

Pegaso Project
People for Ecosystem based Governance
in Assessing Sustainable development of
Ocean and coast

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Integrated Coastal Zone Management

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I.D 6.1.10 Post evaluation training

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Resume The document presents the the objectives, structure and evaluation of the training organized within the PEGASO Capacity Building Plan and in particular of those trainings organized to address the needs of the CASEs. Focus is given to the Participation training course - (Training of trainers), the Spatial Data infrastructure (SDI) and the Virtual Training Course on Integrated Coastal Zone Management (MedOpen).

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1. Capacity building

Within the Pegaso, capacity building is strictly related to the main objective of the project, namely: *“Bridging science and decision making, enabling possibilities of thinking together, sharing the different knowledge from the different Mediterranean and Black Sea experiences and cultures, to build a set of common knowledge on ICZM as geared by the ICZM Protocol”*(PEGASO DOW).

In this framework, capacity building is not only considered as training but also as building awareness, strengthening cooperation and integration, sharing knowledge and skills, and learning common technical capabilities. The conceptual framework around which the PEGASO Capacity Building Plan is built is the Ecosystem-based ICZM. Therefore, all the training actions support the spirit of the ICZM Protocol and aim to train internal partners and stakeholders within this integrative framework. Common objective of each training is to provide a good comprehension of how tools and knowledge can support the implementation of the ICZM protocol.

2. Training needs

One of the results of the first evaluating phase of the CASE activities (August 2011-January 2012) was the request for integrated trainings on ICZM. During the process of development of the Capacity Building Plan (CBP) the need to adapt it to the DoW and to the Pegaso deliverables roadmap was highlighted; as well as the need to develop a CBP feasible, efficient and coherent with the existing budget. Therefore, due to the aforementioned criteria the CBP considered the following issues:

1. ICZM is the main driver of trainings and Capacity Building within Pegaso.
2. In order to better meet the ICZM Protocol and the ecosystem based principles in the Mediterranean and Black Sea Countries, Pegaso is developing a number of tools.
3. The Pegaso Capacity Building is problem solving process.
4. The Capacity Building Plan is coherent with the available budget and with the WP6 work plan.
5. The Pegaso Capacity Building focuses on regional sea but is also open to exchange experiences among different places and scales.
6. The emphasis of the Capacity Building is on integrated assessment, as its objective is not only to train for a better use of the tools but, especially, to demonstrate how to use these tools for regional assessment and how to link them to decision making.

2.1 Target groups

The Pegaso Capacity Building plan has been adapted to meet the need of the ICZM Platform governance, which includes:

1. The Pegaso consortium: all the Partners working within Pegaso.
2. The CASEs: the ten local/sub regional sites where the Pegaso tools are tested. Moreover, the CASEs contribute to the ICZM process ongoing at national level with their local point of view.
3. The Pegaso End User Committee (EUC), which is composed of: The Mediterranean end users (18 representatives of public national or regional institutions, private consultants and a number of economic sectors, which are key in the Mediterranean - tourism, aquaculture, water, biodiversity,

maritime activity, etc); the National Focal Points (NFPs) and the Black Sea end users that represent the 6 countries supported by the BSC PS, which form a Black Sea Panel to steer the adoption of a policy similar to the ICZM Protocol for the Black Sea.

For the external capacity building action plan, the target groups are: external end-users such as decision makers, governmental and non-governmental institutions, research institutions and experts, from all the countries of the Mediterranean and the Black Sea which are not directly involved in Pegaso but can be interested in being informed, especially in the International Cooperation Countries (ICPC).

The document, however, focuses only on the training organized so far for the CASEs and the PEGASO consortium. In particular, it presents the Participation training course - (Training of trainers), the Spatial Data infrastructure (SDI) and the Virtual Training Course on Integrated Coastal Zone Management (MedOpen). The former took place in Venice from the 31st of October to the 4th of November 2011. The second training was developed in two phases: a first e-learning course (15th April -15th July 2012) followed by a hands on training workshop (22nd- 25th October 2012), while the latter was entirely developed online (14th May – 3rd September 2012).

3. Participation Training Course - Training of Trainers

The event was targeted to the Pegaso CASES that have expressed their interest and need in training on participatory tools and more specifically CASES team members that were responsible for the realization of participatory approaches within their CASE. The participation training course-training of trainers was organized by UNIVE with trainers from PAP/RAC and Plan Bleu and took place in the island of San Servolo (Venice-Italy) from the 31st of October to the 3rd of November 2011. The CASEs of Bouches-du-Rhône (France), Aegean Sea Islands (Greece), North Lebanon Coastal Area and Sevastopol Bay (Ukraine) CASES declined the invitation to attend the training.

The main objectives of the training could be summarized as followed:

1. To prepare participatory facilitators to apply participatory approaches within their CASE.
2. To understand principles and tools for dealing with stakeholders (stakeholder management).
3. To know how to prepare, conduct and follow-up on participatory events (in relation to CASE Work Plan and stakeholder analysis).
4. To practice facilitation skills.
5. To contribute to capacity building for realization of participatory approaches.

Institution and role	Participant
Representatives of the Nile Delta - Egypt CASE	Suzan Kholeif - Waala Awaad Awaad Ali
Representative of the Al Hoceima Coastal Area - Morocco CASE.	Nadia Mhammdi
Representatives of the Dalyan-Köycegiz Special Protected Area - Turkey CASE.	Ulas Avsar - Sinem Önder
Representatives of the North Adriatic CASE	Monica Camuffo - Fabrizia Buono - Marco Tonino
Representatives of the Danube Delta - Romania CASE: and, Danube.	Eugenia Marin - Iuliana Nichersu
Representative of the Guria Coastal Region - Georgia CASE.	Amiran Gigineishvili
Representative of PAP/RAC.	Marina Markovic
The Participatory Coordinator of the Pegaso project.	Julien Le Tellier
PAP/RAC consultant, Trainer.	Gunter Englisch

Table 1: Participants of the Training for trainers course

3.1 Training program

The program was based on an interactive training approach, notably on practical exercises for simulation of facilitation situations by role plays. These role plays were recorded and reviewed by video analysis. Personal feedback allowed an intense learning experience for the participants. Traditional lectures were kept to a minimum. Training design was tailor-made to the needs of the participants (as expressed in the participatory checklist attached to the CASE ID document). Participants had to complete some preparatory work before coming to the training: participants familiarized themselves with the contents of several documents (for their specific CASE) such as CASE Identification Document, the stakeholder analysis, the CASE Work Plan and the Participatory Guide on Participatory Methods. Moreover, participants had to complete an exercise on a case study before the training and identified at least one core challenge for their CASE with regard to the application of participatory methods.

The below table reports the detailed program of the training.

Session	Day 1 (Principles)	Day 2 (Participatory process)	Day 3 (Group facilitation)	Day 4 (Handling of difficult situations)
09:00 h -10:45 h	Arrival & Registration. Welcome. Presentation round. Training Objectives. Definition of basic concepts (Participation, Stakeholder, etc.)	Realisation of a participatory process (incl. preparation and follow-up of a participatory events)	Introduction to group facilitation. The role of the facilitator. Interaction between facilitator and group. The facilitation process.	The Problem Solving Process. Group dynamics. Treatment of difficult situations
11:00 h- 13:00 h	Communication as basis for participatory processes. Communication theory and exercises (including feedback). Importance of body language	Preparation of stakeholder meetings. Facilitation tasks	Facilitation skills. Communication rules. Visualisation of results	Treatment of difficult situations (continued)
14:00 h -15:45 h	Principles of adult learning. Principles of participatory learning and action	Conduct of stakeholder meetings. Self-analysis of interaction processes	Participatory tools, methods and approaches. Introduction of PEGASO guide. Analysis of facilitation performance	Development of action plan for individual CASES. Discussion of capacity building for realisation of participatory processes within the CASE.
16:00 h -17:30 h	Stakeholder Management (Principles and tools)	Follow-up of stakeholder meetings	Exercises on participatory tools and methods. Reflection of group interaction processes	Summary and Feedback. Training evaluation
20:00 h ¹ - 21:00 h	Communication Theory and Models (1): 4-ears model (F. Schulz von Thun), Feedback techniques	Communication Theory and Models (2): Transaction Analysis (E. Berne)	Communication Theory and Models (3): Neuro-Linguistic Programming (R. Bandler & J. Grinder)	Farewell dinner

Figure : Agenda of the training of trainers course

3.2 Training post evaluation

The trainer at the end of the course commented regarding on the outcomes:

“The participants of the training course have acquired the basic skills and techniques of group facilitation and stakeholder management. They are now able to start implementing a participatory process within their CASE. However, it is recommended that further advanced training is offered to the participants in order to support the related learning and self-reflection process. A way of delivering this advanced training could be to use the next CASES meeting for training of facilitators ‘on the ground’ in the application of selected participatory methods. In this context, it would be necessary to foresee some time before and after the CASES meeting for training of facilitators. This training should be targeted to the participants who attended the first training. Other Pegaso meetings could be later used for the same purpose”.

