

A systemic and prospective sustainability analysis within the Šibenik-Knin County (Croatia)

Report on the 1st “*Clímagine*” workshop, 8th April, 2013

Facilitated by Vladimir Lay, consultant for Plan Bleu

Main author: report written by Vladimir Lay, local team co-ordinator

Additional contributions: Daria Povh Skugor, PAP/RAC and Antoine Lafitte, Plan Bleu/RAC

Hosted by the Municipality of Šibenik

Zagreb, 27th May, 2013

Table of contents

I.	Introduction.....	4
II.	Description of the assessment of environmental and socio-economic costs	6
III.	Objectives, expectations and pre-requisite of “ <i>Clímagine</i> ” Workshop 1	7
IV.	“ <i>Clímagine</i> ” process.....	10
a.	Reconnaissance of the Šibenik-Knin County’s coastal zone and eco-socio-system	10
b.	The main drivers and priority issues selected by the stakeholders	15
c.	Conclusion	16
V.	Annexes	18
a.	Agenda.....	18
b.	List of participants	19

List of acronyms

CV&C: Climate Variability and Change

DEDUCE: Développement Durable des Zones Côtières Européennes

DIVA: Dynamic Interactive Vulnerability Assessment

DPSIR: Drivers – Pressure – State – Impact - Response

ICZM: Integrated Coastal Zone Management

MSSD: Mediterranean Strategy for Sustainable Development

NGO: Non-governmental organisation

PAP: Priority Action Program

RAC: Regional Activity Centre

I. Introduction

Within the framework of the regional project named “Integration of climate variability and change into national ICZM strategies”, an additional part of the MedPartnership project¹, an activity is focusing on the assessment of environmental and socio-economic costs of climate variability and change in a coastal zone. The results of this assessment will represent an input for the ICZM plan that will be prepared in a selected location. Plan Bleu² and PAP³ RACs are in charge of this evaluation and are working together in implementing workshops. Plan Bleu offers its experience in the participatory process method⁴ named “*Imagine*” in upgrading it into “*Clímagine*”. PAP/RAC offers its experience in working with the team who developed the DIVA model⁵, securing its downscaling to the local level and integrating these results into the ICZM Plan. Two demonstration cases have been selected for the socio-economic assessment: Tunisia and Croatia, while the local socio-economic assessment and an ICZM Plan will be prepared for the coastal area of the Šibenik-Knin County in Croatia. For local assessment of environmental and socio-economic costs, PAP/RAC engaged, in a separate activity to DIVA, a team led by Pr. Anil Markandya under the name of “Metroeconomica”. The “Metroeconomica” team is working in close collaboration with a local team of experts, within the frame of the definition of the ICZM plan. The “*Clímagine*” process provides the participation part of the whole activity.

The first “*Clímagine*” workshop was held in Šibenik on 8th April 2013. This workshop was facilitated by Vladimir Lay, Ph.D. Plan Bleu’s consultant from Zagreb, Croatia, the author of this report.

A short evaluation was carried out in PAP/RAC the next day (9th April) in Split, where a team meeting was held.

The local team coordinator and sociologist, Vladimir Lay, Ph.D. and Daria Povh Škugor, an expert from PAP/RAC, prepared the conceptual and methodological issues of “*Clímagine*” during this two-day workshop in Plan Bleu-Sophia-Antipolis (France) on 12th and 13th March 2013. Mr. Lay’s suggestion to conduct three workshops (the first one to define the main dimensions of problem, the second one to work on indicators and the third one to work on policies and conclusions), instead of two, as initially proposed by Plan Bleu, was accepted.

The preparation for this first “*Clímagine*” workshop in Šibenik on 8th April started three weeks before the event. All elements were carefully prepared; PAP/RAC engaged experts for the ICZM Plan and secured their input for the “*Clímagine*” workshop; it prepared invitations and the agenda jointly with the County of Šibenik-Knin and identified almost 100 various potential stakeholders that were invited to the “*Clímagine*” Workshop; the County of Šibenik-Knin e-mailed and posted invitations, together with the description of the project and

1 <http://www.themedpartnership.org/>

2 <http://www.planbleu.org/indexUK.html>

3 <http://www.pap-thecoastcentre.org/>

4 http://www.planbleu_imagine

5 <http://www.diva-model.net/>

the list of participants to all identified stakeholders, and secured the City Hall for the implementation of the “*Clímagine*” workshop; the County and PAP/RAC phoned several of the identified stakeholders in order to secure their presence at the workshop.

After almost a month reserved for *post festum* impressions and reflections, as well as discussions with some PAP/RAC’s experts and some representatives from civil society and the Šibenik Knin county administration, we can conclude that the first workshop successfully initiated motivation of local social stakeholders for climate change issues into the framework of the integrated coastal zone management in the Šibenik-Knin County.

The town of Šibenik and the Šibenik-Knin County have been affected by developmental and economic crisis issues, like the rest of the Republic of Croatia nowadays. “Social energies” and minds are focused on developmental problems. So, the fact that we attracted some 60 participants (2/3 of the invited participants) is very successful.

The issue of climate changes in the social context of the Šibenik-Knin county population, like in the whole of Croatia, is still generally a new one, even though we are in 2013. This workshop introduced locals to general issues of climate change and the need to meet these issues and problems at the local coastal level. The main dimensions of climate change influences in the local milieu of the Šibenik-Knin County (including several small islands) were “*imagined*”, discovered and defined in an initial way. A good foundation for the next (second) workshop - where emphasis will be on indicators - was created.

