



TRAINING MODULES

Background Knowledge

- Introduction to INSPIRE
- Basic of INSPIRE Data Specification
- Basic of INSPIRE Network Services
- Data Harmonisation
- Procedure for Data and Metadata Harmonisation
- Examples of Data Transformation
- Metadata and Data Validation for INSPIRE
- Towards the ICT Implementation of SEIS
- Copernicus

Thematic Knowledge

- Risk Management
- Geological Data Harmonization

The LIFE+IMAGINE Infrastructure

- The LIFE+IMAGINE Architecture
- The LIFE+IMAGINE Web Services

Integrated Coastal Area Management Application Implementing GMES/Copernicus, INSPIRE and SEIS Data Policies

LIFE+IMAGINE deals with the integrated management of coastal zone (ICZM) and with the enforcement of knowledge base on environmental and data policies for the coastal zone planning and governance.

LIFE+IMAGINE, through methodologies for environmental analysis, provides hands-on information to support coastal planning, decision making and reporting, with particular reference to two environmental scenarios:

- ✓ Soil consumption
- ✓ Landslides

To this aim, LIFE+IMAGINE implements an infrastructure based on web services for environmental analysis, integrating specifications and achievements from the INSPIRE Directive, the SEIS Communication and the Copernicus programme.

The **LIFE+IMAGINE Training Framework** provides the advanced skills required to cope with the INSPIRE implementation process and the documentation and the necessary means to interact, benefit and adopt the LIFE-IMAGINE Infrastructure.



Background Knowledge

Introduction to INSPIRE

Deals with the main elements of the INSPIRE Directive: its context and background, the scope and major chapters of the Directive, an overview of the related implementing rules.

Basic of INSPIRE Data Specification

The module aims to teach the INSPIRE data specification development approach; it explains the standardized approach, the different interoperability components to be taken into account and how this was implemented in INSPIRE.

Basic of INSPIRE Network Services

The module introduces the concept of a Service Oriented Architecture (SOA). It describes and illustrates the 5 types of INSPIRE network services. It explains the link to existing standards of ISO and OGC (e.g. CSW) and also discusses the INSPIRE implementing rules that are applicable including conformity aspects.

Data Harmonisation

This module explains the basic concepts of data harmonisation in general and specifically schema translation.

Procedure for Data and Metadata Harmonisation

This Module explains how to transform heterogeneous source datasets and metadata according to the relevant INSPIRE target schemas.

Examples of Data Transformation

This module provides transformation examples of a source dataset into a dataset compliant to the INSPIRE Data Specifications.

Metadata and Data Validation for INSPIRE

This module provides validation examples of datasets and metadata against the Requirements of the INSPIRE Data Specifications.

Towards the ICT Implementation of SEIS

The module introduces to the SEIS requirements as defined in the NESIS project, to proposed SEIS ICT Components and to the available options of the ICT services that are proposed for the SEIS Implementation.



Copernicus

The module is addressed to listeners non technical professionals needing to have a comprehensive introduction to Copernicus aim and contents. It is of use to get a first view of the project, able to direct users to further readings and more operational training as needed.

Thematic Knowledge

Risk Management

This module is based on the state of the art, main strategies and knowledge on Risk Management, reporting relevant international standards and practical experiences.

Geological Data Harmonization

The Module is focused on: Spatial data definition; it refers to specific definition of geological data into INSPIRE directive and OGC GeoSciML standard. Harmonisation issues across political boundaries; it refers to evidence problems and solutions in the cross-border area

The LIFE+IMAGINE Infrastructure

The LIFE+IMAGINE Architecture

The objective of this training module is to define clearly the details of LIFE+IMAGINE system architecture, the set of components that are available to support the stakeholders from the initial (harmonization and manipulation of original data) to the ending (visualization of data according with INSPIRE directive) phase.

The LIFE+IMAGINE Web Services

The purpose of this module is to support Professionals and End Users, who will be interfacing directly with the LIFE+IMAGINE platform, in understanding how the services work and taking the best advantage from them.

Scenarios Application and Use Cases

Soil Consumption Calculation and its Application at National/Municipal Level

The module is addressed to listeners needing to understand how the LIFE+IMAGINE project has coped with the questions posed by the Soil Consumption scenario, in order to create a knowledge frame able to support the policies for the coastal environment and for the coastal regional/urban planning. The main aim is to transfer the project experience to new cases and to further users.

Landslide Impact Assessment and Specific Applications

The module is addressed to listeners needing to understand how the LIFE+IMAGINE project has coped with the questions posed by the Landslides scenario to create a knowledge frame able to support environmental coastal policies. Aim is to transfer the project experience to new cases and to further users.

Integrated Coastal Zone Management and the Coastal Sediment Balance

General overview of the coastal management and of the sediment budget balance.

Scenarios Application and Use Cases

- Soil Consumption Calculation and its Application at National/Municipal Level
- Landslide Impact Assessment and Specific Applications
- Integrated Coastal Zone Management and the Coastal Sediment Balance

PARTNERS

GISIG, Geographical Information Systems International Group – ITALY

REGIONE TOSCANA - Italy

CONSORZIO LAMMA – Italy

ISPRA – Italy

EPSILON ITALIA S.r.l. – Italy

GRAPHITECH - Italy

More info at:
www.life-imagine.eu