



Overview of the Reference Information Specifications for Europe (RISE) Project

2nd August 06

Introduction

Europe recognises the need for action to protect the environment and ensure the security of its citizens. The European Commission (EC) is encouraging and coordinating such action through the issue of European Directives, to be carried out by national governments, and through the development of the Global Monitoring for Environment and Security (GMES) programme, which is aimed at promoting the development of Information Services required to support decision makers. Central to the success of these programmes is the development of common specifications for data documentation, collection and exchange. RISE will address this central issue of “data harmonisation” which is widely considered a prerequisite for interoperability among spatial information systems, and which will allow Europe to realize its objectives for a sustainable and interoperable functioning of INSPIRE and GMES.

The primary aim of RISE, a 24 month project (September 2005 – August 2007) funded under the 6th Framework Programme, is to produce **guidelines for the creation of harmonised geospatial data product specifications** consistent with the relevant international and industrial standards. For the purpose of this project, a data product specification shall be comprised of the following elements: UML application schema, a (human readable) feature catalogue, plus information on reference systems, data quality, data product delivery and metadata. The project will also illustrate why schema based on a service regime represent an innovative approach to many of the content and information processing challenges that lie before European governments today at all levels.

Specific objectives for the Project are:

- Definition of a repeatable capability for the development, adoption and implementation of harmonised data product specifications. To be documented in a “Methodology & Guidelines on Use Case & Schema Development” document.
- Develop and test a subset of harmonised data product specifications for the geographic themes of ‘water’, ‘elevation’ and ‘land use’ by concentrating on the requirements of river basin management, and specifically addressing the requirements of GMES and the Water Framework Directive (WFD).
- Be user driven and meet the requirements of GMES, INSPIRE other EC policies and EU strategic objectives.
- Build synergies with existing, past and future GMES, GSE and Integrated Projects.

- Work closely with the parallel EC SSA Project MOTIIVE¹.
- Raise awareness of the results and recommendations of the project.

The main project partners are identified in the following Table:

Role	No.	Name	Short	Country
Project Co-ordinator	1	EuroGeographics ² - Project Coordinator	EGHO	France
Technical Manager	2	QinetiQ – Technical Project Management	QQL	United Kingdom
Partner	3	OGC-Europe	OGCE ³	United Kingdom
Partner	4	Bundesamt für Kartographie und Geodäsie	BKG	Germany
Partner	5	Lantmäteriet	NLS	Sweden

RISE Main Partners

Additional organisations are participating in the project activities but, in terms of the project structure, they will be acting in support of one of the main Partners.

The key outcome from the project will be the definition of a process – a repeatable methodology – for developing, adopting and maintaining harmonised data product specifications. This will address issues concerning process and standards to be adopted, organisational models to link the user and producer communities, best practice training for testing the specifications through prototyping, and a recommended ‘road map’ for implementation. Specific Use Cases will be developed to provide practical examples of the application of the methodology.

The execution of the Project is divided into four 6-monthly phases as follows:

Phase 1 (first 6 months) – Requirements and Methodology

Devoted to analyzing the requirements of the GMES Projects and the Water Framework Directive, and to establishing the exact scope of the applications to be covered (i.e. defining possible Use Cases). Outputs include:

- The Data Harmonisation Requirements Report (V1.0).
- Draft Methodology & Guidelines on Use Case and Schema Development (V1.0).

This Phase 1 activity is now complete and the associated deliverables are available from the downloads section of the public project website at <http://www.eu-rise.org/>.

¹ MOTIIVE – EC SSA: Marine Overlays on Topography for Annex II Valuation and Exploitation. Plans to investigate the data harmonization issues in the ocean and marine applications area including relevant terrestrial, bathymetry and coastal elevation issues.

² EuroGeographics is the association of Europe’s National Mapping & Cadastral Agencies with 47 member organisations from 41 countries. EuroGeographics will be represented by the EuroGeographics Head Office for management, coordination, communication and strategic activities, and four of its members for the more technical tasks: National Land Survey of Finland; Geodetic Institute of Finland; Instituto Geografico Nacional of Spain; and Statens Kartverk of Norway.

³ OGC Europe is a wholly owned subsidiary of OGC (Open GeoSpatial Consortium), a non-profit voluntary consensus standards organisation, with some 270 members, leading on the development of standards for Geospatial and Location Based Services.

Phase 2 (second 6 months) – Specifications Development

In the second six months, the project aims to develop the conceptual and application schema required to test the process in the Use Cases. Deliverables are to include:

- Use Case Descriptions together with instructions as to how to generate them.
- Services Architecture Outline.
- Initial Conceptual Schema in UML.
- Initial Data Product Specifications.

The recommendation from Phase 1 was to concentrate, in the first instance, on Use Cases for diffuse nutrient leakage into rivers. Schema for hydrology, elevation and land use are being developed for this context.

The **cross-sector aspects** of data harmonisation are being addressed through a Use Case in Sweden; and the **cross-border aspects** of data harmonisation are being addressed through a joint Swedish/Norwegian Use Case.

Phase 3 (third 6 months) – Implementation and Testing.

The next 6 months of the project will continue to refine the draft schema and will implement a test environment which both tests the validity of the previous work and allows users to see practical demonstrations of application schema in operation. This will allow users to more easily see the benefits of the data harmonisation process.

This period of the project will also see the issues of cost-benefit analysis being addressed.

Phase 4 (final 6 months) – Dissemination

The final phase will serve to consolidate the lessons learnt during the project, both internally within the consortium, and externally, through interaction with the different stakeholders that can contribute to a wide take-up of the results. A seminar and other dissemination activities will take place during this period to publicise the results of the project and encourage exploitation.

For further information, please contact:

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