EGI Community Action Plan– 2013 and beyond

V1 – 31/10/12

1 Decisions for the EGI Council

This report is presented to the EGI Council to:

1. Confirm the EGI Action Plan for 2013 and beyond (see Section 2)

Annex A provides more details on the EC projects proposed to support the EGI Community after the end of EGI-INSPIRE.

2 EGI Action Plan for 2013 and beyond

EGI's 2020 Strategy (http://go.egi.eu/EGI2020) was endorsed by the EGI Council in March 2012 and defines a community focus on:

- Community and Coordination
- Operational Infrastructure
- Virtual Research Environments

Within this strategy EGI has defined a vision, mission and core values that outline proposals for activities for future years. The development of the EGI 2020 Strategy has identified that the key value that EGI delivers to the European Research Area is the ability to bring up to a production quality level and then run integrated secure uniform interoperable services across borders at a European scale. This is achieved by leveraging national funds to sustainably support the long-term operation of services and concentrating EC funds on the technical innovation and community building necessary to grow a leading European e-Infrastructure. Therefore, it is essential that EGI positions EGI.eu and its participants as one of *the* key organisational structure in Europe able to federate and deliver services from different public sector national and domain-specific resource providers (and potentially commercial service providers) to meet the needs of the European wide research community. This in turn positions the EGI community (the NGIs & EIROs) as providing an e-Infrastructure able to support Research Infrastructures and therefore able to play a key role in the realisation of Europe's research potential and Horizon 2020[1]. It has also become clear from presentations made by the European Commission that financial support for e-Infrastructures in Horizon 2020 will be closely linked to supporting the development of pan-European Research Infrastructures (the ESFRI projects and beyond) through a core set of flexible, secure and integrated services designed to meet the needs of the public sector research, but able to be used by other sectors such as (e-)Government and industry.

This section provides a further level of detail to these plans for 2013 and beyond.

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[1] http://go.egi.eu/tnapd

2.1 Baseline Activity

The only funding that EGI can rely on after the end of EGI-InSPIRE is the funding coming directly from the EGI stakeholders. It is therefore essential that EGI's core operational and associated activities are identified, organisations willing to deliver these services after the end of EGI-InSPIRE are selected, and any transitions from the current service providers planned. To prepare for the end of EGI-InSPIRE, EGI.eu will lead discussions within the community to:

Deadline	Activity
Workshop in February 2013	Identify and prioritise the current operational EGI Global Tasks and associated activities that can be continued and the new activities that need to be sustained on the available resources to maintain an operational infrastructure that is open to all research communities.
EGI Council April 2013	Provide a detailed plan relating to the baseline coordination of the operational infrastructure and other key coordination activities that can be provided given a set of different funding models and levels of participation fee coming from the EGI Council. Review the EGI2020 Strategy accordingly.
EGI Council April 2013	Define the process by which EGI Global Tasks are going to be delivered after the EGI-InSPIRE project will be selected.
July 2013	Request and assess proposals from the EGI Community to provide the post EGI-InSPIRE EGI Global Tasks using the approved selection process.
EGI Council September 2013	Prepare a transition plan for any EGI Global Tasks that will be migrating in April 2014 and define a timeline relating to their migration that can be reviewed regularly by EGI.eu.
EGI Council September 2013	Establish the business model and ongoing plan for Technical and Community Forums or their equivalent after May 2014.
EGI Council September 2013	Approve the EGI.eu budget for 2014 that will establish the level of annual baseline activity after the end of EGI-InSPIRE possible with no additional EC funding.
December 2013	Invoice the EGI Council participants and associated participants for 2014 fees to support the coordination of the European Grid Infrastructure after April 2014.
EGI Council April 2014	Annual review and approval process for the updated EGI 2020 Strategy.

2.2 EC Projects

On behalf of the community EGI.eu will formulate project consortia (See Annex B for more details) that it will lead relating to:

- **Innovation in EGI's Operation Tools**: With partners from within the operational tools product teams and adopters from other e-Infrastructures (e.g. EUDAT, XSEDE) and Research Infrastructures to continue the innovation and integration of operational tools for distributed service infrastructures.
- **Promoting EGI within the ERA**: Work with partners across the EGI Community to establish activities that will promote the work being supported by EGI and other e-Infrastructures to researchers and

policy makers through the NGI International Liaisons, the EGI Champions, policy briefings, publications, promotional materials, websites and regular events that bring the community together.

