

# COAST

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POWERED BY



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# Shaping the future



Who knows what the future brings? The future is exactly what we are thinking of when we are talking about and working with Integrated Coastal Zone Management. But the future is now as well! So it is crucial to start talking and start acting. That is exactly what the SUSCOD project is about. Acting now, to maintain a bright future for our coasts and ourselves.

Adaptation strategies are key in coastal management. And for developing these strategies, integrated sustainable solutions and innovation are very important. Why not share methods, different points of view and best practices? On [www.iczmassistant.eu](http://www.iczmassistant.eu) for instance, the most visible result of the SUSCOD project.

As lead partner of the SUSCOD project, it is an honor to offer you this magazine where you can find the achievements and findings of the various work packages of SUSCOD and the pilot projects of the participating partner regions Flanders, England, Scotland, Sweden, Noord-Holland and Denmark.

Read, enjoy and hopefully learn. Please, don't forget to register on [www.iczmassistant.eu](http://www.iczmassistant.eu). By sharing knowledge we can shape our future!

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# SUSCOD

## Partners, process and results



The Sustainable COastal Development project (SUSCOD) is part of the European Union's Interreg IVB North Sea Region Programme. SUSCOD unites people that pursue a climate-resistant, vital North Sea coastline where economics, environment and safety go together. Organisations from Belgium, Denmark, the United Kingdom, Sweden and the Netherlands joined forces to pursue this.

- ▶ Essex County Council, England
- ▶ Fife Coast and Countryside Trust, Scotland
- ▶ Region Zealand, Denmark
- ▶ North Bohuslän, Sweden
- ▶ Flanders Hydraulics Research, Belgium
- ▶ Province of Noord-Holland, The Netherlands
- ▶ Coastal Division, Agency for Maritime and Coastal Services, Belgium



### Subpartners

- ▶ Ministry of Infrastructure and Environment
- ▶ Coordination Centre for Integrated Coastal Zone Management, Belgium
- ▶ The Municipalities Lolland, Slagelse, Odsherred and Local Government Denmark
- ▶ The municipalities Tanum, Sotenäs, Munkedal and Lysekil and the County Administration of Västra Götaland, Sweden

### Goal of the project

The aim of the project is bringing the 8 ICZM principles, adopted by the EU in 2002, into practice. We applied the principles to the partners' pilot projects, discussed them, learned from the experiences and shared our knowledge in conferences and in the ICZM Assistant, the web based SUSCOD tool. We successfully worked with inhabitants, authorities, coastal professionals, project leaders and policy officers, to fully utilize the opportunities for coastal development.

### Work packages

The project consists of 9 work packages, working groups where specific ICZM themes are studied related to the partners' pilot projects. Work packages 1, 2 and 9 are respectively for project management, communications and dissemination of the project.

- ▶ **WP 3:** State of the Art Inventory (coordination by the Coordination Centre for Integrated Coastal Zone Management). The case studies of the project partners were assessed along the 8 ICZM principles and points of improvement were formulated and adopted into the projects.
- ▶ **WP4:** ICZM Assistant development (coordination by Province of Noord-Holland and executed by the Grontmij Consortium). The interactive development of a web based tool that assists the coastal professional and the interested public with relevant information, solutions, project examples and useful contacts to improve their work along the coast: [www.iczmassistant.eu](http://www.iczmassistant.eu).
- ▶ **WP 5:** Climate impact and risk awareness (coordination by Sjaelland). In this work package activities are geared towards assessing and raising awareness of the expected effects of climate change such as sea level rise and more frequent severe storm events. The work package partners applied these themes on a local and regional scale and shared their experiences and the different processes used. The results were presented and discussed in an international expert seminar.
- ▶ **WP 6:** Concepts and strategies (coordination by Essex): The 8 ICZM principles are put into practice and tested in relation to the development of integrated concepts and strategies on regional level and on local level in coastal planning. In the work package all pilot projects were assessed and relevant feedback was given on how to improve working with the ICZM principles.
- ▶ **WP 7:** Plans and measures (coordination by the Agency for Maritime and Coastal Services). This work package focuses on the translation of policies and strategies into real plans. A number of these plans were test-implemented during the SUSCOD project life time on a small scale in relation to the testing of the ICZM-assistant. Other plans will be implemented after the project has finished. The work package has drawn up a report with all the lessons learned from implementing the ICZM principles and the processes used in the pilot projects.
- ▶ **WP 8:** Stakeholder involvement (coordination by FCCT). This comprises of a number of specific activities that

## Show cases and pilot activities

	WP 5 Climate impact and risk awareness	WP 6 Integrated concepts and strategies	WP 7 Integrated development and implementation of local coastal plans	WP 8 Stakeholder involvement
<b>FLANDERS</b> <i>Combining sea defence measures with other functions in coastal towns (weak links)</i>	<i>Wenduine, Zeebrugge</i>	<i>Wenduine, Zeebrugge</i>	<i>Wenduine, Zeebrugge</i>	<i>Wenduine, Zeebrugge</i>
A New communication tools	Simulation and visualization of storm and wave effects a. computer programme b. physical simulation			
B Integrated development of coastal towns		Combining coastal defence measures with enhancement recreation/tourism a. evaluation tourism friendliness coastal defence measure b. new designs for integration of functions	Pilot action plans for 2 coastal towns a. literature review integrated development b. action programmes (2)	Stakeholder involvement a. Organised visits to FHR lab to show simulation and visualization tools
<b>FIFE</b> <i>Long term conservation of natural coastal (dune) defence system</i>	<i>St. Andrews</i>	<i>St. Andrews</i>	<i>St. Andrews</i>	<i>St. Andrews</i>
A Long term development	Assesment current situation a. report on user functions and tendencies	Long term vision a. Vision	Long term management plan a. developing recommendations b. developing work programme c. monitoring programme Recreation and education	Stakeholder involvement
B Guiding public use			b. Test implementation of guiding measures	Recreation and education a. Communication strategy c. Development educational material
<b>SEALAND</b> <i>Anticipating climate change in coastal areas</i>	<i>Slagelse</i>	<i>Odsherred</i>	<i>Lolland</i>	<i>Odsherred, Slagelse, Lolland</i>
A Regional analysis	Regional analysis of challenges a. Regional analysis Sealevel rise and coastal town development:	Sea level rise and tourism: a. Scenarios with socio-economic evaluations of various coastal defence measures	Sea level rise and infrastructural development: a. Case study report	Stakeholder involvement
B Local integrated solutions	a. Development and testing of instruments for inner-city development and seal level rise			
<b>NOORD-HOLLAND</b> <i>Regional development concepts for coastal areas</i>	<i>ID seaside towns</i>			<i>ID seaside towns</i>
A Quality concepts and cultural dimension	Coastal defence and identity of coastal towns a. identification of identities and vitality b. define and execute community actions c. road map for decion making			Coastal defence and identity of coastal towns a. identification of identities and vitality b. define and execute community actions c. road map for decion making
B Spatial planning concepts		Zoning of coastal area a. mapping development options and spatial restrictions b. study sand nourishment zoning		
<b>STRÖMSTAD</b>			<i>North Bohuslän</i>	<i>North Bohuslän</i>
A. Action Plan			Action plans for North Bohuslän	
B. Fair				Recreation and all year living Fair each year / dialogue with tourists and inhabitants
<b>ESSEX</b> Sustaining coastal community Safeguarding and protecting area of historic value		<i>Harwich</i> Harwich masterplan and Marina study	Management Strategy Crag Walk Naze Tower	Essex Coastal Forum

focuses on involving relevant parties in the development and decision making process. In general, the work package guided and monitored this aspect of coastal zone management and development in the work packages 5, 6 and 7.

### Pilot projects aka case studies

All partner regions practiced and tested the 8 ICZM principles within their own coastal pilot projects and they shared the results and experiences amongst each other. In the online ICZM Assistant you will find these in the menu bar under 'case studies'. In this magazine most of the pilot projects are presented from pages 19 to 30.

### Results and dissemination

An integrated approach is mainly a matter of doing and trying. Participating in a project such as SUSCOD helps you to look at your own projects in another way. Evidently face to face contact is very important in setting common goals and to bridge any cultural differences. Networking, and exchange of knowledge and inspiration at its best!