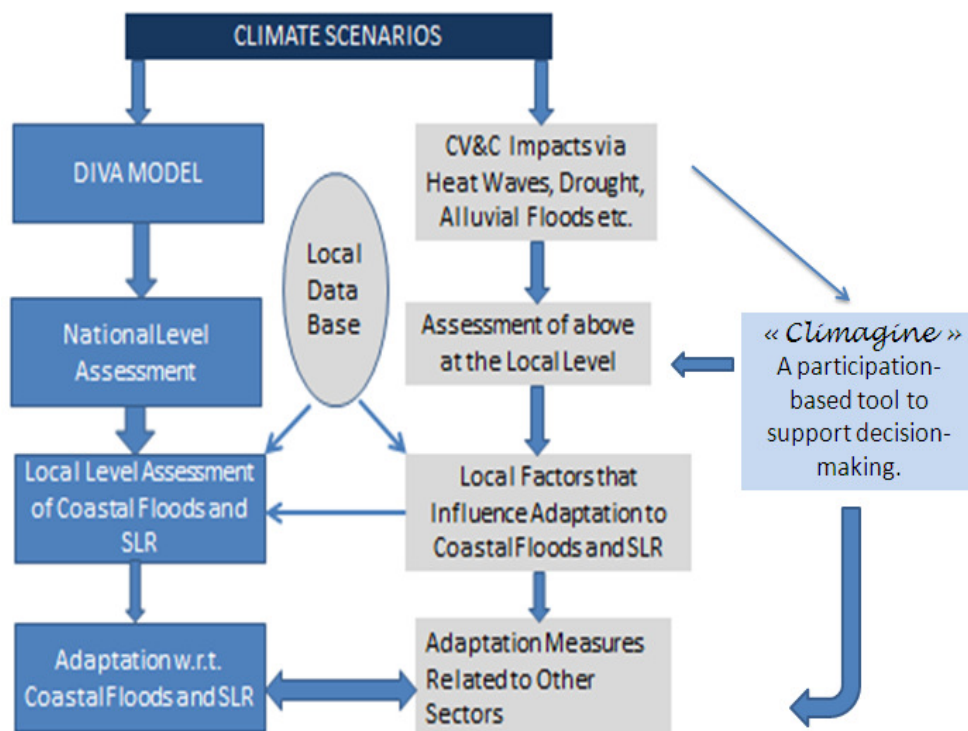
II. Description of the assessment of environmental and socio-economic costs

DIVA, a globally renowned methodology selected for the assessment, is an integrated, global research model for assessing the biophysical and socio-economic consequences of sea-level rise and associated extreme water levels under different physical and socio-economic scenarios as well as by considering various adaptation strategies. In this project, DIVA will be applied at the national scale, assessing the impacts of gradual climate change in terms of sea-level rise, as well as coastal flooding, current and future climate variability in terms of extreme water levels. For coastal flooding, the current adaptation deficit will also be taken into account. This top-down approach will be supplemented with the bottom-up assessment of the environmental and socio-economic costs at the level of the Šibenik-Knin County. Bottom-up assessment will build a database of vulnerabilities at the local level at a scale that the top down model cannot address and, based on that, it will look at a wider set of adaptation policies and measures, comparing them in terms of their costs and benefits as well as other indicators, such as equity, reductions in vulnerability, fiscal constraints etc. The bottom up analysis will also consider impacts that the DIVA model does not address, such as alluvial flooding, heat waves, impacts of climatic variability and change (CV&C) on infrastructure through subsidence, high temperatures, etc.

The assessment will be performed through the following steps:

1. Background and Introduction: Information on the areas being studied, the main coastal issues addressed in the ICZM, history of preparation of the ICZM strategy for the country and the local plans and expected climate vulnerabilities.
2. Climate scenarios for the country and the region, identifying the range of impacts in terms of temperature, precipitation, extreme events etc.
3. Database: Main information that is available for adaptation planning for the area concerned.
4. The Top Down Component: Application of the DIVA model to the area of interest and its use to identify the consequences of the climate variability on sea level rise and coastal flooding and thereby on people, assets etc.
5. The Bottom Up Component: estimated impacts of the scenarios on people and infrastructure via other pathways, such as drought, heat waves, alluvial flooding etc.
6. Integrating the two approaches: introducing the local factors and vulnerabilities to enrich the “Top Down analysis” and combining the results of that analysis with the Bottom Up analysis to derive an overall picture of potential impacts and their costs in the “do-nothing” case.
7. Selecting adaptation options. Measures that can be taken to address the potential impacts with information on costs, possible benefits etc.
8. Summary of stakeholder consultations, where potential impacts and potential adaptation actions are presented and discussed.
9. Evaluating the adaptation options: costs and benefits, uncertainty, fiscal constraints, distributional considerations, use of multi-criteria analysis, timing considerations.
10. Financing the Program. Possible sources of finance and actions needed to mobilize such funds.

The contribution of “*Clímagine*” to the climate scenarios is represented by the following diagram:



Source: adapted by Anil Markandya, 2013.

