



MedOpen – a virtual training course in ICZM in the Mediterranean

PAP/RAC 2013 Advanced Course Final Report

MedOpen/2013/AC
MAP/Priority Actions Programme
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1 About MedOpen

1.1 Background information

Following the need and demand for capacity building for Integrated Coastal Zone Management (ICZM) in the Mediterranean, in November 2001, the Contracting Parties to the Barcelona Convention, at their Ministerial meeting in Monaco, entrusted the Priority Actions Programme Regional Activity Centre (PAP/RAC) with the preparation of the First Virtual Training Course in ICZM in the Mediterranean.

The aim of this Course is to improve capacities for coastal management, which will subsequently facilitate sustainable coastal development in the Mediterranean. Its main objectives are:

- to promote Integrated Coastal Zone Management (ICZM) as a sustainable approach to coastal management;
- to present the basics of ICZM, benefits of using this approach, actors and responsibilities, legislation and finances needed, a way to prepare and implement ICZM projects, tools, techniques and methods that may be used, as well as good practices in coastal management;
- to provide an open and free-of-charge training opportunity for those involved or interested in coastal management;
- to provide trainees with the opportunity to experience a simulated coastal management situation and participate in finding practical sustainable solutions;
- to improve the Mediterranean coastal management networking and to promote the Internet use among coastal management practitioners in Mediterranean countries.

The target users of MedOpen are decision makers (at the local, national, regional and international level), policy advisors, project managers, staff and experts from international organisations and institutions, academic researchers and students interested in coastal management. The main advantage of MedOpen with respect to other ICZM training programmes is that it is available online and completely free of charge. In addition, the MedOpen Advanced course offers a live support by the three lecturers – experts in coastal management, who assist trainees in building their knowledge and skills related to coastal management through conflict resolution (Simulation Game), communication (Discussion Forum) and policy and decision making (Final Essays).

1.2 Training structure and learning methods

The Course is structured in a way that during the 12 weeks 12 different topics dealing with the ICZM are presented to students through the Basic and Advanced lectures, including the additional reading materials, such as the scientific articles, reports and publications, as well as the slide presentations and videos. In parallel with the theoretical part (lectures), a practical Simulation Game created by the Simulation Game Co-ordinator is introduced and developed providing students with the opportunity to experience a simulated coastal management situation and participate in finding practical sustainable solutions.

The Basic module is continuously available to users, open to everyone and completely automated, providing elementary information on coastal management in the Mediterranean through the Basic lectures, or contents delivered, followed by a short quiz. By participating in

the quiz, each trainee wins a certain number of points, enabling him/her to compete with all other trainees. When going through the course, trainees may see their results, as well as their positioning in relation to other trainees. Trainees may participate in the quiz by using their real name, or by using a selected pseudonym. To obtain the MedOpen Basic certificate, the total percentage of points won in the quiz should not be less than 75%.

The Advanced Course requires a higher degree of commitment by trainees. The Advanced trainees first enter the Basic module using their login and password. Once the Basic module is entered, the "Advanced materials", i.e. the Advanced lectures, and the "Additional article", i.e. books, reports or scientific articles, are available to download.

The Advanced Course learning methods include:

- Forum discussions during which the students and their lecturers exchange ideas and discuss the topics based on the Advanced lectures and ICZM in general. The topics for discussion, including specific stimulating questions for students, are introduced by lecturers, experts in coastal management, following each lecture. In this way, the Forum enables students to analyse the programme contents, lead discussions and share critical thinking.
- Simulation Game, as a practical part of the Advanced Course (introduced beginning the week 5 and concluded end of the week 9), is a simulation project designed to generate group work. An imaginary site on the coast, where all students become stakeholders having a specific role (the Simulation Game Co-ordinator assigns roles to each of students). All students are part of proposing and/or analysing the environmental context of the proposed development and participate in finding practical sustainable solutions.
The Simulation Game requires that the Advanced students are consistently networking for the duration of the exercise. The success of the Simulation Game resides in cohesive group work given that it is the intense feedback generated in the decision-making progress that intensifies the performance of students, as well as stimulates the communication with the Game Co-ordinator searching for new answers to issues that in the theory component may not have been discovered. The Simulation Game Forum is used as a space for most of communications during the practical Simulation Game.
- Final Essay – the Final Essay topic is introduced in the week 8 to be prepared and delivered (in the week 12) in a written form (seven pages or less) reflecting the strong emphasis made in the Course about effective communication and presentation skills. Making a written presentation of students' subject proposal to an external audience should provide an excellent opportunity to practice the skills students have honed during the Course. Students may also form a group of two to three people to carry out a collective work in drafting their Final Essay (in such a case, they would be asked to precise each one's role and commitment in doing the work).
Although no explicit requirements are made for the Final Essay, it is aimed at making: i) an explicit connection to advancing ICZM in the participant's country and location; ii) benefits or potential benefits to multiple coastal stakeholders; iii) an explicit project logic - articulated in writing presentation; iv) a clear and realistic assessment of resource needs (people, money, and materials); v) junctures that demonstrated the use and application of Course skills and tools; and vi) ideas presented in a compelling, articulated, and concise manner.

1.3 MedOpen materials

The MedOpen Advanced training course used mainly the PAP/RAC published materials, as well as different BP/RAC, CP/RAC, REMPEC, MCSO, EC, and other materials. All materials are referenced within the text of the lectures. The lectures are being regularly updated by the MedOpen lecturers and PAP/RAC, while the Simulation Game materials are revised and updated by the Simulation Game Co-ordinator, in agreement with PAP/RAC.

1.4 MedOpen communication

The MedOpen Advanced Forum was set up as a place where students and the MedOpen Team can exchange ideas and discuss about the lectures and ICZM in general. The Forum started with the *Welcome* topic prepared jointly by the two lecturers and the Simulation Game Co-ordinator. The lecturers also prepared an Introduction to each lecture, which was followed by the discussion with students. The topics for discussion are based on the lectures' contents and include some specific stimulating questions prepared for students by their lecturers.

In addition, a Forum for the development of the practical Simulation Game is opened by the Simulation Game Co-ordinator and used as a space for most communications during the five-week Simulation Game.

The Forums can also be used as document exchange tools since they offer the possibility of attaching documents.

1.5 Evolution of the Course

The Course was prepared from 2002-2004, while the first MedOpen Advanced edition was implemented in the autumn 2004. A number of 21 candidates have been selected. The priority was given to candidates applied from the Mediterranean and to those selected by the MedOpen commission. Upon the conclusion of the Course, six students were awarded the MedOpen Advanced certificate. This 1st run of the MedOpen Advanced was an excellent opportunity for building capacity in ICZM in the Mediterranean. It managed to demonstrate today's importance and practicality of the web-based learning tools in coastal management.

In 2005, the Course contents were translated into French, and the second Advanced Course edition in French was implemented in 2006. A number of 11 candidates applied for the Course, while six of them were awarded the MedOpen Advanced certificate.

During 2006/2007, the SMAP Regional Management and Support Unit (RMSU) from Rome, Italy, translated the Course materials (the Basic and the Advanced) into Arabic, within the EU financed SMAP III Programme. The ArabMedOpen, which was implemented by the Center for Environment and Development for the Arab Region and Europe (CEDARE) and attended by 198 participants from the Arab Mediterranean countries, was the first e-learning course in ICZM in Arabic. The initiative aimed at assisting decision makers, policy advisors, project managers and experts from the Southern and Eastern Mediterranean countries in building capacities for coastal management in view of the implementation of the Phase III of the SMAP programme. Two more Arabic editions were running in the following years, with the updated Course contents.

The MedOpen materials were further updated for the third, 2010/11 MedOpen edition. This run was of significant importance, particularly because of the turning-point in the Mediterranean coastal zone management – the development, signing and the ratification of

the ICZM Protocol. The ICZM Protocol was included in the theoretical part (lectures) of the MedOpen 2010/11, which helped disseminate the knowledge of Protocol's importance. A number of 22 candidates applied for this Course, but during the Course, six of them had to give up. Finally, 16 students actively participated, while 11 of them successfully completed the Course and were awarded the MedOpen certificate.

The Capacity Building Plan and the Steering Committee meeting held in Barcelona, in March 2012, gave a "green light" to conduct the MedOpen 2012 Advanced Course. This MedOpen edition was settled in the frame of the EU-funded Pegaso project with one of its work packages (WP6) devoted to education and training. As one of the Pegaso partners, PAP/RAC thus started delivering its virtual course in ICZM with particular focus on the ICZM Process, which has been agreed by the Pegaso project as an absolute need for the partners. The Course started in May 2012 and lasted 12 weeks (plus one week foreseen for the Final Essay submission). The main objective of the Course was to get acquainted with the ICZM in general and with the ICZM Process in more detail. The purpose was to deliver a Course that would not only focus on building individuals' knowledge and skills, but a Course which, through a series of interventions, would expand and strengthen the network of individuals and, hopefully, even institutions contributing to coastal management in the Mediterranean and Black Sea regions. The Course gave participants a taste of the breadth and depth of coastal management plans and programmes, as well as of the technical and professional expertise existing in these regions. It focused not so much on the technical and scientific knowledge and skills for coastal management, but rather on the professional, project management, and ICZM practice skills and knowledge critical to today's coastal manager - skills that include conflict resolution (Simulation Game), communication (Forum discussions), and policy and decision-making (Final Essay preparation). Out of 35 candidates who initially registered for the Course, 15 successfully completed and were awarded the MedOpen Advanced certificate.

2 2013 MedOpen Advanced Course

2.1 Basic information

The 2013 MedOpen Advanced Course was organised for the SHAPE project partners with the aim of getting them acquainted with the ICZM in general and in more detail with the ICZM Process being crucial for the implementation of Pilot Projects. The Course started in the 2nd week of September and was officially concluded by the end of the 1st week of December. A number of 22 applicants registered for the Course, more than a half of whom actively participated to it. Expressed in percentages, about 60% of the 22 trainees have been actively participating, either in all the three activities (36%; Forum discussions, Simulation Game and Final Essay), two of them (23%), or only one (one student as co-author of a Final Essay). A number of 14 laureates were awarded the PAP/RAC MedOpen certificates.

In addition to their theory classes (12 lectures introduced to students on a weekly basis), students participated to a practical component of the Course - the Simulation Game, becoming members of a fictitious society faced with a challenging coastal management issue. All participants were given roles evolving according to given guidelines, but in the utmost freedom to test theoretical issues and methodologies. During the five weeks the participants assumed various parts of the ICZM Process, prepared proposals which were defended with the local authorities to promote sustainable development in the imaginary scenario, and finally, submitted a full report on proposals to the Mayor. The result of their joint efforts is a document entitled a Strategy for Sustainable Development of Handenor 2020 – Rewriting a Hi(story).

2.2 MedOpen team

Mr. Yves Henocque and Mr. Brian Shipman were engaged as Lecturers with Mr. Henocque as a Head Lecturer. In addition to weekly introducing lectures to students, they also administrated the topics for discussion *via* MedOpen Forum and moderated the Forum discussions on a daily basis.

Mr. Gonzalo Carlos Malvárez García created a completely new Simulation Game and introduced it to students in the week 5 of the Course. He also co-ordinated and moderated the Simulation Game Forum providing assistance to and communicating with students on a daily basis during the five weeks of the duration of the Simulation Game exercise.

The PAP/RAC project co-ordination was carried out by Ms. Branka Barić, while Mr. Sylvain Petit provided technical support to the project.

The List of MedOpen Advanced students is attached as Annex I, short biographies of the MedOpen team members as Annex II, while the Syllabus is attached as Annex III to this Report.

2.3 Improvements done in relation to previous MedOpen editions

Some improvements were done based on the MedOpen team and students' experiences, as well as the difficulties encountered in the previous MedOpen editions. It should be noted, however, that there are still proposals for improvements which, due to the lack of financial sources, could not be realised in this run.

New software installed

For this-year Course, and based on technical obstacles encountered in the previous MedOpen Advanced editions, new software – the Content Management System (CMS) was purchased and installed by the MedOpen website provider. The new system facilitated the registration of participants; enabled the possibility of document attachment at the Forum; and, finally, enabled the PAP/RAC team to work on administrative pages (the so called “back office”) without (or with minimum) support of the website provider which speeded up and simplified the performance of many tasks to be carried out during the Course.

The only limitation of the software detected during the development of the Course is that only one attachment can be posted per each post. This issue was solved in a way that the documents were merged into one (a PDF document) and attached to the post. The other possibility could be to create several posts, one following the other, each containing one attachment / a PDF document.

Materials updated

The MedOpen lectures (Basic and Advanced), as well as short tests / games following each Basic lecture, and conditioning the opening of the following lecture, were updated. All the 12 lectures were revised, partially or completely, if and where necessary. The lecture 7, for example, was completely revised (Basic and Advanced), as well as the Basic lecture 8. As for the Advanced lecture 8, it had to be prepared since there was no lecture 8 in the previous editions. Instead, there was a link to the online report “The ICZM Process. A Roadmap towards Coastal Sustainability”. The link was replaced with the text of the Advanced Lecture 8 and the link / the reference to the original document was included in the text of this lecture.

Also the practical part of the Course was completely updated. Namely, a new Simulation Game entitled “The Handenor Simulation Project”, including the new *Scenario, Background,*

Issues, Data and Roles, was created and posted onto the MedOpen website by the Simulation Game Co-ordinator. The Co-ordinator also opened a Simulation Game Forum where detailed instructions on how to access the Simulation Game website were given in addition to the Work Plan and the detailed description of roles. The Forum was also used as a place for communication between the Co-ordinator and students, as well as among the students themselves.

Alumni list created

In order to keep the communication activities with all graduated Advanced students alive, as well as to ensure the exchange of experience for the good of students' work, and even for their future activities, a list of MedOpen Advanced Alumni has been created and posted at the MedOpen website. This is only a temporary solution until the final proposal towards the creation of linkages of the alumni group with social networks is realised.

2.4 MedOpen successfully promoted

When the 2013 MedOpen Advanced course was in its full swing, great news arrived from a group of three MedOpen previous run participants. The year before, they decided to come together to work out their Final Essay, which was about the conversion and sustainable development of a site that was used as a former U.S. base in Greece. They did a very good job and then decided to prepare a paper out of the Final Essay and submit it to the next MEDCOAST conference, which was held end October / beginning November 2013 in Turkey. The paper was accepted; they went to the conference and presented it.

This is an excellent example of the use of a Final Essay prepared during the MedOpen, and then developed further as an added-value product beyond the MedOpen course, as well as another confirmation of the relevance of this PAP/RAC initiative. This experience will be used as a benchmark in the future MedOpen activities.

2.5 Grading of students' work

The students' overall work was assessed and graded by the two MedOpen lecturers and the Simulation Game Co-ordinator taking into account students' active participation to Forum discussions and Simulation Game, as well as their Final Essays. The final Grading table (see 2.6 Grading table that follows), prepared jointly by the MedOpen team, in addition to lecturers' comments on Final Essays and the Simulation Game participation, was also announced at the MedOpen website.

Students' work was graded by stars. A maximum number of stars the student could earn per activity (and in total, as a final result) were three 

Grading per activities

Student participation to each of the three activities, i.e. Discussion Forum / Simulation Game / Final Essay was graded in a way that each of these three activities - "tasks" was granted 0,1, 2 or 3 stars max.

When grading students' participation to Forum discussion, posts' and Karma's points (the first two blue coloured columns of the table) indicating students' level of participation were also taken into consideration.

The Simulation Game participation was graded based on students' level of participation in the Game development and the submissions that students provided. Comments on individual participation of students were also provided by the Game Co-ordinator. The quality of Final Essays was graded and Head lecturer's comments on them provided.

Final grading

As for the final grading, a double point system was made: total number of stars / total number of tasks fulfilled by the student including reading of lectures¹ which allowed the attribution of 1 to 3 stars, giving a relevant and fair grading to each student, with

4x3 stars 

6x2 stars 

4x1 star 

in all 14 laureates.

2.6 Grading table

The overall work of students was assessed by grading their participation to Forum discussions and Simulation Game, as well as their Final Essays. Out of 22 registered, 14 students in total successfully completed the 2013 MedOpen Advanced Course. The grading of their overall work is presented in the Table 1 that follows.

¹ Although all students were expected to participate to all the three activities, that was not the case. However, students who participated only to one or two activities also contributed to the successful development of the Course. On the other hand, there were students who at least read the lectures and finished the Course although they did not actively participate to the Course. This "task" (reading lectures) was considered the first minimum required task of all that should be fulfilled, and some did not even go through the lectures (see indicator in the "Course finish-game points" column of the Grading table).

Table 1: Grading table

STUDENTS	ICZM FORUM COVERING THE 12 LECTURES	SIMULATION GAME	FINAL ESSAY	Posts	Karma	Course Finish Game Points (/100)	NUMBER OF TASKS STUDENT GOT INVOLVED	FINAL RESULTS	E-mail
ALBERTAZZI Carlo	/	/	/	/	/	/	/	/	calbertazzi@regione.emilia-romagna.it
ANDREOLI Elisa	0	0	0	4	4	99	4	00	elisa.andreoli@thesis.it
BERTAGGIA Roberto	0	/	0	1	1	90	3	00	roberto.bertaggia@regione.veneto.it
BOARO Ivana	/	/	/	/	/	/	/	/	ivana.boaro@regione.marche.it
BROCHIER Frédéric	00	0	/	11	13	/	2	0	fbrochier@hotmail.com
FANELLI Angiola	0	/	0	1	1	/	2	0	angiola.fanelli@thesis.it
FILOMENA Giorgio	000	000	000	24	27	94	4	000	giorgio.filomena@regione.marche.it
IVESA Ljiljana	/	/	/	/	/	/	/	/	ivesa@cim.irb.hr
JANJANIN Latinka	000	000	000	31	38	66	4	000	latinka.janjanin@istra-istria.hr
LA GHEZZA Vito	0	0	00	1	1	85	4	00	v.laghezza@arpa.puglia.it
LUŽAR Karmen	000	000	000	34	40	47	4	000	lux.karmen@gmail.com
MARRAMA Giovanna	/	/	/	/	/	/	/	/	giovanna.marrama@regione.abruzzo.it
NOVAK Tanja	0	/	0	3	3	90	3	00	tanja@harpasea.si
PUSCEDDU Maria Grazia	00	00	0	7	7	92	4	00	marigracia.pusceddu@regione.veneto.it
PITTALUGA Federico	000	000	00	22	26	92	4	000	federico.pittaluga@arpa.fvg.it
POKLAR Mojca	/	/	0	/	/	97	2	0	mojca.poklar@gmail.com
PORFIDO Antonietta	0	/	00	1	1	/	2	0	a.porfido@arpa.puglia.it
RICCI Roberto	/	/	/	/	/	/	/	/	roberto.ricci@regione.abruzzo.it
SALOGNI Gianluca	/	/	/	/	/	/	/	/	gianluca.salogni@regione.veneto.it
SCROCCARO Isabella	00	00	00	9	13	/	3	00	isabella.scroccaro@arpa.fvg.it
SEDIOLI Olga	/	/	/	/	/	99	1	/	osediolio@regione.emilia-romagna.it
TOLVE Emanuela	/	/	/	/	/	/	/	/	ehape@arpamolise.it

The evaluation of Forum discussions is attached as Annex IV. An insight into the weekly discussions between the lecturers and students, as well as among the students themselves, is available at request.

The evaluation of Final Essays, including detailed comments, overall remarks, problems encountered and ideas for improvement are given in Annex V. The Final Essays prepared by students are available at request.

Comments on individual participation in the Simulation Game are attached as Annex VI of the Report. The Simulation Game Co-ordinator's Final Report, including the detailed description and explanation of the Simulation Game, the limitations of situational practicals, as well as the role description and assignment and the detailed work plan, can be found in Annex VII. An insight into the discussion led during the Simulation Game is available at request.

An overview of Introductions by lecturers to each lecture and to Forum discussions is presented in Annex VIII.

The Strategy for Sustainable Development of Handenor 2020 – Rewriting a Hi(story), as the main output prepared by students participating in the Simulation Game under the guidance by the Game Co-ordinator, is attached as Annex IX.

2.7 Post-course evaluation by students

Upon conclusion of the Course, students were asked to fill-in a Post Evaluation Questionnaire prepared by PAP/RAC. PAP/RAC will benefit from these comments and the evaluation of the Course included in the Post Evaluation Questionnaires, which, as usual, will be taken into consideration for the improvement of the future MedOpen editions. The Post

Evaluation Questionnaires filled-in by students are attached as Annex X and make an integral part of this Report.

2.8 MedOpen statistics

The frequency of students' visits to the Forum per weeks, and the overview of all visits per day (expressed in %), including the demographic and language data, as well as the graphical presentation of the returning and new visitors, were also monitored during the Course. The MedOpen statistics including the overall weekly review is graphically presented as Annex XI.

2.9 Problems encountered

According to the Post Evaluation questionnaires filled-in by students, one of the difficulties the students faced with during the Course was the "workload" and "other commitments", which prevented them from taking a more active part in the Course. In spite of this, the MedOpen team tried to encourage them to join the others and participate even at their own pace. Also, there were students who did not participate to the Course but went through the lectures after all. This has been presented by an indicator *Course Finish-Game Points* in the Grading table which allowed checking up each student's overall lectures coverage with about 50% of them having read most of the lectures.

In addition, the difficulty preventing some students to join in this MedOpen edition was the language barrier. Namely, some students from Italy had difficulties with expressing themselves in English. At one moment, and in order to encourage students to join in, the communication in Italian was proposed but not as a permanent solution since English is the official language of the MedOpen.

As already mentioned, this-year Course, as it was the case with the former one, was in the first place organised for the participants / partners of a project to which PAP/RAC is participating. The advantage of such a course is the "secured" number of trainees, while the weak participation to the Course may be explained (in addition to the workload and other commitments) by the lack of motivation in some of trainees who have not applied on their own initiative but at request of the project leadership. Expressed in percentages, about 60% of the 22 trainees have been actively participating, either in all the three activities (36%; Forum discussions, Simulation Game and Final Essay), two of them (23%), or only one (one student as co-author of a Final Essay).

Other problems encountered have been presented in detail in Lecturers' and the Simulation Game Co-ordinator's Final Reports (see the List of Annexes).

2.10 Ideas for future

Based on the present, as well as past experience, the MedOpen team made proposals for the improvement of the future MedOpen editions (for all and more detailed proposals, see the Annexes containing the Final Reports prepared by the two Lecturers and the Simulation Game Co-ordinator). However, having in mind the human and financial resources available to PAP/RAC for the time being, a following "shortlist" of proposals was created including only the proposals which would be feasible to realise in such a framework:

1. Structure of the Course

Syllabus

- to officially postpone the introduction to Final Essay for one week - This year, and in agreement with the Head Lecturer, the introduction to Final Essay was postponed for one week so that the students could have more time for the

active participation in the Simulation Game. If applied to future runs, a reference to introducing the Final Essay, i.e. the basic information about it, should be made earlier.

- to officially prolong the Course for 1 week - The duration of the Course would be officially extended for one week so that the Course would last 12 + 1 week in a way that the week 12 would be officially reserved for the finalisation and submission of Essays, while the week 13 will allow the lecturer to revise and comment on the Essays (to be included in lecturer's ToR).
Namely, this year, as well as the year before, some students asked for a couple of days extra for the Final Essay finalisation, because, due to other commitments, it was difficult for them to submit their Final Essays in time.

2. Contents of the Course / Course materials / documents

Lectures

- to integrate more practical examples into all lectures (in particular to update the Lecture 10: "Good Practices Demonstration")
- to include and integrate the ICZM indicators (state-of-the-art, progress, etc.) - for example from the ICZM Stock-take
- to put more stress on the importance of public participation and raising awareness of the coastal and marine issues (among others, to elaborate in more detail and provide links to the PAP-MAP regional Coast Day celebration)
- to provide more references to the EU legal framework and to its recent development (IMP, MSFD)
- to include and elaborate in more detail the meaning and scope of Marine Spatial Planning
- to integrate coastal vulnerability and resilience to climate change
- to integrate gender and climate change aspects

3. Training methodology

Final Essay

- in addition to proposing a Final Essay theme, students could provide their mentor with a short summary of the Final Essay as well. In this way, students would think over the structure of their Essay before starting writing it, which would facilitate the Essay preparation. On the other hand, the Lecturer would provide students in good time with proposals / suggestions / guidelines on which direction to follow
- when a Final Essay is prepared by a group of students, it would be good to ask the Final Essay co-authors (or more, as we have seen it in the past) how they complement each other and plan working together (otherwise, and as was the case in this-year Course, it is difficult to conclude anything (to award grades) without knowing how the collaboration did take place between the authors)
- to use by Lecturers more videos (although more videos were used when compared with the previous MedOpen editions); in addition to this, the possibility of including, from time to time, live lectures and / or live ppt presentations should be explored; also, new means of communication could be introduced, like Skype and the "webinar" (for example, instead of just posting the video onto the Forum, Lecturers could make an appointment on the web with people registering beforehand, give a link, and then present the ppt live which would be followed by questions and discussion from the participating students)
- to propose to previous MedOpen Alumni (for example, to those who in the 2013 run were awarded a 3-star certificate) to submit a video comment on their MedOpen experience, put the movies together and present that "motivational" video at the beginning of the Course. At the same time, this

would also be a way of promoting the PAP/RAC MedOpen Course via Internet, social networks, etc.