### The ICZM Assistant

The most visible result of SUSCOD is the development and production of the ICZM Assistant. A practical web based tool [www.iczmassistant.eu](http://www.iczmassistant.eu), that helps translate the 8 ICZM

principles into practical advice and solutions for coastal practitioners. On page 16 you can find how the ICZM Assistant works.

### Ten golden tips

The learnings and results of the case studies are translated to 10 concrete golden tips on how to improve your projects. The 8 ICZM principles and the case studies themselves form the basis for these tips. On page 18 you can read all about the tips!

### Dissemination

The main dissemination of the project results is the ICZM Assistant itself. Besides that, three international meetings in the partner regions and a final conference were organized. In this way regional problems and solutions were presented to the national, regional and local politicians, authorities, experts and interested public. The final conference sums up the results and offers the findings of the SUSCOD project to coastal professionals and the European Union. Also, we offer the ICZM Assistant to the public. A useful tool that comprises our knowledge, lessons learned and experiences and which is open to add more knowledge, successful example projects and policy making of others.

[www.iczmassistant.eu](http://www.iczmassistant.eu)

# Nice to know, need to know

Work package 3 analysed the state of ICZM in the participating partner regions with a concrete focus on the implementation in their case study areas. The eight ICZM principles, as formulated by the European Commission (European Parliament and Council Recommendation concerning the implementation of Integrated Coastal Zone Management in Europe, adopted on 30 May 2002) were used as a guidance to evaluate the ICZM process.

Each partner was asked to complete an elaborate questionnaire, which focussed on the 8 ICZM principles. For each principle, in depth questions were asked. The questionnaire allowed a detailed inventory of each partner's pilot case(s) and an analysis of their current status in implementing ICZM for their specific case study in SUSCOD. WP 3 also identified key words that reflect the key activities and interests of the partners, and instruments which were already used by the partners. These key words and instruments were helpful in developing [www.ICZMAssistant.eu](http://www.ICZMAssistant.eu).

### Process

The answers were analysed in detail by the Coordination Centre on ICZM in Belgium, and discussed at the partnership meetings. Additional to the partnership meetings, bilateral meetings were held with each of the partners, in order to clarify the answers or further discuss ICZM issues where needed. The results from the analysis and the main conclusions for each of the partners are presented in individual analysis reports. The conclusions for each analysis were peer reviewed and confirmed by the partners. The partners could then use this advice, to improve their ICZM process during the course of the SUSCOD project.

### Need for guidance in implementing ICZM

The 8 ICZM principles have proved useful to learn about the ICZM process. During the discussion at the project

management meetings, the partners expressed the need for an easy to understand and simple to use 'assistant', focussing on providing guidance for implementing ICZM, as well on a strategic level, as in concrete projects. A 'checklist' or 'quality standard' was considered a useful way ahead. The 8 principles were suggested as framework to build and structure the ICZM Assistant. The WP3 report gives examples of innovative ways to implement the principles which have been used by the SUSCOD partners and points out the needs for the partners in support of their ICZM process.

### General ICZM recommendations

Additional to the advice for individual case studies by the partners, general recommendations for each ICZM principle were formulated:

1. Overall perspective. When the starting position of a case is single sector based, a strategic Environmental Impact Assessment is a good existing instrument to analyse the interdependence of issues and to study the impact of the project on other aspects such as environment, nature, landscape, social environment, etc. Another well known instrument in support of taking an overall perspective is spatial planning, although ICZM is still often not mentioned in that context.
2. Long-term perspective. Guarantees for a long-term prospects for ICZM can take different forms: signed



## EU principle of ICZM ①

*A broad 'holistic' perspective thematically and geographically.*

*Result of WP 3,  
State of the art analysis*

- agreements, action plans, a follow-up through risk analysis or indicators.
3. Sound-scientific basis. It is important to take into account the social effects of a project, an aspect often forgotten and not easy to grab. A social-cost benefit analysis is a useful tool, and can help making the right choices.
  4. Local specificity. Although the cases are already specifically linked to a certain location, even within the case further specific characteristic such as target audience, visual impact and opportunities for multifunctional use can be identified. This will deliver targeted solutions for local problems on a small scale.
  5. Working with natural processes. There is obviously a need for further clarification on this principle, as the natural processes are all considered from a sectoral viewpoint.
  6. Involving all parties. To reach a successful involvement of all parties, it is advised to use a combination of communication instruments (e.g. brochures, information and consultations meetings, exhibitions, press) in order to reach the different target groups. For a long-term involvement, parties could be given a specific role (eg in monitoring, communicating) and responsibility in the process.
  7. Involvement of relevant administrative bodies. Involvement of relevant administrative bodies can take different forms, and it will often depend on the culture in a country or region how this is structured. In Scotland where stakeholder participation is strong, coastal & estuary partnerships are useful structures. In the Netherlands and Flanders collaboration between administrations has been established (Provincial coastal deliberative body and the Coordination centre on ICZM, respectively). Besides involving administrations and stakeholders, politicians are an important group to have on-board. This was recognised in the Swedish case.
  8. A combination of instruments. Where some instruments are rather obvious or compulsory for the activity envisaged (eg permits, public consultation, EIA/ Environmental Impact Assessment), some instruments are specific for the coast and can help monitoring and support ICZM. Examples applied by some partners are: sustainability indicators for the coast, marine spatial plan and shoreline management plans. Coastal policies can become very complicated, the initiative of Noord-Holland to establish a one-stop-shop for all questions concerning water and coastal policy is a good example in supporting the stakeholders to find their way in the complexity of coastal policies and projects.

# Risky business

The focus in Work Package 5 has been on specific solutions and adaptive measures and at the same time combining the long term perspective with short term protection. WP5 aimed to contribute to sustainable development of coastal zones by the application of an approach that respects the limits of natural resources and ecosystems called 'ecosystem based approach'. Key words in this part of the project are awareness and impact of the expected effects of climate change. Effects such as sea level rise, and more often storms and following consequences with erosion call for actions. The partners in Work Package 5 have shared experiences for a good way to work with these issues in their daily practice.

The main aim of this work package has been identifying key issues on the following topics:

- ▶ Simulation and visualisation of storm and wave effects: development and testing (key issues, demonstration, communication tool and functional design)
- ▶ Assessment (overview and key issues) analysis assessments in relation to climate effects, Coastal Climate Impact Profile
- ▶ Challenge (Regional analysis). Anticipation to climate change in coastal area in a region and analysis of regional ICZM challenges in the light of climate change and key issues
- ▶ Coastal Towns (Risk analysis and key issues). Development and testing of instruments for inner-city development and sea level rise.
- ▶ Awareness (activities of plan implemented and monitored). Province of Noord-Holland; development, implementation and testing a communication strategy.

### Participants and cases

Four partners and one sub partner have each delivered case studies. The subjects for these case studies have been widely spread and concern very different aspects of dealing with the consequences of climate change.

- ▶ Noord-Holland, The Netherlands: seaside towns, protecting them and making them more attractive. Sea level rise is combined with coastal subsidence, therefore Coastal defense consists of beach nourishment.

- ▶ Fife Coast, Scotland: protecting 600 year old golf courses and urban areas. Soft engineering is the answer, go back to the natural beach and voluntary work is a good way of securing active involvement.
- ▶ Flanders: engineering and modeling of sea defenses in coastal towns. Combining beach nourishment and strengthening existing sea dykes.
- ▶ Region Zealand, Denmark: Regional analysis including valuation methods and protection of seaside towns, tourist areas and infrastructure.
- ▶ Slagelse Municipality:- Protection of seaside towns against flooding. Value Mapping has been carried out in order to prioritize economical values and solutions to the main problems.

### Subjects and products

During the project the partners have thoroughly discussed climate impact and risk awareness. We have assessed and developed the results of the pilot cases and visited pilot locations. We have helped each other in analyzing the usefulness of the pilot cases in relation to working with the 8 Integrated Coastal Zone Management (ICZM) principles in practice.

