

GRDI2020

Towards a 10-Year Vision for Global Research Data Infrastructures

Andreas Aschenbrenner points out that challenges are also of an organisational and social nature: *“All of us are required to participate in the everyday operation of data infrastructures - from data managers to regular users. Data stewardship starts with the data creators during the early data life-cycle stages, and continues as an on-going process throughout preservation and reuse.”*



Andreas Aschenbrenner, Göttingen University, Germany
& GRDI2020 Technological Working Group Scientific Chair.

Addressing the Data Deluge in Scientific Research

Research is increasingly becoming collaborative and cross-disciplinary, particularly as attention to grand global challenges continues to grow. Research data is of fundamental importance for modern science. There is a widely recognised need to maximise the value and re-use of potential information resulting from scientific experiments and observations, allowing new knowledge to be generated. In this evolving landscape, scientific enquiry requires a powerful and flexible organisational pattern capable of supporting interoperability and access to diverse

heterogeneous resources with collaboration across geographical boundaries underpinned by an open information ecosystem. To arrive at this knowledge ecosystem, multiple organisational, financial, technological, legal, social and cultural challenges need addressing together with rethinking roles for the stewardship of digital data. Scalability, interoperability, organisational and financial sustainability are imperatives and the issues at stake need to be addressed systematically with the involvement of all the relevant stakeholders along the way.

Technological Working Group

Focus on data challenges and issues like interoperability, scalability, curation, data access and financial feasibility and proposing steps towards their solution.

Roadmap on Global Data Research Infrastructures

GRDI2020 contributes to defining a future Roadmap focused on Global Data Research Infrastructures in close collaboration with the European Commission, policy groups and research user communities.

Organisational Working Group

Strong support on activities related to organizational and policy topics identifying a core set of crucial open problems for the development of Data Infrastructures and suggesting possible solutions.

Advisory Board

Ensuring an international perspective by facilitating the establishment of a worldwide network of relationships with relevant communities, funding agencies, and European and international organizations and supporting activities around the development of recommendations for the data research infrastructures of the future.

Evolving eScience digital repositories and incorporating their holdings into an open information ecosystem will extend and strengthen Europe's Information Space, enabling new scientific methods and paradigms, while enhancing the efficiency of the scientific process and its impact.



Join GRDI2020 at.....



ICT2010 - 27-29 September 2010,
Brussels, Belgium.

GRDI2020 workshop in collaboration
with GRL2020 Africa, co-located with
CODATA22 - 23-24 October 2010,
Cape Town, South Africa.

ICT2010 - 27-29 September 2010, Brussels, Belgium.

- * **Scientific Data Infrastructures - Empowering research in the data-driven Age** – exhibition stand co-ordinated by GRDI2020 together with a group of scientific data infrastructure projects - D4Science-II, DRIVER II, GENESI-DR, IMPACT, METAFOR, OpenAIRE, PARSE.Insight and SEALS - to demonstrate data infrastructure solutions spanning multiple-user communities and scientific disciplines, from astronomy to digital libraries, and biology to climate change - 27-29 September 2010, Brussels, Belgium.
- * **Global Information Infrastructures** - Networking Session co-ordinated by DL.org and co-hosted with GRDI2020 and DC-Net - 9:00-10:30, 29 September 2010, Brussels, Belgium.

GRDI2020 workshop in collaboration with GRL2020 Africa, co-located with CODATA22, 23-24 October 2010, Cape Town, South Africa.

- * Invitation-only event, to harness the global expertise that exists in the field and to mobilise data infrastructure stakeholder communities to foster a better understanding of the technical and organisational/policy challenges that need addressing to arrive at advanced infrastructures over the next ten years.

GRDI2020 supports the launch and promotion of the *Riding the Wave: How Europe can gain from the raising tide of scientific data* report of the European Commission High Level Expert Group on Scientific Data.



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e-infrastructure

