Research Data Alliance (RDA) Governance Model and Policies

e-IRG Workshop, Amsterdam

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03.12.2012

(www.rd-alliance.org)

Contents

- Some history and what RDA is aiming to achieve

- What kind of structure and organisation is needed (very preliminary)?

- Supporting the process through iCORDI

- Discussion (more in the Governance track)

Community coordination needed to accelerate data-driven discovery and innovation

- *"Just do it"* -- Focused efforts help communities drive tangible progress
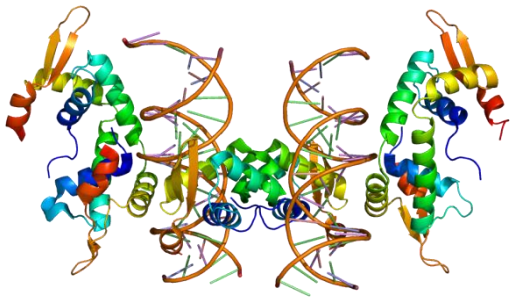
Creation / adoption of **data sharing policies** have accelerated research innovation

Development and adoption of **parallel communication protocols** through the MPI Forum drove a generation of advances

THE LANCET Neurology

The Lancet Neurology, Volume 6, Issue 6, Pages 480 - 481, June 2007
doi:10.1016/S1474-4422(07)70118-7 Cite or Link Using DOI

Alzheimer's researchers open the doors to data sharing

James Butcher

Data from the US Alzheimer's Disease Neuroimaging Initiative will be made publicly available in a central databa...

Development of a publicly available **shared data collection** enabling new results for Alzheimer's

IETF®

Now 25 years old, the Internet Engineering Task Force's mission "to make the Internet work better" has resulted in key specifications of **Internet standards** that support innovation

Genesis – from DAITF/DWF to RDA, short history 2011 - 2012

- Efforts have started very much as broad bottom-up activities in US and Europe, supported by NSF, NIST, Presidential Office and European Commission
- The Data Access and Interoperability Task Force (DAITF) grew as an off spring to EUDAT and OpenAIRE+ initiated by the EC
  - Meeting in Lyon September 2011
  - Pre ICRI DAITF Preparation Workshop, Copenhagen, 20/21 March 2012
- iCORDI project proposal refining DAITF (EU) 2011
- Concept Paper – Data Web Forum (US) 2012
- RDA Steering Group was established in August (high level push by NSF + EC + AU)
- "Research Data Alliance Planning Meeting: Global Data" 1 – 3 October 2012 in Washington DC
- EUDAT 1st Conference in Barcelona 22-24 October 2012 had several presentations about the RDA and a broad discussion
- The first RDA Council members announced in Barcelona during the EUDAT conference: Fran Berman (US), John Wood (EU), Ross Wilkinson (AU).
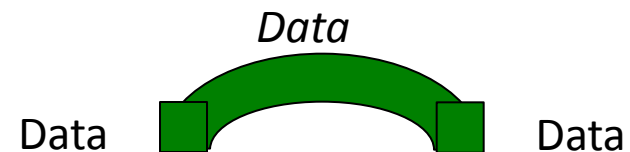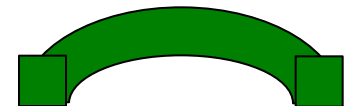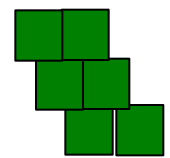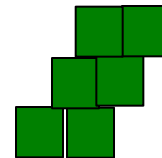
Research Data Alliance:

What does "*getting on with it*" mean?
- Developing the building blocks
- Building data bridges

which
- Requires rough consensus
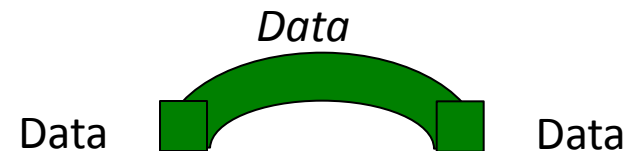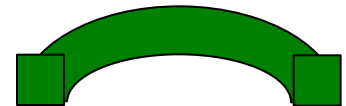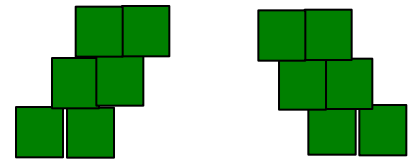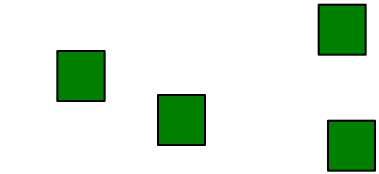- Data exchange (equivalent of "running code")

Data

Data   Data

Research Data Alliance:

What sort of bridges?

