SAFER the GIGAS Effect

How INSPIRE, GMES and GEOSS are influencing EC projects

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Agenda

- GIGAS Project Summary
- SAFER Project Summary
- SAFER Original Approach
- GIGAS Influences
- SAFER - V1 Architecture Overview
- SAFER and European SDI
- Conclusion
GIGAS Project Summary
**GIGAS Project Summary**

- **GEOSS INSPIRE and GMES an Action in Support**
- **Duration** - 24 months - 06/2008 - 05/2010
- **Consortium** - 19 partners
- **Objective**
  - Promote the coherent and interoperable development of the GMES, INSPIRE and GEOSS initiatives through their concerted adoption of standards, protocols, and open architectures.
1. **Analysis - Technical Watch**
   Audit each initiative and selected FP projects (RM-ODP Methodology)

2. **Comparative Analysis**
   Identification of possible
   - synergies that can be built
   - potential barriers to interoperability

3. **Consensus - Recommendation**
   Recommendations will be revised through a broad consultation to achieve as wide a consensus as possible

4. **Shaping**
   Reach attention on/Suggest modifications to INSPIRE, GEOSS and GMES.
SAFER Project Summary
SAFER project summary

- **SAFER project objective**
  - implement and to validate a pre-operational version of the GMES Emergency Response Service,
  - reinforcing the European capacity to respond to emergency situations
  - For Civil Protection and Humanitarian Organization

- **FP 7 Project**
  - 3 years - 01/09 - 31/11
  - 54 partners from 16 countries:
    - 29 private companies (18 SME)
    - 25 public institutions
SAFER project summary

Reference Map - V1 within 6 hours

Assessment Map - V1 within 24 hours

Thematic Map - V2

Spot Image / May 2010
GIGAS influences on SAFER
SAFER - Original Architecture

- Centralized Design
- Central Database
- SQL interface

Static Web Site

FTP based

Emergency Response Core Service

Spot Image / May 2010
GIGAS Influences

**Reference material on**
- Architecture
- Catalogue and Metadata
- Data Access and Processing
- Data Harmonisation and Semantic Interoperability
- User Management
- Cross-Initiative Scenario

**Used deliverables**
- **Technological Watch**
  State of the art and current state in GEOSS/INSPIRE/GMES

- **Comparative Analysis**
  Interoperability opportunities or barriers

- **Recommendation**
  Describes interoperability issues [suggest possible solution]
GIGAS Influences

- **Key concept: interoperability**
  - Open architecture - *an external universe exists*
  - GEOSS
  - INSPIRE
  - Other GMES projects (Geoland-II, Linker ...)

- **Method: RM - ODP / 5 View points**
  - D10400.1 - Enterprise/Service/Information
  - D20200.1 - Engineering/Technical

- **OGC Standard**
  - OWS Common
  - CSW, WMS, WCS, WFS
  - ISO 19119/19115 - encoding 19139
  - OGC User Management Best Practice (AAA - OASIS WS-Security)

- **INSPIRE Implementing Rules**
  - INSPIRE Global Architecture / Service Bus
  - IR Metadata, Catalogue, View and Download Service
SAFER - V1 Architecture Overview

Gateway
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Public Portal
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Private Monitor

**WEB**

**Gateway**
- Public Portal
- Private Monitor

**AAA Central Agent**
- Web Site
- LDAP

**Gateway**
- e-geos

**ERCS Services**
- Workflow, Ordering, Follow Up, Notification

**AAA Local Agent**
- General Repository

**Geo Data Repository**
- Service Access Point
- Metadata
- Local Agent

**Geo Product Repository**
- Service Access Point
- Metadata
- Local Agent

**Node 1: e-geos**

**Node 2: INDRA**

**Node 3: IT-UK**

**Node 4: IT-F**

**Node Service Provider**: TPZ, DLR, ...

**WEB**

**AAA Local Agent**
- Geo Data Repository
- Geo Product Repository

**Node Service Provider**: TPZ, DLR, ...
SAFER and European SDI

Emergency Response Core Services

- SAFER Public Portal
- SAFER Private Monitor

Service Bus

Spatial Data Infrastructure (SDI)

SAFER Gateway
Web Portal Serveur

SAFER Emergency Services
Workflow Notification

SAFER Geo Product Repository

SAFER Geo Data Repository

Rights Management Layer
Conclusion

- **GIGAS**, as a source of,
  - Inspiration for the method
  - Vision of others universes (GEOSS, INSPIRE, GMES)
  - Reference material on standards

- Has positively influenced SAFER, to make right technical choices,

- Even if we … suffer a lot!
  We would have never dare without GIGAS.
Thank You