IASON

D5.4 Workshop material in 5 different languages of the Mediterranean and Black Sea Regions

IASON: Fostering sustainability and uptake of research results through Networking activities in Black Sea & Mediterranean areas

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[1] **R** = Report, **P** = Prototype, **D** = Demonstrator, **O** = Other

[2] **PU** = Public, **PP** = Restricted to other programme participants (including the Commission Services), **RE** = Restricted to a group specified by the consortium (including the Commission Services), **CO** = Confidential, only for members of the consortium (including the Commission Services).

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ABBREVIATIONS

Term	Explanation
BS	Black Sea
CNR	Consiglio Nazionale delle Recerche
CRASTE-LF	African Regional Centre for Space Science and Technology
CSW	Catalog Service for the Web
enviroGRIDS	Building capacity for a Black sea catchment observation and assessment system supporting sustainable development
EO	Earth Observation
EOPOWER	Earth Observation for Economic Empowerment
FAQ	Frequently Asked Questions
FP7	Seventh Research Framework Programme
GEO	Group on Earth Observation
GeoGraphic	GIS and RS consulting center geographic
GEOSS	Global Earth Observation System of Systems
GRID	Global Resource Information Database
IASON	Fostering sustainability and uptake of research results through networking activities in Black Sea and Mediterranean areas
ISO	International Organization for Standardization
KML	Keyhole Markup Language
MED	Mediterranean
OGC	Open Geospatial Consortium
PyWPS	Python Web Processing Service
QGIS	Quantum GIS
R&I	Research and Innovation
SDI	Spatial Data Infrastructure
SLD	Styled Layer Descriptor
UNEP	United Nations Environment Programme
UNIGE	University of Geneva

UNIST	University of Split
UNS	University of Novi Sad
WCS	Web Coverage Service
WFS	Web Feature Service
WMS	Web Map Service
WPS	Web Processing Service

Contents

EXECUTIVE SUMMARY

The document describes the material related to the workshop 'Bringing GEOSS Services into Practice', that was developed by UNIGE, UNEP/GRID-Geneva and CNR and translated into five different languages of the Mediterranean and Black Sea regions: Arabic, Croatian, French, Serbian and Spanish. As of November 2014 the material is being translated to a sixth language: Russian.

1. INTRODUCTION

The 'Bringing GEOSS services into practice' workshop [1] aims at teaching how to configure, use and deploy a set of open source software to set up a spatial data infrastructure (SDI). Trainees learn how to publish and share data and metadata using OGC and ISO standards and how to register services into the Global Earth Observation System of Systems (GEOSS).

The workshop has been produced in the frame of FP7 enviroGRIDS[3] as a hands-on workshop.

One activity of IASON T5.5 is to uptake the training material produced by the enviroGRIDS project by translating the material into five different languages of the MED and BS regions.

The EOPOWER T2.4 also requests that this workshop be upgraded with new components (for example Web Processing Services), packaged in an online portal to facilitate the regular update of its software components and modified to better target the needs of various stakeholders groups. This task also requests to translate the workshop material in other languages, especially in the eastern Black Sea and South-Caucasus regions where teaching material in English is often a strong barrier for adoption and uptake of tools. Finally T2.4 requests to modify the training in a 'train-the-trainers' fashion. This may allow local and regional stakeholders groups who have been trained to train their partners in turn.[4]

Based on what precedes, it has been decided to create as much synergy as possible by optimizing the resources of both projects for creating a common IASON/EOPOWER workshop material addressing both requirements.

2. WORKSHOP MATERIAL UPTAKE

The workshop material produced by enviroGRIDS was composed of a PDF tutorial. The workshop had been given to about 300 trainees in the BS region based on this material.

In the frame of IASON and EOPOWER the workshop material has been widely enriched with the following content, and given to about 180 people in 7 events

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[3] http://www.envirogrids.net
[4] http://www.eopower.eu/?q=node/23

(international conferences; workshops in the frame of FP7 IASON workshops; workshops in the frame of UNEP projects; lectures at University of Geneva).

Note that all material is free and the workshop is registered in GEOSS. The enhancement of the workshop includes the following:

- Development of new chapters (Python programming, WPS, Discovery and Access Broker) by UNIGE, UNEP/GRID-Geneva and CNR. The program of the workshop is summarized in Table 1 including these new chapters:

Chapter	Keywords
Concepts on SDIs	
How to store geospatial data?	PostGIS, flat rasters
How to publish geospatial data?	GeoServer, WMS, WFS, WCS, KML, SLD
How to document and search geospatial data?	GeoNetwork, CSW, ISO metadata
How to process geospatial data?	Python, WPS, PyWPS
How to view geospatial data?	WMS, OpenLayers, QGIS, KML
How to download data?	WFS, WCS, QGIS
How to analyze data?	WPS local/remote
How to share data?	GEOSS, Discovery and Access Broker

Table 1: Program of the upgraded workshop

- Development of a virtual machine with all data and software already installed.

- Improvement of the tutorial (289 pages in the improved version).

- Development of a 180-page PowerPoint presentation based on the program of Table 1.

