

Pegaso Project

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

Funded by the European Union under FP7 – ENV.2009.2.2.1.4 Integrated Coastal Zone Management

Specific Programme FP7
Collaborative Projects
Large scale integrating Project

Grant agreement no: 244170

D1.4C Project Periodic Report

1st February 2013 - 31st January 2014

Code	Pegaso/ 3 rd ECR/UAB/140327-L-1.2
Date	27/03/2014

Grant Agreement number:	244170
Project acronym:	Pegaso
Project title:	People for Ecosystem based Governance in Assessing Sustainable development of Ocean and coast
Funding Scheme:	Collaborative Project (CP) - Large-scale integrating project (IP)
Date of latest version of Annex I against which the assessment will be made:	September 13 th 2012
Periodic report:	3 rd Periodic Report
Period covered:	From M37 to M48 (1 st February 2013 to 31 st January 2014)
Name, title and organisation of the scientific representative of the project's coordinator:	Dra. Françoise Breton. Universitat Autònoma de Barcelona
Tel:	+34 93 5813549
Fax:	
E-mail:	francoise.breton@uab.cat
Project website address:	http://www.Pegasoproject.eu/







Declaration by the scientific representative of the project coordinator

I, as scientific representative of the coordinator of this project and in line with the obligations as stated in Article II.2.3 of the Grant Agreement declare that:

- The attached periodic report represents an accurate description of the work carried out in this
 project for this reporting period;
- The project (tick as appropriate):
 - Has fully achieved its objectives and technical goals for the period;
 - — √ Has achieved most of its objectives and technical goals for the period with relatively minor deviations.
 - Has failed to achieve critical objectives and/or is not at all on schedule.
- The public website, if applicable
 - √ Is up to date
 - Is not up to date
- To my best knowledge, the financial statements which are being submitted as part of this report are in line with the actual work carried out and are consistent with the report on the resources used for the project (section 5) and if applicable with the certificate on financial statement.
- All beneficiaries, in particular non-profit public bodies, secondary and higher education establishments, research organisations and SMEs, have declared to have verified their legal status. Any changes have been reported under section 2.4.6 (Project Management) in accordance with Article II.3.f of the Grant Agreement.

Name of scientific representative of the Coordinator:

Françoise Breton Renard

Date:

Bellaterra (Cerdanyola del Valles), 10th of April 2014



Table of Contents

Declaration by the scientific representative of the project coordinator	
1. Publishable Summary	
1.1 Project impact	
1.2 Project objectives and main expected results	
1.3 Project achievements for the third reporting period	
1.3.1 Achievements and main results so far	
1.3.1.1 WP2 Shared ICZM governance Platform for Mediterranean and Black Sea basin	
1.3.1.2 WP3 Enabling a shared information infrastructure for Mediterranean and Black Sea basins	
1.3.1.3 WP4 Multi-scale tools, methods and models for integrated assessment	
1.3.1.4 Collaborative applications at various scales and Integrated Regional Assessment for Mediter	ranean
and Black Sea basins	_
1.3.2 Capacity building so far	
1.3.3 Dissemination and use so far	
1.3.4 Management issues	
2. Project objectives, work progress and achievements	
2.1 Overall Project objectives	
2.2 Project objectives and main results for the period	
2.3 Work progress and achievements during the period	
2.3.1 WP2 Shared ICZM governance Platform for Mediterranean and Black Sea basins	
2.3.1.1 WP2 progress of work and status of activities	
2.3.1.2 WP2 deliverable progress and status	27
2.3.1.3 WP2 use of the resources	27
2.3.1.4 WP2 dissemination activities	30
2.3.1.5 WP2 problems encountered and risk identified	
2.3.2 WP3 Enabling a shared information infrastructure for Mediterranean and Black Sea basins	
2.3.2.1 WP3 progress of work and status of activities	32
2.3.2.2 WP3 deliverable progress and status	
2.3.2.3 WP3 use of the resources	37
2.3.2.4 WP3 dissemination activities	
2.3.2.5 WP3 problems encountered and risk identified	
2.3.3 WP4 Multi-scale tools, methods and models	
2.3.3.1 WP4 progress of work and status of activities	
2.3.3.2 WP4 deliverable progress and status	
2.3.3.3 WP4 use of the resources	
2.3.3.4 WP4 dissemination activities	
2.3.3.5 WP4 problems encountered and risk identified	
2.3.4 WP5 Applications at various scales and Integrated Regional Assessment for Mediterranean an	
Sea basins	
2.3.4.1 WP5 progress of work and status of activities	
2.3.4.2 WP5 deliverable progress and status	
2.2.4.3 WP5 use of the resources	
2.3.4.4 WP5 problems encountered and risk identified	
2.3.5 WP6 Building and enhancing capacity through training and foster knowledge exchange	
2.3.5.1 WP6 progress of work and status of activities	
2.3.5.2 WP6 deliverable progress and status	
2.3.5.3 WP6 use of the resources	
2.3.6 WP7 Dissemination	
2.3.6.1 WP7 progress of work and status of activities	
2.2.6.2 WP7 deliverable progress and status	
2.3.6.3 WP7 use of the resources.	
2.3.6.4 WP7 dissemination activities.	
2.4 Project management during the period	
2.4.1 Management tasks and achievements	
2.4.1.1 2 nd EC reporting and interim payment	87



2.4.2 Documentation progress and status	88
2.4.3 Problems encountered and corrective actions	88
2.4.4 The Pegaso web portal and the Pegaso Intranet	88
2.4.5 Project meetings	
2.4.5.1 General Project meetings	
2.4.5.2 Steering committee meetings	89
2.4.5.3 Other project meetings	
2.4.5.6 Technical/working meetings	
2.4.6 Changes in the legal status	
2.4.7 Pegaso synergies with other ICZM initiatives and projects	
3. Deliverables and milestones tables	
4. Explanation of the use of the resources	96
5. Financial statements – Form C and Summary financial report	
, , , , , , , , , , , , , , , , , , , ,	

List of figures

Figure 1: Pegaso CBP for the period (The ICPC workshops)

Figure 2: WP2 Gantt chart (end January 2014)

Figure 3: WP3 Gantt chart (end January 2014)

Figure 4: WP4 Gantt chart (end January 2014)

Figure 5: We propose using seascape ecology techniques for sea ecosystem accounting. These techniques quantify seascape structure, which provides valuable information on the quality and quantity of both stocks and flows.

Figure 6: Cumulative pressure index for the Western Mediterranean Sea.

Figure 7: WP5 Gantt chart (February 2014)

Figure 8: Land-use map of local ICZM pilot project area as rendered Pegaso Atlas at

http://pegasosdi.uab.es/geoportal/index.php/guria-coastal-region-case

Figure 9: Main and sample pop-up windows of the ICZM progress indicator software tool

Figure 10: Draping urban sprawl (as indicated with NPP VIIRS day-night band) over the natural capital (represented by Landsat 8) for Guria Coastal Region (red) & wetlands of Kolkheti National Park (green)

Figure 11: Guria region and data-sets available for hydrological modelling its two main river basins

Figure 12: Facilitators of the training content: Dr Breton and Ms De Hauwere (left). Stakeholders from Guria Region viewing Pegaso video presentations (right)



Definitions and/or glossary, acronyms and/or abbreviations

C

CA: Consortium Agreement.

CASEs: Collaborative Application SitES. **CPC**: The Champion Participatory Coordinator.

CBP: Capacity Building Plan

D

DIEC: The Data and Information exchange Coordinator.

DoW: Description of Work.

D: Deliverable.

Е

EC: European Commission. **EUC:** End-Users Committee.

F

FP7: Seventh Framework Programme.

G

GA: Grant Agreement. **GAs:** General Assembly.

Г

ICZM: Integrated Coastal Zone Management.

M

M12: Month twelve.

MAP: Mediterranean Action Plan

Ν

NFPs: National Focal Points.

P

PO: Project Officer.

PAP: Priority Actions Programme.

R

RAC: Regional Activity Center.

S

SC: Steering Committee.

SDI: Spatial Data Infrastructure.

Т

ToR: Terms of Reference.

V

VIC: Virtual Meeting.

VIC02: 2nd Pegaso Virtual Conference.

 \bigvee

WP: Work Package.



1. Publishable Summary

1.1 Project impact

Pegaso (People for Ecosystem based Governance in Assessing Sustainable development of Ocean and coast) is a collaborative project between twenty-four partners that have co-worked over four years under the lead coordination of the Universitat Autònoma de Barcelona to develop common, novel approaches to support integrated policies for the coastal, marine and maritime realm of the Mediterranean and Black sea basins.

Antalya (Turkey), from the14th to 17th of January 2014 gathering a wide range of institutes and networks from the Mediterranean and Black Sea and representatives from Integrated Coastal Zone Management (ICZM) initiatives in other regional seas.

According to the lead partner from the Universitat Autònoma de Barcelona, Françoise Breton, "the Pegaso project has supported the implementation of the ICZM Protocol in the Mediterranean, and has contributed to the development of similar policies in the Black Sea, as well as has bridged science and

The Pegaso final conference took place in



decision-making process along a collaborative process of work ".

1.2 Project objectives and main expected results

The ICZM Protocol to the Barcelona Convention has been the main driver of the Pegaso project. The Pegaso community; ICZM researchers, practitioners and decision-makers, have worked together to achieve as main outcome a shared IZCM Governance Platform as a bridge between communities of scientist and End-Users, far beyond conventional bridging. The Governance platform has been established as a network and a forum where people with deep interest in effectively implementing ICZM have shared knowledge and experience, and tested new planning and management tools. This kind of joint effort based on the ecosystems approach and a collaborative work is called "adaptive management".

Pegaso has also developed tools to better appraise conflicting issues, responding closely to different articles from the Protocol, including climate change, risk vulnerability and adaptation (indicators, accounting methods, models and scenarios). They have been tested and validated in a multi-scale approach for integrated regional assessment through a number of relevant <u>pilot sites</u>. All the tools are fully accessible at the <u>Pegaso website</u> and have served to produce some <u>indicators factsheets</u> at different places, and an <u>atlas</u> for the Mediterranean and Black seas.

To support the whole Pegaso process, a <u>Spatial Data Infrastructure (SDI)</u>, following the INSPIRE Directive, has been implemented to organize and standardize spatial data sharing on an interactive visor, to make it available to the ICZM Platform, and to disseminate all results of the project to the End-Users and interested parties. Furthermore, Pegaso has made efforts to establish and strengthen durable mechanisms for networking and capacity development so as to promote knowledge transfer and dissemination (N-S; S-N; N-N). Special effort has been done for the South and Eastern Mediterranean and for the Black Sea countries, giving support to their ICZM needs.

Over the lifespan of the Pegaso, the project has mobilised in a successful collaborative-work about 800 Mediterranean and Black Sea stakeholders, both at regional and at CASE level. Pegaso ends up as an innovative and creative project, which has provided exploratory ways to stakeholders to share common knowledge with scientists. This practice has given a new know-how on exchanging data and speaking together among decision makers, national and local managers, making these different professional spheres collaborating in unison.



1.3 Project achievements for the third reporting period

1.3.1 Achievements and main results so far1.3.1.1 WP2 Shared ICZM governance Platform for Mediterranean and Black Sea basin

One of the main goals of the Pegaso project has been to build a shared Integrated Coastal Zone Management (ICZM) Governance Platform with scientists, end users and decision makers, linked to new models of management. To achieve this objective, a Pegaso document coordinated by the University of Nottingham, together with experts from the Priority Actions Programme/Regional Activity Centre (PAP/RAC), the Universitat Autònoma de Barcelona (UAB) and IFREMER (Institut Français de Recherche pour l'Exploitation de la Mer), has been submitted to the European Commission in June 2013. The analysis aims to set out the background to the ICZM Governance Platform, a key outcome of the Pegaso project.

The document (D2.1B Common conceptual framework for the implementation of ICZM based on the review of current issues) discusses the contribution that the Pegaso Project has made to take the ICZM Protocol forward in the Mediterranean and Black Sea Basins, and in particular how it is helping to build a governance platform that will facilitate the realization of the Protocol's coastal sustainable development goals and strengthen its links to the ecosystem approach.

Sustainable coastal zone management remains a challenging governance issue. This document examines the requirements of the various policies for the design of governance mechanisms for ICZM and how they could be approached; it also maps out the route to a more sustainable coastal future and the role that a governance platform might play in overcoming the obstacles on that route.

The document has been conceived as the basis for developing the final deliverable (2.1C) through a consultation process with the Pegaso partners and members of the End User Committee (EUC) that started in June 2013 to be finalised in September 2013 when it was shared with the PAP RAC's National Focal Points (NFPs). Back-to-back with the Coast Day celebration this year, PAP/RAC organised a technical meeting of PAP National Focal Points, which was held on September 24th, being the main reason behind the wish to show to the Focal Points some of the Pegaso results and to receive feedback from them.

The conceptual framework for ICZM is supported by another project deliverable (<u>D2.4A Guidelines for the functioning of an Interactive Shared ICZM Governance Platform</u>) in which the experience of the Pegaso governance platform has been analysed and recommendations will be made for the future.

The establishment of an interactive governance platform was considered as a crucial element to ensure a constructive, two-way dialogue between those who have to take decisions at different levels – from regional to national and local, and those who have to provide quality data and tools for that. The Pegaso ICZM governance platform is first of all made of people. People that have worked together to put in place effective ICZM plans and programmes by exchanging, learning together, helping each other to understand better and act in a more coherent way, sharing knowledge, designing and testing new planning and management tools – in short cooperating to make the coastal management more efficient.

To do so, the Pegaso consortium (some 150 persons working in the institutions involved in the project) plus 18 renowned Mediterranean stakeholders representing international organisations and national authorities, plus Members of the Black Sea Commission, plus some 100 people involved in the Pegaso pilot cases either as direct implementers or local stakeholders have had at their disposal a powerful technical infrastructure to use: the Intranet, which is a common work space with an active forum and document repository; a Spatial Data Infrastructure (SDI) that supports interactive information sharing and assure that spatial data are organised and presented in a standardised way, complying with INSPIRE directive; and a web portal allowing contact with the "external world" and dissemination of the project results to wider audience.

Until now, this collaborative work has yielded several important products of relevance for the implementation of the ICZM Protocol, which represents the legal framework for the work of the platform in the Mediterranean. An important WP2 outcome has been the stock-take of ICZM legal, institutional and implementation aspects in the Black Sea and the Mediterranean (D2.2 Final global results of the stock-taking for the Med and the BS). During the last period of the project, an update of the ICZM questionnaire has been done for the Mediterranean countries, which will serve a reference basis for the future reporting on the implementation of the ICZM Protocol, as decided by the Contracting Parties to the Barcelona Convention at their 18th ordinary meeting held in Istanbul in December 2013. The results of this new round have been included in the final stocktaking report.



The Black Sea part has also been finalised with concrete recommendations for this region. The members of the Black Sea AG ICZM advised the use of the regional stocktaking synthesis report as the basis for the ICZM part of the Report on the Implementation of the Black Sea Strategic Action Plan (SAP), which is due in 2014-2015. They also found logical to use the Pegaso stocktaking for the future periodical audits of the regional ICZM implementation (as part of the Black Sea SAP reporting) prior to ministerial meetings convened on a 5-yearly basis.

The ICZM process has also been finalized and uploaded to the Coastal Wiki. The process that is designed as a "living" tool, which can be easily amended by new explanations, good practices, specific tools, etc., has been used as a reference by the Pegaso pilot cases. The ICZM Process has also served as a basis for the preparation of the Guidelines to assist the Contracting Parties in fulfilling one of the major obligations of the ICZM Protocol, which is the preparation of national ICZM strategies. These Guidelines are currently being used in Algeria and Montenegro. The Process was translated into French to easier its use for the French speaking countries; the French version was also uploaded to the Coastal Wiki.

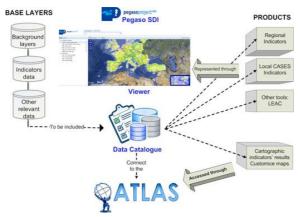
Already during the Pegaso lifetime the governance platform has associated many external actors, such as

PAP/RAC NFPs or other coastal and marine projects, who have enriched it and boosted the network of coastal practitioners, scientists and decision-makers. We hope that, after the closure of the project in February 2014, the platform will continue operating and will become the governance platform for the implementation of ICZM in the Mediterranean, a privileged place of exchange and a sort of hub for all projects, studies and other initiatives related to the ICZM Protocol implementation. As already mentioned, the Pegaso platform and the stocktaking have been included in a decision adopted by the COP18 while there are



still on-going discussions about the future use of the platform within and for the benefit of the UNEP/MAP system. The <u>D2.4B Business Plan</u> collects these set of ideas that have been discussed during the final Pegaso conference organized on the 14-17th of January 2014 in Antalya, announced as an open meeting for everybody interested. The continuity of the Pegaso actions have been discussed there, being the business plan the bone of the meeting.

1.3.1.2 WP3 Enabling a shared information infrastructure for Mediterranean and Black Sea basins



The WP3 activity during the last months of the project has mainly focused on the integration of the Pegaso results into the Pegaso SDI, the development of the Pegaso Atlas and the update and creation of articles in the Pegaso Wiki.

To achieve this objective, the Universitat Autònoma de Barcelona (UAB) and the Universidad Pablo de Olavide (UPO) have worked together to deliver the final prototype of the Pegaso SDI, an online system built to support decision-makers in the Mediterranean and Black Sea basins, providing resources for the people taking better decisions locally.

<u>The Pegaso Atlas</u> has been conceived to integrate the results of the project in a very useful way, with maps that will help the decision makers in decision making processes and will be understandable for the general public.



The WP3 has also been responsible for the development and maintenance of the <u>Pegaso Wiki</u> under the supervision of the Flanders Marine Institute (VLIZ) to make sure that the final content is delivered, uploaded and edited in appropriate format. Based on the already available example of the WP4 tool on Participation, other articles on tools and products have been prepared by the partner institutions as part of the external communication plan. Also some updating has been carried out in the web page in order to include a more dynamic and interactive interface, in particular for the visualisation of the ICZM Governance Platform, as well as the development of a new diagram/structured hierarchy in which the tools are made available to the end user, and linked to the ICZM process.

1.3.1.3 WP4 Multi-scale tools, methods and models for integrated assessment



The last period of the project started for the WP4 with the "Rabat Workshop" organised as part of the 3rd Pegaso General Meeting in March 2013. The Rabat workshop was the culmination of a series of three workshops designed to allow members of the Pegaso Consortium and the enduser community to discuss the barriers and opportunities facing those concerned with implementing Integrated Coastal Zone Management (ICZM) in the Mediterranean and Back Sea Basins, and in particular to better understand how the data and tools being developed within Pegaso can be used in an integrated way.

A particular concern was to exploit the work done to develop a set of ICZM indicators within Pegaso (T4.1), and use them to develop a medium term vision for both Basins. A corollary was to better understand the opportunities and barriers to taking the goals of ICZM forward, and the kinds of threat that might hinder sustainable development.

In keeping with the overall aims of Pegaso, it was essential that this should be done in a participatory way that could illustrate and inform participants' understanding of what the ICZM Governance Platform being developed by the project might do. The specific aims of the Rabat workshop were therefore to: Explore what 'balanced urban development' and 'protection of natural capital' means in the context of ICZM, and how to measure them both qualitatively and quantitatively in terms of Pegaso indicators and the factors that influence them; Give people experience of using participatory processes to develop influence diagrams, and the way they could be used to model causality using Bayesian Networks; and, To give people insights into how Pegaso tools might be linked and used.

The workshop did make a strong connection to the work on ICZM indicators (T4.1) the articulation of the principles underlying ICZM (T2.1) and the findings have informed the Integrated Regional Assessment (T5.2). One of the objectives of the Pegaso workshop was to help people in the consortium see how different tools being developed within Pegaso could be linked and integrated. This was the most difficult aspect to accomplish and it has been pursued further in the last stages of the Project.

Therefore, during the last period of the project, the WP4 has mainly focused on the transfer of tools to the Capacity Building Plan (WP6) and on the integrated framework illustrated by the CASEs application. A space in the Pegaso web platform has been developed to integrate all the WP4 materials produced by the tasks and supported with practical illustrations based on applications over some CASEs. This will form the operational guidelines from WP4 in addition to guidelines produced by individual tasks. The integration of the WP4 materials into the SDI (WP3) has also been studied. In addition, the WP4 has fed the Regional Assessment after having worked mainly at CASEs level.



1.3.1.4 Collaborative applications at various scales and Integrated Regional Assessment for Mediterranean and Black Sea basins



the IRA and to the ICZM process, phases and Protocol.

The WP5.1 CASEs work program for the last year of the project, started with a discussion during the 3rd General Meeting in Rabat about the main achievements reached so far and the constraints encountered during the implementation of the CASEs activities. To organize the last phase of the project, the CASEs coordinators highlighted the importance of organizing an international meeting for debating the results of the CASEs' work; the need to define the best way to disseminate the CASEs results and the potential of the different tools (joint publications, individual CASEs presentations); the contribution of the CASEs to

<u>The final CASEs report</u> prepared during the last reporting period, is not to be considered a synthesis of the work done, but a comprehensive illustration of all the topics that the CASEs teams have considered: relevance of the CASE to ICZM process; CASE and stakeholder; CASE and tools; tools developed, implemented or tested, etc.

The <u>Pegaso WP5.2 Integrated Regional Assessment (IRA)</u> made a good progress in Rabat and also in a technical meeting held in Sevilla on the 28-29th of May 2013 where the availability of spatial information for the IRA was explored.

The calendar for the last months of the project continued with a proposal of a meeting to discuss about the preliminary results of the Pegaso Integrated Regional Assessment as a basis for developing guidelines for ICZM implementation in the Mediterranean and Black Sea, back to-back with the Coast Day that this year was held in Rimini, Italy on the 25th of September. Previous to the Coast Day Celebration, an IRA workshop has been organized on the 22-23rd of September. The aim of the workshop was to gather members of the Pegaso End User Committee and partners to analyse the preliminary results of the IRA, with particular reference to the indicators calculated at local and regional levels, as well as other tools (CIM/LEAC, Economic assessment) and to develop proposals for policy responses and guidelines to implement ICZM in the Mediterranean and Black Sea.

An Integrated Regional Assessment (IRA) for the Mediterranean and Black Sea basins is one of the main foreseen outputs of the project. The Pegaso IRA should explore possible new governance models that rely on strong linkages between science and policy. The IRA aims at formulating policy responses to identified main threats as well as management options at different scales.

The IRA workshop was carried out in co-working sessions, in line with one of the main Pegaso principles, which is to work in collaborative and participatory manners in order to promote exchanges between scientists, practitioners, and decision-makers. The analysis of the current situation, and insights about how the future might unfold, informed a discussion on policy instruments and management tools to respond to the main identified issues as well as on governance aspects (e.g. how to continue promoting a better dialogue between scientists, practitioners and policy and decision-makers). Moreover, a reflection has been developed on the methodology proposed and the usefulness of Pegaso tools and methods to support decision-making for ICZM.



1.3.2 Capacity building so far

Over the project's lifespan, the Pegaso consortium has fostered internal capacity to ensure that the team members could engage effectively with each other in this complex, multi- and trans-disciplinary project. The consortium has contributed and enhanced capacity in the End-User communities and stakeholders through the implementation of a capacity building conceptual frame and training action plan designed. The implementation of this plan has allowed that every Pegaso's partner and End-Users have a good comprehension of how tools and knowledge can help them directly in their task of implementing ICZM.

The Pegaso capacity building and training plan has been developed through seven different types of sessions over four years. The thematic areas have been: public participation methods, ICZM Toolbox Indicators, MedOpen advanced course on IZCM, Spatial Data Infrastructure, Regional ICZM Envisioning Workshops, new scenario-building exercises using the Bayesian Belief Network (BBN) as a decision support tool, and "what-if" modelling tools workshop.

Building research capacity in International Cooperation Partner Countries



One of the major objectives expected by DG RTD, and expressed during the Negotiation Meeting in Brussels (8th of September 2009), was to assist ICPC countries in building their research capacity. In the last run of the project, Pegaso has organised several workshops to foster scientific capacity in Southern and Eastern to assist International Cooperation Partner Countries (ICPC) in building their research capacity.

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. The ICPC

workshops have been organised to train trainers and disseminate results through technical notes and in the most relevant languages (French, Arabic, English, Turkish and Russian).

BBN exercise in Lebanon	Lebanon September 2013	Training in the BBN methods for producing the Lebanese vision on urban growth, supporting the making of the ICZM strategy in Lebanon.
BBN exercise in Dalyan	Dalyan, November 2013	Training in the BBN methods for producing the CASE vision on the coastal site and its future development (protection and enhancement of natural capital).
Atelier sous regional (Algérie, Tunisie, Maroc) sur les indicateurs GIZC	Alger, November 2013	Using the Pegaso indicators for ICZM in Magreb.
The future of Greek aquaculture. Building a sustainable industry in the framework of integrated coastal zone management.	Athens, November 2013	To think on theprospective of aquaculture in anICZM frame for local sustainable development., with aquaculture planners, scientists and producters. The General Fisheries Commission for the Mediterranean (GFCM) participated in the workshop
Pegaso CASEs training workshop. Introduction into the ICZM Toolbox – Indicators.	Grigoleti, Guria Region, Georgia, November 2013.	Combining the work done on indicators in the CASE with the Pegaso indicators, production of factsheets, use of the SDI and GIS. Fieldwork with the ministries in charge to better understand ICZM principles
International workshop on the Nile delta northern lakes: Investment scenarios for restoration actions and sustainable development within ICZM frame.	Cairo, December 2013	How to secure aquaculture sustainable development of Nile Delta in an ICZM frame.

Figure 1: Pegaso CBP for the period (The ICPC workshops)



1.3.3 Dissemination and use so far

The WP7 Dissemination has delivered the 3rd Poster and the 2nd and 3rd Brochures for Decision Makers. The 4th and the 5th Pegaso e-newsletter have also been produced, in English and French, and have been sent to the Pegaso contact list (more than 1.000 people). The WP7 will now focus in preparing the last phase of the Pegaso Communication Strategy and the last round of Video Materials.







1.3.4 Management issues

The 2nd EC report was sent to the EC on the 27th of March 2013 (<u>D1.4B 2nd ECR-UAB_130327-L-1.2</u>). The 2nd interim payment letter and therefore the EC approval, was received on the 29th August 2013 together with a 2nd interim payment of 442.654,52 €. The UAB has transferred to the Pegaso Consortium the corresponding amounts to this 2nd interim in September 2013.

1.3.5 Networking and capacity development

The Mediterranean tradition of celebrating the Mediterranean Coast day on September 25th was continued this year as well. The host of the central regional celebration was the Italian region of Emilia-Romagna, represented by Ms. Paola Gazzolo, Regional Minister for Territorial Safety, Soil and Coast Defence, Civil Protection. The event took place in the beautiful coastal city of Rimini, famous for the endless sand beaches, which was most appropriate since the main topic of this year's celebration was focused on the beaches.

Back-to-back with the Cost Day celebration, PAP/RAC organised a technical meeting of PAP National Focal Points, which was held on September 24th, in order to show to the Focal Points some of the Pegaso results and to receive feedback from them.

The technical meeting was attended by 40 participants, out of which twelve were PAP/RAC NFPs, (Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, Greece, Israel, Italy, Libya, Montenegro, Slovenia, and Spain). It was also attended by the UNEP/MAP Co-ordinator, the representatives of the IPA Adriatic SHAPE project and the PAP/RAC staff members.

Marko Prem (PAP RAC) introduced the ICZM Governance Platform as it had been developed within the Pegaso project, and specified its strengths and weaknesses. Through his presentation, Marko Prem insisted on the existing potential to build synergies between projects, and pointed out the possible connections between SDI tools such as the Mediterranean and Adriatic atlases. He presented the draft plan for its future implementation and in particular the vision developed by the PAP/RAC, advocating the institutionalisation of the ICZM Platform across the Mediterranean.

A video prepared within the Pegaso project was shown to the audience. In this short film, Gonzalo Malvarez (Universidad Pablo de Olavide), presented the various components to the ICZM Governance Platform of the project. His presentation gave a deeper insight into the structure of the platform, its partners, the technical background, etc. He described how the platform contributes to bridge the gap between science and decision-making.

Marko Prem presented briefly the results of the Integrated Regional Assessment (Pegaso project) in the name of Francesca Santoro (IOC UNESCO) who could not attend the meeting. Some specific tools developed, such as the LEAC and cumulative impact mapping, were presented, and in particular the Pegaso ICZM indicators.