Participants, also at the end of the fourth day of training were asked to evaluate the Training for trainers course. In particular they were asked to evaluate the course in relation to: a) the topics considered, b) the methodology adopted, c) the documents provided as well as d) the trainer. From the results of the evaluation (table 4) it is clear that participants have appreciated the highly participative nature of the training, the use of different kind of learning methods and in particular the learning by doing approach used by the trainer. On the other hand they suggested having more case studies examples as well as references and additional readings. The trainer therefore gave his availability to answers to doubts and to give suggestions on material and references to all the participants by mails. Furthermore, participants asked for further support in the implementation of participation strategy in their CASEs.

	What was good?	What could have been better?
Topics Contents	Loved it! Dense enough for 1 week - Well organised agenda - Practical tips - We learned about all aspects - It was great, but I think it would be better to give case studies just for more practice - Contents are enough for the aim of the training.	Homework evaluation - Add some examples about real examples for negotiation - 3-Ego States could be part of the obligatory session - Invite some stakeholders or end users. CASE specific.
	What was good?	What could have been better?
Training Methodology	Methodology made by very good specialists - Exercises - Involving assistance – Innovation - Focussing on learning by doing instead of ppt - Very good alternation of theory with practical exercises - Accurate methodology - Very effective - Very efficient energisers - Participatory enough! - Very good, interesting & creative - Video recording - Good switching between theory and practice - Actually I like the time span between sessions and repeating what we did learn plus spreading the sheets on the walls.	More exercises - Better preparation for exercises - Meal, coffee, wine + field trip - More examples - Explaining the behaviours - Reality in the CASEs. More no. of days -
	What was good?	What could have been better?
Documents	Informative enough! - Detailed information - More than enough -	More materials would be great - It is better if we have some theoretical info on discs (big material) - More suggestions - More case studies - A lot of practical examples - References - Previous experience from other groups - More bibliography - It would be better if every day session has a separate presentation & the ppt should have some figures, photos, animations - more practical examples.
	What was good?	What could have been better?
Trainer	Excellent, patient, active listening and respect for all participants - Patient enough! - You did very well – just keep it - Professional & optimist attitude - Professional trainer - Used the participatory methods – Excellent! - Trainer is super – Pedagogic – Supportive - Thank you (expressed in Arabic language).	Only available during our holiday - Next time please: 1 free afternoon - Good is the enemy of the better- More X-mas Cookies!

Table 2: Post evaluation of the training of trainers

5. SDI

PEGASO's Description of Work document introduces the relevance and responsibility for the implementation of a Spatial Data Infrastructure (SDI). The task consists in the development and implementation of participants' geonodes for the PEGASO's SDI. In order to build a geonode in each organization, the SDI course aimed at the development of capacities at a basic level for partners involved in the project to achieve the complete implementation of their geonodes. The provision of the E-learning based course was a first step in the capacity building plan in WP3 which was completed in the hands on practical course in Oostende in October 2012. The training targeted Pegaso partners, especially those involved in geonode development (CASEs). The training methodology consisted of a e-learning training course through a model platform and a hands on practical course. In both trainings, ppt, examples and practical exercises were provided. The training covered the topics of SDI, geoportal, interoperability and web services. The lead trainer and organizer were VLIZ, UPO and UAB.

5.2 Training program

Session	Day 1 (Introduction)	Day 2 (Configuring partner's environment)	Day 3 (Using data from different SDI's for your own GIS application Group facilitation)	Day 4 (Creating a metadata and creating a geoportal)
09:00 h - 11:00 h	What is a SDI (components, benefits and challenges)	Introduction to GeoNetwork Catalogue and CSW: Installing an adapted version (to PEGASO) of the GeoNetwork software	Using data from different SDI's for your own GIS application	Metadata and the creation of Metadata records. Introduction to metadata Using the Geonetwork form & the INSPIRE web Form, Creating Services Metadata
11:00 h - 12:00 h	The PEGASO SDI: the why, how, what and demonstration	Introduction to GeoServer, WMS and WFS Installing Geoserver and activating WMS, WFS and other services (until 13:00)	Guidelines for publication and data harmonization PEGASO's data harmonization: definition of styles, symbols and scales.	
13:30 h - 14:30 h	SDI's basic Services and functionalities: Discovery, View, Download, Processing	Practical exercises Spatial indicators for ICZM in the Mediterranean using Geoserver & Geonetwork : Publishing data to a WMS, Styling portrayals, transforming data, downloading data using WFS (from 14:00)	Practical exercise Data harmonization of selected spatial indicators for ICZM in the Mediterranean. Exercises on participatory tools and methods. Reflection of group interaction processes	Creation a Geoportal Internet: Resources for creating Web pages, Installing the Pegaso Geoportal (until 15:00)
14:30 h - 17:00 h	Use case of SDI's focusing on the functionalities, basic technologies and standards used (ISO standards, OGC Standards, INSPIRE...) The EnviroGrids SDI The ICAN SDI the International Coastal Atlas Network			Practical exercise: exercise, creating a Web page for hosting a local SDI