Soft engineering is part of the answer for most of the cases, but also a combination of hard engineering (dykes etc.) and beach replenishment are protection measures that seem most viable. All the cases showed that visualization

## EU principle of ICZM ②

*A long term perspective.  
Ensure that decisions taken  
today do not foreclose  
options for the future.*

of the problems faced, active involvement of stakeholders, crosscutting cooperation between authorities, scientific institutions, consultants and inhabitants are necessary tools which must be activated in order to reach solutions in the future.

### Results presented in an expert seminar

To wrap up Work Package 5 an expert seminar was organized at Korsør in Denmark on September 3rd 2013 named: 'International seminar on Climate Impact and Risk Awareness working together with Integrated Coastal Zone Management (ICZM) powered by the SUSCOD project.' The main contents of the final expert seminar where the debate and discussion on the following questions between international experts, WP-group members and invited guests. The discussion was video recorded and available on youtube.

The questions concerned:

- ▶ What do you see as the major challenges when it comes to working with a) Climate Impact and Risk Awareness, b) Creating basic understanding of climate change, and c) How local action is developed on the basis of expert knowledge on climate impact?
- ▶ It is obvious to link Climate Impact and Risk Awareness to Integrated Coastal Zone Management ('theory vs practice'). Which are the key challenges to be tackled - seen from your field of expertise?
- ▶ Is the ICZM Assistant an appropriate/useful instrument for assessing the future coastal development and the need for coastal protection?
- ▶ Which are the key advantages related to the practical application of ICZM?
- ▶ Can you highlight some good practice examples where the newest best available climate change/impact knowledge has been applied?
- ▶ Where do you see the biggest challenges/barriers concerning the translation of new (expert) knowledge into practical solutions/new and better practices?
- ▶ In which way can international cooperation contribute to local decisions-making processes in the field of ICZM?
- ▶ International coordination - across borders, in macro-regions etc. - regarding climate change in coastal areas seems to be important in the future. Which are the key challenges to be addressed?

### In conclusion

- ▶ There is a significant need for (better) coastal planning, and ICZM delivers an eminent approach.
- ▶ It remains a challenge to 'translate' results and knowledge from the research sphere into the policy sphere, i.e. decision making, planning and implementation.



- ▶ It is important to define - based on best available knowledge and national/regional/local priorities - what kind of efforts should be planned - coastal protection or coastal adaptation?
- ▶ It's important that all administrative levels and stakeholders work together.
- ▶ Like the long term plans for the energy sector - such as Energy 2050 - exist at EU and other administrative levels; it would be a good idea to elaborate similar policy instruments in the field of coastal protection/adaptation.

# Conception of concepts & strategies

Work Package 6 looks at how an integrated approach during project scoping helps to support the development of strong concepts and strategies. Partners in Work Package 6 agreed that the necessary first step in this activity was to define the terms 'concepts' and 'strategies' in order that a consistent approach was taken. In addition, it was important to agree what would be seen as successful 'integration' of these.

In the first meeting, the partners agreed the following definitions:

- ▶ Concept: 'A notion or statement of an idea expressing how something might be done or accomplished, that may lead to an accepted procedure.'
- ▶ Strategy: 'Plan of action to achieve a goal, meeting the needs and expectations of stakeholders, taking into account use of resources, processes and people using an adaptive management approach.'

## Method of project evaluation

In order to agree an approach to ensure 'integration', the Lead Partner for Work Package 6 explored options of using both the 8 ICZM principles and the 27 EU coastal sustainability indicators to measure the sustainable development of the coastal zone. Through discussion, partners agreed that the use of the 27 ICZM indicators would be too specific and detailed and would not provide sufficient direction to improve projectscope for all schemes. It was therefore agreed by partners that projects should be reviewed and scored against the 8 EU principles of Integrated Coastal Zone Management alone. The 8 principles can be found throughout this magazine and on [www.ICZMAssistant.eu](http://www.ICZMAssistant.eu).

## Overall integration

Scoring the individual projects against the 8 principles would provide an opportunity for partners to easily identify how successfully they had satisfied the ICZM principles for both

concepts and strategies. Through this process, it became clear that projects where scoring against the relevant principles was highest, integration was also strongest and **delivery the most effective**. Adopting this approach would make it easy for a coastal practitioner to clearly identify where delivery against certain principles was lacking, which would enable the concept and strategy to be reconsidered in order to strengthen these aspects and improve the overall integration of the project, as in Figure 1.

Figure 1

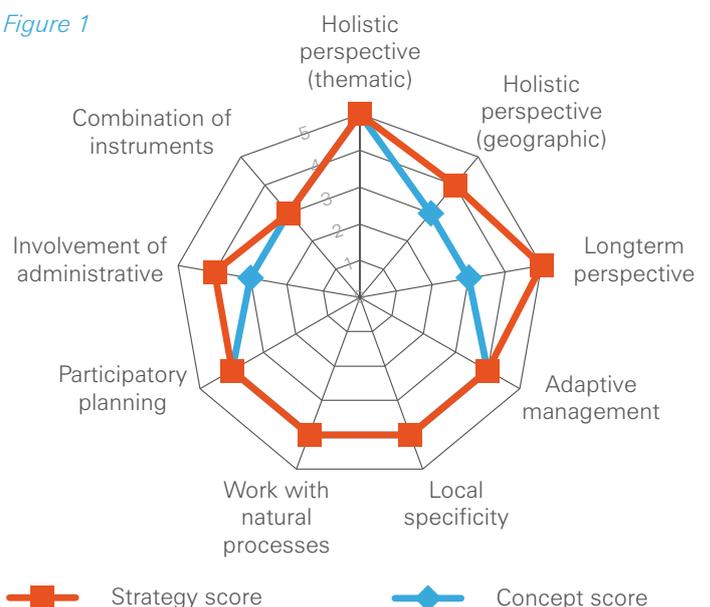
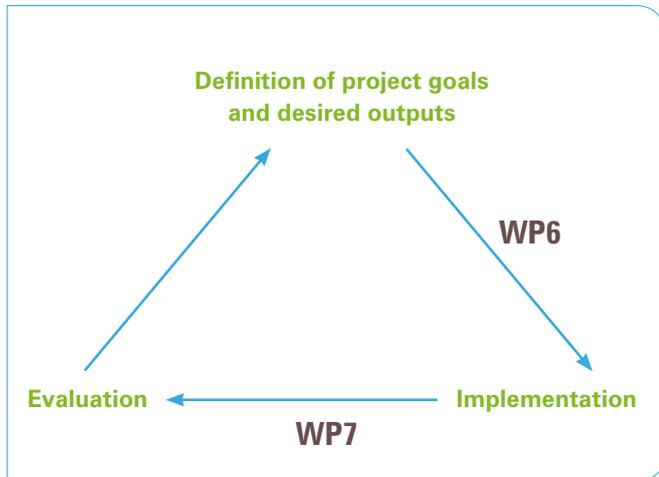


Figure 2



In some instances, it was decided that it was not possible to differentiate between concepts and strategies, so the decision was taken, in these cases, to provide one overall score for the indicator concerned.

### Review system

Due to the timescales of WP6 activity, it was not possible to carry out the evaluations during project concept and strategy development. However, reviewing projects once nearing completion and those already completed, the review system could be fully tested as low scores against particular principles could be shown to be directly related to poor deliverables in the final product. It was agreed by all partners however, that a peer review of projects (using the process developed) at initiation and through delivery, is vital to ensure strong project development and more integrated initiatives.

### Process

Meetings were held to discuss each of the partner projects relevant to WP6, as well as a few additional projects where it was thought they might benefit from the peer review. In depth discussion, followed by assessment against the ICZM principles, was the agreed process used to review and score the concepts and strategies developed by partners. At each meeting, two projects were presented and the rationale behind the initial concept and the process used for strategy development explained.

### Connection other Work Packages

WP6 feeds directly into WP7, as highlighted in Figure 2. The link with the 8 ICZM principles ensured consistency of approach with both WP3 and WP7 and retained a strong focus within the partnership of the importance of these 8 principles.