- to more encourage the use of the Forum for all communication
 - the e-mail exchange should be used by Lecturers to encourage individual participation of students to the Course, in addition to PAP/RAC official communication with them
 - The idea of inviting Alumni from the previous years to join the Forum discussion in order to stimulate it (through, for example, sharing comments, ppt presentations, documents, etc. on a shared exchange-platform)
 - to ask students to chose their own "mentor", an experienced coastal management professional from their home country (at intervals, mentors would make themselves available to participants for discussions, preferably in-person discussions, all along the MedOpen Training Course, or like a "referee" in the case of an article review; also, mentors would help make the practical part of the work more dynamic operating as motivators and controllers in order to help students keep the momentum and ensure timely and correct delivery of the set outcomes)
 - tests following the Basic lectures to be redesigned and updated / newly created
 - to improve the grading system so that it could be uniform for all future editions either by applying the system of granting "stars" (applied to this-year Course) or by taking into consideration the European Credit Transfer and Accumulation System (ECTS) - framework by the European Commission - See www.en.wikipedia.org/wiki/ECTS_grading_scale (taken as a grading scale in earlier MedOpen Advanced editions)
 - to encourage the use of "karma" (the possibility to express "liking" or "disliking" posts by giving or taking off points; in this way, the difference between "karma" and posts provides a sort of appreciation of a participant by the others)
4. Post evaluation of the Course
- to expand the Post Evaluation Questionnaire with a question on evaluation of PAP/RAC technical support and co-ordination
5. Statistics / Monitoring - The Course development to be monitored / statistically followed in more detail and noted during the entire duration of the Course (all visits on the Forum; visits per groups - students, professors, PAP/RAC) and per weeks; visit duration, an overview per day / week / month

More detailed proposals for improvements and recommendations for the future MedOpen editions are contained in Lecturers' and the Simulation Game Co-ordinator's Final Reports attached as Annexes to the this overall report (see the List of Annexes that follows).

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ANNEX I

List of MedOpen Advanced students

2013 MedOpen Advanced

List of Trainees

NO.	NAME AND SURNAME	EDUCATIONAL BACKGROUND / POSITION	E-MAIL ADDRESS	INSTITUTION	COUNTRY
1	Carlo ALBERTAZZI	Degree in Civil Engineering / Technical Officer	CAIbertazzi@regione.emilia-romagna.it	Soil and Coast Defence and Reclamation Department (Emilia-Romagna Region)	ITALY
2	Elisa ANDREOLI	Senior Environment Specialist	Elisa.ANDREOLI@thetis.it	Environment Unit Environment, Territory Engineering and Laboratories Unit, Thetis SpA, Venice	ITALY
3	Roberto BERTAGGIA	Biology Degree / Manager in Public Administration	roberto.bertaggia@regione.veneto.it	Regional Secretariat for the Infrastructure, Venice Directorate for Projects (Veneto Region)	ITALY
4	Ivana BOARO	Degree in Civil Engineering / Public Servant / Executive in coastal defence institution	ivana.boaro@regione.marche.it	Coastal Defence Institution (Marche Region)	ITALY
5	Frédéric BROCHIER	Master in Environmental Management / Independent Consultant in Environmental Management	fbrochier@hotmail.com	Independant Consultant	LUXEMBOURG
6	Angiola FANELLI	Degree in Environmental Sciences / Environmental Specialist	angiola.fanelli@thetis.it	Territory Engineering Unit, Thetis SpA, Venice	ITALY
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8	Ljiljana IVEŠA	Dr. sc. / Biologist / Scientific Associate	ivesa@cim.irb.hr	Centre for Marine Research Rovinj, Ruđer Bošković Institute	CROATIA

9	Vito LA GHEZZA	Degree in Geological Science / Professional Contract with ARPA, Puglia	v.laghezza@arpa.puglia.it	Regional Agency for Environment Protection (ARPA) (Puglia Region)	ITALY
10	Latinka JANJANIN	Mr. Sc. in Biology / Professional Advisor for Natural System	latinka.janjanin@istra-istria.hr	Institute for Physical Planning, Region of Istria	CROATIA
11	Karmen LUŽAR	Degree in Social Sciences and Journalism (Honours); Postgraduate: Master of Applied Science – Natural Resource Management - MAppSc - NRM; Manager	lux.karmen@gmail.com	Nature's PR	SLOVENIA
12	Giovanna MARRAMA	Degree in Philosophy / Employee	giovanna.marrama@regione.abruzzo.it	Maritime Works and Marine Water Service (Abruzzo Region)	ITALY
13	Tanja NOVAK	Degree in Geography of Contact Areas; Postgraduate: 3rd cycle Doctoral Study Programme in Geography, (2nd year); Young Researcher, R&D Geoinformatics at Harpha Sea, d.o.o. Koper	tanja@harphasea.si	Harpha Sea, d.o.o. Koper	SLOVENIA
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18	Roberto RICCI	High School Diploma / Technician	High School Diploma / Technician	roberto.ricci@regione.abruzzo.it	Maritime Works and Marine Water Service, Office for Quality of Marine Water and Ecosystems (Abruzzo Region)	ITALY
19	Gianluca SALOGNI	Environmental Scientist / Public Servant / Co-ordinator of Environmental Assessment	Environmental Scientist / Public Servant / Co-ordinator of Environmental Assessment	gianluca.salogni@regione.veneto.it	Project Unit Commissions Coordination VAS-VINCA-NUVV (Veneto Region)	ITALY
20	Isabella SCROCCARO	Degree and Ph.D. in Environmental Science / Environmental Technician ARPA FVG	Degree and Ph.D. in Environmental Science / Environmental Technician ARPA FVG	isabella.scroccaro@arpa.fvg.it	Regional Agency for Environment Protection (ARPA) Friuli-Venezia-Giulia (FVG) Region	ITALY
21	Olga SEDIOLI	Degree in Geology / Technician	Degree in Geology / Technician	osedlioli@regione.emilia-romagna.it	Soil and Coast Defence and Land Reclamation Department (Emilia-Romagna Region)	ITALY
22	Emanuela TOLVE	Degree in Environmental Sciences / Expert Professional Technical Collaborator	Degree in Environmental Sciences / Expert Professional Technical Collaborator	shape@arpamolise.it	ARPA Molise, Molise Region	ITALY

ANNEX II

Short biographies of the MedOpen team members



Dr. Yves Henocque. Head Lecturer

First trained as a scientist (marine ecology) who then acquired management and international co-operation skills (to start with in Japan and the South-East Asia) through technical training and professional practice, it was from the very beginning of the 90's that Yves Henocque settled in the Mediterranean to start a new coastal environmental laboratory within the premises of the French Research Institute for the Sustainable Development of the Sea (IFREMER) in Toulon. After a dedicated vocational training in the United States in 1994, he started to practice integrated coastal management (ICM) and strategic planning in the Mediterranean and other marine regions like the Indian Ocean (1995-2000). More recently, he expanded his experience in Thailand (Department of Fisheries) as Team Leader and Co-Director of CHARM (Coastal Habitats and Resources Management), a 5-year and 16 million Euros project (2002-2007) co-funded between the Thai Government and the EU. Since 2008 he is IFREMER Maritime Strategy Senior Advisor where, among others, he is contributing to the building up and implementation of national maritime strategies and integrated coastal and ocean management strategy and action plans in Europe, the Indian Ocean, the Caribbean, and the Asia-Pacific regions and countries.



Mr. Brian Shipman. Lecturer

Brian Shipman has been consultant since 2002 to the Priority Actions Programme Regional Activity Centre (PAP/RAC) on the sustainable management and governance of coastal areas (ICZM) in the Mediterranean. He is also a regular consultant for the EU, the UNDP and UNEP programmes across Europe, the Mediterranean, the Middle East and Africa on ICZM and marine governance. Originally qualified as a spatial planner in the 1970's, Brian Shipman spent much of his career in the peripheral maritime region of the South West of the UK delivering practical and innovative programmes for coastal management, recreation and economic regeneration. He was the founding Chairman of CoastNET, the UK's network for coastal zone practitioners in the early 1990's and, from the mid 90's, representative to the local authority sector (Local Government Association) in the UK on the drafting of national and EU coastal and marine policy. He was heavily involved in the EU Demonstration Programme on ICZM (1997-2002), both as a local project manager and as consultant to the European Commission. Building on his extensive experience of transnational co-operation and European Structural Funds, he became EU co-operation manager for the region of Cornwall in 2002, and manager in the following decade of diverse co-operation projects across the EU and with third countries on spatial development, research excellence, climate change and economic regeneration.



Dr. Gonzalo Carlos Malvárez García. [Simulation Game Co-ordinator](#)

Gonzalo Carlos Malvárez García works at the Physical Geography Area of the University "Pablo de Olavide" in Seville, Spain, where he is a full-time Lecturer and Dean of Faculty. Also, he is the Director of the Master's course in "Education in coastal management for the Mediterranean -Educom@med", and another doctoral programme on "Strategic spatial planning". His field of work relates to coastal geomorphology, but also to the application of analytical tools and findings in the development of tools for Integrated Coastal Zone Management - including development of indicators, carrying capacity, resilience and vulnerability. He earned his PhD in Environmental Science at the University of Ulster (UK) in 1997. He is the author and co-author of many conference and technical reports, and journal articles related to environmental science.



Ms. Branka Barić. [MedOpen Co-ordinator](#)

Branka Barić is a Programme Officer at the UNEP/MAP's Priority Actions Programme Regional Activity Centre (PAP/RAC), responsible for MedOpen. In 16 years with PAP/RAC, Ms. Barić has been involved in a number of projects, most of them ICZM related, such as the Coastal Area Management Programmes (CAMPs) for Albania, Israel, Lebanon, Slovenia and Montenegro; EIA and SEA; Projects in Africa; Integrated Coastal Area and River Basin Management (ICARM); PlanCoast; Landscape Management; etc. She is the author and co-author of conference proceedings and technical reports related to ICZM.



Mr. Sylvain Petit. [MedOpen Technical Support](#)

Sylvain Petit, Programme Officer at the UNEP/MAP's Priority Actions Programme Regional Activity Centre (PAP/RAC), provides technical support to MedOpen. He has a MSc degree in Territorial Dynamics, specialization in economic strategy, from the Aix-Marseille III University (2008). He also graduated in strategic development of tourism. Through internships and in various projects he has been working in the field of integrated coastal zone management. During the past years, starting at PAP/RAC, he mainly worked on international co-operation project building and follow-up.

On several projects and missions, he joined the teams of the Conservatoire du Littoral in Aix-en-Provence (France) and the Conservatoria delle Coste in Sardinia (Italy). At PAP/RAC he has been contributing to the ICZM stocktaking analysis, animation of the interactive forum and in the drafting of a new visual concept for the governance platform within the FP7 PEGASO project. Since recently, he works in close co-operation with the French National Focal Point in the launching phase of the Coastal Area Management Programme (CAMP) France project.

ANNEX III

Syllabus

WEEK	LECTURES	RESPONSIBLE	PRACTICALS	RESPONSIBLE
week 1 16 – 22 September	1. SUSTAINABLE DEVELOPMENT ISSUES IN THE MEDITERRANEAN	Lecturer: Brian Shipman	DISCUSSION	Brian Shipman
week 2 23 – 29 September	2. HOW TO RESPOND?	Lecturer: Brian Shipman	DISCUSSION	Brian Shipman
week 3 30 September – 6 October	3. BASIC PRINCIPLES OF ICZM	Lecturer: Brian Shipman	DISCUSSION	Brian Shipman
week 4 7 – 13 October	4. BENEFITS OF ICZM	Head Lecturer: Yves Henocque	DISCUSSION	Yves Henocque
week 5 14 – 20 October	5. WHO IS RESPONSIBLE FOR ICZM?	Head Lecturer: Yves Henocque	DISCUSSION SIMULATION GAME <ul style="list-style-type: none"> • Introduction of the area and scenario • The roles 	Yves Henocque Gonzalo Malvarez, Simulation Game Co-ordinator
week 6 21 – 27 October	6. LEGISLATIVE AND FINANCIAL FRAMEWORK	Head Lecturer: Yves Henocque	DISCUSSION SIMULATION GAME: <ul style="list-style-type: none"> • Briefing for principal consultant or team 	Yves Henocque Gonzalo Malvarez
week 7 28 October – 3 November	7. ICZM AT THE NATIONAL LEVEL	Lecturer: Brian Shipman	DISCUSSION SIMULATION GAME develops	Brian Shipman Gonzalo Malvarez
Week 8 4 – 10 November	8. ICZM PROCESS, A ROADMAP TO SUSTAINABILITY	Lecturer: Brian Shipman	DISCUSSION SIMULATION GAME develops FINAL ESSAY: <ul style="list-style-type: none"> • Introduction 	Brian Shipman Gonzalo Malvarez Yves Henocque

week 9 11 – 17 November	9. TOOL BOX	Head Lecturer: Yves Henocque	<ul style="list-style-type: none"> Proposal of Final Essay themes by trainees Consultations on proposed themes DISCUSSION SIMULATION GAME: <ul style="list-style-type: none"> Submission of proposals and resolutions FINAL ESSAY: <ul style="list-style-type: none"> Final Essay consultation Deadline for Final Essay theme submission 	Yves Henocque Gonzalo Malvarez Yves Henocque
week 10 18 – 24 November	10. GOOD PRACTICES DEMONSTRATIONS	Head Lecturer: Yves Henocque	DISCUSSION	Yves Henocque
week 11 25 November – 1 December	11. THE PROTOCOL ON ICZM IN THE MEDITERRANEAN	Lecturer: Brian Shipman	FINAL ESSAY preparation DISCUSSION	Yves Henocque Brian Shipman
week 12 2 – 8 December	12. CONCLUSIONS AND IDEAS FOR FUTURE	Head Lecturer: Yves Henocque Lecturer: Brian Shipman	FINAL ESSAY preparation DISCUSSION FINAL ESSAY finalisation and submission	Yves Henocque Yves Henocque & Brian Shipman Yves Henocque

✓ In parallel min. 4 guided discussions on ICZM topics

✓ Examples of discussion subjects:

- Interest and usefulness of the lesson contents?
- Is it matching with your current activities?
- Missing consideration/information?
- Your experience in regard to what you read?

ANNEX IV

Evaluation of Forum discussions and Proposals for improvements

MedOpen – evaluation and proposals for improvements

Brian Shipman

My involvement was primarily as a lecturer and so I have limited my comments to that role.

In this course the participants shared a common project background, SHAPE. This had some influence on the nature of the participation, the participants coming primarily from the Adriatic sub-sea basin. The general level of discussion was reasonably high and enthusiastic, although did not extend to all participants. It was unfortunate that participation did not include a wider Mediterranean participation, as this would have enriched the discussion further.

Numerically Forum participation was varied. The mean rate was 7 posts per participation, but the standard deviation was 11, with 4 students making more than 20 posts and 9 participants making no posts at all. The reasons for such non-participation are not clear and may vary from participant to participant. At least one participant had their permanent contract terminated during the course. Others may not realise the need to participate, whilst language issues may intimidate others. **Feedback should be sought at an early on the reasons for non-participation, and possibly intervene at an earlier stage.**

For the first time I was able to post a Polimedia video lecture thanks to the PEGASO project. The was limited but positive feedback to this and I think there is great potential for more of this if we can plan ahead. Given that the course is a virtual one, we should be exploring wider options than just written lectures and forum posts though videos etc. Most participants will have use of Skype etc. Also, we could use/explore proprietary video/voice conference technology such as 'GoToMeeting". **The greater use of video, live lectures, group or one-to-one video/voice for seminars, one-to-one links should be explored.**

On a wider level, I may be worth having a wider debate on the use of alternative means of presentation and communication offered by the web.

Finally, **there may be greater potential for mentors from outside the 3 core lecturers to assist individual students.** MedOpen can call on a Mediterranean-wide range of professionals and the course alumni.

ANNEX V

Final Essays Evaluation and Detailed Comments

Assessment of the MedOpen 2013 Final Essays

Yves Henocque, MedOpen 2013 Head Lecturer

The content of the final essays was very diverse showing the capacity of the contributing students in adapting the ICZM framework to the local context and existing initiatives rather than the other way around. One the explaining factor is certainly that most of them were already practitioners engaged in their own (regional) administration.

13 out of 22 students (59%) drafted and submitted a final essay, alone or with a co-author. It is worthwhile observing that there are those who have been, 1) following up the lectures (with two exceptions) and, 2) actively participating to the two other activities, the forum and the simulation game (with 4 exceptions regarding the simulation game).

The 5 co-authored (two students) final essays did not get the best grading since three of them got 1 star and two with 2 stars. It is difficult to conclude anything without knowing how the collaboration did take place between the authors. In the future, it would be good to ask the final essay co-authors (or more, as we have seen it in the past) how they complement each other and plan working together.

The main thrust of the comments made on each final essay, hence the criteria used for the grading, were based on the consistency of the presentation in regard to integration and operational level, i.e. whatever the issue, the capacity to put it into a broader context, to look at how it connects with other existing initiatives and possible synergies towards specific objectives through institutional arrangement and funding mechanisms.

Most of the students are obviously still uneasy about linking with the ICZM protocol principles, objectives and tools, showing once more that it is not the protocol which is making the policy (national, sub-national or local) while it should be considered as a useful framework for adjusting the policy provided the students develop a ‘dynamic’ understanding of how it might be used (Lecture 10 ‘Lego video’ is particularly relevant in that regard, when it superposes the project dynamic –orders of outcome- with the main steps of ICZM strategy establishment and implementation).

Table 1 – Final essays grading, titles and authors’ name

<p>3 stars</p> <ul style="list-style-type: none"> ○ <i>ICZM in the Marche Region: what strategy for the future?</i> Giorgio Filomena ○ <i>Investing towards the future: ICZM in the Region of Istria – dream and/or reality?</i> Latinka Janjanin ○ <i>Sustainable utilization of geothermal potential in the coastal region of Slovenia.</i> Karmen Luzar
<p>2 stars</p> <ul style="list-style-type: none"> ○ <i>Analysis of multiple stressors operating in the coastal area of Brindisi with inclusion of the industrial area: DPSIR approach.</i> Vito La Ghezza & Antonietta Porfido ○ <i>Proposal for the development of ICZM strategies in the Friuli Venezia Giulia Region.</i> Isabella Scroccaro & Federico Pittaluga
<p>1 star</p> <ul style="list-style-type: none"> ○ <i>Sustainable development of a transitional coastal area in between the Adriatic sea and the Venice lagoon: the Lido of Venezia island.</i> E. Andreoli & A. Fanelli ○ <i>Integrated coastal zone management (ICZM) and environmental and spatial dynamics in the system comprising the drainage basin, the Venice lagoon with Porto Marghera industrial site and the Upper Adriatic sea.</i> Roberto Bertaggia & Maria Grazia Pusceddu ○ <i>Using GIS in for planning and visualization of spatial development: good practice example in</i>

Table 2 - Final essays content against the main criteria related to the Med ICZM Protocol

Name / Criteria	Giorgio Filomena	Latinka Janjanin	Karmen Luzar	Vito La Ghezza Antonietta Porfido	Isabella Scroccaro Federico Pittaluga	Elisa Andreoli Angiola Fanelli	Roberto Bertaggia Maria Grazia Pusceddu	Tanja Novak Mojca Poklar
Scale	REGIONAL	REGIONAL	REGIONAL	LOCAL	REGIONAL	LOCAL	LOCAL	LOCAL
Land-sea continuum	X	X	X	X	X	X	X	X
Carrying capacity				X		X		X
Temporal scale	X	X	X	X	X	X	X	X
Participation mechanism					X			
Legal and institutional arrangement	X	X	X		X		X	
Combination of policies and instruments	X		X		X		X	
Diversity of maritime activities	X		X	X		X	X	
Reflecting place specificity	X	X	X	X	X	X	X	X
Risks assessment			X			X		X
Pollution mitigation and restoration		X		X				
Knowledge transfer				X	X		X	X

* *The line 'Participation mechanism' is underlined in grey to signify it is almost absent in all the final essays*

Final essay detailed comments

Sustainable development of a transitional coastal area in between the Adriatic sea and the Venice lagoon: the Lido of Venezia island. *E. Andreoli & A. Fanelli*

The presentation of the case is very clear but limited to the general presentation and the two main issues “erosion and costal setback zone” and “intense tourism”, without looking at the overall legal and institutional framework and the policies involved regarding the Lido at the interface between the Venice lagoon and the Adriatic sea. Such a presentation, at least the outlines of what exist, would have helped then to make the “possible solutions” more concrete and articulated with existing policies, programmes and projects we know nothing about. In that regard, it would have been good to dig a bit more into the mentioned “local planning provisions”, their implementation and the problems encountered in implementing them. The lesson would be: don’t be afraid to copying what has been done to learn and improve towards a more articulated (integrated!) approach.

Sustainable utilization of geothermal potential in the coastal region of Slovenia. *Karmen Luzar*

A very interesting and original work on the “prospects and requirements of geothermal resource use” in Slovenia as part of the national “Strategy for the Transition of Slovenia in a low carbon society by 2050”. This case is particularly relevant since it touches upon the crucial issues of climate change and renewable energy sources as part of an ICZM strategy and not besides. The final essay unfolding demonstrates how from a very specific issues, geothermal energy, one can touch upon all sustainable development aspects (economic, social, environmental) applied to an ICZM strategy or action plan in a specific area (the references to the ICZM protocol are made in a very appropriate way). However, there is always a risk in keeping too ‘conceptual’: the risk of getting too much abstract towards the decision-makers and other stakeholders you want to convince (the “good participatory planning” very general discourse is particularly illustrative). As a final word, I would say always make sure that you are keeping your feet on the ground through concrete cases and real people while keeping the vision which is remarkably presented in this essay.

Analysis of multiple stressors operating in the coastal area of Brindisi with inclusion of the industrial area: DPSIR approach. *Vito La Ghezza & Antonietta Porfido*

The approach and tool, very well described as such, are fundamental (and not just in the case of the study area!) in any coastal area diagnostic in the frame of the establishment of an ICZM strategy. Now, typically, one can feel the ‘uncertainty’ in the relationship between the ICZM and MSP approaches; just remind that planning is an important ICZM stage before implementation (and after, in an iterative way, to adapt to changes) hence MSP is a useful tool for ICZM implementation but not ‘something else’ (il you look at any MSP guidebook, you are going to find exactly the same principles and the same approach...). Talking about planning and the use of DPSIR analysis and indicators, you could have gone a step further through the delimitation of specific management units since you are dealing with an area with many different uses and thus pressures including an important urban area located right into the center. Here, going through multivariate analysis of your indicators value could lead you to a quality or risk index attribution to each of the management units. That might be a powerful tool as a feedback for interaction with concerned decision-makers and users.

Proposal for the development of ICZM strategies in the Friuli Venezia Giulia Region.

Isabella Scroccaro & Federico Pittaluga

When reading the essay last sentence, “The choice of the sediment management, as strategic issue for the development of a pilot action, may be an amazing and concrete kick-off for the implementation of an ICZM strategy in the Friuli Venezia Giulia Region”, one cannot help thinking that actually the final essay as it is should have been built up on this very issue to progressively move towards an ICZM overall strategy for the region! You then can go backward to reconstruct your argumentation in much more concrete terms : pilot actions, technical tables, technical training, education, knowledge, etc. In that way, ICZM would not be something coming out of the blue but constructed on the foundations which are already there (you can easily relate the sedimentation issue to the energy policy and consequently to the region climate change adaptation strategy, etc.). The highly prioritized Coastal Forum should start with dealing with such a specific issue and it might take shape only if it is also built on a bottom-up approach, maybe first in a pilot area (a ‘Coastal charter’, not legally binding, but proposed to all local governments –provinces and municipalities- may be a powerful kind of social contract provided it is sustained by a strong political will at regional level like in the case of the French Region of Brittany). Another track is certainly the way the Region is going to coordinate both EU framework directives measures, landward and seaward; how to embed the technical descriptors into a broader management framework?

