Funding	
National Public Funding	
Institutes	
Donations	
Private investments	
Membership Fees	
Paying Users	
Royalties	

45. What is total national funding received for the operation and replacement of the physical resource infrastructure? (Millions of Euro)

46. What is the total national funding for the staff needed to provide technical outreach? (unit: Millions of Euro)

47. What is total national and European funding that is supporting technology innovation projects in which the NGI/EIRO is involved with? (Unit: Millions of Euro)

48. Do you have comments or suggestions on this section? (e.g. how to improve the questions, missing information that would be interested to capture)

Cost of the NGI/EIRO e-Infrastructure

The questions have the goal to understand the cost of e-Infrastructures and the evolution over the years. The questions have been developed together with the e-FISCAL project.

The cost data will be used to calculate aggregate metrics at the EGI level. **The cost data by NGI will not be disclosed**.

In order to fill this page, you have two options:
1. provide cost information for one resource centre (as a sample from your country)
2. collect the information from all affiliated resource centres and provide the aggregated values

49. For how many resource centres are you providing the cost information?

○ One

○ Many

○ All

○ None

Comments

50. What is the acquisition cost per logical CPU (core) in € in 2012?

51. What is the acquisition cost per TB in disk storage in € in 2012?

52. What is the acquisition cost per TB in tape storage in € in 2012?

53. What is the average useful life of CPUs in years?

54. What is the average useful life of disk storage in years?

55. What is the average useful life of tape storage in years?

56. What is the interconnect equipment costs as percentage of hardware acquisition costs?

57. What is the estimated support contract cost as percentage of hardware acquisition cost? (You can use approximations on the basis of most recent procurements of budget data)

> [   ]

58. Auxiliary equipments are UPS, air-cooling, liquid cooling, power generators, power transformers, fire detection, etc. What is the estimated cost of these equipments as percentage of the cost of computing and storage infrastructure?

> [   ]

59. What is the cost for software licenses in 2012?

> [   ]

60. What is the number or FTEs in 2012 dedicated to operate/manage the NGI/EIRO e-infrastructure? (Overall number including coordination, dissemination, etc.)

> [   ]

61. What is the estimated percentage of the FTEs indicated in the previous question that would need to be retained if the NGI/EIRO would use commercial cloud providers (IaaS) for all computing and storage services. (This question is needed to demonstrate that moving to commercial cloud services would not remove all personnel costs, but only those needed to manage the lower layer of the infrastructure).

> [   ]

62. What percentage of FTEs are females in the NGI/EIRO? (This question is for the Gender Action Plan)

> [   ]

63. What is the estimated percentage increase of the FTEs indicated in Q.54 if your e-infrastructure would double its size measured in number of logical CPUs (cores)? (This question is needed to demonstrate the economy of scale in personnel costs).

> [   ]

64. What is the average total cost per FTE in 2012 in €? (including gross salary, fridge benefits, etc.)

> [   ]

65. What is the hosting space for computing in m2 in 2012?

> [   ]

66. What is the total yearly electricity consumption for hosting in 2012 in MWh? (Hosting includes servers, storage, networking, cooling, lighting, UPS systems, etc.)

> [   ]

67. What is the total yearly electricity consumption for IT in 2012 in MWh? (IT includes only servers, storage and networking, therefore this amount is part of the energy consumption indicated in the previous question).

68. What is the Power Usage Effectiveness (PUE) in 2012? (It can be derived by the previous two questions)

69. What is the expected increase/decrease of FTEs dedicated to e-infrastructure activities within the NGI/EIRO in the following years? (express in % as positive or negative number referred to the 2012 figure)

2013

2014

2015

70. Do you have comments or suggestions on this section? (e.g. how to improve the questions, missing information that would be interested to capture)

Policy

71. What is the current resource allocation model adopted in the NGI/EIRO?

○ There is no central allocation process, users negotiate with each individual resource centre

○ There is a central allocation process, users apply to the NGI/EIRO to receive resources

Other (please specify)

72. Please, describe the resource allocation model through which an existing/new user community can apply for new resources in the NGI/EIRO infrastructure (specify also the approaches to cover costs).

