Steps Towards Implementation

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- Towards a User-Driven GEOSS: The Process
- Brief History
- Design Considerations
- Project Description
- Prototype Implementation
- Issues concerning the UIC
Towards a User-Driven GEOSS: The Process

Primary Goal: User Requirements in Support of System Design

Other capabilities:
- Analysis of value chains/networks;
- Linking users types, activities, and system components;
- Networking
November 2006: UIC: Initiated a process towards a user requirement registry

March 2007: First draft of a specification document for UNSPU

2007: several presentations and discussions of the UNSPU in UIC

May 2008: First implementation of the web-based interface; discussions at UIC meeting

2008: Introduction of the User Requirement Registry (URR) in the GCI

December 2008: New version of the UNSPU specification document

August 2009: Initiation of implementation project (prototype)
Design Considerations

Publishing/registering:
All GEO members:
- user types;
- activities.

authorized administrators:
- Properties;
- Requirements;
- Specifications;
(- Techniques;
- Observations;
- Products;)
- Links.

Functional Specifications
- registered users;
- authorization matrix.

Reporting and analysing:
- value chains and networks;
- deviations of system performance from specifications;
- requirements not met by products;
- activities not receiving the required products;
- user types not able to utilize the full benefit of Earth observations;
- value chains and networks

Others:
- networking of users, activities, etc.
Design Considerations

Architecture

Earth System

Techniques

Observations

LINKS

Comparison

Products
Design Considerations

Additional Comments

- One link table provides very high flexibility (e.g., networks of value chains, chains based on different threads) attributes.
- Users of the URR/UNSPU will have to register.
- By offering to users of the URR/UNSPU to characterize themselves, we create a tool to network experts, resources, programs, ...
- more capabilities likely to emerge as we go ...
**Project title:**
Deployment and test of a prototype of the GEOSS User Requirements Registry

**Contractor:**
ERG (Jan Connery) working for EPA (Gary Foley)

**Other Participants:**
- Hans-Peter Plag (consultant)
- Rudi Husar (consultant)
- Doug Nebert (advisor)
- SBA Analysts (will be invited as advisers)
- Open to others as advisers (e.g., AIP)
# Prototype Implementation

## Work Plan

0 - Implementation of the database prototype (ERG)
1 - Definition of the Set of Work Flow Scenarios (done)
2 - Development of Generic Work Flow Scenarios (in progress)
3 - Initial Ontology (started)
4 - SBA-Specific Work Flow Scenarios and Test Cases
5 - Iteration and final documentation

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<tr>
<th>Date</th>
<th>Task</th>
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<th>Description</th>
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<td>URR Ontology available</td>
<td>Registry</td>
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<td>TC-Test-1</td>
<td>Test of URR completed and presented at UIC meeting</td>
<td>Test Report</td>
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<td>TC-IT</td>
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<td>Report</td>
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<td>5</td>
<td>URR-PV1</td>
<td>Result of URR iteration available and Prototype PV1.0 of URR released</td>
<td>Final Report</td>
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Date: weeks from project start (August 26, 2009):
Prototype Implementation

Task 1: Definition of the Set of Work Flow Scenarios

**Publishing:**
- Properties (i.e., the main part of the ontology)
- new User Types
- new Activities
- new Requirements
- new Specifications
- links

**Look up:**
- User Types
- Activities
- Properties
- Requirements

**Reporting/analysing:**
- User Types, Activities and value chains linked to a Requirement
- Activities and Requirements of a User Type
- Activities and User Types down a value chain/network that benefit from an Activity/Requirement/Specification.
Prototype Implementation

Three Test Cases:
- Air Quality and Health: Results of the SBA analysis (sub-SBA Health)
- Geohazards: 2008 Review of Requirements (sub-SBA Disaster)
- GGOS 2020: Cross-cutting (at least seven SBAs)
Issues Concerning the UIC

- General Comments?
- Additional advisers?
- Other test cases?

Potentially:
- Testing at GEO Plenary (by invitation only)