As the diagram highlights, learning from WP6 helps to scope and direct activity in WP7. Learning from the latter could then be fed back in to WP6 to ensure continued improvement as the project develops.

### Conclusions

It was agreed by partners that using the 8 ICZM principles to assess a project at concept stage was a useful way of ensuring that both the concepts and strategies incorporated a breadth of principles and that they consider all aspects of effective integrated coastal zone management. WP6 therefore recommended that this simple review process (either light touch or more in depth) be used from project initiation through to completion. A simple 'Quick Scan' for coastal practitioners to assess their projects in the light of the 8 ICZM principles, following a similar method to that noted above, can be found at [www.ICZMassistant.eu](http://www.ICZMassistant.eu) and a more in depth assessment is available, if required.

### Lessons learned

Following discussion on the specific WP6 projects, a number of key lessons learnt were identified.

- ▶ Writing of the brief: any brief written should be detailed and highlight the stages for discussion/liaison between the consultants and the tenderer throughout.
- ▶ Clarity is required around expected outcomes of the project at concept stage, agreed by all partners.
- ▶ Identification of desired outcomes: at concept stage, commitment from management should be secured that they will take forward the outcomes of the studies completed. Project strategies must be well integrated with existing administrative strategies in order to reduce duplication and encourage commitment from management.
- ▶ Communications: a clear communication strategy has to be agreed with the key stakeholders at concept stage. Strong communication is required with consultants (if used), to ensure that they are clear on the brief and are delivering to the requirements contained therein. Consultation regarding the proposed outcomes and process needs to be held with the relevant bodies from concept to completion.
- ▶ Project completion: following delivery of the strategy, or at the end of the project, a comparison should be made between the work delivered and the original brief. Any discrepancy should be tackled.
- ▶ Project payment: payment of consultants needs to be dependent upon delivery of specified outputs.

The above highlights some key conclusions, still the group felt that of greater significance was the agreement of a satisfactory method of project scoping that incorporates an examination of ICZM principles at planning stage to identify how projects could potentially benefit from a broader approach in order to give a more holistic and integrated project outcome.

# Do numbers tell the tale?

Measuring progress is a difficult thing. Especially when working with processes that cannot be measured by numbers. Work Package 7 focuses on the actual uptake and evaluation of the devised concepts & strategies under WP6. To grasp the progress made by partners on their implementation of ICZM, in depth discussions were needed. The State of the Art Inventory (WP3) analysed the state of ICZM in the participating partner regions with a concrete focus on the implementation in their case study areas. WP7 used this information as a baseline, from where progress could be measured.

The progress of the individual partners was discussed during regular meetings for the duration of the project. Per meeting, two to three partners were asked to present their cases, and elaborate on progress and problems they had encountered. This fed a fruitful discussion among the partners. Partners learned from each other's process and approach, and got valuable feedback in return. The meetings were often combined with a meeting of work package 6, on 'Integrated Concepts and Strategies'. In the projects opinion, one should follow the other. Whereas WP6 focusses on the definition of goals, concepts and strategies, WP7 focusses on the actual uptake and evaluation of the devised strategies under WP6. It's a cyclical process, where adaption can be aided via a learning process (WP7) – accepting that situations do change and changes of strategies (WP6) can be necessary.

### Conclusions

Consistent with the approach in WP3, the eight ICZM principles were used to guide the discussions. In addition, three detailed studies on specific case study challenges have been made by the partners of Fife, Sjealland and Bohuslän. All the results can be found at [www.iczmassistant.eu](http://www.iczmassistant.eu).

1. Overall perspective. Implementing the strategies using an overall perspective proves to be difficult for all partners. The main explanation for this can be found in the fact that all organisations have their own responsibility and their own budget. Even though often the willingness of the involved parties is there to cooperate, funding and political backing is difficult. This results in parties focussing on their specific area of interest, all other issues are circumstantial and not a priority (just the legal obligations are). This prevents the uptake and creating of a true overall perspective as meant in this ICZM principle. Solutions can be found in actively applying the principles 'natural processes', 'involving all parties' and 'support and involvement of all relevant administrative bodies'. This can strengthen the cooperation, and perhaps show the different parties that there are cross benefits to using an integrated approach when planning for those issues they are obliged to handle.
2. Long-term perspective. Working with a long-term perspective has been applied differently throughout the partnership. A most common difficulty was about the tangibility of the plans. For many people, working on an abstract time scale presents difficulties. A proposed



### EU principle of ICZM 3

***Adaptive management during a gradual process. Integrated planning and management is a process that develops and evolves – good information provision is basis.***

solution could be to work with plans on different scales: one long term plan (200 years) and several more adaptive 'short' term plans (i.e. maximum of 30 to 50 years, 'a lifetime'). In that way it is clear to everyone how the short term plans feed into the long term plan, and what that long term plan and goals should be.

3. Adaptive management. Most partners apply adaptive management. Often this is a legal obligation, but also the cyclical approach of using short term plans ensure that plans are regularly updated. The sound scientific basis that should be used is not always present. This can be caused by the problem of funding and the availability of data. Scientific data are not always easy to get by, or too expensive. (Scientific) research carried out by public funding of other parties in some instances are not publically unavailable, even though they have been paid by public funding in the first place.
4. Local specificity. The projects executed under SUSCOD all focussed on local projects, therefore local specificity was taken into account by all partners. As stated in the State of the Art Inventory: 'local specificity, a natural thing to do'.
5. Working with natural processes. As indicated in the State of the Art Inventory this was perceived very differently by different partners. When working with embedding natural processes in a non-natural process it seems having legal obligations was paramount in the ability to work with these processes. Often it is understood as 'a given fact' : either you suffer from coastal erosion or you don't, either the waves will flood your coast or they won't. How to actually apply this principle remains a challenge.
6. Involving all parties. This principle touched the core of the SUSCOD project, together with principles 1, 2 and 7. Stakeholder involvement is considered very important, if not essential, by most partners. The classical top-down approach has been used by many partners, although things do have changed (meeting frequency, focal points, bottom-up). Getting the right people involved is a challenge some partners encountered. Keeping your stakeholders informed and involved is a concern most partners had. How do you ensure the people stay active even when your project has finished? How about funding? It helps when you have a high profile; a senior and/or very engaged person to keep non-professional stakeholders going. The stakeholders should feel appreciated and useful. The project should be visibly backed-up by the responsible organisations.
7. Involvement of relevant administrative bodies. Most relevant administrative bodies have been involved from the start. A very useful suggestion was made by one of the partners to always include the political opposition. As you never know who is in charge after the next election.
8. Combination of instruments. The partners learned from each other's instruments and how to apply those. As can be seen throughout the project, the suggestions given by the state of the art inventory have been acted upon. For most partners it remains a case if pure logic to base your strategies and plans of actions on more than one source, the same applies when trying to get people involved: you should fit the means to an aim.

# Support is key

The aim of WP 8 was to develop a better understanding on the need for stakeholder involvement in ICZM in the North Sea Region, to look at how it is practiced in partner regions, to test methodologies in pilot projects, to share the results, and to help ICZM practitioners by including key information in the ICZM Assistant.

'Stakeholder Involvement' is a major theme of the Work Packages in SUSCOD. It is also a theme in many EU funded projects. But what do we mean by Stakeholder Involvement? For many, the word 'Stakeholder' is synonymous with 'Public'. That is, stakeholder involvement is taken to mean how institutions such as government agencies relate to the general public in their activities, for example in routine information and consultation procedures.

### Stakeholder involvement and SUSCOD

In SUSCOD the term 'stakeholder' is defined much more broadly to include all of those organisations, businesses, groups and individuals involved in, or concerned with, a particular activity, project or policy and where their active participation can lead to consensus on a course of action in accordance with ICZM principles. In SUSCOD, the approach combines the two principles set out in the box below. This

#### EU ICZM Principles

##### Support and involvement of all stakeholders.

Involving all the parties concerned (economic and social partners, the organisations representing coastal zone residents, non-governmental organisations and the business sector) in the management process, for example by means of agreements and based on shared responsibility

**Participatory approach.** Support and involvement of relevant administrative bodies at national, regional and local level between which appropriate links should be established or maintained with the aim of improved coordination of the various existing policies.

approach is in line with current thinking which takes its departure from the most elemental level of engagement and aims to give all stakeholders an active role and meaningful role through partnership working.