Integrated coastal zone management (ICZM) and environmental and spatial dynamics in the system comprising the drainage basin, the Venice lagoon with Porto Marghera industrial site and the Upper Adriatic sea.

Roberto Bertaggia & Maria Grazia Pusceddu

The essay subliminal message could be: ‘the Venice lagoon highly complex system is covered by a very comprehensive management system from the legal, institutional and knowledge points of view. Is it good enough as it is?’. We are impressed by the very accurate description of the system but still it is a description. Actually, a more analytical work could have started from page 17, Problems and solutions, where coastal erosion is certainly central in the region, yet the question is does it work?, is it the solution in regard to the economic, environmental and social aspects. We don’t know. In regard to the ICZM framework, what is your interpretation of this impressive governance structure? Rightly you go up to the national level (ICZM national strategy in preparation) down to the river basin district, but how within these strategies and plans the two EU framework directives are going to be articulated? Generally speaking, you want to say it all but there is a conducting thread missing. Is coastal erosion the central issue? In this case, why not looking at it through the existing governance structure that you describe at length? Focus the objective and the message will become clearer.

Using GIS in for planning and visualization of spatial development: good practice example in municipality of Koper.

Tanja Novak & Mojca Poklar

A very clear description of the GIS tool at national and local level putting it into context, in particular within the CAMP Slovenia project and within the SHAPE project in the case of the municipality of Koper. If the development of the GIS system in consultation with future users and particularly municipalities is important, the way it is then effectively used generates transactions towards common choices of forms of management is an equally important process that could have been better illustrated taking at least one example where GIS data and images have been used as a conflict management and/or prospective tool.

ICZM in the Marche Region: what strategy for the future? *Giorgio Filomena*

A very interesting presentation and analysis of a transitional period between the current and the future Marche Region ICZM plan. The link made with the different existing strategies, European directives, and particularly the Environmental Action Strategy for sustainable development in Italy (is there an ICZM national strategy in preparation?) is very appropriate as well as regarding the Mediterranean protocols including of course the ICZM one. By the presentation made, we quickly understand that the current regional ICZM plan is far from being fully implemented focusing mainly on the coastal defense infrastructures. The decision support system disappeared in the process. This situation leads to the question of the enabling conditions as regard the financial and institutional aspects. Who is in charge of implementing the action plan? What is the institutional arrangement and how it could be improved in the future? How to better match the Region strategic ambitions with the burdensome daily implementation at municipal level and the economic considerations of the private sector?

Investing towards the future: ICZM in the Region of Istria – dream and/or reality?

Latinka Janjanin

Heading towards the Croatian Coastal and Marine Strategy as an overall framework for the sustainable development of the region's coastal and marine areas. If well understood, the implementation of an ICZM action plan for the region of Istria will take place mainly within the Protected Coastal Areas defined as maritime public domain. The institutional problem is rightly mentioned (7 different ministries concerned like in many countries) and the question is about their coordination for the preparation as well as the implementation of the ICZM action plan at the level of towns and municipalities. The presentation is very much environment-led (habitat mapping) but not much is said about the activities and the users, how they will be taken into consideration?, what kind of consultation will be done during the preparation of the strategy and its action plan (the matrix-compatibility shows that there are a lot of maybe on-going and potential conflicts). Again (as in another final essay), MSP should be considered as the planning process within the ICZM framework.

Overall remarks

- While the long-term goal of the course is to build a regional cadre of coastal management practitioners/leaders, the starting point is to focus on building individual skills and knowledge. Hence, the course worked in parallel to build both individual and team skills through the use of the forum and the simulation game which have all in all been practiced by about 60% of the participants.
- Introduction and time for question and reflection were built into each lecture with participants asked to reflect on specific topics of relevance to the course and to their work in coastal management. Other times participants were asked to reflect on a topic or issue of their choice which could relate to the course, to their own professional development, or to the future of coastal management in their country. While the reflections were private or made collectively as reflected into the final essays, some participants volunteered to share some of their thoughts through the forum, and in so doing provided interesting insights and comments about the content of the course.
- At the beginning of the course, participants were advised of a voluntary competition including their active participation in communicating through the forum and through to a simulation game, and the drafting of a final essay of their choice. Within the framework of the simulation game, the initial imaginary scenario was introduced to the candidates together with natural conditions of the area presented through different data. The candidates were given specific roles, possible pathways for the development have been offered, and they were then invited to develop the situation and propose solutions. The simulation game and discussions were moderated, and outputs evaluated by the Simulation game coordinator.
- Each final essay was to be delivered in written form (seven pages or less) reflecting the heavy emphasis in the course on effective communication and presentation skills. Making a written presentation of their subject proposal to an external audience provided an excellent opportunity for participants to practice the skills they had honed during the course. As it has been the case in the past MedOpen sessions, they were invited to think their final essay as a possible initial paper to be presented in a conference (national or international) and/or to be published in a national/international Journal.
- During the final essay preparation phase including the subject identification, there were significant exchanges between the Head Lecturer in charge and the students. The bulk of the recommendations made touched upon:
 - An explicit connection to advancing ICZM in the participant's country and location;
 - Benefits or potential benefits to multiple coastal stakeholders;
 - An explicit project logic—articulated in writing presentation;
 - A clear and realistic assessment of resource needs (people, money, and materials);
 - Junctures that demonstrated the use and application of course skills and tools;
 - Ideas presented in a compelling, articulate, and concise manner.
- As a whole, the eight submitted final essays (13 contributors as a whole), be there at regional or local scales, captured rather well the integrated coastal zone management flexible approach tackling very different issues depending on the scale, the country or the place, the main issues at stake, and also depending on the author's perception. A detailed assessment of each of the final essays have been worked out and submitted to their authors

or co-authors without any further comments back from them although they were invited to do so.

- A **post-course evaluation** has been conducted in order to assess how participants applied the skills and knowledge acquired during the course. To this purpose a short questionnaire has been formulated while the participants were asked to send back their comments. The results are attached as an annex to the overall PAP/RAC report.
- While the course was unfolding, at least three missing items were thought worthy to be considered for the next MedOpen sessions : coastal vulnerability and resilience to climate change ; the gender issue ; and the meaning and scope of marine spatial planning.

Problem encountered and ideas for future improvement of the activity

- About 60% of the 22 candidates have been actively participating, either in all three activities (36% ; forum, simulation game, final essay), two of them (23%), or only one (one student as co-author of a final essay). A new indicator (Course Finish-Game Points) allowed checking up each student's overall lectures coverage with about 50% of them having read most of the lectures.
- This 4-month MedOpen training course was organized in the frame of the SHAPE project as a contribution to building individual skills and knowledge. The following suggested ideas (some of them already submitted in previous MedOpen sessions) could emphasize this individual learning while instilling some team skills:
 - instead of just asking their motivation, each participant could be asked to prepare a **"learning agreement"** which would outline his/her professional development goals and priorities for the course. Participants would review the agreement with the course advisors prior to finalizing the document. Once complete, the agreements could be formally signed by the participants. Between modules, participants would be encouraged to discuss progress on their learning goals with their advisors. The latter would provide encouragement, suggest adjustments where necessary, and help participants develop new priorities where appropriate. Once agreed, learning agreements could be posted on Googledocs with corresponding participant's photo for mutual information;
 - During the selection process, each participant could be charged with selecting a **mentor**—an experienced coastal management professional—from their home country. At intervals, mentors would make themselves available to participants for discussions—preferably in-person discussions—all along the MedOpen training course. The purpose is to link the participants with experienced coastal managers who could at a minimum advise and coach the participants throughout the course, and at best continue contact and provide coaching of the participant after the course. The intent of the mentoring element would be two-fold: to provide participant-specific benefits in their ICM professional development, and to add momentum to building an expanding network of coastal management experts and leaders in the region. Each participant would complete a mentor/mentee agreement form that would guide his or her interactions with and expectations of the relationship;

- a survey could be submitted to the participants at the end of the first month, asking participants to identify their predominant or preferred style of **leadership and management**. Participants would then be asked to reflect on the survey results. What do those results reveal about how the participant manages work or leads others? What are the pros and cons of their particular style/profile? After raising awareness on their preferred/predominant style, participants could then be asked to reflect these different tools/approaches to leadership—styles in their own final essay.
- In order to give more stake to the final essay, at the beginning of the course, participants could be advised of a voluntary competition to design and implement a small **coastal management project** costing no more than US\$3,000. The process would involve writing a proposal for submission not only to a Head Lecturer but to a review panel. In the final module of the course, the best three proposals would be awarded funding for implementation of their outlined projects. In awarding the winning proposals, a panel of experts would consider the merits of both a written proposal and a possible oral presentation on its highlights. At the very beginning of the course, they would be provided with the general guidelines in developing their service project proposal and the criteria by which that proposal would be judged.
- While formative evaluations—those which identify strengths, weaknesses, and areas for improvement—are essential for immediate or short-term adjustments to course content and delivery, it is **impact assessments** which are the more critical tool for assessing whether the MedOpen training course model is achieving its longer-term goals of ICZM capacity building in the region. In consideration, impact evaluation surveys could be distributed to course participants at approximately six to nine months after the end of the course, and then again at the 15 to 18-month mark. These surveys will seek to assess longer-term ability of participants to use in their work the professional ICZM practice and the project management knowledge, skills, and tools acquired or strengthened by the course. Equally important, these surveys would seek to assess what impact participants’ strengthened skills are having on their larger organizations, projects, or programmes. As well, they would seek to assess changes in “softer” targets of the course— e.g., course impact on the participants’ attitudes, viewpoints, and critical thinking skills on key issues facing ICZM at the local, national, or regional levels. Lastly, impact evaluations would assess (hence contribute) the attempt made at creating a more active regional network of ICZM practitioner/experts—a network that stimulates the sharing of knowledge, experience, and skills in the region. It will help answer whether alumni and their organizations are more likely—as a result of having been part of the *MedOpen virtual training course on ICZM* experience—to communicate with and call upon one another.
- The 18-month post-course evaluation would include an additional section for those three individuals who were awarded funding for their **service projects** (see recommendation above). This section would seek to assess how well this element provided additional opportunity to practice the knowledge, skills, and attitudes from the course in a situation where they had full control over the design and implementation of the project from start to finish.
- The three last items would strongly contribute to the building up of a MedOpen Alumni’s network.

ANNEX VI

Comments on individual participation in the Simulation Game

ALBERTAZZI Carlo		Never Logged In*. It was supposed to be a key role.
ANDREOLI Elisa		Average performance. Started late and supported.
BERTAGGIA Roberto		Never Logged In*.
BOARO Ivana		Never Logged In*.
BROCHIER Frédéric		Largely isolated in his role, I believe he could have evolved further with a different role or group. Committed
FANELLI Angiola		Never Logged In*.
FILOMENA Giorgio		The other part of the environmental duo. High commitment.
IVESA Ljiljana		Never Logged In*.
JANJANIN Latinka		Above average involvement. Really exceptional capacity to lead the work of the Consultants
LA GHEZZA Vito		Very minor participation. At least there was a little effort at some stage (but no consistency)

LUŽAR Karmen		Exceptional skill for coordinating and managing. Social skills are above average and capacity to engage and make engage
MARRAMA Giovanna		Never Logged In*.
NOVAK Tanja		Never Logged In*.
PESCEDDU Maria Grazia		The other active member of the consultant group. Motivated and involved.
PITTALUGA Federico		The most motivated and able member of the environmental group. Good skills in management and high commitment
POKLAR Mojca		Never Logged In*.
PORFIDO Antonietta		Never Logged In*.
RICCI Roberto		Never Logged In*.
SALOGNI Gianluca		Never Logged In*.
SCROCCARO Isabella		The main driver in the Developer's group. She demonstrated good managerial skills and help putting together a good proposal
SEDIOLI Olga		Never Logged In*.
TOLVE Emanuela		Never Logged In*.

*As far as could be gathered from the Simulation Game Forum.

ANNEX VII

Simulation Game Co-ordinator's Final Report

**FINAL REPORT
MEDOPEN PRACTICAL
SIMULATION GAME**

**MEDOPEN Virtual Training in Coastal Zone Management for the Mediterranean
SHAPE PROJECT**

2013 / 2014 Edition

**UNITED NATIONS ENVIRONMENT PROGRAMME
MEDITERRANEAN ACTION PLAN
PRIORITY ACTIONS PROGRAMME / REGIONAL ACTIVITY CENTRE**

Prepared by
Dr. Gonzalo C. Malvarez

for



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Context

In order to teach and learn in the field of Coastal Management the capacity building process needs to focus in the relationships between disciplines and issues. It is not easy, however, to find the correct balance between the practical (pragmatic) and theoretical (academic) pitch in capacity building for ICZM.

On the one hand practitioners of the management of the coast often use their own resources to develop their capacity incurring in autodidactic approaches that are inevitable but disorganised and too dependant on personalities and context. This type of improvisation, and more often than not their success, normally leads to reaffirmation of folkloric views, often too pragmatic and lacking academic or systemic background. The experienced coastal managers often rely on their interpersonal skills developed through years on the back of effective negotiation and continuous running of conflicts. This approach is far from the ICZM views, in which true governance is at the centre of the process, and is unsurprisingly heavy in political load.

On the other, academic approaches are often based on the backbone of a “tradicional” discipline such as those listed above. These, although involving sound scientific base, keep focusing on capacity building (which in essence is not detached from content-based teaching and learning) on the “wrong” issues in the construction of knowledge and skill programmes because they reproduce learning and teaching methods that are correct in the original fields of expertise. This being a generalisation, is a contrastable shortcoming in most ICZM programmes that are accessible to the managers of the coast who are actually in the job and cannot update their original training flexibly.

MedOpen faces these challenges and offers a new direction in capacity building using corner stone concepts established in higher education teaching and learning and applies them to the highly complex field of ICZM. This approach is characterised by:

- Offering multidisciplinary views on issues that occur on coastal environments;
- Avoiding the limitations of tradicional disciplines, respectfully accepting their contribution in the sectorial knowledge they provide.
- Deploying significant support from capable staff in various fields, including of teaching skills
- Focusing on the necessary skills of potencial and existing coastal managers always considering the ICZM viewpoint.

The profile of open courses targeted in specialised (although heterogeneous) student groups is centered on the identification and development of three key skills: (i) Reading skills sufficient to understand, comprehend and review (diagnostic reading) proposed readings. It is assumed that students will read more widely than the specified materials and that the depth and interpretation of the reading is carried out in great depth. It is important, thus, that students know how to find and choose additional materials and inspirations. (ii) Students should be expected to demonstrate academic judgement by gathering appropriate evidence or data, which can be critically evaluated. The diagnosis should be sufficient to enable the basis for logical argument, discussion and constructive proposals. (iii) The ability to present their findings in writing or by a presentation to others (which may involve presenting or writing a report or proposal for other students or tutors). This is expected to be done in a convincing and, preferably, professional way.

It is significant to note that the course is conducted and subscribed by online teaching and learning methods by students and staff. Inserting a practical component on this topic is critical but understandably rather complex.

Simulation Game: a Situational Practice for skill-based teaching and learning

This practical component must focus on developing transferable and interpersonal skills for students, building on the theoretical base that they already have or have developed during the theoretical component of the course. The key skills that the students have to develop in this part of the online programme are:

- The capacity to comprehend complex situations, including surprisingly improbable developments in the history of a coastal site. This leads to the generation of conflicting interests and hence students will resource to conflict management techniques
- The understanding of scenarios through the full description of an imaginary (but quite topical) coastal site and its fate. Scenario building is a skill and output that students inadvertently develop through practice.
- How to deal with spatial planning from the bottom up, which leads to the practice of consensus reaching, development of societal groups and networks and having to face insolidarity or lack of common grounds when it comes to proposal building. Governance in action.
- Completing a proposal under flexible guidelines, having to lobby and submit an idea for future development in a complex situation.

In this edition of MedOpen, the situation created for the Simulation is based on an imaginary site (Coast of Handenor) which suffers after the economic slow down of the beginning of the century poses the highly complex scenario of ICZM facing the potential redevelopment of an abandoned mine and its infrastructure. The issues that are the concern of the students (or stakeholders in the simulation game) include environmental as well as socio-economic. The scenario, the issues and the role play dynamics for the problem solving exercise are described in the following sections.

The Scenario. An imaginary site on the Mediterranean coast

1. Brief description summary

A coastal platform, now an island of 25000 m², was constructed as an industrial installation in the past. The decline of the mining industry in the area lead to closing and infrastructures are now derelict and difficult to manage. The isolated island lies in a newly declared Natural Park, property of the Ministry of Environment, managed by the Regional Government through specific natural resources planning regulating present and future use.

The near by coast of Canemor is a highly developed tourist resort which is over utilising natural resources but signifies a example that local settles from Jandenor want to imitate since great wealth has brought about the interest of international companies. The Canemor International Airport is also seeing as a potential node that can bring tourists around. But the Jandenor coast is 150 kilometres from Canemor and the fragile environment that has resulted from years of over exploitation leave little choice but plan development from the beginning, including basic infrastructure.

The island offshore Jandenor is at the centre of a complex management situation. It is owned by the government but planning and policy is unclear about utilisation of offshore installations in a Natural Reserve. The local politicians want it to focus their development plans around it and big companies are waiting. Local environmentalists want to preserve the underwater flora and fauna and an association of Jandenor settlers want to address development in the most sustainable way.

2. Historical background.

Just like many coastal sites along the Mediterranean Sea, the Jandenor Coast knew an illustrious past expanding from its Phoenician origins to through Roman salt meat industrial era until Christianity transformed land uses and developed a totally new approach to settling on the coast. In modern times the peaked of productivity and population expansion came during the XIX century when mining and associated activities proliferated around the hinterland and influenced the coastal strips as well, given that transport networks depended heavily on accessibility and the Jandenor coast offered the usual accessible and sheltered conditions of the Mediterranean.

Today the focus comes, however, from the tourism industry. This resource appears to be the only one that can guaranty the develop of this coastal strip, which economy was decadent since the mid XX century political troubles meant that the coast was not safe and the hinterland, gravely de-populated, was not seen as good agricultural land. Great steepness of the land and low rainfall meant that most economic opportunities focused around an industry that requires just sun and some sand on the beach. The coast itself was only the scenario of old industrial installations and beaches were narrow and steep, full of gravely sediments that made sun bathing not pleasant. This environmental setting meant that the villages along the coast were all small hut-like fishermen settlements whose business was to feed their large families and possibly get some financial aid from the Regional Government who could try for some European money for these kind of under developed areas.

This was the model that, since 1950, had followed the neighbouring stretch of coast (the Canemor Sunny Coast), internationally acclaimed now for its highly developed infrastructure mainly around the Canemor International Airport, near Canemor City. This vibrant sun and beach tour operated managed coast had shown all the signs that the peak period has passed. At least in terms of environmental sustainability, since in tourism carrying capacity the limit had been changing as planning and policy adapted to an ever increasing demand for a piece of land along this heavily developed area. The Canemor coast was now an uncomfortable example of overdeveloped real state zoo, where speculation has been the dominant species and unique predator; only now the environment, the main prey, had been extinguished and there were too many aggressive speculators around. There were, however, a number of issues that were linked to prior activities along the coast that affected the potential development of this stretch of coast.

a. Mining activity:

In 1817 the local mining company (Grinder Ore Ltd.) organised some detail studies on the possibilities of further exploitation on the old Roman mines that the tradition located on the mountains, some 8 kilometres from the shoreline. The company prospected and effectively found some indications that there was possible to create some metallurgic industry nearby taking the mineral from the very mine, then closed.

Later, after the company had completed the pilot project, in 1838, a delegate from the expansive British mining industrial circle came along and put a substantial offer that the local company could not refuse. The Dungiven Mining Company Ltd. Started to exploit the mines in 1860 and built the necessary railway networks to bring the mineral down to the coast and load it onto the British and other nationality ships that came in dozens to a newly built (1865) loading platform that was moored first at 15 metres deep, some 750 metres from the actual shoreline. This depth allowed large ships to approach the platform and load using heavy cranes. The offshore platform, which was over engineered to resist the heavy loads, had a total surface of 30 Hectares (30000 m²) taking in the long and wide jetty which was topped in wood along which run the railway that connected the platform with the coast.

The Dungiven Mining Company Ltd. exploited the site until the mine and network showed not very competitive in the instabilities of the time and closed in 1932 for an extended period of 5 years. Miners were surprised when in 1945 a local company Ferrum & Metal Ltd. reopened for further exploitation until 1956 when a new economic push allow the mine to achieve production levels closer to the early years. This period that extended to 1974 when financial difficulties and a change in global economy took the company to bankruptcy. After this, the decline of the maintenance programmes, that had effectively started since 1965, implied that the working conditions were not operative and the new attempt to re-start the company by the local association of miners (Local Miners Association)

ended with a severe degeneration of both the mine and industrial installations which were severely savaged prior to the final closing in 1985.

The Regional Government bought the land of the Mine, the hinterland corridor where previously extended the railway and the entire coastal installation (pillars of the jetty, and platform) in 1988 after no viable alternatives were found to re-establish industrial activities in the area. A number of post mining industry issues remain that are making difficult the new management and future development of the site.

A great number of explosives were utilised in the various phases of mining exploitation. There were also heavy traffic of explosives from the coastal platform to the land, since the explosives were imported. A number of ships sank in or around the sites and the beach and nearby areas may still have today some rests of dynamite that could be dangerous.

b. Railway network

The railway network, that extended for more than 8 kilometres was dismantled by miners and other settlers but never officially removed. There are many hazards associated with the potential exploitation of old tracks for mountaineering or hiking. These activities are naturally some of those that would mean future use of the existing resources and the regional government has not planned what to do with all the old railway litter spreading about.

c. Prior vegetation “control”

Despite the fact that the site is now a Nature Reserve, most of the rare vegetation has developed after mining stopped. The species are rare iron lover plants that have proliferated in the area and represent an endemism that is now protected. Prior to this, vegetation was consistently controlled by means of large scale provoked forest fires and cutting. Forests and vegetation in general was utilised as fuel for the machinery of the mines and to generate power. Thus the original vegetation had been lost a few decades ago and now bear hills showed severe land losses that had taken the sites to a desert like appearance. Only in gullies the iron lover plant has proliferated.

d. Geologic interest

The mining activity exposed, as they denuded the hills, prior Jurassic limestones that showed erosional forms from these times. Now, the mines are frequently visited by geologists from around the world for the rarity of the landscapes that show impossible erosional forms, generated in much warmer and wet times when the limestones were exposed to the severe climate of the time. This makes the landscapes around the Jandenor coast an available natural resource.

3. Spatial planning and management.

A set of standard concepts for basic policy is provided for students to be able to develop plausible proposals. The idea is to allow freedom yet provide a framework emphasising the importance of the multiscale view that is necessary in spatial planning (and ICZM) highlighting the Regional scale.

The planning documents affecting the coast are classified at various scales: National, Regional and Local. In the National level the main objective is the zoning and regulation of Public Lands. In Regional planning the instruments are developed to provide a generic framework for land use and Local planning is mostly in charge of urbanisation instruments. The Supranational level is mainly regulated in the ICZM Protocol for the Mediterranean. Take some time to study the Protocol before continuing.

National level management

Nationwide planning is linked to a Coastal Law and the main directives are:

- **Boundary designation.** As noted earlier, this is concerned with defining those parts of the coast that form part of the public domain under the Law. As well as a legal requirement, this provides the first step in the protection or defence of vulnerable areas. Initially planned for completion within a 10-year period from the enactment of the Law, this was not achieved, although there has been a rapid acceleration in activity since 1997.
- **Power of Sanction.** This allows the Direction General for Coasts (DGC) of the national administration to take action against those abusing the public domain in a wide range of activities that impinge directly on both the physical integrity of the coast and recreational activities. Thus, the unauthorised extraction of materials (sands, gravels, etc.) that might compromise marine processes can be controlled, as can unauthorised construction work, vehicle parking and camping. Almost 6000 prosecutions resulted in the first two years of operation alone and fines have been levied on defaulters.
- **Overseeing of urban plans.** The DGC through the Coastal Act is responsible for ensuring plans comply with the Law and thus municipalities' intentions are examined in respect to whether the seafront harmonises with the various land-use, access provision and building restrictions.
- **Granting of title to use the public domain.** Certain activities, particularly concerning health and public safety, require proximity to the shoreline and the DGC has power to grant title in these cases. Sanitation facilities fall into this category and upgraded units have been granted title. The growing problem of ensuring sufficient fresh water supplies underpins permission for a desalination plants, again within the public domain.
- **Planning and execution of Coastal projects.** Finally, the Administration will assist developments to improve the infrastructure, provided that the law is respected in terms of provision of transit rights and recognition of the public domain and that the work does not promote urban expansion. Improvements to promenades come under this heading, as do the various other works of coastal protection that have traditionally been this authority's responsibility, namely breakwater construction, cliff protection and beach stabilisation, together with the more strictly environmental concerns of dune, marsh and wetland conservation and recuperation of degraded coasts.

