



Policy Working Group

Perla Innocenti, *HATII, University of Glasgow, Policy WG Coordinator*

Seamus Ross, *Faculty of Information, University of Toronto*

Policy WG Goals & Outcomes

| Goals | Expected outcomes |
|---|--|
| Identify and discuss crucial policy interoperability issues arising in the implementation large-scale Digital Libraries | Consolidate and Enhance the DELOS DL Reference Model |
| Identify the State of the art of policy solutions implemented in other contexts (i.e. by the Working Group participating projects) | Contribute to the Digital Library Technology & Methodology Cookbook |
| Propose agreed policy solutions | Contribute to creation of a wide network of stakeholders working on the research/development of European-wide DLs |

Policy WG Scope

1. **DELOS RM reference conceptual framework for revising the *Policy domain***
2. **Define policy interoperability for DLs**
3. **Investigate approaches and strategies related to policy interoperability for DLs**
4. **Look at policies outside the traditional DLs domain** (i.e. the W3C Policy Working Group, medical domain and OAI policies)
5. **Produces brief descriptive user scenarios** to support the collection and definition of best practices for the use of policies in the DL domain

Policy WG Participants & expertise



Kevin Ashley,
ULCC



Perla Innocenti,
HATII at UG



John Faundeen,
USGS



Mackenzie Smith,
MIT Libraries



Seamus Ross,
UoT



Antonella De Robbio,
UniPd



Hans Pfeiffenberger,
AWI



Steve Knight,
NLNZ



Projects and initiatives involved



DPC - Digital Preservation Coalition



E-LIS



Italian Open Access Working Group - CRUI



SHAMAN - Sustaining Heritage Access through Multivalent Archiving

DRAMBORA

DRAMBORA - Digital Repository Audit Method Based on Risk Assessment



National Digital Heritage Archive, National Library of New Zealand



Open Access working group of the Helmholtz Association

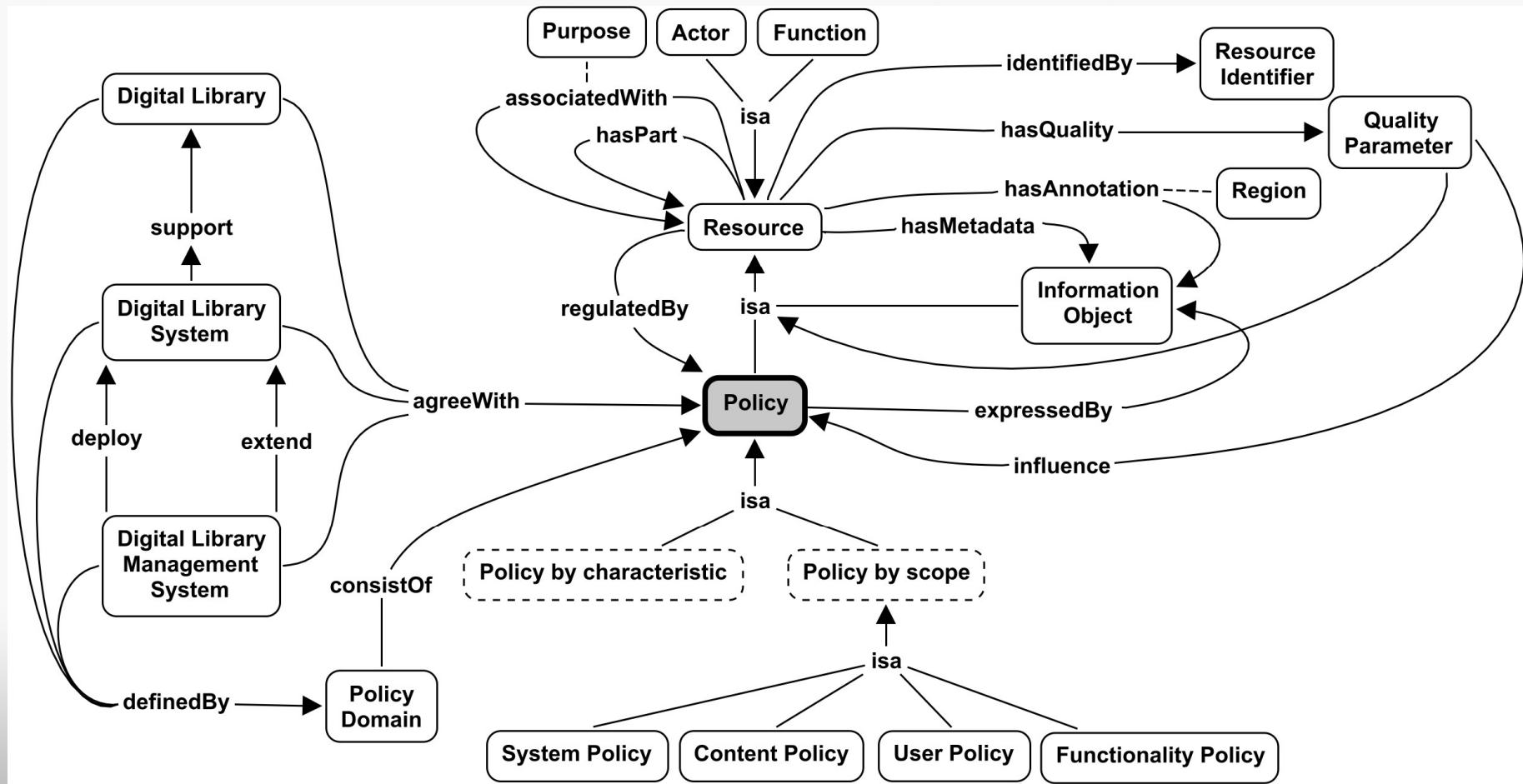


PLEDGE - PoLicy Enforcement in Data Grid Environments

Policy Domain in the DELOS RM

“The policy concept represents the set or sets of conditions, rules, terms and regulations governing interactions between the Digital Library and its users, whether virtual or real. Examples of policies include acceptable user behaviour, digital rights management, privacy and confidentiality, charges to users, and collection delivery. Policies belong to different classes; for instance, not all policies are defined within the DL or the organisation managing it. The policy supports the distinction between extrinsic and intrinsic policies. The definition of new policies and re-definition of older policies will be a feature of digital libraries.”

Policy Domain in the DELOS RM



Our proposal for revising the Policy Domain I

Underpinning every digital library, there is an organisation governed by an **organisational policy framework!**

Digital libraries represent the confluence of vision, mandate and the imagined possibility of content and services constructed around the opportunity of use.

It is the policy framework that makes the digital library viable. Without a policy framework a DL is little more than a container for content - even the mechanisms for structuring the content within a traditional library building as container (e.g. deciding what will be on what shelves where) are based upon policy.

Our proposal for revising the Policy Domain II

Policy governs how a digital library is instantiated and run.
The **policy domain is therefore a meta-domain** which is situated both outside the DL and any technologies used to deliver it and with in the DL.