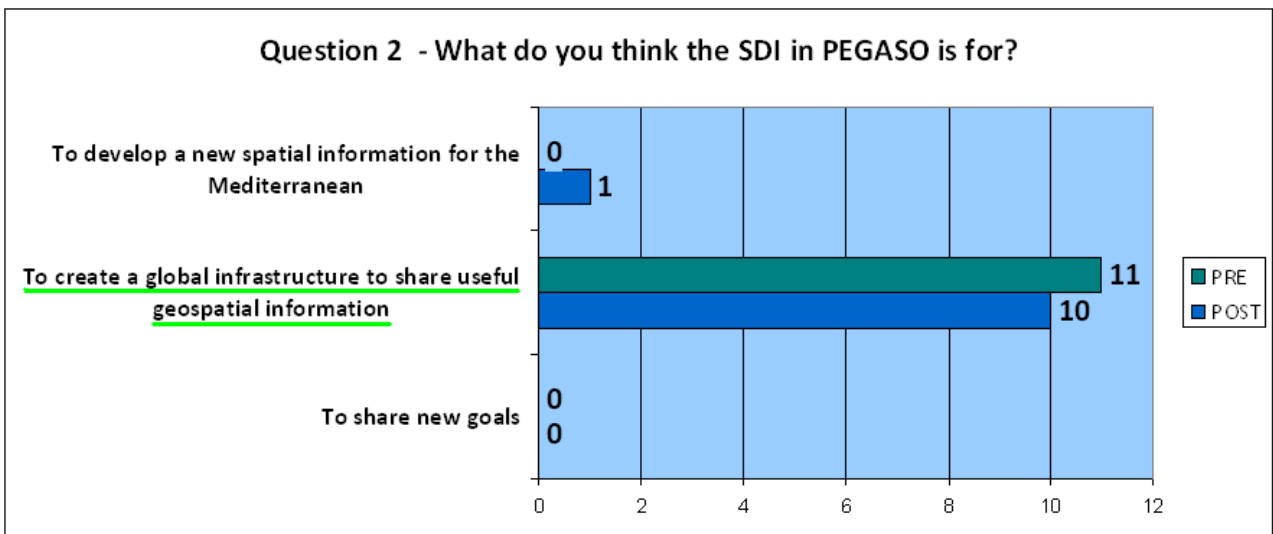
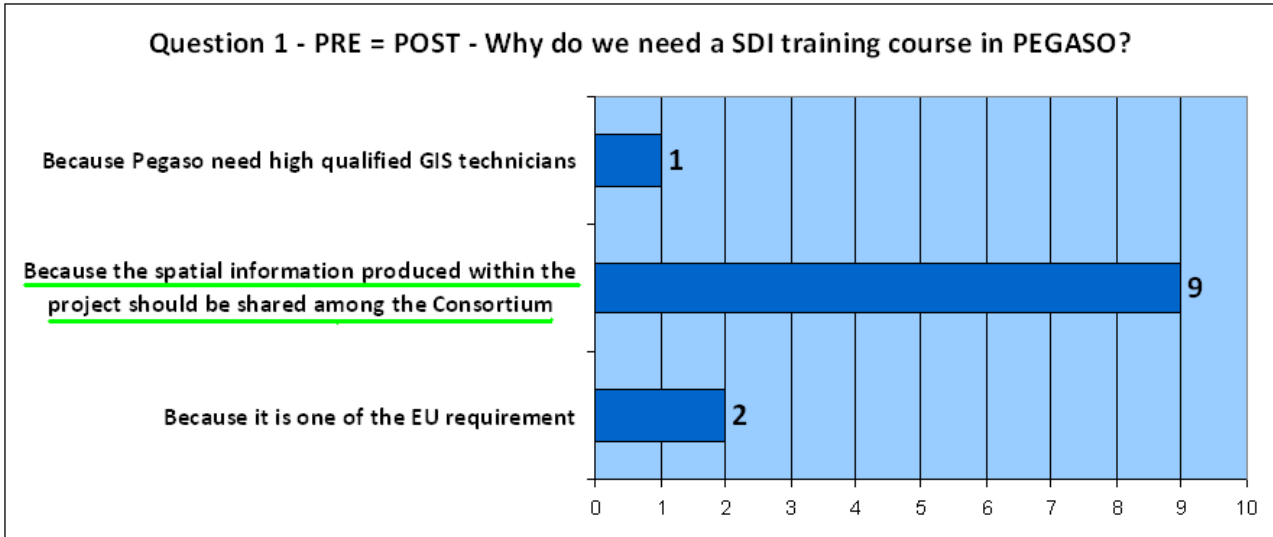
Table 3: SDI hand's on practical course program

5.3 Knowledge evaluation

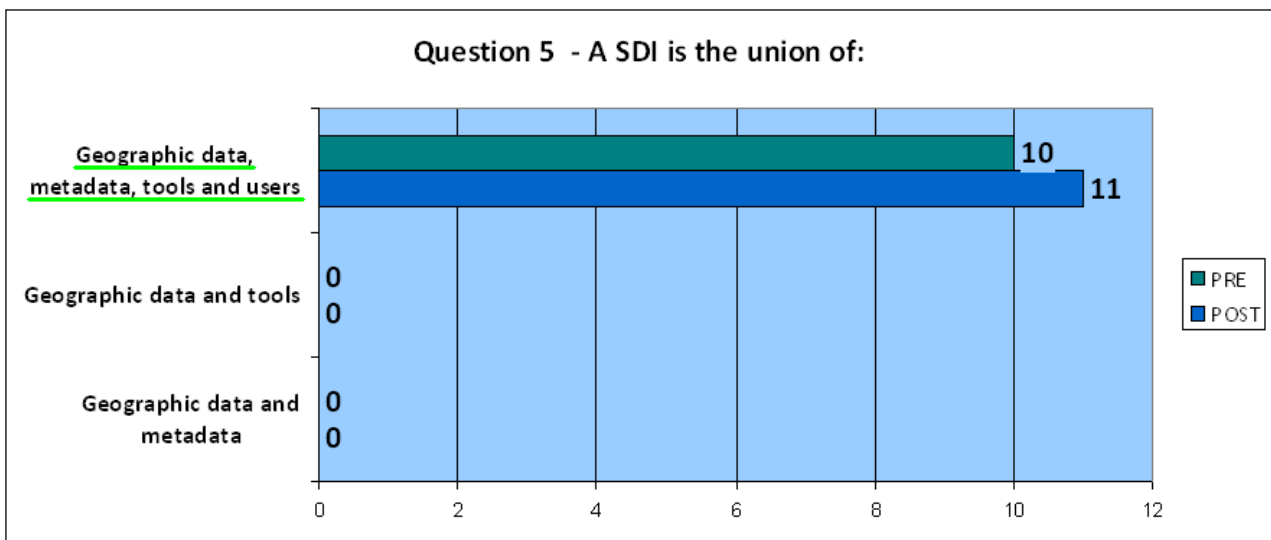
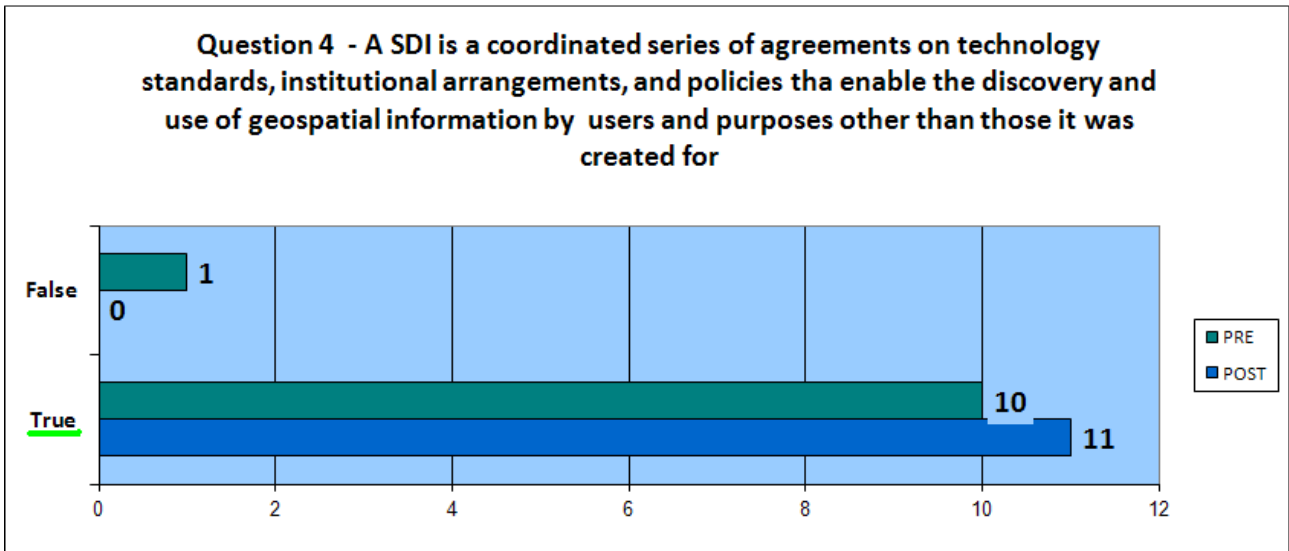
Relevance and the aims of the SDI

Participants were asked to fill in a pre and a post evaluation questionnaire of the training. Below are presented the results of both questionnaires.

Most of PEGASO training participants recognized, before and after the course, the need of a SDI training (question 1 and question 2): sharing geospatial information among the consortium through a global infrastructure is considered after the course an important issue for 10 out of 11 participants.