III. Objectives, expectations and pre-requisite of “*Clímagine*” Workshop 1

The main objectives of the **first workshop** – within the framework of the agreed model of three steps (or workshops) were:

- Developing an understanding of the context: territorial Šibenik-Knin County diagnosis: coast line, some part of the inland area, special zone: river Krka – “backyard” lakes and the estuary of the river Krka into the Adriatic sea, several small islands like Žirje, Prvić, Zlarin, Kaprije, Krapanj and part of the Kornati islands,
- Drawing “Rich Pictures” to identify priority issues in the coastal zone,
- Starting to prioritise the issues.

In order to clarify and remind us of the whole methodological concept of “*Clímagine*” applied to the Šibenik Knin County, the objectives of the next two steps /workshops will be:

Second workshop: (scheduled for October 2013)

- Selecting a final core set of indicators related to issues,
- Defining their band of equilibrium,
- Using a matrix to rank issues and indicators,

- d. Checking data available to populate indicators.

Third workshop: (expected by the end of 2013)

- a. Definition of the assumptions of scenarios and exploration through scenarios,
- b. Presentation and discussion of the results,
- c. Elaboration of recommendations and establishment of priorities for a local ICZM action plan.

We understand such timing and plan of steps are very useful and adequate for successfully introducing local stakeholders and participants in “*Clímagine*” process.

Having experience with the low “social status of climate change issues in Croatia”, we begin with the hypothesis that basic knowledge on the causes and consequences of climate change is also missing in the Šibenik-Knin County. We added an additional educational component about basic facts (causes, consequences, etc...) of climate changes throughout the world and in Croatia. This is not a part of the project, but we thought that it would be useful for general project objectives in the future.

Several copies of Mr. Lay’s book “*Kap preko ruba Čaše*” and a DVD with a short documentary (18 minutes) titled “*Climate changes story from Croatia*” have been distributed in Šibenik⁶. In addition, books were promised to those who expressed an interest and left their contact addresses on the book wish list. The book was sent to these addresses in April 2013. In total, 21 books were donated. The interest of 21 persons from a group of 60 participants confirms our hypothesis that participants (1/3!) needed more information and knowledge concerning the issue. Participants without adequate knowledge on the basic issues of global climate changes cannot be productive at the local level, even if they understand local environmental issues.

All in all, 60 representatives from different institutions attended the workshop (91 letters of invitation were sent). 9 participants from different public services came to the workshop even though they were not formally invited! (For details see list of participants in annex 2.)

Structure of present representatives was like that:

Business sector	0
Europe Aid	0
Ministry of construction and spatial planning:	1
Towns and communes	1
National public institutions – “Croatian waters” and others	1
Spatial planners	2
Plan Bleu/RAC	2
Presenters from two scientific institutions in Split	2
Local Island Boards ⁷ (local committee)	2 +1
Ministry of protection of environment and nature (Republic of Croatia)	4

⁶ This is the outcome of a previous climate change project financed by the EU Life 3 program in 2005 – 2007 and conducted by the NGO, Croatian Environmental Education Centre, Zagreb (founded in 1994) led by Mr Vladimir Lay.

⁷ Nice detail: one person, an old man from the island, Prvić Luka, Mr. Blaž Renić, president of the Local Island Board (Mjesni odbor otoka Prvić) came at 8 o'clock in the morning and apologized as he had to be with his elderly wife in hospital.

NGOs	4
Public organisations (protection of environment and nature, health, tourism,...)	5
Academic institutions (faculties and institutes)	6
PAP/RAC	8
Šibenik-Knin county administration - different sectors	12

Additional participants who were not invited but attended:

Šibenik-Knin county protection of nature institution	Additional 2 (<i>one is on the list of invited participants</i>).
National public institutions – “Croatian waters” and others	Additional 2 (<i>two are on the list of invited participants</i>).
Port of Šibenik office (Luka kapetanija)	2
Hydrological Institute	2
Centre for public helping and saving (Šibenik)	Additional 1 (<i>one is on the list of invited participants</i>).

According to Mr. Lay, Plan Bleu’s consultant, the relationship “invited – attended” is very positive because the participation rate was pretty high. If we compare the number of invited participants (91) with the number of representatives who came from the group of invited participants (50) or the total number of participants (60), we cannot avoid such conclusion.

For the additional persons (9), they mostly came from institutions that were on the list. Additional persons from those institutions also came, which we thought was positive. Regarding the Port Šibenik Office, although not invited, some representatives attended the workshop.

However, we noted some gaps regarding the list of invited / present participants. In our expert opinion:

1. The Port of Šibenik needs to be included on the invitation list;
2. Representatives from the towns of Šibenik, Vodice and Skradin (on the Krka River) were all absent; additional efforts have to be made to attract them to the next workshop.
3. The presence of some additional local NGOs has to be secured (for example Šibenski građanski forum or Argonauta).
4. Business sector should be invited with “stronger” type of preparation, including some sort of education on the reason for conceptual connecting of two issues “climate changes” and “business”.

This data will help us to compile a new, more complete invitation list for the next workshop. A very important point is that this list – including some persons / institutions that were invited but did not attend - will be a basis for the establishment of a local team. Of course, a few of the most active persons (the facilitator made notes about this) at the first workshop will be invited to co-operate in the local team’s work.

We declined doing this step in Šibenik at the first workshop held on 8th April 2013, as there were local elections in Croatia on 19th May, plus second circle on 2nd June. All normal decision-making processes (DMP), developmental steps and processes in towns, communes and counties, including the Šibenik-Knin county area, are somehow stopped at this period of time.

