

The eENVplus on-line Training Action

Giorgio Saio (GISIG)

eENVplus Workshop and Training Action,
Ljubljana (SLO), 15th September 2015



Copernicus



INSPIRE



SEIS



WFD

Data
Harmonisation

eContentplus

Data
Specifications

ICT-PSP

Services
Provision

FP7

SME
Involvement



HUMBOLDT



NATURE-SDIplus



BRISEIDE



smeSpire



NESIS



GeoSmartCity



LIFE+IMAGINE



LINKVIT

TRAINING (e-learning)

Training within EU
Projects

Leonardo Da Vinci



VESTA-GIS

Leonardo Da Vinci



eLEANOR



Copernicus



INSPIRE



SEIS



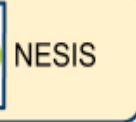
WFD

Data Harmonisation

eENVplus



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LINKVIT

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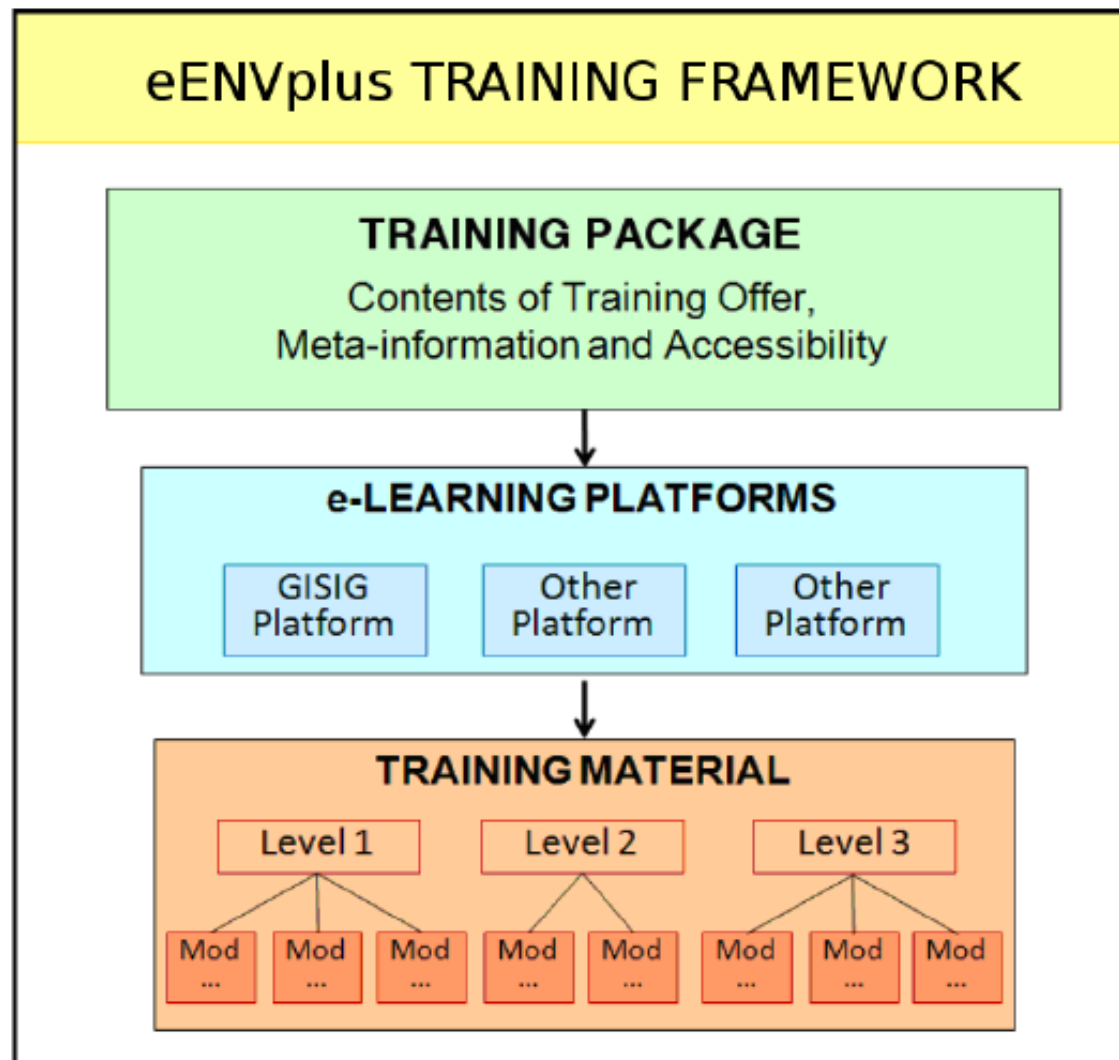
Training within EU Projects