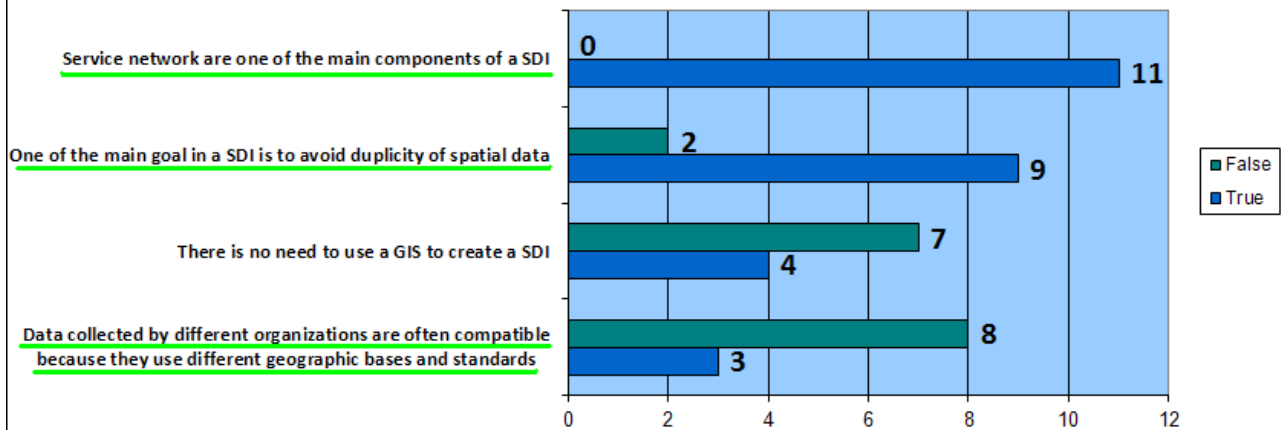


Question 4 and Question 5 attest the knowledge regarding the meaning of SDI general definitions. Participants have shown to have a robust knowledge regarding it even before the course.

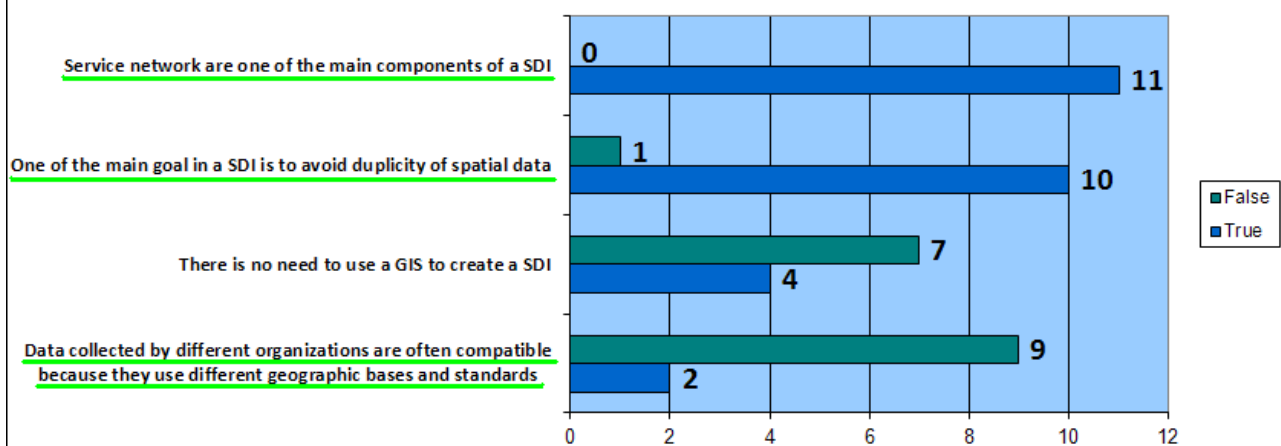


In more advanced questions, while there were no doubts in recognizing the service network as one of the main components of a SDI, participants started facing some doubts, both before and after the course. However, the majority demonstrated to be aware of the main goal of SDI, to recognize the need to use a GIS to create them, and to have knowledge about the problems of compatibility of data. Only one participant in the posted evaluation changed his opinion about the 2nd and 4th answers of the question 3.

Question 3 - PRE - Define whether the statement about SDI is True or False

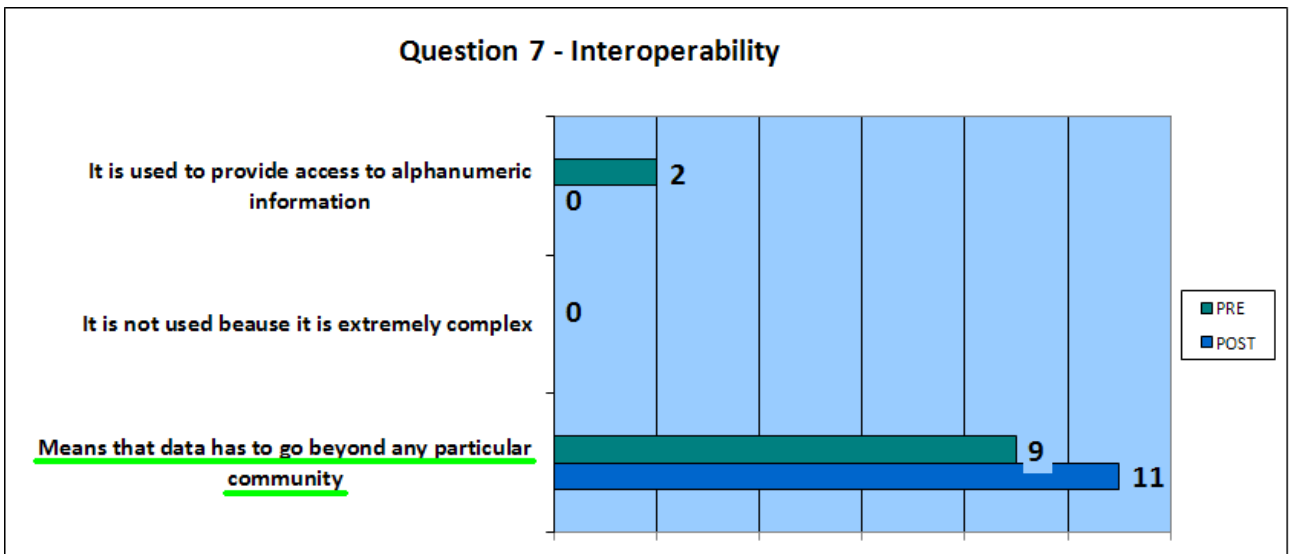
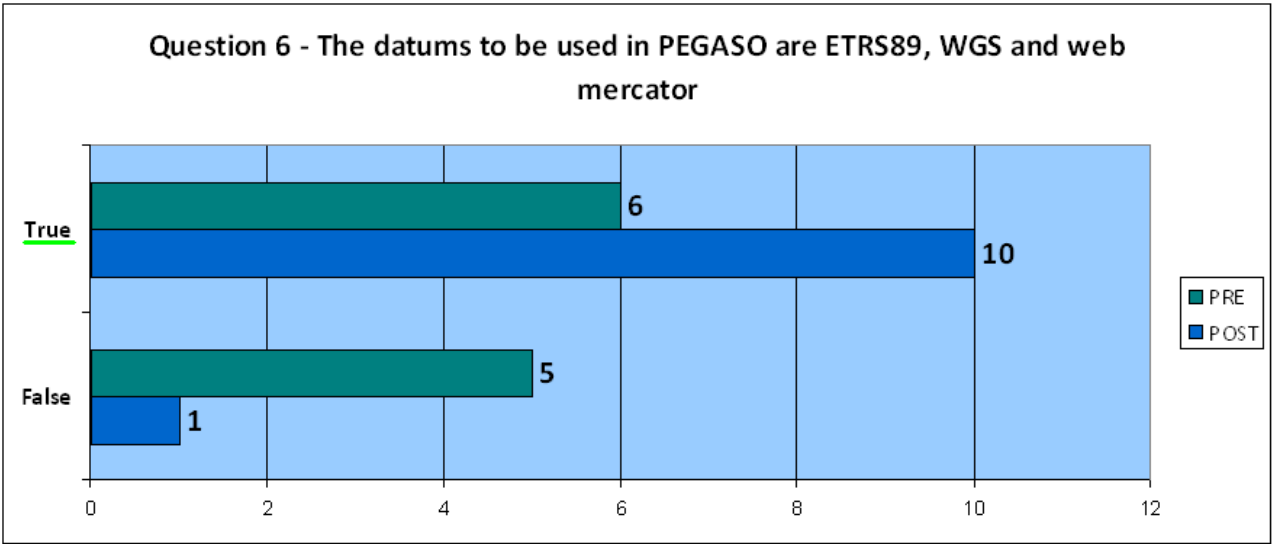


Question 3 - POST - Define whether the statement about SDI is True or False



SDI Technical characteristics

The datums to be used in PEGASO (Question 6) and the meaning of interoperability (Question 7), put in trouble many participants before the training. Almost half of the participants missed the question about datums, but the course clarified the points. WCS, WFS, WMS, Geonetwork and Geoserver issues, have been the trickiest of the course. The training only partially succeed in improving their knowledge. If WCS was almost known by everyone (except for two participants which did not changed their answer), WFS and WMS concepts were quite unclear but the training helped the majority of participant to clarify these issues.