New or old DMP teams are expected to be elected. After the second round of local elections (2nd part of June), we will be able to establish a local Šibenik-Knin county team. This will occur in June 2013. This date should be decided by PAP and Plan Bleu RACs. The same process should hopefully be followed with the date of the second workshop in October 2013.

To conclude this part of the report, it can be said that the organization and motivation of participants were very good. Nevertheless, the list of participants needs to be slightly improved; some persons have to be more motivated to come over. First of all, business people and representatives of the towns of Šibenik (including Port Šibenik), Vodice and Skradin need to be present at these workshops. Another observation is that the participation of NGOs needs to be improved, even though a representative of the NGO “Sunce” attended.

The local team has a good human resource base and it will be consolidated after the local elections.

IV. “*Clímagine*” process

a. Reconnaissance of the Šibenik-Knin County’s coastal zone and eco-socio-system

At the first workshop that lasted the whole day, introductory words were spoken by Mr. Pauk, Šibenik County’s Prefect, Ms. Škaricic, PAP/RAC’s Director and Mr. Lafitte, program officer from Plan Bleu RAC.



Introductory words, Šibenik, 8th April 2013.

This introduction was followed by a presentation of the “*Clímagine*” methodology and process by Mr. Lafitte. Then, four expert presentations followed: two by Mr. Trumbić on ICZM Protocol and the general main issues of CVC, one by Mr. Vilibić on CVC in Croatia and one by Mr. Margeta on water management and coastal infrastructure in the coastal zone of the Šibenik-Knin County.

*Mr. Trumbic**Mr. Vilibic**Mr. Margeta*

It was a very good and useful way of educating and providing participants with scientific data and expert opinion regarding climate change and possible influence on the coastal zone. The Šibenik coastal zone was defined through discussion with participants.

The panel discussion was fruitful. Around 10 participants took active role in discussion. A lady from Šibenik University put focus on the problem of drinking water in future times. Also, she invited participants () on being careful about preserving small numerous carst fields in Šibenik-Knin county area.

The representative of the County office of the National protection and rescue directorate pointed out the high value of the Initial Spread Index (a numeric rating of the expected rate of fire spread) for the Šibenik Knin County. In addition, he reminded the participants that global warming and climate changes will make things worse for the County's forests areas, including very valuable forests in coastal zones.

The representative of the Ministry of Environmental and Nature Protection informed other participants that the new "Coastal and Marine Strategy for Croatia" will be articulated till the end of year 2014 and climate changes aspects will be taken into account. Ministries are now in the process of collecting "zero state" data.

Two persons from the small islands of Šibenik archipelago put accent on how neglected these islands are and the problems they face for everyday's life because of the Šibenik-Knin County "government". They told "we shall not die from climate changes; we shall die from our administration system and its passivity concerning small island problems." The last five years, the level of sea rose, making numerous small damages in small ports - on boats, roads etc.

A local businessman from Island Žirje told that no organic economy on island exists anymore, a small number of people lives permanently on island Žirje (registered 132, present permanently around 80 – 100). In the past, there was a rich activity of collecting and exporting medical herbs. Many natural resources are still there, but no enterprising activity. For example, special sort of

Žirje plum (food), wild animals (hunting), olives, grapes, wild growing medical herbs, etc. No fishing ship on island, when there is lots of fish around!?!)

NGO “Sunce” presented their activities on protected nature area field in Šibenik-Knin County. Stakeholders’ discussions highlighted that the influence on local biodiversity was an important missing issue on the first workshop.

We suggested to present this issue at the beginning of the next workshop. We think that some participants, people from the National park Krka and from a Polytechnic in Šibenik (Tanja Radić plus an NGO “Sunce”) can help in this area.

After this part of the workshop and a coffee break, participants were invited by the facilitator Mr. Lay – after “warming up” these 60 participants with developing some sort of familiar relation towards new issues of climate change – to try to recognize and define the main issues concerning climate changes in the coastal area of Šibenik. Discussions were good and more than 10 participants took part. Details were noted and will be used for preparing the second workshop to pre-define indicators of climate change in the Šibenik coastal zone.



“Break the ice” session moderated by Mr. Lay, Plan Bleu’s consultant.



The floor was given to participants to express their opinions about issues in the county.

After lunch, work continued in four working groups with 10-12 participants in each. One participant from PAP RAC / NGO / Ministries / Universities / Planning institutes / Biologists / Fishermen, etc. took part in each group. A general observation is that a few local socio-economic representatives attended the workshop, but that there were more institutional representatives.

Plan Bleu led one group; the other three were led by PAP/RAC experts. The process in each group was, first of all, a round table to introduce them, and then Plan Bleu's consultant explained that they have to discuss the issues of the territory, start to fix priorities and draw the system complexity following their own instincts and experiences. In small scale influence of

climate changes are already present in coastal Šibenik-Knin County zone. It is the fact which will help “*Climagine*” process to be fruitful on the next workshop.



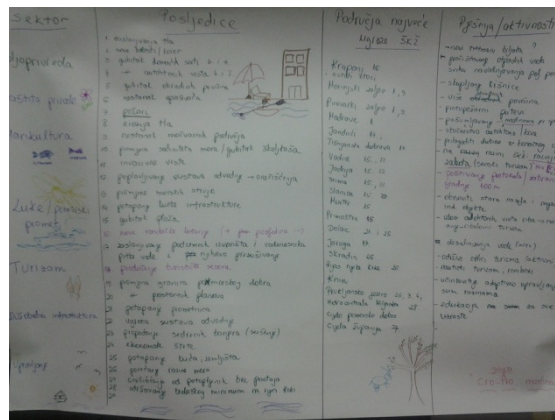
Working group sessions in order to draw “rich pictures”.