### Process

The WP 8 process involved several steps:

- ▶ developing of an understanding of the regional context, and traditions for stakeholder involvement. This included developing an understanding of the statutory framework, policy and guidance; lead agencies and organisations, available resources (institutional support, human and financial resources); examples of previous practices; expressed interest in improving stakeholder participation, and political support. Sources were primarily in English and some documents were translated. Information was gained from a review of concurrent or past EU funded projects where stakeholder involvement was a key issue.
- ▶ visiting each region to learn about stakeholder involvement and its objectives and context with follow-up discussions
- ▶ participating in key conferences, e.g. the OURCOAST Stakeholders Conference, Riga, Latvia, October 2011, and the LIFEscape 'Stakeholder participation' Conference, Korsør, Denmark, May 2012. These were invaluable in developing networks of practitioners and exchanging information with other North Sea projects to be included in the ICZM Assistant.



- ▶ The fourth step in the process consisted of presentations, field visits, and discussions during SUSCOD partnership meetings. This provided a detailed overview of work in each region, and an opportunity to share experiences and follow progress.
- ▶ The final step involved the preparation of a detailed questionnaire by the WP 8 partners on their experiences with stakeholder involvement in the pilot projects. The completed questionnaires were analysed by the WP coordinator. They form a key part of the final report.

### About the process

It would have been possible to undertake WP 8 by focussing only on the diverse range of activities carried out in the SUSCOD project. This would have been simpler but would have given an uneven and fragmented picture of how SUSCOD activities can contribute to advancing the project aims in the North Sea Region, and in providing the ICZM Assistant with a coherent body of useful information. As a result of the SUSCOD project we now have a much better appreciation of advances in this area, the challenges to be overcome, and the 'direction of travel' in each region. The WP 8 report can form a useful basis for future work in this key area. In future projects it would be valuable for partners to personally experience stakeholder involvement activities in the other regions to gain a first-hand appreciation of the process. Language and nomenclature is, of course, an issue but partners can get invaluable impressions and ideas that cannot be obtained only from minutes or progress reports.

### Ambitious commitment

Particularly striking was the enthusiasm and total commitment of the SUSCOD partners in carrying out their pilot projects. Bringing stakeholders together in a forum, a partnership or a fair, and organising events and meetings – often on a frequent basis - is very challenging. Without exception all partners organised and successfully ran an ambitious range of activities which would not have been possible without the support of the North Sea Region

### Programme

Stakeholder involvement was a new departure for some government agencies so this could be seen as a big step forward. In other regions there are already sophisticated procedures for involving stakeholders, backed by government policy, procedures and funding. Some approaches seem to be working well but their sustainability is dependent on funding beyond the life of the project. There are many challenges to overcome – raising and meeting stakeholder expectations, stakeholder fatigue, over reliance on technology, connecting to a broad demographic, demonstrating the cost-effectiveness of resource intensive activities, and delivering meaningful results with a clear path to decision making. One of the major challenges is in presenting engineering and technical models to the public in a meaningful way. Computer visualisations appeal to a wide audience but developing them may be beyond the remit of the laboratories and universities concerned.

### In conclusion

The results of WP8 give a clear demonstration of the need to employ a range of techniques to engage with stakeholders, on how to time activities to best effect, on how to use resources efficiently and effectively, and in being SMART.

# The ICZM Assistant

One of the SUSCOD goals was creating a practical tool for implementing integrated and sustainable development strategies following the 8 ICZM principles. This goal was converted into the most visible result of the SUSCOD project: [www.iczmassistant.eu](http://www.iczmassistant.eu). Within the easily accessible and user-friendly ICZM Assistant you can share and acquire knowledge and experiences from other (similar) coastal projects around Europe.

### For whom?

The tool aims especially at (supporting) project leaders, policy makers and water professionals to integrate the ICZM principles in developing projects and plans, and therefore to achieve practical solutions that ensure integrated and sustainable social, economic and environmental development. Using the ICZM Assistant is also recommended to NGO's, engineering or consulting companies and interested citizens.



### Knowledge exchange

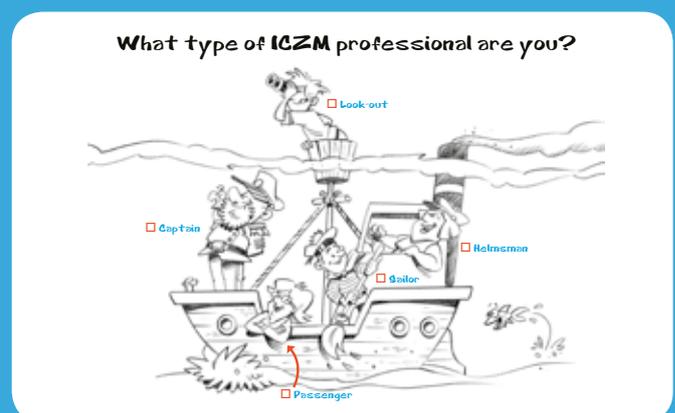
The website [www.iczmassistant.eu](http://www.iczmassistant.eu) offers a database filled with information about vital coasts and an online community with relevant 'colleagues'. A registered member of the Assistant has access to all functionalities, which links them to relevant information and relevant people. Besides that, every member can upload documents, websites and case studies from their own practice into the Assistant too. In this way we can learn from each other.

### ICZM proof?

The database is also linked to the ICZM Quick scan and the ICZM Assessment. Two different questionnaires, that you can fill out to see where you or your project stand on integrated coastal zone management.

### ICZM Quick Scan

The quick scan is a brief questionnaire to get the goals of ICZM across in a way that is fun and easy. After answering ten illustrated questions, the tool shows you what kind of ICZM type you are and what you might need to improve to get even more ICZM experienced.



### ICZM Assessment

This extensive test gives you customised information on how to improve your project or policy and how to apply the eight principles of ICZM. With a list of questions, the ICZM Assessment identifies the strengths and weaknesses of your initiative and guides you in showing helpful case studies, documents, web links and people that will help your project become even more ICZM proof.

# ICZM, the principles explained

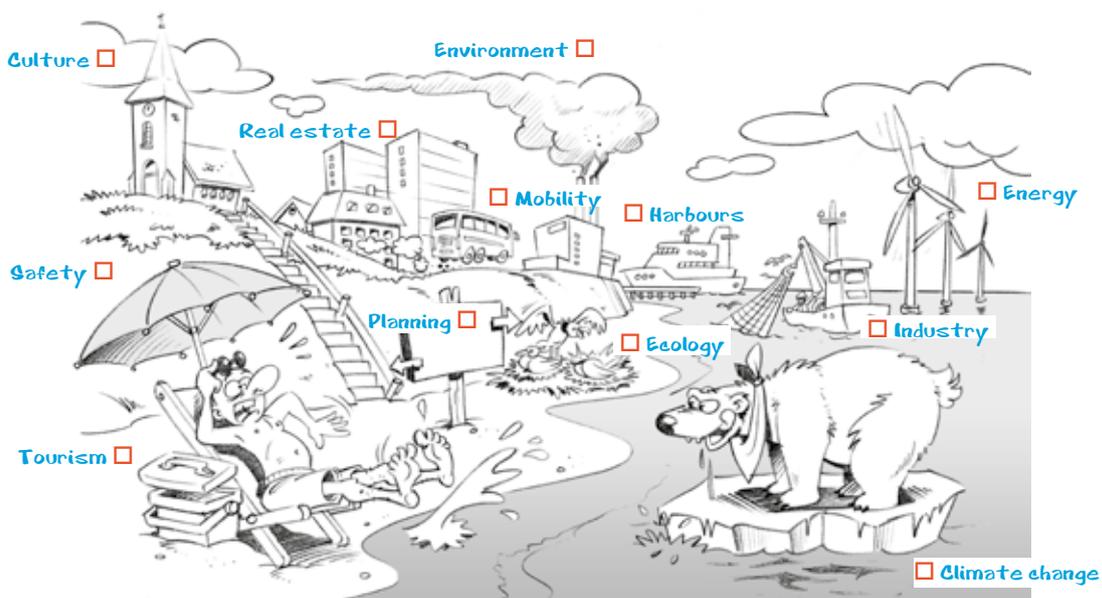
In May 2002 the EU Council and Parliament adopted eight principles of good Integrated Coastal Zone Management (ICZM):

