

5th e-Infrastructure Concertation

Barcelona

6 June 2008

e-Infrastructures as Standardisation Drivers

DATA TRACK

Chair : Krystyna Marek

Rapporteur: Wolfram Horstmann

Participants in the session

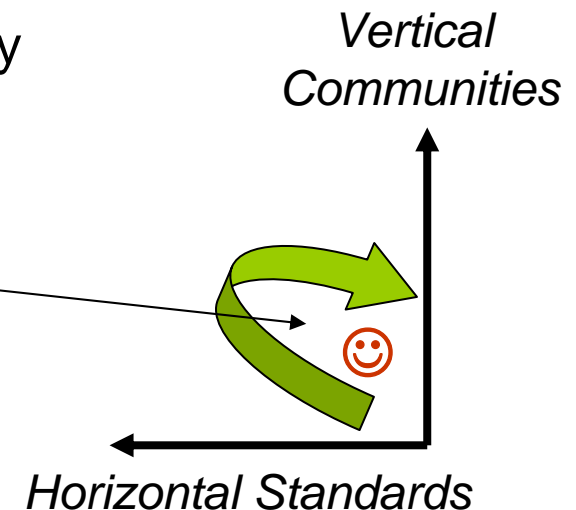
- By call
 - Repository infrastructures
 - NMBD
 - IMPACT
 - DRIVER-II
 - EuroVO-DCA, EuroVO-AIDA
 - Genesi-DR
 - METAFOR
 - User communities
 - D4Science (Diligent)
 - Communications
 - BELIEF-II
 - Scientific data infrastructures (2008)
 - DIESIS, PESI, PARSE.Insight,
 - More / Observers
 - Spanish Innovation Min / BelnGrid / SimDat / EGEE / EUASIA / ETICS / ..

As a first result:
Session arose strong interest -- many participants from „adjacent“ projects attended the session.

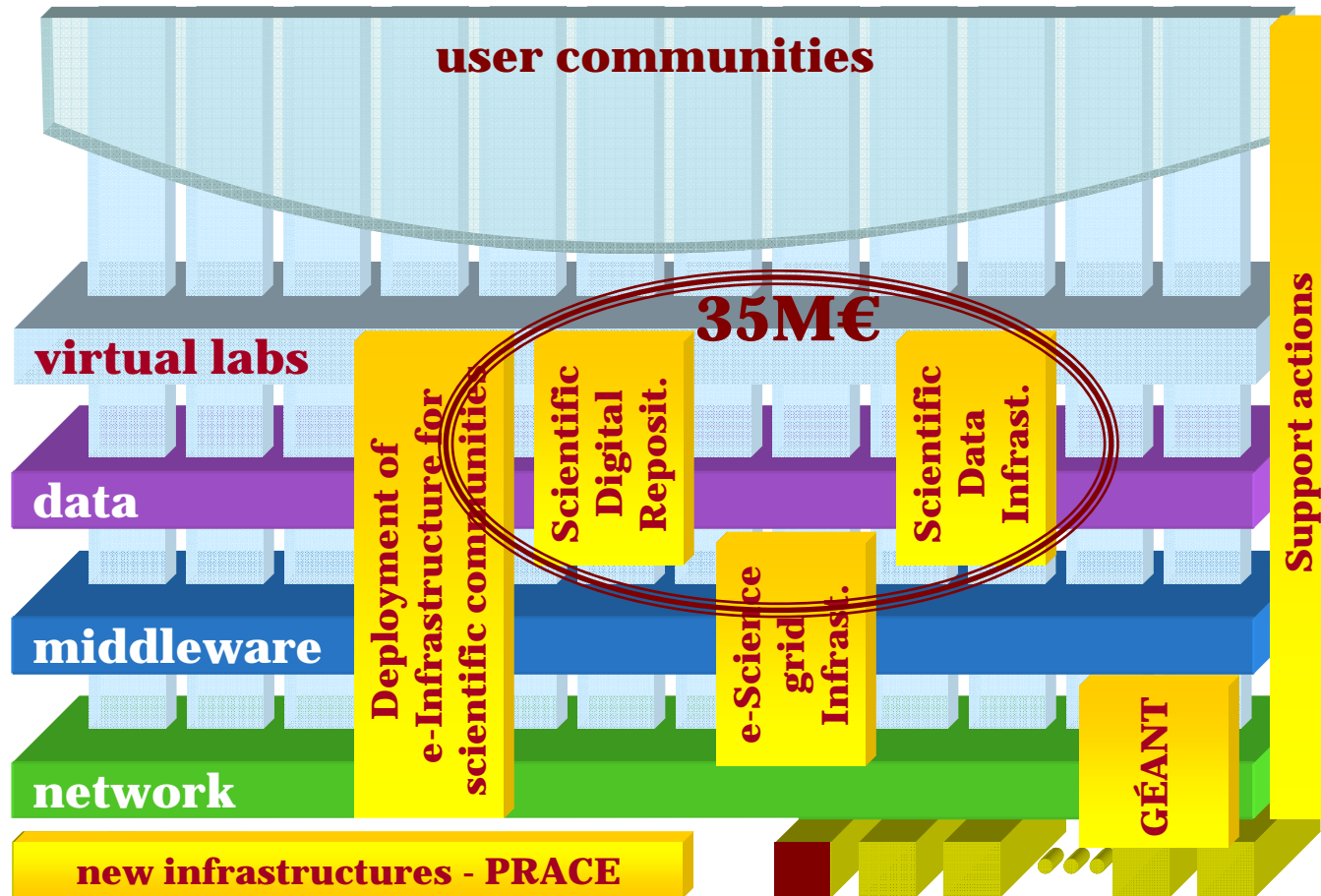
Underlined: participants new as compared to 4th concertation