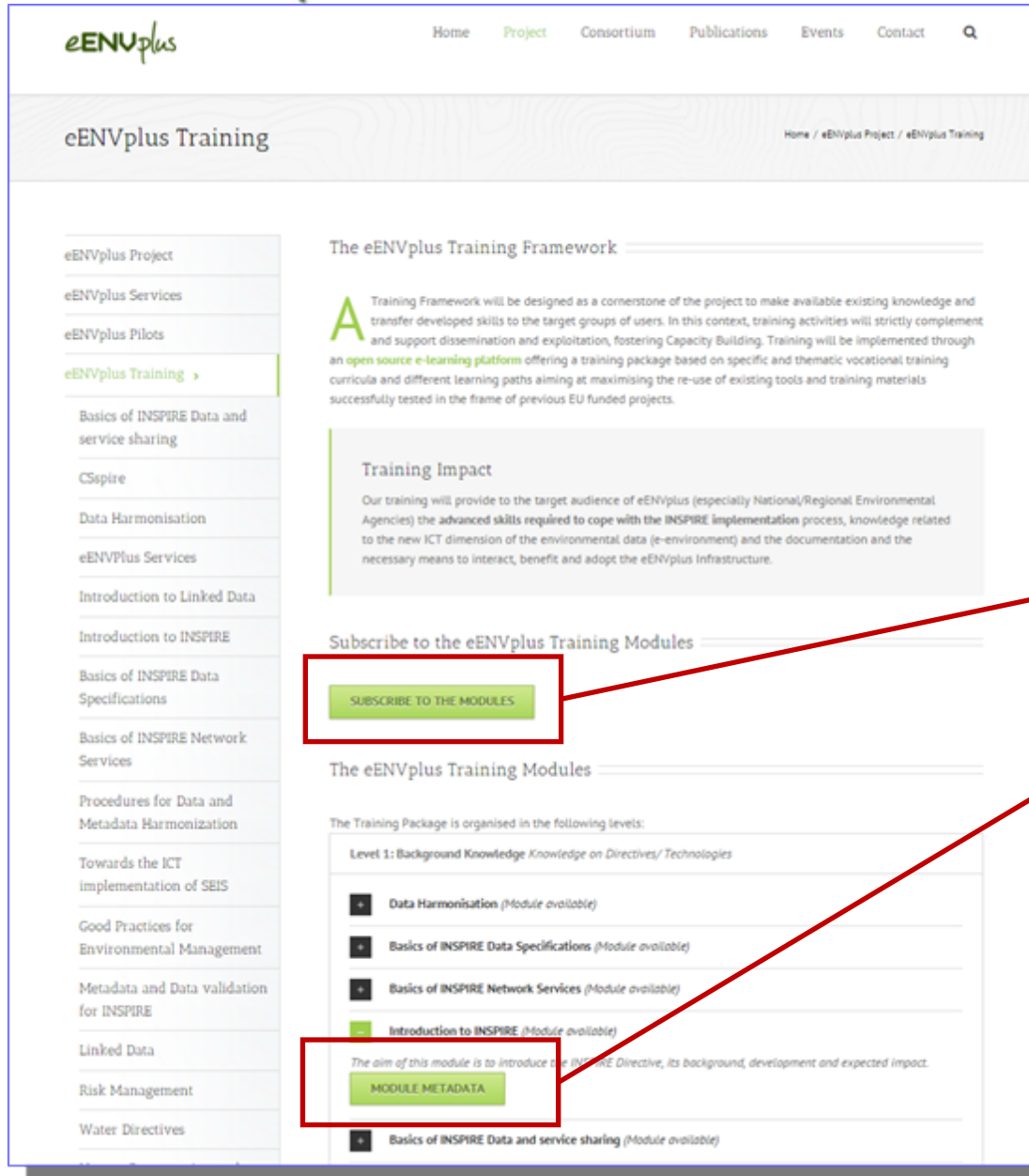
VESTA-GIS



eLEANOR



- Constitute the infrastructure(s) hosting the training modules and training material.
- Established by widely diffused open source e-learning tools.
- Open to the project members and (open registration) to the users Communities.
- Once subscribed to the Module (or Modules), the user is redirected to an e-learning platform with personalized access.
- Decentralised: Training Material is hosted in different platforms.
- Training material developed on a variety of formats: Presentations with voice, screencasts, plain text lectures, exercises, etc.
- Allows monitoring the user progress and students/ teachers interaction.