“Rich pictures” were created using sheets of white paper and colour pencils. These working sessions lasted an hour and presentations lasted for 45 minutes. In two of the groups, a big drawing with a map of the whole area was presented (see pictures 1 & 2 below) and two other groups presented textual descriptions (see pictures 3 & 4 below).



A “rich picture” from group 2. Schematization of the Sibenik-Knin County with texts and drawings.



A "rich picture" from group 4. A table with 4 columns: sector/ consequences/ areas/ solutions.

14

With regard to the eco system of the river Krka, estuary and bay, Šibenik city plus several islands were described in detail. People from small islands described their current concerns and possible problems in future.

All in all, the rising sea level and many other delicate consequences of that process on peoples' working activities, living conditions and lifestyles / being near the coast are clearly recognized by participants. The main dimensions and issues were defined.

b. The main drivers and priority issues selected by the stakeholders

The first workshop's goal was to recognize and define the main dimensions as well as influences of climate change on the coastal zone in the Šibenik-Knin County. It was decided not to prioritise these issues at the first workshop. This was decided by Mr. Lay, the moderator of "*Clímagine*". His evaluation, based on his experience as a Croatian sociologist, researcher of climate changes and moderator/facilitator of "*Clímagine*" public participation process, was that people from the Šibenik-Knin county were not familiar with these issues and that they should be given an opportunity to think about them. It was decided that they could present some proposals on the priorities at the second workshop.

The main activities and social stakeholders / drivers which will be "touched" in some way, more or less with the consequences of climate changes are:

- Tourism (navigation at sea, beaches, objects near sea, etc.;
- Agriculture & activities concerning biodiversity (water level for flora and fauna / hunting / cultivating medical herbs etc);
- Aquaculture (shell cultivation, fishery, etc.) Cultivation of shells is very active in all this area;
- Security:
 - elements of risk in the whole area - fires are very frequent in summer time;
 - "Heat waves" in summer can be dangerous for inhabitants and animals.
- Increasing salinity of water in this area, where the river Krka and sea water mix is a special issue that harms species.
- Traffic at sea and near / around sea zone;
- Infrastructure – especially water supply system, sewerage / waste water management in the town of Šibenik and in all settlements in the coastal zone of Šibenik-Knin County;
- Factory and firms pollution issue, in city of Knin, near the Krka river, is important but there is a need to define the nature of pollution. According to a participant, there is no filter in the factory (metal production).
- Lake eutrophication is an issue due to too many inputs and wastes from the city of Knin.
- All industries and businesses (like banks, insurance companies), which come in direct or indirect contact with the consequences of climate changes.
- The rise of the sea level is not really a dramatic issue in Croatia in terms of erosion because it is a rocky coast. Nevertheless, it is important since most of the human settlements and tourism infrastructure, as well as the rich historical heritage, all are located very close to the coastline. In addition, dikes degradation, coastal infrastructure

degradation and flooding are all significant threats to the coastal zone. The whole estuary area and coastal zone of the Šibenik town bay is very delicate with regard to the sea level rise, including the islands. For example, a participant said “If the sea level rises, we will have a problem to host ferries on quays on islands”.

- Moreover, sources of drinking water for almost the entire county can be jeopardized with a rising sea level.
- Local economy on islands: currently, it has been noted that local inhabitants are moving to the mainland even though there is a potential for development on islands. For instance, inhabitants could grow some fruits, raise free range wild chickens ...

To establish the whole and complete list at this moment is impossible. It is necessary to know more about climate changes and newest data (see draft of IPCC year 2013 Report). In addition, it is necessary to access every corner and hidden part of the coastal zone of this county's territory. It is necessary to imagine climate and make a draft of problems of everyday life and work for people.

c. Conclusion

The main issues and dimensions of influence of climate changes are recognized and defined. The next steps are to make priorities and to select indicators for all important influences. This is the task for the next workshop, which should hopefully take place in October 2013. Thorough preparations should start at the beginning of October 2013, but some work has to be carried out by the local team until the second workshop.

In June 2013, after the local elections, the local team should be established. Several interviews should be realized before that to explore the capacities and motivations of people. Daria Povh Škugor⁸ from PAP/RAC and Vladimir Lay (engaged by Plan Bleu) have made arrangements about this.

In addition, regarding the scoping report prepared by experts (Mr. Trumbić, Mr. Vilibić and Mr. Margeta), it has been agreed that they have to concentrate their conclusions on the Šibenik-Knin county coastal area, with relevant and concrete examples of how climate variability and change should be described in the ICZM plan. It could be, for instance, focused on three or four hotspots in the area of the county which need to have special attention. It would be useful to use the following process:

Main issues ➔ DPSIR⁹ framework to describe each one ➔ indicators to measure them.

During “*Climagine*” workshop 2, discussions will have to allow stakeholders to accept the final core set of indicators. Special attention will be made to select a rational list of indicators. This preliminary list will have to be discussed and selected by a method (for instance RACER¹⁰) before moderating workshop 2 with stakeholders.