Regional level management

This is a key element in the new structure of spatial planning strategy. Subregional plans are a mandatory framework for spatial plans of local scale and urban planning. Other instruments which introduce territorial impacts are also subject to the resolutions in subregional planning, such as environmental or other coastal affections.

The main function of the sub regional plan is to allow for more detailed planning at a sub regional level serving as the framework for the development and coordination of policies, plans and projects by the Administration, public entities and individuals.

Responsibility for the production of sub regional plan lies with the Office of Housing and Territorial Planning of the Regional Ministry for Public Works.

Three types of normative regimes are predicted for application for Public and Private stakeholders

- Directive: these are normative of mandatory nature. Their applicability is immediate for public and private stakeholders in urbanisable land.
- Guidelines, are mandatory in terms of the objectives that are sought after, and public administration is obliged to comply with the objectives although the means to achieve these is not determined in the actual regulation.
- Recommendations, of indicative nature aimed at the development of strategic lines in accordance with the overall objectives of the plan. The recommendations are aimed at the public administration affected by the plan (sectoral and territorial offices) and any deviation from them must be justified and in no way must actions contradict spatial planning directives.

The overall structure of the subregional plan is designed for improving territorial cohesion, including the advance of quality of life, sustainability of natural resources exploitation and improvement of territorial competitiveness in the national and international context.

Local level management

New political and administrative structures introduced following expansive socioeconomic boom of the 60s introduced changes in the planning legislation. The principal instrument was the Reform of the Land and Urban Planning Act with its requirement of each municipality to produce its own urban plan. Although it was the case that the previous 1956 Land Act, which had demanded similar Plans, the response of Town councils was slow to the point of non-compliance in some instances among other reasons because the provincial and national plans were not ever completed.

The County Council was fast, producing its plan in 1959 followed by a second in 1968. After the original Act had already been superseded by the 1975 Reform, new Plans produced following the Reform recognised problems inherited from the earlier legislation and made provision for environmental conservation and improvements in the social and economic infrastructure. Moreover, the application of the three broad land-planning categories of 'urban', 'urbanisable' (programmed for development) and 'non-urban' was more firmly established. Nevertheless, although there was widespread recognition of existing problems, many were beyond remedy, while economic development priorities continued to hold pole position. However, growing concerns over the image projected by the old established resorts gradually brought about a shift in emphasis, so that by the end of the century major improvements in the economic and social infrastructure (including promenade completion and sewage provision) had been made.

One aspect of the new types of Land Act is to be noted: rustic or agricultural land was now to be classified as "non urbanisable", as stated above. Thus, the set up and intention of the Law is clear: the emphasis is on regulation of urbanisation and other sectoral policy for spatial planning will have to wait.

4. The Issues.

Following closely the developments of its over developed neighbour the Canemor Coast, Jandenor was now open for a more environmentally friendly management. Particularly, since the Regional Government for this part of the nation was very environmentally focused and pretended to control situations like the one described above occurring along the Canemor Coast.

The Regional Government, which was responsible for final ratification and passing of all local land and urban planning policy, was not going to allow uncontrolled development. However, the local political party ruling the municipality that controlled most of the Jandenor Coast had other ideas. Influenced by its wealthy neighbour, they also wanted development and a few local and international companies had their eyes onto taking their shares of opportunities in this virgin territory.

Taking advantage on the rarity of some local plants and geological attributes, the Regional Government had declared most of the hinterland of the Jandenor Coast a Natural Park, one of the highest categories for protection available (the highest was National Park, but the environment clearly did not make it, despite the efforts from regional politicians).

The Natural Park was unique in the country because it also enclosed some areas of the marine environment. The submerged coast had been included because some rare species had flourished there associated to some industrial installations offshore that had been built by the Scottish Mining Company who run the mines from 1860 onwards. The marine park was therefore part of the Nature Reserve and thus was included in a highly restrictive Plan for Exploitation of Natural Resources (PENR), main legal document that regulated uses and intensities in protected areas.

Given that the hinterland was a Nature Reserve and land use was heavily watched, local companies and politicians saw in the derelict loading platform off shore an opportunity for development on the basis of utilisation of existing infrastructure.

Management Issues

Local politicians do not agree with management from DoE and are campaigning for self management and ownership. The leader party, the local liberal **QUILLO** (Qualified United and Illustrious Lawyers of the Littoral Order) and the pressure group **JARL** (Joint Association of Residents of the Littoral) see in self management a quick way for development that would change the traditional decadence of socioeconomic history of the Jandenor coast.

The **QUILLO**, seeing the opportunities that self management would introduce in the area is already applying for international funds to improve local infrastructure, namely road networks, telecommunications and power supply. The VIth European Union Framework is their reference although the specific programme they are planning to apply is to be defined since their focus is to re-activate the island-platform as a new focal point for reactivation of the local economy. The **QUILLO** is lead currently by Mr. Lucca Grinjande-Nauer, the mayor of Jandenor, a descendant of miners of the area who is very ambitious yet a great politician playing very carefully with the potential partners. The opposition party, however, is prepared to play unison with the Regional Government.

The **JARL** is working in conjunction with the **QUILLO** but their interests are not entirely the same. This is due to the feeling and well spread understanding that local politicians may have a second agenda which involves a more laissez faire approach to pressures from big companies, eager to start business if local planning changes towards a more aggressive management of the resources. The **JARL** is therefore establishing a dual platform, one that satisfies the demands of the **QUILLO** and another that is closer in philosophy to the principles of the **NOPUEDOL** (Natural Opportunities for Populations Under Environmental Development On the Littoral) a highly active reivindicative group whose premise is the potential development of a highly natural environment within the framework of socio-

economic development.

The QUILLO has delegated their responsibility in the formulation of the application for infrastructure to a committee in which seats members of the JARL and the NOPUEDO along with Regional Government officials and QUILLO itself. This committee is going to use an environmental consultant for assessment.

Since the DoE acquired the land and coast of Jandenor locals have used the press heavily to show their views on management. The local newspaper in particular, The Voice of Jandenor (commonly referred to as The Voice) has published numerous articles and editorials in relation with developments occurring since 1985 and is now considered a crucial player in coastal development. They represent the voice of the anonymous population.

5. Roles:

- *The Mayor (Mrs Lucca Grijande Nauer). A local politician of the QUILLO, Qualified United and Illustrious Lawyers of the Littoral Order.*
- *Local developers*
- *Environmental Consultants*
- *A member of the Voice of Jandenor. Local press*
- *NOPUEDOL (Natural Opportunities for Populations Under Environmental Development On the Littoral) Environmental Pressure groups*

6. Additional information provided

- *Extract from 1:50,000 OS map of the area*
- *Annotated Mining map.*
- *Computer simulated images of Grijander Island*
- *Meteorological data from DoE weather station Jandenor.*
- *Wave data*

Limitations of Situational Practicals: Problems encountered in the Simulation Game and proposals.

The SHAPE edition of MedOpen has perhaps been the most successful to date in terms of organisational delivery. A clear key to this success is to be found in the dedicated performance of PAP/RAC staff (in particular Ms. Branka Baric and Mr. Sylvain Petit) who have contributed significantly in some aspects detected in previous editions to be shortcoming (incentive to students and enabling capacity to students out of pace). However, as in any formative programme there are issues that are two-folded that need analysis: the student's side and the teaching side.

The main issues concerning student's performance continue to be related to Pace and Commitment:

During the first week it is needed to engage students in Simulation as strongly as possible. The instructor initial effort is designed to ease student potential rejection to the learning structure. It may be necessary to use multiple levels of communication during this important time.

If students are not active by day 3 of the course, the instructor emails the students inviting them to join and also include an offer of assistance. A student's positive perception of instructor's commitment can lead to greater student success.

If the instructor does not receive an immediate (one or two day) response to the emails sent to the student, the instructor highlights that it will take some work and good time management and study skills on the part of the student to complete the program.

Second and subsequent Weeks of MedOpen, except final submission date.

First, one week has passed which focussed in reading and understanding the Scenario in depth and to familiarising with simulation game dynamics. Then the instructor, after contact had been established with students and communicated the roles assigned each one. The game develops with the groups of students starting to work together in their assumed roles. Developers, environmentalists and other stakeholders analyse the severity of the situation in the Scenario and then will propose to Consultants various development plans to provide the Handenor Coast with some future. In week 4 groups provide a diagnostic and write up strategic lines of action.

Final proposal are selected (the Mayor intervenes as moderator) and in week 5 the Strategy for Sustainable Development is presented. This document is the final submission and is used as assignment paper since it should reflect the acquisition of the main skills intended in the course's practical.

Final week.

Students submit their work. The main thrust is here the achievement of the goals set by the working groups and the demonstration of commitment by students and their groups.

The online tools are basic for students to achieve their goals since all meetings and coordination efforts for the submission are conducted via MedOpen's web site and, in particular, via the forum.

However, this section is included as a summary of proposals for future editions:

A.- Although the SHAPE Edition of MedOpen has introduced a new website for delivery of the course significant improvement may be achieved in MedOpen (in particular for the Simulation Game) through the use of a dedicated Learning Management System. This enables compact teaching and learning web course tools. There are many existing platforms which support the provision of course tools both in open source and proprietor software; such as Moodle or Blackboard.

A distributed Learning Management System is a software package that supports the management and delivery of learning content and resources to students via Internet. Most systems are web-based to facilitate "anytime, anywhere" access to learning content and administration. These system may allow also offer student registration, the delivery and tracking of all the components of the e-learning course (theory and practice) as well as content, assignment and marking and may also allow for the management of instructor-led training clases in real time communication virtual classrooms. Most systems allow for learner self-service, facilitating self-enrollment, and access to courses.

B.- As well as this technical advantage, from the academic perspective it would be desirable to establish a well structured Teaching Agreement (Guidelines) as a way to formalise the commitment between students and instructors. The teaching agreement should include a Module/Subject Guide including at least sections on Key Information (Instructor, dates, level, expected outcomes, etc); Introduction to the Simlation Game (Practical Module); Intended Learning Outcomes; Outline Delivery (attendance requirements); Assessment (description and dates); Assessment Criteria and Marking Standards; Assessment Offences and Learning Resources.

Gonzalo Malvarez
Sevilla, February 2014

ANNEX I: Role Distribution.

SIMULATION GAME 2013

- ROLE DESCRIPTION AND ASSIGNMENT-

THE HANDENOR COAST ROLE ASSIGNMENT 2013

PARTICIPANT	ROLE	PROFILE
Tanja Novak	Developer	Priority in urban development
Olga Sedioli	NOPUEDOL	Activist. Environmental Pressure group
Carlo Albertazzi	Journalist "The Voice"	Reporter seeking news
Maria Grazia Pusceddu	Consultant	Focuses on planning aspects
Latinka Janjanin	Consultant	Coordinator
Roberto Ricci	Consultant	Focuses on Environmental issues
Vito La ghezza	Developer	Priority in urban development
Federico Pittaluga	NOPUEDOL	Activist. Environmental Pressure group
Antonietta Porfido	Consultant	Focuses on planning aspects
Isabella Scroccaro	Developer	CEO of Concrete Dreams
Angiola Fanelli	Developer	Priority in urban development
Elisa Andreoli	Consultant	Focuses on planning aspects
Roberto Bertaggia	NOPUEDOL	Activist. Environmental Pressure group
Gianluca Salogni	Developer	Priority in urban development
Karmen Lužar	Mr. Lucca Grijande-Nauer	President of QUILLO
Giovanna Marrama	Developer	Priority in urban development
Ivana Boaro	Developer	Favours alternative development
Giorgio Filomena	NOPUEDOL	Activist. Environmental Pressure group

Gonzalo Malvarez

Mojca Poklar	JARL	(Joint Association of Residents of the Littoral)
Ljiljana Ivesa	JARL	(Joint Association of Residents of the Littoral)
Emanuela Tolve	JARL	(Joint Association of Residents of the Littoral)
Frédéric Brochier	JARL	(Joint Association of Residents of the Littoral)

ANNEX II: Detailed Simulation Game WorkPlan.

SIMULATION GAME WORK PLAN 14 October to 17 November

Getting to the Strategy for Sustainable Development of HAN DENOR 2020

SUMMARY

The game develops now and the group of students start to work together in their assumed roles. Developers, environmentalists, and other stakeholders will analyse the severity of the situation in HAN DENOR (using tools discussed in the theory part) and then will propose to Consultants development plans to provide the coastal zone, and in particular the Island of Grijander, with some future. In week 4, consultants report to the Mayor. Final proposal should be selected and an assembly (potentially all participants take part) is held to arrive at a consensus for a final draft of the development plans. In week 5 the *Strategy for Sustainable Development of HAN DENOR 2020* is presented.

WEEK 1(14 to 20 October)

All participants: First, you dedicate this week to reading and understanding the Scenario in depth and to familiarising yourself with simulation game dynamics. Then the Simulation Coordinator established the roles assigned to each one.

WEEK 2 (21 to 27 October)

Consultants and NOPUEDOL Environmental Pressure group: Both groups research environmental issues in general; Consultants and NOPUEDOL contact the Mayor to seek guidance for overall context of development plans. The general rule is that (given the time constrain) a meeting could be organized to discuss issues. A forum topic could be started by the Mayor to hold a virtual meeting over week 2. Feel free to invent the boundary conditions here: our Voice of Handenor journalist must be informed as his/her opinion is crucial for influences to the Mayor.

Developers : preliminary meetings among you to define your position and plans. Note that the instructions from Consultants will come around the 27th October. However, you can start developing your alternatives for reconstructing or whatever for the abandoned mine and associated resources at the loading island of Grijander.

Since there are various views on development in the group a forum topic to hold discussions on possible future scenarios. Back your views on theory contents seen in the theory part of the course and, of course, feel free to amplify views to enhance extremes and push the Mayor and other groups to their limits. It may be wise to invite the local press to your discussion to see how he/she reacts to plans.

WEEK 3 (28 October 03 November)

Developers: During this week developers should complete their proposals for development of the island of Grijander and submit to Consultants. A full report (max 10 pages) to be submitted to Consultants and Mayor by 03rd November. The report will include: Introduction, Justification of the proposed project, SWOT, Feasibility study and an Action plan -timing-.

WEEK 4 (04 to 10 November)

Consultants and NOPUEDOL Environmental Pressure group and journalist: After receipt of proposals from developers, Consultants, NOPUEDOL members and the Voice of Handenor share views on the overall design. Consultants will then provide a full report on proposals based on a stakeholders view for the feasibility of the project. A 5 page (max) review will be submitted by the end of the week to the Mayor.

FINAL WEEK 5 (11 to 17 November)

All participants: The Mayor presents towards the end of the week the Strategy for Sustainable Development of HAN DENOR 2020. The decision making process may involve the use of instruments seen in the theory part of the course. The Mayor may want to call for an assembly via a forum topic dedicated this week to open discussion prior to publishing results.

Gonzalo Malvarez

ANNEX VIII

Introductions to Lectures

WELCOME to the 2013 MedOpen Advanced Training Course in ICZM!

An integrated approach to coastal management and governance means reaching a new level of knowledge and the application of lessons from experience to emerging issues. Managers working in centralised programmes need to adapt national rules and regulations to the specific needs and concerns of coastal ecosystems and shoreline areas, while leaders working primarily at the community level must engage more partners and layers of government to make progress.

Let's hope this intensive twelve-week course will provide an inspiring setting for all of you, ICZM practitioners from the Mediterranean region and beyond. This course is designed to share ideas, lessons and strategies in order to forward the art of local, national and regional place-based integrated coastal management.

During these twelve weeks, we lecturers and the Simulation Game moderator will do our best to accompany you all the way so that, while focusing on building the knowledge and skills of individuals, this virtual course meets the demands of your advanced group by:

- drawing together participants with experience and skills in coastal management;
- performing at a deeper level of analysis and processing of programme contents;
- structuring activities so that participants can lead the discussions and share critical thinking, assessment and problem-solving with peers (Simulation Game);
- offering an opportunity for applying knowledge and skills learned in the course (Final Essay).

It depends on all of us, on our capacity to interactively communicate through the MedOpen forum, to make such an ambitious challenge possible!

Please be aware that the emphasis of the course is on policy, governance and management of the coastal zone, thus is not primarily focused on natural science research and data analysis skills, since many professionals already possess them or have access to in-country technical staffs and research assistance.

Your lecturers and Simulation Game moderator:

Yves Henocque, Head Lecturer
Brian Shipman, Lecturer
Gonzalo Málvarez, Simulation Game Co-ordinator

Introduction to Lecture 1: Sustainable Development Issues in the Mediterranean

Lecturer: Brian Shipman

This first lecture on this course is not about ICZM, it's about the Mediterranean Sea and its sustainability issues. This is important - the Mediterranean is a special sea with very special characteristics, these characteristics must in turn shape a distinctive ICZM response.

"Of all the world's continents only the Mediterranean is liquid", wrote Jean Cocteau. It's an interesting thought - a continent whose citizens inhabit its coastal rim looking inwards to the sea.

It's no exaggeration to say that the Mediterranean is one of the most dynamic places of interaction between different societies and cultures on the planet. Its role in human history is unsurpassed by any other expanse of sea. Its opposing shores are close enough to permit easy contact, but far enough apart to sustain cultural, ethnic, religious and political differences and identities. Paradoxically, the shared identity of Cocteau's "liquid continent" is its extreme diversity.

In the 21st Century political rivalries, cultural diversity and economic disparities across the Mediterranean are as strong as ever. The goals of political stability, or of a great pan-Mediterranean economic union, appear as elusive as ever.

Despite this, it is on the shared environmental problems - particularly on marine and coastal issues - that the sovereign nations of the Mediterranean and the EU have agreed to transcend political differences and work together. This began effectively in 1976 with the signing of the "Barcelona Convention - the Convention for the Protection of The Mediterranean Sea Against Pollution".

In the following four decades the states bordering on the Mediterranean, (now totalling twenty-one) and the EU have together developed a succession of environmental initiatives, including the "Protocol on Integrated Coastal Zone Management", within the framework of the United Nations Environment Programme's Mediterranean Action Plan (UNEP/MAP).

Whether these initiatives will address the fundamental issues of sustainable development and achieve their desired effects will depend on a combination of factors. The most important of these factors are: political willingness at all levels – from the supra-national through national, regional to local levels; the relevance of the processes and the tools available, and finally the capacity of those key individuals, communities and institutions to participate and deliver results.

In this first lecture page of MedOpen we set out a series of key sustainability issues faced by the Mediterranean.

The data comes primarily from within the UNEP/MAP system of Regional Activity Centres (RAC's) around the Mediterranean responsible for coordinating action on these key issues. An additional report, the "STATE OF THE ENVIRONMENT AND DEVELOPMENT IN THE MEDITERRANEAN - 2009" published Under the coordination of UNEP/MAP's Regional Activity Centre "Plan Bleu" which gives the most comprehensive picture available has been selected by the MedOpen Team for this topic and is posted alongside the lecture.

What to do next?

1. Read and test your knowledge of the on-line lecture, and look at the additional material provided.

2. Go to the discussion forum to discuss the issues in more detail, and to challenge the analysis. Consider the following questions:

a. Are the individual issues shown in the lecture the most relevant ones – are there others that could or should be considered?

b. For the purposes of coastal management - is there a hierarchy of issues?

Remember that we have just one week to consider this topic before we move on to lecture 2 in which we look at how we respond through ICZM to these issues.

As a community, the participants of the Advanced course bring an enormous wealth of knowledge and experience together - so I look forward to a very fruitful and challenging discussion. Please put any question or comment you have onto the forum so that I can answer and moderate the exchanges you may have between you.

I will be available all week.

Brian Shipman

Introduction to Lecture 2: How to Respond?

Lecturer: Brian Shipman

The opening of this lecture contains a big claim for ICZM as “... *an approach globally recognised as optimal to a successful coastal management.* ”

The lecture presents ICZM in the Mediterranean as a process with clear policy goals and a strategic context, a process in which public sector agencies at all levels, private sector and the NGOs, and all actors play their part in the management of the coast. Thus ICZM follows the pluralist political model in which all interest groups have primacy in determining policy outcomes.

However, there is some scepticism about its practical implementation:

“Even though ICZM is an effective tool for advancing towards sustainability in the coastal zone, ensuring equitable use of coastal resources (natural, socio-economic and cultural) and integration among the different administrative and societal sectors, the success of ICZM in supporting sustainability goals in Europe has been limited due to, among others, the challenge associated with translating the basic principles of ICZM into management action (Shipman et al. 2007, Diedrich et al., 2010).” [1]

By comparison to the rest of the world, there are grounds to challenge this scepticism in the context of the Mediterranean. The 1975 Mediterranean Action Plan (MAP) led to intense collaboration between the states in ICZM issues at the Regional Sea level - both in terms of policy development and practical local implementation. The Mediterranean is held up as a model for the other Regional Seas around the world.

However, for a relatively recent review of this collaboration I also invite you to consider, “[The Way Forward for the Mediterranean Coast](#)” [2] notably Section 5: **Barriers and threats to creating a self-sustaining ICZM process in the Mediterranean.** This is a *realpolitik* sketch of the state of ICZM in the Mediterranean in 2009.

So, somewhere between the high ideals of the policy makers at the macro-level and the reality on the ground, might ICZM in its current state be better characterised as the “science of muddling through” [3]?

Additionally, ICZM is a relative ‘oldie’ in the sustainability field; new ‘young guns’ such as climate change and the ecosystem approach now compete powerfully for the attention of decision-makers and the public.

As we will see in later lectures, the Mediterranean ICZM Protocol provides a powerful political instrument, unique in the world, but ICZM needs to reinforce its potent intellectual *raison d’être* and make itself attractive and – above all – useful to decision-makers if it is to turn basic principles into action. Put simply, ICZM is no good unless it can be shown to work in the real world.

QUESTIONS FOR THE FORUM TO CONSIDER

We will come back later in the lectures to the detailed process of ICZM implementation and the ICZM Protocol. **But at this stage consider the following questions relating to the place of ICZM in the sustainability debate.**

1. **How realistic in such a complex region as the Mediterranean is it realistic to expect that the pluralist ICZM political model can predominate?**
2. **Is there a sufficient “connect’ between the concept of ICZM and its perceived need, i.e. are the various interest groups even aware of their shared interests and needs in the face of strong competition from other sectoral agendas such as climate change and biodiversity?**
3. **What differentiates ICZM from other integrated approaches currently advocated such as Marine Spatial Planning or lthe Ecosystems Approach?**

See you on the Forum!

[1] Analysis of Member States progress reports on Integrated Coastal Zone Management (ICZM), European Commission - DG Environment, 2011.

[2] Shipman B., Henocque Y., Ehler C.N. (2009). Final ICZM Policy Report. The Way Forward for the Mediterranean Coast. A framework for implementing regional ICZM policy at the national and local level. SMAP III/2009/ICZM PR/ENG, Priority Actions Programme Regional Activity Centre, Split, June 2009 http://www.circle-med.net/doc/UNEP_FinalICZMreport.pdf

[3] **“muddling through”** an English idiom which roughly translates as *“to manage to do something although you are not organised and do not know how to do it.”*

Introduction to Lecture 3: BASIC PRINCIPLES OF ICZM

Lecturer: Brian Shipman

The lecture sets out the basic principles of ICZM. The language will be very familiar to anyone involved in the field of sustainable development. Indeed ICZM was one of the earliest promoters of the now well-known principles of SD.

At first sight, much of the language used - ...***“a way to ensure that human action is undertaken with a concern over balancing economic, social and environmental goals and priorities in a long-term perspective”*** seems to be yet more *“motherhood and apple pie”*¹ of the SD debate – rich in ideals but poor in real world application.

So what makes ICZM different?

Firstly and obviously is ICZM's focus on a specific geographic entity – the coast. But, perhaps ICZM's greatest strength woven through all the principles is the emphasis on process and *operationalisation* – another word for delivery – particularly in the real world of multi-level administrations, stakeholder participation and adaptive management.

So, the basic principles of ICZM are not just about an academic or esoteric debate of WHAT constitutes sustainable development, but also the HOW of delivering SD on the ground in real space in real time.

ICZM provides a practical frame within which a whole range of sustainable development objectives can be achieved over time. ICZM could perhaps be seen metaphorically as that practical and pragmatic uncle in the SD family who can usually be relied on to fix things.

