

Global Research Infrastructures and the Grand Challenges: lessons, priorities and future direction

**International Conference for Research Infrastructures – ICRI 2012
Copenhagen, 21-23 March 2012**

Never before has there been a need to act globally to tackle the grand challenges before us such as climate change, health, energy supply etc. Every discipline from arts and humanities and social sciences through to physical and environmental sciences is joining hands to create international research infrastructures focused on these pressing needs. Research Infrastructures are not just large physical facilities; they include physically dispersed, virtual and data infrastructures that are managed as international entities. In this context ICRI2012 address the following questions:

- Why do we need global research infrastructures? Which types of world-class infrastructures are best suited to a global approach?
- How to increase the use of these facilities and how to support access to them based on excellence?
- How to strengthen international cooperation in the implementation, governance and operation of research infrastructures?
- How to nurture synergies between research infrastructures from differing disciplines and how to promote interdisciplinary approach?
- How to manage large international Research Infrastructures focused on global challenges?
- How to increase awareness of the education and training possibilities that Research Infrastructures offer?
- How to tackle data, in particular how to address the distributed nature of either the facilities themselves or the user communities?

To answer these questions, ICRI2012 will draw on existing experience, including:

- The experience that existing global Research Infrastructures and other bodies can share (e.g. Group of Senior Officials on Global RIs, GEOSS and the Global Science Forum of the OECD).
- Lessons to be learnt from current initiatives across different fields. Are there specific additional needs for managing those addressing global challenges? If so, in which areas? Are there common characteristics?

The purpose of the Conference will be to make specific recommendations on how international cooperation for research infrastructures can be most effective in the future. This could include calling for a coordinated support to (and strengthening of) existing initiatives, highlighting possible needs for additional effort, and developing a vision for open science. ICRI 2012 will also provide important input to the European Strategy and to the implementation of the next EU Framework Programme – "Horizon 2020", supporting the strengthening of a global ecosystem of research infrastructures.

ICRI 2012 will take place under the auspices of the forthcoming Danish Presidency of the European Union, in cooperation with the European Commission.