- Bridges to the future – data preservation

- Bridges to research partners

- Bridges across disciplines

- Bridges across regions

- Bridges to integration – to solve new problems

- Bridges across communities

Data

Data   Data

RDA role

Two bridges we can build:

- Connecting Data

- Connecting People

What kind of organisation do we need to do this?

Initial Group of Funders (iGoF)

- The Research Data Alliance is being brought into existence by an initial three research funding organisations:
  - The Australian Commonwealth Government through the Australian National Data Service supported by the National Collaborative Research Infrastructure Strategy Program and the Education Investment Fund (EIF) Super Science Initiative
  - The European Commission through the iCORDI project funded under the 7th Framework Program
  - The United States of America through the RDA/US activity funded by the National Science Foundation

Accelerating Data Sharing and Exchange Across the Globe → the Research Data Alliance

- The Research Data Alliance (RDA) is an emerging organization that will facilitate **specific, short-term efforts that accelerate the sharing and exchange of research data**

- **Working groups serve as accelerants** to data sharing practice and infrastructure. Work products / deliverables include
    - Adopted standards
    - Deployed infrastructure
    - Adopted policy
    - Implemented best practice, etc.

RDA Vision and Purpose

- **Vision**
  - *Researchers around the world **sharing** and **using** research data without barriers.*

- **Purpose**
  - *The purpose of the Research Data Alliance (RDA) is to accelerate international **data-driven innovation and discovery** by facilitating research data **sharing** and **exchange**, **use** and **re-use**, **standards harmonization**, and **discoverability**. This will be achieved through the development and adoption of **infrastructure**, **policy**, **practice**, **standards**, and other deliverables.*

RDA Working Principles

- These structures and procedures should support the guiding principles of the RDA which are:

- **Openness** – Membership is open to all interested organizations, all meetings are public, RDA processes are transparent, and all RDA products are freely available to the public;

- **Consensus** – The RDA moves forward by achieving consensus and resolves disagreements through appropriate voting mechanisms;

- **Balance** – The RDA is organized on the principle of balanced representation for individual organizations and stakeholder communities;

- **Harmonization** – The RDA works to achieve harmonization across standards, policies, technologies, tools, and other data infrastructure elements;

- **Voluntary** – The RDA is not a government organization or regulatory body and, instead, is a public body responsive to its members; and

- **Non-profit** - RDA is not a commercial organization and will not design, promote, endorse, or sell commercial products, technologies, or services.

RDA Working Groups Form the Foundation for RDA Community Impact

- ***Working Groups envisioned as accelerants to data sharing practice and infrastructure in the short-term*** with the overarching goal of advancing global data-driven discovery and innovation

- RDA Working Group profile:

  - *Short-term: 12-18 months*

  - *Focused efforts with specific actions adopted by specific communities*

  - *International participation*

  - *Open, voluntary, consensus-driven*

  - *Complementary to effective efforts elsewhere*

Potential outcomes / deliverables:

- Adopted standards

- Deployed infrastructure

- Adopted policy

- Implemented best practice, etc.

How to Participate

- **Suggest a Working Group** (focused 12-18 month efforts with measurable outcomes that accelerate data sharing and exchange)
    - Interest Groups creating **"Case Statements"** on their topic for community and RDA review

- **"Join" RDA and Participate in the Forums**
    - **Community members** will join by registering at rd-alliance.org. (Discussion Forum at **forum.rd-alliance.org**).
    - **Organizational members** contribute funding or time for a 2+ years to support core RDA structure

- **Provide feedback** through **rd-alliance.org** and to the organizing committee as the organization develops
    - Community feedback welcome/needed to "debug" the RDA.
    - Help us make this an impactful, effective, and functional organization that achieves its goals.