Through a live Internet connection he directly presented the list of indicators chosen and developed in the form of descriptive factsheets, to be used by the end-users in the Mediterranean and in the Black Sea.

Finally, Željka Škaričić (PAP RAC) presented the Conceptual Framework document prepared within the Pegaso project. She synthesised the contents of the document, which intends to give a clear overview of where ICZM is coming from and where it is going in the Mediterranean and beyond. This document, she stated, was one-step stone towards the preparation of the follow up of the Pegaso project, and that comments from the partners were highly expected.

The 18th Ordinary Meeting of the Contracting Parties to the Barcelona Convention (Istanbul, December 2013) adopted a series of decisions regarding the work of UNEP/MAP in the biennium 2014-2015. One of these decisions was to accept the report of the Compliance Committee for the past biennium and to adopt the official reporting format on the implementation of the ICZM Protocol. The Pegaso stock-taking is specifically mentioned in this decision as the reference base for measuring the progress with this most recent Protocol of the Barcelona Convention.

Prior to the final adoption, this and all the other decisions were thoroughly examined and discussed by the UNEP/MAP NFPs at their meeting held in Athens in September 2013. The part of the decision on ICZM reporting was prepared jointly by UNEP/MAP and PAP/RAC, and it was introduced to the meeting participants by Maria Luisa Silva, UNEP/MAP Executive Secretary and Coordinator. The usefulness of the Pegaso stocktaking was fully recognised by the NFPs who expressed their satisfaction with the work done and the amount of information collected through the stock-taking exercise.

The MEDCOAST Global Congress on Integrated Coastal Management: "Lessons Learned to Address New Challenges" was successfully organised by MEDCOAST (Mediterranean Coastal Foundation) in Marmaris (Turkey) from 30th October to 03rd November 2013.

The MEDCOAST Conferences have been organized every two years since 1993, and it was the second time that this biannual conference has been co-organized by the International EMECS Centre (Environmental Management of Enclosed Coastal Seas, Japan). The congress gathered 300 participants from 40 countries of Europe, North Africa, Asia, North America, and Australia; they shared their findings, concerns, and ideas about environmental management of enclosed seas and their coastal zones.

Two sessions of the congress were especially devoted to present the results of the Pegaso project; twelve oral and two poster presentations related to the Pegaso Project were made. The manuscripts of all Pegaso papers were published in two-volume proceedings of the Global Congress. Two papers, one prepared jointly by the project leader and WP2 leader and the other by the Plan Bleu team, dealt specifically with the governance platform at its role within the project and for the future ICZM implementation in the Mediterranean and Black Sea regions.



2. Project objectives, work progress and achievements

2.1 Overall Project objectives

The Pegaso project has the following overall objectives, divided into the different work packages:

WP2 Shared ICZM governance platform for Mediterranean and Black Sea basins

To construct an ICZM governance platform, consistent with the aims of article 14 of the ICZM protocol for the Mediterranean, to support the development of integrated policies for the coastal, marine and maritime realms of the Mediterranean and Black sea basins.

- To develop guidelines on interactive shared ICZM governance platform.
- To facilitate implementation of regional legal instruments.
- To apply and test efficient participatory methods.
- To make an initial stocktaking of scientific, technical, legal, and institutional knowledge base to create a Platform for desired policy changes in Mediterranean and Black Sea coastal areas and their interface.
- To take into account scientific, policy, managerial and societal views and attitudes towards ICZM governance in the Mediterranean and the Black Sea regions.
- To develop a methodology for improving the ICZM governance in the Mediterranean and the Black Sea regions.
- 4 To assess end-user needs, define target groups and stakeholders.
- To build a shared ecosystem-based ICZM governance Platform for Mediterranean and Black Sea regions, aimed at assisting decision and policy makers, professionals, private sector and civil society elements to plan actions and assess their impacts in coastal and marine areas.
- 6 To facilitate implementation of a regional legal instruments in both seas.

WP3 Enabling a shared information infrastructure for Mediterranean and Black Sea Basins

To co-build a spatial data infrastructure (SDI) for the Mediterranean and the Black Sea

- Supporting and creating local geonodes.
- In order to deliver a Mediterranean and Black Sea harmonised sets of data.
- Accessible through an Internet viewer.
- To build a shared Spatial Data Infrastructure (SDI) with existing participants' institutions for the needs of Pegaso. In order to do that the WP will implement:
 - a. the different participants' geonodes that will be part of the Pegaso SDI; and
 - b. the building of a central interactive geoportal with a number of services to facilitate access to the data in an interactive way.
- To support participants in the harmonization and normalization of data and metadata within the SDI following INSPIRE guidance.
- To identify and select a set of maps and spatial data from the SDI to build a first version of an interactive coastal and marine atlas.
- To develop a common content management Platform as a repository for all work done in the consortium (i.e electronic reports, maps, all new data and applications produced during the project).
- To generate an interactive web portal to manage communications, normalisation and dissemination of consortium spatial information sets.

WP4 Multi-Scale tools, methods and models for integrated assessment

To refine and further develop efficient and easy to use tools for making sustainability assessments in the coastal zone, regarding:

- Relevant indicators set to measure sustainable development,
- Operational environmental accountings for the coastal zone,
- Multi-scale, spatially explicit scenarios to inform ICZM responses,
- Effective use of participatory methods,



- Economic assessment for ICZM.
- To bring added value building an integrated pack to train stakeholders and facilitate use of all tools together for past, present and future assessments and in a multiscale context.
- To exploit and refine existing scientific expertise and methods related to indicators, environmental accounting, scenario construction, participatory approaches and assessment, to create a suite of tools and techniques that can be used to make a multi-scale assessment in the coastal zone in the Mediterranean and Black Sea Basins.
- To integrate the suite of tools into a common analytical framework that can form the technical and methodological basis of the assessment platform for ICZM that will be delivered by the project.
- To develop training materials and opportunities related to the suite of assessment tools that can support the wider capacity development activities initiated by the project.
- To qualify the choices and uses of tools/methods based on an integrated expertise in order to recommend the best practises responding to various applications (issues, scales).

WP5 Collaborative applications at various scales and integrated regional assessment for Mediterranean and Black Sea Basins

To test and validate the assessment tools at regional and local scales to understand both global and cumulative local trends and how they interact in specific coastal and marine regions.

- To enlarge ICZM governance platform through intensive work at case sites
- To integrate all relevant scales into the ICZM process
- To support an integrated regional assessment for the Mediterranean and Black Sea coastal and maritime areas.
- To identify the main common threats and priority responses, including urban growth, biodiversity loss and adaptation to climate change impacts in both basins.
- To formulate policy response options at different spatial and temporal scales
- To produce guidelines for sustainable planning and assessment on land and sea, and for specially vulnerable areas such as coastal urban settlements, islands, wetlands, relevant marine and coastal ecosystems, etc.
- To test and validate, in an iterative and collaborative way, the tools developed in WP4 in the CASEs (Collaborative Application Sites) of the Mediterranean and Black Sea Basin basins to facilitate their use by stakeholders.
- To contribute to the identification of the coastal and marine main common threats (past, present and future) concerning the Mediterranean and Black Sea basins, by integrating results from WP4 and T5.1 (CASEs), reviewed, prioritized and agreed by WP2 (Shared ICZM governance Platform for Mediterranean and Black Sea basins).
- To prepare an integrated regional assessment and outlook for the Mediterranean and Black Sea basins based on different conceptual frameworks and approaches developed in WP2 and WP4 and possible new governance models that rely on strong linkages between science and policy.
- To formulate policy response options at different scales, and to evaluate trade-offs among them. Especially the formulation of maritime planning guidance.

WP6 Building and enhancing capacity through training and foster knowledge exchange

To establish and strengthen mechanisms for networking and capacity development so as to promote knowledge transfer and the long-term use of the project outputs.

To provide training courses on sustainability tools and SDI to enhance capacity for ICZM at different scales and to support implementation of Pegaso products.

- To steer dynamic regional networks with high scientific capacity to assess their countries after Pegaso ends.
- To build and enhance capacity for trans-disciplinary research and application building in relation to ICZM issues within the Pegaso Consortium (WP6.1).
- 2 To identify the training needs of key end user groups and to respond by designing and delivering appropriate materials so that the ICZM Governance Platform can be built and used (WP6.2).
- 3 To foster knowledge exchange amongst the consortium members and their wider circle of participants and collaborators, so that future funding bids can be made and the ICZM Platform sustained and developed



(WP6.3)

4 To support the development of sustainability science in the Southern and Eastern Mediterranean and Black Sea countries, to ensure good collaborations south-south and the building of capacity to assist decision makers, participating in FP7 and ENPI proposal to foster regional networks.

WP7 Dissemination

To establish and strengthen mechanisms for networking and diffusion of Pegaso outputs so as to enlarge network of interested stakeholders and the large public.

To promote diffusion of Pegaso concepts through scientific events, newsletters and other means, accessible to different languages and cultural backgrounds.

To promote the ICZM Mediterranean and Black Sea end user Committees incl. strategic actions for the Black Sea oriented towards the countries of the Black Sea, and the South and East Mediterranean to enlarge the impacts of Pegaso in both regions.

To promote scientific papers published in peer reviewed journals.

- Support and promote the understanding and practice of ICZM in the Mediterranean and Black Sea regions by creating a general climate-of-support by which Mediterranean and Black Sea countries could enhance their ICZM capabilities so that decisions makers are informed of the essentials of and methodologies for ICZM and that competing interest groups can discuss the issues and come to a common understanding;
- Promote the intentions, approaches, methodologies, resources and findings of Pegaso to the Euro-Mediterranean- Black Sea audience of researchers, policy-makers and other end-users.

2.2 Project objectives and main results for the period

The main objectives of the WP2 for the last reporting period were:

- Ensure the involvement of and facilitate exchanges among the members of the platform.
- Promote ICZM governance issues and the results of Pegaso within the official systems in the Mediterranean and Black Sea regions.
- Finalise the WP2 deliverables.
- Promote the ICZM Governance platform and the Pegaso project in general.

Objective	Actions	Results for the period
Ensure the involvement of and facilitate exchanges among the members of the platform.	 Invitations and reminders for project partners and end-users to participate in exchanges via Intranet and to face-to face meetings including the two general meetings (Rabat in March 2013 and Antalya in January 2014). Live work of the platform during the Rabat meeting by using the BBN method. Material uploaded to Document manager and/or provided through Blog and Wiki for consultation, use and comments. Help to strengthen local governance mechanisms within CASEs. 	 Like in the previous periods, the participation of people involved in the project as partners, end-users or local stakeholders was high and very constructive (see page 35 for the web and intranet statistics). Input of the BBN exercise to the Integrated Regional Assessment and decision to use the method in one national-level CASE (Lebanon) and one local CASE (Turkey). Several meetings were held, organised within CASEs and with focus on tools, which have significantly helped to boost local governance mechanisms and put them in relation with the broad governance platform.



Objective	Actions	Results for the period
Promote ICZM governance issues and the results of Pegaso within the official systems in the Mediterranean and Black Sea regions.	 Inclusion of the Pegaso stocktaking into the BC COP18 (Istanbul, December 2013) decision. Presentation of the Pegaso results to PAP/RAC and BSC NFPs. Bilateral contacts with the responsible officers of the two regions and EU. 	 Pegaso stocktaking adopted as the reference base for the reporting on the ICZM Protoco in the Mediterranean. Pegaso stocktaking adopted as the reference base and format for reporting on ICZM in the Black Sea.
Finalise the WP deliverables.	 Numerous virtual exchanges among authors of the four deliverables of WP2 (Conceptual Framework for ICZM, Stock-taking, Guidelines and lessons learned, and Business Plan). Two face-to-face meetings among the main authors. Presentation of draft deliverables to and consultation with PAP/RAC NFPs. Organisation of the external revision of deliverables. 	 Final draft of all deliverables prepared. External revision completed. High level of satisfaction and appreciation of all the consulted actors with the Conceptual Framework and Stocktaking, which were largely presented.
Promote the ICZM Governance platform and the Pegaso project in general.	 Participation in various events (meetings, conferences, etc.) to present the platform and its results. Bilateral contacts with external actors in the Mediterranean and Black Sea regions (mainly other ICZM-related projects and initiatives). Joining the FACECOAST network. Contacts and negotiation with potential donors to continue the platform. 	 See the list under dissemination activities. MoU signed with FACECOAST. More or less advanced negotiations with UNEP/MAP, EEA, UfM, EU, etc. on possible future projects to continue the platform.

For the WP3

The main objectives of the WP3 for the last reporting period were:

- To finish the development and implementation of the Pegaso SDI (catalogue, viewer and atlas).
- The revision of all the work done and the definition of needs and contents for the atlas with the WP2, 4 and
- Maintenance and helpdesk of the Pegaso common management platform (T3.3).
- Creation and maintenance of the Pegaso web portal and the publication of articles based on the project results (phase 3).



Objective	Actions	Results for the period
To finish the development and implementation of the Pegaso SDI (catalogue, viewer and atlas) (task 3.2).	 Presentation of a SDI demo. Technical meeting in Sevilla: IRA: balance use of coastal zone and natural capital, 2) Pegaso CASEs: indicators, Regional Indicators, and Geonodes. Skype meetings with Data Coordinator and CASEs partners. 	 Creation of a protocol describing the functionalities of the Pegaso Map Viewer. Minutes of the Technical Meeting WP3-4-5. Final connection of the local geonodes and addition of new tools on the Viewer (Split map, query tool). Action points associated to the indicators in CASEs, to feed into the IRA and SDI. Delivery of a short & practical guide to harmonize Pegaso indicators.
Revision of all the work done and definition of need and contents for the atlas with the WP2, 4 and 5 (task 3.2).	 Skype meetings with the Atlas developers about the structure, proposals and contents of the Atlas. 	 Creation of the Prototype of Pegaso Atlas. Action points to feed the Atlas with Pegaso products.
Creation and Maintenance of the intranet (task 3.3).	 Maintenance of sections and store documents, organise VICs and forums. 	 Hosting the SC, financial and technical discussions and forums. Storage of deliverables and products. Post it area, news and announcements.
Creation and maintenance of the Pegaso web portal (phase 3) (task 3.4).	 Maintenance of news section, upcoming events or conferences and published newsletters. Publishing of articles. 	 Uploading of new web pages, creation of news (20 items) and picture gallery. Around 14.310 visits/month on the wiki. Updates of 35 new wiki articles.

For the WP4

The main objectives of the WP4 for the last reporting period were:

- To complete and implement the Pegaso tools at Regional level.
- To document all tools with practical illustrations.
- To deliver final guidelines for each of the tools.
- Explore the different ways to deliver the integration task (framework, website, etc.).
 Dissemination of results and materials.



Objective	Actions	Results for the period	
To complete and implement the Pegaso tools at regional level (Mediterranean and lesson for the Black Sea)	 Presentation of the Cumulative Impact Mapping during the IRA meeting in Rimini on October 2013. Joint technical meeting in Sevilla with WP3 and WP5: IRA: balance use of coastal zone and natural capital, Pegaso CASEs: indicators, Regional Indicators, and Geonodes. Joint WP4 and 5 meeting in Brest. Skype meetings with WP4 tasks leaders. 	 Development of the Cumulative Impact Mapping tools with an application over the North Western Mediterranean. Action points associated to the tools in CASEs, to feed into the IRA. Finalization of tools. Economic assessment at the regional level. 	
To document all tools with practical illustrations	Review of CASES.	 Integration of illustrations in Tools' Guidelines. 	
To deliver final guidelines for each of the tools.	 Writing process and internal/external review of products. 	 Tools guidelines with supporting material. 	
Explore the different ways to deliver the integration task (framework, website, etc.).	 Following the implementation of the two regional workshops by the end of 2012, implementation of a regional visioning workshop as a practical test for an integrated assessment scheme and scenarios elaboration (Rabat 2013). Use the Pegaso Website to upload tools and material. Production of an integrated assessment scheme. 	 An integrated assessment scheme combining Pegaso tools. Proposal of roadmap for sustaining Pegaso tools through integrated scheme and through the ICZM protoco network. 	
Dissemination of results and materials	 Record videos as supporting material for guidelines. Update of tools' factsheets. Producing Tasks' factsheets. Publishing of articles. 	 Polimedia video for each tools Tools' factsheets Synthetic tasks' factsheets Articles 	

For the WP5.1

The main objectives of the WP5.1 for the last reporting period were:

- The collection of all the materials produced by the CASEs in a standardized format. For such a reason a
 final evaluation template of the work carried out by CASEs has been produced and sent to all the CASEs
 coordinators.
- The coordination task has also focused during this period on the collection of the main lessons learned by the CASEs.
- The task has also contributed to clarify and collect the input of the CASEs for the IRA.
- Dissemination activities of the CASEs work.



Objective	Actions	Results for the period
Collect information on the CASEs work (in particular regarding indicators and SDI) and relation with the Governance Platform.	 Preparation of a questionnaire for the CASEs coordinators and analysis. 	 Presentation of the results during the last conference (19- 22nd of March, 2013).
Share information about progress made and problems encountered as well as smooth the final work of the CASEs.	 Specific discussion organized during the Third General Meeting (Rabat, 19-22nd of March 2013). 	 Discussion with the Consortium.
Definition of the CASEs contribution to the IRA.	 Participation to the Sevilla technical meeting (WP3-4-5, 28-30 May 2013). 	 Preparation and submission to the CASEs of the description of their input to the IRA.
Dissemination of the CASEs activities in the field of participation.	 Preparation of the wiki pages on CASEs experiences in participation. 	 Publication in the Pegaso wiki (July 2013).
Collection of the final Evaluation Report.	 Preparation of the final version. 	 Submission to the CASEs coordinators (July 2013).
Presentation of the progress of work within the task 5.1 and planning of the next activities.	 Preparation of a summary of the progress of work. 	 Participation to the SC meeting in Barcelona 4-5th of September 2013.
Presentation of the preliminary IRA results to the End Users and contribution of the CASEs.	 Participation to the Pegaso IRA workshop (Rimini) 22-23rd of September 2013. 	 Definition of the CASEs contribution and input.
Dissemination of the Pegaso activities.	 Preparation of 1 article and 1 extended abstracts for the Global Congress on ICM. 	 2 presentations made during the Global Congress on ICM (30th of October- 2nd of November 2013)
Analysis of the Evaluation Report and preparation of final deliverables.	 Collection and feedback request to the CASEs. 	 10 out of 10 Evaluation report collected (December 2013).

For the WP5.2

The main objectives of the WP5.2 for the last reporting period were to:

- Finalise the conceptual framework and structure of the Integrated Regional Assessment.
- Identify the contributions and roles of each partner.
- Define with the WP3 leader the visualization through the SDI and the Atlas of the IRA results.
- Consult with the Pegaso end-users on the Pegaso IRA results.
- Prepare a consolidated report including results of the application of the Pegaso tools at regional and local scale.
- Finalize the guidelines for ICZM implementation in the Mediterranean and Black Sea.

Objective	Actions	Results for the period
Finalise the conceptual framework and structure of the Integrated Regional Assessment.	 Consultation with the main partners in task 5.2. Presentation of the Pegaso IRA to the Pegaso end-users at the 3rd General Meeting in Rabat. 	 Agreed structure based on the ICZM steps as defined by the UNEP-MAP PAP/RAC. Choice of the two focus topics: Balanced Urban Development and Preservation of Natural Capital.
Identify contributions and roles of each partner.	 Proposal made to each partner and discussion with 	 Agreed contribution of LEAC and Cumulative Impact



Objective	Actions	Results for the period
Define with the WP2 leader the	the task 4.2 coordinators on the contribution of results at regional level. Consultation with the task 4.6 leader for an integrated toolbox application. Consultation with the task 5.1 leader for the definition of the CASEs contribution. Consultation with the CASEs coordinators for their contribution to the IRA and to the two focus topics.	Mapping for what regards the definition of specific spatial indicators related to the two focus topics. Definition of a structure for integration of the WP4 tools to be applied in the IRA. Definition of the CASEs contribution through the preparation of a template to be filled by the CASEs coordinators to link their results in terms of Pegaso tools application to the two focus topics.
Define with the WP3 leader the visualization through the SDI and the Atlas of the IRA results.	 Technical meeting in Sevilla in May 2013. 	 Definition of guidelines for the CASEs, LEAC and CIM results visualization in the SDI. Definition of additional indicators to be calculated at regional level to better describe and analyse the two focus topics.
Consult with the Pegaso end-users on the Pegaso IRA results.	Preparation and realization of an end-user meeting in Rimini in September 2013 back to back with the Coast Day.	 Agreed objectives of the enduser meeting. Preparation of the background material to be sent to the endusers for the meeting preparation. Feedback from the endusers on the preliminary results of the application of the Pegaso tools, in particular on LEAC, CIM, and indicators and socioeconomic valuation. Feedback from the endusers on the main policy options focus and guidelines for ICZM implementation in the Mediterranean and Black Sea.
Prepare a consolidated report including the results of the application of the Pegaso tools at regional and local scale.	 Collection of the contributions from the Pegaso partners. Editing of the final report. Preparation of the final layout and summary for policymakers. 	 Deliverable and report finalized. Summary for policy-makers finalized.
Finalize the guidelines for ICZM implementation in the Mediterranean and Black Sea.	 Identification of the priority areas, bridging themes and actions to be taken for the ICZM implementation in the Mediterranean and in the Black Sea. Presentation at the Final Pegaso meeting in Antalya, January 2014. 	 Identification of the lessons learned and research gap. On the basis of the Pegaso results, identification of the actions to be undertaken for the full implementation of ICZM.



For the WP6

Objective	Actions	Results for the period
To assist ICPC countries in building research capacity.	To organize a series of ICPC training workshops within the CBP and specifically the task 6.3.	 BBN exercise in Lebanon (September 2013). BBN exercise in Dalyan (November 2013). Atelier sous régional (Algérie, Tunisie, Maroc) sur les indicateurs GIZC (Alger le 13, 14 et 15 novembre 2013). International workshop on the Nile delta northern lakes: Investment scenarios for restoration actions and sustainable development within ICZM frame (Cairo, 10th - 11th of December, 2013) The future of Greek aquaculture. Building a sustainable industry in the framework of integrated coastal zone management. (26-27th of November 2013. Athens, Greece). Pegaso CASEs training workshop. Introduction into th ICZM Toolbox - Indicators (20 21st November 2013, Grigolet Guria Region, Georgia).



2.3 Work progress and achievements during the period2.3.1 WP2 Shared ICZM governance Platform for Mediterranean and Black Sea basins

WP	Type of activity	Lead participant	PM	Start	End
2	RTD	PAP RAC	127,2	1	48

Task		Leader	Start month	End month
2.1	Conceptual framework for ICZM including the Ecosystem Approach integrating assessment for land and sea relationships.	UNOTT	6	48
2.2	Stock-take of users' ICZM policy, legal, financial and institutional frameworks at multiple levels with a review of stakeholder needs.	PAP RAC	3	37
2.3	Stock-take of ICZM scientific development.	UNIGE	3	11
2.4	Building a sustainable interactive 'Shared ICZM Governance Platform' for ocean and coastal evaluation and assessment by policy makers, managers, scientists and other stakeholders	PLAN BLEU	2	47
2.L	Planning of WP work plan (incl. objectives and indicators) and coordination of WP	PAP RAC	1	48

Deliverables for the period:

D2.1C	Common conceptual framework for the implementation of ICZM based on the review of current issues
D2.2A	Final global results of the stock-taking
D2.2B	Draft recommendations to the Bucharest Convention
D2.4A	Guidelines for the functioning of an Interactive Shared ICZM Governance Platform
D2.4B	Business Plan



2.3.1.1 WP2 progress of work and status of activities

Status	Subtask	%	
Complete:	33	94	
In Progress:	2	6	
Not started:	0	0	
Past due:	2	6	
Total	35	100	



Figure 2: WP2 Gantt chart (end January 2014)

During this last reporting period the WP2 has concentrated on the following:

- Live platform demonstration during the 3rd General Meeting in Rabat with the BBN exercise;
- Consolidating the Pegaso platform, working with lots of contacts related to the final deliverables and with the end-users;
- "Externalisation" of the platform by including the NFPs and sharing the results with other ICZM-related projects (UNEP/GEF and EU funded);
- Inclusion of Pegaso in the decision on the Reporting Format for the ICZM Protocol, adopted by the COP18, UNEP MAP;
- Contacts with potential donors for the future of the ICZM Governance Platform.
 The Pegaso final General meeting has prompted an open discussion on the platform of governance for the Mediterranean across the Pegaso platform participants and the most relevant networks of the Mediterranean and Black Sea (MEDPAN, MEDWET/RAMSAR, the GID, GFCM/CAQ, Black Sea NGOs, MEDCOAST)
- The results are being used to finish to write the Pegaso Business Plan.
- In parallel to the Business Plan writing, intensive contacts with potential donors for the future of the ICZM Governance Platform (and associated Pegaso products) have been done during the whole period, and after: UNEP/MAP (ECAP process, medpartnership, etc), EEA, Union pour la Méditerranée, GFCM/CAQ, EU DGs (MARE, ENV...), EUSAIR (Adriatic-Ionian Marine Strategy) and donors in the South and Eastern countries (eg. Egypt, Algeria, Turkey, etc).



Task 2	2.1	Conceptual framework for ICZM including the Ecosystem Approach integrating assessment for land and sea relationships.					
2.1	2.1.4	Development of a conceptual framework for the implementation of ICZM Governance (Phase III)	M37- M48	- -	Consultation process with the Pegaso partners; Collecting comments by PAP NFPs by end September 2014; Finalisation of the deliverable 2.1C.		

The complex and dynamic nature of coastal zones, coupled with changing social and economic circumstances, makes their management extremely challenging, especially in regions characterised by the lack of adequate institutional and legal frameworks. This means that coastal zones have to be managed taking into consideration:

- Their physical reality i.e. their position as a nexus between land and sea:
- Their functional aspects as a dynamic socio-ecological system;
- Their place in the conceptual space in which many similar policy initiatives risk to cause overlapping or duplication of efforts; and
- The need for adequate, all-inclusive governance mechanisms.

ICZM, together with initiatives such as Marine Spatial Planning (MSP), could be seen as a collective response to the goal of sustainable development in coastal and marine areas. The particular characteristic of ICZM that makes it distinct is that it provides a framework in which all these related issues can be brought together and potentially resolved. It embodies the idea that management decisions have to go through a process of consultation, negotiation, harmonisation and reconciliation of interests, so as to achieve a consensus about what needs to be done and where. The place-based focus of ICZM seeks to encourage all interested parties to work together on specific development issues and appropriate protection measures. Success depends on forging partnerships and linking local-scale initiatives to higher-level policies.

The concept of ICZM happens to be very alive in contemporary debates about sustainable development and as a policy instrument. Recent developments have not undermined the principles on which ICZM is based, but rather suggest that there is a need to find new ways to ensure that the thinking it engenders feeds into the wider policy initiatives that concern sustainable development, ecosystem based approach, balanced economic growth and social cohesion. The ICZM principles discussed are necessary rather than sufficient conditions to determine the 'co-construction' of an integrated and adaptive management approach to coastal zone issues. Pegaso has been creating opportunities to establish and promote good and inclusive governance, which is a fundamental part of what ICZM is trying to achieve.

Task	Sock-take of users' ICZM policy, legal, financial and institutional frameworks at multiple lewith a review of stakeholder needs.				
2.2	2.2.5	Identification of the needs for countries, and recommendations. Update of global results of the stocktaking.	M37- M48		An update of the ICZM questionnaire has been done for the Mediterranean countries: Last comments by PAP NFPs have been
	2.2.6	Roadmap for creating a new ICZM institutional and legal framework for the Black Sea.	M37- M48		collected; The Black Sea part has also been finalised with concrete recommendations for this region. Finalisation of the deliverables 2.2A&B

The stock-take offered a wealth of data and information on the current state of ICZM in the Mediterranean and the implementation of the ICZM Protocol. The broad pattern that emerges is that there is a substantial level of activity overall, but that the distribution is uneven both thematically and geographically. The highest negative levels relate to the following themes: use of economic, financial & fiscal instruments; economic activities (indicators) and land policy. Conversely, the highest positive levels relate to aspects of environmental protection and management, reflecting arguably the concentration of effort in the past decades. Encouragingly, the level of positive response in those themes relating to ICZM capacity such as: participation; awareness raising; training and research; and coordination is relatively high.

