

European Grid Infrastructure

Horizon 2020 – the Framework Programme for Research and Innovation (2014 - 2020)

New EU Research and Innovation Programme

The current EU research, innovation programmes and related funding schemes will end in 2013. Therefore, many stakeholders are wondering what to expect afterwards. The European Commission (EC) has already decided to combine the current Framework Programme for research with the Competitiveness and Innovation Programme and the European Institute of Innovation and Technology into a single Common Strategic Framework (CSF) for EU research and innovation funding. This new programme has been named **Horizon 2020**.

Green Paper on CSF and EGI Position Paper

Before announcing the new budget figures and the elements of the new Programme, the EC published a Green Paper to initiate a consultation process. The Green Paper stimulated debate and launched a process of public consultation by providing a set of questions to collect different views from all interested stakeholders (organisations and individuals).

EGI.eu submitted a position paper on behalf of EGI along with a set of suggestions on what the EC support should focus on in order to accelerate the move towards an e-Infrastructure that is able to flexibly and responsively meet the needs of diverse user communities. A few recommendations include:

- Support the closer integration of different e-Infrastructure providers in order to provide a coherent technical and policy structure, and integrated services to end-users.
- Support the direct engagement between end-users and e-Infrastructure providers to develop new innovative services within an integrated project, the development of new innovative applications that use e-Infrastructure services to support e-Science, and the provision of a user-driven e-Infrastructure through service charging.
- Reinforce the existence and importance of the top-level legal entities governing European e-Infrastructures by using them as a flexible vehicle to support innovation taking place within the

community; embracing flexibility which would encourage partners/countries to commit to these structures and see the benefits that could be derived from them.

• Affirm a clear commitment by the EC at both a policy and a technical level for the long-term development of open standards for e-Infrastructures in Europe within a global context so that the seamless service landscape that is foreseen within Europe extends worldwide.

Budget Figures

Based on the policy priorities set up within the **Europe 2020 strategy**, which focuses on "smart growth" for research and innovation, it was reassuring to see that even in the time of financial cutbacks and austerity measures, the new proposal for EU budget (2014-2020) matches their goals with plans for a **sharp increase in funding (45%)**. The current budget of \in 55 billion provided during the 2007–2013 Programme for research and innovation will **increase to** *€***80 billion** for the period 2014–20. This substantial funding increase can be considered a big success and a vote of confidence for research and science, especially as budgets in other areas will shrink or remain flat.

Key messages from the Horizon 2020 Workshop

EGI.eu participated at the consultation workshop on the possible content of "Horizon 2020" for the CSF for Research and Innovation with a focus on research infrastructures (RI) held on 4th July 2011 in Brussels [4].

In general, Horizon 2020 will move away from a set of different, non-coherent priorities defined in the various EC programmes and initiatives to a set of common strategic priorities agreed by the EC. Horizon 2020 focuses on research excellence, societal challenges and competitiveness. While holding a steady focus on European Research and Technological Development (RTD). it will concentrate more on stronger support for innovation. non-technological including innovation and market take up.

Through Horizon 2020, the EC plans to support the coordination of e-Infrastructures at an EU level to provide seamless services (including international cooperation) since they are seen as critical infrastructures for e-science and open access to scientific data. The EC plans to subsidise distributed infrastructure coordination that provides added European value and the continuous support of upgrading e-Infrastructures and further federation of national efforts. Furthermore, the EC sees e-Infrastructures as knowledge and innovation enablers for RIs (including ESFRI projects) across disciplinary, geographic and administrative boundaries fostering the development of genuine pan-European infrastructures.

The most important aspect of e-Infrastructure in the years to come is the development of innovative services, digital curation, open access, interoperability and a stronger user-centric approach.

Some of the areas that were identified as critical include:

- Improving the relationship between users and service providers;
- Addressing underdevelopment of the data layer of e-Infrastructures;
- Reducing the distance between Research Infrastructures and e-Infrastructures;
- Addressing the lack of awareness for the fundamental role of data and interoperability;
- Leveraging activities and services beyond research and including communication, education and training as part of all e-Infrastructures initiatives;
- Enhancing the dialogue with industry (especially SMEs) in order to foster knowledge and technology transfer, both as a supplier and as user;
- Combining top-down, policy-driven approaches with a bottom–up approach to identify innovation opportunities and new needs and communities;
- Broaden the role of e-Infrastructures beyond research to other areas, for example transport, government, energy and health;
- Tackle environmental ICT issues (because of the increasing volume of scientific data to be managed).

The EC will ensure that there is a closer cooperation between the Directorate General (DG) for Information Society and Media (the funding source for e-Infrastructure projects) and the DG for Research and Infrastructure (the funding source for ESFRI projects). As a result of better coordination, the EC wants to see a durable connection between e-Infrastructures and ESFRI projects that will result in increased mutual benefits. Gaining momentum and a strong element of continuity in collaboration between EGI and ESFRI projects will lead to stronger links between e-Infrastructures and emerging Virtual Research Communities (VRCs). Ideally. every ESFRI infrastructure should eventually become part of the discipline-specific VRC.

It is important to note that the post-2013 Structural Funds (SF) programmes will have an increased emphasis on innovation and smart growth specialisation and it will be also used to address the digital divide between countries and regions. The EC proclaimed that it would use SF for research and innovation to: develop world-class research and ICT infrastructures; establish networks of research facilities; and develop regional partner facilities. However, SF is to be used to stimulate national funding not replace it, hence, increasing national funding through SF serves to complement and reduce spending in other EC funding programmes.

Overall, the implementation of the upcoming "Horizon 2020" for Research and Innovation will be of crucial importance in **defining the future funding environment of EGI and ensuring its sustainability.**

References

1. Horizon 2020 – the Framework Programme for Research and Innovation

http://go.egi.eu/horizon-2020

 Green Paper – From Challenges to Opportunities: Towards a Common Strategic Framework for EU Research and Innovation funding

http://go.egi.eu/csf-green-paper

3. EGI Position Paper on Common Strategic Framework for future EU Research and Innovation Funding

 $\underline{http://go.egi.eu/csf-egi-position-paper}$

4. Report on a consultation workshop on the possible content of "Horizon 2020"

http://go.egi.eu/horizon-2020-workshop