So, during this second workshop, discussions could be focused mainly on the band of equilibrium for each indicator, but the list of indicators has to be prepared in advance from the

⁸ Program officer, PAP/RAC, Split.

⁹ http://enviro.clark.edu:8002/rid=1145949501662_742777852_522/DPSIR%20Overview.pdf

¹⁰ <http://www.sei.se/eipot/resources/EIPOT-RACER-evaluation-framework-final-07Oct08.pdf>

existing list of indicators based on PEGASO EU-FP7 project factsheets, MSSD list of indicators, DEDUCE project, Plan Bleu's lists of indicators, lists based on the experience of Coastal Area Management Programs implemented between 2000 and 2013,...).

With regard to the number of indicators, generally it is common to have two or three indicators for each issue, but this depends on the importance of the issue. For example, for two or three of the most important issues emphasized during the first workshop of "*Climagine*", we could have more indicators.

Moreover, in order to define the band of equilibrium, an important factor is to consider the level of knowledge of the experts who attend the meeting. Certain persons could be expert in a specific field and could give their expertise to define the most suitable value for the indicator concerned or, if it exists, they will use the value of international standards.

To conclude this focus, for the second workshop we should proceed as follows:

- Presenting the priority issues coming from the "Rich Pictures";
- Explaining with precision what is an indicator, the selection method for them;
- Providing materials to the stakeholders: the list of indicators, the matrix to show issues/indicators,..
- Finally, taking into account influence of climate change on local biodiversity in the coastal zone of the Šibenik-Knin county. This topic should be introduced at the second workshop.

Last but not least, as already mentioned, the list of invited participants has to be slightly modified. Indeed, some institutions and people should be added. On the other hand, regular contact is important for the success of the second workshop; people have to be motivated by mails and calls. They have to feel that their regular attendance is necessary for the success of the whole process.

V. Annexes

a. Agenda

“Clímagine” 1

8 April 2013

Town Hall, Šibenik

PROGRAMME

- 08:30 – 09:00** Registration of participants
- 09:00 – 09:10** Opening of the workshop and welcome address (Mr. Goran Pauk, President of the Šibenik-Knin County)
- 09:10 – 09:20** Welcome address (Ms Višnja Grgšević, Ministry of Environmental and Nature Protection)
- 09:20 – 09:30** Welcome addresses (Mr Antoine Lafitte, Plan Bleu and Ms Željka Škaričić, PAP/RAC)
- 09:30 – 09:40** Introduction to *“Clímagine”* (Mr Antoine Lafitte and Mr Vladimir Lay)
- 09:40 – 09:55** Presentation of the project (Mr Ivica Trumbić)
- 09:55 – 10:10** Expected climate change and effects on the seas (Mr Ivica Vilibić)
- 10:10 – 10:25** Introduction to potential effects on the coastal zone (Mr Ivica Trumbić)
- 10:25 – 10:40** Potential effects on water systems and coastal infrastructure (Mr Jure Margeta)
- 10:40 – 11:15** Questions and discussion
- 11:15 – 11:30** *Coffee break*
- 11:30 – 13:30** Beginning of *“Clímagine”*
- 13:30 – 14:30** *Lunch break*
- 14:30 – 16:00** *“Clímagine”* continued
- 16:00 – 16:15** *Coffee break*
- 16:15 – 18:00** *“Clímagine”* continued

b. List of participants**MINISTRIES****Ministry of Environmental and Nature Protection**

Ms. Višnja Grgasović

Head

Service for the Protection of Climate, Ozon Layer and Sea

Ulica Republike Austrije 14

10000 Zagreb

Tel: 01 3717217

Faks: 01 3717157

E-mail: Visnja.Grgasovic@mzoip.hr

Mr. Ivan Radić

Senior Consultant

Service for the Protection of Climate, Ozon Layer and Sea

Ulica Republike Austrije 14

10000 Zagreb

Tel: 01 3717242

Fax: 01 3717135

E-mail: ivan.radic@mzoip.hr

Ms. Nevia Kružić

Head

Department for Protection of Sea and Coastal Area

Užarska 2/1

51000 Rijeka

Tel: 052 213499

Fax: 052 214324

E-mail: nevia.kruzic@mzoip.hr

Ms. Gordana Ruklić

Head

Service for General Environmental Protection Policy and International Relations

Ulica Republike Austrije 14

10000 Zagreb

Tel: 01 3717238

Fax: 01 3717122

E-mail: gordana.ruklic@mzoip.hr

Ministry of Construction and Physical Planning

Ms. Sandra Momčilović
Head of Department
Directorate for Physical Planning
Ulica Republike Austrije 20
10000 Zagreb
Tel. 01-3782145
Fax: 01-3782152
E-mail: sandra.momcilovic@mgipu.hr

NATIONAL INSTITUTIONS**Croatian Waters**

Ms. Ivana Gabrić
VGO Split
Vukovarska 35
21000 Split
Tel: 021-309401
E-mail: ivana.gabric@voda.hr

Mr. Tihomir Galić
Tel: 021-309401
E-mail: tihomir.galic@voda.hr

Ms. Mirjana Švonja
Tel: 021-309401
E-mail: tihomir.galic@voda.hr

Hydrographic Institute of the Republic of Croatia

Mr. Hrvoje Mihanović
Hydrographic Institute of the Republic of Croatia – Split
Zrinsko-Frankopanska 161
HR-21000 Split
Tel: 021-308800
E-mail: hrvoje.mihanovic@hhi.hr