73. Does the NGI/EIRO define any policies on the e-infrastructure in addition to the EGI policies? If so, what? (e.g. certain countries restricted from use/access; privacy policies)

○ No

○ Yes (please describe briefly the addressed aspects by the additional policies)

74. If the NGI/EIRO defines additional policies, what are the affected areas?

☐ Technology

☐ Operations

☐ Users / Community

☐ Security

☐ Green IT

☐ Other (please specify)

75. Does the NGI/EIRO have a webpage with the list of policies/procedures that apply to the coordinated e-infrastructure?

○ No

○ Yes (please specify the URL)

76. Does the NGI/EIRO have a defined Gender Action Plan?

☐ Yes

☐ No

Other (please specify)

77. Do you have comments or suggestions on this section? (e.g. how to improve the questions, missing information that would be interested to capture)

Outreach and Publications

78. How many peer-reviewed scientific publications have you recorded that have benefited from the NGI/EIRO infrastructure?

79. Does the NGI/EIRO publish a regular newsletter or annual report or case studies or book?

○ No

○ Yes (please list them and provide URL if applicable)

80. Does the NGI/EIRO run a regular event? (e.g., annual workshops, schools)

○ No

○ Yes (please list them and specify the URL)

81. Does the NGI/EIRO publish an online news feed?

○ No

○ Yes (please list them and specify the URL)

82. Did the NGI/EIRO publish any outreach materials in the past year? (e.g., brochures, leaflets, annual reports)

○ No

○ Yes (please, specify what)

83. Does the NGI/EIRO run project websites?

○ No

○ Yes (please specify the URLs)

84. Is the NGI/EIRO active in social media?

☐ LinkedIn

☐ Facebook

☐ Twitter

☐ Google+

☐ Other (please specify)

85. If the NGI/EIRO is active in social media, please specify the URL to the relevant pages/profiles

86. Do you have comments or suggestions on this section? (e.g. how to improve the questions, missing information that would be interested to capture)

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Services

87. Does the NGI/EIRO operate an internal Certification Authority?

☐ Yes, to issue certificates for users

☐ Yes, to issue certificates for servers

☐ Yes, to issue certificates for code signing

If no, please, specify how do you or your users provision digital certificates and if you plan to build a CA in the future

[   ]

88. What services are provided by the NGI/EIRO to the users?

☐ VO membership service

☐ VO monitoring

☐ Data management services

☐ Job management services

☐ Science gateways

☐ Digital certificates services

☐ Other (please specify)

[   ]

89. What is the number of training days for Grid end-users or Grid operators offered in 2012? (a training day should be calculated per training event and not related to the number of participants)

[   ]

90. How many Grid end-users or Grid operators attended training events during 2012? (if the same person attends two different training events, then it counts double)

[   ]

91. Did your NGI/EIRO support researchers to use commercial cloud services in 2012?

	Free of charge	Paid
Infrastructure as a Service (IaaS) - e.g. Amazon EC2	☐	☐
Platform as a Service (PaaS) - e.g. Microsoft Azure	☐	☐
Software as a Service (SaaS) - e.g. Google Apps	☐	☐
Other (please specify)		

[   ]

92. Do you have comments or suggestions on this section? (e.g. how to improve the questions, missing information that would be interested to capture)

Users

93. How many different Grid end-users had valid credentials released by the NGI/EIRO at the end of 2012?

94. How many Virtual Organisations (VOs) are supported by the NGI/EIRO? (the answer is not required since it will be retrieved by EGI.eu from the Operations Portal)

95. What are the top 3 VOs by usage (logical CPU walltime)? (the answer is not required since it will be retrieved by EGI.eu from the Accounting Portal)

1.

2.

3.