- **Come to the first RDA Plenary**
    - **March 18-20, 2013 in Gothenburg, Sweden**. More information will be available at rd-alliance.org

Working Group Case Statement v.1 Components

1. **WG Charter:** *A concise articulation of what issues the WG will address within a 12-18 month time frame and what its outcomes or "deliverables" will be*

2. **Value Proposition**: *A specific description of who will benefit from the adoption / implementation of the WG outcomes /"deliverables" and what tangible impacts the adoption / implementation of the deliverables should have.*

3. **Engagement with Existing Work in the Area:** *Brief review of related work and plan for engagement with other activities in the area*

4. **Action Plan:** *A specific plan for adoption / implementation of the WG deliverables within the organizations and institutions represented by WG members, and plans for adoption / implementation of the deliverables more broadly within the community.*

4. **Work Plan:** *A specific and detailed description of how the WG will operate*

5. **Initial Membership:** *A specific list of initial members of the WG. A description of the initial leadership for the WG.*

RDA Working Group Development "Workflow" v.1

"Bottom-up" increase of interest → development of a candidate WG Case Statement (some groups forming via forum.rd-alliance.org)

Case Statement

Community feedback (via forum.rd-alliance.org) and continued development of Case Statement; submission to Council
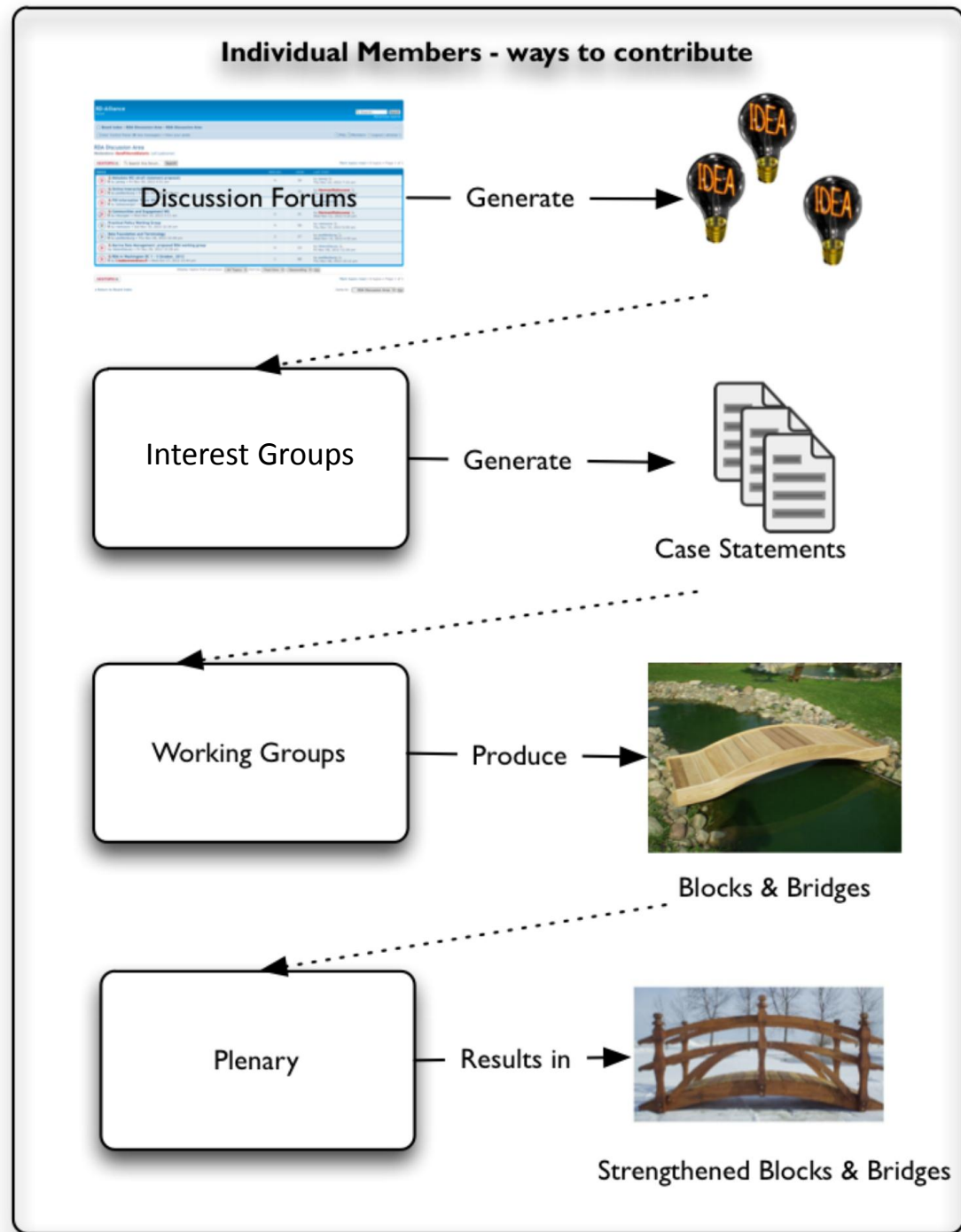
Council Approval