In my introduction to the last lecture, I characterised ICZM as the *“science of muddling through”*². At first this may seem derogatory, but it is the recognition that to be effective we must be adaptive to real-world issues without losing sight of the basic principles.

Thus, we will never have adequate data, political barriers seem insurmountable, and there will never be enough resources. I am reminded of an analogy from my political science lectures on the role of ideals and principles. Humans always dreamed of flying – our imagination stimulated by the myth of Icarus – the idea is probably at the core of being human. But flying only finally became a reality for those who accepted the practical need for mechanical assistance such as fabricated wings, the high risk of failure, and less that graceful first attempts. In ICZM we may never achieve the effortless flight of full SD – the principle – but we are on a constant journey to achieving it – the *process*.

As we have discussed extensively in the past two weeks, one of ICZM's key weakness is its impenetrable jargon and lack of apparent relevance to others beyond the closed intellectual ICZM circle. PAP/RAC have long recognised this and added an important vision to the underlying principles, a simple six-point statement of what kind of coast ICZM offers that answers the simple question *“what does mean for me?”*

¹ *“motherhood and apple pie”* a US English idiom meaning a statement of something so obviously good it can't be criticised, but on the other hand is so obviously good its almost empty of meaning.

(2) *“muddling through”* an English idiom which roughly translates as *“to manage to do something although you are not organised and do not know how to do it.”*

PAP/RAC's Six Principles of Coastal Sustainability – a coast that is:

- **resilient** – resilient to climate change, resilient to natural processes, resilient to human processes
- **productive** – productive financially, competitive, high in value, increasing GDP, alleviating poverty
- **diverse** – diverse in ecological, diverse in experiential terms
- **distinctive** – distinctive culturally, distinctive in marketing
- **attractive** – attractive to visitors, investors and to local people
- **healthy** – free from pollution.

We will come back to the practical application of IZM in future weeks, but for this week please consider the principles, and in particular on the Forum:

What are the threats to the principles when faced with a real world situation? Is ICZM's lack of a specific sustainability focus and its pragmatism its strength or its Achilles' Heel?

Brian Shipman

NB: readers will have noticed my repeated use of English idioms – please feel free to add to my stock from the rich wealth of idioms from other languages.

Introduction to Lecture 4: Benefits of ICZM

Lecturer: Yves Henocque

Buongiorno everybody! Following Brian I am going to be with you the next three lectures hence the next three weeks during which Gonzalo will join us (week 5) to start up with you the simulation game.

During the first 3 weeks, I have been following your previous exchanges on the forum and noticed a number of key words (words reflect ideas, aren't they?) such as 'ecosystem approach' (and Brian's remark that it's not only about 'ecosystem per se' but I would add about socio-ecosystem), governance framework (including criteria such as accountability and transparency underpinned by 'mutual trust'), economic activities like fisheries still poorly addressed within ICM projects, ICZM as an 'umbrella institution' (or an 'articulated process' ?), and a lot about leadership, communication and legislation as emphasized by Brian. And a last one (amongst others!) that 'values are not always monetary', yes!, definitely and we should keep this in mind when talking about the 'benefits' of ICZM.

As shown throughout this fourth lecture, ICZM may bring over many benefits through outcomes more or less measurable, while it is often difficult to link them to the dynamics of ICZM. As an introduction, it is these dynamics I would like to schematically introduce so that you may then look at these benefits throughout an overall vision that could make your argumentation towards decision-makers easier.

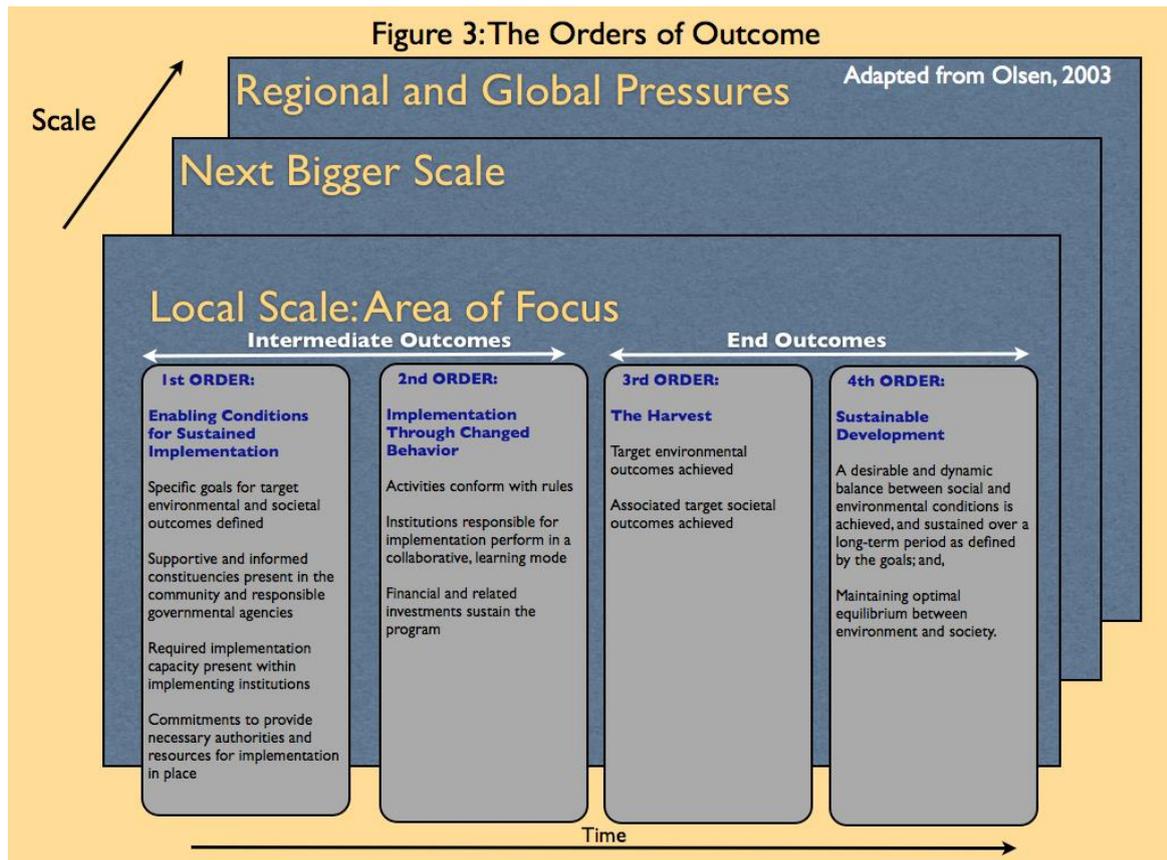
As shown below and besides the classic policy cycle, Stephen Olsen (Olsen S.B. 2003. Frameworks and indicators for assessing progress in integrated coastal management initiatives. *Ocean & Coastal Management* 46, 3-4: 347-361) introduced the very pragmatic Orders of Outcomes framework designed to complement the latter by focusing on the sequence of outcomes that are supposed to be achieved when working to realize desired societal, environmental and economic conditions.

Please see attached Figure, The Orders of Outcome, adapted from Olsen 2003.

The 1st Order outcomes define the four enabling conditions for the sustained practice of ecosystem-based management, an approach you have been already talking about but which is not besides ICZM but part of it. It includes the formal commitments (considered as benefits) required to implement a plan of action directed at the achievement of defined ecosystem conditions. The outcomes that mark the full scale implementation of a formally approved and sustainably funded plan of action are addressed in the 2nd Order, as changes in the behaviour of governmental institutions, the behaviour of the relevant groups (sometimes called "first" and "secondary" beneficiaries) exploiting or otherwise affecting ecosystem conditions and the behaviour of those making financial investments in the system. An important feature of this third category of 2nd Order change is success in generating the funds required to sustain the project/programme over the long term. The 3rd Order marks the achievement of the specific societal, environmental and economic quantity/quality goals, i.e. the very objectives of your ICZM project/programme. In ecosystems that are much altered by human activities the achievement of a sequence of 3rd Order goals marks the path to more sustainable forms of development towards the culmination of sustained courses of action that mark achievement of the 4th Order.

Now, with that vision in mind I invite you to immerse yourself into Lecture 4 and its documents, match that vision with your own experience, and see if that can help as regards the comprehension of the ICZM process (dynamics) and all the benefits that it may bring up including the hidden one, those that are not monetary (qualitative and difficult to measure) but

nevertheless crucial to the success of any ICZM-like initiative. Let's meet on the forum coming Monday 7 October!



Introduction to Lecture 5: Who is Responsible for ICZM?

Lecturer: Yves Henocque

Now, we are entering Lecture 5 where “governance” is a key attribute of ICZM. You will see that in introducing governance the Mediterranean Strategy for Sustainable Development is quoted at length. I strongly invite you to have a look at it (a revised one is currently under preparation) and you will see that “Promoting sustainable management of the sea and coastal zones and taking urgent action to put an end to the degradation of coastal waters” is one of the seven priority fields of action across the four main objectives of the strategy which are Economic development, Reducing social disparities, Changing unsustainable production and consumption patterns, and the last but underpinning objective which is Improving governance.

Improving governance in between the three main forces which are the market, the government, and the civil society, is very much what ICZM is about but it may succeed only if it generates ownership through meaningful public participation (civil society) besides the central role of governments (national, regional/provincial, local) and the private sector involvement. This is one of the key conditions on which I would like to expand a bit before starting the lecture.

Promoting meaningful public participation

In all the models, public participation and local involvement are recognized as crucial components of coastal management. Similarly, NGOs and community organizations are, among others, increasingly playing a major role in coastal zone management initiatives around the world. In most of the cases, communities have typically participated in coastal zone management through public meetings, hearings and inquiries, and as representatives on advisory committees or councils. In many countries, public involvement is a legislated requirement for the development of and implementation of any sector or field management programmes.

Let's have a look at a number of lessons that may be considered as central to provoke and grab opportunities allowing public participation to happen (e.g. see Glavovic, 2000, about the South Africa experience):

- *At the outset, key stakeholders should agree on an appropriate process and structure to secure broad political support for the initiative.* This approach stands in contrast to common practice, which typically begins with technical analysis of a problem. By concentrating on process considerations first, attention can be given to building political support before stakeholders assume positions based on differing perceptions about how best to solve the problem. The setting up of a specific programme and its coordination body may promote the credibility of the process seen as a partnership between government, civil society and the private sector.
- *The process should be designed in an inclusive, voluntary and culturally sensitive manner.* Particular attention needs to be given to designing culturally sensitive and appropriate methodologies to engage diverse participants effectively in the participatory process. Different kinds of opportunities, forums and participation methodologies need to be developed, tested and applied, depending on stakeholder needs. It should be an iterative process in which capacity and trust are progressively built over time, contributing to deeper insights and to enhanced stakeholder relationships. Locally networked and informed regional managers may play a key role in this regard.
- *The process should be aimed at empowering historically disadvantaged individuals, groups and communities.* Socially and geographically distinct patterns of poverty and inequality will be perpetuated unless there is a commitment to empowering those who are marginalized.

Creating opportunities for meaningful public participation can be a powerful means of mobilising historically disadvantaged people.

- *The process should be conceptualised as a partnership-building endeavour.* A broadly owned policy outcome is based on a shared commitment to its implementation. Such partnership-like relationships provide the basis upon which stakeholders can learn about and appreciate the interests of others. Conceptualising the process as a partnership-building endeavour helps to foster a common understanding of the issues and builds a share set of values that can be then translated into practical measures for cooperation.

- *The process should be designed and managed to deepen and extend public deliberation.* Promoting public participation presumes that participants are well informed about the issues at hand and are able to engage in group discussions that get to grips with the substantive nuances of the issues. It also presumes that participants are able to work through their differences of opinion and develop a common understanding of the issues. Usually, public meetings provide limited opportunity for in-depth discussion. Alternative forums and participatory methodologies are required to extend and deepen discussion, including small group discussion that facilitate increased interaction between specialists and stakeholders, as well as deeper levels of interaction between stakeholders.

- *The process should be managed in an innovative, reflective and deliberative manner that is responsive to changing circumstances and stakeholder interests.* From an operative point of view: (a) keeping the momentum requires *independent facilitators* who, depending on circumstances, may need to play different roles, ranging from mediator to negotiator, educator, advocate and so forth; (b) building stakeholders' interest, understanding and trust necessitates timely, accurate and *regular feedback* that reflects the nature of their contributions and the manner in which they have been integrated into the products of the process; (c) the process should be designed and managed to be *responsive* to the needs and interests of stakeholders and to the new insights that emerge in the course of the process, (d) careful attention needs to be given to using the most *appropriate media* and means to make the outputs of the process widely accessible and reach particular target audiences, such as key decision-makers or the youth; (e) conducting such an extensive participatory process requires securing sufficient *financial resources* as well as a *reasonable timeframe* to engage stakeholders in formulating the coastal policy.

As you can guess, engaging into such an adventure requires the experience and the appropriate techniques of what the sociologists like to call "social engineering" to do it. Most of the time it is poorly done, why? Because most of the time there is not such a skill in the project, the social practitioners are often not there but rather environmentalists or biologists or ecologists but not the social engineers which are badly needed.

No situation is perfect and of course we have to work with what we have, but we have also to be aware that there are requirements we cannot ignore if we want to achieve a meaningful participation hence genuine ownership of an ICZM programme or project which is key to its sustainability.

Introduction to Lecture 6: Legislative, Institutional and Financial Framework

Lecturer: Yves Henocque

Hello all of you! This is our third week together and we are going to speak about the ICZM legislative, institutional and financial framework which regards directly the way the Mediterranean ICZM Protocol may be implemented at national and local level.

Remember the '1st order outcomes' I introduced in Lecture 4? Well, this lecture is very much about the setting up of the enabling conditions for sustainable coastal and marine areas development, and for building up these enabling conditions the Mediterranean countries are fortunate enough referring to a common framework and its guidelines which is the Mediterranean ICZM Protocol. As indicated in the lecture, the first item in its menu of actions is about defining the coastal zone, and I think worthwhile to say a few words about it.

In the Protocol, the coastal zone boundaries are defined in a very flexible way as: (i) the seaward limit of the coastal zone is the external limit of the territorial sea (12 nautical miles); (ii) the landward limit is the limit of the competent coastal units.

It is clear that the definition of the coastal zone varies with each existing model. With respect to the size of the coastal zone, there is usually a trade off between comprehensiveness (bigger) *versus* acceptability and practicality (smaller). Some non Mediterranean countries, such as Sri Lanka and Costa Rica, have adopted a narrow definition of the coastal zone. In contrast, seaward boundaries can extend as far as the outer limit of the Exclusive Economic Zone (EEZ), which is the case for most of the countries that developed a Maritime or Ocean Strategy.

But whatever the boundaries and because of the dynamic and "open system" nature of coastal and marine areas, the analysis for planning and management should add other areas to the boundaries of the management of the ecological area, which are the *demand areas* (see B.T. Bower & R.K. Turner. 1996. *Characterising and analysing benefits from integrated coastal zone management (ICZM)*. "Designing Sustainability", Fourth Biennial Conference of the International Society for Ecological Economics, Boston University, 4-7 August 1996).

What are these varied demands?: demands from within the designated area; demands from outside the designated area but within the watershed; demands from outside the watershed, with respect to, e.g. waste disposal of pollutants transported into the area *via* atmospheric transport; demands for coastal recreation, including visits to unique marine areas, and internationally determined demands, such as for global shipment of crude oil and oil products. Even if you have defined who should be the project's first beneficiaries, that's pretty much enlarge your list of "stakeholders" you have to take into consideration, be there from the government, the private sector (market) or the civil society, i.e. the governance main components and drivers.

Therefore, any management area should be considered in its multi-scale dimensions. For example, over-fishing and the impacts of unregulated tourism may be considered as local pressures, but the degradation of wetlands or seagrass beds from the area of focus may be reducing the flows of larvae that repopulated the area and these impacts may be or may not be beyond the reach of local action. Careful documentation of the impacts of such global pressures as climate change might help to be aware of this scale issue and link with other policies or programmes addressing the causes of global warming.

Finally, don't forget that a local ICZM project should also be understood as part of an actual or potential network of local coastal management projects (and it does not matter if they are not

labelled “ICZM”), which through replication and scaling up, may convince and help regional and national governments in developing their own regional or national ICZM strategies.

Have a great week!
Yves

Introduction to Lecture 7: ICZM at the National Level

Lecturer: Brian Shipman

In this lecture we look at how states can create the framework that raises the status of ICZM from isolated projects or voluntary initiatives to a “job that must be done”, one that is driven by legal requirement, nationally agreed priorities, or an international obligation.

So, imagine yourself for the moment - a middle- level, underpaid official in the Environment ministry of the republic of Bureautania. All was well until your new Minister returns from a biennial meeting of the Barcelona Convention countries with a question:

*“What, in the sacred name of our blessed Saint Sinus the Deviated^[1], is a ‘**National strategy for ICZM**’ ...and what's the point of it? According to those PAP/RAC people from Croatia, we are supposed to prepare one.”*

Eventually the questions filter down to you - the Ministry’s “Focal Point for ICZM” (job description page 4 under “any other duties”) - and you are expected to provide a briefing paper by Monday morning. Maybe you can tell by his tone that he is not very enthusiastic, but the neighbouring state of Anemia claimed to be well on the way to finishing theirs, so it is a matter of national pride.

So you look around the Mediterranean and beyond for inspiration and ideas...

We have included some of these international examples in our lecture, along with other examples of national frameworks such as coastal laws. They are all very different. They reflect different perceptions, histories, legal traditions, cultures, geographies, and even the oceans the face. Many are single issue-driven, such as development or fisheries.

So, how to proceed? The reply to the Minister’s question looks to be a difficult one! All that is clear is that Article 18.1 of the ICZM Protocol requires that, *“Each Party shall further strengthen or formulate a national strategy for integrated coastal zone management and coastal implementation plans and programmes...”*

Fortunately for you - our poor harassed Bureautanian bureaucrat - we at PAP/RAC are making your life easier by producing a set of guidance on what a national strategy is for, and what it might contain.

Above all the ICZM national strategy is not seen as a massively detailed geographical strategy dealing with the minutiae of each section of the coast. The focus of the national strategy should be on governance and a clear plan of action. It is for local plans and programmes to elaborate the details. The key objectives are simple, to:

- Articulate an agreed, clear national vision for the sustainable development of the coastal zone
- Establish through governance the integration and harmonisation of multiple interests in coastal zone
- Identify both the priorities and the means to achieve the sustainable development of the coastal zone.

The need for speed, clarity and simplicity are stressed. The important point is to provide clear national guidance and authority for ICZM, along with the official government “stamp of approval”.

We will look at the process of preparation in later lectures, but for now the key questions for this lecture and this forum (and maybe for your ministerial briefing report) are:

1. **What should be the key areas for the national strategy to address?**
2. **What are the key benefits of preparing a national strategy?** (after all it is much better that your Minister feels he *wants* to produce the strategy rather than just complying with a Protocol to a Convention to which his country is a signatory)
3. **...And why didn't you tell him all this before he went the meeting?**

Keep your answers brief - just a few bullet points - like your Minister, I have a short attention span 😊

[\[1\]](#) Saint Sinus the Deviated – patron saint of Bureautania d. 845

Introduction to Lecture 8: ICZM Process, A roadmap to Coastal Sustainability

Lecturer: Brian Shipman

Good morning all,

By now you will be heavily involved in the Simulation Game and your essay, so you are very busy, and probably a little stressed. And it's Monday.

So, I thought for the introduction to the ICZM Process I would follow my own advice in the lecture and "...**keep it simple**".

We've all heard that tired old metaphor "**building blocks**" to describe the basic stages in a work, political or business process ("'*...we are putting in place the bulding blocks for a lasting peace' said the President" etc etc etc) ...and ICZM is no exception, building blocks are an over-used metaphor.*

But today - just to be different, and after you have read the lecture - I'm asking you to go beg, steal or borrow some **real** building blocks, and then build your own ICZM Process! (OK, maybe not big messy concrete ones blocks, LEGO will be OK).

Yes, you read it correctly ...release your inner child and get out the LEGO.

"...*he is crazy!*" I hear you say, "...*how is it possible to build an ICZM Process out of LEGO?*" Well, as I'm in a generous mood today, I'll show you how *I* did it.

So grab a coffee, kick back your chair, close the e-mail, and click onto this on-line video and I'll show you how it's done in less than 20 minutes:

[The LEGO approach to building ICZM \[1\]](#) (yes it really is me).

And after...

1. **Your feedback** on the simplified Process we are rolling out for the Mediterranean and Black Sea will be very interesting.
2. **And why not post a photo of your building efforts here on the Forum for us all to enjoy** ... maybe we'll find a prize for the best.

Happy Process Building,

Brian Shipman

--

[1] A Polimedia training video for the **PEGASO Project funded by the European Union within the FP7 (Framework Programme)**

Introduction to Lecture 9: Tool Box

Lecturer: Yves Henocque

As an introduction to Lecture 9 devoted to a number of tools articulating the setting of the ICZM processes, I would like to emphasize three important underpinning issues: the local level and community involvement, building up on existing knowledge, and considering MSP (marine spatial planning) as a tool contributing to the delivery of ICZM. The sole ambition of the few comments and examples developed below is to help you considering and articulating the ICZM tools in a very pragmatic and adaptive way.

Remember that rather than being an all-encompassing solution for managing coasts and oceans, ICZM and more particularly national ICZM strategies should be seen as **facilitating and strengthening the implementation of diverse frameworks and processes for delivery** given the commonality of their operational goals and approaches, and areas concerned.

That means that shifting in management responsibilities to local governments or coastal communities should be encouraged. This trend is illustrated within many management initiatives like in the Philippines, Sri Lanka, Barbados, Tanzania, Ecuador, Bulgaria, the US or Australia. The well-known Tanga Coastal Zone Conservation and Development Programme in Tanzania has successfully introduced a participatory community-based ICZM programme based on the principle of sustainable resource use. Ecuador and Sri Lanka have placed particular emphasis on local level management through Special Area Management (SAM) initiatives, which involve coastal community and government partnerships. In Ecuador, SAMs are the primary vehicle through which the national ICZM framework is implemented.

In many of the known models, community sustainability issues often related to traditional resource usage as a key management issue while overall socio-economic considerations have usually been a weak component of many of these coastal management models.

At present, economic viability is the most pressing concern in sustaining coastal communities, particularly those linked to fisheries; sustainable development of these communities should therefore constitute an important component of any regional and national ICZM programmes. To achieve this, an ICZM initiative must be linked to community development, regional/provincial land use and maritime spatial planning, as well as sector planning at the national and regional level. In addition to addressing the key socio-economic concerns, such linkages help provide support and commitment to ICZM.

Another example, in the UK (Brian was used to be a member of one of these...), over 60 voluntary Coastal Partnerships have developed since the 1990s³. They commonly employ a coordinating officer and in some cases a small team (of up to five staff) delivering core services plus projects depending upon funding availability. Other defining features of the Coastal Partnerships tend to be: a regular forum or conference bringing together decision-makers with sectoral interest groups to debate current issues; the use of topic/focus groups to carry out specific tasks such as problem solving, report writing or policy development; and development of communication mechanisms such as workshops, websites, newsletters, and consultations to generate wide involvement from government, private and voluntary sectors. These structures have provided the momentum to formulate and implement voluntary coastal and estuary management plans and strategies. They are brought together into a national network through the Coastal

³ T. Stojanovic, N. Barker. 2008. *Improving governance through local Coastal Partnerships in the UK*. The Geographical Journal, Vol.174 No.4, pp. 344-360

Partnership Working Group (2006), which reports to the Annual Coastal Partnerships Forum.

Call it 'partnership' or under any other name, giving the place and the means to local stakeholders to meet and exchange together including about the **gathering and integration of existing knowledge** (scientific and traditional) should be a continuous endeavour. At the end, in between researchers, managers, coastal stakeholders and the public, what counts is not to make a comprehensive assessment of the status of the coastal and marine ecosystems elements but to identify the major threats and issues that have to be tackled.

The last comment goes to the so-called Maritime Spatial Planning (MSP) which may be considered as a possible useful planning tool throughout the ICZM process provided it may be applied well beyond local governments' area of interest, at a large marine ecosystem scale. For example, in the introduction of the Firth of Clyde (Scotland) marine spatial plan, it is said in the introduction that "effective ICZM requires the application of a range of instruments and tools such as legislation, technological solutions, research, voluntary agreements, education, stakeholder engagement and facilitation", and that "Marine Spatial Planning is also a tool that enables the delivery of ICZM."