Contextualizing the session

- Data-Projects are „user“ driven
 - horizontal standards play role of a commodity
 - Are supplemented by „vertical“ / community standards
 - Diversity is a declared objective
- Inherent paradox of subject differentiation and standards
 - Different Perspective than in Connectivity and Middleware
 - Researchers mainly interested in their subject
 - Standardization too technical
 - Standard developers interested in technology
 - overwhelmed with subject complexity
 - We need interpreters in between



Data in the „big picture“



From: Campolargo 2008

<http://www.driver-repository.eu/Summit1/Campolargo%20MCAM%20Driver%20event.ppt>

Session Agenda

- Review Follow-Ups & „Standards Matrix“
 - What has happened after 4th concertation?
- Discuss Common Problems?
 - Data Quality, Identifiers etc.
- Define Next Steps

Underlined: participants new as compared to 4th concertation

Follow-Up from 2007 Meeting

- Simple forms of networking / Bilateral discussions
 - Mutual presence at meetings: e.g. DRIVER-Summit, Grid Workshops etc.
- Coordinated communication
 - BELIEF set up a Project/Standards-Matrix
 - Questionnaires have been filled to update Standards-Matrix (see next slides)
 - Resources on standards collected

Standards-Use

W3C	ISO <small>no individual mentioning</small>	OASIS	IEEE	IETF	ETSI
<ul style="list-style-type: none"> • HTML, URI/URL, XML • Web Services (WSDL, SOAP) • Ontologies/ Semantic Web (e.g. <u>RDF</u>, <u>SPARQL</u>, SKOS) 	<ul style="list-style-type: none"> • Vocabularies (language, country, dates) • Virtual research environments • Geographic MetaData & information and services, • Archiving/OAIS 	<ul style="list-style-type: none"> • Web Services (UDDI) • A&A (SAML/ XACML) • <u>GeoXACML</u> (OGC) • <u>Business Markup/Process</u> (ebXML, BPEL) • <u>Stateful WebServices</u> (WSRF) • <u>Remote User Interfaces</u> (WSRP) 	<ul style="list-style-type: none"> • Architecture (HLA) • Simulation (DIS) 	<ul style="list-style-type: none"> • -- 	<ul style="list-style-type: none"> • --

Underlined = updated information; **Red** = proactive contributors

Standards-Use

OGF	OAI	DCMI	LOC	IVOA <i>(subject based)</i>	Other <i>(subject based)</i>
<ul style="list-style-type: none"> • „Usage of other people’s work“ • <u>OGSA</u>, <u>DAIS</u>, <u>GridFTP</u>, <u>GLUE</u>, <u>DRMAA</u>, <u>JSDL</u> 	<ul style="list-style-type: none"> • Resource exposure/ aggregation (OAI-PMH) • Object Re-use and Exchange (OAI-ORE) 	<ul style="list-style-type: none"> • Simple Metadata (DCMES) • Virtualizing (DC-Collection) 	<ul style="list-style-type: none"> • Web-Service queries (SRU/W-CQL) 	<ul style="list-style-type: none"> • Metadata • Resource Registry 	<ul style="list-style-type: none"> • [Ontologies, Vocabularies, Terminology Services] • <u>INSPIRE Metadata Draft (?)</u> • <u>OGF/OGC WebProc. Standard (WPS) WebService (OWS) and Web Catalogue (CSW)</u> • <u>Classification systems (e.g. ISSCAAP, ISSCFV, ISSCFG)</u> • <u>features representation (e.g. GML for GIS)</u> • <u>metadata (e.g. AgMES for Agricultural, SDMX for Statistics)</u>

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Resources provided

- DRIVER Standards Report
 - http://www.driver-support.eu/documents/DRIVER_Review_of_Technical_Standards.pdf
- Metafor Standards Collection
 - <http://metaforclimate.eu/Related-Links/Metadata/>
- PESI community standards
 - www.tdwg.org; www.gbif.org; www.e-taxonomy.eu; www.enbi.info
- D4Science
 - <https://quality.wiki.d4science.research-infrastructures.eu/quality/index.php/Standards>
- GENESI-DR >> Standardization Body OGC
 - <http://www.opengeospatial.org/>
- EURO-VO >> Standardization Body IVOA
 - <http://www.ivoa.net/>

Observations Challenges

- Grand Challenge
 - Bridging between generic and subject specific
- Specific Challenges
 1. Protocols
 2. Identifiers
 3. Abstract Data Model
 4. Metadata

Observations

Differing Network Models!?

- Point to Point Network
 - community by community definition of data standards
 - Community by community interfaces
 - *adhoc* standardization
- Layered Network
 - Minimal generic requirements Repositories
 - Thin interoperability layer ...

Observations

Modes of Collaboration

- field is too wide to discuss with all partners
 - More focussed discussions needed
- field is predominantly driven by users
 - Bottom-up working groups needed

Next Steps

- More Focussed Groups / Meetings
 - Group on „Provenance Metadata“ proposed
- BELIEF Collaboration Space for follow-up
- OGF Data repository interoperability Working Group
 - Open for expression of interest