In the case of the Black Sea, following the initial stocktaking iteration of 2010 there were concerns expressed that self-ratings were rather optimistic compared to realities with coastal governance in each Black Sea country. After detailed review by BSC PS and reconsiderations by country representatives, self-rating indicators were found to be more realistic and accurate in setting the baseline. Despite wide variations in self-rating scores, it should be acknowledged that the level of advancement with ICZM is in general very comparable in all Black



Sea countries. As with the Mediterranean there are a wide variety of responses by theme. The highest negative levels relate to the themes: use of economic, financial & fiscal instruments; and economic activities (indicators). The highest positive levels relate to aspects of environmental protection and management. The comparatively high level of themes "In progress" potentially represents the lack of a formal agreement such as the Protocol for the Mediterranean against which to establish a common benchmark

Task 2.4 Building a sustainable interactive 'Shared ICZM Governance Platform' for ocean and coasta evaluation and assessment by policy makers		1 -		Go۱	vernance Platform' for ocean and coastal
2.4	2.4.6	Implementation plan for the Pegaso continuity after the end of the project through agreements with interested/identified	M35- M48	-	Stocktaking included in the relevant decision adopted by the BC COP18 (Istanbul, December 2013); Networking and several discussions to ensure the future of the ICZM governance platform within UNEP/MAP; Pegaso last conference organized on the 14-17 th of January 2014 in Antalya. The continuity of the Pegaso actions have been discussed there, being the business plan the bone of the meeting; Finalisation of the deliverables 2.4A and 2.4B.

At the heart of the Pegaso project, the "Shared ICZM Governance Platform" aimed at facilitating communication, exchanges and networking among its various members: project partners including scientific institutions and international organisations (consortium); end-users recruited from national and international institutions and organisations (end-user committee); and local stakeholders involved in the ten "collaborative application sites" (CASEs). This was done through the building of a collective expertise and a process of coworking and learning from each other, sharing knowledge and expertise, and testing innovative tools provided by the project.

This ICZM Governance Platform was the place where knowledge and implementation capacities were fostered through capacity building and participatory activities organised throughout the project with the following objectives:

- to learn directly from the Mediterranean and Black Sea stakeholders about their needs and priorities with regard to sustainable development;
- to ensure a common understanding of ICZM tools and methods;
- to facilitate data and information sharing by building a shared knowledge base; and
- to give birth to what is expected to become a Mediterranean and Black Sea wide network of ICZM policymakers, practitioners and scientists.

Following the "Common conceptual framework for the implementation of ICZM" (Deliverable D2.1C) and paving the way to the "Pegaso Business Plan" (Deliverable D2.4B), the Deliverable 2.4A entitled "Shared ICZM Governance Platform: Guidelines and Lessons Learned" focused on governance issues, proposing guidelines and rules for the functioning of an operational ICZM Governance Platform, and reporting on lessons learned and experiences from the various components of the project, e.g. the integrated toolbox implemented in CASEs with the support of the relevant capacity building programme and the technical support provided through the Spatial Data Infrastructure (SDI), Coastal Wiki (ICZM Process), Intranet including discussion forum and document manager, "Polimedia" videos; participatory events and dissemination activities.

The Pegaso Business Plan is being discussed since the second year of the project, but this debate has been quite intensive during this last year. The Final meeting in Antalya has allowed a good discussion about how to envision the after-Pegaso ICZM governance platform as a durable and institutional asset for the Mediterranean. The enlargement of the Mediterranean platform to relevant networks and projects, scientists, etc. has been presented by Marko Prem (PAP/RAC), and discussed with the current Pegaso governance platform participants and the most relevant networks in the Mediterranean.

In Antalya, the scientific and technical support for the platform, the SDI (WP3) and the tools (WP4) have also been presented in an integrated way, through the Pegaso Atlas and the SDI viewer.



2.3.1.2 WP2 deliverable progress and status

WP	WP Task	Deliverable number	Deliverable name	Status
2	2.1	D2.1B (M37)	Common conceptual framework for the implementation of ICZM based on the review of current issues.	Submitted on the 28 th of February 2013.
2	2.1	2.1C (M48)	Common conceptual framework for the implementation of ICZM based on the review of current issues.	Submitted on the 10 th of February 2014.
2	2.2	D2.2A (M37)	Global results of the stocktaking.	Submitted on the 12 th of February 2014.
2	2.2	D2.2B (M37)	Draft recommendations to the Bucharest Convention	Submitted on the 12 th of February 2014.
2	2.4	D2.4A (M47)	Guidelines for the functioning of an Interactive Shared ICZM Governance Platform	Submitted on the 25 th of March 2014.
2	2.4	D2.4B (M37)	Business Plan	Submitted on the 31 st of March 2014.

2.3.1.3 WP2 use of the resources

Participant number	1	3	4	6	7	8	9
Participant short name	UAB	PLAN BLEU	IFREMER	FREMER IOC UNESCO		IUCN	UNOTT
Planned 15,0		18,0	1,5	2,0	30,3	1,0	11,0
3 rd period	2,61	8,80	0,50	2,64	10,15	0,0	6,0
Actual	14,93	18,36	2,62	2,77	41,03	1,07	11,25
Participant number	10	11	12	13	14	15	16
Participant short name	VLIZ	UNIVE	JRC	UNIGE	HCMR	MEDCOAST	DDNI
Planned	1,0	9,0	2,0	1,5	3,5	2,5	1,0
3 rd period	1,30	2,23	0,0	0,0	1,14	0,0	0,0
Actual	1,33	8,73	3,62	1,1	4,50	0,97	0,50
Participant number	17	18	19	20	21	23	25
Participant short name	UM5a	AREA-ED	NIOF	UOB	MHI	TdV	BSC PS
Planned	4,5	3,0	4,5	6,0	3,0	2,0	5,0
3 rd period	0,0	0,0	2,6	1,55	0,75	0,94	0,08
Actual	0,0	0,0	8,0	6,28	3,0	1,9	7,82



Individual partner achievements:

The Pegaso partners have undertaken the following activities in the WP2:

Partner	Contribution for the period
UAB	 Pegaso D2.4 B Business Plan presented in the 3rd General Meeting in Rabat and the Final General Meeting in Antalya. Workshop - Stepping into the sea (Brussels, 14-16/05/2013). Françoise Breton assisted to the ESPON meeting to present the Pegaso results and discuss how ESPON was organising its programme for funding. It was interesting to speak with Mr Peter Melby to discuss how Pegaso results could be used by ESPON. It was the first time that we took contact with DG REGIO, to prepare next steps of the Business Plan (WP2), encouraged by the Pegaso Project Officer who suggested us to contact all relevant DGs. The governance issue was discussed as well as the Pegaso tools. UNEP/MAP/CDDM Meetings (09-12/06/2013). UNEP-MAP is the institution, which is most interested in the Pegaso project, as the objective of Pegaso was to support the ICZM Protocol. This Protocol objective is to manage the coast within a sustainability framework. Françoise Breton has become an observatory member of UNEP-MAP. As discussed with our Project Officer, it was important to be attending the different UNEP-MAP meeting and responding, with Pegaso tools, to their demands. PapRac/ICZM/MSP/DG-Env Meetings (Brussels 01-03/07/2013). UNEP/MAP/EcAp Meetings (Athens, 08-10/09/2013). Pegaso received an invitation to participate at the UNEP-MAP Ecap project. We have presented a number of possible indicators for Ecap needs, coming from the Pegaso tools.
PLAN BLEU	 Deliverable D2.4A "ICZM Governance: Guideline and Lessons Learned". Consultation of members of the End User Committee (interviews and regular contacts, asking feedback about preliminary reports, involvement for meetings, etc.), supporting dialogue between scientists and decision-makers. Review, feedback, and inputs to several deliverables and products of the WP2 and for the ICZM Governance Platform: Conceptual Framework, ICZM Stock-Take Exercise, Business Plan, fact sheets, etc. Contributions to most of the activities of the WP2, close to PAP/RAC (WP leader) and UAB (project coordinator).
IFREMER	- Contribution to the final version of the deliverables D2.1C and D2.4A
IOC UNESCO	 Contribution to the definition of the governance platform. Moreover, a review of the conceptual framework was also done.
PAP RAC	 Organisation and leading of work within WP2; finalisation of the stock-taking reports for the Mediterranean and Black Sea; meetings with PAP/RAC National Focal Points (NFPs) to discuss and validate the results of the stock-taking; animation of the platform together with BP/RAC and UAB; contacts with other partners and other WPs; participation in the meetings of the project SC; translation into French of the ICZM process and uploading to the Pegaso ICZM wiki; meetings to discuss the ICZM process; securing cooperation and synergies with other regional initiatives e.g. MedPartnership, SHAPE, MAREMED, MIRA, PERSEUS, etc. Finalisation of the deliverable on conceptual framework; Skype calls and meetings to discuss the text; organisation of the revision. Commenting and reviewing of the text of the Business Plan; contacts with possible donors and drafting of a proposal for the future Mediterranean ICZM platform. Finalisation of the deliverable on ICZM Platform lessons learnt and guidelines for the future; structuring and commenting the deliverable; organisation of the revision. Participation in the SC meetings and the Final Conference in the part on the governance platform.



UNOTT	- Coordinating input (incl. meeting) and writing D2.1B and D2.1 as lead author.
VLIZ	 Support to the ICZM Governance Platform through the Coastal Wiki, Internet, Intranet. Review and contributions to the WP2 deliverable, ICZM Process diagram.
UNIVE	- Contribution to the Task 2.4 / D2.4A / ICZM Platform
HCMR	- Elaboration of the deliverables: Greece-D.0012.Relationship between stakeholders and end-users Greece-D.0013.Delivearble 2.4.a. for CASEs - Contribution to the deliverable of Task 2.1. (Deliverable 2.1.c.)
NIOF	- ICZM Stocktaking of Egypt.
UOB	- Stocktaking of scientific, technical, legal, and institutional knowledge base.
МНІ	- Information on criteria for Governance resulted from and the Governance Platform developed within the Pegaso project has been used in our work and presented at several national meetings and at the local ICZM Pegaso web portal.
TDV	 The Tour du Valat contributed to the regional assessment with graphics and site-specific information from the CASE Bouches du Rhone. We also made a SWOT analysis of the participative process carried out in the Bouches du Rhone for the deliverable "Shared ICZM Governance Platform: Guidelines and Lessons learned".
BSC PS	- ICZM Stock taking finalized. Report on regional assessment (Mr. Mamuka Gvilava, amended by BSCPS).



2.3.1.4 WP2 dissemination activities

The following dissemination activities have taken place under the WP2; an intense dissemination activity confirming the usefulness of the project and its results:

- Meetings of the executives of UNEP/MAP and its components (ECP meetings) Pegaso included in the UNEP/MAP Programme of Work (PoW);
- ENPI CBC project MARE NOSTRUM kick-off (Haifa, March 2013) short presentation of the project;
- DG MARE expert meeting on Information and Knowledge (Athens, April 2013) detailed presentation of the Platform including SDI;
- MAP NFPs meeting (Athens, April 2013) information on the links with the EcAp process;
- Joint EU MSP-ICZM Expert Group (Brussels, June 2013) information about the project;
- Two articles submitted to the MEDCOAST Conference;
- Pegaso included in the PAP/RAC Progress Report for 2012-2013 submitted to PAP/RAC and UNEP/MAP NFPs:
- D2.1B shared with PAP NFPs for comments.
- Presentation of the project results at the PAP NFPs meeting back-to-back with the Mediterranean Coast Day (Rimini, September 2013);
- Presentation/discussion of COP decisions at the MAP NFPs meeting (Athens, September 2013) and COP18 (Istanbul, December 2013);
- Organisation of the side event at COP18;
- Dissemination of the project results throughout the Med and BS regions.

2.3.1.5 WP2 problems encountered and risks identified

- Surprisingly for such a large number of members in the Platform and such complex tasks, there were no major problems in implementing the WP2. Good spirit of cooperation, interest in the project activities and results, supported by a smoothly operating technical support, has yielded good results.
- Minor difficulties were encountered in relation with the timely submission of the stocktaking questionnaires and the time needed to collect valid and validate data and information. An additional "complication" was the decision taken by the Contracting Parties to the Barcelona Convention to update the results of the first run of stocktaking (finalised in early 2012) with fresh data that will serve as a reference base for the reporting on the ICZM Protocol implementation.
- Governance is a complex and time demanding issue that needs lots of facilitation effort but also it needs quality material to work on and with. Delays in making available such a material sometimes made it difficult to mobilise stakeholders, especially at the local level.
- For the continuation of the Platform, it would be necessary to ensure additional resources. The interest and demand exist but no concrete arrangements have yet been made to secure the future of the Platform.



2.3.2 WP3 Enabling a shared information infrastructure for Mediterranean and Black Sea basins

WP	Type of activity	Lead participant	PM	Start	End
3	RTD	UPO	167,7	1	48

Task		Leader	Start month	End month
3.1	Assessment on the data availability and data needs for the development of the Pegaso Spatial Data Infrastructure.	VLIZ	3	15
3.2	Implementation of Spatial Data Infrastructure for Pegaso.	UAB	12	48
3.3	Develop a Pegaso common content management platform.	UPO	1	35
3.4	Creation and maintenance of a collaborative web portal.	VLIZ	1	48
3.L	Planning of WP work plan (incl. objectives and indicators) and coordination of WP.	UPO	1	48

Deliverables for the period:

D3.2A	Report on the Mediterranean and Black Sea assessing SDI including existing viewers, their strength and limits, and the characteristics of Pegaso geoportal development.
D3.2B	Guidelines and training material for the SDI construction, geoportal and geonodes functionalities, included data harmonisation and interoperability, following INSPIRE principles, specially oriented towards capacity building with prototype.
D3.3A	Coastal and marine atlas for the Mediterranean and the Black Sea.



2.3.2.1 WP3 progress of work and status of activities

Status	Subtask	%
Complete:	29	100
In Progress:		
Not started:		
Past due:		
Total	29	100

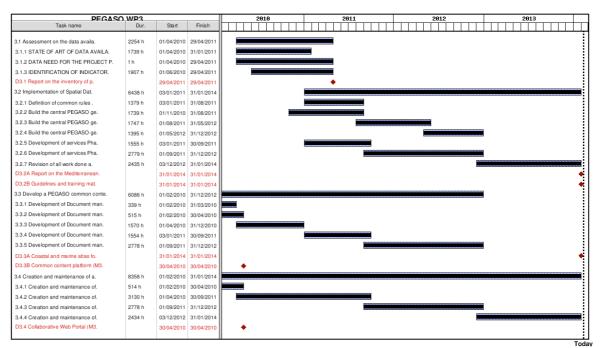


Figure 3: WP3 Gantt chart (end January 2014)

During this last reporting period the WP3 has concentrated on the following:

- Creation of a landing page for the WP3 products;
- Improvements of the geoportal and viewer with new functionalities and layers;
- Giving support to the partners on the implementation of their local geonodes;
- Producing harmonisation guidelines to integrate the Pegaso indicators and the IRA results in the SDI;
- Design, development and implementation of the Coastal Atlas;
- Update and maintenance of the Pegaso web portal and wiki.



Task	3.2	Implementation of the	Spatial Data	a Infrastructure for Pegaso
3.2	3.2.7	Revision of all the work done and definition of the needs and contents for the atlas with the WPs 2,4 and 5	M35-M48	 Local Geonodes Development and integration of the local geonodes in the central SDI VLIZ (Belgium), MHI/IBSS (Ukrania), HCMR (Greece), UNIGE (Envirogrids geonode), UNIVE (Italy), JRC (pending on connection with EMIS). VLIZ GeoServer and VLIZ Geonetwork are acting as the node for the Moroccan data. Shapefiles and data on the Al Hoceima Case are hosted on the VLIZ server, which is connected to the Pegaso SDI where the data can be displayed. Envirogrids acting as a node for BSCPS and the Guria Case publishing its maps and results. Through the central geonode, data and maps from the CASE Dalyan-Koycegiz (Turquey), have been also published. Map viewer and atlas New tools in the Viewer: split screen, query tool; Connection of geonodes and new layers in the Catalogue (Cumulativimpact index, local indicators, LEAC); Coordination with other WPs for the integration of products derived of WP 3,2,4,5 in the Atlas and in the SDI;
				Mapping can be also accessed through the Atlas.
				Deliverables
				- Finalisation of the deliverables D.3.2A, D.3.2B and D.3.3A:
				 Draft report on status for central geonode and SDI state of art (version 3);
				 Draft report on needs and new functionalities and feedback
				from partners (version 2);
				 Final design and development of Coastal Atlas and
				integration of Pegaso products in the SDI;
				 Final local Geonode Connection;
				 Indicator results and IRA products integration.





Pegaso VIEWER Pegaso ATLAS Pegaso CATALOG

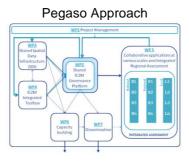


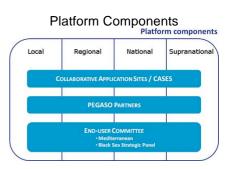
Task 3.3 Implementation of the Spatial Data			ial Data Infrastructure for Pegaso
3.3	3.3.5	Development of the Document management platform (Phase 3)	Helpdesk and maintenance during 4 years Great participation of the Pegaso partners: 200 credentials created, around 15.000 visits and 71.150 web pages visited. 193 news and announcements in the welcome area with more than 29.000 visits. More than 7.000 visits to the Forum section (31 Categories, 1.052 posts and 71 participants). More than 100 documents stored and 3.541 visits to the doc manager. During the 1 ^s t and the 2 nd Virtual Meetings, 316 and 843 visits were registered respectively.

Task 3.4	Creation and maintenance	a collaborative web portal.
3.4 3.4.4	Creation and maintenance of the Pegaso web portal (phase 3) M35-	Web portal updates: Content, Picture gallery, web pages, news Items, new wiki articles, news about Meetings. - 3 new images related to the Pegaso approach and platform (see below 212 pictures have been added from the 3 rd General Meeting in Rabat and 201 from the Final Meeting in Antalya. - New web pages: - Home: image of the ICZM platform is placed on a central page, previous homepage has been moved to 'Project overview' - Products: to centralize all products delivered by the Pegaso Project. - Public deliverables: description of the tools and deliverables from WP1, 2 & 3 - Training and tutorials: Polimedia videos - Dissemination: e-news, newsletters, bulletins, brochures and posters - Indicator factsheets: factsheets prepared by WP4 - Tools: tasks WP4. Changes to the layout of the Pegaso Wiki and creation (and update) of new articles (sea list below). - Publication of the Pegaso products and results (Translations (English French): - Indicator Factsheets - "Built up - "Natural Capital - D6.2 included in the web portal (Bridge).

New images added to the web portal









Pegaso web portal statistics

	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Total 2010	5729	9214	72974	261571	3.11 GB
Total 2011	13910	23164	133718	466238	7.42 GB
Total 2012	19400	32796	322477	615887	19.69 GB
Total 2013	93201	155203	1125603	1584429	22.46 GB
January 2014	4611	8714	70161	118829	2,23 GB

New wiki articles

- Application of LEAC in Pegaso (2612 views)
- Enabling a shared information infrastructure for Mediterranean and Black Sea basins (1316 views)
- How to explore science capacity (430 views)
- Participation in Pegaso study sites (346 views)
 - o Participation in Al Hoceima (596 views)
 - o Participation in Bouches-du-Rhône (489 views)
 - o Participation in Koycegiz Dalyan SPA (516 views)
 - Participation in the Danube delta (503 views)
 - o Participation in the Nile Delta (521 views)
 - o Participation in the North Adriatic (BHAM) (497 views)
 - o Participation in the North-Adriatic (DSS-DESYCO) (559 views)
- Pegaso IMAGINE workshops (332 views)
 - European Assessment Scenario Workshop (EASW) (739 views)
 - o Imagine methodology The Systemic and Prospective Sustainability Analysis (2262 views)
 - Pegaso Workshop 1 Understanding the context (793 views)
 - o Pegaso Workshop 2 Connecting and investigating (678 views)
 - Pegaso workshop 3 and 4 modelling and exploring (750 views)
 - o Pegaso Workshop 5 Suggesting and acting (668 views)
- Pegaso indicator core set (1.759 views)
- Pegaso participation methods (4.828 views)
 - Backcasting (1.401 views)
 - o Citizens monitoring (806 views)
 - o Future search conference (711 views)
 - Imagine methodology The Systemic and Prospective Sustainability Analysis (2262 views)
 - Key stakeholder interviews (738 views)
 - o Logical framework matrix (661 views)
 - o Mediation and Negotiation principles (855 views)
 - Open space technology (871 views)
 - o Organise a brainstorming session (670 views)
 - o Organise a field trip (637 views)
 - o Organise a focus group (690 views)
 - o Organise an expert panel (538 views)
 - Scenario testing (490 views)
 - o Sketch match (1171 views)
 - Snowball sampling (544 views)
- Pegaso project Indicators for Integrated Coastal Zone Management in the Mediterranean and Black Seas (2213 views)
- <u>Scenarios (Pegaso)</u> (571 views)
- The ecosystem Approach (634 views)

Wiki articles: translated to French

(Not yet available on the Wiki)

- Application of LEAC in Pegaso
- Enabling a shared information infrastructure for Mediterranean and Black Sea basins
- How to explore science capacity



- Pegaso participation methods
- Pegaso project Indicators for ICZM in the Mediterranean and Black Seas
- Scenarios (Pegaso)
- The ecosystem Approach (full article)

Updated wiki articles

- · Pegaso study site
 - Pegaso CASES (4597 views)
 - o Aegean Islands (5085 views)
 - o Al Hoceima coast (12152 views)
 - o Bouches du Rhône (13031 views)
 - o Dalyan-Köycegiz Special Protected Area (8983 views)
 - o Danube Delta (7550 views)
 - o Guria Coastal Region (5518 views)
 - o Nile Delta (5712 views)
 - North Adriatic Sea (6371 views)
 - o North Lebanon Coastal Zone (6072 views)
 - Sevastopol Bay (4059 views)
- · Legal frameworks ICZM
 - Barcelona Convention (10257 views)
 - o Black Sea Convention (1593 views)
 - o Mediterranean ICZM Protocol (3544 views)
- Spatial Data Infrastructure SDI
 - o The need for data sharing (7974 views)
 - o Common concepts (3936 views)
 - o Downloading of data (1416 views)
 - o Interoperability (1527 views)
 - o Metadata and metadata catalogues (1998 views)
 - o OGC Web Coverage Service (WCS) (1181 views)
 - o OGC Web Feature Service (WFS) (1615 views)
 - o OGC Web Map Service (WMS) (1153 views)
- ICZM Process Diagram
 - The ICZM Process a Roadmap towards Coastal Sustainability Introduction (42500 views)
 - The ICZM Process a Roadmap towards Coastal Sustainability Establishment (19749 views)
 - Establishing the ICZM Coordination Mechanism (1323 views)
 - <u>Defining the Territorial Scope for ICZM</u> (172 views)
 - Defining the governance context in a ICZM (1212 views)
 - Scoping
 - ICZM Scoping Pressures and Drivers (1189 views)
 - ICZM Scoping Problems and Issues (806 views)
 - ICZM Scoping Risks (806 views)
 - ICZM Strategies, Plans or Programmes (4848 views)
 - ICZM: Identifying Futures: Scenarios, Pilot Actions, and Funding (1280 views)
 - Engaging Stakeholders and preparing Communication Strategy for ICZM (1394 views)
 - Proposing Potential ICZM Vision (1196 views)
 - Deciding on Strategic Environmental Assessment (SEA) for ICZM (1925 views)
 - The ICZM Process a Roadmap towards Coastal Sustainability Analysis and Future (11529 views)
 - Building the Evidence: Diagnostic Report for ICZM (1776 views)
 - The ICZM Process a Roadmap towards Coastal Sustainability Setting the vision (9270 views)
 - Building Consensus in ICZM (1733 views)
 - Setting the Direction in ICZM (1264 views)
 - Measuring Success: ICZM Indicators (1654 views)
 - The ICZM Process a Roadmap towards Coastal Sustainability Designing the Future (9125 views)
 - The ICZM Process a Roadmap towards Coastal Sustainability Realising the Vision (5999 views)
- Integrating Climate Change into the ICZM planning process Analysis and Future (1228 views)
- Integrating Climate Change into the ICZM planning process Designing the Future (613 views)



- Integrating Climate Change into the ICZM planning process Establishment (1220 views)
- Integrating Climate Change into the ICZM planning process Introduction (853 views)
- Integrating Climate Change into the ICZM planning process Realising the Vision (737 views)
- Integrating Climate Change into the ICZM planning process Setting the Vision (766 views)

2.3.2.2 WP3 deliverable progress and status

WP	WP Task Id	Deliverable number	Deliverable name	Status
3	3.2	D3.2A	Report on the Mediterranean and Black Sea assessing SDI including existing viewers, their strength and limits, and the characteristics of Pegaso geoportal development (M48)	Submitted on the
3	3.2	D3.2B	Guidelines and training materials for an SDI construction, geoportal and geonodes functionalities, included data harmonisation and interoperability, following INSPIRE principles, specially oriented towards capacity building with Prototype (M48)	Submitted on the 12 th of February 2014.
3	3.3	D3.3A	Coastal and marine atlas for the Mediterranean and the Black Sea (M48)	Submitted on the 12 th of February 2014.
3	3.4	D3.4C	Live Collaborative Web Portal (VLIZ). Final product (M48).	Available on line.

2.3.2.3 WP3 use of the resources

Participant number	1	2	4	8	10	12	13
Participant short name	UAB	UPO	IFREMER	IUCN	VLIZ	JRC	UNIGE
Planned	55,3	62,0	4,0	1,0	25,0	2,0	1,0
3 rd period	27,68	8,1	1,56	0,0	4,05	0,59	0,0
Actual	81,14	65,19	1,79	1,36	24,48	3,49	2,05
Participant number	14	16	17	21	23	25	
Participant short name	HCMR	DDNI	UM5a	МНІ	TdV	BSC PS	
Planned	5,4	4,0	1,0	4,0	2,0	1,0	
3 rd period	1,56	0,0	1,74	1,0	0,0	0,0	
Actual	6,37	3,36	3,43	4,0	1,17	0,58	



Individual partner achievements:
The Pegaso partners have undertaken the following activities in WP3:

F	October Constitution
Fask	Contributions from partners
	See Task 3.2
	- Creation of SDI Geoportal in order to integrate all SDI components.
	- Design and deployment of the technology platform for hosting the Pegaso Atlas for
	the Mediterranean and the Black Sea.
JAB	- Creation of the Atlas (structure and contents) in collaboration with UPO.
	- Connection to additional geonodes (EnviroGRIDS/UNIGE and UNIVE).
	- Publication of layers related to Land and Ecosystem Accounting (LEAC) and
	Cummulative Impact Mapping (CIM) assessments.
	- Publication of layers related to Dalyan-Koycegiz Pegaso CASE.
	See Task 3.2 and Task 3.3
	- Coordination of local geonodes connection.
	- Arrangements and coordination with other WPs for the integration of products
	derived of WP 3,2,4,5 in the Atlas and in the SDI.
	- Design of a Coastal Atlas, and creation of contents from different CASES and
JPO	Pegaso products.
	- Skype meetings with the Atlas developers about the structure, proposals and
	contents of the Atlas.
	- Creation and coordination of Deliverables D.3.2A, D.3.2B and D.3.3A.
	- Maintenance and helpdesk of Pegaso intranet. (Hosting the SC, financial and
	technical discussions and forums, Storage of deliverables and products). Ifremer has developed and completed a map of potential cumulative impacts in the
	Western Mediterranean, which accounts for both stressors and environmental
FREMER	components had to be identified and confronted. These maps portray the seabed
	physical habitats according to the upper levels of the Eunis classification.
	See Task 3.2 and Task 3.4
	VLIZ GeoServer and VLIZ Geonetwork act as the geonode for the Moroccan data
	Shapefiles and data on the Al Hoceima Case are hosted on the VLIZ server,
/LIZ	connected to the Pegaso SDI where the data can be displayed.
	Collection of metadata. Proceeds (as because the displayed for the displayed (MPR) (1). The control of the displayed for the displa
	- Proposal for Harmonization in the visualisation of calculated indicators (WP3-4).
	- Georgia, invited expert to Pegaso CASEs Workshop 18-20/11/2013.
	- Seville, participation to Pegaso WP3-5 Technical Work Meeting 27-31/05/2014.
IRC	Preparing the JRC EMIS website to be used as geonode within the Pegaso project.
	Elaboration of the deliverables:
HCMR	Greece-D.0014.Greek CASE contribution to RA.
	Create and upload SDI material (GIS layers).
	The Sevastopol Bay interactive system for ICZM Pegaso purposes has been updated
мнı	as a standalone and online product to incorporate tools for Pegaso indicators
vii ii	calculations; local SDI geonode has been initiated and information has been uploaded for common utilization.
	Preparation of 26 shape files for the Al Hoceima CASE local geonode (with the help of



2.3.2.4 WP3 dissemination activities

Workshops and meetings:

- Pegaso map viewer workshop in the 3rd General meeting (19th-22nd of March, Rabat).
- Technical meeting WP3-WP4-WP5 (28-29th of May 2013, Sevilla, Spain).
- Steering Committee meeting (3-6th of September 2013, Barcelona, Spain).
- End-user meeting with presentation and revision of tools (22-23rd of September, Rimini, Italy).
- DG Environment and DG Research & Innovation workshop on Science-Policy Interface (14-15th of November, Brussels, Belgium).
- Pegaso CASEs training Workshop (19-21st of November 2013, Grigoleti, Georgia).
- SPINCAM (IOC-UNESCO, Glamders government and Permanent Commission for the South Pacific) (2-5th of December, Santa Marta, Colombia)

Conferences and scientific publications:

- Malvárez, G., Guisado, E., Navas, F and Giordano, A. 2013. Coastal Spatial Data Infrastructures: So far So Good?. Global Congress on Integrated Coastal Management: Lessons Learned to Address New Challenges, MEDCOAST, 30th October-3 th November, Marmaris, Turkey.
- Gvilava, M., Bakuradze, T., Gigineishvili, A., Allenbach, K., Guisado, E., Martínez, C and Malvárez, G. 2013.
 Data Sharing Inspired by Pegaso SDI Georgian CASES. Global Congress on Integrated Coastal Management: Lessons Learned to Address New Challenges, MEDCOAST, 30th October-3th November, Marmaris, Turkey.