eENVplus Training

Home / eENVplus Project / eENVplus Training

eENVplus Project

- eENVplus Services
- eENVplus Pilots
- eENVplus Training**

Basics of INSPIRE Data and service sharing

CSpire

Data Harmonisation

eENVplus Services

Introduction to Linked Data

Introduction to INSPIRE

Basics of INSPIRE Data Specifications

Basics of INSPIRE Network Services

Procedures for Data and Metadata Harmonization

Towards the ICT implementation of SEIS

Good Practices for Environmental Management

Metadata and Data validation for INSPIRE

Linked Data

Risk Management

Water Directives

The eENVplus Training Framework

A Training Framework will be designed as a cornerstone of the project to make available existing knowledge and transfer developed skills to the target groups of users. In this context, training activities will strictly complement and support dissemination and exploitation, fostering Capacity Building. Training will be implemented through an **open source e-learning platform** offering a training package based on specific and thematic vocational training curricula and different learning paths aiming at maximising the re-use of existing tools and training materials successfully tested in the frame of previous EU funded projects.

Training Impact

Our training will provide to the target audience of eENVplus (especially National/Regional Environmental Agencies) the **advanced skills required to cope with the INSPIRE implementation process**, knowledge related to the new ICT dimension of the environmental data (e-environment) and the documentation and the necessary means to interact, benefit and adopt the eENVplus Infrastructure.

Subscribe to the eENVplus Training Modules

SUBSCRIBE TO THE MODULES

The eENVplus Training Modules

The Training Package is organised in the following levels:

Level 1: Background Knowledge Knowledge on Directives/ Technologies

- Data Harmonisation** (Module available)
- Basics of INSPIRE Data Specifications** (Module available)
- Basics of INSPIRE Network Services** (Module available)
- Introduction to INSPIRE** (Module available)

The aim of this module is to introduce the INSPIRE Directive, its background, development and expected impact.

MODULE METADATA

Basics of INSPIRE Data and service sharing (Module available)

eENVplus website:

Training section

- Access to the Module list
- Access to the e-Learning Platform
- For each module access the Metadata

[eENVplus Project](#)
[eENVplus Services](#)
[eENVplus Pilots](#)
[eENVplus Training >](#)
[Basics of INSPIRE Data and service sharing](#)
[CSpire](#)
[Data Harmonisation](#)
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[Basics of INSPIRE Network Services](#)
[Procedures for Data and Metadata Harmonization](#)
[Towards the ICT implementation of SEIS](#)
[Good Practices for Environmental Management](#)

Introduction to INSPIRE

Source

Earlier versions of this training module have been developed within the VESTA-GIS project in 2009 (<http://www.vesta-gis.eu/>), the Nature-SDIPlus project in 2010 (<http://www.nature-sdi.eu/>) and within the Educational Services Programme (EduServ) of EuroSDR in 2010 and 2011 (<http://www.euroedr.net>).

Ownership

Author: Danny Vandenbroucke, KU Leuven. The material is provided under Creative Commons Attribution Share-Alike License (<http://creativecommons.org/licenses/by-sa/3.0/>).

Abstract

The INSPIRE initiative was initiated by the European Commission in 2001 to enhance the sharing of harmonized spatial data and services between public authorities in order to assist environmental policy-making and activities that may have a direct or indirect impact on the environment. The INSPIRE Directive entered into force in May 2007. Member States transposed the Directive into national legislation and started to implement INSPIRE components: setting-up a coordinating structure, harmonizing spatial data, developing network services to access the data, maintaining metadata for spatial data & services, and putting in place measures to improve data & service sharing.

This module 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, the conformity of spatial data and services, and the potential for new innovative solutions based on INSPIRE. The module also pays attention to the relationship between INSPIRE and other Directives such as the Directive 2003/98/EC on the re-use of public sector information (PSI) and Directive 2003/4/EC on public access to environmental information. The training material consist of presentations, supporting documents and a weblecture. The module is a self-learning module.

Common Metadata template

Structured in a clustering training perspective to allow interoperability of training modules within different project Training Frameworks.