INSTITUTIONS OF THE ŠIBENIK-KNIN COUNTY**Šibenik-Knin County**

Mr. Goran Pauk

President of the County

Trg Pavla Šubića I. br. 2

22000 Šibenik

E-mail: zupan@sibensko-kninska-zupanija.hr

Department of Maritime Affairs, Transport and Insular Development

Ms. Jadranka Fržop

Head

Tel: 022-460741

Fax: 022-460752

E-mail: pomorstvo@skz.hr

Department of Physical Planning and Construction

Mr. Gojislav Krnić

Head

Kralja Zvonimira 16

22000 Šibenik

Tel: 022-342777

Fax: 022-342790

E-mail: uredjenje.gradnja@skz.hr

Department of Environment and Municipal Affairs

Ms. Sanja Slavica Matešić

Head

Tel: 022-460748

Fax: 022-460754

E-mail: okolis.komunalno@skz.hr

Ms. Živana Lambaša Belak

Senior Consultant for Environmental Protection

Tel: 022-460745

E-mail: zivana.lambasa.belak@skz.hr

Ms. Marica Spahija

Consultant for Municipal Affairs

Tel: 022-460746

E-mail: marica.spahija@sibensko-kninska-zupanija.hr

Ms. Ivana Juričev Martinčev

Tel: 022-460747

E-mail: ivana.juricev-martincev@sibensko-kninska-zupanija.hr

Public Institution Regional Development Agency of the Šibenik-Knin County

Mr. Ivan Jurković

Scientific Consultant

Prilaz tvornici 39

22000 Šibenik

Tel: 022-217113 / 200473

Fax: 022-217114

E-mail: ivan.jurkovic@rra-sibenik.hr

Public Institution for Management of Protected Areas and Other Protected Resources of the Šibenik-Knin County

Ms. Anita Babačić Ajduk

Director

Prilaz tvornici 39

22 000 Šibenik

Tel: 022-218462

Fax: 022-218331

E-mail: ababacic@zpv-sibenik.hr

Ms. Tina Dragutin

Scientific Consultant

Tel: 022-218-462

e-mail: zastitapriode@zpv-sibenik.hr

Mr. Hrvoje Zekanović

Tel: 022-218-462

e-mail: zastitapriode@zpv-sibenik.hr

Public Institution Institute for Physical Planning of the Šibenik-Knin County

Mr. Damir Lučev

Director

Vladimira Nazora 14

22000 Šibenik

Tel: 022-217255

Fax: 022-217256

E-mail: zavod-za-prostorno-uredenje@si.htnet.hr

Ms. Sanja Kljajić
Tel: 022-217255
E-mail: zavod-za-prostorno-uredjenje@si.htnet.hr

Ms. Irena Terzanović
Tel: 022-217255
E-mail: zavod-za-prostorno-uredjenje@si.htnet.hr

Port Authority of the Šibenik-Knin County

Mr. Željko Dulibić
Director
Draga 14
22000 Šibenik
Tel: 022-219852
Fax: 022-219863
E-mail : zeljko.dulibic@cpa-sibenik-knin.hr

Ms. Nikolina Araz
Tel: 022-219852
E-mail : nikolina.aras@cpa-sibenik-knin.hr

Mr. Nebojša Makarin
Tel: 022 219852
E-mail : nebojsa.makarin@cpa-sibenik-knin.hr

MUNICIPALITIES

Bilice

Mr. Krešimir Čaleta – Car
Head of the Management Department
Bosuć 3
22220 Bilice
Tel.: 022-310519
Fax: 022-310 528
E-mail: info@opcina-bilice.hr

LOCAL COUNCILS**Local Council of Kaprije**

Mr. Dinko Jelovčić
Chairman
Zapadna obala 116
Kaprije
Mob: 095-8302231

Local Council of Žirje

Mr. Anton Dobra
Chairman
Mikavica Tratinska 20
Žirje
Mob: 098-9454700

PROFESSIONAL INSTITUTIONS AND ORGANISATIONS**National Park Krka**

Ms. Gordana Goreta
Head of the Department for the Protection of Waters, Travertine Barriers and Biodiversity
Tel: 022-201757
Fax: 022-336836
E-mail: gordana.goreta@npg.hr

Institute of Public Health of the Šibenik-Knin County

Ms. Lidija Bujas
Head of the Environmental Service (member of the National Board for Monitoring Marine Strategy)
Put groblja 6
22000 Šibenik
Tel: 022-212425
Fax: 022-212430
E-mail: ekologija@zzjz-sibenik.hr

Tourist Board of the Šibenik-Knin County

Mr.. Šime Vlašić

Director

Tourist Board of the Šibenik-Knin County

Fra Nikole Ružića bb

22 000 Šibenik

Tel: 022-219 072

Fax: 022-212 346

E-mail: info@sibenikregion.com

State Directorate for Protection and Rescue – Regional office Šibenik

Mr. Milovan Kević

Head

Velimira Škorpika 5

22000 Šibenik

Tel: 022-347240

Fax: 022-347244

E-mail: sibenik112@duzs.hr

Ms. Danijela Erceg

Head of the Department for Prevention and Planning

Tel: 022-347425

E-mail: sibenik112@duzs.hr

Public institution – Institute for Physical Planning of the Split-Dalmatia County