2.3.2.5 WP3 problems encountered and risk identified

- Problems are expected to complete the Atlas content if indicators calculated in the content of CASEs are not submitted to SDI team on time.
- Problems are encountered with the delay that Indicators of CASEs were carried out as well as the delay of the local Geonodes connection, that compromise the timing of achievement to show indicators and the Atlas contents.

D1.4C 3rdECR/UAB/140327-L-1.2



2.3.3 WP4 Multi-scale tools, methods and models

WP	Type of activity	Lead participant	PM	Start	End
4	RTD	4	290,2	1	48

Task		Leader	Start month	End month
4.1	Indicators to measure sustainable development of coast and sea	f IOC	3	45
4.2	Coastal land and marine ecosystem accounting.	UNOTT	3	45
4.3	Scenarios	UNOTT	7	45
4.4	Participatory methods	UNIVE	3	45
4.5	Economic assessment.	IFREMER	8	45
4.6	Integration of assessment tools.	IFREMER	20	48
4.L	Planning of WP work plan (incl. Objectives and indicators) and coordination of WP.	IFREMER	1	48

Deliverables for the period:

D4.1	Report and accompanying fact sheets documenting a populated, core set of indicators for assessing progress towards sustainable development in the coastal zones of the Mediterranean and Black Sea Basins
D4.2	Report, accompanying database and supporting materials on LEAC Methodology and how to apply in CASES
D4.3	Report and accompanying multi-media supporting materials describing the use and application of scenarios for multi-scale ICZM across the Mediterranean and Black Sea Basins
D4.4	Report, accompanying supporting materials and guidelines for the use of participatory methods and application for multi- scale ICZM across the Mediterranean and Black Sea Basins
D4.5	Report and supporting materials to economic assessment methods to decision making within the coastal zones of the Mediterranean and Black Sea Basins
D4.6/6.2	Integrating assessment scheme for Mediterranean and Black Sea regions.



2.3.3.1 WP4 progress of work and status of activities

Status	Subtask	%	
Complete:	31	67	
In Progress:	15	33	
Not started:	0	0	
Past due:	15	33	
Total	46	100	

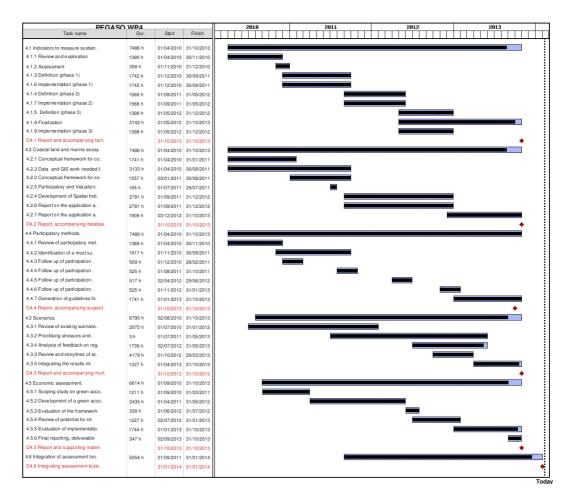


Figure 4: WP4 Gantt chart (end January 2014)



During this second reporting period the WP4 has concentrated on the following:

- Organizing the inputs of the Pegaso CASEs to calculate the Pegaso Indicators and thus to contribute to the IRA as local examples, liaising with the WP3 SDI for the harmonization of the available data and preparing the materials for the ICPC training workshops.
- Testing the applicability of the LEAC tool for ICZM and extracting accounts for regional assessments;
- Running the BBN workshop at the 3rd Pegaso General Meeting in March 2013 and preparing the regional report.
- Evaluating the implementation trials in the CASEs BdR and Al Hoceima for what refers to the Economic Assessment;
- Finalizing the WP4 deliverables and the training materials (polimedia videos);
- Integrating the WP4 materials, supported with practical illustrations based on applications over some CASEs, in the Pegaso web portal.

Task 4.1		Indicators to measure sustainable	Indicators to measure sustainable development of coast and sea.						
4.1	4.1.8	Implementation (phase 3)	M28- M35 -	Methodological approach for indicator calculation and analysis with links to the ICZM Protocol and other relevant policies (e.g. Marine Strategy Framework Directive); Methodological factsheets developed and published; Contact with partners in charge of CASEs for indicator calculation at local level and definition of their contribution for the IRA.					
	4.1.9	Finalization	- M28- M45 - -	 Completion of indicators calculation from partners and possible publication on SDI; Training workshop in Algeria (Alger, 13-15th of November 2013) Training Workshop in Georgia (20-21st of November 2013). Finalizing the D4.1. 					

During the last period of the project, the WP4.1 has concentrated on the development of the methodological factsheets of the core set of indicators identified. This core set was defined in order to focus on the priority areas as defined by the ICZM Protocol, the EU Marine Strategy Framework Directive, and the Ecosystem Approach initiatives of UNEP-MAP. After the completion of the methodological factsheets, the CASEs coordinators were requested to verify the possibility of calculating and applying the indicators at a local level or spatial scale. This collaboration has also led to the definition of the CASEs contribution to the Integrated Regional Assessment.

Moreover, two meetings were organized with the partners in charge of the development of the Spatial Data Infrastructure (SDI) in order to define the appropriate format for indicators calculation results in order to be properly visualised on the SDI.

Furthermore, in terms of capacity building, two workshops were organized in Algeria to discuss about a set of indicators for the Maghreb countries (Algeria, Morocco and Tunisia), and one workshop in Georgia for the application of indicators in the Black Sea. Finally, the Pegaso indicators approach was presented during meetings of the Southeast Pacific data and information network in support to integrated coastal area management (SPINCAM) project, which built on the Pegaso findings and experiences. The work done in the context of Pegaso helped reviewing the current approaches related to indicators for ICZM and filling some of the gaps in terms of methodologies and data collection and sharing. 15 methodological factsheets were compiled and are now available not only for the Pegaso partners but for a wider community interested in ICZM.

The Pegaso Indicators have been used at different scales and in different contexts and have proven to be a useful tool for analysis and for dissemination of results. The collaboration between the SDI developers and the CASEs colleagues has helped in understanding the potential and the usefulness of sharing data in a harmonised and standardised fashion. The dissemination activities have also shown the potential of the work



done in Pegaso for application in other geographical contexts. The Pegaso set of ICZM indicators should not only serve as a descriptive but also analytical tool for the understanding of the coastal system, being it a region (the Mediterranean or the Black Sea), a country or a local coastal area. The challenge is to perform an integrated assessment, or to develop a storyline, also at the level of the indicator assessment, both qualitative and quantitative. To achieve this, cross-linkages between indicators are proposed: between Indicators of Sustainable Development and Indicators of Governance, between Driver, State, Pressure, Impact and Response indicators, cross-cutting issues, themes and sectoral objectives. Particular attention needs to be paid to the cause-effect relationships – and to the processes that define these relationships at the scale at which the analysis is conducted.

Task	4.2	Coastal land and marine ecosystem acc	ounting	.
4.2	4.2.7	Report on the application and testing of accounting tools for ICZM (Final)	M35- M47	L Δccolinte extracted for regional accessments:

Progress in Technology and Science for LEAC:

Key tasks in the final stages of the work have been:

- The development of analytical methods for processing and integrating a range of different remotely sensed data sources for land cover stock and change, and biodiversity monitoring data into a consistent biophysical accounting system at regional scales;
- The development of consistent mapping products that extend methods developed for the EU to the Southern Mediterranean and Black Sea areas;

The findings of the accounting work have also been finalised. In summary it is argued that:

Land and ecosystem accounts provide the user with a picture of the ecological status of an area, or region, so that management decisions can be made. Such accounts are designed to provide key indicators or metrics that characterise the integrity of the ecosystems being considered. In this work we show how they have been developed for the Mediterranean and Black Sea Basins. Accounting methods are fundamentally data driven and application focussed. The work in Pegaso has described what data resources are available for land cover, biodiversity and ecosystem productivity, and for land cover how they can be processed to make a consistent set of accounts for the two sea basins. The work has also described how the robustness of the accounts can be tested and how they can be used to support decision making at the regional and CASE scales.

As a result of the work we recommend that:

(1) Accounting methods are taken forward in conjunction with the wider indicators that Pegaso has initiated, and that appropriate institutional mechanism for maintaining these sources of information are considered as part of the Business Plan that is now being developed as a legacy of the Project; and,



(2) That wherever possible accounting methods are considered in any future work programme undertaken by the Platform to make periodic regional assessments and analysis at the CASE scale, so that the outcomes and benefits of such work are fed back to the wider community.

A video presentation describing accounting methods and the accounts results has been prepared in January 2014: <u>Land and Ecosystem Accounts applications for ICZM support in the Mediterranean and Black Sea</u>
Coastal areas

Progress in Technology and Science for SEAC:

Key tasks in the final stages of the work have been:

- The development of a framework for sea ecosystem accounting using seascape ecology techniques as a proxy for stocks and flows;
- The development of a consistent method for seascape baseline characterization that can be monitored to evaluate changes in the quantity and quality of ecosystems;
- The development of a method for exploring and understanding the effects of pressures on ecosystem structure:
- Two case studies in Spain's Balearic Islands were used to test and demonstrate the use of SEAC.

In response to the need for a time efficient method of tracking changes in coastal and marine ecosystems and linking those changes to human activities, a framework for sea ecosystem accounts (SEAC) was developed in T4.2. The ecological functioning of marine and coastal ecosystems is poorly understood making it challenging to quantify the flows needed to construct sea ecosystem accounts. As seascape structure is inherently linked to ecological processes, it could be used as a proxy for flows. Furthermore, seascape structure is derived from spatial benthic habitat data, which are stocks. What this means is that measuring changes in seascape structure using seascape ecology techniques (such as spatial pattern metrics) could provide information on the changes in the quality and quantity of both stocks and flows. In other words, seascape ecology provides a quantitative and repeatable method of physical ecosystem accounting (Figure 1).

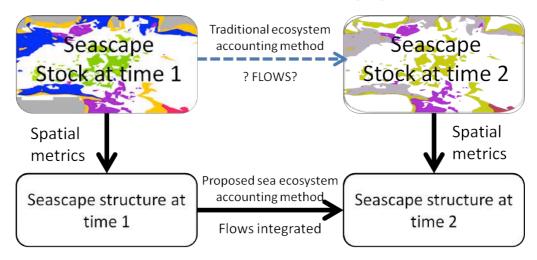


Figure 5: We propose using seascape ecology techniques for sea ecosystem accounting. These techniques quantify seascape structure, which provides valuable information on the quality and quantity of both stocks and flows.

This method provides valuable information at the seascape scale so that appropriate responses can be taken and adaptive management implemented.

A basic framework for sea ecosystem accounting using spatial pattern metrics is given in the final deliverable for Task 4.2 along with a case study to demonstrate the creation of baseline accounts for seascapes. A second case study shows how pressure indicators or environmental variables can be included in sea ecosystem accounts to track which components of the seascape are affected. While time series data is required to further develop this ecosystem accounting method, the seascape ecology approach is certainly a positive step in the direction of creating physical ecosystem accounts of coastal ecosystems.



The main limiting factor of this study was the availability of spatial data. While spatial metrics can provide valuable information at all scales, even coarse resolution data is lacking in the Mediterranean Sea. Benthic habitat maps are confined to scattered local scale studies or modelled distribution maps at the regional seascale (currently only available for the Western Mediterranean). Time-series data is practically non-existent. Disturbance data is in most cases only available at coarse spatial resolution (minimum of 1 km2) resulting in a limited number of disturbance indicators that could be included at the scale of this study. It is therefore recommended that future studies carefully weigh their objectives against the availability of data.

This is a first step towards creating sea ecosystem accounts and as spatial data becomes available, so the ability of these accounts to represent reality will improve. We recommend that the techniques presented in this report be tested with time-series data at a various scales to ensure their robustness. The next step is to link spatial metrics to ecosystem services for the purpose of creating monetary ecosystem accounts. Valuation of ecosystem services is required for externalities to be included in the market price of marine resources. Linking spatial metrics to biological variables is recommended to further enhance the possibilities for effective marine spatial planning and management.

Training material for SEAC consists of a polimedia video explaining the background and application of seascape ecology techniques for seascape baseline characterization and how to determine the impact of pressures on coastal and marine ecosystems (http://polimedia.uab.cat/#v_440). A second polimedia video delving into more detail on SEAC has been recorded in January 2014:

Land and Ecosystem Accounts applications for ICZM support in the Mediterranean and Black Sea Coastal areas

Progress in Technology and Science for WMIIE:

Key tasks in the final stages of the work have been:

- An expert survey to gather expert opinion on the vulnerability of Mediterranean coastal and marine ecosystem components to anthropogenic activities;
- Spatial data gathering and processing of spatial explicit datasets on pressures and ecosystems in the Mediterranean Sea:
- Calculation of the cumulative impact index and associated products.

Understanding where multiple pressures are occurring, their principal source and how they impact marine and coastal ecosystems is essential to support these strategies and is a requirement of the developing marine policies (Marine Strategy Framework Directive (MSFD), ECAPMAP). At present, an integrated qualitative and quantitative understanding of the relationship between pressures and impacts in the marine environment is far from being achieved. In 2007, Halpern et al. provided a way to predict ecosystem response to pressures using expert knowledge. Using this methodology and its developments in more recent studies, a cumulative impact map is being created by Pegaso for the Western Mediterranean Sea (Spain, France, Italy, Morocco, and Algeria). Not only will this approach be consistent and comparable across all marine regions and sub-regions, but it will also enhance the cross-boundary cooperation between EU and non-EU countries assessing the availability of harmonized data for this area. This study will provide a framework to extend the capacity of implementing the cumulative impact index methodology to the rest of the Mediterranean and Black Sea as necessary datasets become available. The cumulative impact map will be an integrative component of the Pegaso toolbox, which includes tools such as ecosystem accounts, indicators, scenarios, participatory methods and economic valuation.



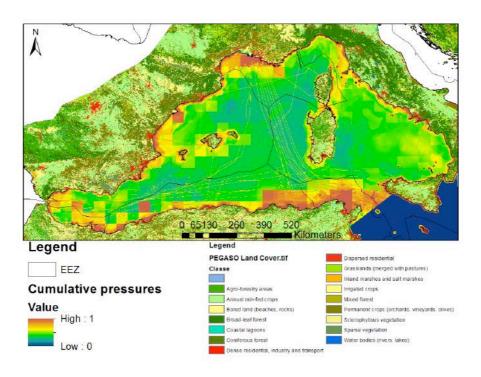


Figure 6: Cumulative pressure index for the Western Mediterranean Sea.

Understanding how multiple stressors can impact marine ecosystem is still in its infancy and uncertainty remains very high. However waiting for the ideal conditions to understand pressures/status relationships is a luxury that marine ecosystems and their managers can hardly afford (Parravicini et al., 2010).

Conscious of that, the goal of this exercise is not to provide a realistic prediction of where and with which intensity Mediterranean ecosystems are impacted by human activities but to provide a dynamic approach that help stakeholders and decision makers to participate, formulate and visualize the link between human activities and the potential impact they have on surrounding ecosystems.

A video presentation describing WMIIE was produced (http://polimedia.uab.cat/#v_385).

Task	4.3	Scenarios.			
4.3	4.3.3	Review and storylines of scenario studies undertaken by Plan Bleu in the Mediterranean region, with recommendations on current trends, existing time-lines and geographically coverage of existing scenarios in the context of Pegaso.	M33- M38	-	Internal deliverable submitted in last reporting period. Turned into a Plan Bleu report available under: http://planbleu.org/ sites/ default/files/publications/Pegaso _scenarios _planbleu_0.pdf Comprehensive Power Point presentation used in various Pegaso events.
4.3	4.3.4	Analysis of feedback on regional scale scenarios by CASEs, and recommendations on development of scenarios within the context of Pegaso based on an understanding of the differences and similarities between cases in terms of their 'future thinking'.	M30- M40	- -	Internal deliverable ID4.3.4 submitted on time. Development of BBN tool in association with workshop in Rabat M39. Further elaboration on barriers to ICZM and their generality within and beyond case areas; matric of barriers against information sources for inclusion in D4.3.
4.3	4.3.5	Integrating the results into the deliverable D4.3	M39- M45	-	The structure of the final deliverable has been circulated. Resources within this task and period are focused on finalising the final deliverable.

The internal deliverable ID4.3.3 (provided by Plan Bleu) was turned into a technical report entitled "Building on the Mediterranean scenario experiences - Crosscutting approaches between regional foresight analysis and



participatory prospective". This technical report was one of the materials aimed at supporting the "Scenarios" Regional Workshop held in Arles (France) on 13-15 October 2012. This technical report was made of several parts and elements:

- Synthesis of existing foresight analysis in the Mediterranean, both "business as usual" and alternative scenarios. The sector by sector approach was developed in addition to the presentation of transversal scenarios (cross-cutting approach among the sectors studied);
- A Policy Paper focusing on "Seeds of change, inflection of current trends" aimed at taking into account changes and recent events in the Mediterranean; and,
- Focus and feedback on the "Imagine" method for strengthening participatory prospective at the local scale (PEegaso CASEs).

The Rabat workshop was designed to use scenario approaches as a deliberative tool, designed to develop a shared understanding of ICZM issues. Its three fundamental aims were:

- 1. To better understand the factors that must be considered in relation to the policy goals of 'balanced urban development' and the 'preservation of natural capital';
- 2. To explore how participatory methods could be used to analyse issues related to balanced urban development and the preservation of natural capital in an interactive way; and,
- 3. To help people in the consortium see how different tools being developed within Pegaso could be linked and integrated.

The strong participatory theme was designed to link with the important work on such methods being undertaken by UNIVIE in support of subtask ID4.3.4.

Following the analysis of the results of the Rabat workshop, and in particular the barriers to implementing the ICZM goals of 'balanced urban development' and the 'preservation of natural capital', a literature review and analysis of case materials has been made to test the generality of the barriers identified in the workshop. The results will be used to scope the recommendations for any scenario work undertaken by the Governance Platform.

Progress in Technology and Science:

As a result of the analysis of barriers to future implantation of ICZM the major conclusions to emerge are that:

- 1. Issues of governance continue to stand out as being of paramount importance. This finding confirms the general conclusions from the 2012 Arles and Istanbul meetings, and suggests that interventions and efforts to ensure more effective institutional capacity and deeper political commitment are probably essential. The results also seem to suggest that the indicators proposed by Pegaso are likely to be useful ways by which the outcomes of better governance might be assessed. This finding has implications for the work undertaken as part of the Pegaso Regional Assessment (T5.2).
- 2. In terms of developing and using futures thinking to help people understand and discuss issues, the influence diagram exercises in the workshops appeared to work well as a vehicle for deliberation, and there was some success in using Bayesian Belief Networks (BBN) as a focus for discussions about the future. It has been concluded that influence diagrams and BBN tools could be effective decision support tools, and useful ways of engaging with stakeholders.

Potential impact and innovative aspects can be seen in two aspects:

- Following the Rabat workshop several groups have attempted to apply influence diagrams and BBN as
 deliberative tools with stakeholders in Lebanon and Turkey; this has been led by UAB. This work
 contributes to the goal of sharing of good practice in the application of scenario products and processes in
 decision making related to ICZM issues.
- The experience of the Rabat workshop and subsequent analysis of the barriers to implementing ICZM has enabled a strong connection to be made to the work on ICZM indicators (T4.1), the articulation of the principles underlying ICZM (T2.1), and Regional Assessment (T5.2). Further work needs to be done on looking at how mapping data can be used as an input into the development of influence diagrams and BBNs, especially in the context of better understanding how outcomes would be different in different geographical situations. This has ensured that the Development of scenario products consistent with the ICZM indicators and accounting methods developed within Pegaso.



Task 4.4	Participatory methods.						
4.4.7	Generation of guidelines for the use of the tools adapted to the ICZM context	M36 -M45	-	Development of the Wiki guidelines on participation (February 2013). Preparation of the Wiki pages experiences on public participation (July 2013). Preparation of the Polimedia Video on Public Participation (September 2013). Presentation of the paper "participatory experiences in the Pegaso project" Soriani S.,Buono F., Bordin A., Tonino M., Camuffo M. at the Global Congress on ICM (EMECS 10 - MEDCOAST 2013 Joint Conference- Antalya Turkey 30th October-3nd November 2013). Finalization of the Deliverable Report, accompanying supporting materials and guidelines for the use of participatory methods and application for multi-scale ICZM across the Mediterranean and Black Sea Basins.			

The task 4.4 regarding the tool of participation has achieved the following technical results:

- Development of wiki Guidelines on participation for ICZM and wiki pages reporting examples of participatory experiences in the CASEs.
- Preparation of the Polimedia video "<u>Participation in Pegaso</u>". The Video explains the aims and objectives of participation in ICZM initiatives, the structure of the Wiki Guidelines proposed by UNIVE and gives some examples from the CASEs.

The main scientific results have been:

- Finalization of the guidelines "Participation Methods for ICZM implementation". The guidelines offers some theoretical background on participation, a review of participatory methods as well as concrete examples of participatory experiences from the CASEs.
- Publication of the paper "Participatory experiences in Pegaso" Soriani S., Buono F., Bordin A., Tonino M., Camuffo M. In Ozhan, E. (Editor), 2013, Proceedings of the Global Congress on ICM: Lessons Learned to Address New Challenges, EMECS 10- MEDCOAST 2013 Joint Conference, 30 October-03 November, Marmaris, Turkey, MEDCOAST, Mediterrenean Coastal Foundation, Dalyan, Mugla, Turkey, vol 1-2, 1392p.

Task 4.5		Economic assessment.						
4.5	4.5.5	Evaluation of implementation trials in CASEs	M36- M45					
	4.5.6	Final reporting, deliverable	M44- M45	nianned at intra regional level).				

During the last period of the project, Task 4.5 has concentrated on the finalization of the Deliverable D4.5 (Economic assessment guidelines) and related supporting materials. The Bouches-du-Rhône CASES was used as an illustration of the approach for local scale. The workshop to test indicators in a participatory way was postponed after the end of the project, but the online participatory platform was developed and can be seen as an additional and complementary tool.

This last period was also marked by the contribution to the Integrated Regional Assessment (IRA). Another assessment framework was developed to target the regional scale, as it couldn't rely on an upscale of the local assessment framework due to paucity of data.



Finally factsheets and videos were updated and new ones produced:

Economic assessment methods to decision making within the coastal zones of the Mediterranean and Black Sea Basins, **Part A Degradation costs**: http://polimedia.uab.cat/#v_481

Economic assessment methods to decision making within the coastal zones of the Mediterranean and Black Sea Basins, **Part B – The Regional dimension**: http://polimedia.uab.cat/#v_482

Raux P., Mongruel R., Bailly D. (2013). Report and supporting materials to economic assessment methods to decision making within the coastal zones of the Mediterranean and Black Sea Basins. Pegaso Project, FP7 ENV.2009.2.2.1.4, Deliverable D4.5, 70p. Available from Pegaso website from February 2014.

Raux P. (2013). A review of Socio-economic information/Indicators in support to coastal zone management at the scale of the Mediterranean and Black Sea. Pegaso Project, FP7 ENV.2009.2.2.1.4 Integrated Coastal Zone Management, 39p. Available from Pegaso website from February 2014.

Progress in Technology and Science:

The economic assessment task designed and developed two operational assessment frameworks in support to the ICZM protocol. The first one is thought to be applied at local scale (CASES to national) and is based on a cost based approach to assess the cost of degradation of coastal and marine ecosystems. The second one targets the regional scale and is based on an indexes based approach to assess regional seas and their neighbouring countries according to their levels of marine industry activities, socioeconomic development and environmental degradation.

Article 2 of the ICZM Protocol puts the issue of ecosystem degradation to the front of the stage. Ecosystems are degraded by over-use and there's then a need to remediate to this degradation in order to sustain commons ecosystem services supporting economic welfare and social wellbeing. A cost based approach was then designed and implemented over the Bouches du Rhône CASE as a demonstration site. Aside ecosystem degradation cost, an indicator-based approach was developed to provide CASES with minimum and realistic economic information to inform their selected issues and to provide a clear overview of socio-economic pressures and associated environmental degradation. A series of indicators was proposed to provide a characterization of actors' economic weight for each activity weighing over natural resources (activities based on direct or indirect uses of the site shared resources) at an ecosystemic scale, according to boundaries linked to natural resources uses (river basins, sub-river basins...), to cultural or economic logics to produce a new map of the information usually provided according to administrative scales.

The economic assessment at regional seas scale relies on an improved and adapted index based approach developed for the economics of Large Marine Ecosystems (LMEs) of the World. Updated indexes were produced for both Mediterranean and Black Seas and completed with environmental indexes related to resources depletion.

Potential impact and innovative aspects:

Cost-based approach balances the initial enthusiast for monetary valuation. This led to enlighten limits and constraints of methods and to consider them according to the issue to be addressed and to the local context of implementation. For instance, instead of using CBA as a decision-making tool it can be used in a much more heuristic manner, where sensitivity analysis is employed in order to explore elements of the analysis which may be uncertain or controversial.

The cost-based approach offers various practical solutions for stakeholders and end-users. The analysis is based on degradation thematics as they appear in current policies. It is possible to identify the legal measures or potentially the citizen initiatives which are intended to respond to these degradation thematics (which may be used as a proxy for the "reference state"). The cost of these measures or initiatives may be estimated based on data which corresponds to observable behaviours (investments, etc.). The residual impacts reveal the efficiency of the current expenditures as regards the current norms (or social demand) for ecosystem preservation. The cost-based approach explicitly takes into account the collective choices that have been made about the formulation of the environmental problems, as well as the objectives and norms which exist to tackle these issues, and the effort necessary to achieve them.



Task 4.6

Integrating assessment scheme for Mediterranean and Black Sea regions.

During the last period of the project, Task 4.6 focussed on the writing process of Deliverable D4.6 (Economic assessment guidelines) and related supporting materials. T4.6 also contributed to the Integrated Regional Assessment task by providing input to design the integration process.

The integration of assessment tools developed within the Pegaso project attempts to highlight the link between tools to identify added value. Integrating economic assessment on these methods provides new hints and a better implementation on site by decision makers. An integrated assessment framework informed and supported by Pegaso tools was then proposed, together with a step-by-step approach to facilitate its implementation. As the compilation or integration of tools do not making an integrated assessment, an integrated information system fed by Pegaso's tools was proposed to act as a coherent integrated assessment framework. Prior to the framework development, roots demand and needs for integrated assessment was reviewed for coastal and marine socio-ecosystems in the context of the ICZM protocol.