RDA Working Group: 12-18 month out-come oriented effort culminating in adoption and implementation of its "Action Plan"

Group Culmination

Post-completion continuation of action of Working Group members and broader community, continued promotion by RDA

Individual Member Participation

- **Discussion Forums** where ideas are discussed on ways to enhance the aims of RDA.
- **Interest Groups** where ideas for action are turned into one or more case statements that propose a particular building block or data bridge.
- **Working Groups** carry out the technical work of the RDA. Their purpose is to achieve consensus on a technical matter. They are open to participation from anyone who wishes to become involved. Working Groups operate to a defined objective and on a finite timeline which are set when they are established. Upon completion of their original task, a working group will be disbanded or re-chartered with a new task. Working group members are volunteers who may be supported by their sponsors or self motivated. The outputs of a working group may include documents, web resources, code and applications, tools, data sets, etc.
- The **Plenary** is responsible for discussing all aspects of research data exchange, approving and establishing working groups, analysing needs, identifying gaps, and discussing, strengthening and endorsing Working Group proposals.

Individual Members - ways to contribute

Discussion Forums → Generate → IDEA

Interest Groups → Generate → Case Statements

Working Groups → Produce → Blocks & Bridges

Plenary → Results in → Strengthened Blocks & Bridges

RDA Organizational Structure – Work in Progress

Working Groups

- Carry out work of RDA
- Outcome-oriented, consensus-driven
- Approval based on vetted "Case Statement" defining group charter, deliverables, and processes
- Open to all; commitment expected

RDA Community (Plenary)

- Open registration through rd-alliance.org, commitment to participation expected / encouraged
- Participate in Interest Groups (TBD), Working Groups, other component groups – multiple entry points
- Attend RDA Plenary (Forum for working groups, interest groups, organizational members, partner affiliates, etc.)

Technical Advisory Committee / Advisory Board

- Advise WGs and Council
- Provide expertise to enable working groups and interest groups / BOFs

Online Open Interaction Fora - use for many activities, open to all RDA members

Admistration and Management Team (Secretariat and Steering Group)

- Implements strategic direction set by Council
- Supports RDA component groups including Council, Working Groups, etc.
- Supports the activities of the RDA
  - Arranges plenary meetings
  - Runs on-line forums
  - Manages documents, etc.

Council

- Confirms consensus, manages strategic direction
- Provides general oversight of RDA
- Serves as a point of reference
- Drives economic sustainability for RDA
- Decision-making responsibilities for WGs, etc.

Current RDA Interest Groups

- Harmonization and Use of PID Information Types
- UPC Code for Data
- Data Type Registries
- Metadata
- Pub/Data Citation/Linking
- Terminology & Semantic Interoperability
- Practical Policy
- Legal Interoperability
- Defining Urban Data Exchange for Science
- The Engagement Group
- Marine Data Harmonization
- Repository Audit and Certification

http://rd-alliance.org/working-group/
http://forum.rd-alliance.org/

RDA Development Status

Many ways to participate at rd-alliance.org

Pre-Global Data Meeting

- Initial discussions: Vision, Purpose, WG, Governance, Membership, etc.

- Planning for October Meeting

Global Data Meeting

- Community information and input

- Feedback on initial discussion issues

- Germination of vanguard Working Groups

Pre-launch

- Continuing conceptualization of operations and bylaws, etc with expanding RDA community

- Population of Council, Sec., Working Groups

March 2013 Plenary Launch

- High-impact plenary speakers

- Approval of by-laws, charter, etc.

- Reports on vanguard WGs and approval of new WGs, etc.