96. What are the research areas supported by the NGI/EIRO infrastructure? (the answer is not required since it will be retrieved by EGI.eu from the Operations Portal)

- ☐ Astronomy, Astrophysics and Astro-Particle Physics
- ☐ Computational Chemistry
- ☐ Computer Science and Mathematics
- ☐ Earth Sciences
- ☐ Fusion
- ☐ High-Energy Physics
- ☐ Life Sciences
- ☐ Multidisciplinary
- ☐ Other (please specify)

97. What is the usage of the NGI/EIRO infrastructure by non-LHC VOs?(percentage on total logical CPU walltime)

98. In how many projects related to scientific computing the NGI/EIRO was involved during 2012?

Direct involvement of the NGI/EIRO as a partner

Indirect involvement through an NGI/EIRO member

99. In what ESFRI projects the NGI/EIRO is directly involved? (or indirectly through members)

100. Do you have comments or suggestions on this section? (e.g. how to improve the questions, missing information that would be interested to capture)

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Infrastructure

101. How many resource centers are coordinated by the NGI/EIRO? (the answer is not required since it will be retrieved by EGI.eu from the GOCDB)

102. What is the total logical CPUs (cores) available via the NGI/EIRO at the end of 2012? (includes all resource centers) (the answer is not required since it will be retrieved by EGI.eu from the Metrics Portal)

103. How many of these logical CPUs (cores) are dedicated to run virtual machines? (includes all resource centers)

104. How many hours of logical CPU (core) wall clock time were consumed in the NGI/EIRO infrastructure during 2012? (the answer is not required since it will be retrieved by EGI.eu from the Accounting Portal)

105. What is the percentage of utilisation of the logical CPU (core) capacity in 2012?

106. What is average useful life of CPUs (in years)?

107. What is the total GPUs available via the NGI/EIRO at the end of 2012? (includes all resource centers)

108. How many hours of GPU wall clock time were consumed by users of the NGI/EIRO infrastructure in 2012?

109. What is the percentage of utilisation of the GPU computing capacity in 2012?

110. What is the size of disk storage (in TB) available via the NGI/EIRO at the end of 2012? (includes all resource centers) (the answer is not required since it will be retrieved by EGI.eu from the Metrics Portal)

111. What is the size of tape storage (in TB) available via the NGI/EIRO at the end of 2012? (includes all resource centers) (the answer is not required since it will be retrieved by EGI.eu from the Metrics Portal)

112. What is average useful life of tape storage (in years)?

[   ]

113. Does the NGI/EIRO have a pool of resources dedicated to enable new users to try the Grid services?

Number of Logical CPUs
(cores)   [   ]

Disk Storage (TB)   [   ]

Tape Storage (TB)   [   ]

114. What amount of resources the NGI/EIRO is willing to allocate to new users through the EGI federated resource allocation process in 2013?

Number of Logical CPUs
(cores)   [   ]

Disk Storage (TB)   [   ]

Tape Storage (TB)   [   ]

115. Are the resources for new users try-out owned by the NGI/EIRO as legal entity and/or offered through affiliated resource centres?

☐ Owned by NGI/EIRO

☐ Owned by affiliated resource centres/institutions

☐ Mixed

Other (please specify)

[   ]

This sub-section is devoted to understand approaches within the NGI/EIRO for Green IT

116. Did the affiliated resource centres recycle CPUs or storage devices during 2012?

○ Yes

○ No

Comments

[   ]

117. Had energy efficiency considerations influenced the acquisition decisions within the NGI/EIRO in 2012?

○ No

○ Yes (please specify how)

[   ]

118. Do you have comments or suggestions on this section? (e.g. how to improve the questions, missing information that would be interested to capture)

119. Do you have comments or suggestions on this section? (e.g. how to improve the questions, missing information that would be interested to capture)

Technology

120. What categories of middleware components are deployed in the NGI/EIRO infrastructure? (the answer is not required since it will be retrieved by EGI.eu from the Information System)

- ☐ EMI (components from gLite)
- ☐ EMI (components from UNICORE)
- ☐ EMI (components from ARC)
- ☐ EMI (components from dCache)
- ☐ Globus
- ☐ StratusLab
- ☐ EDGI
- ☐ Other (please specify)

121. Is there anything else you would like to add about the NGI/EIRO and the related e-infrastructure activities for 2012?

122. At the beginning of 2014, we will run a new survey to build the compendium for the current year. What questions should be added? What questions should be removed?

Thank you for your collaboration with the EGI Compendium. You can update your data anytime using the same link until the deadline.

For any comment or question, do not hesitate to contact us.

Kind regards,

EGI.eu Strategy and Policy Team
e-mail: policy@egi.eu