The economic assessment approach (T4.5) was thought and built beyond of its solely assessment so that it can take place in a wider assessment framework where different tools can be implemented in order to perform assessment of socio-ecosystems according to a chain of actions. Entitled the Environmental Territorial Diagnosis (ETD), the framework acts as a Regional Information System in support to ICZM through an integrated information system. Two regional workshops were implemented for the Mediterranean and Black Sea to test the rationale of the approach and to explore the different ways to deliver the integration task (framework, website, etc.). Following this implementation and according to feedback, T4.6 proposed the implementation of a regional envisioning workshop as a practical test for an integrated assessment scheme and scenarios elaboration (Rabat 2013). T4.6 coordinated the workshop and T4.3 implemented it.

The final update of the integrated assessment task was implemented following the final conference in Antalya in order to integrate conference feedback about the scheme proposed by T4.6 and a proposal of roadmap for sustaining Pegaso tools through integrated scheme and through the ICZM protocol network.

In addition to D4.6, a video was also produced as a supporting material and a factsheet was issued too.

Videos: Integration of assessment tools. Integrating assessment scheme for Mediterranean and Black Sea regions: http://polimedia.uab.cat/#v_483

Raux P., Bailly D., Le Gentil E. (2014). Integrating assessment scheme for Mediterranean and Black Sea regions. Deliverable D4.6, available from Pegaso website from February 2014.

Progress in Technology and Science:

Very few operational integrated assessment frameworks exist in the field of coastal and marine socioecosystems. The most operational ones are related to systems dynamics or Individual Based Modelling. Beyond of these modelling approaches (including soft modelling), the added-value of the Environmental Territorial Diagnosis can be significant.

Potential impact and innovative aspects:

Applying the range of Pegaso tools and other available tools available on study sites, the ETD approach proposes a coherent integrated framework from issue appropriation to action. Being problem oriented it allows to integrate actors and end-users all along the process and from the very early beginning.



2.3.3.2 WP4 deliverable progress and status

There are no due deliverables for this second reporting period but the following documents have been produced:

WP	WP Task Id	Deliverable number	Deliverable name	Status
4	4.1	D4.1	Report and accompanying fact sheets documenting a populated, core set of indicators for assessing progress towards sustainable development in the coastal zones of the Mediterranean and Black Sea Basins.	Submitted on the 20 th of January 2014.
4	4.2	D4.2	Report, accompanying database and supporting materials on LEAC Methodology and how to apply in CASEs	Submitted on the 1 st of April 2014.
4	4.3	D4.3	Report and accompanying multi-media supporting materials describing the use and application of scenarios for multi-scale ICZM across the Mediterranean and Black Sea Basins	Submitted on the 24 th of January 2014.
4	4.4	D4.4	Report, accompanying supporting materials and guidelines for the use of participatory methods and application for multi-scale ICZM across the Mediterranean and Black Sea Basins.	Submitted on the 30 th of January 2014.
4	4.5	D4.5	Report and supporting materials to economic assessment methods to decision making within the coastal zones of the Mediterranean and Black Sea Basins.	Submitted on the 24 th of March 2014.
4	4.6	D4.6	Integrating assessment scheme for Mediterranean and Black Sea regions.	Submitted on the 1 st of April 2014.

2.3.3.3 WP4 use of the resources

Participant number	1	2	3	4	5	6	7
Participant short name	UAB	UPO	Plan Bleu	IFREMER	ACRI-EC	IOC UNESCO	PAP-RAC
Planned	48,7	1,0	28,0	29,0	4,5	7,0	7,0
3 rd Period	15,06	1,1	1,42	9,7	1,9	2,02	0,09
Actual	44,55	1,9	28,33	36,35	5,74	11,61	5,05
Participant number	8	9	10	11	12	14	15
Participant short name	IUCN	UNOTT	VLIZ	UNIVE	JRC	HCMR	MEDCOAST
Planned	1,0	24,1	7,0	40,0	14,0	3,9	4,0
3 rd Period	0,0	14,0	1,06	4,95	1,12	0,0	0,0
Actual	0,81	42,23	7,01	35,01	17,55	4,59	1,73



Participant number	16	17	18	19	20	21	23
Participant short name	DDNI	UM5a	AREA-ED	NIOF	UOB	MHI	TdV
Planned	4,0	8,0	6,5	12,0	15,0	13,0	4,0
3 rd Period	0,2	1,01	11,42	3,50	3,21	3,25	1,38
Actual	4,88	9,01	11,42	11,93	13,39	13,0	7,51
Participant number	24	25					
Participant short name	NARSS	BSC PS					
Planned	5,5	3,0					
3 rd Period	0,0	3,43					
Actual	5,0	3,88					

Individual partner achievements
The Pegaso partners have undertaken the following activities in WP4:

Partner	Contribution for the period
UAB	The UAB contributed to WP4 by developing a framework for sea ecosystem accounting (SEAC) to meet the requirements of task 4.2 (Land and sea ecosystem accounts). A consistent method for seascape baseline characterization was developed using seascape ecology techniques. This tool can be used to quantify the quantity and quality of ecosystem stocks and flows using seascape structure as a proxy. Two case studies in the western Mediterranean Sea were used to demonstrate the application of SEAC and how human pressures influence ecosystem stocks and flows.
UPO	 Preparation and coordination of a technical meeting in Seville to discuss indicators and regional products (IRA and LEAC) into the SDI. Presentation of a SDI demo. 1) IRA: balance use of coastal zone and natural capital, 2) Pegaso CASEs: indicators, Regional Indicators, and Geonodes. Coordination with the WP4 and the CASEs to integrate local and regional indicators into the SDI and the Atlas.
PLAN BLEU	 Indicators (Task 4.1): Contributions to and review of the methodological reports and factsheets. Scenarios (Task 4.3): Updating, finalisation, and dissemination of the Internal Deliverable ID4.3.3 "Building on the Mediterranean Scenario Experiences – Cross-cutting approaches between regional foresight analysis and participatory prospective" (technical report, scientific papers, summary for decision-makers, and appendices). Contribution to the final report "Scenarios Tools for ICZM: Lessons and Applications". Contribution to factsheets and Wiki articles. Contribution to the preparation of the Rabat Workshop. Participation (Task 4.4): Inputs in terms of methods, contributions to reports and factsheets, contribution and review of Wiki articles, attendance in meetings. Scientific papers published.
IFREMER UBO	 UBO ensured the coordination of WP4 over the reporting period and was in charge of two WP4's tasks: T4.5 the socio-economic assessment and T4.6 devoted to the integration of tools. In that field UBO completed the work planned in each of these tasks and delivered the reports in terms of guidelines with supporting materials. Under the WP4 coordination, UBO also proposed the implementation of a regional visioning workshop as a practical test for an integrated assessment scheme and scenarios elaboration. The workshop was run by T4.3 and managed by UBO during the project meeting held in Rabat on March 2013. UBO also contributed to T4.2 (LEAC/SEAC) through involvement in issuing D4.2 with T4.6 (Integration task) inputs. As WP4 leader, UBO attended and contributed to all Steering Committees on the reporting period.



	 Outputs from WP4 were used to feed WP5 at CASEs level, especially over the Bouches du Rhône CASE were T4.5's tools were implemented. UBO brought support to the CASE for the socio-economic assessment. UBO also contributed to the Regional Assessment through WP4 by implementing a regional
	assessment at the Mediterranean scale, contributing to the Integrated Regional Assessment and introducing the Integrated Assessment approach.
	IFREMER:
	We have carried out a systematic review of the scientific literature, which deals with the use of socio- economic information in support of coastal zone management. This review covered 1682 articles over the period 1992-2011, from which 170 were found to be relevant. The results of the systematic review are presented in a scientific paper which has been submitted for publication in March 2014.
ACRI EC	 Contribution to SEAC definition and testing. A slight work overload has been used to finalise iteration with UAB about parameters to be used for posidionia as well as EO products preparation.
IOC UNESCO	 During the last period the activities related to WP4 were mainly related to the assistance to partners willing to calculate the indicators and to use the factsheets developed in the context of task 4.1. Moreover, an effort was made to liaise with WP3 and the viewer and atlas development of the SDI in order to be able to homogenously visualize the results of the indicators calculation.
PAP RAC	 Contribution to the finalisation of the deliverables on indicators and regional assessment; participation in Skype conferences and forum exchanges to finalise the set of indicators; commenting documents sent by the WP4 leaders and task managers; links with the UNEP/MAP EcAp work on indicators, targets and GES.
	 Assistance with participatory methods and techniques; facilitation of the project meetings and workshops.
	- Task 4.1: Input into Indicator discussion.
UNOTT	- Task 4.2: Coordinating all partners input and writing D4.2-Part A as leading author, contributing to overall D4.2 (UAB beneficiary).
	 T4.3 (Scenario): Coordinating input (incl. meeting) and writing D4.3 as lead author. Indicator factsheets final versions (see 'Products' section).
VLIZ	- Evaluation questionnaires of the use of indicators.
	- Coordination & communication: output of indicator calculations by UNOTT and CASEs and partners.
	 Contribution to the D4.3: Scenarios Tools for ICZM: Lessons and Applications Development of the participation WIKI guidelines.
	 Finalization of the D4.4 Report, accompanying supporting materials and guidelines for the use of participatory methods and application for multi-scale ICZM across the Mediterranean and Black Sea Basins.
UNIVE	 Preparation and presentation of the paper: Soriani S., Buono F., Bordin A., Tonino M., Camuffo M., Participatory Experiences in Pegaso Project. In Ozhan, E. (Editor), 2013, *Proceedings of the Global Congress on ICM: Lessons Learned to Address New Challenges, EMECS 10- MEDCOAST 2013 Joint Conference,* 30 October-03 November, Marmaris, Turkey, MEDCOAST, Mediterrenean Coastal Foundation, Dalyan, Mugla, Turkey, vol 1-2, 1392p.
IDO	 Contribution to the D4.2 Report, accompanying database and supporting materials on LEAC Methodology and how to apply in CASEs.
JRC	 Contributed to University of Nottingham assessment, supplying wave data for the Mediterranean Sea Contribution to the D4.3 Report and accompanying multi-media supporting materials describing the use and application of scenarios for multi-scale ICZM across the Mediterranean and Black Sea Basins.
DDNI	- Scenarios work.
UM5a	 Elaboration and validation of the CASE Indicators with the local stakeholders Work on Indicators with the representative of the Ministry of Environment for his participation to the Pegaso Regional meeting in Algiers.



AREA ED	 Questionnaire Indicateur; Test des indicateurs; Rapport indicateur.
NIOF	 Collect information regarding the proposed scenario for the sea-level rise and coastal erosion of Nile Delta case. Working with Nile Delta scenario and preparing the materials sent to Nottingham.
UOB	- Assisted in the development of the indicators.
МНІ	 ICZM Pegaso developed indicators have been introduced to the Sevastopol Bay interactive system and used for assessment of the state of marine environment and for regional assessment.
TDV	The Tour du Valat participated in various activities in the WP4. We worked with the task leaders for LEAC and scenario planning to validate and improve the final deliverables.
BSC PS	 Stock taking, testing and elaboration of ICZM Indicators and ICZM Guidelines for Romania and Ukraine, comments and suggestions to progress indicators.



2.3.3.4 WP4 dissemination activities

The following dissemination activities have taken place under WP4:

Workshops:

Presentation of the indicators results at the IOC-UNESCO General Assembly, Paris, 26 June - 5 July 2013

Papers and articles:

- Presentation of the paper 'A set of indicators for ICZM' at the Global Conference on ICM: Lessons learned to address new challenges, Marmaris, 30th of October – 2nd of November 2013.
- Presentation of the paper "Seascape Metrics for the Mediterranean Sea: A Case Study" at the Global Conference on ICM: Lessons learned to address new challenges, Marmaris, 30th of October – 2nd of November 2013.
- Presentation of the paper "Participatory Experiences in Pegaso Project" at the Global Conference on ICM:
 Lessons learned to address new challenges, Marmaris, 30th of October 2nd of November 2013.
- AREA ED Organisation d'un workshop Maghreb sur les indicateurs GIZC et Réalisation d'un publication sur les aires marines protégées.
- Le Gentil E., Mongruel R. (2014). "A Systematic Review of Socio-economic Assessments in Support of Coastal Zone Management (1992-2011)", Journal of Environmental Management, Submitted.

2.3.3.5 WP4 problems encountered and risk identified

On the final period of the project, there were no particular problems beyond of those already quoted in previous periods.

They became more accurate and especially consist in:

- In some tasks (Scenarios and Economic Assessment tasks) competencies in the partnership were insufficiently
 assessed and led to a reallocation of effort to other tasks where competencies were more useful. But this
 induced a significant decrease in effort level for the concerned tasks with an effort unequally distributed among
 tasks.
- Integration task (T4.6): as many approaches wanted themselves integrated, Pegaso should have immediately focused on the integration beyond of tools instead of proceeding to ex-post integration. Approach should be reversed by defining and structuring an integrated framework before working on tools with the objective of constraining tools to the integrative dimension of the issue. This can also be read through the effort allocated to this task compared to other ones in WP4. There's also an important need to integrate much more social scientist working in the field of governance and institutional analysis.
- As in a number of important research project having to explore methodological frameworks, tools and related guidelines are often too lately provided to application sites that have to go ahead on their own. A consequence is often a reverse functioning scheme, with application and demonstration sites contributing to build tools rather than applying them. But this also linked to the FP mechanism that favours such approaches. This should be a lesson for future projects to be funded under the H2020 framework programme.



2.3.4 WP5 Applications at various scales and Integrated Regional Assessment for Mediterranean and Black Sea basins

WP	Type of activity	Lead participant	PM	Start	End
5	RTD	UNIVE	273,1	1	48

Task 5.1	Application in CASEs.	Leader UNIVE	Start month	End month 46
5.2	Regional Assessment for the Mediterranean and Black Sea.	IOC UNESCO	20	47
5.L	Planning of WP work plan (incl. objectives and indicators) and coordination of WP	UNIVE	1	48

Deliverables for the period:

D5.1A	CASEs reporting (10 CASEs at the end of the 5 phases: preparatory, phase 1, phase 2, phase 3 and conclusions) including comparison among CASEs and relevance of CASEs in the whole basin.
D5.1B	Evaluation report on CASEs multi sector, multi administrative and multi scale work, Integrated approach method in CASEs.
D5.2A	Report on the Mediterranean and Black Sea Basin Regional Participatory Assessment including Fact sheets showing the integration, outcomes and conclusions in addition to recommendations and Policy options in the region.
D5.2B	Guidelines for Maritime Spatial planning in response to policy options.
D5.2C	Black Sea ICZM Guidelines as the governance tool for the development and application of the legal agreement framework (such as protocol) for ICZM in the Black Sea.



2.3.4.1 WP5 progress of work and status of activities

Status	Subtask	%		
Complete:	16	70		
In Progress:	7	30		
Not started:	0	0		
Past due:	7	30		
Total	23	100		

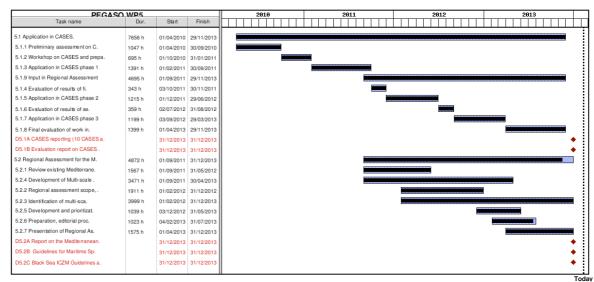


Figure 7: WP5 Gantt chart (February 2014)

During this last reporting period the WP5 has concentrated on the following:

- Individual discussions with the CASEs coordinators for the preparation of the final reports.
- Preparation and submission of the final version of the Evaluation Report to all the CASEs coordinators.
- Communication with the CASEs regarding their contribution to the IRA.
- Dissemination of the CASEs activities and results.
- Exploring the availability of spatial information for the IRA.
- Analysing with the members of the End User Committee and the partners, the preliminary results of the IRA, with particular reference to the indicators calculated at local and regional levels, as well as other tools (CIM/LEAC, Economic assessment).
- Publication on the Pegaso WIKI of the experiences of the CASEs in public participation.
- Contribution to the 3rd brochure on the Pegaso CASEs, "Building capacity and sharing experiences for ICZM".
- Drafting and finalizing the WP5 deliverables.



Task 5.1	Applicatio	n in CASEs.			
5.1	5.1.8	Final evaluation of the work in the CASEs and conclusions	M39- M46	- - -	Communication and individual discussions with the CASEs coordinators regarding the preparation of the final report; Collection of the CASEs reports; 10 final evaluation reports collected. Preparation of the draft version of the final deliverables; Finalization of the final deliverables: 5.1A and 5.1B.
5.1	5.1.9	Input in Regional Assessment	M20- M46	-	Communication with the CASEs regarding their contribution to the IRA.

The Danube Delta (DDNI)

For the Danube Delta CASE, the main scientific technical results for the last period of the project can be summarized as follows:

- Checking on the available data for the development of the Pegaso Spatial Data Infrastructure.
- Implementing at local level the Romanian Case study Geonode (uploaded the results from Sketch Match, other meetings and scenario development process).
- Providing input for the task 4.2 LEAC: Stock assessment for the Danube Delta.
- Sketch match session:
 - Post processing information on the coastal zone problems and solutions;
 - Participatory approach (supplementary meetings with the end-users and local stakeholders);
- Scenarios of strategic options development for the coastal and marine main common threats in the Danube Delta CASE.
- Final CASE reports preparations.
- Trainings and preparations for further use of the Pegaso results and scenarios to the end-users and local stakeholders.

The main dissemination activities have been the following:

- Preparing presentations, posters and specific information for different events, to promote the Pegaso activities and results.
- Preparing materials and presentations for the MEDCOAST Conference 2013.

The North Adriatic CASE (UNIVE)

For the North Adriatic CASE, the main scientific technical results for the last period of the project can be summarized as follows:

- Set up of the North Adriatic geonode for the SDI.
- Two surveys have been conducted with stakeholders:
 - Survey with the main planning and management bodies of the four Italian Regions of the North Adriatic regarding the evaluation of the ICZM implementation.
 - Survey with the Italian North Adriatic, Slovenian and Croatian MPAs managers regarding the implementation of the ICZM principles in MPAs management.
- Finalization of the DSS with the integration suggested by the stakeholders.
- Calculation of two indicators (Area of built-up space in the coastal zone and size and density of the population living in the coastal zone) for the IRA.



Development of a Decision Support System for climate change risk assessment for the coastal area.

The work of the UNIVE team during 2013 was aimed at concluding the activities related to the North Adriatic case study (i.e. Veneto and Friuli Venezia Giulia regions). Specifically the research unit applied one Pegaso tool (i.e. indicators) and extended and applied a Regional Risk Assessment (RRA) methodology through the DEcision support SYstem for Coastal climate change impact assessment (DESYCO), integrating the results of the participatory process carried out in 2012.

Indicators were used within the North Adriatic case to support the evaluation of the anthropic pressure in coastal zones. Specifically, two indicators were selected among the Pegaso indicators: Area of built-up space in the coastal zone and Size and density of the population living in the coastal zone. These indicators allowed quantifying how coastal areas are impacted by human presence and evaluating past trends over time.

The results showed that coastal zones of the Veneto and Friuli Venezia Giulia regions are characterized by a high anthropic pressure due to the presence of many built-up areas and to a high population density. As far as the RRA methodology is concerned, it allowed the estimation of water quality variations under climate change scenarios

The final aim is supporting national and regional authorities in examining the possible consequences of climate change on seawater ecosystems and defining possible adaptation measures. The main output of the RRA include hazard maps representing the hazard against which a system operates (e.g., changes in physic-chemical and biological parameter of marine coastal waters), vulnerability maps representing the spatial distribution of environmental vulnerability factors and risk maps identifying and prioritizing areas and targets at risk. These maps allow the visualization and prioritization of impacted areas and vulnerable coastal receptors and the identification of more sensitive areas in the considered coastal region. Moreover, they allow an easy and flexible visualization of vulnerabilities and risks for stakeholders and decision makers, supporting the implementation of the Integrated Coastal Zone Management (ICZM). The methodology was implemented within DESYCO, stand-alone software aimed at supporting the application of the RRA by facilitating the procedures for integrating the outputs of external numerical models and geographical vulnerability indicators, by means of GIS functions and MCDA routines.

The DSS was improved based on the results of a workshop with stakeholders organized in 2012. Specifically, the following improvements were implemented: automatic calculation of statistics, production of report of performed applications, connection of the DSS with QGIS (a open source GIS software), definition of print layout.

Finally, the UNIVE team has set up a web portal containing metadata of the maps used within the described application. The web portal is part of a Spatial Data Infrastructure implemented in the framework of the Pegaso project connecting the different case studies across the Mediterranean sea and the Black sea. The geonode set up in the framework of the North Adriatic case is hosted by the University Ca' Foscari of Venice – Office systems and Infrastructures (ASIT) - and is accessible through its website (http://virgo.unive.it:8080/geonetwork/srv/eng/main.home).

Analysis of the link between Marine Protected Areas and ICZM.

Within this subtask of the CASE, the activities have focused on carrying out interviews with Marine Protected Managers of the North Adriatic (eight MPAs were identified in the North Adriatic among Italy, Slovenia and Croatia). In order to understand if and how Integrated Coastal Zone Management (ICZM) principles are implemented in the MPAs management and how the 8 MPAs are collaborating and communicating among them, Ca' Foscari carried out a survey addressed to a selection of 18 relevant stakeholders.

Analysis of ICZM implementation at the Italian subnational level in the North Adriatic.

The research group has developed a questionnaire aimed at further investigating the results of the first phase of the research regarding the state of ICZM implementation in the Italian North Adriatic Regions (Marche, Emilia Romagna, Veneto and Friuli Venezia Giulia).



The main dissemination activities have been the following:

- Two presentation held during Global Congress on ICM (Dalyan, 30 October- 2 November 2013)
 - Soriani S., Tonino M., Buono F.,,Bordin A.,Camuffo M., Pegaso Case Studies and ICZM Implementation.
 - Soriani S., Buono F., Tonino M., Bordin A., Camuffo M., Participatory experiences in Pegaso.

The following papers have been produced during the period:

- Soriani S., Tonino M., Buono F., Bordin A., Camuffo M., Pegaso Case Studies and ICZM implementation.
 Global Congress on ICM (30th of October to 3rd of November 2013, Dalyan, Turkey.
- Soriani S., Buono F., Tonino M., Bordin A., Camuffo M., Participatory experiences in Pegaso. Global Congress on ICM (Dalyan Turkey 30 October 3 November 2013, Dalyan, Turkey).
- Climate Change Impacts on Marine Water Quality. Rizzi, S. Torresan, A. Zabeo, A. Critto, D. Brigolin, S. C arniel, R. Pastres. Global Congress on ICM (Dalyan Turkey 30 October 3 November 2013, Dalyan, Turkey).
- Governance of Marine Protected Areas in the North Adriatic Sea Marco Tonino, Stefano Soriani, Francesca Santoro SASE Conference "State in Crisis" Network A: Communitarian Ideal and Civil Society Milan, June, 27th 2013.
- Measuring progress in ICZM. The case on North Adriatic Regions. Stefano Soriani XXIV Rassegna del mare. Mare Amico. 4-6 November 2013. Lecce.

The Aegean Islands CASE (HCMR)

For the Aegean Islands CASE, the main scientific technical results for the last period of the project can be summarized as follows.

The following reports have been uploaded to the Pegaso wiki:

- 24h shipping density in the Greek Seas.jpg 5.02.2013
- Relationship between stakeholders and end-users.docx 20.08.2013
- Deliverable 2.4.a.CASEs.docx 11.09.2013
- Greek CASE contribution to IRA.pdf 1.09.2013
- Greek CASE Final Report.pdf 17.09.2013

The main dissemination activities have been the following:

- Following a decision from the Pegaso coordination unit, the Hellenic Centre for Marine Research organised an international seminar entitled "The future of Greek aquaculture: Building a sustainable industry in the framework of integrated coastal zone management" which was held in St George Lycabettus Hotel, Athens, on the 26-28th of November 2013.
- The Hellenic Centre for Marine Research produced a report in Greek regarding the results of the sea level rise exercise in the Cyclades CASE, which was officially submitted to the Region of South Aegean.

The Dalyan CASE (MEDCOAST)

For the Dalyan CASE, the main scientific technical results for the last period of the project can be summarized as follows:

- Continue assessing the most important ICZM issues of the area by compiling the information available.
- Assessment of the nature conservation issue.
- Real-time monitoring and analysis of the boat traffic in the Dalyan Channel has continued by using video recording.
- Awareness building and participation in ICZM.
- Implementing the Bayesian Belief Network (BBN) for the Koycegiz- Dalyan CASE with the theme of preserving and enhancing natural capital. Two sessions of the BBN Workshop have been organized: The first one on the 6th of October 2013 and the second one on the 17th of December 2013. A third and last session has been organized on the 2nd of January 2014.



In the first BBN session, the participants identified, through a collaborative approach, the elements contributing to the natural capital of Koycegiz - Dalyan SPA. Identifying the negative impacts on each of these elements and the variables that may cause the impacts followed this session.

The casual relationships were discussed and identified. After presenting the results obtained in the first session, the BBN questionnaire was introduced and given to the participants for getting their individual responses in the second session of the BBN Workshop. The results of the questionnaire will be used to calibrate a BBN diagram in the Netica Sowtware for developing scenarios, which will be discussed in the last session of the BBN workshop.

The main dissemination activities have been the following:

Stakeholder meetings:

The second and third general stakeholders meeting for Koycegiz-Dalyan CASE were organised in 2013. The second meeting was held on the 20th of February 2013 and the third one on the 6th of November 2013.

One of the outcomes of the second stakeholder meeting was the proposal to construct a web-based forum, which will be available to the public in order to increase the participation and contribution of any parties, who are interested in the management of Koycegiz-Dalyan Specially Protected Area. In the second stakeholder meeting the locals were much interested to discuss the conservation issues of Dalyan.

The current ICZM issues of Koycegiz-Dalyan SPA were presented and discussed at the third stakeholder meeting. In the afternoon of the same day, the first session of the BBN Workshop was held with the same participants under the title of: "Future of Dalyan".

All stakeholder meetings provided information about the Pegaso Project to stakeholders and the local media, including the work carried out in the CASE and the results obtained together with the ICZM process with emphasis on participation.

National Workshop:

The MEDCOAST Foundation organised the "National Workshop on ICM in Turkey: Latest Developments" during the 25-26th of April 2013 in Marmaris, Turkey with partial support of the Pegaso Project's Koycegiz-Dalyan CASE. Thirty-five participants representing the Ministries, Regional Governmental Offices, the host Municipality (Marmaris), universities, research institutes, planning companies and NGOs reviewed the Pegaso project and other recent research and development projects dealing with coastal management in Turkey. The ICZM Protocol for the Mediterranean and the Turkish National Committee on Coastal Zone Management were among the special discussion topics. A ppt presentation was made on the Pegaso Project and the Koycegiz – Dalyan SPA CASE. The detailed Technical Program of the Workshop in English is posted under the News section of the MEDCOAST's web page (www.medcoast.net).