Policy exists as an **intellectual construct that is deployed to frame** the construction the digital library and its external relationships and then these and other more operational policies are represented in the functional elements of the digital library.

So **policy permeates the digital library from conceptualisation through to operation and needs to be so represented in the model at these various levels**

But what is interoperability?

- Is it a representation problem?
- Is it a semantic problem?
- Is it a process problem?
- Is it possibility to define generic interoperability objectives?
- Can we create transformation services to enable interoperability across time?



7 keys interoperability issues

1. *Process* – what is the boundary between static content, representations, linkages
2. *Authenticity* – how do we (people and machines) know ‘it’ is authentic
3. *Quality* – how do we measure quality and does it change overtime
4. *Change over time* – how do we create ‘dynamic interoperability’ frameworks
5. ***Policy* – how do we reconcile policies in a contemporary context and how do we handle policy drift**
6. *Legal* – how can we address issues related to legal aspects
7. *Preservation* – how do we preserve ‘interoperability potentiality’ what do we preserve.

Source: Seamus Ross, ECDL2008

Our Policy Interoperability definition

policy interoperability as “business level interoperability”

- With a policy framework it is possible to compare and trust values and purposes of each organisation
- This type of interoperability is about peer-to-peer interoperability, but also about third-party service providers interoperable policies (i.e. data archives and the policies exchange with cloud providers)

Risks of a lack of policy interoperability

Lack at organisational level impacts on machine level

- lack of DL to DL interoperability
- data/document mining mismatch
- mismatch of level of staff expertise between diverse DLs
-

we need policies interoperability at high level and then these need to be instantiated at process level whether those processes are being handled by human or machine

Towards a Policy Interoperability Framework

Challenges

- unexplored territory if we look at policy at a organisational rather than only technical level
- little scientific literature
- little formalisation (in engineering terms)
- and... time constraints within this project!

Some examples we are looking at

- PLEDGE project
- SHAMAN Assessment framework



Our identified key issues and preliminary findings

- **broadness of the DELOS Digital Library Reference Model.** The Policy working however agreed that the policy domain is broader than how it is currently represented in the Reference Model.
- **definition of policy interoperability as “business level interoperability”.**
- **hot areas for policy research:** policy classification; manual vs. automated policies (and in particular how to encode those policies for machine discovery, and which languages can be used to represent policies and make them functional, with particular attention to semantic web technologies); policy management (in particular how policies are appraised and enforced); policies evolution over time; interconnectedness of policy and quality.
- **cross-domains research:** relevant studies on policies are taking place outside the traditional digital library’s domains and disciplines, such as computer science theory, digital content management, data management, e-science, risk assessment and digital repository certification, health care and medical sector, Open Access Initiative.
- **policy user scenarios** are useful to support investigations in this field and the collection and definition of best practices for the use of policies in the digital library domain.