- **Collaborative Infrastructure Platform**: Work with a few technology partners to develop and integrate the innovative services defined by the ESFRI cluster projects (and other activities) common across many of the research communities for their use of distributed resources through central services (e.g. AAA, data transfer, group management, persistent data identifiers, etc.)
- **Dissemination Platform for Research Infrastructures**: Working with lead institutes within the ESFRI projects to provide communications services to research communities across areas such as social media, outreach strategies, communications training, events organisation and to support a weekly electronic publication.

There are also projects where EGI.eu could act as a partner:

- **Ensuring an integrated EGI**: Support is needed to build capacity in the national infrastructures being established outside the EU 27 and the accession states. Such support could include technical support, technical exchanges, direct training and policy support.
- **Worldwide Integration**: Exploit EGI's leading position within the global e-Infrastructure community to support an interoperating global e-infrastructure by developing and aligning governance, software, virtual research environments, technical and operational models.
- **Cloud Infrastructure Platform**: Working with external technology providers and a few leading NGIs to pioneer the development of a federated cloud platform and associated services that integrates with EGI's existing operational infrastructure but provides new functional mechanisms to attract new research communities to EGI.

Other projects, both those involving and not involving EGI.eu may be added to this list. The expected timeline for the preparation and submission of these EC project proposals are given below. Clearly, these will remain provisional until the Horizon 2020 workplan is published, but these timelines assume project start dates in May 2014 after the end of EGI-InSPIRE.

Deadline	Activity
May 2013	Presentation of outline project workplans and consortia to the EGI Community for outline approval. It is possible that at this stage the detailed workplans from the European Commission will not yet be known.
September 2013	Approval of EC project proposals and workplans that will be receiving the endorsement of the EGI Council. Any proposal coming in after this date will not receive a letter of endorsement. This will allow EGI to build a coherent ecosystem of project proposals.
November 2013	Submission of proposals into the expected first call of Horizon 2020.
April 2014	Expected announcement by the EC of the successful proposals in the first call of Horizon 2020.

2.3 Other Activities

Until Spring 2014, other activities can be supported with the endorsement of the EGI Council through EGI-InSPIRE and the effort individual NGIs are willing to commit from their own national resources. These activities include:

- Increasing the resources and adoption of EGI's federated cloud.
- Establishing and developing the EGI Champions scheme.
- Establish and develop outreach programmes to new user communities
- Growing and reinforcing the NGI International Liaison's network.
- Developing prototype processes around allowing user communities to pay resource providers for the use of their resources.
- Providing the coordination and support for a community driven initiative for a Digital Research Infrastructure ERIC.
- Developing peer-reviewed access to a pool of resources contributed by the NGIs to support excellent European science.
- Providing software release coordination needed to ensure a Core Infrastructure Platform that supports the integration of different Community Platforms.
- Coordinating community focused events, training and workshops.
- For the EGI Council to develop the scientific use cases for the collaborative international use of distributed computing and storage resources.

After Spring 2014, the activity that can be supported by EGI.eu and the NGIs will be dependent on several factors. It is envisaged that the baseline activity supported directly by the EGI Council in EGI.eu and associated partners will be restricted to primarily the Operational EGI Global Tasks and a core management team across other areas such as policy, communications, user support and administration. Additional effort will only be available if support is provided from the European Commission, the EGI Council through higher participation fees or dedicated effort provided by the NGIs that can be coordinated centrally.

3 Summary

The second full year of EGI.eu's operation saw it leading a restructuring and refocus of the EGI Community around its non-operational activities such as communications, policy and technical outreach. With the endorsement by the EGI Council of the EGI 2020 Strategy in June 2012, the EGI Community has established a strategic multi-year plan from which a detailed plan for both EGI and the EGI.eu organisation can be derived.

Until the start of Horizon 2020 in 2014, the activities of EGI and EGI.eu are supported by the EGI-InSPIRE project and constrained by the resources available within the current project. Additional effort may be available through national funds being used within the NGIs or being directed to EGI.eu, however with the economic climate in Europe realistically any additional effort will be small. During the early years of Horizon 2020, this report identifies a number of possible projects for which funds from the European Commission could be requested to support the areas defined within the EGI 2020 Strategy.

