

GEOSS User Requirements Registry (URR) or User Needs and System Performance Utility (UNSPU) or ...

Steps Towards Implementation

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- **Towards a User-Driven GEOSS: The Process**
- **Brief History**
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Towards a User-Driven GEOS: The Process

Definition of (Output) Goal(s)

Design of Utility

- Functions, Structure;
- Ontology;
- Integration into GCI

Collecting Process Definition

- Who? What? How?
- Based on what sources?
- How often updates, reviews?

Collecting Information

- Currently: UIC; SBA Teams;
- Harvesting?
- Rolling Review of Requirements?

Database

- Common templates for all SBAs;
- Overarching, cross-cutting, transverse
- versatile

Analysis

- Comparison: products & requirement
- Gaps, redundancies
- Value chains, user linkages, ...

Output:

- Prioritization (critical obs., gaps);
- Understanding value networks;
- Linking users, activities, system components

Primary Goal:
User Requirements
in Support of
System Design

Other capabilities:

- Analysis of value chains/ networks;
- Linking users types, activities, and system components;
- Networking

Brief History

November 2006: UIC: Initiated a process towards a user requirement registry

March 2007: First draft of a specification document for UNSPU

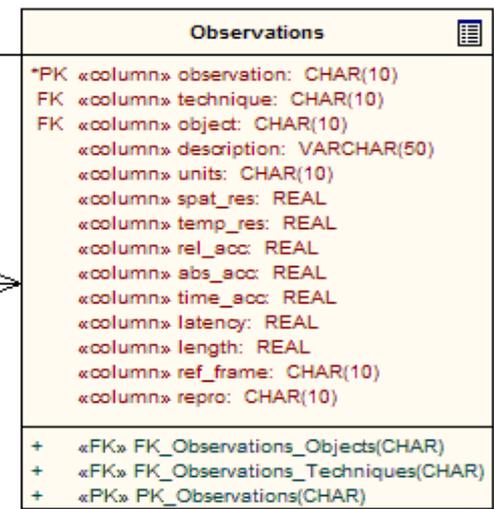
2007: several presentations and discussions of the UNSPU in UIC

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

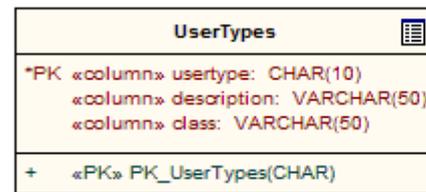
August 2009: Initiation of implementation project (prototype)



(observation = observation)

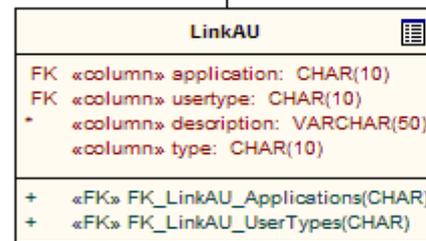
«FK»

+ «FK» FK_LinkPO_Observations(CHAR)



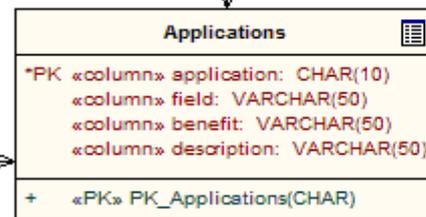
(usertype = usertype)

«FK»



(application = application)

«FK»



(technique = technique)

«FK»