MEDCOAST International Conference:

The Global Congress on ICM: Lessons Learned to Address New Challenges, the joint meeting of the Eleventh bi-annual MEDCOAST Conference and the Tenth EMECS Conference, was organized by MEDCOAST Foundation during the 30th of October – 3rd of November in Marmaris, Turkey. More than 300 people participated from 40 countries of Europe, North Africa, Asia, North America, and Australia. There were two special sessions dedicated to the Pegaso project where partners presented the results of the project. One oral and one poster presentations were made on the Koycegiz – Dalyan SPA with the following titles:

- Monitoring of Boat Navigation in the Dalyan Channel Nesrin Tufekci, Ulas Avsar, Erdal Ozhan
- Management Issues of Koycegiz-Dalyan SPA (Turkey)
 Erdal Ozhan, Ulas Avsar, Nesrin Tufekci, Serdar Ozuslu, Sinem Onder, Deniz Konakli, Nurdan Kanl



The local/provincial media covered all the stakeholder meetings satisfactorily. The reports (in Turkish) can be found at the following web sites:

- http://dalamangazetesi.com/tr/akdeniz-kiyi-vakfindan-degerlendirme-toplantisi.html
 Dalaman Gazetesi, 20.02.2013
- http://www.marmarismanset.com/haber/marmaris_1/-akdeniz-kiyi-vakfindan-degerlendirme-toplantisidalyanda/16682.html. Marmaris Manşet, 20.02.2013.
- http://www.gundemgazetesi.net/dalyan-kanali-tekne-trafigi-izleniyor-akdeniz-kiyi-vakfi-baskani-prof-drozhan-t-11621h.htm. Gündem Gazetesi, 21.02.2013.
- http://www.haberler.com/dalyan-kanali-tekne-trafigi-izleniyor-4356028-haberi/ Haberler.com, 22.02.2013.
- http://www.marmarismanset.com/haber/marmaris_1/-dalyan-kanali-tekne-trafigi-izleniyor/17331.html.
 Marmaris Manşet, 23.02.2013.
- http://www.mugladevrim.com.tr/index.php?option=com_content&view=article&id=14526:dalyan-kanal-tekne-trafii-izleniyor-&catid=1:son-haberler. Muğla Devrim, 24.02.2013.
- http://www.denizhaber.com.tr/guncel/47175/dalyan-kanali-tekne-trafigi-izleniyor-denizhaber-recepcanpolat-dalyan-kanal.html. Deniz Haber, 26.02.2013
- http://dalamangazetesi.com/tr/dalyan-kanalinda-tekne-trafigi-cok-yuksek.html.
 Dalaman Gazetesi, 26.02.2013
- http://dalyanhaber.net/haber-1576-dalyan-ve-koycegiz-sular-altinda-kalabilir.html
 Dalyan Haber, 06.11.2013
- http://www.guneyege.net/?Fid=3&Id=1487&gy=1&cat=1&subcat=4&Pagex=0
 Güney Ege, 13.11.2013
- http://www.guneyege.net/bdf%5Cegazete%5Cguneyege-31.pdf
 Güney Ege, 13.11.2013



Third BBN Workshop on the theme of Preserving and Enhancing Natural Capital – 02nd of January 2014.

Preparing the BBN report in Turkish and English.

Establishing a web-based forum as part of Turkish version of MEDCOAST webpage (under-construction) about coastal management issues of Koycegiz-Dalyan SPA and creating an online network for coasts of the Mugla Province.



Al Hoceima (UM5a)

For the Al Hoceima coast CASE, the main scientific technical results for the last period of the project can be summarized as follows:

- Calculating the Pegaso Indicators.
- Contributing to the Regional Assessment.
- UM5a has also been in charge of the preparation and organization of the 3rd General Meeting of the Pegaso Project in Rabat on the 19th to 23rd of March 2013.

For the Al Hoceima CASE, the main dissemination activities have been the following:

Communication with the Stakeholders and general public

- Data collection and calculation of indicators.
- Dissemination of the results of the indicators to local and national stakeholders.
- Meeting with the "Haut Commissariat aux Eaux et Forêts et à la Lutte Contre la Désertification" at national level on the 19th of December 2013.
 - Presentation of the Pegaso indicator 'Capital natural: Conservation status of species and habitat, presentation of the results in the National Park of Al Hoceima (CASE Morocco) and comparison with the new MPA in the Moroccan Mediterranean 'Cap des Trois Fourches' in the framework of the MedMPAnet project.

Participation to scientific conferences

- 12th International Coastal Symposium Plymouth University, 8-12th of April 2013. Oral Presentation by A. Khouakhi on Vulnerability assessment of Al Hoceima bay.
- 3rd International Marine Protected Areas Congress, 21-25th of October 2013, Marseille & Corsica, France. (Hocein Bazairi).
- The launch of the new co-production Radio Copeam Permanent Conference of the Mediterranean Audiovisual was the opportunity to record a special emission 'Kantara', dedicated to Marine Protected Areas in the Mediterranean. For the occasion, the co-producers of the new "Mediterranean Marine Parks" series were gathered around Pierre Mari and exceptionally invited to take over the usual team, the time of issuance. Bazairi H. participated in this event on the National Park of Al Hoceima and the indicators elaborated in the framework of the Pegaso project.
- Training courses on ICZM and Indicators in the framework of the GEF project on ICZM of the Moroccan Eastern Mediterranean (Région de l'Oriental) organized by the Ministry of Environment for the profit of local stakeholders. **M. Snoussi** was in charge of 7 modules on DPSIR and challenges of the coastal zones. She took this opportunity to advertise the Pegaso Project and its tools.









— Meeting with MM. Rachid Tahiri from the Ministry of Environment and Hafid Chafi from the University of Oujda who represented Morocco in the Algiers workshop. M. Snoussi has transferred all the information on the Pegaso indicators and those developed in the Al Hoceima CASE for the Regional Assessment.

Publications in scientific journals

 Khouakhi A., Snoussi M., Niazi S., Raji O. (2013) Vulnerability assessment of Al Hoceima bay (Moroccan Mediterranean coast): a coastal management tool to reduce potential impacts of sea-level rise and storm surges. *Journal of Coastal Research Special Issue No. 65, 2013*

Publication of papers in proceedings of scientific conferences and events

 Adnani M, Jana N, Niazi S, Khouakhi A, Raji O. (2013): Analyse de la cinématique du trait de côte des plages du Parc National d'Al Hoceima: Caliris, Torres et Bades, à l'aide du couplage télédetection et SIG. Rencontres des Sciences Géomatiques, 8-9 Avril 2013, Rabat, Maroc.

Other Publications

 Ribi M. & Bazairi H. (2013). Le Parc National d'Al Hoceima: seul marin protégé de la côte méditerranéenne du Maroc. Méditerranée – Mer Vivante, 18 : 234-236.

PhD students

- Abdou Khouakhi: Contribution with scientific tools to ICZM in the Al Hoceima bay. Defended on 23rd of November 2013.
- Latifa Flayou: (ongoing) Assessing the vulnerability of the coastal beaches in Morocco in the context of Climate change. (two months trainings at Geosciences Laboratory of Montpellier University).

The preparation of a video on the CASE of Al Hoceima is still ongoing.

The Nile Delta (NIOF)

For the Nile Delta CASE, the main scientific technical results for the last period of the project can be summarized as follows:

- Completing the report of Land-use for the Nile delta CASE.
- Completing the report on Indicators.
- Organizing two meetings of the "Nile Delta Coastal Group" and three meetings with Policy makers to discuss the land use planning in the Nile Delta region.
- Organizing the contribution and report for the IRA.
- Completing the shore protection plan.
- Updating the national ICZM guideline to be compatible with International ICZM guideline.
- Organizing a General Policy maker National workshop to validate the final output from the Pegaso Nile Delta ICZM Management Plan (29th of February 2013).
- Completing the Nile Delta CASE final report.
- Organizing the Capacity building workshop entitled "Investment scenarios for restoration action of Nile Delta Coastal lakes within the Frame of ICZM" from the 10th to the11th of December 2013, el Cairo.

North Lebanon (UOB)

For the North Lebanon CASE, the main scientific technical results for the last period of the project can be summarized as follows:

- Calculation of indicators.
- Bayesian Belief Network (BBN) model for "Controlling artificialization" (still on going).
- Coastal Forum (still on going).



Calculation of indicators

Given the urgency to address artificialization, the "area of built-up space in the coastal zone" and "coastal erosion and coastal instability" indicators were selected and calculated. Also, coastal zones are often areas of intense economic activities, and the Northern Coastline in Lebanon is not an exception. Therefore the "value added per sector" and the "number of enterprises" indicators were also taken into consideration and calculated.

BBN model for "Controlling artificialization" (on going)

Currently the Institute of the Environment-University of Balamand team (IOE-UOB team) is in the process of creating a BBN model for "Controlling artificialization" on the coast of North Lebanon involving all stakeholders.

The BBN is being developed through the following four steps:

- Step 1: Expert meeting for the identification of influences and drivers in order to build a first draft of the BBN.
- Step 2: Translation of the BBN into a questionnaire in order to determine states and probabilities for each influence/driver. The questionnaire is then sent online to the attendees of the first expert meeting for pilot testing. Experts will be solicited to provide comments on the questionnaire if any.
- Step 3: Production of the final form of the questionnaire after addressing all the comments of the experts and analysing the answers in order to evaluate the appropriateness of the questions. The final form of the questionnaire will be sent to all concerned stakeholders on national level for completion
- Step 4: Results of the questionnaire at national level will be represented in a complete BBN with measurements and introduced to stakeholders in a large workshop.

The IOE-UOB Team is currently at the Step 3 where the questionnaire is being produced in survey monkey to be sent to all the stakeholders at national level.

Coastal Forum (on going)

On the other hand, the concept of the North Lebanon Coastal Forum (CF) is being finalized and the work on the website will be launched soon. This CF will address, but will not be limited to, the following:

- Create a network of communication between experts and the public to discuss coastal zone issues
- Form an open exchange of information platform
- Spread awareness on coastal problems and conflicts
- Propose new strategies to improve coastal zone management with the help of public and private institutions and/or any interested individual as a collective initiative for a balanced development of the coastline.
- Develop a better understanding of the coastal environment through awareness raising in schools, colleges, clubs and NGOs.

Sevastopol Bay (MHI)

For the Sevastopol Bay CASE, the main scientific technical results for the last period of the project can be summarized as follows:

- Scientific support, which is one of the components of ICZM, assumes participation of various specialists and utilization of various data depending on a specific task. The major disadvantage of traditional sources of data (atlases and data base), is the need to address various specialists. We have designed the system (http://wiki.iczm.org.ua/en/index.php/Download_the_latest_version_of_the_atlas) incorporating digital atlas and GIS features, but also allowing interaction with data and application of different ICZM tools. The major of these tools are indexes. While interaction with data makes possible to construct different maps, which have not been preloaded, tools make possible to analyze data. The current version of the system incorporates a number of indexes chosen within the frame of the Pegaso project for environmental assessment.
- The web-portal (http://wiki.iczm.org.ua/en/index.php/Main_Page) and a standalone CD version of a GIS-type tool for the Sevastopol Bay (http://wiki.iczm.org.ua/en/index.php/Download_the_latest_version_of_the_atlas) have been updated to incorporate additionally recovered information on the marine environment. Additional data in regard to local environmental assessment have been also achieved from our stakeholders.



- The list of the suggested indicators, as well as other available indicators, has been evaluated for the purposes of local conditions and application. The selected indicators have been incorporated into the developed CD version of a GIS-type tool for the Sevastopol Bay and presented to local stakeholders for evaluation.
- We have also evaluated the ways to incorporate scenarios tool to our CD version of a GIS-type tool for the Sevastopol Bay. Additional information of currents in the Sevastopol Bay has been incorporated in the CD version of a GIS-type tool for the Sevastopol Bay in line with the software tool for its evaluation. Additionally, we have incorporated information on possible consequences of the sea level changes for the coastal zone of the Sevastopol Bay.
- One of the most important parts of our work has been addressed to interaction with stakeholders in regard to evaluation of our results. As an outcome of our interaction, stakeholders (when they feel that our work results important) have issued letters of endorsement (http://wiki.iczm.org.ua/en/index.php/Dissemination). So far, we have got 4 such letters and 3 more are expected in the nearest future. Our results have been also published and acknowledged in two newspaper publications and presented in several scientific (http://wiki.iczm.org.ua/en/index.php/Scientific_publications).
- GeoServer and GeoNetwork software have been updated on local servers and necessary settings applied. Grids for oceanographic atlas of Sevastopol Bay are converted to GeoTiFF and described as WMS layers to work as spatial data service. WMS developed on the base of open source web GIS software MapServer (as the first example, http://193.42.157.77/ru/index.php?r=atlas/wms/view&id=19).

For the Sevastopol Bay CASE, the main dissemination activities have been the following:

- The annual Pegaso general meeting, Rabat, Morocco on the 18th to 23rd of March 2013.
- The 17th ICZM AG Meeting of the Black Sea Commission, Istanbul, Turkey on the 12th to 13th of September 2013.
- The TUBITAK Marmara Research Center, Istanbul, Turkey from the 3rd to the 10th of August 2013.
- MedCoast congress: Global Congress on Integrated Coastal Management: Lessons Learned to Address New Challenges, Marmaris, Turkey on the 30th of October to the 3rd of November 2013.

Publications

- S. Konovalov, V. Vladymyrov, V. Dolotov, O. Sergeyeva, Yu. Goryachkin, O. Moiseenko, S. Alyomov, N. Orekhova, L. Zharova Environmental Assessment Tools in the Pegaso Case Sevastopol Bay. Proceedings of the Eleventh International Conference on the Mediterranean Coastal Environment (Ed. E. Özhan), MEDCOAST 12, 28 October 04 November 2013, Marmaris, Turkey, MEDCOAST, Mediterranean Coastal Foundation, Dalyan, Muğla, Turkey, 2013, vol. 1, 59-70.
- Моисеенко О.Г., Коновалов С.К., Орехова Н.А. Индексы оценки экологического статуса бухт в общей стратегии управления прибрежной средой в целях её устойчивого развития на примере б. Севастопольской (Черное море). Экологическая безопасность прибрежной и шельфовой зон и комплексное использование ресурсов шельфа, Сборник науч. тр. (Ред. В.А. Иванов), Севастополь: ЭКОСИ Гидрофизика, 2013, Вып. 27, 399-402.

The Bouches du Rhône (TdV)

For the Bouches du Rhône CASE, the main scientific technical results for the last period of the project can be summarized as follows:

- Contribution to the regional assessment with graphics and site specific information from the CASE Bouches du Rhone.
- SWOT analysis of the participative process carried out in the Bouches du Rhone for the deliverable "Shared ICZM Governance Platform: Guidelines and Lessons learned".
- Development of analytical reports in French and English.
- Applying LEAC to the project area, developing a number of maps and information sheets for the local stakeholders.
- Participative workshop with local stakeholders to share the results of the tools developed in the project.



We constructed indicators for the CASEs using a participative methodology with local stakeholders. The Indicators and LEAC were transferred to the local water agency to contribute to the post project monitoring and decision-making.

- Participating in the project meetings in Rabat in 2013 and Antalya in January 2014.
- The Tour du Valat participated also in various activities in the WP4, worked with the task leaders for LEAC and scenario planning to validate and improve the final deliverables.

The main dissemination activities have been the following:

— The Tour du Valat made a presentation and published an article in the MedCoast conference in Turkey in October 2013 and also contributed to the posters concerning the CASEs, the CASEs booklet "Building capacity and sharing experiences for ICZM".

Georgian CASE - Guria Coastal Region (BSC PS)

For the Georgian CASE, the main scientific technical results for the last period of the project can be summarized as follows:

Testing and succeeding in SDI deployment of the existing local pilot project spatial planning GIS for Guria region. Online version is now accessible through Pegaso Viewer, Catalogue & Atlas (see link below), as well as at the enviroGRIDS BSC-OS portal, latter providing GeoServer space.
("Data Sharing INSPIREd by Pegaso SDI – Georgian CASES," in proceedings of Medcoast Global Congress 2013)

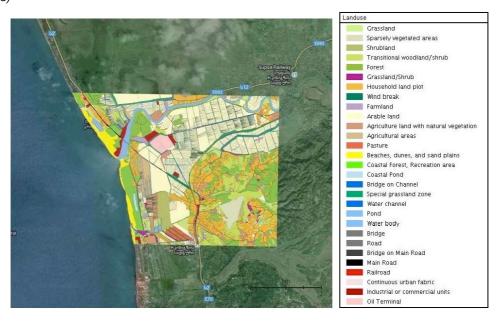


Figure 8: Land-use map of local ICZM pilot project area as rendered Pegaso Atlas at http://pegasosdi.uab.es/geoportal/index.php/guria-coastal-region-case

- The Georgia CASE Coordinator and ICZM NFP developed a tool for simplified compilation of EU ICZM Progress Indicators for application at international, national, regional and local levels. Tool is currently being used and tasted by ICZM Advisory Group Members of the Black Sea region in an attempt to compile EU Progress Indicators for ICZM. After testing software tool and source code will be made available through coastwiki. Tool is generic for application by any regional sea end users, even at local level of governance.
- ("Easy to Use Tool for ICZM Progress Reporting", in proceedings of Medcoast Global Congress 2013)



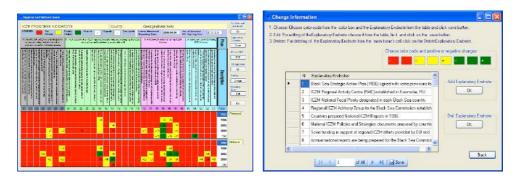


Figure 9: Main and sample pop-up windows of the ICZM progress indicator software tool

 Demonstration of the application of tools is completed with an example of the utilisation of remote sending datasets to rapidly visualize the urban development pressures in the coastal zone.



Figure 10: Draping urban sprawl (as indicated with NPP VIIRS day-night band) over the natural capital (represented by Landsat 8) for Guria Coastal Region (red) & wetlands of Kolkheti National Park (green)

 In synergy with the enviroGRIDS FP7 project, hydrological modelling tools were applied to Guria Region and its main rivers Supsa and Natanebi.



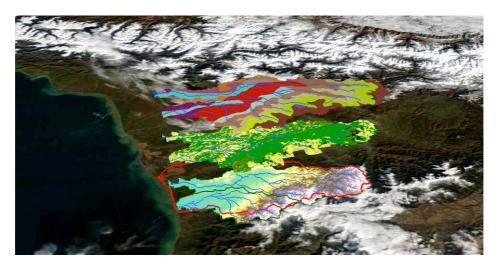


Figure 11: Guria region and data-sets available for hydrological modelling its two main river basins

Planned follow-up post-Pegaso actions

- Posting more resources on the Pegaso SDI Viewer, Catalogue and Atlas utilising enviroGRIDS SDI geoserver and geonetwork repositories.
- Building prototype local level GeoNode for Lanchkhuti Municipality (http://lanchkhuti.org.ge).
- Further application of selected and feasible coastal indicators for Guria Region.
- Calibration of hydrological model for Guria case with in-situ daily discharge time series data.
- Development of beach management initiatives to start addressing litter and erosion problems.
- Establishment and organizing regular work of the Guria Region Coastal Council.

For the Georgian CASE, the main dissemination activities have been the following:

Dissemination, participatory and capacity building events

- Participation of CASE Coordinator in Pegaso CASEs and project meetings (except final in Antalya):
 - Participation of Chairpersons of two coastal Municipal Councils (Lanchkhuti, Ozurgeti) of Guria Region as end users from local authorities in Pegaso Project Meeting, Rabat, Morocco (19th to 22nd of March 2013)
 - Participation of ICZM NFP and Pegaso Task Manager for BSC PS in Pegaso Project Final Meeting and contribution into panel discussion on CASEs, Antalya, Turkey (15 to 18th of January 2014).
- Evaluation meeting to assess progress since the adoption of local community pilot ICZM plan (Tskaltsminda, Guria Region, 13th of March 2013).
- Presentation of Georgia CASEs activities to Black Sea Commission's ICZM Advisory Group Meeting No. 17, Istanbul, Turkey (11th of September 2013).
- Participation in the Black Sea BS-GES 3rd Biannual Conference (27th to 30th of October 2013).
- Preparation of 2 research papers and participation with one oral and one poster presentation in the EMECS/Medcoast Global Congress on ICM (1st to 3rd of November 2013).
- Organizing CASEs training on Pegaso Indicators for National and Guria Region stakeholders and end users in Grigoleti, Guria Region, Georgia (20th to 21st of November 2013).
 (In the course of the project CASEs Coordinator, representative of the non-governmental sector, was elected

as the Chairperson of Lanchkhuti Municipal Council. This can substantively contribute to dissemination and application of Pegaso experience into local level governance.)







Figure 22: Facilitators of the training content: Dr Breton and Ms De Hauwere (left). Stakeholders from Guria Region viewing Pegaso video presentations (right)

 Participatory Meeting in Tskaltsminda Community, on the 13th of March 2013 (report submitted 2013.03.16).

Publications

- Gvilava, M. and Gigineishvili, A. (2013a): "Easy to Use Tool for ICZM Progress Reporting", submitted for publication in the proceedings of Global Congress on ICM, EMECS 10 - MEDCOAST 2013 Joint Conference, October 29-03 November 2013, Marmaris, Turkey.
- Gvilava, M., Bakuradze, T., Gigineishvili, A., Allenbach, K., Guisado, E., Martínez, C. and Malvárez, G. (2013): "Data Sharing INSPIREd by Pegaso SDI Georgian CASES", submitted for publication in the proceedings of Global Congress on ICM, EMECS 10 MEDCOAST 2013 Joint Conference, October 29-03 November 2013, Marmaris, Turkey.

Deliverables

- Gvilava, M. and Gigineishvili, A. (2013b): "Input to Deliverable D2.4A: Georgia CASE Site, Guria Coastal Region", EC FP7 Pegaso Project, Work Package 2, December 10, 2013, Tbilisi, Georgia.
- Gvilava, M. and Gigineishvili, A. (2014a): "Input to Deliverable D5.1A: Georgia CASE Site Guria Coastal Region", EC FP7 Pegaso Project, Work Package 5, January 30, 2014, Tbilisi, Georgia.
- Gvilava, M. and Gigineishvili, A. (2014b): "Georgia CASES Training Workshop Report", EC FP7 Pegaso Project, Work Package 6 (pending).



Task	5.2	Regional Assessment for the Medite	rranea	n and Black Sea.
5.2	5.2.5	Development and prioritization of recommendation on policy options at subregional and regional scales.	M35- M40	
	5.2.6	Preparation, editorial process, lay out, publication and dissemination of Regional Assessment Report.	M37- M42	 First draft of IRA document sent to IUCN for layout; Development of summary for policy-makers in Arabic, French and English; Final version of the document in English.
	5.2.7	Presentation of Regional Assessment, Final Conference, End-users feedback.	M39- M47	Presentation at the Final conference

An integrated approach among different sources of knowledge, methods, approaches, and disciplines was developed. A regional view of urbanisation and natural capital was provided together with example assessments of these two issues at local levels. Trends in coastal urbanisation over a 12-year period (2000 to 2011) were assessed in the Mediterranean and Black Sea regions. Accounts for areas of natural cover were constructed by extracting data on natural and semi-natural land-cover types. Stocktakes of 50 km coastal strips containing natural areas were assessed for various parameters: per cent of natural areas; per cent of increase or decrease in natural areas over an eleven-year period; and per cent of protected areas. Moreover, impacts from land-based and marine-based activities resulting from pressures and stressors that lead to natural-capital degradation were assessed for the Western Mediterranean through the use of the Cumulative Impact Mapping (CIM) tool. Results of the Pegaso IRA informed a proposal for policy and management options at different levels as well as guidelines for ecosystem-based coastal and marine management in the Mediterranean and Black Seas. Five priority areas for future work have been identified.

- 1) The Governance Platform is undoubtedly one of the most important added values of the Pegaso project. It has provided, and will continue to provide, the precondition for the continuation of the present work.
- 2) In order to prioritise actions for management and policy-making, efforts to build views at a basin level need to continue
- 3) Pegaso highlighted a number of research gaps that need to be filled in future research programmes and frameworks, which require strong collaborations across multiple disciplines. 4) Although significant progress has been made in the context of Pegaso, there is still much work to be done for building capacity in the two basins if the principles of ecosystem-based management are to be fully implemented. 5) Although the ICZM Protocol represents a milestone for sustainable development in the Mediterranean, there are still some policy gaps that exist. Moreover, much work needs to be done in the future to define strategies for the full implementation of existing legislations. Work described in this Pegaso IRA Report has produced a policy-oriented blueprint for guiding future directions in scientific research, policy-making, and socio-economic activities related to the ICZM Protocol in the Mediterranean, and that can be applied to processes in Black Sea countries. With constantly evolving feedback of improved decision-making, rigorous scientific data, and sustainability of natural capital, refinements to marine and coastal assessments will strengthen governance of these valuable ecosystems.



2.3.4.2 WP5 deliverable progress and status

WP	WP Task Id	Deliverable number	Deliverable name	Status	
5	5.1	D5.1A (M47)	CASES reporting (10 CASES at the end of the 5 phases: preparatory, phase 1, phase 2, phase 3 and conclusions) including comparison among CASES and relevance of CASES in the whole basin.	Submitted to the EC on the 25 th of March 2014.	
5	5.1	D5.1B (M47)	Evaluation report on CASES multi sector, multi administrative and multi scale work, Integrated approach method in CASES.	Submitted to the EC on the 25 th of March 2014.	
5	5.2	D5.2A (M47)	Report on the Mediterranean and Black Sea Basin Regional Participatory Assessment including Fact sheets showing the integration, outcomes and conclusions in addition to recommendations and Policy options in the region.	Submitted to the EC on the 28 th of March 2014.	
5	5.2	D5.2B (M47)	Guidelines for Maritime Spatial planning in response to policy options.	Submitted to the EC on the 31 st of March 2014.	
5	5.2	5.2C (M47)	Black Sea ICZM Guidelines as the governance tool for the development and application of the legal agreement framework (such as protocol) for ICZM in the Black Sea.	Submitted to the EC on the 31 st of March 2014.	

2.2.4.3 WP5 use of the resources

Participant number	1	3	4	5	6	7	8
Participant short name	UAB	PLAN BLEU	IFREMER	ACRI-EC	IOC UNESCO	PAP-RAC	IUCN
Planned	8,0	6,5	22,0	7,0	12,5	5,5	1,0
3 rd Period	2,23	2,49	4,16	1,12	7,07	0,97	0,41
Actual	8,44	6,09	24,29	8,93	23,77	5,12	0,80
Participant number	9	10	11	12	13	14	15
Participant short name	UNOTT	VLIZ	UNIVE	JRC	UNIGE	HCMR	MEDCOAST
Planned	8,3	9,0	50,0	4,5	9,0	21,3	17,5
3 rd Period	7,0	3,94	9,17	2,65	3,1	7,02	14,3
Actual	12,71	4,96	65,92	5,37	11,4	22,58	41,61
Participant number	16	17	18	19	20	21	23
Participant short name	DDNI	UM5a	AERA-ED	NIOF	UOB	MHI	TdV
Planned	8,5	17,0	2,5	13,0	12,0	13,5	10,0
3 rd Period	0,2	12,15	0,0	5,2	11,03	3,37	7,69
Actual	7,75	47,11	0,0	18,88	20,90	13,5	18,29



Participant number	24	25			
Participant short name	NARSS	BSC PS			
Planned	8,5	6,0			
3 rd Period	8,0	4,63			
Actual	10,0	7,38			

Partner	Contribution for the period
UAB	 The UAB carried out an expert survey to gather expert opinion on the vulnerability of the western Mediterranean coastal and marine components to anthropogenic activities. This information was used to calculate the cumulative impact index. This is a spatial dataset, which allows for a better understanding of where multiple pressures are occurring, their principal source and how they impact marine and coastal ecosystems. The cumulative impact index is available on the Pegaso SDI. The UAB also contributed to Task 5.2B by demonstrating the use of the seascape ecology tool for Marine Spatial Planning. A case study in the Balearic Islands (western Mediterranean Sea) was used to show how to use the tool (developed in T4.2) can be used to improve decision-making in MSPs.
PLAN BLEU	 Contribution to the Task 5.2 Final Report. Several exercises of stakeholder consultation (End User Committee) about the general overview and preliminary results of the Integrated Regional Assessment. Follow-up and support of the work done in several CASEs, and links with the ICZM Governance Platform (Networking component), participation at CASEs meetings.
IFREMER	- A workshop with stakeholders was held in Marseille on February the 11th 2013, in order to present the territorial diagnosis and to identify needs for the final version of the Local Information System on the Bouches du Rhône coastal zone. Following this workshop, a framework for the Local Information System has been agreed upon and the indicator set has been completed. A sub-contract has been engaged with the company Actéon for developing a consultation interface for the LIS. A final workshop with a core group of stakeholders will be organised in April or May 2014.
ACRI EC	- The work has been focused on Al Hoceima and VHR images (Pléiades) have been used in an attempt of sea bottom classification. Some further work was done on water masses delineation.
IOC UNESCO	 The IOC coordinated the development of the Pegaso Integrated Regional Assessment by defyining the roles of partners, collecting their contribution and editing them. Moreover, work focused on the finazation of the deliverable format but also of a publication and of a summary for policy-makers. The deliverable on guidelines for Marine Spatial Planning was produced as well.
PAP RAC	 Drafting of the WP2 contribution to the Integrated Regional Assessment; participation in Skype conferences and forum exchanges to finalise and the Integrated Regional Assessment; participation in the working meeting on Integrated Regional Assessment; contributing to the final document on CASEs.
IUCN	- Participation to the meeting in Rabat, CASEs, IRA, End users discussions.
UNOTT	- Developing Regional Accounting for D5.2.
VLIZ	 Coordination and co-editing of Final deliverable Integrated Regional Assessment (IRA) Report. Coordination of CASEs contribution to IRA report. Co-author drafting of 3 Chapters of the IRA report. Co-editor of the 'Brochure' version of the IRA report (public version).