Ms. Nora Nikšić

Public institution – Institute for Physical Planning of the Split-Dalmatia County

Domovinskog rata 2

21000 Split

Tel: 021-400160

E-mail: nora.niksic@dalmacija.hr

NON-GOVERNMENTAL ORGANISATIONS**Ecological association Krka Knin**

Mr. Dimitrije Dujmović
 7. Gardijske Brigade 13
 22300 Knin
 Tel: 022-664608
 Fax: 022-664608
 E-mail: ekolosta.udruga.krka@si.t-com.hr

Ms. Nataša Mudronja
 Tel: 022 664608
 Fax: 022 664608
 E-mail: ekolosta.udruga.krka@si.t-com.hr

Mr. Srećko Kmetić
 Tel: 022 664608
 Fax: 022 664608
 E-mail: ekolosta.udruga.krka@si.t-com.hr

Association for Nature, Environment and Sustainable Development SUNCE

Ms. Milena Šijan
 Obala hrvatskog narodnog preporoda 7
 21 000 Split
 Tel: 021-360779
 Fax: 021-317254
 E-mail : milena.sijan@sunce-st.org

ACADEMIC COMMUNITY**Polytechnic in Šibenik**

Ms. Tanja Radić Lakoš
 Polytechnic in Šibenik
 Trg Andrije Hebranga 11
22000 Šibenik
 Tel: 022-311060
 Fax: 022-216716
 E-mail: marko.radacic@vus.hr

Polytechnic „Marko Marulić“

Mr. Marko Jelić
 Petra Krešimira IV. 30
 22300 Knin
 Tel: 022 664450
 Fax: 022 661374
 E-mail: marko.jelic@veleknin.hr

Mining - Geology - Petroleum Engineering Faculty, Zagreb

Mr. Zoran Nakić

Vice-Dean for Finance and Business

Mining – Geology – Petroleum Engineering

University of Zagreb

Pierottijeva 6

10000 Zagreb

Tel: 01-5535766

Fax: 01-4836064

E-mail: zoran.nakic@rgn.hr

Faculty of Economics, Split

Ms. Maja Fredotović

Vice-Dean for Development and New Products

University of Split – Faculty of Economics

Cvite Fiskovića 5

21000 Split

Tel : 021-430674

Fax: 021-430701

E-mail : maja.fredotovic@efst.hr

Ms. Silvia Golem

Tel : 021-430673

Fax: 021-430701

E-mail: sgolem@efst.hr

Ms. Slađana Pavlinović

Tel : 021-430729

Fax: 021-430701

E-mail : sladjana.pavlinovic@efst.hr

AUTHORS OF PHYSICAL PLANS**Institute IGH**

Ms. Ivana Bojić

Matice hrvatske 15

21000 Split

Tel: 021-558666

Fax: 021-465335

E-mail: ivana.bojic@igh.hr

Town-Planning Institute of Croatia

Mr. Ante Senjanović
Town-Planning Institute of Croatia
Frane Petrića 4
10000 Zagreb
Tel: 01-4804300
Fax: 01-4812708
E-mail: r1@uih.hr

Licensed Architect

Mr. Hrvoje Skračić,
Architectural bureau
Krste Stošića 3
22000 Šibenik
Tel: 098-266911

INTERNATIONAL ORGANISATIONS**Plan Bleu**

Mr. Antoine Lafitte
15 rue Beethoven
Sophia Antipolis
06560 Valbonne
France
Tel: +33 4 92 387142
Fax: + 33 4 92 387131
E-mail: alafitte@planbleu.org

Plan Bleu Expert

Mr. Vladimir Lay
Travanjska 19
10000 Zagreb
Tel: 01-3872872
E-mail: lay.vladimir@gmail.com

Priority Actions Programme Regional Activity Centre (PAP/RAC)

Ms. Željka Škaričić
Director
Kraj Sv. Ivana 11
21000 Split
Tel: 021-340471
Fax: 021-340490
E-mail: zeljka.skaricic@ppa.t-com.hr

Ms. Lada Jakelić
Financial Assistant
Tel: 021-340470
E-mail: lada.jakelic@ppa.t-com.hr

Mr. Sylvain Petit
Programme Officer
Tel: 021-340474
E-mail: sylvain.petit@ppa.t-com.hr

Ms. Daria Povh Škugor
Programme Officer
Tel: 021-340478
E-mail: daria.povh@ppa.t-com.hr

Mr. Neven Stipica
Programme Officer
Tel: 021-340479
E-mail: neven.stipica@ppa.t-com.hr

Ms. Veronique Evers
Tel: 021-340478
E-mail: veronique.evers@ppa.t-com.hr

Mr. Jure Margeta
Head of the Department of Water Management and Protection
Faculty of Civil Engineering, Architecture and Geodesy
University of Split
Matice hrvatske 15
21000 Split
Tel: 021-303356
E-mail: margeta@gradst.hr

Ms. Marina Stenek
Mob: 091-5382585
E-mail: marinastenek@gmail.com

Mr. Ivica Trumbić
Tel: 021-339520
Fax: 021-340018
E-mail: ivica.trumbic@gmail.com

Mr.. Ivica Vilibić
Institute for Oceanography and Fisheries
Šetalište I. Meštrovića 63
21000 Split
Tel: 021-408040
Fax: 021-358650
E-mail: vilibic@izor.hr