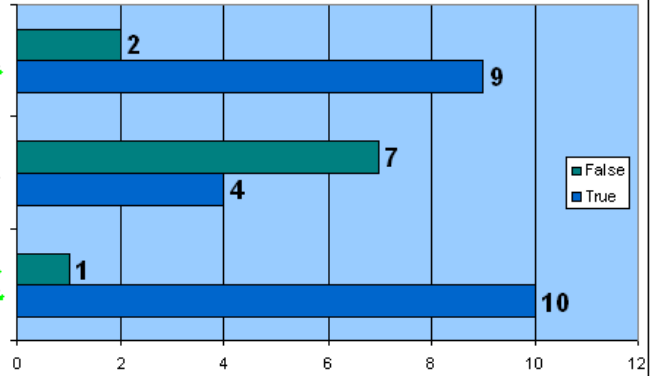


Question 8 - POST - Define whether the statement is True or False

A WCS serves raster data

A WFS allows a client to access vector datasets and raster datasets; provide access to different types of gridded data such a satellite image, orthophotos and digital elevation data

A WMS service defines a geographical representation (jpeg, gif or png files) of a geospatial data that does not give access to the data itself

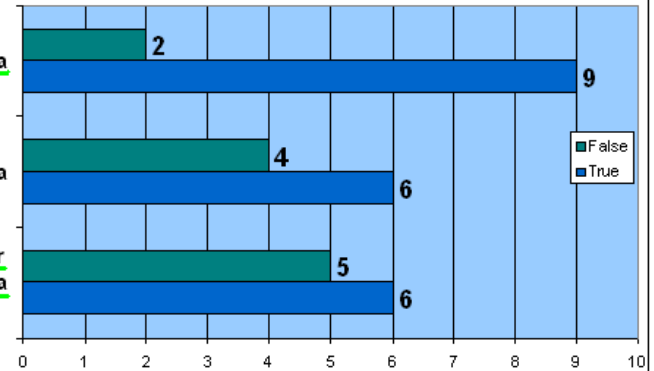


Question 8 - PRE - Define whether the statement is True or False

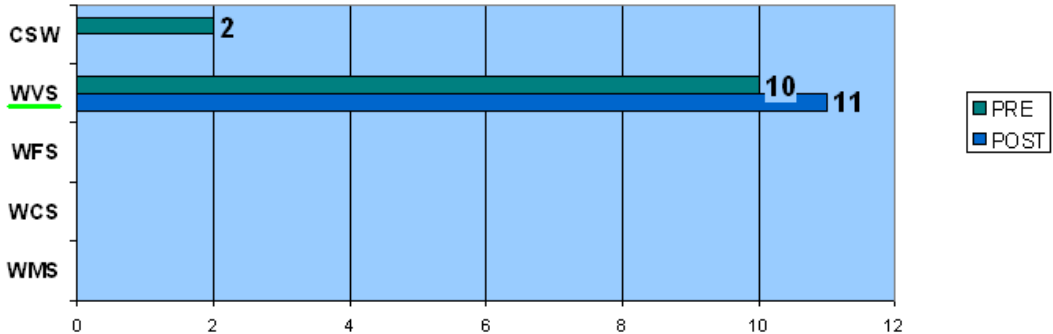
A WCS serves raster data

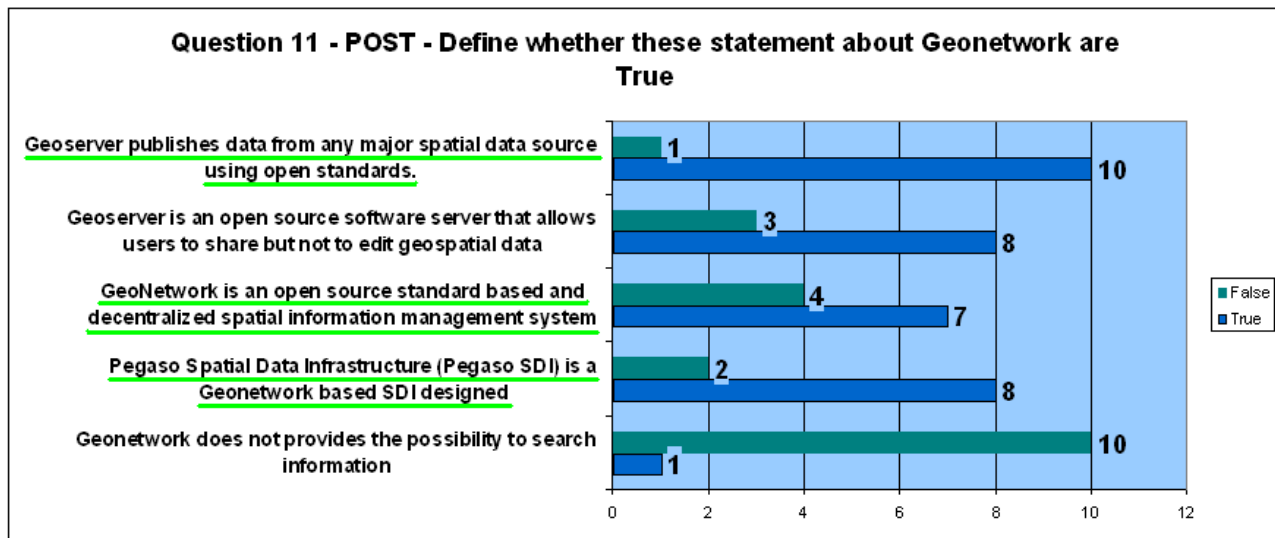
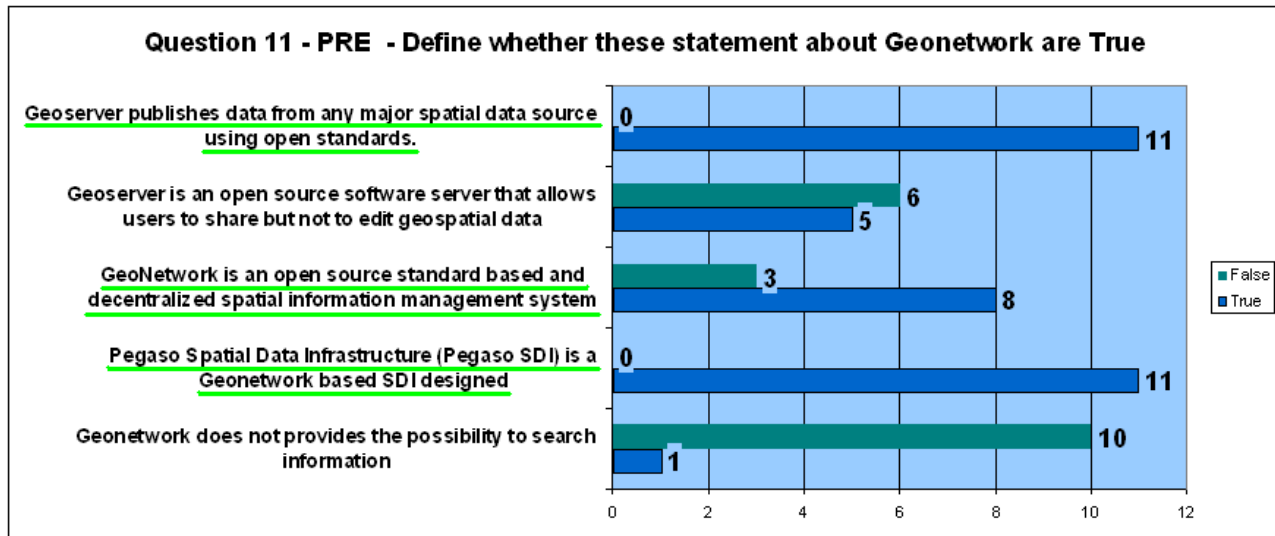
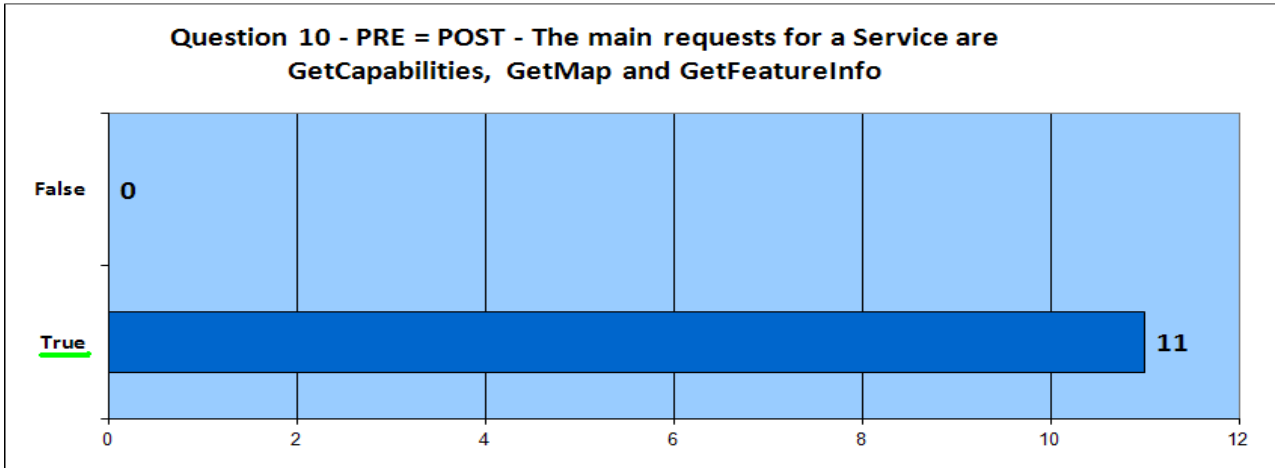
A WFS allows a client to access vector datasets and raster datasets; provide access to different types of gridded data such a satellite image, orthophotos and digital elevation data