1. A broad 'holistic' perspective, both thematically as well as geographically
2. A long term perspective: ensure that decisions taken today do not foreclose options in the future
3. Adaptive management during a gradual process.  
Integrated planning and management is a process that develops and evolves – good information provision is basis
4. Reflect local specificity
5. Work with natural processes
6. Participatory planning
7. Support & involvement of all relevant administrative bodies
8. Use of a combination of instruments

## Why ICZM principles?

Over the long-term the use of coastal resources will continuously be increasing, therefore the need for coordination and integration of environmental, economic, social, cultural and recreational objectives becomes more and more necessary. The ICZM principles offer a framework which covers the full cycle of information collection, planning (technical and financial), decision making, management and monitoring of implementation. ICZM is a process coastal professionals can use in their profession taking into account all aspects of the coastal zone in an attempt to achieve sustainability.

## What are the relevant themes for your work?



# Ten Golden Tips

1

## Create a solid knowledge base as a starting point

Commonly shared evidence and scientific knowledge base of the working of natural processes and understanding the impact and consequences of measures on the economic, social and ecologic systems, is the starting point and a solid ground for developing shared visions and plans with all parties involved. This base should be elaborated by multi-disciplinary research.

2

## Use the power of hands-on local communities (volunteers)

Make, as a public agent/ authority use of volunteer networks because they can help to maximize the involvement of local communities in managing and restoration of the coastline.



3

## Set up a Taskforce to connect different governmental levels

A Taskforce, supported by a secretariat and maybe initiated nationally, creates an informal connection between governmental levels, to work together in an unofficial way with closed meetings, anonymity and freedom to explore other, out-of-the-box, points of view that can be included in the process.

4

## Focus immediately on long-term financing structures

Next to developing a long-term plan, also develop long-term financing options. Allocate budgets for the following 15 to 25 years today. Without finance there is nothing.

5

## Use appealing visual means to explain your message to the public

Use appealing methods like visualisations, games, films and simple models to translate and spread (scientific) knowledge to a wider audience.



6

## Understand cultural differences to assure your solutions will be tailor made

Transcend cultural differences to understand the rationale, attitude, behaviour and statements made by the partners. In this way, you will benefit from solutions that already were applied elsewhere, while tailoring these for your own specific coastal context.

7

## Welcome and invite the opposition to participate

Involve the opposition: include all political parties at an early stage in your planning process, because, in due time they might be the political majority. Incorporate other existing initiatives or vision-groups on the same issue in the process for the same reasons.

8

## Make use of local knowledge, experiences and gain their insights.

Learn from implemented solutions elsewhere and knowledge and insights of local communities. Engage with local stakeholders and experts into dialogue about situations, characteristics, cause and effect, approaches, methods and techniques used elsewhere. See the implementation live on a site visit. In this way, you can gain insight in the particularities and details of the implemented solutions and processes to improve your measures and solutions.

9

## Involve statutory partners as early as possible

Engage with Statutory Partners as early as possible in the thinking and planning process - this will ensure that problem areas will come out sooner rather than later.

10

## Embrace unusual and new working methods if necessary

Be open to unusual working structures, methods and combinations that are not yet thought of, e.g. via a think-tank. This can help you to facilitate or speed up the process.





# From ideas to action plan in North Bohuslän

The five municipalities of North Bohuslän in Sweden, joined the SUSCOD project to continue the efforts of developing the coast and hinterland in a sustainable way. The municipalities are small, but by working together the local issues can be raised to a regional and national level. A common action plan gives the municipalities the opportunity to make long-term political decisions based upon the principles of ICZM.

The basis for SUSCOD's case studies in the municipalities is the common strategy document that represents the overall conclusions of the coastal zone management and rural development project. The chairmen and the opposition of the municipalities, who together form the steering group for the organisation 'Growth of Bohuslän' (Tillväxt Bohuslän), came to an agreement in the autumn of 2009. The SUSCOD project has been focusing on developing an action plan based on this agreement. The action plan consists of a list of concrete projects.

## Survey

There are about as many seasonal as permanent residents in the north of Bohuslän. A survey conducted among second home owners showed that many second home owners are engaged in associations (including business associations) in northern Bohuslän. Some of them could even see themselves and their company move to this region in the future. The survey also showed the politicians that northern Bohuslän in potential could attract more permanent inhabitants. Some of the inevitable questions now became: what exactly could convince the second home owners to actually become permanent inhabitants?

## 'Living Bohuslän' fair

Inspired by the survey and from the situation in the north of Bohuslän (too much part time population), the idea came up of organizing an annual fair in the surroundings to convince the second home owners and tourists to move to this region permanently. The fair programme included inspiring short seminars by entrepreneurs, scientists, artists, and residents. All with the common background of living and working in the area.

## Knowledge exchange day

Since housing is a difficult issue in the north of Bohuslän, the municipalities decided to invite different stakeholders to a knowledge exchange day. Questions such as: 'what are the means to create a living in northern Bohuslän?' were discussed. A lot of important issues were raised and discussed by various parties, both on a national legislation level as well as by the local building co-pays and estate agents.

## Evaluation of detailed plans

In this project municipality development plans were evaluated. All five municipalities aim to build houses for permanent residents, but they don't know what type of planning actually would result in increasing the number of permanent residents. The case study aimed to investigate, for example, if the municipalities had a planning instrument to create all year resident areas. Questions to be addressed included: 'Which areas actually became all-year resident neighbourhoods and why?' 'Has the permanent status of a neighbourhood affected the houses becoming all year residences?' The final report was published in February 2013.

## Joint policy for visitor accommodation and camping

The five municipalities have been working on a joint policy for visitor accommodation and camping facilities. In August 2011, camping owners, county administrators, the municipalities and other parties in the field, met informally to discuss the conflicting interests within the development of camping facilities and preserving the coastline.



# Everyone wants a piece of Wenduine

Wenduine (De Haan) is renowned for its touristic activities and draws tourists from all over Europe. The community of Wenduine is part of the larger coastal town of De Haan. Wenduine is a part of the Integrated Master plan for Future Coastal Safety. This city is one of Belgiums targeted areas and therefore a pilot project in SUSCOD.

## Various stakeholders

Along the 1.4 kilometre long stretch of coastline many stakeholders have direct interests in the beach and sea wall. Not only people who enjoy the sea shore like inhabitants and tourists. But also stakeholders who have an economic interest in Wenduine such as (small) businesses in the tourist industry like hotels, renting out of cottages, cafés and restaurants.

## Sand nourishments and walls

In order to effectively protect the city for future flooding, protective measures are needed. These include beach nourishments and the placing of a wall on top of the currently existing dike.



# Delivering the goods in Zeebrugge

Zeebrugge is one of the four harbours of Belgium: Gent, Oostende, Zeebrugge and Antwerp. The harbour of Zeebrugge is the second largest harbour in Belgium. It is home to a long range of goods and services: bulk carriers, roll-on-roll-off cargo, gas and LNG, and so on. Zeebrugge also hosts a fishing harbour, ferry services to Great-Britain, a marina and a naval base.

## Weak link

As a part of the Integrated Master plan for Future Coastal Safety the harbour of Zeebrugge is identified as one of the weak links along the Belgian coast. Zeebrugge is part of the larger city of Bruges.

## Storm barriers

To sufficiently protect the harbour of Zeebrugge, protective storm barriers (walls) will be constructed. One specific stretch of existing slope will be redesigned to make it erosion resistant. The protection works are being executed by the Coastal Division of the Flemish ministry for Mobility and Public Works.

## Integrated approach

Since these measures will be constructed in an area which has several public functions - economic, recreational, living environment, etc - these storm surge barriers should be designed in such a way it takes into account the societal impact the measures could have.