	- Preparation and submission of the last Evaluation Report to the CASES.
	- Preparation of the deliverables D5.1A CASES reporting (10 CASEs at end of the 5 Phases: preparatory
	Phase 1, Phase 2, Phase 3 and Conclusions) including comparison amongst CASEs and relevance of
	CASEs in the whole basin.
	- 5.1B Evaluation report on CASEs multi sector, multi administrative and multi scale work, Integrated
UNIVE	approach method in CASEs.
	- Preparation and presentation of the extended abstract Pegaso CASEs and ICZM implementation.
	Soriani S., Tonino M., Buono F., Bordin A., Camuffo M. Pegaso CASEs and ICZM implementation.
	Book of extended abstracts. *of the Global Congress on ICM: Lessons Learned to Address New
	Challenges, EMECS 10- MEDCOAST 2013 Joint Conference,* 30 October-03 November, Marmaris,
	Turkey, MEDCOAST, Mediterrenean Coastal Foundation, Dalyan, Mugla, Turkey.
	- Contribution to the D5.2 Regional Assessment Recommendations for policy makers and end-users
JRC	(individual CASEs and for the Regional Basins).
	Publication about environmental changes during the last 50 years and about ecosystem (phytoplankton
	in the Mediterranean Sea).
	- Deliverables readings.
UNIGE	- Publishing Black Sea Beaches database on enviroGRIDS SDI.
	 Contribution to deliverable D5.2 Integrated Regional Assessment. Writing scientific paper in Environmental Science & Policy Journal (submitted).
	- Meeting with local stakeholders within the Framework of planning a meeting for the Pegaso Project,
	Naxos 17-21/7/2013.
	 Participation in scheduled meeting for the Project, Cairo Egypt, 9 – 12/12/2013.
	- Participation in scheduled meeting for the Project, Antalya, Turkey, 13-18 Jan 2014
HCMR	- Participation in a meeting with local stakeholders for the Pegaso Project, Naxos 26-31 Jan 2014.
	- Elaboration of the deliverables:
	- o Greece-D.0015.Greek CASE Final Report
	- o Greece-D.0016.Factsheet on Task 4.3 for Greece-HCMR
	- o Greece-D.0017.Overall factsheet of Greek Case
	- Spatial data provided for the Pegaso Geoportal, 20 layers are available now for the Dalyan CASE area
	in the Map viewer (12 September 2013).
	- The development and application of BBN for participatory scenario building in the Köyceğiz-Dalyan SPA
	CASE. Three BBN workshops have been organized on 6 November 2013, 17 December 2013, and 7
	January 2014 in Dalyan.
	- 2 nd Köycegiz-Dalyan SPA CASE Stakeholders Meeting, 20 February 2013
MEDCOAST	- 3 rd (Final) Köycegiz-Dalyan SPA CASE Stakeholders Meeting, 6 November 2013
	- Continuation with the CASE study on Köycegiz- Dalyan SPA
	- Contribution to Participation and Final Evaluation reports
	- Real-time video monitoring of boat navigation in the Dalyan Channel starting with March 2012
	- Contribution for the Integrated Regional Assessment by preparing the report on Mediterranean and
	Black Sea Coastal and Marine Networks research.
	- Preparation of the Final Report of the CASE study on Köycegiz- Dalyan SPA.
DDNII	Final CAOF association and introduction of a social state of control of the Caop of the Ca
DDNI	- Final CASE reporting activities (Final report completion, Case sheet).
	- Meeting with the Wali and other stakeholders in Al Hoceima. Presentation of the work progress and firs:
	results (Vulnerability maps, indicators)
UM5a	- Elaboration of the IRA set of indicators in Al Hoceima CASE and contribution to the Integrated Regiona
	Assessment.
	- Preparing the final reports of Indicators, resources, and assessment of water quality.
NIOF	- Preparation of the shore protection report.
•	- Finalizing the final products of Pegaso.
UOB	- Development of GIS data for the CASE in Lebanon, Calculation of indicators, including contribution to
	the IRA report, BBN model for "Controlling artificialization", Coastal Forum Concept.



МНІ	- The Sevastopol Bay interactive system for ICZM purposes has been used, evaluated, discussed with stakeholders, and updated for local purposes.
TDV	The Tour du Valat was actively involved in WP5 during this time period. We contributed to the development of analytical reports in French and English. We began to apply LEAC to the project area, developing a number of maps and information sheets for the local stakeholders. We also co-organized a participative workshop with local stakeholders to share the results of the tools developed in the project. We constructed indicators for the CASEs using a participative methodology with local stakeholders. The Indicators and LEAC were transferred to the local water agency to contribute to post project monitoring and decision-making. We also participated in the project meetings in Rabat in 2013 and Antalya in January 2014.
NARSS	 Technical issues related to the link between the project portal and the NARSS one. Activate the link between NARSS SDI and Pegaso SDI. The team waiting for data created by NARSS (indicators) to be published by NARSS SDI. Documentation about Building System Process on progress. Report about the system will be created as soon as the connection between NARSS SDI and Pegaso SDI is established.
BSC PS	- Georgia CASE testing (Amiran Gigineishvili). Reports and documents developed. Rimini Workshop participation. Georgia CASE organization and participation.

2.3.4.4 WP5 problems encountered and risk identified

- The main problems related to the last part of the project has been related to the time management of the activities. The fact that some partners have not met the deadlines suggested by the coordinators of the CASEs has slowed down all the process of finalization of the Deliverables.
- For what refers to the IRA, the main problem encountered was related to the complexity of the issues to be dealt with and of the integration of different types of knowledge and expertise.



2.3.5 WP6 Building and enhancing capacity through training and foster knowledge exchange

WP	Type of activity	Lead participant	PM	Start	End
6	RTD	UOB	100,2	1	48

Task		Leader	Start month	End month
6.1	Building and enhancing capacity internally.	UNIVE	6	46
6.2	Building and enhancing capacity with end users and stakeholders through training.	UOB	1	36
6.3	Sustaining capacity.	UNIVE	10	45
6.L	Planning of WP work plan (incl. objectives and indicators) and coordination of WP.	UOB	1	48

Deliverables for the period:

D6.1A	Report and associated material and lessons learned from a transdisciplinary project.
D6.3	Concept documents describing joint present and future initiatives (incl. additional funding) and strategies building
D0.0	scientific capacity in ICPC countries.

2.3.5.1 WP6 progress of work and status of activities

During this last reporting period the WP6 has concentrated on the following:

- Dissemination of the training materials prepared within the task 6.1: Participation, MedOpen and the SDI.
- Definition of the WP6 capacity building activities for the last period of the project (task 6.3).
 - Trainings workshops in the ICPC Countries (task 6.3).
 - Bayesian Belief Network (BBN) for the Koycegiz- Dalyan CASE and the coast of North Lebanon.
- Organization of the post evaluation of the trainings.
- Finalizing the WP6 deliverables (D6.1 and 6.3).
- Recording the polimedia videos on tools and uploading them on the Pegaso website (D6.2/4.6).

Capacity Building within the context of Pegaso is related to the main objective of the project: 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 and its implementation.

From the beginning of the Project and especially during the negotiation phase, the DG-ENV pointed out the importance to build capacity in the International Cooperation Partner Countries (ICPC). During the last period of the project, the WP6 has mainly focused in the organization of a sequence of ICPC training workshops including also non-ICPC countries, such as Greece and Turkey. The D6.3 collects the main results and lessons learned from a series of workshops organized by the partners AREA ED, BSC PS, HCMR, NIOF, MEDCOAST and UOB in close collaboration with the Pegaso coordinator UAB and IFREMER.



(1) North Tripoli, Lebanon (June 2013 - February 2014)

The University of Balamand (UOB) in collaboration with the UAB has led a series of BBN exercises for "Controlling artificialization" on the coast of North Lebanon. The work began in June 2014 and will finish in February 2014 when a final meeting will be organized to complete the BBN cycle.

(2) Dalyan, Turkey (November 2013 - February 2014)

The Mediterranean Coastal Foundation (MEDCOAST) has been in charge of implementing the Bayesian Belief Network (BBN) for the Koycegiz- Dalyan CASE with the theme of preserving and enhancing natural capital. A BBN workshop has been organized through three sessions: the first one on the 6th of October 2013, the second one on the 17th of December 2013 and the third and last session on the 2nd of January 2014. The method has helped the stakeholders to identify the main human impacts (tourism, boating, turtle observation, etc.) on the natural capital in Dalyan, being the priority objective the sustainable management of the protected areas Koycegiz-Dalyan.

(3) Alger, Algeria (November 2013)

The Association de Réflexion, d'Echanges et d'Actions pour l'Environnement et le Développement (AREA-ED) has been in charge to organize a training workshop on the indicators and the SDI with stakeholders from the three Maghreb countries (Morocco, Algeria and Tunisia). The workshop co-organized between the Pegaso and the Medina projects had as main objective to review some of the indicators of the Pegaso project and to identify those especially relevant for each of the Maghreb countries. Part of the discussion also focussed on the available data, how to make it accessible and the possibilities to share this data through the Pegaso SDI.

(4) Grigoletti, Georgia (November 2013)

A training workshop on the coastal sustainability indicators was held in Grigoleti, Guria Coastal Region of Georgia, on the 20th of November 2013. The Commission for the Protection of the Black Sea Against Pollution Permanent Secretariat (BSC PS) has organized this training workshop with the objective to provide basic understanding of the coastal indicators in the view of their application at the international level, as well as to apply coastal indicators for the Guria CASE as the basis for regional level reporting on the state of the coastal environment.

(5) Athens, Greece (November 2013)

The workshop "The future of Greek aquaculture; Building a sustainable industry in the framework of integrated coastal zone management" gathered 62 experts during 3 days and has focused on the mobilisation of the ICZM principles for the integrated management of the coastal and interface zones, making reflexions on how to do a better aquaculture, transforming it into a durable sector.

The workshop has been organised by the Pegaso Greek CASE and led by the Hellenic Centre for Marine Research (HCMR) with the participation of organisms and structures actively involved in the planning sector and the aquaculture in the Mediterranean Sea, principally the General Fishery Commission of the Mediterranean (GFCM) and IFREMER.

(6) Cairo, Egypt (December 2013)

The National Institute for Oceanography and Fisheries (NIOF) has been in charge to organize the "International workshop on the Nile Delta northern lakes: Investment scenarios for restoration actions and sustainable development within ICZM frame".

The workshop has gathered organisms and structures very active in the sector of the planning, management and exploitation of the Nile Delta, being the main objective of the workshop to show the interest of some prospective methods to anticipate acute problems in the management of the great lakes of the Nile delta, especially focussing on ICZM and aquaculture sustainable development.



2.3.5.2 WP6 deliverable progress and status

WP	WP Task Id	Deliverable number	Deliverable name	Status
6	6.1	D6.1A	Report and associated material and lessons learned from a transdisciplinary project	Submitted on the 10th of March 2014.
6	6.3	D6.3	Concept documents describing joint present and future initiatives (incl. additional funding) and strategies building scientific capacity in ICPC countries.	Submitted on the 10th of March 2014.

2.3.5.3 WP6 use of the resources

Participant number	1	2	3	4	5	6	7
Participant short name	UAB	UPO	PLAN BLEU	IFREMER	ACRI EC	IOC UNESCO	PAP-RAC
Planned	4,8	13	1,0	4	0,5	5,0	4,0
3 rd Period	1,19	0	0,0	1,69	0,34	3,21	0,61
Actual	4,91	13,5	1,15	4,45	0,83	3,29	6,91
Participant number	8	9	10	11	12	14	15
Participant short name	IUCN	UNOTT	VLIZ	UNIVE	JRC	HCMR	MEDCOAST
Planned	1,5	4,1	1,5	13,0	0,5	1,4	1,0
3 rd Period	0,0	1,0	0,05	5,54	0	1,4	0,0
Actual	0,69	3,65	0,58	17,37	0,77	1,4	0,23
Participant number	16	17	18	19	20	21	23
Participant short name	DDNI	UM5a	AREA-ED	NIOF	UOB	МНІ	TdV
Planned	0,5	3,5	3,0	2,5	30,0	2,5	0,5
3 rd Period	0,0	0,0	0,0	0,5	18,35	0,625	0,0
Actual	0,5	0,0	0,0	2,8	37,95	2,50	0,06
Participant number	24	25					
Participant short name	NARSS	BSC PS					
Planned	0,5	2,0					
3 rd Period	0,0	0,06					
Actual	1,0	1,23					



Individual partner achievements:

Partner	Contribution for the period
UAB	- Contribution to the final deliverables and to the organization of the Task 6.3 ICPC workshops.
IFREMER UOB	 In WP6, output from WP4 were transferred and especially the Integrated assessment scheme (T4.6). This led to an integration of D4.6 into D6.1. Denis Lacroix acted as co-organizer of two capacity-building workshops. The first one proposed an indicator-based approach for the sustainable development of marine aquaculture in Greece and the second one proposed a prospective scenario approach for the transition of Nile delta from rice culture toward aquaculture. Both workshops targeted an audience of high-level representatives of the administration, research organisations and the private sector.
ACRI EC	 Iteration with scientific community on reliability and extent of the results for monitoring purposes.
IOC UNESCO	 Training products were produced in the form of videos on both the indicators (task 4.1) and the Pegaso Integrated Regional Assessment (5.2). Moreover, the IOC contributed to the organization of a training session in Algeria on indicators for the Maghreb countries. The contribution was made for the training in Georgia as well.
PAP RAC	 Preparation and dissemination of the MedOpen course results; preparation and distribution of certificates.
UNOTT	- Training material on LEAC (video) and BBN.
VLIZ	 Contribution to and Review of Capacity Building Plan. Final report and evaluation of the Training Session Oostende. Post-training support to participants and partners.
UNIVE	 Preparation and submission to the organizers of the IPCC workshop of the Training evaluation. Collection of all the material produced during the IPCC trainings and preparation of the deliverables 6.1 Report and associated material and lessons learned from a transdisciplinary project and 6.3 concept documents describing joint present and future initiatives (incl. additional funding) and strategies building scientific capacity in ICPC countries.
HCMR	 Participation in a meeting of GFCM, Tunis Tunisia, related to the following stakeholder workshop in Greece 26-28 Nov 2013 which was organised with the cooperation of GFCM (among others) following a decision of the Pegaso coordination unit. Organisation of ICPC workshop entitled "The future of Greek aquaculture: Building a sustainable industry in the framework of integrated coastal zone management", 26-28 November 2014 Elaboration of the deliverables: Greece-D.0018. ICPC workshop report-GREECE
NIOF	 Prepare the materials for training course on scenario of the Nile Delta that held in Conrad hotel on December 2014.
UOB	 Final report, Group discussions and follow up on WP activities, Pre- and Post-Tests For Training Workshops, Update of the list of funding agencies, Organization of capacity building trainings and evaluation in ICPC Countries, Dissemination of training material on participation, MedOpen and SDI
MHI	 Results of our work have been regularly presented and discussed with local and national stakeholders and end-users to introduce them to the results and possibilities of the Pegaso tools.
BSC PS	- Preparation and conducting of training workshop in the Georgia CASE.



2.3.6 WP7 Dissemination

WP	Type of activity	Lead participant	PM	Start	End
7	OTHER	MEDCOAST	116,5	1	48

Task		Leader	Start month	End month	
7.1 7.2	Awareness raising in all relevant events. Awareness raising – project materials.	MEDCOAST/UM5a UAB/IUCN	1 1	48 48	
7.3	Exploitation of project results.	UAB/IOC	12	48	
7.L	Planning of WP work plan (incl. objectives and indicators) and coordination of WP	MEDCOAST	1	48	

Deliverables for the period:

D7.1	Communication Strategy and Action Plan (phase 1 on M20, phase 2 on M35 and phase 3 on M48).
D7.2.6	Project newsletter in English and French.
D7.2.16	Video materials.
D7.2.23	Brochure for decision makers
D7.3A	Peer-review summary document describing lessons learnt and recommendations.
D7.3B	Next Steps Plan.

2.3.6.1 WP7 progress of work and status of activities

During this 3rd reporting period the WP7 has concentrated on the following:

- To deliver the 3rd Poster and the 2nd and 3rd Brochures for Decision Makers.
- The 4th and the 5th Pegaso e-newsletter have also been produced, in English and French, and have been sent to the Pegaso contact list (more than 1.000 people).
- Recording the polimedia materials.
- The WP7 will now focus in preparing the last phase of the Pegaso Communication Strategy.

2.3.6.2 WP7 deliverable progress and status

WP	WP Task Id	Deliverable number	Deliverable name	Status
7	7.1	D7.1	Communication Strategy and Action Plan (phase 1 on M20, phase 2 on M35 and phase 3 on M48).	Submitted on the 28 th of March 2014.
7	7.2	D7.2.6	Project newsletter in English and French.	Submitted on the 25 th of March 2014.



WP	WP Task Id	Deliverable number	Deliverable name	Status
7	7.2	D7.2.16	Video materials.	Available in the Pegaso web portal
7	7.2	D7.2.23	Brochure for decision makers (The Pegaso CASEs)	Submitted on the 24 th of January 2014
7	7.3	D7.3A	Peer-review summary document describing lessons learnt and recommendations.	Submitted on the 31/03/2014
7	7.3	D7.3B	Next Steps Plan.	Submitted on the 31/03/2014

D7.2.10	Project bulletin in English (Translated to Arabic, French, Russian and Turkish D7.2.12/A,F,R,T /15/09/2012)	7	7	In the original DOW, there were only the Newsletters (no Bulletins). We changed this to Bulletins to be uploaded at the Pegaso web site
D7.2.11	Project bulletin in English (Translated to Arabic, French, Russian and Turkish D7.2.13/A,F,R,T /15/02/2013)	7	7	and short e-mail newsletters that makes short references to the articles in the Bulletin and takes the reader to the bulletin for the detailed article. This new scheme was Incorporated in the
D7.2.12	Project bulletin in English (Translated to Arabic, French, Russian and Turkish D7.2.14/A,F,R,T /15/09/2013)	7	7	amended DOW. Later however, there was a change in the system of newsletters. IUCN started issuing the Newsletters with full articles as those would be in the Bulletins (not only the short references). In this way, Newsletters exertest the
D7.2.13	Project bulletin in English (Translated to Arabic, French, Russian and Turkish D7.2.15/A,F,R,T /15/01/2014)	7	7	references). In this way, Newsletters overtook the Bulletins. These are the reasons why four Bulletins (D7.2.10 to D7.2.13) were not issued, as they would overlap with the Newsletters.
D7.2.20	Project poster	7	7	There were no funds available at MEDCOAST for designing Poster No 4 and at IUCN for printing. Despite the limitation of the budget, printing a project poster at M48 would not do much contribution to the visibility after ending of the project.



2.3.6.3 WP7 use of the resources

Participant number	1	3	6	7	8	10	11
Participant short name	UAB	PLAN BLEU	IOC UNESCO	PAP-RAC	IUCN	VLIZ	UNIVE
Planned	7,7	6,0	2,0	4,5	12,8	0,5	6,0
3 rd Period	1,19	3,11	0,3	0,06	4,76	0,45	1,1
Actual	4,91	5,5	0,3	4,02	13,81	1,0	5,0
Participant number	13	15	16	17	18	19	20
Participant short name	UNIGE	MEDCOAST	DDNI	UM5a	AREA-ED	NIOF	UOB
Planned	1,0	35,5	5,0	7,0	7,0	1,0	7,0
3 rd Period	0,0	9,2	0,6	6,49	7,18	0,0	3,97
Actual	0,4	42,1	4,5	6,85	7,18	1,0	6,9
Participant number	21	24	25				
Participant short name	МНІ	NARSS	BSC PS				
Planned	4,0	3,0	6,5				_
3 rd Period	1,0	0,0	1,66				
Actual	4,0	2,2	5,4				

Individual partner achievements:

Partner	Contribution for the period
UAB	 Contributions to newsletters, monthly e-news, factsheets. Updating the plan for use and dissemination of foreground. Participation in workshops and meetings to present the Pegaso results.
PLAN BLEU	 Contributions to newsletters, monthly e-news, factsheets, Wiki articles. Participation in workshops and meetings to present the Pegaso results. Publication of scientific papers. Dissemination of factsheets and technical reports.
IOC UNESCO	- The IOC led the development of the Next Step Plan. The work was done in conjunction with the project coordinator considering the links between the Next Step Plan and the Business Plan. The IOC also participated in a number of disseminations events.
PAP RAC	Contribution to the Pegaso bulletins and e-news; presentation and promotion of the project and its results at a series of international meetings; presentation of the Pegaso results at the COP18 (Barcelona Convention); participation in the Adriatic initiative meetings to link the project; contacts with possible donors regarding the project follow-up; promotion of the project with other ICZM projects in the Mediterranean (MedPartnership, MAREMED, SHAPE, etc.); shooting of the polimedia videos about the platform and the ICZM Process.



IUCN	 Participation to the final meeting, review of networking, scenarios, business plan, toolbox and governance aspects. Thinking the future Preparation of the Pegaso CASEs brochure and the IRA publication. Releasing the 3 Pegaso Newsletters (April 2013, Sept 2013, Jan 2014). Publicity of the SDI brochure through the IUCN-Med Newsletter (dec 2013) Publication of the brochure and the 3 newsletters on the IUCN-Med website. Publication of a webstory of the final Pegaso conference on the IUCN-Med website. Tweets about the launch of each Pegaso Newsletter through the account @llazaromarin Tweets about the Final Pegaso conference (Jan 2014) through the account @llazaromarin Distribution of hard copies of the CASEs brochure to the main stakeholders linked to the project (200 copies). Distribution of the IRA publication.
VLIZ	 Drafting of Coastal Wiki articles. Dissemination of the Pegaso Products & Deliverables.
UNIVE	 Collaboration in the preparation of the brochure the Pegaso CASEs Building capacity and sharing experiences for Integrated Coastal Zone Management (ICZM).
MEDCOAST	 Management of the WP. Design of Pegaso Poster No: 3. Organisation of the national Pegaso workshop entitled "Coastal Management in Turkey: Recent Developments" during 25-26 April 2013 in Marmaris, Turkey. Representing Pegaso project in the COP18 Istanbul, 18th ordinary meeting of the contracting parties to the Barcelona Convention and its protocols during 3-6 December 2013 in Istanbul, Turkey. Development of the dedicated web page for the Final General Meeting. Organization of the Final General Meeting of the Pegaso project during 14 -17 January in Antalya, Turkey.
DDNI	 Dissemination activities: publication of papers, posters, participation to the Medcoast and other conferences.
UM5a	 Organisation of the 3rd Pegaso General Meeting in Rabat. Secretariat (letters of invitation, banners, flyers, badges, Roll-on, documents, briefcases) and all logistics (flights and hotel booking, transport, meeting venue, etc. Publication of scientific papers. Contributions to newsletters, brochures, factsheets, Wiki articles.
AREA ED	 Atelier maghrébin. Réalisation d'une publication sur les aires marines protégées. Émission radio et television. Communication.
UOB	 Translation. Participation in conferences and workshops.
МНІ	 Results from the Pegaso project have been disseminated in forms of scientific presentations at various meetings and scientific conferences and publications, articles in local newspapers and presentations at local TV programs.
BSC PS	- Participation in 4th BS Scientific Conference (Oct 2013), MEDCOAST Conference (Nov 2013).



2.3.6.4 WP7 dissemination activities

During the period, presentations of Pegaso have been done at different events:

- Meetings of the executives of UNEP/MAP and its components (ECP meetings) Pegaso included in the UNEP/MAP Programme of Work (PoW);
- ENPI CBC project MARE NOSTRUM kick-off (Haifa, March 2013) short presentation of the project;
- DG MARE expert meeting on Information and Knowledge (Athens, April 2013) detailed presentation of the Platform including SDI;
- MAP NFPs meeting (Athens, April 2013) information on the links with the EcAp process;
- 12th International Coastal Symposium Plymouth University, 8-12th of April 2013. Oral Presentation by A.
 Khouakhi on Vulnerability assessment of Al Hoceima bay.
- Joint EU MSP-ICZM Expert Group (Brussels, June 2013) information about the project;
- Presentation of the indicators results at the IOC-UNESCO General Assembly, Paris, 26 June 5 July 2013
- Pegaso included in the PAP/RAC Progress Report for 2012-2013 submitted to PAP/RAC and UNEP/MAP NFPs;
- D2.1B shared with PAP NFPs for comments;
- Presentation of the project results at the PAP NFPs meeting back-to-back with the Mediterranean Coast Day (Rimini, September 2013);
- 3rd International Marine Protected Areas Congress, 21-25th of October 2013, Marseille & Corsica, France.
- Presentation/discussion of COP decisions at the MAP NFPs meeting (Athens, September 2013) and COP18 (Istanbul, December 2013); The Pegaso project was included in COP18 Istanbul Side event presentation entitled "Integrated Coastal Management in the Mediterranean" and presented by Erdal Özhan.
- Dissemination of the project results throughout the Med and BS regions.
- DG Environment and DG Research & Innovation workshop on Science-Policy Interface (14-15th of November, Brussels, Belgium).
- SPINCAM (IOC-UNESCO, Glamders government and Permanent Commission for the South Pacific) (2-5th of December 2013, Santa Marta, Colombia).
- Evaluation meeting to assess progress since the adoption of local community pilot ICZM plan (Tskaltsminda, Guria Region, 13th of March 2013).
- The MEDCOAST Foundation organised the "National Workshop on ICM in Turkey: Latest Developments" during the 25-26th of April 2013 in Marmaris, Turkey with partial support of the Pegaso Project's Koycegiz-Dalyan CASE.
- The TUBITAK Marmara Research Center, Istanbul, Turkey from the 3rd to the 10th of August 2013.
- Presentation of Georgia CASEs activities to Black Sea Commission's ICZM Advisory Group Meeting No. 17, Istanbul, Turkey (11th of September 2013).
- Participation in the Black Sea BS-GES 3rd Biannual Conference (27th to 30th of October 2013).
- Organisation of the Global Congress on ICM: Lessons Learned to Address New Challenges EMECS 10
 MEDCOAST 2013 Joint Conference, 30 October 3 November 2013, Marmaris, Turkey with over 300
 participants from 40 countries (two special sessions were dedicated to the Pegaso Project with 12 oral and
 two poster presentations from Pegaso partner institutions were made and their manuscripts were published
 in the 2 volume of Proceedings of the Global Congress.)

Publication of papers in proceedings of scientific conferences and events:

- Marin E., Nichersu I., Mierla M., Trifanov C, Nichersu I., 2013, Application of the Sketch Match method in Sulina coastal study area within Pegaso project, Geophysical Research Abstracts, Vol. 15, EGU2013-8719, 2013 EGU General Assembly 2013 (http://meetingorganizer.copernicus.org/EGU2013/EGU2013-8719.pdf)
- Iuliana Nichersu, Iulian Nichersu, Eugenia Marin, Marian Mierla, Cristian Trifanov, 2013, Spatial planning modeling in ICZM implementation for Black Sea- case study Sulina European Geosciences Union, General Assembly, Vienna, Austria, 07-12 April 2013, Vol. 15
- Participation at the 15th MED EDUC Workshop "La Méditerranée, un patrimoine naturel et culturel à connaître et à protéger à travers une gouvernance concertée / The Mediterranean Sea, a natural and



- cultural heritage to know and to protect through a collaborative governance", 29 May 2013, Marseilles (France).
- Governance of Marine Protected Areas in the North Adriatic Sea Marco Tonino, Stefano Soriani, Francesca Santoro SASE Conference "State in Crisis Network A": Communitarian Ideal and Civil Society Milan, June, 27th 2013.
- Lafitte A., Urbanization pressure and coastal area development in relation with ICZM Protocol in the Mediterranean, OTREMED Forum, Roma (Italy), 15-17 July 2013.
- Lafitte A., Introduction to the Climate Variability Project and Platforms, 1st Steering Committee of the "ENPI-ClimaSouth project", Brussels (Belgium), 10-12 September 2013.
- Nichersu Iuliana, Nichersu Iulian, Marin Eugenia, Mierla Marian, Trifanov Cristian, Scenario based on prioritizing the components of vulnerability in black sea coast, Deltas and Wetlands, Tulcea, September 2013.
- Participation at the workshop "La prospective en appui à la décision et à la GIZC / Support of foresight analysis to decision-making and ICZM", Montpellier (France), 25-27th of September 2013.
- Adnani M, Jana N, Niazi S, Khouakhi A, Raji O. (2013): Analyse de la cinématique du trait de côte des plages du Parc National d'Al Hoceima : Caliris, Torres et Bades, à l'aide du couplage télédetection et SIG. Rencontres des Sciences Géo.
- Nowell, M.S., Kalwij, J.M., Breton, F., Salvati, L., 2013b. Composition, configuration or complexity: spatial metrics to manage disturbed seascapes, DGM Mitteligungen.