A WMS service defines a geographical representation (jpeg, gif or png files) of a geospatial data that does not give access to the data itself



Question 9 - What of the followings is not a OGC web service

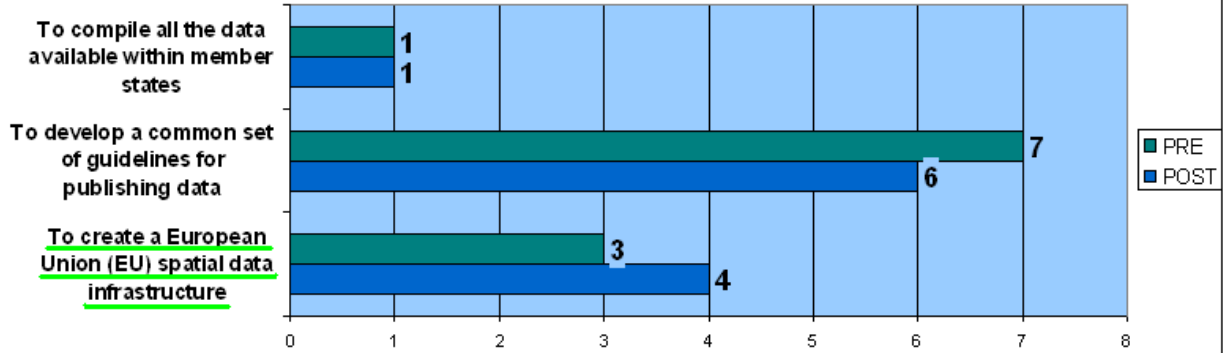




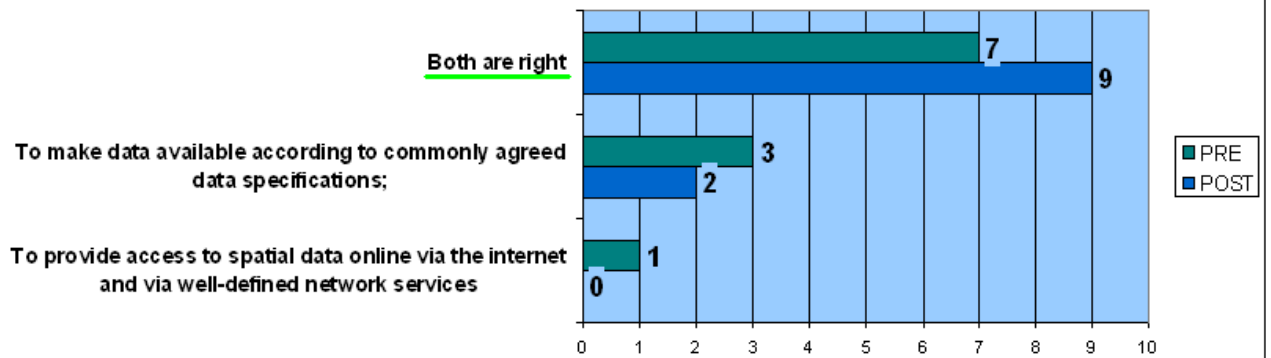
The INSPIRE directive

This section analyses the questions regarding the knowledge about the INSPIRE directive. The results of the evaluation shows that some of the aims of the INSPIRE directive persists to be unclear for most of the participants (Question 12). Question 13 on the other hand, shows that some aims of the Directive were more clear to the participants. The third and last question regarding types and services of the INSPIRE directive was answered correctly by the majority of the participants (with an improvements of two right answers after the course).

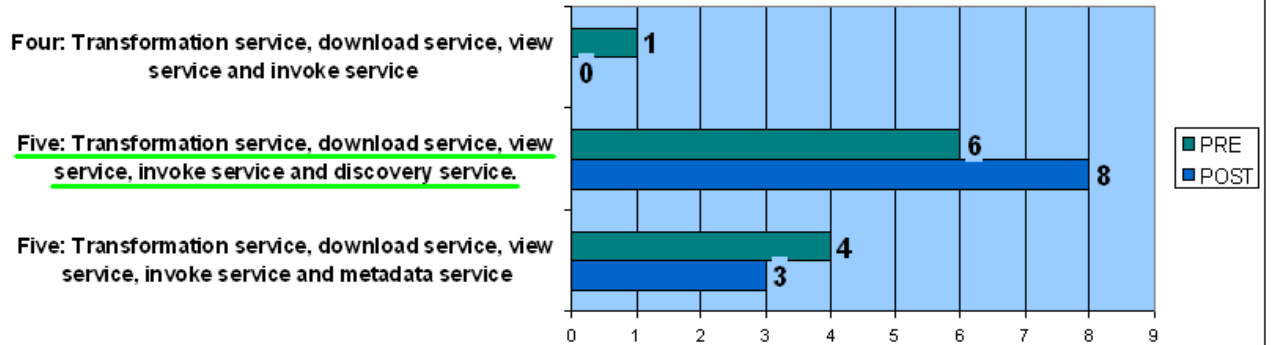
Question 12 - The INSPIRE directive aims:

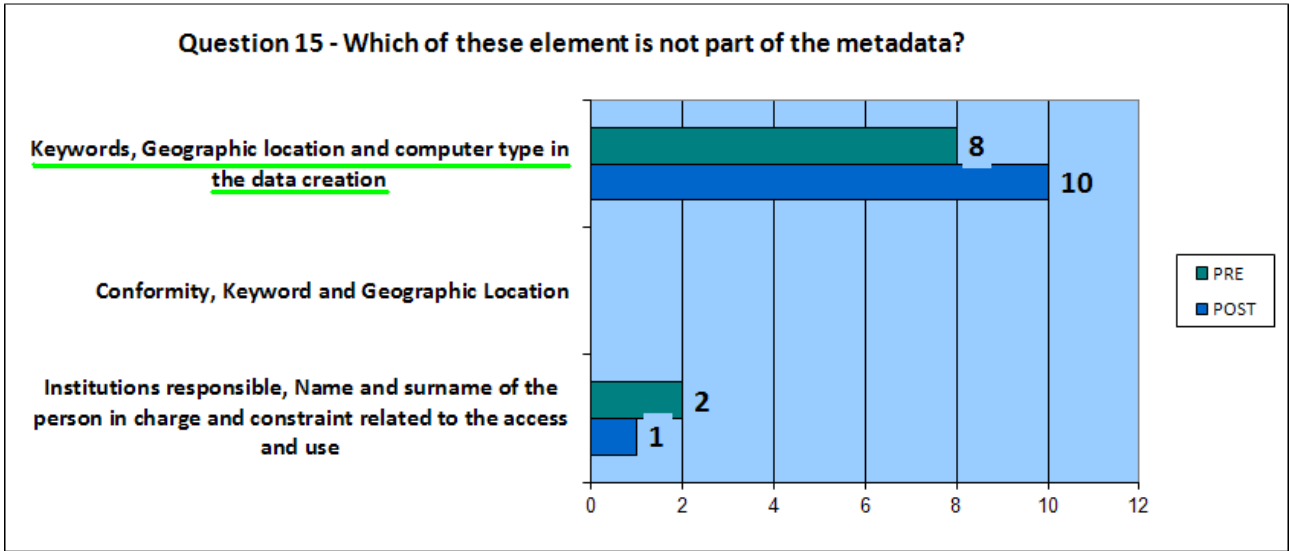


Question 13 - What does INSPIRE aim at



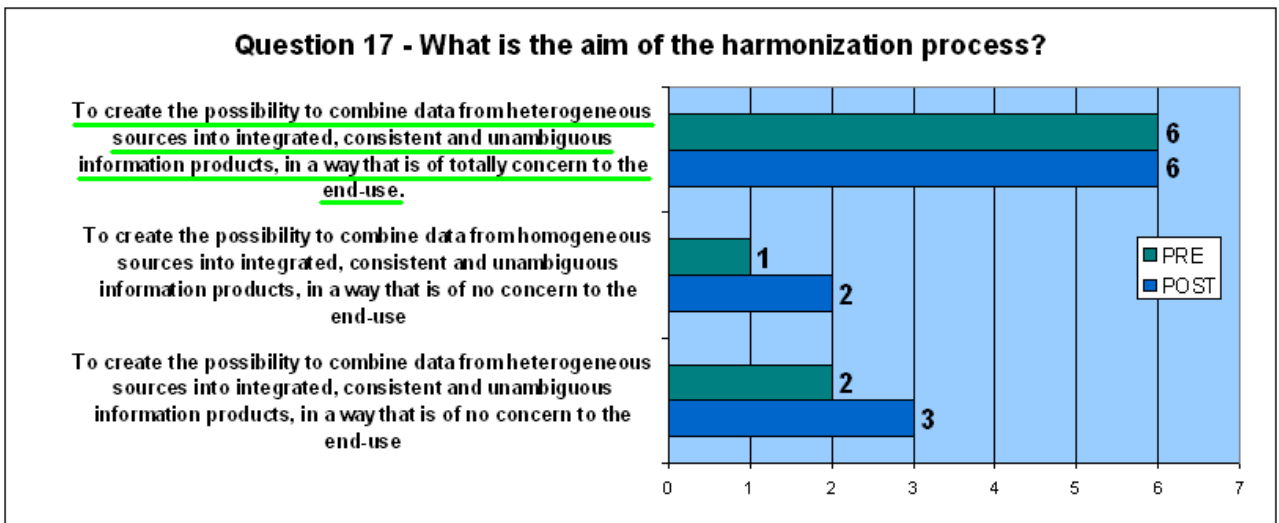
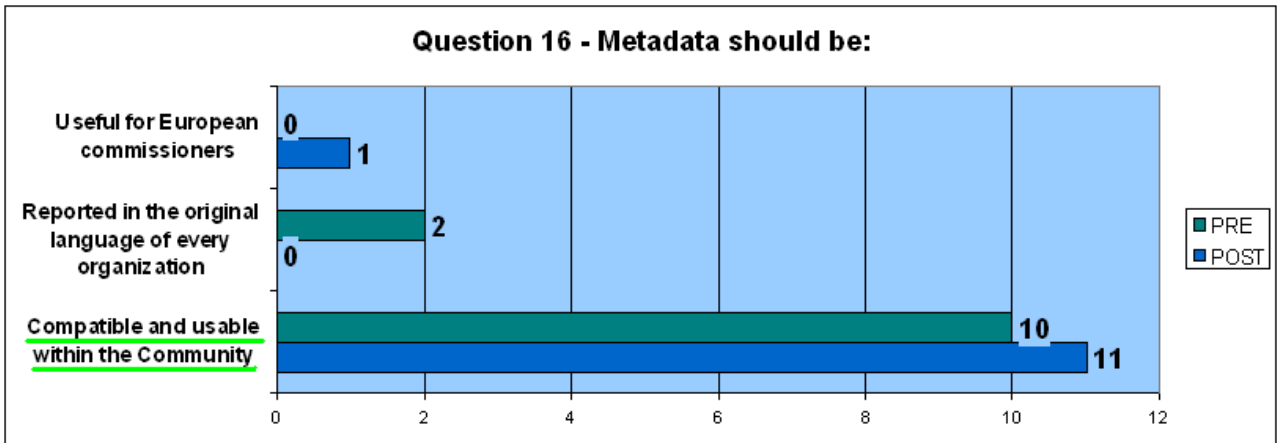
Question 14 - The services types in INSPIRE are:

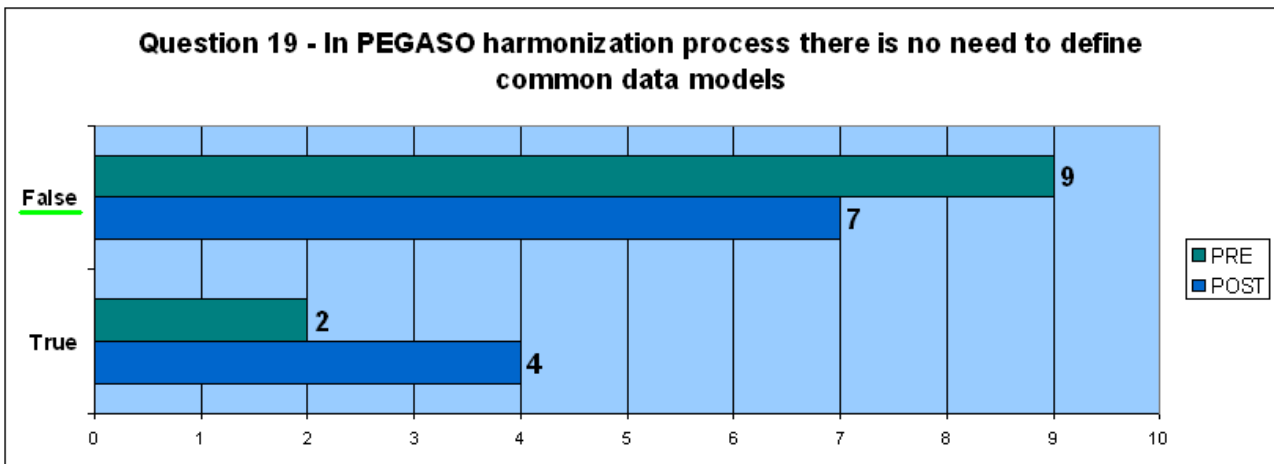
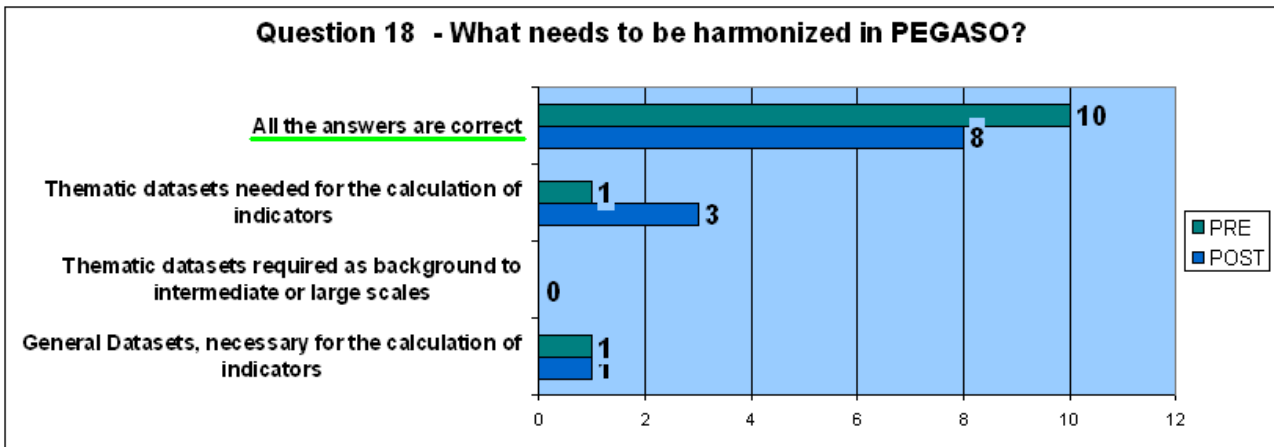