Who's Involved

- **A Growing Community and You:**
  - Members from "Global Data Meeting" and throughout the community have joined the mailing list. **To join, please go to rd-alliance.org**

- **Organizational Members: AU (ANDS), EU (iCORDI), US (NSF-supported RDA/US)**
  - Organizational and development support and planned RDA participation

- **RDA Steering Group:**
  - AU: Ross Wilkinson and Andrew Treloar
  - EU: John Wood, Leif Laaksonen, Peter Wittenburg, Juan Bicarregui
  - US: Fran Berman and Beth Plale

- **RDA Council:** John Wood, Ross Wilkinson, Fran Berman, other members to be appointed

- **Information:**
  rd-alliance.org

- **Questions, comments:**
  enquiries@rd-alliance.org

- **Registration and Forum:**
  forum.rd-alliance.org

iCORDI

www.icordi.eu

iCORDI goals

- Facilitate and support the creation of an IETF (Internet Engineering Task Force) like organisation for the global data interoperability and data exchange – **Research Data Alliance** (RDA)

- **Support** the work of **European research communities** in their effort to **collaborate** with their US counter parts through **a coordinated platform** and to extend this to **the global levels**

iCORDI key facts

Project Name	iCORDI – Global Data Interoperability
Start date	1st September 2012
Duration	24 months
Budget	3,3 M€ (including 2,3 M€ from the EC) and 240 PMs (CSA)
EC call	Call 10 (INFRA-2012-3.2): International cooperation with the USA on common e-Infrastructure for scientific data (11.2011)
Participants	14 partners from 8 countries (national data centers, technology providers and research communities)
Objectives	"iCORDI's prime objective is to establish a **coordination platform** between Europe and the USA to discuss and improve the interoperability of today's and tomorrow's scientific data infrastructures of both continents and to extend this to the global levels."

A coordinated platform

⬡ The platform that iCORDI will set up will be supported by three key programmes:

⬡ An *analysis programme* devoted to analyzing data organizations and solutions as they emerge from the various scientific communities.

⬡ A *prototype programme* to coordinate a series of cross-infrastructure experiments on EU-US interoperability with a selected group of important projects and communities.

⬡ A *workshop programme* covering the investigation data infrastructure convergence and reaching out to new research communities.

iCORDI activities

- Supporting the emerging Research Data Alliance (RDA) grass-root process as part of the international collaboration platform by helping to prepare the format and to define the contents of the RDA meetings and by helping to organise the Working Groups.

- To complement and support the work of the High Level Strategy Forum (HLSF) in Europe.

- To capture and collate results and feed genuine experimental outcomes, requirements and issues into the RDA and HLSF discussion and analysis processes.

- **Data-oriented scientists** mean leading scientists who are working at the cutting edge of data-driven science in various disciplines and who can help determining the needs with respect to the integration of data to create interoperable domains.