# ID'ing the seaside towns of Noord-Holland

The Identity of Seaside Towns project is an initiative of the Province of Noord-Holland which aims at strengthening the economy and urban quality of seaside towns along the North Sea coast of Province of Noord-Holland. Aim is to improve the competitiveness of the seaside towns and the North Sea Coast as a tourist destination.

The project started with two pilot projects in separate coastal towns and a broad cultural and communicative process in which all coastal towns are invited to participate. It is this broad cultural process that we want to share with SUSCOD, regarding the direct link to stakeholder involvement and awareness of climate change.

## Identity Matching

Firstly we created awareness to get the coastal towns to open up for discussion on their identity. We used studies, research, exhibitions, artists in residence, story pavilions etc.

Secondly we decided to focus on the development of profiles. In order to get these profiles we use the Identity Matching method, which consist of four phases. In our project we focus mainly on the first phase: (1) defining the identities of 15 seaside towns and their core values (DNA research). In the second phase (2) of the Identity Matching method, seaside towns define their marketing landscape (including social and economic targets). Finally it is up to each coastal municipality to focus on the last two phases (strategies & concepts and marketing & communications).



## EU principle of ICZM 6

### *Participatory planning*



#### **Results**

Aim is to have all the profiles ready by the start of 2014, including the total North Sea coast profile of Province of Noord-Holland.

This method offers both an effective seduction strategy and a practical way of operating. Strategy and implementation go hand in hand, because only an effective use of means will lead to success.

#### **Link to Delta Programme**

At the same time we did some long term exploring on urban planning, coastal safety and economic development in the Coastal Quality Studio (Atelier Kustkwaliteit).

This serial of workshops spread over two years focused on developing, designing, broadening, circulating and

discussing new ideas for the safety and spatial quality of the Dutch coast. Coastal Quality Studio was related to the national Delta Programme, which elaborates a National Coastal Vision for the long term perspective (2050-2100), published in September 2013.

#### **Participation**

In both the Identity Matching method and the long term exploring approach of Coastal Quality Studio, the involvement of stakeholders is crucial for the project and depends on the participation and input of other parties. We work closely together with a lot of stakeholders: e.g. local authorities, administrators, entrepreneurs, residents, landowners, environment agencies and water boards.





# Coast of opportunities: Lolland

Lolland municipality in Denmark is characterized by a flat and low-lying landscape, with a 300 km coastline. Although approximately one third of the area is below sea level, agriculture is intensive in the area, not least due to several pumping stations that continuously drain the fields behind dykes. The largest dyke is 70 km in length, and goes along the south coast from the town of Nakskov to the bird sanctuary of Hyllekrog. It was built in the 1870 after a big flooding. A biking route has been established on top of the dyke, and offers fantastic views and experiences for the users. Large Natura 2000 areas are found along the south coast.

The town and harbour of Rødby on the south coast is a main center of the local tourist industry, with hotels, a resort and summer houses. The ferry link to Puttgarden in Germany operates from here, and it is also the place where the new tunnel under Femern Belt is being constructed. The coastline around the harbor of Rødby will change some due to this large project, and opportunities for new recreational nature along the coast will arise.

## Positive change

The future rise in sea level is expected to be of some 40 cm at Rødby in 2060. The Municipality of Lolland is facing the adaptation to climate change in a positive way, and does not necessarily see the future climate as a threat, but also with a wealth of opportunities. The coming link to Germany will bring potential for new development, but they will have to be pursued with realism. The development of new settlements, the tourist industry, the climate industry, and the insurance that agricultural land can be farmed in the future, are all among several challenges in the future.

## Matter of perspective

The SUSCOD project has been a success, giving the municipality the opportunity to look at the coastal defence of the south coast of Lolland in a new way. The coming tunnel to Germany has been an important input to the discussion of the future defense of the coast. There is time to develop long term solutions on climate adaptation, while the existing dykes and pumping systems protect the coast in the near future.

## Integrated view

The project has shown that the south coast of Lolland and the hinterland is not just a 'dull' low lying coast with a long protective dyke, and sum. The development scenarios for southern Lolland – the 'coast of opportunities' -, contain the following highlights; natural regulation of the coast, beach nourishment, new forest, new regulation of drainage with new lakes and meadows, new recreation and tourist facilities, international beach park, as well as the opportunity for recycling of surplus soil from the Femern Belt tunnel construction.



# Inner city flooding in Slagelse

The municipality of Slagelse in Denmark is a sub partner in the SUSCOD project by invitation of the Region Zealand. The main partner Zealand invited three municipalities with different challenges concerning flood-risk due to climate change and sea level rise.

Slagelse has a coastline of 180 kilometres long and therefore has a great interest in maintaining and developing a vital coast line. In 2006 there was a flood at 2 metres above normal sea level, whereas the tide normally does not exceed 0,25 m. The Flood Insurance (Stormrådet) received 605 reports and they paid 8 million to homeowners in Slagelse.

## Cross-section work group

The main contribution to the SUSCOD project from Slagelse is how to deal with flood risk management in an inner city environment with many stakeholders, both public and private. We set up a cross-section working group. The purpose was to improve flood risk management in such a way that it would better meet the ICZM principles.

## Value Based Mapping

To improve the fundament for future work with emergency preparedness, coastal protection and spatial planning in major inner cities, we have developed Value Based Mapping to be able to prioritize the actions needed when there is a flood.

This includes both material and immaterial values:

- ▶ Price of the houses
- ▶ Number of citizens
- ▶ Number of working places
- ▶ Nature quality
- ▶ Landscape value
- ▶ Value setting of urban and cultural environments
- ▶ Value setting of culture and recreational areas



## Results

- ▶ With the tool Value Based Mapping to improve the platform for the future decisions in coastal zone management.
- ▶ Cross-section works in the municipality will enhance the level of internal knowledge and understanding.
- ▶ Share and experience from other activities in the SUSCOD project - both national and international.
- ▶ Contribute to the interregional understanding for Integrated Coastal Zone Management.



# Integrated policy making in Odsherred

A significant part of the economic basis of Odsherred in Denmark can be attributed to the revenue from 25.000 holiday homes on one third of the 168 km long coast line. Therefore, it is of vital importance to maintain the basis on which the holiday and recreation demand rests. The areas were originally rural marginal land with an elevation close to sea level, low topography (moor/meadow/bog) and surface near groundwater table.

Many of the areas experience flooding risks either directly from the sea or from precipitation due to poor drainage. This project/ study had a focus on flooding along the coast line of western Odsherred and its impact on the tourism industry in the area. The aim of SUSCOD within this project was to complement the flood legislation with a tool that can improve the municipalities' work with preventive measures in the coastal areas.

## Mapping flooding risks

The Floods Directive requires Member States to engage their government departments, agencies and other bodies to draw up a Preliminary Flood Risk Assessment. On this basis Flood Risk Management Plans can be produced to indicate to policy makers, developers, and the public the nature of the risk and the measures proposed to manage these risks. Flood risk management plans shall take into account the relevant environmental objectives of the Water Framework Directive (integration). The Floods Directive has now been partially implemented in Danish legislation and is just a planning tool to control flood risks in a few areas. Implementing legislation is assessed not to cause any noticeable change in local protection efforts.

## Whose responsibility?

According to the sectoral legislation (particular the Coastal Protection Act and the Watercourse Act), the private landowners have to implement and fund the protection activities themselves. The floods legislation does not change the present options and leaves the implementing legislation

with two primary issues that should be clarified before the authorities can act appropriately: 1. Institutional issues - who does what and how? and 2. Clarification of ambition.

## Increasing knowledge

Assuming that decision makers must make decisions on an informed basis, it can be argued that there is a lack of knowledge about how the socio-economic costs of a given project are estimated. A socioeconomic analysis is considered to be an excellent management tool, i.e. clarification of both costs and benefits of a project including synergies with the water planning. The assumption is that all non-marketable goods (and costs) can be priced. E.g. what is the value of (a) a coast without human impact contra coast protection? (b) a wetland (nitrate removal, biodiversity, heritage protection) contra the yield? Local politicians (and officials) are not trained to handle these issues on an objective basis. It can be argued that neither are the 'professionals'.