Harmonization Process

Also before the course, the majority of participants knew what an harmonization process is, recognized the need of it in the context of PEGASO, and recognized the elements which need to be harmonized within the project. However, the course was not able to improve the awareness of these concepts among all the participants (e.g. if before the course only two participants considered common data model unnecessary, after the course they were four).





Below the results of the open questions included in the PRE and Post Evaluations are presented.

Question 20: “How, in your opinion, harmonization of data can be performed efficiently?” Participants answered almost univocally (before and after the course), stressing the need to spread shared standards for data through clear guidelines.

Question 21: Do you think an SDI is a powerful tool for ICZM purposes? (choose between “yes” or “no” and explain why) Every participant except one (who changed opinion after the training) considers a SDI a powerful tool for ICZM. Motivations vary from the practical visualization of data with change detection, to the possibility of integration of many types of data, which are essential and constant issues in ICZM. The training strengthened the pre-course opinions, which became more detailed and justified. Whilst one participant, recognizing the SDI utility, highlighted the concern of the knowledge that stakeholders need to have in order to manage the SDI, another participant after the course redimensioned the SDI, judging it as only one part of a lot of tools needed for ICZM process.

Question 22: In your opinion, how the PEGASO SDI will help in the dissemination process? Participants expressed favorable comments about the relevance of the SDI in the dissemination process in PEGASO. Most of the opinions can be summarized with the statement that SDI published on web are friendly interfaces and could be able to show the results achieved and the issues that have to be addressed to policy makers and end users in general.

5.4 Training post evaluation

General assessment of the course

The questions regarding the general assessment of the Hand's on Training show a general satisfaction of the participants (see table below).

	YES	NO
Was the content appropriate?	9	1
Was the introduction informative?	10	0
Did you understand the content?	9	1
Appropriate level of difficulty	8	1
Do you think is feasible to reproduce this at your institute?	6	2
Was the time and length of the training appropriate?	8	1
Were the training facilities appropriate?	9	1
Do you recommend this venue for other trainings	9	0

How you will apply what you learned?

The majority of the participants reported their willingness to implement a SDI or to use the information received to improve the existing ones.

Overall rating and final comments

Participants were finally asked to express their opinion on the course by using a scale from 1 (poor) to 5 (excellent), the below table reports the mean for each category. Two participants moreover reported the following advices in order to improve the training. In detail:

“Better define the target public/participants and the minimum knowledge required to follow the course in order to better understand and follow the training”.

“Less attention on the installation process because trainers are not likely to be the ones to install the software, but to create data and fill the servers”.

	Mean
Trainers rating	4,2
Trainers methods	4,4
Overall rating	4,6

6 MedOpen

6.1 Training objectives

The training aimed at improving capacities for coastal management, which will subsequently facilitate sustainable coastal development in the Mediterranean; and to get acquainted with the ICZM in general but in more detail with the ICZM Process being crucial for the implementation of pilot projects in the PEGASO CASES. The training was entirely carried out online, participants at the end of the course were asked to express their evaluation.

Target Group:

9 PEGASO CASES partners

Learning Methods: Forum discussions; Simulation Game participation; and Final Essays preparation.

Preparatory Work: Financing of the Course (budget); Announcement of the Course; ToRs for lecturers; ToR for the website providing agency; Update of the previous MedOpen version; Communication with / Instructions to the website providing agency; Selection of candidates; Info / Instructions to candidates and lecturers prior to the Course.

Training Duration: 14 May – 3 September 2012

Lead trainer: Mr. Yves Henocque

6.2 Training program

- Sustainable development issues in the Mediterranean
- How to respond?
- Basic principles of ICZM
- The benefits of ICZM
- Who is responsible for ICZM?
- Legislative and financial framework
- Examples of introducing ICZM at the national level
- ICZM Process: How to prepare and implement ICZM projects?
- Tool box
- Good practices demonstrations
- The Protocol on ICZM in the Mediterranean
- Conclusions and ideas for future

6.3 Training post evaluation

	YES	NO
Was the content appropriate?	9	0
Did you understand the content?	9	0
Was the training material relevant to your needs?	7	2

- Question 1: “Was the content appropriate?”
All participants agreed on the pertinence of the course. The participants which motivated the answer stated that the training was well focused and sufficiently advanced.
- Question 2: “Did you understand the content?”
All participants considered the contents comprehensive. However, practical examples also for the Black Sea would be appreciated.
- Question 3: “Was the training material relevant to your needs?”
The two participants who gave a negative assessment of the training material commented that, except for the simulation game, the material was too general for practical work in the CASEs. The same remarks were present also in some comments of the participant who gave a positive assessment. Other participants who gave positive assessment commented instead that sometimes the material was too large to be read in a couple of days, and reported a lack of practical examples of implementation of ICZM programs. Three participant have been completely satisfied and reported a very focused and comprehensive material.
- Question 4: “How will you apply what you learned?”
Most of the participants reported that the course help them to frame their experiences within a comprehensive theoretical methodology.

Trainers

	Mean
Were the trainers effective?	4.7
Did the trainers respond to doubt?	4.6

Training methods

	Mean
Were the material used useful?	3.3
Was the teaching methods appropriate?	4.0
Were you motivated to learn the contents?	4.0
Did you find the material useful?	4.3
Was the level of difficulty appropriate?	7 Yes – 2 No
Would you recommend the course to your colleagues?	9 Yes

Training administration

Was the time and length of the training appropriate?	7 Yes – 2 No
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Overall Rating

	Mean
What is your overall rating of the training?	4.4

7 Conclusion

The training courses organized by PEGASO were appreciated by the participants. Moreover, valuable suggestions have been reported in order to improve future trainings. Summarized below are the main suggestions for each course.

Regarding the Training of trainers' course, the participants demonstrated appreciation both for the trainers and the methodology adopted. In order to improve it they suggested having more practical examples (CASEs related). Furthermore, both the trainers and the participants suggested having an advance training in the future. The SDI training was also appreciated by the participants which demonstrated their willingness in using the information obtained and the competencies acquired in order to set up or improve SDI in their institution. However, they suggest to define better the target public in order to smooth the execution of the practical exercises. The MedOpen course was appreciated by the participants, and it was suggested to have more examples and literature referring to the CASEs context (e.g experiences of ICZM in the Black Sea).

Overall all the courses organized within the framework of the Pegaso Capacity Building were appreciated by the participants and have improved the knowledge of ICZM and the tools that can support its implementation.