4   Annex A: Future EGI related projects

4.1   With EGI.eu as Coordinator

For EGI.eu to coordinate a project it needs to be strategically critical to EGI.eu and the research communities it supports. The recent restructuring of DG-CONNECT has placed the e-Infrastructure unit in the 'Excellent Science' pillar indicates that future funding for e-Infrastructure will be dependent on it delivering excellent science which within Europe means the support of Research Infrastructures and ESFRI activities. The decision as to run these project ideas as a single project or as multiple projects is a tactical decision that can only be made once the call is published. However, the development around these concepts can start now:

1. **Innovation in EGIs Operational Tools**: Coordinated by EGI.eu and involving the current operational tool developers it would provide the development and the integration effort around a testbed for verifying changes before deployment. The operation of the operational tools would be funded directly through the participation fee. The project would include current operational tool partners, adopting research infrastructures and focus on better integration, rationalization, reducing the cost of operating the tools and the automation of processes to reduce the cost of running the infrastructure with these tools. The impact of the project would be to reduce the cost of running the operational tools and to reduce the cost of running distributed infrastructures based on these operational tools.

2. **Promoting EGI within the ERA**: Coordinated by EGI.eu this project would expand the current network of NILs into a human network that could provide outreach and inreach into EGI across different research communities and their local technical support through 'Champions'. The development of EGI's human network and the human capital within it would include major events (e.g. the forums), workshops (e.g. logistical and speaker support) and training (e.g. sourced internally or externally to provide the excellence in technical and associated skills needed in the community). Promotional activities within this network and beyond this network to EGI's consumers across the ERA would be achieved through a regular (weekly?) professionally staffed on-line publication (a.k.a. International Science Grid This Week), websites, quarterly policy briefings, and tools to engage the citizen scientist in the work being undertaken by the EGI community. The impact of the project would be to provide a grassroots network within EGI that can be used to engage research communities across Europe and to raise EGI's profile in the ERA and the public at large.

3. **Collaborative Infrastructure Platform**: A critical role for EGI is to promote technical collaboration between research communities. Services fitting into this category include EGI's current community services (e.g. AppDB, Training Marketplace, Software Repository, GANGA, Diane) but also new scalable centrally provisioned services such as Persistent Data Identifiers or Data Transfer mechanisms (for example, Globus Online). Many of these services only exist as prototypes and need further innovations to ensure that they provide a scalable, reliable and sustainable service. Other services need promotional and training activities to ensure that the platform integrators are aware of and able to use these new capability and frequent gathering of requirements needs to take place within the research communities to understand their evolving needs. The impact of such a project would be to provide a set of services that could be used as foundation to build collaboration between different research communities, their services and their data.

4.2 With EGI.eu as a partner

The following projects are seen as strategic for EGI and do not necessarily need to be led by EGI.eu.

1. **Ensuring an integrated pan-European infrastructure**: The ambition of the ERA is to have a single market for research activity across the whole of Europe. Within EGI, the variation of NGI maturity and activity is potentially compromising our ability to uniformly deliver services across Europe. This project would provide directed funding to the new and emerging NGIs in EGI (primarily SEE Europe and beyond) to help build up the human capital so that they can contribute fully to EGI's activities. This project would engage partners from some of the NGIs to help deliver training and support to the targeted NGIs. The impact of the project would be to strengthen the capability of the targeted NGIs to fully engage in EGI activities – both operationally and non-operationally.

2. **Worldwide Integration**: With the growth of worldwide research communities and their expectation of an integrated e-Infrastructure, targeted effort is needed to achieve interoperability between different e-Infrastructures and the alignment of their respective policies and operation architectures. Such an activity needs to deal with both mature and emerging national and regional e-Infrastructures. The impact of a project in this area would be to reinforce Europe's leadership in this area and its integration and alignment with other activities around the world.

3. **Federated Cloud Technologies**: The fundamental technology needed to operate institutional private clouds is being sustained outside of the EGI community. Innovation is needed in the integration of private clouds so that they present an open, integrated, standards based resource for different research communities to deploy and operate their own virtual research environments. Adopting a federated model would allow commercial public clouds to be integrated into these resources to provide transparent access to those user communities willing to pay and place their work on these resources while allowing other users to keep their work on publicly funded resources. This work would be able to re-use many of the innovations in federating grid technologies and distributed operational procedures that have taken place over the years.

4.3 As a consumer

It is important that the following projects take place, but EGI.eu does not need to have a role in these projects:

1. **Virtual Research Environments (VREs)**: VREs, composed of research community specific services needed to access EGI's resources that are deployed on EGI and services operated by the research community or its agents to facilitate access to its distributed services, need to be tuned to the needs of different research communities. Working from open-source software VREs will be integrated into platforms for specific communities and then operated on behalf of these communities to meet their specific service requirements. The impact of having VRE's customised to the needs of individual research communities, coupled with the ability of EGI to facilitate the deployment and operation of these environments, will allow different research communities to be able to access the services they need, when they need them and where they need them.

There may be other projects that EGI.eu would be willing to endorse if the projects are aligned with its EGI2020 strategy.