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.*

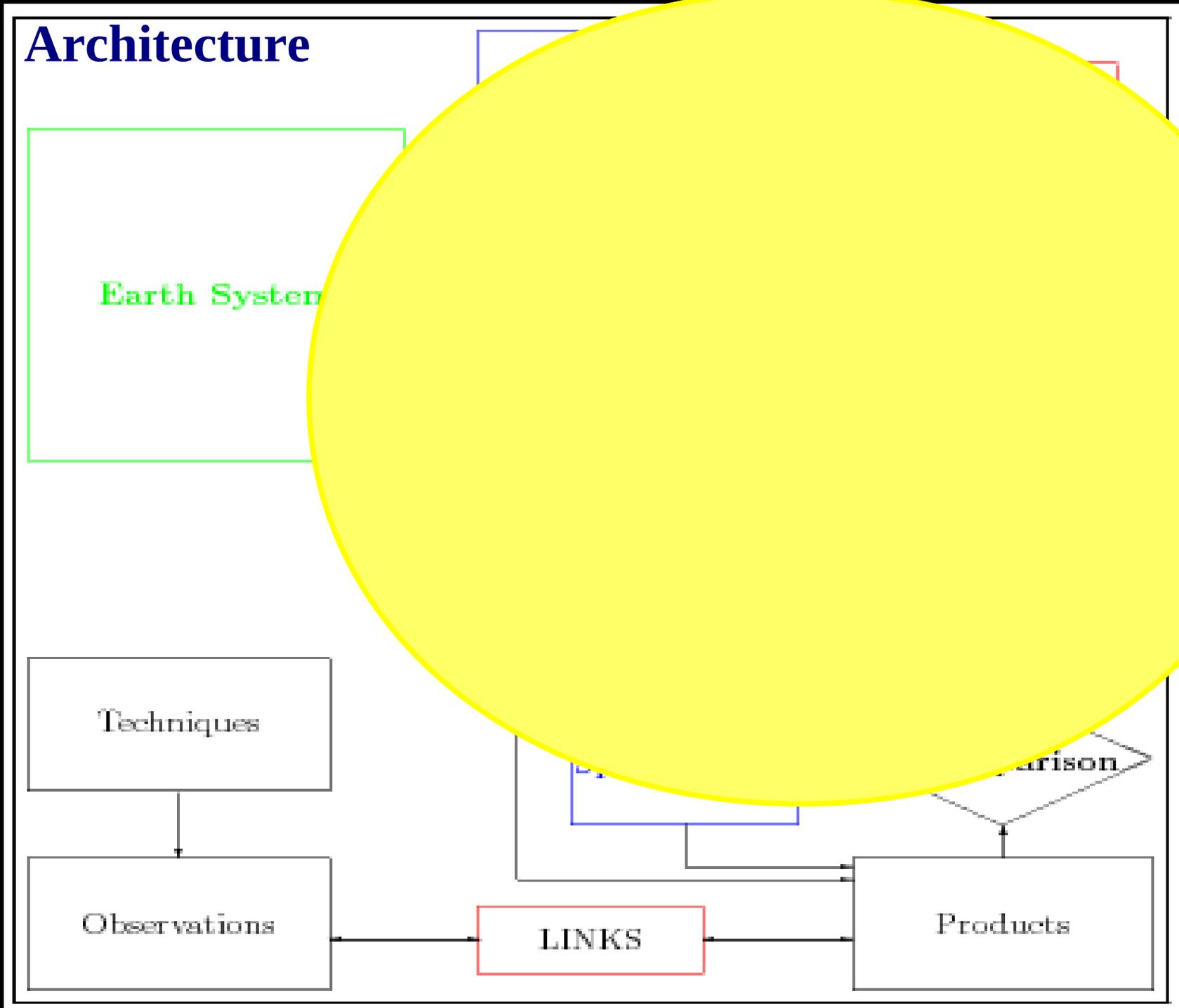
Reporting and analysing:

- 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



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 Description

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

Date	Task	Id	Description	Type
1	1	WF-Pro-V1	Work Flow Scenarios proposal available	Draft
3	2	WF-Def-V2	Work-Flow Scenarios Version 1 available	Report
7	0	URR-PTV0	URR prototype PVO available	Registry
9	3	URR-ON	URR Ontology available	Registry
12	4	TC-Test-1	Test of URR completed and presented at UIC meeting	Test Report
15	5	TC-IT	Iteration of URR with users completed	Report
18	5	URR-PV1	Result of URR iteration available and Prototype PV1.0 of URR released	Final Report

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)