Outlines of the Firth of Clyde (Scotland) Marine Spatial Plan

Background and Context

This provides an overview of the Firth of Clyde and sets the political context within which this plan has been developed

The Framework

This establishes the framework in which the policies and proposals have been developed and integrated. It includes the Vision, Aims of the Plan, Objectives and Guiding Principles

Crosscutting Policy Themes

There are four policy areas which impact upon the policies and proposals of the Sectoral Plans. These are: Environment, Communities, Heritage and Safety

Sectoral Plans

Sectoral plans have been developed for key sectors within the Firth of Clyde: Energy and Subsea Infrastructure; Fishing; Mariculture; Recreation and Tourism; Shipping and Transport. These forward looking strategic plans will help guide the sustainable development of activities

Implementation and Monitoring

The implementation of the plan will depend upon the action of many different bodies and agencies both public and private. A five-year action plan, detailing what should be delivered by whom and when, is set out.

From: Scottish Sustainable Marine Environment Initiative. Firth of Clyde Marine Spatial Plan Draft. March 2009

With these few words and examples, my main message would be: don't get lost into tools development for their own sake but, as much as possible, customise them for local stakeholders' own use since,

- **how sophisticated they may be, tools are of no much use if they don't fit into the dynamic of the ICZM processes for delivery or outcomes (here, I am sending you back to Brian's 'LEGO approach to building ICZM', Lecture 8) from a political, institutional, economical, knowledge and participation points of view;**
- **as an ICZM practitioner, any issue at stake should be considered from a multi-objectives (or multi-processes as mentioned before) perspective, meaning that**

you will have to deal with the crafting (customisation) and use of many tools at the same time in order to contribute to the delivery of significant outcomes.

I wish you a very good week and, since you are a multi-objectives oriented person (yes, you are!), try to consider at the same time the content of your final essay in order to make it as useful as possible for your future activities.

All the best, Yves

Intro to Lecture 10: Good practices demonstrations

Lecturer: Yves Henocque

Hold on! This is the 10th week and you are going to look around you what is there and how these concrete examples might match what you have learned or re-discovered before.

In this lesson it is proposed to have a look at a number of local coastal zone management examples in the Mediterranean and try to come out with some lessons that may be useful for further ICZM development in line with the Mediterranean ICZM Protocol.

To complement this Mediterranean overlook, I would like to enlarge the vision to the lessons that we may draw from experiences in other parts of the world as well. You will see that fundamentally, there are many common observations with the Mediterranean's ones.

Altogether it appears that there is no recipe for ICZM where the process may be triggered by concern over sectoral issues or by regional issues, and can be implemented through a number of different institutional schemes and management instruments.

To start with the very definition and delimitation of the coastal zone vary considerably among coastal States, as does the extent to which integration is desired; the scope of issues, environments, and stakeholders involved in the management process; and, the approaches and methods employed to achieve management objectives. Diverse factors such as the political and cultural nature of a country or region or place, the resources available for management, and the existing institutional structure, influence the approach adopted or adapted.

As a result, the models do not easily lend themselves to comparison, but there are common features characterizing varied approaches which can provide insights into the trends and current practice of ICZM internationally. Let me propose you some of them that could (I hope!) give you some ideas for your final essay:

- the particular context and experiences that generated each ICZM model appear to be unique to that country or region and are a function of a host of legal, political, social and cultural factors;
- coastal management efforts can be divided into three types: (i) **single issue initiatives** focusing on a single or a limited number of coastal problems (e.g. Sri Lanka, Barbados, Ecuador, Thailand, the United Kingdom initiated their respective coastal zone management programmes to address erosion control and shore protection); (ii) **comprehensive coastal management models** adopt a more cross-sectoral approach, incorporating a variety of issues in order to achieve sustainable development in the coastal zone (e.g. most of US states, some Australian states, South Africa, a number of EU member states), the scope of these management initiatives being often constrained by the mandate and responsibilities of the lead agency; and, more recently and increasingly, (iii) **integrated maritime policies** including ICZM as a crucial governance tool at the interface between the land and the sea (in 2008, no less than 40 countries had taken concrete steps toward cross-cutting and integrated national ocean policy for the management of their coast and marine areas under national jurisdiction);
- look at that one which I think is highly significant to the Mediterranean: very few countries in the world (e.g. the Philippines) effectively incorporate the fisheries sector into their ICZM planning. Notwithstanding the difficulties that may be involved, ICZM cannot be achieved without such an important sector (like tourism) being factored into the planning process;
- coastal management requires local action for implementation (the politicians know that very well: politics is local!). **Local government** involvement is therefore essential to the successful implementation of the various economic development and environmental

- management policies and action plans forwarded by central government, but local governments are rarely involved in the design of the policies and programmes;
- disparities between the capacities of central and local governments are another factor contributing to weak implementation. Most local governments do not have the financial and human capacity they require to implement the projects and programmes forwarded by central government. Lack of incentives is another reason for weak programme execution at the local level. Also, the lack of a legal requirement gives ICZM a low priority in most states;
 - generally speaking, investments in **capacity building** in support of coastal and ocean management since Rio (1992) have been fragmented and failed to deliver the integrating knowledge, concepts and tools that are required. Overall, fragmentation of efforts at multiple levels is the most important barrier that needs to be overcome to improve capacity building;
 - usually, ICZM assumes that the leadership and responsibility lies with governments. But while the participation of stakeholders and the public is promoted, there is scant recognition of any role for **the market**. Yet, with the globalisation trend, experience tends more and more to demonstrate that it is typically market forces that dominate in shaping the trajectory of coastal change with highly variable roles for civil society. Approaches that have proved most successful are those that stress (i) strong involvement by those affected by coastal change, (ii) incentive-based methods, and (iii) the willing compliance with plans of action. Such approaches often translate into “community-based management” demonstrating that positive outcomes can also be produced at small, localized scales. However, such local successes have also proved to be resistant to “scaling up” in good part because they have required intense efforts, often heavily subsidized by external funding and expertise, strong local leadership and compromises and arrangements that are much dependent on local conditions;
 - many handbooks and guidelines have been issued since Rio conference (1992) that describe the features of ICZM and Ecosystem Based-Management (EBM) as these should be expressed in practice, first very much separately (conservation of biodiversity vs. local development) but fortunately more and more combined under the same policy. Some don't hesitate to label this as an ‘integrated ecosystem-based management approach’!

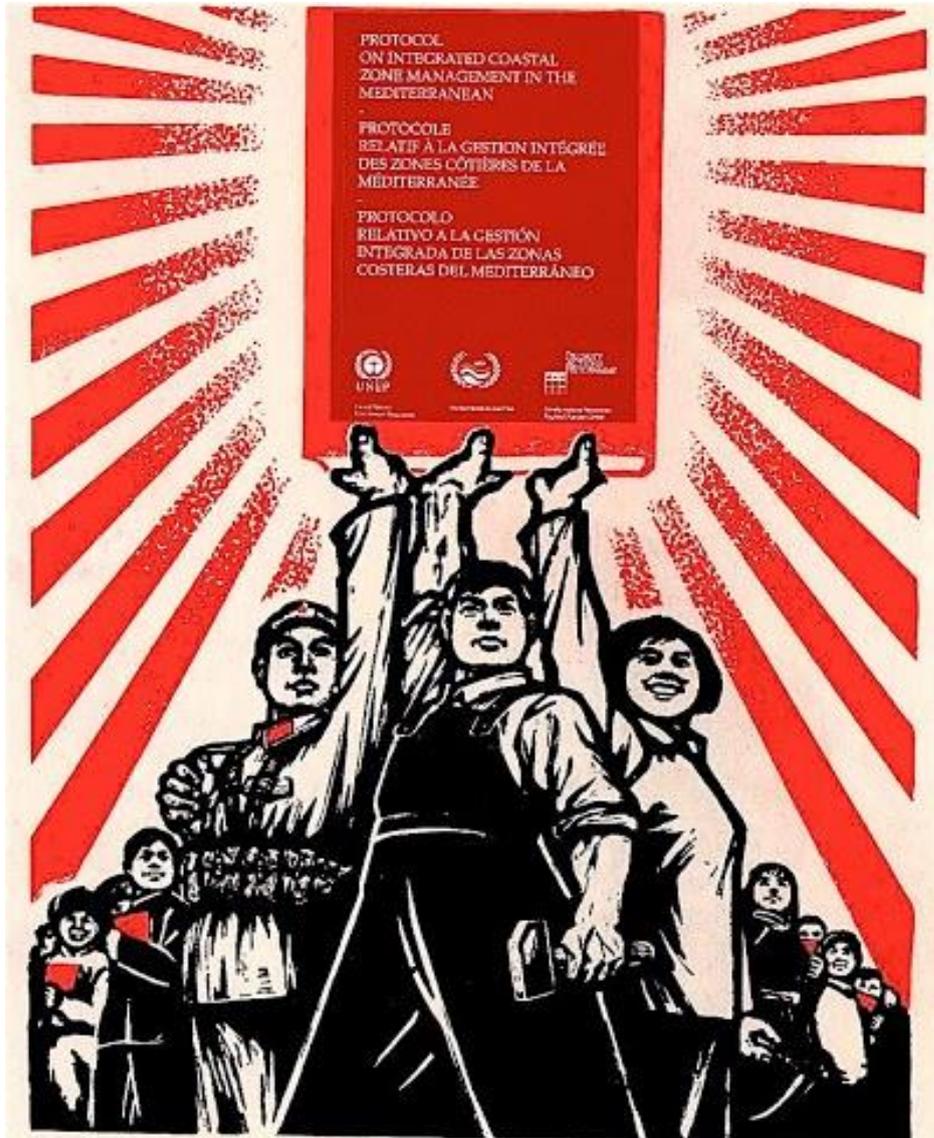
With all this, don't get the Mediterranean protocol wrong: it is one of the tools that help **pushing** the new Mediterranean agenda whilst desire for a rich quality of life, strong human ties and resonant connection to nature is the lure that **pulls** it toward the future.

Get inspired for your final essay? You should!
 Have a nice week,
 Yves

Lecture 11 Introduction: The Protocol on ICZM in the Mediterranean

Lecturer: Brian Shipman

The Little Red Book



This week we are discussing the groundbreaking “**Protocol on ICZM Protocol on Integrated Coastal Zone Management in the Mediterranean (ICZM Protocol)**” – known to its many fans as “*the Little Red Book*”.

In the ICZM Protocol we have the first supra-state legal instrument in the world aimed specifically at coastal zone management. It is one of a series of protocols to the **Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention)** adopted in 1976.

For those of us not so well informed about the subtleties of international law, a protocol is simply a supplement to an international treaty or agreement – amending or adding provisions. The “Kyoto Protocol” is perhaps the best-known example, setting out provisions to implement the

United Nations Framework Convention on Climate Change. A multi-lateral protocol may 'enter into force' when a fixed number of states express their consent for entry into force.

The ICZM Protocol entered into force in March 2011 after the required 6 ratifications. Interestingly, one of the ratifying parties is the EU, which means that the provisions of the Protocol are binding on all the Member States. In the EU legal hierarchy this therefore places an obligation on the Member States equivalent to any international treaty, and nominally higher in the EU legal hierarchy than a Directive.

As can be seen from the lecture text, the ICZM Protocol is an all-embracing document – setting out the geographical coverage, comprehensive principles and means of implementing ICZM in the Mediterranean. A total of 40 Articles - most commonly seen in the A5 sized [little red book](#) in English, French, Spanish and Arabic texts.

So, why is it important?

Firstly, it is the first supra national, legally binding agreement on ICZM in the world, and is seen a model for other regional seas - no small achievement given the complexity and diversity of the Mediterranean.

Secondly, the Protocol as a legal text gives ICZM a major “competitive edge” in the Mediterranean against competing agendas, notably the recent surge in marine initiatives (largely EU-driven) that threaten to “squeeze” out ICZM in the battle for political priority.

Thirdly, the Protocol sets very definitive boundaries for the “coastal zone” based on real-world lines of governance: the coastal administrative units on land and - in an outstanding stroke of foresight - the coastal waters to the external limit of the territorial sea. Thereby putting ICZM in the Mediterranean firmly in the realm of both terrestrial and marine policy.

Fourthly, its provisions provide a solid platform for future action. The Protocol is the launch pad for the recently agreed [Action Plan for the implementation of the ICZM Protocol for the Mediterranean \(2012-2019\)](#)

The core purposes and objectives of this Action Plan are to:

1. *“Support the effective implementation of the ICZM Protocol at regional, national and local levels including through a Common Regional Framework for ICZM;*
2. *Strengthen the capacities of Contracting Parties to implement the Protocol and use in an effective manner ICZM policies, instruments, tools and processes; and*
3. *Promote the ICZM Protocol and its implementation within the region, and promote it globally by developing synergies with relevant Conventions and Agreements. “*

Progress on the Protocol has been rapid. From its signing in 2008 it was the fastest of all the Barcelona protocols to enter into force, and the Action Plan was adopted by the “Contracting Parties” at their meeting in February of this year.

However, in the words of the old English proverb, *“the proof of the pudding is in the eating”*. Can the provisions of the ICZM Protocol really be turned into action in these uncertain times?

In my opinion, a legally binding international agreement backed by an agreed action plan is certainly a more robust foundation for the future than the fuzzy and voluntary “EU Recommendation on ICZM”, or the short-term opportunistic project-funding cycles. So, if ICZM

is to come out fighting from this difficult period anywhere in the world, the ICZM Protocol puts the Mediterranean in poll position^[1].

Sorry about the mixed sporting metaphors!

Brian

^[1] "**Pole position**", is the position of a racing car at the front of the grid at the starting grid – giving a strong advantage over the rest of the cars.

Introduction to Lecture 12: Conclusions and Ideas for Future

Lecturers: Yves Henocque and Brian Shipman

Hi folks!

After two and a half months of total “immersion” in ICZM, eleven lectures, a role-playing Simulation, and a Final Essay to write, here we come to the “finale” - Lecture 12. By this point, the many strands of ICZM - from the macro, regional-sea ambitions of the Little Red Book (the ICZM Protocol), to the new intended strategy over the sustainable development of Handenor - a piece of the Spanish coast that the tourism boom of the 20th century seems to have overlooked⁴ - should be coming together into a simple understanding of the core principles, purposes, dynamics and potential of ICZM in the Mediterranean.

If only it were so simple. We, the MedOpen students and lecturers, are a cross section of real-world coastal practitioners - from NGOs, research institutes, universities, international agencies, consultants and the public sector at all levels - each with our own unique perspective on the complex “ICZM web” itself embedded into the web of life.

Few of us can stand far enough back to see the whole structure. Most of our waking hours are spent doing our “day job” as you several times reminded us on the forum; participating in meetings, writing reports, doing some analysis, or even going to the “field”. We spend most of our time up against reality, interacting locally in our particular corner of the ICZM web. In short, when you’re part of the action, it’s very difficult to simultaneously “stand back far enough”, keep the vision and keep a multi-objectives perspective in regard to political agendas, institutional arrangements, integration of useful knowledge, level of participation, and tangible local economic development.

So it is in life: to the town mayor at a local stakeholder meeting ICZM is a vague acronym in the subtitle of the local project; to the senior official in a capital far from the coast it’s just one more international commitment she or he must brief the Minister about the next day; to the fisheries scientist ICZM is yet another arena in which to fight for her or his sectoral interest and there is no guarantee that he/she will make a link with the ecosystem-based approach of fisheries he/she may be trying to promote.

As you read this week’s lecture, pull back your mental camera to its widest angle. See how the Protocol could power a multi-scale Mediterranean-sized ICZM web, the delicate policy fibres multiplying over and over as the web stretches out to coasts at national, sub-regional and local levels, webs within webs of people, institutions and communities. And, as you prepare for that Final Essay, take a moment to reflect. Most of you have chosen a local or region-scale topic, but think about those special “Mediterranean-wide” (not to say global for a number of them) factors we discussed at the very start. Then consider where you fit into the wider ICZM web that links international and national policy-makers with your tiny part of the coast and with others on all sides of this remarkable 'liquid continent' or so-called “sea within the land”.

Consider also the dynamic that keeps the web together and growing - the “ICZM Process” designed to ensure the delivery of real coastal sustainability.

⁴ Overlooked for probably good reasons – Handenor is widely believed to be the inspiration for Lorca’s
*“I am afraid of being on this shore,
 a branchless trunk,
 and what I most regret
 is having no flower, pulp or clay
 for the worm of my despair.”*
 Extract from Sonnet of the Sweet Complaint; date unknown.

And finally, how can you, as a local ICZM practitioner, draw on the unique regional driver that is the ICZM Protocol?

This is not a one way street, ICZM is nourished by top-down/bottom-up dialogues at all stages of its cycle, by what you have contributed to this course, and your Final Essay will feed back into the growing body of knowledge and experience that is ICZM towards sustainable development of the Mediterranean region.

Now, after closing up the Simulation Game (the results of which will be sent to you later) let us wish you inspiration in the drafting of your Final Essay due on the 9th of December.

Your devoted lecturers,
Brian and Yves

ANNEX IX

Strategy for Sustainable Development of Handenor 2020 – Rewriting a Hi(story)



REWRITING THE (HI)STORY...

Strategy
for
Sustainable
Development
of
HANDENOR 2020

Handenor Coast, December 2013

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We have consulted extensively in developing this document and listened to the views of stakeholders. We thank those who have contributed to our work to date.

Thank you, too, all those involved in drafting, editing and designing the final document.

FOREWORD



Sustainable development is one of most universally endorsed aspirations of our time. It has been defined as development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

Continued economic growth is essential to meet people's legitimate ambitions for a better life. However, we should not tolerate development that is excessive in its consumption of natural resources or that unduly pressurises the environment.

We have called this Strategy 'Rewriting the (Hi)story' as we believe that only by, first, recognising the unique environment in terms of cultural and natural heritage we are settled in, and second, building upon these assets honourably, we will achieve our aspirations.

Undoubtedly, our history shows a number of adverse trends, and there are two ways to responding to the problems they created. First, we need where possible to

establish specific measures to mitigate adverse environmental effects. Regulation, improved infrastructure and other targeted actions are all important in providing solutions of this kind.

However, we must also get the fundamentals right. Environmentally adverse trends can only be radically reversed by having the main economic sectors pull with rather than against the environment. We must see our unique environment for what it can serve us best - as a host for tourism industry. We have a great stretch of coast, natural resources and history we can be proud of. Now we need to take these assets and create a new, modern story that will embrace all our potentials.

This is an exciting opportunity to change the traditional decadence of socio-economic history of Handenor Coast. But we must be mindful to do more with less. We must reduce the intensity of natural resource consumption associated with energy and infrastructure. We need more efficient and sparing use of transport and of consumer goods. Through changes of this kind, excessive waste generation and pressures on water, soil and air will be headed off at source. This is the beginning of sustainable development.

Further, more sustainable approach to our economic activities will also be manifested through establishing environment-friendly initiatives to create new employment, to ensure intergeneration equity and prevent emigration that represents one of more prominent threats in the region at the present.

Through our policies and actions, we intend to encourage habits that inspire and support individual and organisational decisions that ensure strong, healthy and just society, while promoting living within environmental limits. We acknowledge our role in leading the change and we intend to live by example.

This strategy is the first step in providing a focus for the concept of sustainable development of Handenor Coast. It takes forward the commitment to the principles and agenda for sustainable development agreed at the Earth Summit in Rio in 1992. It responds also to the EU Fifth Action Programme for the Environment, the Mediterranean Strategy for Sustainable Development and the seventh Protocol in the framework of the Barcelona Convention - Protocol of the Integrated Coastal Zone Management in the Mediterranean.

Mayor,
Mr Lucca Grijande-Naner



PART ONE:

**STRATEGIC
FRAMEWORK**

KEY FEATURES , PRESSURES AND DRIVING FORCES

Just like many coastal sites along the Mediterranean Sea, the Handenor Coast knew an illustrious past expanding from its Phoenician origins through to the Roman salt meat industrial era. Christianity came and transformed land uses and developed a totally new approach to settling on the coast. In modern times the peak of productivity and population expansion came during the XIX century when mining and associated activities proliferated around the hinterland and influenced the coastal strips as well, given that transport networks depended heavily on accessibility and the Handenor coast offered the usual accessible and sheltered conditions of the Mediterranean.

Today, however, the great potential for reviving the economy comes from the tourism industry. This resource can guarantee the development of the coastal strip and the hinterland. There are opportunities to develop beyond a program that requires just sun and some sand on the beach. The Regional Government aspires to improve the conditions of the small hut-like fishermen settlements of the villages along the coast. The rich neighbour Canemore Coast serves as a great example of flourishing development, however, we want to prosper differently, not just in economic terms, but by keeping in mind the environmental limits and community development too. We are aware there are a number of issues linked to prior activities along the coast that affected the potential development of this stretch of coast in a very distinctive fashion. The present Strategy represents a framework to outline this unique setting and provides guidelines for sustainable development of the region.

Mining History

In 1817 the local mining company (Grinder Ore Ltd.) organised some detailed studies on the possibilities of further exploitation of the old Roman mines that the tradition located somewhere in the remote mountains to the north, some 8 kilometres from the coast itself. The company prospected and effectively found some indications that there were possibilities to create some metallurgic industry nearby taking the mineral from the very mine. After ephemeral extraction the Grinder Ore Ltd. closed in 1833.

Later, after the company had completed the pilot project, in 1838, a delegate from the expansive British mining industrial circle came along and put a substantial offer that the local company could not refuse. The Dungiven Mining Company Ltd. started to exploit the mines in 1850 and built the necessary railway networks to bring the mineral down to the coast and load it onto the British and other nationality ships that came in dozens to a newly built (1865) loading platform that was constructed on pillars at a location 15 metres deep, some 750 metres off shore from the present shoreline. This depth allowed large ships to approach the platform and load using heavy cranes. The offshore platform, which was over engineered to resist the heavy loads, had a total surface of 3 hectares including the long and wide jetty which was topped in wood along which run the railway that connected the platform with the coast. The platform itself was 25000 m².

The Dungiven Mining Company Ltd. exploited the site until the mine and net-

work showed not very competitive in the instabilities of the time and closed in 1932 for an extended period of 5 years. Miners were surprised when in 1945 a local company Ferrum & Metal Ltd. reopened it for further exploitation until 1956 when a new economic push allow the mine to achieve production levels close to the early years. This period extended to 1974 when financial difficulties and a change in global economy took the company to bankruptcy. After this, the decline of the maintenance programmes, that had effectively started since 1965, implied that the working conditions were not operative and the new attempt to re-start the company by the LMA (Local Miners Association) ended with a severe degeneration of both the mine and industrial installations which were severely savaged prior to the final closing in 1985.

The Regional Government bought the mine, the surrounding land and the hinterland corridor where previously extended the railway and the entire coastal installation (pillars of the jetty, and platform, etc.) in 1988 after no viable alternatives were found to re-establish industrial activities in the area. A number of post mining industry issues remain and call for a careful consideration the new management and future development of the site a great challenge. A number of explosives were utilised in the various phases of mining exploitation. There was also heavy traffic of explosives from the coastal platform to the land, since the explosives were imported. A number of ships sank in or around the sites. The railway network of more than 8 kilometres has been dismantled by miners and other settlers but never officially removed. There are hazards associated with the potential exploitation of old tracks for

mountaineering or hiking. These activities are naturally some of those that would mean future use of the existing resources and the Regional Government wish to plan how to efficiently deal with the old railway litter spreading about.

Environmental Setting

The region of the Handenor Coast includes a hinterland and coastal stretch which has been the subject of management transformations. In particular, a coastal platform, now an island of 25 hectares that was constructed as an industrial installation in the past is the centre of most proposals for future development. The decline of the mining industry in the area lead to definitive closing and infrastructure is now derelict and difficult to manage. The island lies in a newly declared Natural Park, property of the Government and managed directly by the Department of Environment, through specific natural resources planning which considers present and future use. Local environmentalists want to preserve the underwater flora and fauna and an association of Handenor settlers want to address development in the most sustainable way.

The Island of Grijander is located in a typical Mediterranean coastal environment with low energy waves, long periods of calm weather, long droughts (mean precipitation is 300 mm/year) and about 2300 hours of sun per year. Coastal sediments are composed of dark heavy minerals combined with limestone and marbles, which composes the coarser fraction on the semi reflective beaches. This implies that sediment supply is highly dependent on

rainy periods which are commonly torrential and thus flooding is one of the main natural hazards in the area.

The isolated island lies in a newly declared Natural Park, property of the Government and managed directly by the Department of Environment, through specific natural resources planning which considers present and future use.