- Development of an online questionnaire for future impact assessment of the workshop.

- Creation of a flyer to promote the workshop in conferences and international events.

- Online packaging of the workshop material on http://www.geossintopractice.org This website contains a description of the workshop, a FAQ, links to download

the material in different languages[5] and the past and future agenda of the
workshop (see Figure 1).

Partenaires
Enseignements
   Certificat de géomatique
   Cours SIG
   Formation continue
   GEOSS in practice
      Description (français)
      Start with the workshop
      FAQ
      Supporting projects and authors
      Agenda
Activités
Outils SIG
TIGERS
Geo For All
Données
Logiciels
Infrastructure
Contact

Frequently asked questions (FAQ)

General questions about the course

1. Is the workshop free?
2. Is the course licensed?
3. What are the pre-requisites on my computer for this workshop?
4. Where can I find useful information on the software used in the tutorial?
5. Is there an official mailing list for this workshop?
6. Do I need to follow the workshop in a specific order (e.g. chapter 1 -> chapter 2 -> ... -> chapter 9)?

Technical questions

1. How can I configure my keyboard on the virtual machine?
2. When processing data from the QGIS WPS client is it possible to apply an automatic rendering?
3. The virtual machine is slow. How can I improve perfomances?

Answers to general questions

1. This workshop and all related material (lectures, software, plugins, test data) is free of charge.
2. This course is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported Licence. To view a copy of this license click ⤤ here .
3. Pre-requisites for this workshop include: Operating system: Windows or MacOS or Linux ; Memory (RAM): minimum 4 GB ; Disk space: minimum 20 GB
4. Links to all software tutorial and documentation are provided in the start.html file on the desktop of the virtual machine.
5. There is no official mailing list for this workshop but there are official mailing lists for each software and technology used, e.g. GeoServer, OpenLayers, GeoNetwork, PyWPS etc.
6. There is a logical order for this workshop, therefore we recommend to do

Figure 1 Workshop dedicated website on http://www.geossintopractice.org

3. WORKSHOP MATERIAL TRANSLATION

As mentioned above the workshop material is quite substantial therefore it was not
possible to translate all this material:

- In order to make the workshop a 'train-the-trainers' it was decided to translate
  the 180-page PowerPoint presentation. With this translated material trainees

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[5] ftp://orion.grid.unep.ch/GEOSS_services/

will be able to give the workshop in turn to their partners, their students and to local and regional stakeholders. If they want to customize, enrich and maintain this material in their language they are free to do it.

- It was decided to not translate the 289-page tutorial because most software used during the exercises is in English language (GeoServer, Python programming etc.).

We took advantage of the fact that there were partners speaking Arabic, Croatian, French, Russian and Serbian in the consortium to translate the workshop in these languages (see Table 2).

Language	Institution who translated
Arabic	CRASTE-LF
Croatian	UNIST
French	UNIGE
Russian	GeoGraphic
Serbian	UNS
Spanish	UNIGE[6]

Table 2: Languages in which the workshop material was translated

With these languages in addition to English most countries of the Mediterranean and Black Sea regions are covered.

4. CONCLUSIONS AND NEXT STEPS

In conclusion D5.4 has been delivered in conformance with the Description of Work. The workshop has been upgraded, packaged online through a dedicated website, translated into five[7] different languages of the MED and BS regions, and made available as an interactive book. In the frame of IASON and EOPOWER, the workshop has been given to about 180 new persons, making a total of 480 people when adding the 300 persons taught before the project, in various regions of Europe and Africa,

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[6] Initially 5'000€ had been reserved for sub-contracting part of the translation. In order to lighten administrative work it was decided to engage a Spanish-speaking translator at UNIGE instead of sub-contracting to an external company. The coordinators of the project contacted the European Commission before making this decision
[7] Translation into a sixth language (Russian) is under completion as of November 2014

including the Black Sea, South-Caucasus and Mediterranean regions. It was presented in various international events and conferences.

Note also that in 2013 the Geo/Geoss Progress Assessment has cited the "Bringing Geoss services into practice" workshop as one of the 5 recommended Capacity Building initiatives.

It is important to maintain and regularly upgrade the workshop's material with new software versions that would come out. To this end, advantage will be taken of this workshop being also taught at the university of Geneva (certificate of geomatics[8]). This will give the possibility to the team to dedicate some time to this maintenance. Additionally, if the team is part of other capacity building projects, time in these projects could also be dedicated to such upgrading tasks in order to always propose latest software versions for this workshop that must remain cutting-edge. Besides, it is foreseen to enrich the course with practical exercises based on thematic data, e.g. in fields such as climate change, water resource and mineral exploration.

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[8] http://www.unige.ch/sig/enseignements/cgeom.html

REFERENCES

[1] Giuliani G., Lacroix P., Guigoz Y., Bigagli L., Ray N., Lehmann A. (2014). Bringing GEOSS Services into Practice. *GIS Open Source Workshop Material*. University of Geneva, United Nations Environment Programme, National Research Council of Italy, 189 pages, 2014. Available from Google Play Books and from iTunes Store

5. TABLE OF FIGURES

6. LIST OF TABLE