[eENVplus Project](#)
[eENVplus Services](#)
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Each Training Module must be detailed with metadata:

- Module name
- Source
- Ownership
- Abstract
- Structure
- Learning outcomes
- Intended audience
- Pre-requisites
- Language
- Format
- Expected workload

The Training Framework is structured in 4 levels:

- ❑ Level 1: **Background Knowledge** (*Knowledge on Directives/ Technologies*)
- ❑ Level 2: **Thematic Knowledge** (*Knowledge on specific related knowledge areas*)
- ❑ Level 3: **The eENVplus Infrastructure** (*Knowledge on the technical outcomes of eENVplus*)
- ❑ Level 4 - **eENVplus scenarios** (*These modules will be available in a later stage of the project*)

Level 1: Background Knowledge (Knowledge on Directives/ Technologies)	
1.1	Introduction to INSPIRE
1.2	Basics of INSPIRE Data and service sharing
1.3	Basics of INSPIRE Data Specifications
1.4	Basics of INSPIRE Network Services
1.5	Data Harmonisation
1.6	Procedures for Data and Metadata Harmonisation
1.7	Towards the ICT implementation of SEIS
1.8	Good Practices for Environmental Management
1.9	Introduction to Linked Data

Level 2: Thematic Knowledge (Knowledge on specific related knowledge areas)	
2.1	Water Directives
2.2	Nature Conservation and Natura 2000 Network
2.3	Nature Conservation and INSPIRE
2.4	Risk Management
2.5	Geological Data Harmonisation

Level 3: The eENVplus Infrastructure (Knowledge on the technical outcomes of eENVplus)	
3.1	Examples of Data Transformation
3.2	Metadata and Data validation for INSPIRE
3.3	The eENVplus Architecture
3.4	The eENVplus Thesaurus Framework
3.5	The eENVplus services
	<i>Components of the eENVplus services Modules:</i> View service Download service for vector Ingestion service Web processing service Notification service
3.6	eENVplus catalogue and connection to operational infrastructures
3.7	Mobile Mapping and advanced visualisation

Level 4 – eENVplus scenarios (These modules will be available in a later stage of the project).	
4.1	Implementation of a SEIS for air quality data
4.2	Providing INSPIRE-compliant access to utility services: the case of sewage networks in Flanders
4.3	CSspire
4.4	Natural Areas INSPIRE Compliance Toolbox
4.5	Forest Fire Management Scenario
4.6	Window on the Protected Areas – Mobile Conservation Map (WMA MCM)
4.7	NLSI - Mobile application for Nature Conservation (INSPIRE Geoportal)
4.8	Geological Map Harmonization
4.9	Urban Landuse Planning: INSPIRE'd land use planning Indicators to monitor good urban planning practices

The training actions are scheduled from 2015, forming "classes" grouped according to the following professional profiles:

- ☐ Managers
- ☐ Professionals
- ☐ End Users

For each professional profile are provided training packages with different modules for each profile.

Recommended core training modules	Optional modules
Context knowledge	
1.1 Introduction to INSPIRE	1.3 Basics of INSPIRE Data Specifications
1.5 Data Harmonization	1.4 Basics of INSPIRE Network Services
1.9 Introduction to Linked Data	1.7 Towards the ICT implementation of SEIS
	1.8 Good Practices for Environmental Management
	Level 2 Modules, according to the thematic interest
Project specific	
3.3 The eENVplus Architecture	Other modules of Level 3
	Level 4 Modules, according to the thematic interest

Recommended	Optional
Context knowledge	
1.1 Introduction to INSPIRE	1.9 Introduction to Linked Data
1.2 Basics of INSPIRE Data and service sharing	Level 2 Modules, according to the thematic interest
1.3 Basics of INSPIRE Data Specifications	
1.4 Basics of INSPIRE Network Services	
1.5 Data Harmonization	
1.6 Procedures for Data and Metadata Harmonisation	
Professional modules	
3.1 Example of Data Transformation	1.6 Towards the ICT implementation of SEIS
3.2 Metadata and Data validation for INSPIRE	1.7 Good Practices for Environmental Management
3.3 The eENVplus architecture	Level 4 Modules, according to the thematic interest
3.4 The eENVplus Thesaurus Framework	
3.5 The eENVplus services	
3.6 eENVplus catalogue and connection to operational infrastructures	
3.7 Mobile Mapping and advanced visualisation	

Recommended	Optional
Context knowledge	
1.1 Introduction to INSPIRE	1.3 Basics of INSPIRE Data Specifications
	1.4 Basics of INSPIRE Network Services
	1.8 Good Practices for Environmental Management
	Level 2 Modules, according to the thematic interest
Project specific	
3.3 The eENVplus architecture	Other modules of Level 3
3.5 The eENVplus services	Level 4 Modules, according to the thematic interest
3.7 Mobile Mapping and advanced visualisation	

Training Actions

The training actions are organised in cooperation with the NAs **in their respective countries** and are structured **with training workshops** followed by assisted **self learning sessions** and a training forum at country level

Training Action Scheme:

- First step: an initial Workshop (15 September) to present the basic content and the structure of the different modules
- Registration - NAs to collect the list of participants
- Distance Learning (self - learning) based on the proposed Curricula

Training Action Scheme:

- At the end of the self-learning process, the participants in the training action will be requested to answer to an evaluation questionnaire
- A concluding teleconference workshop with a discussion on the feedback (evaluation) from the training action

Slovenian Training Action - Agenda

Event	Start	End
Initial Workshop	15/09/2015	
Training Action Registration	20/09/2015	30/09/2015
eLearning phase (all Modules)	01/10/2015	15/12/2015
Final evaluation workshop	15/12/2015	

Training Action page :

All the registered participants to the training action, will receive a message with further indications to follow the training action.

➡ In particular, a link to the “training action” web page, with all the necessary information and references.

eENVplus Training Action

Resources

Discussion Forum

FORUM

Post here your questions, doubts and problems (relative to the platform or on the contents of the training modules)

Downloadable training modules evaluation form

EVALUATION FORM

MS Word version of the online questionnaires

Participants

PARTICIPANTS

List of participants in the training action

Contact us

CONTACT US

*Technical support and assistance***Training profiles***Select your profile to access the page with the training modules offered*

Manager

ACCESS THE LEARNING PATH >>

Professional

ACCESS THE LEARNING PATH >>

eENVplus Training Action

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Downloadable training modules evaluation form

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EVALUATION FORM

Participants

List of participants in the training action

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Contact us

Technical support and assistance

CONTACT US



Training Action eENVplus

The forum is a section that allows members of the course to communicate in a structured way through messages. It can be used for questions, concerns and problems (of a technical nature relating to the platform or on the contents of the modules). For a correct use of the forum each intervention must contain:

- the course and / or module to which you are subscribed
- a detailed description of the problem or doubt about the form

[Add a new discussion topic](#)

(There are no discussion topics yet in this forum)

■ Evaluation questionnaire for training actions

- It is a questionnaire to be submitted to the participants in training actions which studied for getting feedbacks on the quality of training itself, in terms of material, methodology, tutoring, didactic approach.
- It includes comments on the use of the eLearning platform (navigation, organisation of the material, available tools), linkage and impact on working activities, if applicable.
- Also required as “confirmation of participation” for those who want to apply for a certificate of participation
- .doc format, if useful to the **online** filling

eENVplus Training Action

[.doc format](#)

Resources

Discussion Forum

Post here your questions, doubts and problems (relative to the platform or on the contents of the training modules)

[FORUM](#)

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MS Word version of the online questionnaires

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eENVplus Training Action

on-line format

Training profile: Manager

Important note::

> *We strongly recommend to follow the modules in the order specified in the table.*

General evaluation questionnaire of the training action

> *Participants are asked to fill out this compulsory questionnaire at the end of the training action*

GENERAL EVALUATION QUESTIONNAIRE

Recommended Modules



Optional Modules



Background knowledge modules

Introduction to INSPIRE

+ INFORMATION

ACCESS THE MODULE >>

Evaluation of the whole Training Action

Comments on the use of the e-learning platform and quality of learning material

(5=strongly agree, 4=agree, 3=neutral, 2=disagree, 1= strongly disagree)

- Use of the platform:
- Organization of the learning paths:
- General considerations on the use of the training material and the e-learning platform

Impact of the training action on the own working activity (for those learners that work)

- Relevance of the learned contents with respect to the working tasks
- Please provide examples on how the training helps you in your work

Impact of the training action on University and High School studies (for students of Universities and High Schools)

- Usefulness and complementarity to the curricula:

Appropriateness of contents

- There were subjects and contents that you expected and did not found? And vice versa subjects that in your opinion should be dropped from the training module?
- Which part was more relevant in relation with your interests?
- Which part was less relevant in relation with your interests?
- Any other comment

Evaluation of the whole Training Action

Mode: User's name will be logged and shown with answers

(*)Answers are required to starred questions.

Profile (pls select the profile more suitable with your working activity)*

- ☐ Manager
☐ Professionals

Comments on the use of the e-learning platform and quality of learning material

Use of the platform: (5=strongly agree, 4=agree, 3=neutral, 2=disagree, 1= strongly disagree)

easiness to find the necessary information (modules, assignments, background information ...);

easiness to navigate through the modules and related learning material, etc.

It is easy to use the e-learning platform *

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

I received adequate technical support when needed *

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Organization of the learning paths:

The learning paths are organized in a logical way *

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

The learning paths helped me organizing my studies *

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

**Don't forget to register and
have a good Training Action!!!**