Pegaso related papers presented at the Global Congress on ICM Global Congress on ICM (Turkey) (EMECS 10 – MEDCOAST 2013 JOINT CONFERENCE, 30th of October - 3rd of November 2013). The manuscript of the following papers were printed in the proceedings of the congress:

- Environmental Assessment Tools in the Pegaso Case Sevastopol Bay
 Sergey Konovalov, Volodymyr Vladymyrov, Vyacheslav Dolotov, Olexandra Sergeeva, Yuri Goryachkin,
 Olga Moiseenko, Sergey Alyomov, Natalia Orekhova, Liubov Zharova
- Easy To Use Tool For ICZM Progress Reporting Mamuka Gvilava, Amiran Gigineishvili
- Participation, Stakeholder Dialogue, and Governance Platforms in the Mediterranean and Black Sea Basins
 - Julien Le Tellier, Antoine Lafitte
- Seascape Metrics for the Mediterranean Sea: A Case Study Megan S. Nowell, Luca Salvati, Françoise Breton
- Coastal Spatial Data Infrastructures: so far so good?
 - Gonzalo C. Malvárez, Dr. Emilia G. Pintado, Fátima Navas, Alessandro Giordano
- Application of ICZM tool's: Experience from the French Pegaso study site
 Anis Guelmami, Lisa Ernoul, Eric Le Gentil
- Pegaso Case Studies and ICZM Implementation
 - Stefano Soriani, Marco Tonino, Fabrizia Buono, Andrea Bordin, Monica Camuffo
- Participatory Experiences in Pegaso Project
 - Stefano Soriani, Fabrizia Buono, Andrea Bordin, Marco Tonino, Monica Camuffo
- A set of indicators for ICZM
 - Francesca Santoro, Ann-Katrien Lescrauwaet, Jean-Pierre Giraud , Antoine Lafitte, Julian Barbière
- Data Sharing INSPIREd by Pegaso SDI Georgian CASES
 - Mamuka Gvilava, Tamar Bakuradze, Amiran Gigineishvili, Karin Allenbach, Emilia Guisado, César Martínez, Gonzalo Malvárez
- Implementing Local Policies for Case Study Sulina
 - Iuliana Nichersu, Iulian Nichersu, Marian Mierla, Eugenia Marin, Cristian Trifanov
- The Pegaso Project: Supporting ICZM in the Mediterranean and Black Sea Basins Francoise Breton, Željka Škaričić
- Monitoring of Boat Navigation in the Dalyan Channel Nesrin Tüfekçi, Ulaş Avşar, Erdal Özhan
 - Management Issues of Köyceğiz-Dalyan SPA (Turkey)
 - Erdal Özhan, Ulaş Avşar, Nesrin Tüfekçi, Serdar Özuslu, Sinem Önder, Deniz Konaklı, Nurdan Kan



The following papers have been produced during the period:

- Le Gentil E. and Mongruel R., A Systematic Review of Socio-economic Assessments in Support of Coastal Zone Management (1992-2011), submitted.
- Measuring progress in ICZM. The case on North Adriatic Regions. Stefano Soriani XXIV Rassegna del mare. Mare Amico. 4-6 November 2013. Lecce.
- Khouakhi A., Snoussi M., Niazi S., Raji O. (2013) Vulnerability assessment of Al Hoceima bay (Moroccan Mediterranean coast): a coastal management tool to reduce potential impacts of sea-level rise and storm surges. *Journal of Coastal Research Special Issue No. 65, 2013*
- Allenbach, K., Garonna, I., Herold, C., Monioudi, I., Giuliani, G., Lehmann, A., Velegrakis, A., (submitted)
 Black Sea beaches vulnerability to sea level rise, Environmental Science & Policy.
- Zharova L. Integrated management as a background of modern environmental policy. Global Business and Management Research: An International Journal (2012) Vol. 4, No. 2, 123-131.
- Le Gentil E., Mongruel R. (2014). "A Systematic Review of Socio-economic Assessments in Support of Coastal Zone Management (1992-2011)", Journal of Environmental Management, Submitted.
- Diego Macías, Adolf Stips, Elisa Garcia-Gorriz (2014) The relevance of deep chlorophyll maximum in the open Mediterranean Sea evaluated through 3D hydrodynamic-biogeochemical coupled simulations.
 Ecological Modelling, Volume 281, 2014, Pages 26–37.

Other:

- Soriani S., Tonino M., 2012, Approcci e strumenti della gestione integrata della zona costiera nel Mediterraneo, Insegnare il mare. Paesaggi costieri e vocazioni marittime, Carocci, pp. 33-44 (ISBN 9788843066179)
- Le Tellier J. and S. Sanna (2013), Building on the Mediterranean scenario experiences: cross-cutting approaches between regional foresight analysis and participatory prospective, Plan Bleu Technical Report, Sophia-Antipolis (France), http://planbleu.org/en/publications/building-mediterranean-scenario-experiencescross-cutting-approaches-between-regional
- Sanna S. and J. Le Tellier (2013), Possible futures for the Mediterranean: a cross-cutting approach of foresight analysis studies, Scientific Annals of the Danube Delta Institute: 18, Tulcea (Romania), http://planbleu.org/sites/default/files/upload/files/PossibleFuturesForMediterranean_ScientificAnnalsDanub eDeltaInstitute2013.pdf.
- K. Skuratova, Yu. Bilogurova, O. Sergeeva, D. Slipetskyy Database of IBSS coastal expedition's reports
- V. L. Vladymyrov, O. V. Sergeeva, K. A. Skuratova Availability of Marine Biological Data for the Black Sea
- The local ICZM Pegaso website (http://wiki.iczm.org.ua/en/index.php/Main_Page) will remain operational and active for years after the Pegaso project is completed.



2.4 Project management during the period

2.4.1 Management tasks and achievements

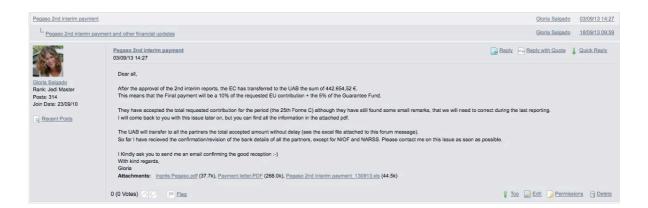
During this last reporting period the Pegaso management team has concentrated on the following:

2.4.1.1 2nd EC reporting and interim payment

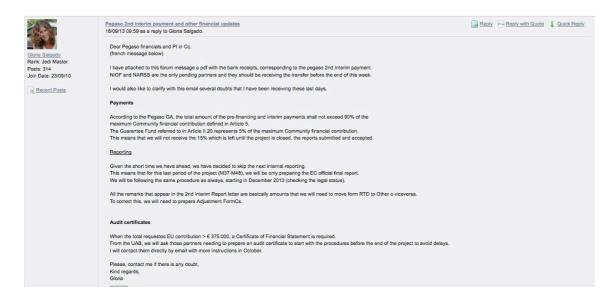
The 2nd EC report was sent to the EC on the 27th of March 2013 (D1.4B 2nd ECR-UAB_130327-L-1.2). The 2nd interim payment letter and therefore the EC approval, was received on the 29th August 2013 together with a 2nd interim payment of 442.654,52 €.

The UAB has transferred to the Pegaso Consortium the corresponding amounts to this 2nd interim in September 2013:

Nº	Partner	Total EC contribution (3rd Amendment)	Pre-financing	Pre-financing (GA)		Financing (GA) Net amount 1st interim		Final payment (10%) + Guarantee Fund)		2nd interim	2nd interim payment		
2	UPO	255.777,64	114.563,37	44,79%	72.427,61	28,32%	38.366,65	15,00%	28.607,51	11,18%	1		
3	PLAN BLEU	431.979,89	209.359,67	48,47%	129.942,60	30,08%	64.796,98	15,00%	27.880,63	6.45%	1		
4	IFREMER	536.955,00	257.535,29	47,96%	161.519,86	30,08%	80.543,25	15,00%	35.363,64	6,59%	1		
5	ACRI-EC	86.920,88	42.011,76	48,33%	26.146,41	30,08%	13.038,13	15,00%	5.724,57	6,59%	1		
6	IOC UNESCO	257.320,11	130.500,00	50,72%	77.403,71	30,08%	38.598,02	15,00%	16.947,00	6,59%	1		
7	PAP/RAC	348.138,17	162.921,30	46,80%	101.192,47	29,07%	52.220,73	15,00%	31.803,67	9,14%	1		
8	IUCN	210.144,27	102.028,80	48,55%	63.212,88	30,08%	31.521,64	15,00%	13.380,95	6,37%	1		
9	UNOTT	500.535,94	241.925,61	48,33%	150.564,75	30,08%	75.080,39	15,00%	32.965,20	6,59%	7		
10	VLIZ	303.376,35	132.035,23	43,52%	83.677,41	27,58%	45.506,45	15,00%	39.740,58	13,10%	1		
11	UNIV CA' F	484.944,76	230.937,41	47,62%	143.726,08	29,64%	72.741,71	15,00%	30.392,41	6,27%	1		
12	JRC*1	281.220,22											
13	UNIGE	149.137,92	72.083,33	48,33%	44.861,74	30,08%	22.370,69	15,00%	9.822,16	6,59%			
14	HCMR	212.822,62	102.864,27	48,33%	64.018,55	30,08%	31.923,39	15,00%	14.016,41	6,59%	-		
15	MED-COAST	386.290,59	169.490,78	43,88%	116.194,13	30,08%	57.943,59	15,00%	25.453,50	6,59%	1		
16	DDNI	137.522,08	66.455,47	48,32%	41.359,09	30,07%	20.628,31	15,00%	9.079,21	6,60%	1		
17	UM5	244.520,00	118.053,20	48,28%	73.471,52	30,05%	36.678,00	15,00%	16.317,28	6,67%			
18	AREA-ED	132.585,34	64.082,91	48,33%	39.882,61	30,08%	19.887,80	15,00%	8.732,02	6,59%	1		
19	NIOF	193.317,59	93.436,83	48,33%	58.151,29	30,08%	28.997,64	15,00%	12.731,82	6,59%	7		
20	UOB	219.126,16	90.769,12	41,42%	65.914,70	30,08%	32.868,92	15,00%	14.431,57	6,59%	1		
21	мні	146.828,39	70.967,06	48,33%	44.167,02	30,08%	22.024,26	15,00%	9.670,06	6,59%	1		
23	TDV	198.651,86	96.065,33	48,36%	59.787,17	30,10%	29.797,78	15,00%	13.001,58	6,54%	1		
24	NARSS	76.789,88	37.115,11	48,33%	23.098,94	30,08%	11.518,48	15,00%	5.057,35	6,59%	1		
25	BSC PS	167.861,38	67.500,82	40,21%	50.457,79	30,06%	25.179,21	15,00%	11.149.38	6.64%	1		







2.4.2 Documentation progress and status

The 2nd EC report was sent to the EC on the 27th of March 2013: (D1.4B 2nd ECR-UAB_130327-L-1.2).

2.4.3 Problems encountered and corrective actions

During this last reporting period the need for the following corrective actions has been identified:

After the 2nd period, special attention has been given to those partners having contributed less to the Pegaso work than expected. The coordinator has contacted them to request a clear plan of their expected work and prevision of budget for this last period.

2.4.4 The Pegaso web portal and the Pegaso Intranet

The electronic communication and management tools developed by WP3 include:

- A public website "the Pegaso web portal". http://www.Pegasoproject.eu/
- A private intranet "the Pegaso content management platform". http://gstgis.com/liferay/en_GB/

The Pegaso intranet is the restricted/internal site of the project offering a common space where the project partners and End-users can share and exchange information, communicate with each other and work together on the different tasks and project documents. It has been in operational since month 3 of the project offering a common place for exchange and communication.

The Pegaso Web Portal is the public image of the project. It is used to share the information (news, events, deliverables) produced throughout the project, with users outside the Pegaso consortium. It provides complete external visibility and a permanent showcase of the project, since it contains general information on project goals, scope, focus and work progress as well as on consortium contacts.

The Pegaso Wiki is embedded in the Coastal and Marine Wiki (www.coastalwiki.org), which is an internet encyclopaedia providing up-to-date, high-quality information for coastal and marine professionals. The wiki s continuously improved, complemented and updated by expert users. The Pegaso wiki has already become the main artery of the project, a portal that acts as on online collaboration platform to publish information and discuss on various tools, methodologies, indicators or scenarios used in ICZM at various scales and in different CASEs throughout the Mediterranean and Black Sea.



2.4.5 Project meetings

Different types of meeting have taken place during this last reporting period. Minutes of every meeting and action plans have been produced and distributed.

- General project meetings.
- Steering Committee meetings.
- Virtual meetings
- Other project meetings often in connection to another event, such as a planned workshop.
- Technical/working meetings with no specific meeting schedule.

2.4.5.1 General Project meetings

The Pegaso 3rd General Meeting took place in Rabat (Morocco) from the 19th to the 22nd of March 2013. The host of the meeting was the University Mohammed V-Agdal of Rabat. The diversity of the partners to the Pegaso project was well represented by the participants including scientists, representatives of international organisations, researchers, end-users and other stakeholders from the Mediterranean and Black Sea. The main topics discussed can be summarised as follows: discussion on the future tasks for each Work Package, presentation of the SDI functionalities, the indicator building and the role of the atlas, the progress in the CASEs and the latest evaluations and the presentation of the Integrated Regional Assessment. The last two days of the meeting, a workshop with the Pegaso partners and end-users has been organized to put into practice the Bayesian Belief Network (BBN) tool. Very successful steps have been taken, such as the good overall communication and co-ordination established through the governance system, first between the partners, but also between the regional platform and local sites.

The ideas exchanged during the meeting helped structure the next key steps for the last period of the project. Pegaso has still 10 months to go.

The Pegaso final conference took place in Antalya (Turkey), from the 14th to 17th of January 2014.
The meeting focused on the ICZM Regional Governance Platform in the Mediterranean and the Black Sea, the ICZM/MSP policies in the Mediterranean and the Black Sea and the future of Pegaso.
A wide range of institutes and networks attended the meeting from the Mediterranean and Black Sea and representatives of ICZM initiatives from other regional seas.

2.4.5.2 Steering committee meetings

Pegaso SC in Barcelona from the 4th to the 6th of September 2013.

During the 1st session of the SC meeting, the SC members have presented the most innovative aspects of each WP to the European Commission Project Officer. Following the presentation of the Pegaso main achievements and potential impact, Stefan Weiers from the EC has given his feedback on the Pegaso progress of work.

2.4.5.3 Other project meetings

— Workshop on the Pegaso Integrated Regional Assessment (24th of September 2013).
WP5.2 meeting to discuss about the preliminary results of the Pegaso Integrated Regional Assessment as a basis for developing guidelines for ICZM implementation in the Mediterranean and Black Sea, back-to-back with the Coast Day that this year will be held in Rimini, Italy on the 25th of September.

— The ICPC workshops:

BBN exercise in Lebanon	Lebanon September 2013
BBN exercise in Dalyan	Dalyan, November 2013
Atelier sous regional (Algérie, Tunisie, Maroc) sur les indicateurs GIZC	Alger, November 2013
The future of Greek aquaculture. Building a sustainable industry in the framework of integrated coastal zone management.	Athens, November 2013
Pegaso CASEs training workshop. Introduction into the ICZM Toolbox – Indicators.	Grigoleti, Guria Region, Georgia, November 2013.
International workshop on the Nile delta northern lakes: Investment scenarios for restoration actions and sustainable development within ICZM frame.	Cairo, December 2013



- Stakeholder Meeting: Participatory workshop on coastal zone management in Bouches-du-Rhône (France) and Al Hoceima Bay (Morocco), Marseilles (France), 11 February 2013.
- "Nile Delta stakeholders Workshop and Policy makers" held on the 29th of March 2013 in Helnan Palestine,
 Alexandria, Egypt, to validate the final output from the Pegaso Nile Delta ICZM Management Plan.

2.4.5.6 Technical/working meetings

Technical meeting WP3-WP4-WP5 (28-29th of May 2013, Sevilla, Spain).

2.4.6 Changes in the legal status

No changes in the legal status have been identified in the Pegaso Consortium during this last reporting period.

2.4.7 Pegaso synergies with other ICZM initiatives and projects

- Pegaso participated in the cluster of Mediterranean project FACECOAST.
- The UAB, PAP/RAC and UPO are partners of the EU Med project COASTGAP, with the objective to make regions adopting a number of ICZM best practices (from the ICZM Protocol and other policies). The objective is also to build a network for the regions analysing how it can be articulated with the ICZM Mediterranean platform (after Pegaso).
- NIOF, IUCN, JRC, UAB, and UPO are partners in the FP7 Project MEDINA whose objective is to assess the
 coastal and marine ecosystems in North Africa, developing ECAP indicators and making an assessment on
 ecosystem trends and risks, as well as recommendations to the countries for monitoring (finishing September
 2014).
- On demand of a Pegaso stakeholder, Mr Mitja Bricelj, F. Breton has been supporting the preparation of the third Pillar of EUSAIR in the Adriatic-Ionian Sea, with different Skype conferences and phone calls, and a 6 pages note with ideas and recommendations.
- The Pegaso coordinator, Françoise Breton and the PAP/RAC director, Zeljka Skaricic, participate in 2nd joint Member State Expert Group on Maritime Spatial Planning (MSP) and Integrated Coastal Management (ICM) led by the EC (DG ENV, Brussels, 2-3 July 2013).
- Françoise Breton participated also in the steering Committee of the ENPI project (H2020) and the Med partnership project.
- Invited this year (June 2013) to be part of the steering committee of the Coastal Commission of the International Geographic Union (IGU), she will chair a special session on Pegaso issues in the Mediterranean and the Black Sea at the IGU International Conference in Krakow (Poland), August 2014. US interest on what Pegaso has developed on ICZM/MSP and the ecosystem based framework is clearly appreciated in the IGU exchanges, with a view to present and transfer knowledge on these ideas in the USA.
- Participation to the ESPON meeting "Stepping towards the sea", Brussels, 14-15 May 2013 (F. Breton and Z. Skaricic).
- Participation to the meeting of the Commission for the Sustainable Development in the Mediterranean Sea, UNEP/MAP, Malta, 10-12 June 2013
- Workshop on FP7 project on marine issues, HCMR, Athens 13-14 June 2013 (Presentation of Pegaso)
- Workshop Portefex-Alboran project, included CAMP-Almeria, Malaga 19-21 June 2013 (Presentation of Pegaso), UAB together with PAP/RAC, UPO, MEDPAN, UICN.
- Intensive contacts have taken place for the Pegaso business Plan, with UNEP/MAP, Plan Bleu, EEA, UpM, DG MARE, CAQ/GFCM, MEDWET/RAMSAR, MEDPAN; etc to look at founding possibilities and to be involved in proposals.



3. Deliverables and milestones tables

The following deliverables, which are due in this reporting period, have been uploaded by the responsible participants to the Pegaso Intranet and then approved and submitted by the Pegaso Coordinator (partner 1 UAB).

The deliverables have been also submitted later on via the Participant portal:

Del.	Deliverable name	Version	WP	Lead	Nature	Dissemination	Delivery date from	Actual /	Status	Contractual	Comments
no.			no.	beneficiary		level	Annex I	Forecast Delivery	No submitted/ Submitted	Yes/No	
							(proj month)	date	Submitted		
D1.4C	Financial and progress report 3		1	1	Report	PU	M50	31/03/2014	Submitted	Yes	
D1.5	Guidelines and procedures for management of FP7 Projects		1	1	Online	PU	M48	13/03/2014	Submitted	Yes	
D2.1C	Common conceptual framework for the implementation of ICZM based on the review of current issues		2	9	Report	PU	M48	10/02/2014	Submitted	Yes	
D2.2.A	Final global results of the stock-taking		2	7	Report	PU	M37	12/02/2014	Submitted	Yes	
D2.2B	Draft recommendations to the Bucharest Convention		2	7	Report	PU	M37	12/02/2014	Submitted	Yes	
D2.4A	Guidelines for the functioning of an Interactive Shared ICZM Governance Platform		2	3	Report	PU	M47	24/03/2014	Submitted	Yes	
D2.4B	Business Plan		2	1	Report	PU	M37	31/03/2014	Submitted	Yes	
D3.2A	Report on the Mediterranean and Black Sea assessing SDI including existing viewers, their strength and limits, and the characteristics of Pegaso geoportal development.		3	1	Report	PU	M48	19/02/2014	Submitted	Yes	

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).



Del. no.	Deliverable name	Version	WP no.	Lead beneficiary	Nature	Dissemination level ¹	Delivery date from Annex I (proj month)	Actual / Forecast Delivery date	Status No submitted/ Submitted	Contractual Yes/No	Comments
D3.2B	Guidelines and training material for the SDI construction, geoportal and geonodes functionalities, included data harmonisation and interoperability, following INSPIRE principles, specially oriented towards capacity building with prototype.		3	1	Report	PU	M48	12/02/2014	Submitted	Yes	
D3.3A	Coastal and marine atlas for the Mediterranean and the Black Sea.		3	1	Prototype	PU	M48	12/02/2014	Submitted	Yes	
D4.1	Report and accompanying fact sheets documenting a populated, core set of indicators for assessing progress towards sustainable development in the coastal zones of the Mediterranean and Black Sea Basins		4	6	Report	PU	M45	20/02/2014	Submitted	Yes	
D4.2	Report, accompanying database and supporting materials on LEAC Methodology and how to apply in CASEs		4	1	Report	PU	M45	01/04/2014	Submitted	Yes	
D4.3	Report and accompanying multi-media supporting materials describing the use and application of scenarios for multi-scale ICZM across the Mediterranean and Black Sea Basins		4	9	Report	PU	M45	24/02/2014	Submitted	Yes	
D4.4	Report, accompanying supporting materials and guidelines for the use of participatory methods and application for multi-scale ICZM across the Mediterranean and Black Sea Basins		4	11	Report	PU	M45	30/01/2014	Submitted	Yes	
D4.5	Report and supporting materials to economic assessment methods to decision making within the coastal zones of the Mediterranean and Black Sea Basins		4	4	Report	PU	M45	24/03/2014	Submitted	Yes	



Del. no.	Deliverable name	Version	WP no.	Lead beneficiary	Nature	Dissemination level ¹	Delivery date from Annex I (proj month)	Actual / Forecast Delivery date	Status No submitted/ Submitted	Contractual Yes/No	Comments
D4.6& 6.2	Integrating assessment scheme for Mediterranean and Black Sea regions.		4	4	Online	PU	M48	31/03/2014	Submitted	Yes	
					م ما داده الماد		D	\			
	.1B glossary will be included in the D6.2 ex								l		fantha Thi
_	on between D4.6, D6.1B and D6.2: For the	•	,	•		•				online guidance	ior the user. Thi
	e organised into the website and the Pega	so wiki. Triei							, ,	Vaa	
D5.1A	CASES reporting (10 CASES at the		5	11	Report	PU	M47	25/03/2014	Submitted	Yes	
	end of the 5 phases: preparatory,										
	phase 1, phase 2, phase 3 and										
	conclusions) including comparison										
	among CASES and relevance of										
	CASES in the whole basin.								0.1.11		
D5.1B	Evaluation report on CASES multi		5	11	Report	PU	M47	25/03/2014	Submitted	Yes	
	sector, multi administrative and multi										
	scale work, Integrated approach										
	method in CASES.										
D5.2A	Report on the Mediterranean and Black		5	6	Report	PU	M47	28/03/2014	Submitted	Yes	
	Sea Basin Regional Participatory										
	Assessment including Fact sheets										
	showing the integration, outcomes and										
	conclusions in addition to										
	recommendations and Policy options in										
	the region.										
D5.2B	Guidelines for Maritime Spatial planning		5	6	Report	PU	M47	31/03/2014	Submitted	Yes	
	in response to policy options.										
D5.2C	Black Sea ICZM Guidelines as the		5	6	Report	PU	M47	31/03/2014	Submitted	Yes	
	governance tool for the development										
	and application of the legal agreement										
	framework (such as protocol) for ICZM										
	in the Black Sea.										
This deli	verable should be considered as a 'starting	' point. The	ICZM A	G Members an	d the BSC P	S would continue w	orking on it in a	participatory ma	nner reviewing the	texts, before ar	riving to final dra
for appro	oval with appropriate mechanism (endorser	nent by Blac	k Sea C	ommission).							
D6.1A	Report and associated material and		6	11	Report	PU	M42	10/03/2014	Submitted	Yes	
	lessons learned from a transdisciplinary										
	project.										



Del. no.	Deliverable name	Version	WP no.	Lead beneficiary	Nature	Dissemination level 1	Delivery date from	Actual / Forecast	Status No submitted/	Contractual Yes/No	Comments
							Annex I (proj month)	Delivery date	Submitted		
D6.3	Concept documents describing joint present and future initiatives (incl. additional funding) and strategies building scientific capacity in ICPC countries.		6	11	Report	PU	M45	10/03/2014	Submitted	Yes	
D7.1	Communication Strategy and Action Plan (phase 1 on M20, phase 2 on M35 and phase 3 on M48).		7	1/15	Report	PU	M48	28/03/204	Submitted	Yes	
D7.2.4	Project newsletter in English and French.		7	7	Online	PU	M39	05/06/2013	Submitted	Yes	
D7.2.5	Project newsletter in English and French.		7	7	Online	PU	M43	17/10/2013	Submitted	Yes	
D7.2.6	Project newsletter in English and French.		7	7	Online	PU	M48	25/03/2014	Submitted	Yes	
D7.2.1 6	Video materials		7	1	Online	PU	M38	28/03/2014	Submitted	Yes	
D7.3A	Peer-review summary document describing lessons learnt and recommendations		7	1	Report	PU	M46	31/03/2014	Submitted	Yes	
D7.3B	Next steps plan		7	6	Report	PU	M46	31/03/2014	Submitted	Yes	

In the original DOW, there were only the Newsletters (no Bulletins). We changed this to Bulletins to be uploaded at the Pegaso web site and short e-mail newsletters that makes short references to the articles in the Bulletin and takes the reader to the bulletin for the detailed article. This new scheme was incorporated in the amended DOW. Later however, there was a change in the system of newsletters. IUCN started issuing the Newsletters with full articles as those would be in the Bulletins (not only the short references). In this way, Newsletters overtook the Bulletins. These are the reasons why four Bulletins (D7.2.10 to D7.2.13) were not issued, as they would overlap with the Newsletters.

There were no funds available at MEDCOAST for designing Poster No 4 and at IUCN for printing. Despite the limitation of the budget, printing a project poster at M48 would not do much contribution to the visibility after ending of the project.



Milestone	Milestone name	Work	Lead beneficiary	Delivery date from	Achieved	Actual /	Comments
no.		package		Annex I	Yes/No	Forecast	
		no		(September 13 th 2012)		achievement	
						date	
38	Second Annual Report delivered to EC	1	1	31/03/2013	Yes	31/03/2013	
39	Pegaso 3rd General Meeting	2,3,4,5,6,7	17	28/02/2013	Yes	22/03/2013	
40	Wp6.3 ICPC workshops	6	1,4,6,14,15,18,19,20,25	31/03/2013	Yes	31/01/2014	
47	Pegaso Final General Metting	2,3,4,5,6,7	15	31/01/2014	Yes	31/01/2014	
50	Third and Final Reports delivered to EC	1	1	31/03/2014	Yes	11/04/2014	



4. Explanation of the use of the resources (Submitted)



5. Financial statements – Form C and Summary financial report

(24 FormC Submitted, 1 pending)(1 Third Party FormC Submitted)(11 Form C of Adjustment submitted)