- **Data architects** mean leading IT experts who are working on concrete data organizations and data solutions that aim to overcome the many technical barriers currently faced.
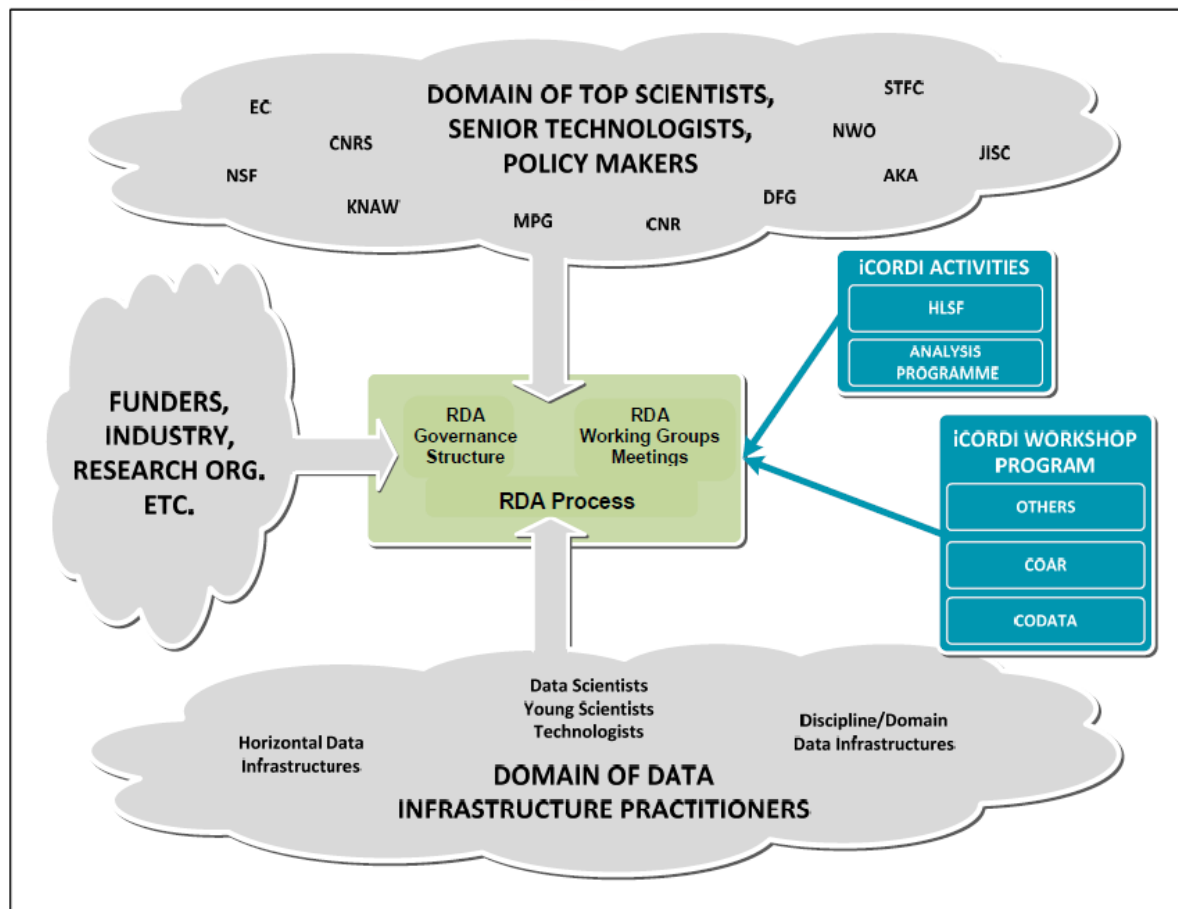
High Level Strategy Forum (HLSF) 2/2

- A focus team existing of John Wood, Juan Bicarregui, Leif Laaksonen and Peter Wittenburg are in charge to synchronize and organize the activities around RDA and HLSF.

- The HLSF as an European entity will target EU policy-makers and working groups, and also aim to stimulate the work of the emerging *RDA process.*

- The *High Level Strategic Forum defines policy and strategies in the realm* of data management, curation, sharing and access by continuing the work of initiatives such as the High Level Expert Group on Scientific Data and the G8+O5 group on data.

- A group of selected experts chaired by John Wood will organize annual meetings resulting in recommendations and strategy notes both to the RDA and the European Commission.

Who's Involved in iCORDI

CSC – IT Center for Science

Association of Commonwealth Universities

Athena-Research and Innovation Center in Information, Communication and Knowledge Technologies

Barcelona Supercomputing Center

CINECA

CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE

Consiglio Nazionale delle Ricerche

Maastricht University

MAX-PLANCK-GESELLSCHAFT

Science & Technology Facilities Council

Trust-IT Services Ltd
Communicating ICT to markets

THE UNIVERSITY OF EDINBURGH

iCORDI
INTERNATIONAL COLLABORATION ON RESEARCH DATA INFRASTRUCTURE

icordi-info@postit.csc.fi | www.icordi.eu

Register at the iCORDI site!

www.icordi.eu

Contact details

- Project Coordinator: Leif Laaksonen (leif.laaksonen@csc.fi)
- Scientific Coordinator: Peter Wittenburg (peter.wittenburg@mpi.nl

Governance Track 03.12.2012

E-IRG Workshop

Thoughts for the discussion

- Are the bodies right, top-down and bottom-up?
  - WGs (&BoFs), Plenary, TAC, Council, Management
  - Do we need more (or less)
  - Do they have the right functions?
  - How should members of each body be chosen?
  - Who is eligible?
  - How are they chosen?
  - How long do they serve?
  - Can they be renewed?
- How/who measures the impact of the WGs and Case Statements?
  - Is the governance of the WG work handled?
- How to handle the inclusion of new organisational members byond EC/US/AU?
- Working with other alliances (UNESCO, CODATA, Royal Society)
- What about the Risks?
  - Imperial, Esperanto, one example, wheel reinvention....
- Feedback please
  - now and through website

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