## Checklist

The project was thought to be evolved in two steps.

- ▶ Step 1 - Determining what factors should be clarified in order to ensure policy making on an informed basis. Including (a) coordination with water planning and (b) preparation of an economic analysis. Drawing up a 'checklist' was proposed.
- ▶ Step 2 - Demonstration and testing the checklist in a case study.

## EU principle of ICZM 7

***Support & involvement of all relevant administrative bodies.***

The consultancy company Orbicon carried out the task and made the report 'Odsherred Komm - ICZM Odsherred'. The overall conclusion was: *"Due to the time limits of this paper only a few socio-economic benefits are included and the list of parameters that could be included is long."* Integration with the water planning and the floods directive was ignored.

### **Outcome**

The outcome of this project unfortunately does not leave any new or useful knowledge about developing a checklist to coordinate water planning and flood protection. The same goes for determining what factors should be clarified in order to make policy making on an informed basis, which was the overall aim of the this project.





# Partnership and protection in St. Andrews

The West Sands in St. Andrews forms part of a world - iconic landscape and a diverse coastal ecosystem. The challenge is to ensure that this international destination continues to be well planned and managed sustainably. Competing pressures from a variety of users will increase as visitor numbers grow, demographics change and interests shift.



The area is also confronted with an immediate and growing threat – the effects of climate change. The West Sands are highly vulnerable to flooding and coastal erosion. On March 31, 2010, a storm surge destroyed parts of the dune system, flooded parts of the golf courses and eroded a closed landfill.

## **Fife Coast and Countryside Trust**

Coastal erosion and flooding are priority issues for the eight North Sea countries, – concerns made more urgent as high-value coastal areas are increasingly threatened by sea level rise and other effects of climate change. Fife Coast and Countryside Trust is the Scottish partner in the EU North Sea Region SUSCOD Project. N.E. Fife was selected as a SUSCOD project area and offers the opportunity to address long-standing issues in coastal zone management in a highly vulnerable area. These include the need for a long-term, sustainable management plan for the West Sands, and the protection and management of the closed landfill.

## **A Major Step Forward**

The plan was approved by Fife Council in January 2012 and is now being implemented. The main reason for its success was the partnership approach to its development, and the willingness of the partners to cooperate and reach consensus in dealing with difficult issues. The Chair of the West Sands Partnership is an elected member of Fife Council. This proved key to moving the plan to formal approval. At the outset there was consensus on the planning approach – styled on a global standard for conservation management plans – and the explicit recognition of ICZM principles. The partnership recognized the need to tackle local issues such as dune erosion in the larger context of a regional ecosystem – a Natura 2000 site.

## **Communications**

The partnership used several approaches to communicating with the public – town hall meetings, newspaper articles, conferences, workshops and science fairs – but the most effective approach was to undertake a demonstration project. This involved restoring part of the degraded dune system by creating a new dune, stabilizing it with native grasses and removing invasive plants. Volunteers continue to make a valuable contribution to this work.

## EU principle of ICZM 8

*Use of a combination of instruments.*



*Dune restoration project*



### Working together

Apart from sustaining work on restoring the dunes, the partnership persuaded the many recreational interests on the West Sands to work together to ensure that all users can use the beach with mutual respect and consideration. A West Sands Users Group has been formally constituted and meets regularly. This has proven to be a much better solution than to introduce bye-laws and enforcement procedures. A cost-effective solution was finally agreed to manage the eroding landfill and, like everything else in tight economic times, awaits funding for its implementation.

### Next Steps

Now that the plan has been adopted by Fife Council and key agencies, and enjoys broad public support, the next step is the development and monitoring of a management scheme for the Firth of Tay – Eden Estuary Natura 2000 site and surrounding area. This will require the constitution of a new and broader partnership with links to existing and future structures such as the proposed marine planning partnership and the development of regional marine plans. It will be a challenging but very worthwhile task, hopefully assisted by agreement on the future of ICZM in the EU.

### Fife Landscape Explorer = FLEX

Written plans are a necessary part of the development process but are of limited interest to many stakeholders, and they may be soon forgotten by all except those that work with them on a daily basis. How then can we communicate the challenges of planning for an area such as the West Sands to a larger audience in an effective way? Fife Coast and Countryside Trust is working with the University of Abertay to develop an interactive, 3D computerized simulation of the area. The visualization is known as FLEX: Fife Landscape Explorer.



*FLEX: Fife Landscape Explorer*



# Waterfront Zoning Strategy in Harwich

In late 2009, Essex County Council commissioned Marina Projects to undertake a marina study to review the potential for establishing a leisure marina at Harwich, taking account of a range of market and local factors and furthermore to select the optimum location for the marina.

The outcome of the initial marina study concluded that a site known as 'the NavYard' is the preferred location for the development of a modern day marina, not least because of the potential the site offers to deliver a marina of the required scale in the most accessible and appropriate environment and the opportunity the site offers to establish strong and direct links with Harwich Old Town. However, this site is currently not available and alternative zones were therefore requested.

## Alignment with ICZM

The Coastal Renaissance Partnership Board is keen to pursue the wider regeneration initiatives for the area including the establishment of enhanced marine leisure activities aligned to tourism and the Integrated Coastal Zone

Management programme. It is for this reason that Marina Projects was commissioned to undertake a specific study of the Zone 4 site to identify the potential for delivering a meaningful marine leisure offer in the short to medium term that will add benefit and support the Coastal Renaissance Board's aims and objectives.

## Global crisis

With the onset of the recession, the proposed marina development has not been taken forward, due to financial constraints for both the public and private sectors. However, the documents are available for future reference, when the market picks back up. The study has also proved useful in identifying the wider needs and opportunities in the area.



*Harwich public realm, September 2011*



*Harwich beach*

# Standing the test of time



It was the end of 2012 when I became project leader of the SUSCOD project. I entered a project where the partners already had been working hard for a couple of years. The pilot projects of the partner countries had started and the activities for the project itself were in full swing. It was all about sharing knowledge on how to implement the 8 Integrated Coastal Zone Management principles to make better use of the opportunities the coast has to offer.

In my opinion we really succeeded in doing so. The web based tool [www.ICZMAssistant.eu](http://www.ICZMAssistant.eu) is extensively filled with the results of the project. Information which is ready to use for every coastal professional seeking to bring more ICZM into his/her own practice. This brings us all closer to an integrated, sustainable, social and economical development of our coasts.

DG Environment enthusiastically welcomed the ICZM Assistant, which resulted in the adoption of 'our' Assistant into OURCOAST. In this way our efforts will keep on reaching the coastal professionals. An achievement we can all be proud of! My wish for the future is not only to make the ICZM Assistant and our network stand the test of time but – and above all – maintain and develop a safe sustainable and beautiful coast. I want to thank all parties involved for the pleasant cooperation, and for their dedication and hard work. For me this has been a great and valuable SUSCOD period. Thank you all!

Lillian Bernhardi

*Project leader SUSCOD  
Province of Noord-Holland*

## Colophon

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[www.ICZMassistant.eu](http://www.ICZMassistant.eu)

**“The ICZM principles work! They provide a checklist to evaluate your own project. However, it is still down to the project officials and the responsible authority to apply the principles effectively and honestly”.**

*Kathy Belpaeme - Coordinator, Coordination centre for ICZM in Belgium*

**“Being in a partnership like SUSCOD allows us to look at solutions we might not otherwise have thought of. Learning from others experience is a great and efficient way to work”**

*Amanda McFarlane - Chief Executive of Fife Coast and Countryside Trust*

**“SUSCOD has partnership working and best practice sharing at its heart. There is such a breadth of information across the partners which is only accessible at such a depth through European cooperation. The ICZM assistant will help ensure that this transnational information sharing remains strong.”**

*Hilary Rowlands - Regeneration Manager, Essex County Council, England*

**“Thanks to the SUSCOD project we could implement new methods to work on coastal development. SUSCOD = gaining insights, share inspiration and adding a new network!”**

*Martijn Vos - project manager, Province of Noord-Holland, The Netherlands*

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