

The Standards and Interoperability Forum

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Short History

- 2007
 - First meeting in Barcelona in 2007
 - Terms of Reference and Operating Procedures created
- 2008
 - Teleconferences begin in earnest
 - Overall workflow process discussed
 - Regional teams begin formation
- 2009
 - Regional teams operating
 - Workflow system deployed
 - Review of SIR entries begin
 - Outreach to other related GEOSS tasks
 - CFP 2 released

Accomplishments

- Regional teams formed and operating
- Design and development of SIR
- Review of standards and special arrangements via formal process
- Deployment of workflow system
- Design and deployment of interoperability between CSR and SIR
- Call for broader participation

Current Activities



- Assessing the current status of GEOSS interoperability
 - Participation in other GEOSS tasks
- Determining convergence to a reduced set of GEOSS-registered standards
 - SIR entries
- Pursuing opportunities to advance semantic interoperability
 - GEO Ontology task
 - Harmonization task
 - AIP
- Establishing cooperative arrangements with other standards groups
 - NASA Standards Process Group
 - IEEE-SA
 - IOOS DMAC
 - OGC

Near-Term Plans

- Develop a set of recommendations on standards and interoperability for GEOSS
- Develop a controlled vocabulary for interoperability advocacy
- Establish outreach and education program

SIF Workshop

- Thursday
 - Overview of mission and goals
 - Invited presentations on the GCI and interoperability
- Friday
 - Technical topic discussions
 - Standards convergence
 - Semantic interoperability
 - Data sharing, DRM, authentication
 - Standards taxonomy
 - SIF operations
- Agenda at:
 - http://www.earthobservations.org/meetings/20091112_13_sif_workshop_draft_agenda.pdf

SIF Roles

- Core Management Team
 - Overall management of SIF fundamental issues
- Regional Team Member
 - Provide regional contributions of expertise and manpower
- SIR Overseer
 - Review of SIR entries and data integrity of registry
- Registry and Interoperability Tester
 - Testing of SIR and other GCI interoperability
- Interoperability Advocate
 - Education and outreach to GEOSS community
- Interoperability Advisor / Domain Expert
 - Technical consultant to GEOSS providers

Collaboration

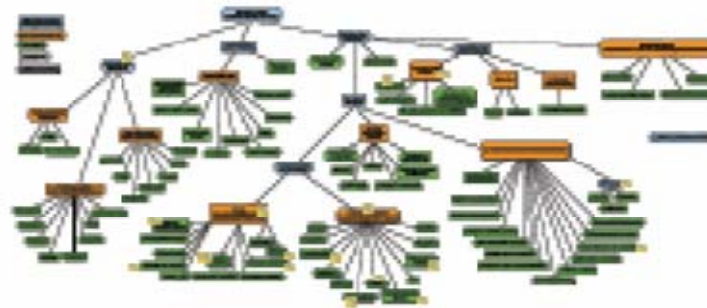
- Architecture Implementation Pilot (AR-09-01b)
 - Understanding GCI and interoperability issues related to GEOSS providers
- Data Metadata Product Harmonization (DA-09-01b)
 - Understanding the issues and work involved with metadata and GCI resources
- Data Integration and Analysis Systems (DA-09-02a)
 - Understanding data sharing and standards usage between data centers.
- Ontology Task (AR-09-01d)
 - Understanding the view towards ontology inclusion and use in GEOSS

Hot Topics

- Metadata
 - Semantic or not ???
 - Helps provide syntactic interoperability
 - Does not guarantee semantic interoperability
- Semantic interoperability
 - To what extent can this be realized?
 - Manual -> Semi-Automated -> Fully-Automated
 - Semantic engines and other semantic components
- Usage of GEOSS resources
 - Automation
 - Publish-Find-Bind use case

SIR Taxonomy

- Currently 17 categories with no hierarchy
- Version 2 is ready for external review
 - Hierarchical
 - Has support vocabulary
 - Will be deployed into SIR after review period



SIR Statistics

- 150 entries
 - 135 nominated standards
 - 15 nominated special arrangements
- Although standards are good, there are likely more special arrangements that have not been entered, but need to be
- Favorite Categories
 - Streaming Protocols: 10
 - Metadata: 46
 - Data Format: 24
 - Catalog/Registry Service: 19
 - Data Access: 25

CSR – SIR Interoperability

- CSR users can nominate SIR entries while registering services at the CSR
- SIR registration form, taxonomy, and standards are updated dynamically at the CSR based upon checksums
- Notifications are used between the SIR and CSR to notify CSR users of SIR modifications