Despite the fact that the site is now a Nature Reserve, most of the rare vegetation has developed after mining stopped. The species are rare iron lover plants that have proliferated in the area and represent an endemism that is now protected. Prior to this, vegetation was consistently controlled by means of large scale provoked forest fires and cutting.

Forests and vegetation in general was utilised as fuel for the machinery of the mines and to generate power. Thus the original vegetation had been lost a few decades ago and now bear hills showed severe land losses that had taken the sites to a desert like appearance. Only in gullies the iron lover plant has proliferated.

The mining activity exposed prior Jurassic limestone that showed erosional forms from these times. Now, the mines are frequently visited by geologists from around the world for the rarity of the landscapes that show impossible erosional forms, generated in much warmer and wet times when the limestone was exposed to the severe climate of the time. This makes the landscapes around the Handenor coast an

available natural resource that some "alternative tourism" companies are willing to exploit. There has been increasing interest from central European visitors to study fossils in this complex geology since the entire limestone building is littered by these fossils from the carboniferous. There may even be a market for organised fossil hunting tours.

The Canemore International Airport is also seen as a potential node that can bring tourists around. But the Handenor coast is 150 kilometres from Canemore and the fragile environment that has resulted from years of over exploitation leave little choice but plan development from the beginning, including basic infrastructure.

Grijander Island

The island is best described as a mineral loading platform. It used to be adjoined to the coastline by a long jetty that is impossible to use in its present condition. The island, however, despite some wooden sections being damaged, could be repaired and thus be at the centre of some interesting proposals. The underwater marine reserve is also an interesting diving site.

The high potential of the island as a recreational enclave needs to be seen in the light of major refurbishment. It's attractive natural and cultural heritage is already attracting boating expeditions which are nowadays more and more frequent and that represents a contrasting element to the fishermen boats that sometimes come along the ruins to collect mussels and bar-

nacles from the wooden posts. The sandy sediments on the see floor are also highly sought after since the poseidonia plants need to be taken care of. This poseidonia, as is frequent in Mediterranean settings is highly sensitive to some aggressive fishing practices and is one of the DoE's priorities to maintain a healthy submerged prairie there. It is foreseen that anchoring numerous yachts can be a problem.

Natural Park

Taking advantage on the rarity of some local plants and geological attributes, the Department of Environment had declared most of the hinterland of the Handenor Coast a Natural Park. The Natural Park is unique in the country because it also encloses some areas of the marine environment. The submerged coast is included as some rare species that flourish there are associated to some industrial installations offshore that had been built by the Dungiven Mining Company who run the mines from 1860 onwards. The marine park is therefore part of the Nature Reserve and thus is included in a highly restrictive Plan for Exploitation of Natural Resources (PENR), main legal document that regulates uses and intensities in protected areas.



GOALS AND PRIORITIES

The quality of Handenor's environment and the availability of abundant natural amenities, have traditionally been relied upon as important elements of the regional resource base. Socio-economic progress, changed settlement patterns and changing lifestyles are however leading to the transformation of increasing quantities of human induced pressures; this is altering the balance between environment and society. A new strategic approach (together with policies and measures to realise it) is therefore necessary to establish a sound relationship between Handenor's economy and environment.

Sustainable development is based on universal principles, relevant to all nations and peoples. It seeks an acceptable quality of life for present and future generations, recognising that the actions of the present affect the inheritance of future generations. In a sustainable world, human activity must not undermine the long-term productivity of supporting ecosystems.

Sustainable development is increasingly recognised as the key to managing economic and environmental interdependence. It is neither a fixed concept nor a narrowly defined process, but an approach in which

- the exploitation of resources,
- the direction of investments,
- the orientation of technological development, and
- institutional change are made consistent with future as well as present needs. It therefore involves difficult choices and depends on decisive political action.

This Strategy aims at securing the transition, over time, to an environmentally sustainable society and economy. While many of the measures and actions included will be undertaken in the short to medium term, the overall time horizon of the Strategy must, necessarily, be a long-term one, recognising that sustainable development is a continuing process which needs ongoing assessment and refinement.

The overall aim of this Strategy is to ensure that economy and society of Handenor Coast can develop to their full potential within a well-protected environment, without compromising the quality of that environment, and with responsibility towards present and future generations and the wider international community.

STRATEGIC OBJECTIVES

We have identified strategic objectives that we will pursue as the biggest and most urgent challenges of the current time, resonating with key features, pressures and driving forces. By achieving our strategic objectives we will be making a real progress towards strategic development. The strategic objectives set out what we want to achieve with this Strategy and set out a framework for action to deliver it. The Implementation Plan for this Strategy will clearly identify authorities with lead responsibility for achievement of targets and the contribution expected from delivery partners.

*1. To facilitate, through the rational planning of activities, the **sustainable development** of Handenor Coast by ensuring that the environment and landscapes are taken into account in harmony with economic, social and cultural development of the entire community.*

Suggested strategies include:

- a) identifying and delimiting, outside protected areas, open areas in which urban development and other activities are restricted or, where necessary, prohibited;
- (b) limiting the linear extension of urban development and the creation of new transport infrastructure along the coast;
- (c) ensuring that environmental concerns are integrated into the rules for the management and use of the public maritime domain (e.g. Grijander Island);
- (d) providing for freedom of access by the public to the sea and along the shore;
- (e) restricting or, where necessary, prohibiting the movement and parking of land vehicles, as well as the movement and anchoring of marine vessels, in fragile

natural areas on land or at sea, including beaches and dunes.

*2. To ensure the **sustainable use** of available resources, recognising and treating them as assets, particularly in regard to water use and treatment of waste.*

Water is an irreplaceable precondition for life and activity. It is the duty of all people to carefully protect its quality, and to use it sparingly and rationally, under equal conditions established by law. Water shall be managed in accordance with the principle of integrity of the water system and the principle of sustainable development which meets the needs of the present generation, without threatening the right and possibility of future generations to meet their needs.

Pollution is direct or indirect introduction by man of substances or energy into the marine or coastal environment, which results or may result in fatal consequences to the living conditions of flora and fauna on the land, in the sea and seabed, that is, may generally endanger living conditions and endanger human health, hinder marine activities including fishing and other lawful uses of the sea and seabed, impair the quality of sea water and reduce the amenities of the marine and coastal environment. A remedial measure is a specific activity and procedure which must be conducted in order to remedy environmental damage and imminent threat of damage, which occurred due to a sudden event, or as a result of natural phenomena or as a consequence of performing dangerous or other activities including specific operations during the performance of the activity.

Directive 2008/98/EC of the European Parliament establishes a legal framework for the treatment of waste. It aims at protecting the environment and human health through the prevention of the harmful effects of waste generation and waste management. It applies to waste other than: gaseous effluents, radioactive elements, decommissioned explosives, faecal matter, waste waters, animal by-products, carcasses of animals that have died other than by being slaughtered, elements resulting from mineral resources. In order to better protect the environment, we aim to adopt measures for the treatment of waste in line with the following hierarchy which is listed in order of priority: prevention, preparing for reuse, recycling, other recovery, notably energy recovery, disposal.

Strategies shall include adaptation of necessary measures to regulate or, if necessary, prohibit activities that may have adverse effects on ecosystems. General ecological status shall be assessed as follows: *high, good, moderate, poor and bad status*. Depending on the ecological status measures for conservation and sustainable use of natural resources shall include:

(a) preservation of favourable physical and chemical properties of sea water or to improve them where deteriorated;

(b) provision of at least secondary purification of urban and industrial water flowing into the sea;

(c) preservation favourable configuration and structure of sea bottom, shore, coastal areas and river mouths;

(d) prevention of unlawful construction of buildings on sea-shore and to improve an unfavourable state wherever possible;

(e) determination of high risks areas in relation to marine pollution (tankers' routes terminals, ports, anchorages, coastal installations and underwater pipelines, potential sources of accidental marine pollution, sunken ships and aircraft etc.);

(f) estimating quantities of potential oil and/or oil mixture and hazardous and noxious substances releases and their effect on specially sensitive areas, (g) determining the number and frequency of port entries by ships carrying oil and/or oil mixtures as well as hazardous and noxious substances, their cargo capacities (size) and traffic density of other ships;

(h) establishing database with records of reported marine pollution incidents caused by oil and/or oil mixture, hazardous and noxious substances;

(i) economic valorisation (of the consequences) of potential marine pollution.

AGENDA FOR ACTION

The Contingency Plan for Accidental Marine Pollution of Handenor Coast.

This Plan shall represent a sustainable development and environmental protection document which establishes the procedures and measures for predicting, preventing, restricting and preparedness for as well as response to accidental marine pollution and unusual natural marine phenomenon for the purpose of protecting the marine environment. The Contingency Plan shall be harmonised with international treaties governing the area of marine environment protection to which the Grinde State is a party.

3. To ensure preservation of the integrity, protection and recovery of a) marine and coastal ecosystems, landscapes and geomorphology that has formed over the years, and b) hinterland area of Handenor Coast.

As a signatory of the European Landscape Convention we are committed to the adaptation of measures to ensure the protection and conservation, through legislation, planning and management of marine and coastal areas, in particular of those hosting habitats and species of high conservation value. Strategies may include:

(a) removing existing and restricting the further introduction of alien species and genetically modified organisms by conducting an appropriate system of management and surveillance of ship ballast waters;

(b) restricting the exploitation of sediments from coastal dunes;

(c) ensuring constant mixing of salt and fresh water in estuaries, and preserve favourable physical and chemical properties of water in estuaries, lagoons, large shallow inlets and bays or improve their condition when they are unfavourable for conservation of habitats and their important biological species;

(d) maintaining a constant contact between a lagoon and the sea, and in case of natural or artificial closing of the passage re-dig it, and if required due to raising of the soil caused by depositing of organic material deepen the seabed of the lagoon;

(e) preserving muddy, sandy, gravel and rocky coast in their natural form with natural vegetation;

(f) taking restorative measures in affected ecosystems wherever possible with a view to reactivating their positive role in coastal environmental processes;

(g) including vulnerable marine and coastal ecosystems and landscapes of significant importance into NATURA 2000 and other binding initiatives.

4. To put in place all possible actions to adapt to climate change, and prevent and/or reduce the effects of other hazards, which can be induced by natural or human activities.

United Nations Framework Convention on Climate Change was adopted at the United Nations Conference on Environment and Development held in Rio de Janeiro in the year 1992.

The global scientific community is predicting acceleration in sea level rise associated with atmospheric warming. The coastal zones and their human settlements may not only be affected by changes in sea level, temperature, rainfall, humidity, winds and, perhaps, storm frequency, but also by changes in groundwater level, salinity, ocean circulation, sediment flux, and storm and erosion patterns. An ICZM system in place could prepare for such an eventuality and minimize resource and human losses.

In the long term, the sea level increase could be potentially become one of the most expensive climate change impacts on Handenor coast, along with impacts of warmer and dryer climate on tourism and on larger frequency of extreme weather conditions.

Suggested strategies include:

- (a) developing policies that account for increasing uncertainties of climate change and account for risk element in all future plans and programmes;
- (b) adopting special measures for coastal sediments and coastal works to eliminate risk elements of natural hazards;
- (c) becoming a member of Global Earth Observation System of Systems (GEOSS). GEOSS is a new initiative taken with the objective to co-ordinate and enhance all current observing systems on the global level in support of the requirements of user areas: natural disasters, health, energy, climate, water, weather, ecosystems, agriculture and biodiversity.

5. To preserve and enhance the uniqueness of cultural heritage.

Suggested strategies include:

- (a) adopting, individually or collectively, all appropriate measures to preserve and protect the cultural, in particular archaeological and historical, heritage, including the underwater cultural heritage, in conformity with the applicable national and international instruments;
- (b) ensuring in particular that elements of the historical heritage on the land and underwater cultural heritage of coastal zones removed from the marine environment are conserved and managed in a manner safeguarding their long-term preservation and are not traded, sold, bought or bartered as commercial goods;
- (c) ensuring that the preservation in situ of

the cultural heritage on the land or underwater is considered as the first option before any intervention directed at this heritage.

DRIVING PRINCIPLES

'The **precautionary principle** requires that emphasis should be placed on dealing with the causes, rather than the results, of environmental damage and that, where significant evidence of environmental risk exists, appropriate precautionary action should be taken even in the absence of conclusive scientific proof of causes.' This is more than simply giving the environment the benefit of the doubt. It is a spur to responsible action and a stimulus to scientific and technological development. Reasonable action to avoid potentially serious risks to the environment and human health maintains choice, control and quality.

The **polluter pays principle** regarding cost allocation and action by public authorities has influenced public policies at OECD and EU levels for over twenty years, and has been incorporated in all recent environmental legislation. Its objective is to allocate correctly the costs of pollution, consumption of energy and environmental resources, and production and disposal of waste to the responsible polluters and consumers, rather than to society at large or future generations; in turn, this provides an incentive to reduce pollution and consumption.

The principle of **shared responsibility** for the environment requires a broadly based involvement of public bodies, private enterprise and the general public so as to achieve environmental policy objectives. Shared responsibility aims at engendering commitment throughout society, which in turn fosters a sense of public ownership of the environment. Voluntary actions by individuals, through lifestyle choices, as well as by economic and social operators, are essential to realise the aims of this Strategy.

Integration (of environmental considerations into other policies) is a leading mechanism for sustainable development. Integration must also be pursued at macro-economic and fiscal policy levels, to reflect the value of natural as well as human-made capital, to account for natural resource use and depletion, to internalise environmental costs and to provide a more balanced and full measurement of national growth and prosperity. Effective environmental policies require the active participation of society, so that lifestyle changes compatible with sustainable living can become established.

The principle of **intergenerational equity**. Sustainable development inherently raises issues of fairness between generations in caring for and using our environment: industrial developments which contaminated land with toxics, forest clearing which made soil eroded and unproductive or eliminated large areas of unique biological diversity, or disposal of explosive materials on the beach that contaminated sea, soil or freshwater streams. These issues are in the first instance normative. Along with those, creating the opportunities for employment that will prevent emigration of younger generations must also be addressed, if we are to develop and implement appropriate instruments for achieving sustainable development.

"Principle 1 of the Rio Declaration on Environment and Development states that "human beings are at the centre of concerns for sustainable development".

*Integration of environmental considerations into **social policy** envisages:*

- fair access to a clean, healthy environment;
- maintenance of public health and elimination, as far as practicable, of environmental risks;
- equity in the use of environmental resources;
- full access to education and information concerning the environment; and
- sustainable planning, development (including urban development), and human settlement policies."

POLICY DRIVERS (LEGISLATION)

The Grindor State and Handenor Coast Region are subject to international obligations to protect and manage the marine and coastal environment under instruments such as United Nations Convention on the Law of the Sea, United Nations Framework Convention on Climate Change, European Landscape Convention, Ramsar Convention, Convention of Biological Diversity, Marine Framework Strategy, Water Framework Directive, Habitat Directive, Birds Directive, Barcelona convention, and several regional protocols such as: Dumping Protocol, Emergency Protocol, Land Base Sources Protocol, Specially Protected Areas and Biodiversity Protocol (SPA), Offshore Protocol, Hazardous Wastes Protocol and ICZM Protocol.

„Integrated coastal zone management“ means a dynamic process for the sustainable management and use of coastal zones, taking into account at the same time the fragility of coastal ecosystems and landscape, the diversity of activities and uses, their interactions, the maritime orientation of certain activities and uses and their impact on both the marine and land parts.”

ICZM Protocol, Article 2(f)

The National Planning Framework (NPF) and Handenor Coast Regional Development Plan (HCDP) have been taken into account in the development of this guidelines, which be drafted to minimize conflicts and to provide for optimal sustainable marine and coastal resource use.

The Handenor Coast Council seeks to encourage development where sustainability principles are satisfied (benefits to all inhabitants, environment friendly technologies, cleaner production,

horizontal and vertical harmonisation and cooperation – integrated approach).

ICZM is a process of governance and consists of the legal and institutional framework necessary to ensure that development and management plans for coastal zones are integrated with environmental (including social) goals and are made with the participation of those affected.

The purpose of ICZM is to maximize the benefits provided by the coastal zone and to minimize the conflicts and harmful effects of activities upon each other, on resources and on the environment. It starts with an analytical process to set objectives for the development and management of the coastal zone. ICZM should ensure that the process of setting objectives, planning and implementation involves as broad a spectrum of interest groups as possible, that the best possible compromise between the different interests is found, and that a balance is achieved in the overall use of the country's coastal zones.

WORKING TOGETHER

The present Strategy for Sustainable Development of Handenor 2020 is the first step towards working together in rewriting the history and creating a new story that shall improve the quality of life for the present and future generations of the Handenor Coast inhabitants while preserving our unique surrounding environments. We foster horizontal (intersectoral) and vertical (institutional) cooperation and harmonisation of the governance structure (integrated approach).

We shall work together

(1) to strengthen the coherence and effectiveness of the coastal strategies, plans and programmes established;

(2) to achieve coherence between public and private initiatives and between all decisions by the public authorities; and

(3) to ensure institutional coordination, where necessary through appropriate bodies or mechanisms, in order to avoid sectoral approaches and facilitate comprehensive approaches.

Integrated approach requires the co-operation of the key parties responsible for sustainable development of the Handenor Coast and Grijander Island. We shall organize appropriate co-ordination between various authorities competent in the relevant administrative services. They include:

- Handenor Coast Council;
- Agency for the Protection of the Marine/Coastal Environmental and Hinterland including Environmental Monitoring Centre and Intervention

Centre against pollution

- Permanent Audit and Rules Committee for the sustainable development of Grijander Island, Handenor Coast and Hinterland

Environmental education and awareness rising represent the essential components of public support. The aforementioned authorities shall adopt and promote at the appropriate institutional level adequate actions to inform public and any relevant stakeholders of its geographical coverage, as well as provide adequate opportunities for the public to participate in decision making about the activities referring to sustainable development of the Handenor Coast based on their local customs and knowledge.

With the present Strategy we strive to ensure science-management integration for the sustainable development of Handenor Coast.

BENEFITS

Sustainable development is not just a philosophy, a scientific theory or indeed a political slogan. Properly implemented, it can deliver real, wide ranging and lasting benefits, but it takes positive action to realise these. The transition towards real sustainability will be enabled by a development of a dynamic, responsible economy lead by tourism that is capable of responding to change and is supportive of innovation. This enduring successful economy will effectively use natural resources and contribute towards the protection of the environment. It will also create conditions necessary to build a society that is fair, inclusive, stable and prosperous. More concrete benefits may include:

- Strengthening regional and local cooperation between partners and all stakeholders
- Coastal plans and programmes as tools for implementing national strategies
- Establishing a coastal setback zone according to ICZM
- Increased quality of life in a healthy environment
- Cleaner production and new eco-friendly technologies
- New types of economic development in the coastal zone of Grijander island
- Ensured environmental assessment and carrying capacity
- Balance between the development of activities and the preservation of natural, cultural and landscape heritage
- Better management of the hinterland as a high benefit to coastal strip
- New employment
- New possibilities for EU funding

IMPLEMENTATION, MONITORING AND FOLLOW UP

It is necessary to establish a monitoring system-water, sea, air, soil, habitats, and species.

In accordance with the MSFD, the sustainable development indicators for monitoring the environmental, economic and social status of the Handenor Coast will be identified within the Handenor Coast Information System in cooperation by the Environmental Monitoring Centre. Databases shall be developed and integrated for the purpose of collecting, processing and displaying up-to-date data. The system shall also be harmonized with superior relevant systems such as the Water Information System for Europe (WISE) and the European Marine Observation and Data Network (EMODnet) systems.

Agency for the Protection of the Marine/Coastal Environmental and Hinterland shall be responsible for development and implementation of the monitoring program as well as delivering the annual report of the Handenor environment to the European Commission, in accordance with Directive 2006/7/EC of the European Parliament.

The system of economic development indicators related to sustainable development at the National Planning Framework (NPF) and Handenor Coast Regional Development Plan (HCDP) is to be established. It shall comprise of physical indicators needed for quantitative monitoring of HCDP.



PART TWO:

**AGENDA FOR
ACTION**

To neglect development of Handenor Coast and its hinterland would lead to serious consequences in the near future due to a lack of effective planning and an action plan. The example of neighboring Canemore Coast shows the consequences of uncontrolled development that leaves the field open to an aggressive tourism and a fierce urbanization. The need for a Plan of Action that leads to the identification of guidelines for sustainable development and formal establishment of marine and terrestrial protected areas is essential.

The following are the main points of a possible Plan of Action for the Sustainable Development of Handenor Coast, the hinterland and the Grijander Island:

- Establishment of a "Permanent Audit and Rules Committee for the sustainable development of Grijander Island, Handenor Coast and Hinterland" - The Committee will consist of representatives from the public and private sector, NGOs, representatives of environmental committees and all other relevant stakeholders.
- Public information and consultation - All development proposals will be subject to public information and consultation
- Grijander Island - protection of the marine ecosystem (marine protected area, underwater marine reserve, diving site) and are able to devote 40% of the 25,000 square meters of business accommodation platform with a low environmental and landscape impact (e.g. bungalow concession) and the remaining 60% in public space cultural/scientific/educational value for the marine protected area (Grijander Island and seagrass beds) with the establishment of a 'Training, education &

research centre of Grijander Island'. The grant dedicated to business accommodation will be subject to an additional tax on the principle of polluter pays.

- With the regard to Marine Protected area, the following actions should be taken:

(a) defining and mapping distribution of marine habitats important for conservation of biodiversity and relevant areas that should be protected

(b) defining and mapping all coastline type (pebble, sandy, rocky..)

(c) implement protection and monitor the state of threatened and rare habitat types and habitat types listed in the Habitat Directive

(d) evaluation of the area from the nature protection standpoint, incorporation of nature protection requirements and measures - Management Plans of marine protected area and implementation of Action plans for the protection and monitoring of species and habitats

(e) defining list and description of cultural heritage (underwater) defining risk (commercial objects on shore and at sea, sport and recreational areas, tourist zones, fishing areas, mariculture zones, cultural heritage areas, etc.)

(f) defining list of potential places of refuge according to the Plan of Providing Assistance to a Ship in Distress.

- It is important to build on the Hinterland to decrease the pressure on the coast through. Proposed actions include historical/cultural paths in old mines, hiking/environmental paths, scientific paths (complex geology, fossil...),

identification of areas for eco-tourism/landscape (eg, camping areas, areas bungalows...)

- The environmental assessments should take into consideration the cumulative impacts on the coastal zones, paying due attention to their carrying capacities. Related studies of environmental impact assessment for public and private projects likely to have significant environmental effects on the coastal zones, and in particular on their ecosystems, take into consideration the specific sensitivity of the environment and the inter-relationships between the marine and terrestrial parts of the coastal zone.
- New construction must be planned as far away from the coast as possible, i.e. on the border and/or outside the protected coastal area. Percentage of construction will be prescribed after Environmental Impact assessment. It is necessary to take into consideration the water and waste, as well as the existing airport.
- Coastal Stretch - Defining the limits of the coastal strip with an area of 'no construction' (min. 100 meters from the coast line defined by the highest winter waterline); a respect area for the dunes in order to replenish/protect them, providing technical provisions to the management; land ownership and access to the coast.
- Co-operation with the neighbouring coast Canemore for environmental cooperation of all the coastal and hinterland also to exchange of information and activities of common interest (also environmental monitoring in order to evaluate the two different ways of development)

- Coastal erosion - Encourage the river sediment transport to promote the natural nourishment of the beaches by removing all unused anthropic along the course of rivers and periodic maintenance of the waterways. Synergy with biogas plants for the exploitation of the plant material accumulated by the cleanliness of rivers.

Areas for development

This guidelines selected goals and policies include new and strengthened regulatory programs, zonation schemes for partitioning the coastal zone into areas for particular uses and activities, new management programs tailored for particular resources, or particular sites, action program aimed at correcting and/or restoring degraded coastal resources (damaged landscape) or solving coastal problems (coastal erosion, damage environment), and action programs targeted at stimulating new types of economic development in the coastal zone.

(A) Mining area and 'Cultural' Park

The aesthetic value of landscape is one of the most threatened attributes of the human environment. This threat is particularly dramatic in post-mining landscapes. The rehabilitation of post-mining landscapes requires an interdisciplinary planning approach during realisation of Cultural Park. The mining area will be secured and restored in order to create an historical museum of the mining activities carried on in the past, reclaiming all the area from explosives and mining remains. Creation of natural, geological and industrial archaeology tracks in order to

enhance and fully appreciate the entire area. Connections both physically (through naturalistic walks and daily excursions) and virtually (computer rooms and cinemas) will be constructed among the mining area and the natural parks in the region. Some repaired areas can enhance with native forest vegetation of Grijander Island and/or Mediterranean herbs citrus, olives, lavender, vineyards.... Plant roots will bind soil particles and thus stop further erosion of the island. An interesting example may be the European and Global Geopark, realized in collaboration with UNESCO, in order to create in the medium-long term a sustainable tourism, on quality.