Our activities past and ongoing (Phase 1: Analysis)

- **Management:** Set up of WG, first WG meetings, charter, workplan
- **Ongoing analysis** of the DELOS RM domain, of policy and policy interoperability issues from a organisational rather than only computer-centric perspective
- Policy section for the **State of the Art Survey**
- Production of **user scenarios** related to policy and policy interoperability
- **TRAC tickets** with our proposals to enhance the Policy domain of the DELOS RM upon our findings
- **Production of the enhanced Policy domain section** within the DELOS RM

What next (Phase 2: Reality check)

- **Produce more scenarios** on OA policies, data harmonization, funding bodies, policy comparability, and to look also from the **point of view of the consumer**
- **Collect accessible DLs policy statements**
- **Identify operating digital libraries and data centres** to contact for verifying our findings
- **Group policy statements and scenarios** according to our identify key issues to trigger further analysis
- Keep investigating and discussing within and outside our WG to **provide feedbacks and proposals to enhance the DELOS RM and the DL.org Cookbook**
- Upon this work, provide a formal **mapping between the PLEDGE policies and the DELOS RM enhanced policy domain, and relate to the SHAMAN Assessment Framework**
- **Publicly disseminate our results**

About policy scenarios

- Tension in our research between analyzing and preparing proposals for enhancing the DELOS Reference Model, and the acknowledgement that policy in general is about the digital library organisation
- We are collecting both types of scenarios

Interoperability scenarios for policy

Depositor Choice

An information owner has digital material which they wish to donate to a digital repository/library. (The owner could be a researcher wishing to deposit research data, or a well-known person wishing to deposit their personal digital 'papers', to give two examples.) They would like certain conditions to be met: they want guaranteed, free open access to some (but not all) of the material - some must be kept back for 50 years because it identifies living individuals. The owner is choosing between two repositories and is trying to understand questions such as: "What happens when/if the repository stops operation ?" ; "Am I allowed to attach special conditions to my donation ?" "Can I or my heirs sue someone if the conditions are not met ?" **To make the comparison effectively, they need to see institutional policies expressed in a consistent, inter-operable, comparable way.**

Interoperability scenarios for policy

Selective Collection

The Library's current policy around printed legal deposit material is that of comprehensive collection. However, with eLegal deposit the Library will be selective in what it collects. This new policy, combined with the selective nature of the collection policies for the individual heritage collection areas, means that there is a need to appraise unsolicited digital material and record selection decisions. **The NDHA system needs to provide a managed and controlled environment where this appraisal can be performed.**



Interoperability scenarios for policy

Appraisal Policy

The USGS appraisal policy is shaped upon International Standards Organization records management guidelines. Factors involving declining budgets, advice provided by advisory panels, programmatic changes, and donation offers also contributed to the U.S. Geological Survey developing a formal appraisal policy. This policy states all offered and existing science collections intended for long-term preservation and access must be documented through our appraisal process. To date, 38 science collections have been reviewed while an additional six are expected to be completed in 2009. The policy has helped engage our scientists in the decisions to preserve and make available collections by requiring their participation in all appraisals. **The policy documents and justifies decisions which affects resources expended. Being a federal agency, accountability is critical.**

Interoperability scenarios for policy

User scenario of audiovisual collection management policies

There is no formal policy to explicitly guide the work of the audiovisual collection of the Central Archive of the Organisation. In the broader context of the organisation-wide information management strategy, the recent Organisation Archival Policy sets out rules for archiving paper-based and electronic records. The policy does not mention audiovisual records explicitly, but recordings of official events are implicitly understood to fall under the 'electronic information resources' and 'electronic records'. But **the lack of an explicit policy on the care of audiovisual collection has given individuals working with it in different departments significant influence over working principles, formats, description and storage of the collection.** The Archive Policy of the Organisation needs to be enforced for audiovisual content as well, and if necessary further explanation of responsibilities of departments and exact procedures for archiving should be developed. Specifically, policy and procedural guidelines should be developed for departments responsible for individual stages in the lifecycle of audiovisual objects.



Interoperability scenarios for policy

User scenario about relationship between harvesters and OAI-PMH

Hussein is working at the Digital Libraries Laboratory at UCT (University of Cape Town, Republic of South Africa) and he is managing some IRs for his University. Recently he received a request to register one of the IRs/archives he manage, with OCLC, as OAIster transitions to OCLC. Hussein is worried about terms and conditions of harvesting which seem cover both metadata AND all forms of data ... "while OAIster harvested metadata, OCLC appears to want to claim more rights associated with digital objects" says Hussein.

Hussein believes this new OCLC approach goes against one of the fundamental principles of the OAI-PMH - that we harvest metadata only. In most institutional repositories this is a minefield of legal problems, as the majority of commercial publishers only allow users to archive versions in their IRs with specific restrictions, different in each case (see RoMEO). The terminology used in the OAIster terms and conditions did not accurately state the rights that OCLC needs to make the OAIster data available. As a result, the OAIster terms and conditions have been corrected and are being re-sent to OAIster data providers. **Policies must clarify the relationship between OAI-PMH protocol and harvesters rules in order to respect copyright terms guarantee towards IRs authors which are self-archiving their papers.**



Looking forward your feedback!

<http://www.dlorg.eu>

[https://workinggroups.wiki.dlorg.eu/index.php/Policy
Working_Group](https://workinggroups.wiki.dlorg.eu/index.php/Policy_Working_Group)

<https://issue.dlorg.eu/report>

p.innocenti@hatii.arts.gla.ac.uk

Thank you!