(B) Grijander Island

The original structure will be renewed and transformed in a dock station for ferryboat ships. A limited marine area will be used to create a special path to allow ships to enter in the dock without damaging the protected marine area. Some current original structure could be used for this purpose (docks). Dock stations should be outside of posidonia meadows, and compulsory prohibit anchoring in sea grasses meadows. Also the dimension and the traffic of the ships will be balanced in order to preserve the marine and coastal environment. Further incentives could include boats lengths limit and usage of traditional boats and electric ferryboat ships.

(C) Railway

The original railway will be reconfigured in order to create a path, also served by shuttle, connecting the coastal zone to the hinterland in order to reach the Mine

museum and the other structures and minimize further environmental impact.

European funds exist to help in the realization of the restoration of points 1, 2 and 3.

(D) Sporting / Recreational Centre and Hospitality Initiatives

Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA), Carrying Capacity Assessment (CCA), Cost-Benefit Analysis, Least-Cost Analysis (L-CA) shall be carried out prior to the final decision on construction of Sporting/Recreational Centre and associated hospitality activities.

To revitalize the area a new structure is proposed to be realized, consisting of a recreational center (e.g.: Olympic swimming pool, beach volley fields, tennis and fitness center, etc.). Further, a congress/conference center is to be developed inside the structure. Naturalist paths will be created all around order to enhance and fully appreciate the entire area. Cycling and walking excursions, snorkeling, diving, bird watching and other naturalistic activities with specific stations may complete the recreational center.

Further, also a subject of the aforementioned suitability assessments techniques, hospitality initiatives are to be considered. To promote the local economy a development fund may be created to assist residents who endeavor to carry out hospitality activities such as hostels, bed&breakfast, restaurants, shops, alternative tourism, etc.

ANNEX X

Post Evaluation of the Course (Questionnaires filled in by students)

User: Latinka Janjanin

Course: ICZM

Share with us your ideas on how to improve ICAM in future...

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.

NO

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)

Everything was just fun except I never had enough time. However, it is not a matter of course, but the job obligation

----- advanced questions -----

Topic/content:

- What was good?

All lectures (12) and simulation game

- What could have been better?

Training methodology:

- What was good?

additional articles, summary of lectures, examples from practises from all over the World

- What could have been better?

Documents/material:

- What was good?

All lectures

- What could have been better?

Trainers:

- What was good?

all profesors

- What could have been better?

User: Tanja Novak

Course: ICZM

Share with us your ideas on how to improve ICAM in future...

ICZM implementation: informing the general public and potential stakeholders with ICZM

Protocol benefits;

ICZM: working data quality and availability.

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)

I especially find interesting The simulation game which enriched the course and encouraged team/group work.

----- advanced questions -----

Topic/content:

- What was good?

covered all the important topics - from legislatives to data and practical examples.

- What could have been better?

maby greater emphasis on the importance of data and tools

Training methodology:

- What was good?

group work, knowledge sharing

- What could have been better?

Documents/material:

- What was good?

a lot of various reading material available, also additional.

- What could have been better?

Trainers:

- What was good?

they were available for answers and advises

- What could have been better?

User: Federico Pittaluga

Course: ICZM

Share with us your ideas on how to improve ICAM in future...

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)

I enjoy the simulation game very much although several user have not been particularly active

----- advanced questions -----

Topic/content:

- What was good?

distribution and choice of subjects of the readings

- What could have been better?

Training methodology:

- What was good?

- What could have been better?

final test of the lecture could be a little more elaborate or long

Documents/material:

- What was good?

Good

- What could have been better?

More videos!

Trainers:

- What was good?

I like very much Brian Shipman

- What could have been better?

User: Olga Sedioli

Course: ICZM

Share with us your ideas on how to improve ICAM in future...

it is essential to capitalize all the experiences and the progresses achieved in the past initiatives and projects, and to build a solid cooperation. the integration of ICZM and MSP as a unique comprehensive tool for the management and planning of coastal and maritime spaces as a whole is essential to achieve the multiple objectives of the sustainable development.

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)

unfortunately, I had no time to take part in the simulation game, which I regret a lot. lectures were very interesting and exhaustive, even though I would have read 12 more lectures with so much pleasure... tests were stimulating and... nasty

----- advanced questions -----

Topic/content:

- What was good?

I found lectures topics to be very interesting and very well explained

- What could have been better?

being a "technician", I have a lot of unplanned and urgent things to deal with, and it was impossible to follow the course on a regular base. this prevented me to participating in the simulation game, but this is not a fault of the organizers, after all... I only wish I could take it another time...

Training methodology:

- What was good?

it was

- What could have been better?

what I said before

Documents/material:

- What was good?

they were very good, and very thoroughly elaborated.

- What could have been better?
nothing I can think of

Trainers:

- What was good?

- What could have been better?

User: Mojca Poklar

Course: ICZM

Share with us your ideas on how to improve ICAM in future...

- improve public participation - people should be involved in planning process + raise awareness among people regarding coastal (and marine) pollution
- mutual co-operation and complementarity between groups involved in spatial planning
- support iczm research

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)

- great lectures, interesting tests
- simulation game would have been more interesting if it had been carried out "live"

----- advanced questions -----

Topic/content:

- What was good?

all

- What could have been better?

Training methodology:

- What was good?

- great lectures, interesting tests

- What could have been better?

- simulation game would have been more interesting if it had been carried out "live"

Documents/material:

- What was good?

all

- What could have been better?

Trainers:

- What was good?

all

- What could have been better?

User: Giorgio Filomena

Course: ICZM

Share with us your ideas on how to improve ICAM in future...

The international institutions that promote ICZM (UNEP, EU), if they really want that nations begin to work with the principles of the ICZM, should make available funds in support of only initiatives/projects at national and local levels that promote concretely the integrated management of coastal areas.

"A bit 'of funds could help coastal zones...this is a sensitive side of policy"!

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)

I think it was an excellent course.

I've never done on-line courses, but this was definitely very exciting.

Congratulations!

----- advanced questions -----

Topic/content:

- What was good?

- how the course was organized

- the topics

- What could have been better?

- too repetitive arguments on ICZM

- too many repetitive words to describe the ICZM: you have to find something more pragmatic

- lack of practical examples

Training methodology:

- What was good?

excellent

- What could have been better?

nothing

Documents/material:

- What was good?

anything

- What could have been better?

- some pratica exemples

Trainers:

- What was good?

excellent

- What could have been better?

nothing

User: Maria Grazia Pusceddu

Course: ICZM

Share with us your ideas on how to improve ICAM in future...

I think that would be essential for the implementation dell'ICZM initiate a process of consultation between the political parties and all stakeholders in order to define effective policies for its implementation. The maritime and coastal planning processes should be based on data derived from environmental monitoring, under which you could build rules and actions, ensuring through the use of clear indicators can also be used in a long time. From this comes the need for an appropriate needs revision of the rules and a clear definition of responsibilities.

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)

I found the course very interesting and thorough, and very knowledgeable teachers and organizers.

I wanted to make before all the readings, then the simulation game and then I wanted to prepare the final essay because the overlap of the three was a bit 'busy and I was not allowed to participate as wanted. It would be desirable to separate the various stages of the game.

In addition, I believe that the reading test at the end are a bit 'more related to the readings and their resolution is not a test of knowledge of the English language.

----- advanced questions -----

Topic/content:

- What was good?

The readings.

- What could have been better?

The tests

Training methodology:

- What was good?

- What could have been better?

I was not allowed to participate as wanted. It would be desirable to separate the various stages of the game.

In addition, I believe that the reading test at the end are a bit 'more related to the readings and their resolution is not a test of knowledge of the English language

Documents/material:

- What was good?

The readings.

- What could have been better?

The tests

Trainers:

- What was good?

I found the course very interesting and thorough, and very knowledgeable teachers and organizers.

- What could have been better?

User: Roberto Bertaggia

Course: ICZM

Share with us your ideas on how to improve ICAM in future...

It is important to the approval of the Proposal for a direct COM 2013 133 because MSP and ICZM can improve the articulation of and reduce conflicts between economic objectives and environment legislation

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)

The materials are very interesting and full of information; games on the other hand were a useless waste of time. I have not been able to put myself in the role play and participate in the forum, but it was a matter of time!

----- advanced questions -----

Topic/content:

- What was good?

I really liked the annex to the lecture n. 8 and the reading n.9

- What could have been better?

Training methodology:

- What was good?

- What could have been better?

keep open access to the course even after its conclusion

Documents/material:

- What was good?

- What could have been better?

Please, place the readings as a printable pdf file

Trainers:

- What was good?

- What could have been better?

User: Karmen Lužar

Course: ICZM

Share with us your ideas on how to improve ICAM in future...

Connect, communicate, create!

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.

How long will this forum stay active, or better ask how long after the finish of the course are participants still able to sign in in case they wish to check the content of a particular lecture, contact somebody from the group, even communicate further on forum with all or such? Is there an Alumni Club, hehe?

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)

I very much liked the committed involvement of lecturers, unselfishly sharing their professional experiences and knowledge. I also loved the format in which the course was conducted in: written lectures, which the participant of the course can go through at their own time and speed; simulation game to give a feeling of interaction with others and discussion forum that is a great platform to exchange the ideas. I also believe the size of the group was just perfect. For comparison, some online course nowadays depend too much on video presenting and popular social media, which consumes too much time/energy/internet and the size of groups are in thousands, so there can be no real interaction among participants, and consequently also information exchange is very much one sided (no feedback on 'homework'). so, basically, what I'm trying to say is that you guys did a wonderful job in this course design. The only thing that I might have disliked a bit was a lack of participation of some people enrolled in this course, so maybe your endeavours for the future courses could focus on providing stimulation/incentives for those, for the overall feeling of good functioning group?

----- advanced questions -----

Topic/content:

- What was good?

I pretty much liked it all

- What could have been better?

Sometimes on the forum discussions questions were provided by the lecturer to stimulate thinking and responses. I think this could be beneficial for ALL topics...

Training methodology:

- What was good?

as described above... all set in excellent formats: written lectures, simulation game for the feeling of creative involvement, discussion forum for feedback.

- What could have been better?

don't change a thing ah, maybe you can establish an Alumni Club for all past members... :P

Documents/material:

- What was good?

all good.

- What could have been better?

Trainers:

- What was good?

I liked the interaction between lecturers and participants. Their selfless experience and knowledge sharing. Their fast-responsiveness is also highly appreciated.

- What could have been better?

User: Vito La Ghezza

Course: ICZM

Share with us your ideas on how to improve ICAM in future...

Alcune idee:

- educazione ambientale iniziando dalle scuole primarie
- creare delle pratiche linee guida per le azioni previste nel protocollo

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)

Interesting use of the game, but it should accompany the training course from the first lesson

----- advanced questions -----

Topic/content:

- What was good?

the arguments have been developed in a comprehensive manner

- What could have been better?

Training methodology:

- What was good?

- What could have been better?

More practical exercises to apply the concepts

Documents/material:

- What was good?

the materials were satisfactory

- What could have been better?

Trainers:

- What was good?

They have been very present

- What could have been better?

User: Antonietta Porfido

Course: ICZM

Share with us your ideas on how to improve ICAM in future...

I think one of the best way to improve the ICMZ is to start from the environment education of the people, I mean we need more awareness of the environmental value.

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)

I liked the tests done at the end of each module because they allow you to fix the knowledge gained and I liked the proposal of the game that was a practical way to simulate an application of ICZM strategy.

----- advanced questions -----

Topic/content:

- What was good?

The arguments have been devoleped in a comprehensive manner.

- What could have been better?

Training methodology:

- What was good?

- What could have been better?

I think we could need more practical excercises to apply the concepts.

Documents/material:

- What was good?

- What could have been better?

The material was satisfactory

Trainers:

- What was good?

They have been always present

- What could have been better?

User: Frédéric Brochier

Course: ICZM

Share with us your ideas on how to improve ICAM in future...

More references to the EU legal framework and to its recent development (IMP, MSFD) could be of interest.

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)

The course is great but as a general rule I can say that some on the concepts behind ICZM still remain very foggy concepts....
I really like the great support of all the staff and trainers!!

----- advanced questions -----

Topic/content:

- What was good?

The lectures focusing on the ICZM protocol. The last lecture including ideas for the future.

- What could have been better?

Lecture on the good/best practice could be improved.

It could be also important to include some references to the ICZM indicators (state of the art, progress, etc.).

Training methodology:

- What was good?

Structure of the course, length of the lectures, the tests. The forum is a great added-value.

- What could have been better?

I think that the objectives, the rules, and the functioning of the "simulation game" were not so clear. Maybe a more careful explanation on how the simulation game is running could be of great interest.

Documents/material:

- What was good?

everything

- What could have been better?

Trainers:

- What was good?

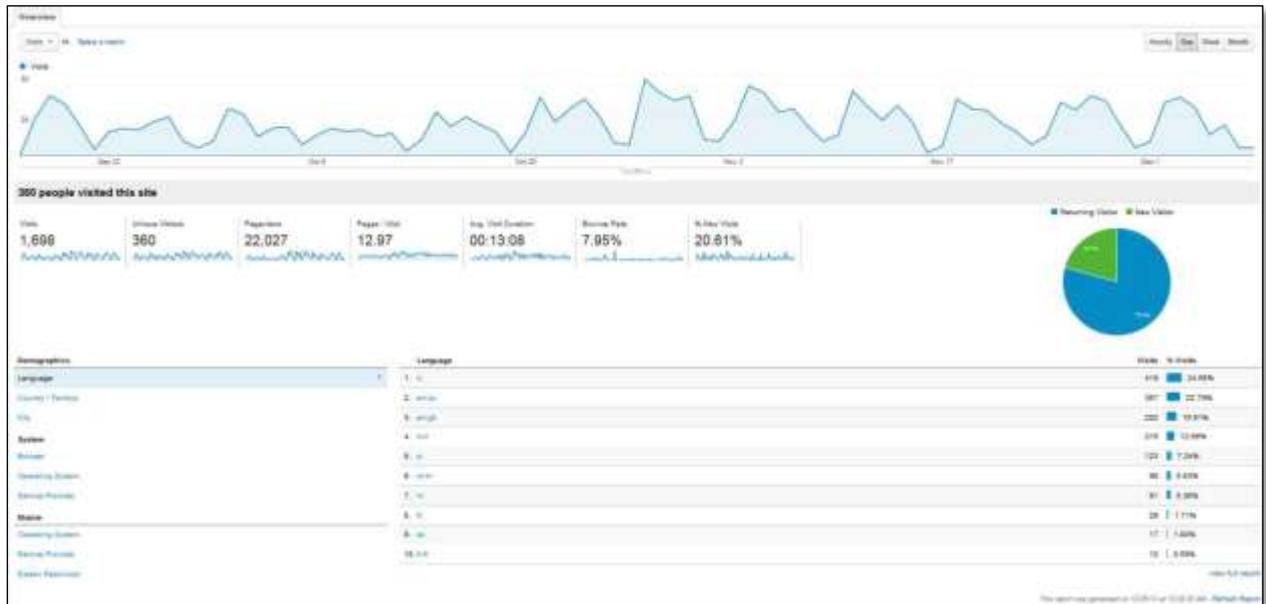
Everything

- What could have been better?

ANNEX XI

MedOpen statistics – the overall weekly review (graphical presentation)

Overall visits to the MedOpen Course website during the 2013's run:

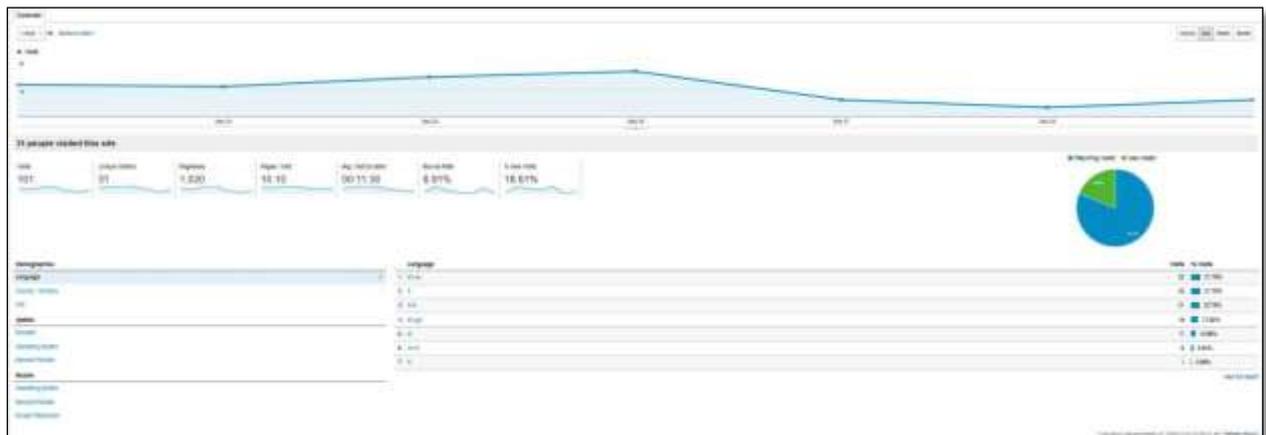


Overview per week of the visits to the MedOpen website during the 12 weeks of 2013's run:

1.



2.



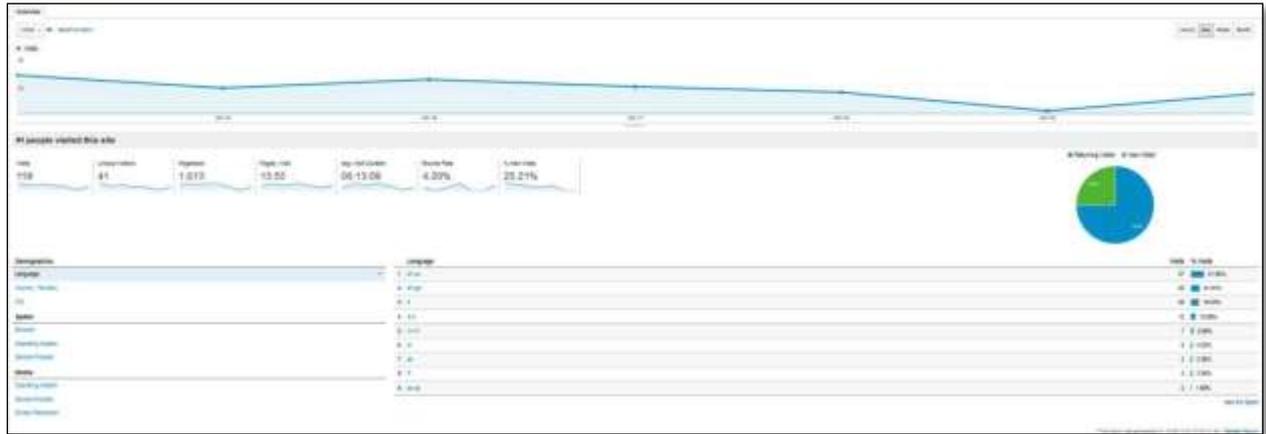
3.



4.



5.



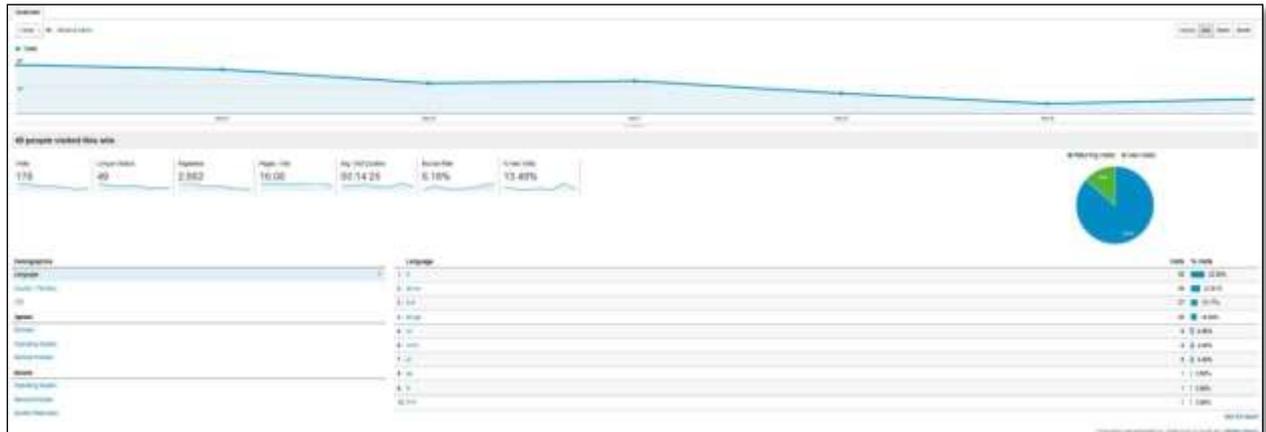
6.



7.



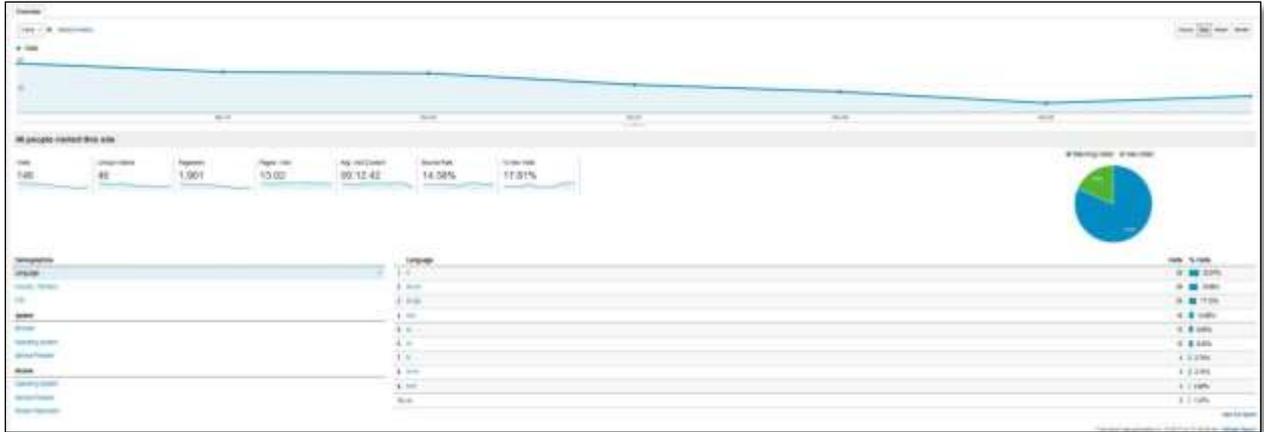
8.



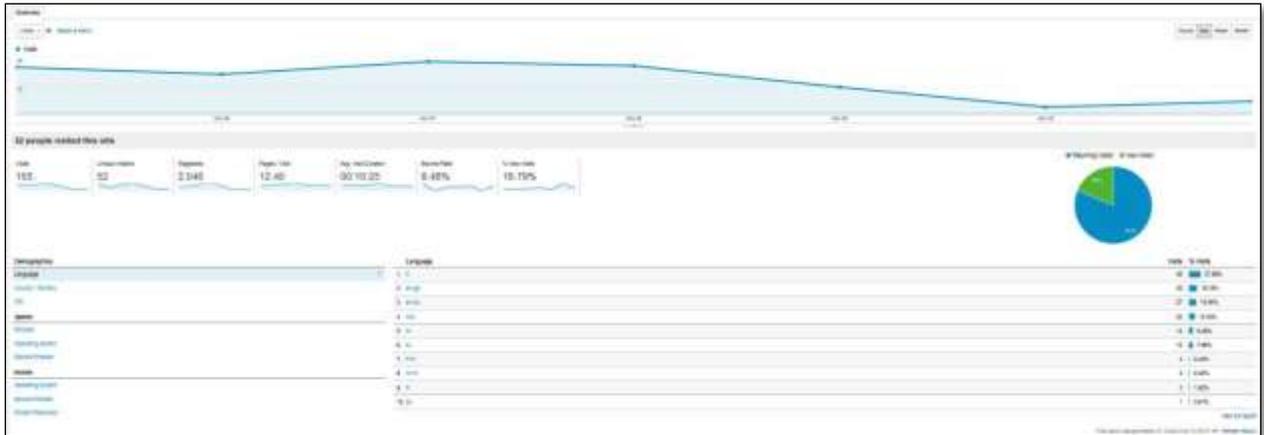
9.



10.



11.



12.

