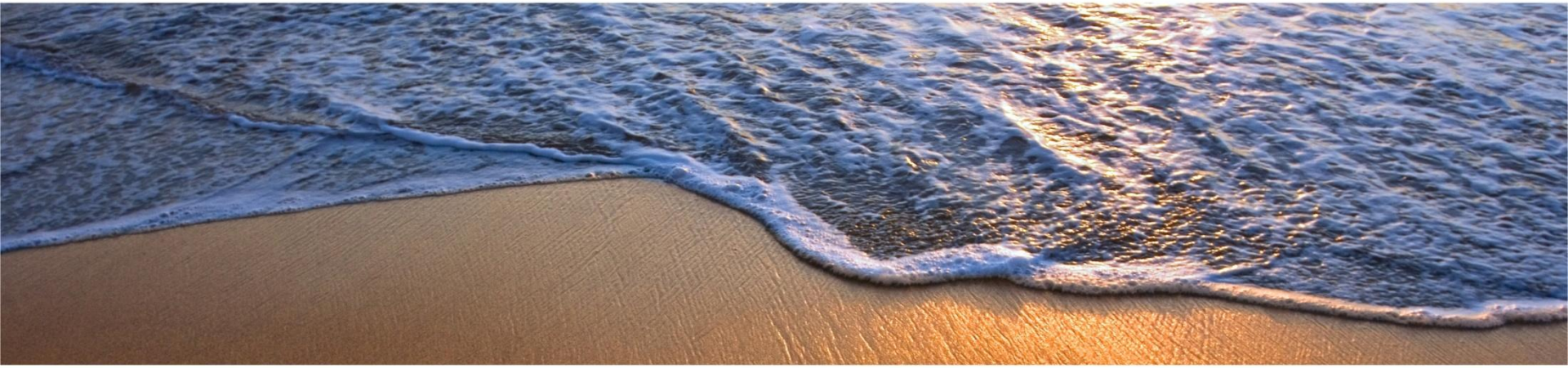
7TH CONFERENCE OF BSR MINISTERS
FOR SPATIAL PLANNING AND DEVELOPMENT
VILNIUS, LITHUANIA, 2009

VISION & STRATEGIES 2010 AROUND THE BALTIC



# Maritime Spatial Planning Challenges in the Baltic Sea

7TH CONFERENCE OF BSR MINISTERS
FOR SPATIAL PLANNING AND DEVELOPMENT
VILNIUS, LITHUANIA, 2009

VISION & STRATEGIES 2010 AROUND THE BALTIC

# Knowledge needs for maritime spatial planning

Risto Kalliola / Department of Geography University of Turku
Finland

October 15th, 2009

# Starting point for MSP

- MSP should be more than just drawing boundary lines on water
- It should incorporate any relevant existing knowledge about the addressed sea area, integrate it to the actual needs, involve all the relevant stakeholders to set preferences, and be transparent
- It should also be feasible in ecological, economical and social terms
- As environment and society change with time and new understanding accumulates, it should also be adaptive
- As only a few cases of successfully completed MSP exist in the world, one has to be innovative and experimental within the Baltic Sea region – considering e.g. its diffuse boundary between the coastal zone and open sea areas

# Who defines MSP knowledge needs?

- Consider it as a *participatory process*
- Leadership by an institution with the legal mandate, steering by a committee with external counterparts
- It may be hard to incorporate all the relevant voices into the MSP process
- Publicity is needed for transparency and for attention raising
- Experts, politicians authorities and lawyers should participate according to their expertise and mandate
- Anyone whose interest is concerned should be considered as a potential stakeholder
- Also non-speaking interest types should be involved, such as “nature”, “climate change” or “future generations”

# Generating knowledge need list

- A broad wish-list of the needed knowledge should be generated, covering a variety of relevant topics
- The leading body should direct and facilitate this work
- Expert opinion, brainstorming workshops, public hearings and open discussion forumsImportant: benchmarking and the incorporation of lessons learnt in other areas
- BALANCE project has already provided some very good references for the Baltic
- The broad wish-list should finally be narrowed down to the essential, and systematized to become a reasonably precise and concrete directory for the later stages of MSP

# How to get access to the needed knowledge?

- The “wish-list” should now be narrowed down to the level of concrete data or other information
- Best sources for the information should be identified and contacted
- Get the information, buy it, generate it, evaluate it and improve whenever needed
- Long-term iterative process involving plenty of energy and time; the use of experts can be helpful during the process
- Metadata catalogue should be generated and maintained up-to-date

# What, in concrete?

- General background data (base maps, etc) covering the physical and human environments
- Sea area specific data and other unique information (also statistics, forecasts etc.)
- Important to consider both static and dynamic information contents (e.g. sea water quality) according to their unique characteristics
- Spatial and temporal modelling may be needed to develop such information that best fits to the knowledge needs

- SHOULD A “BASELINE KNOWLEDGE NEED LIST” BE AN OUTCOME OF THIS DISCUSSION?

# Spatial approach in the core

- As MSP operates on and with maps –as much as possible of the gathered information should be spatial at the beginning or be transformed into spatial form
- Some information must probably be developed by interpolation, extrapolation or by other means alike
- In GIS (Geographic Information System) compatible format the different nature types, administrative borders and use activities can be plotted one over the other
- Spatial overlay should be followed by a set of more specific spatial analyses (buffer, distance analyses, etc.)
- GIS also helps to create alternative MSP regimes for discussion, and to identify the key areas of conflict among different priorities

# Representativeness analysis

- The gathered information contents should satisfy the identified knowledge needs but this goal may not be met
- Gaps of information should be identified by spatial and/or other analysis and their significance evaluated
- Additional surveysand other efforts must be planned and implemented to reach the set goals
- This all may take much time and requires funding.

# Information infrastructures

- Redundant work by different actors should be replaced by a shared effort within the frame of a commonly agreed collaboration culture
- Information infrastructures involve intellectual property rights, user rights, data harmonization, agreeing about the technical standards to use, resolving compatibility problems and many other technical details alike
- Important to apply existing standards, systems and regulations as far as possible, such as the INSPIRE directive
- Some knowledge basis is not data but rather, for example, human expertise or institutional capability → try to incorporate them into the overall knowledge base of the MSP process, as well.

# From selfish to shared data

- Access to relevant information should not be restricted to a few experts or institutions only
- MSP benefits from shared data culture in the form of better, broader, more open and precise knowledge basis
- Shared information resources can be jointly established and maintained over the network
- These may incorporate textual, tabular and spatial data, all with appropriate metadata and user interface
- Adequate computing protocols exist already (e.g. XML), making the goal of virtual networked data banks and information services feasible
- Restrictions in the user rights may be problematic – but problems are to be solved!

# Share even your primary data archives

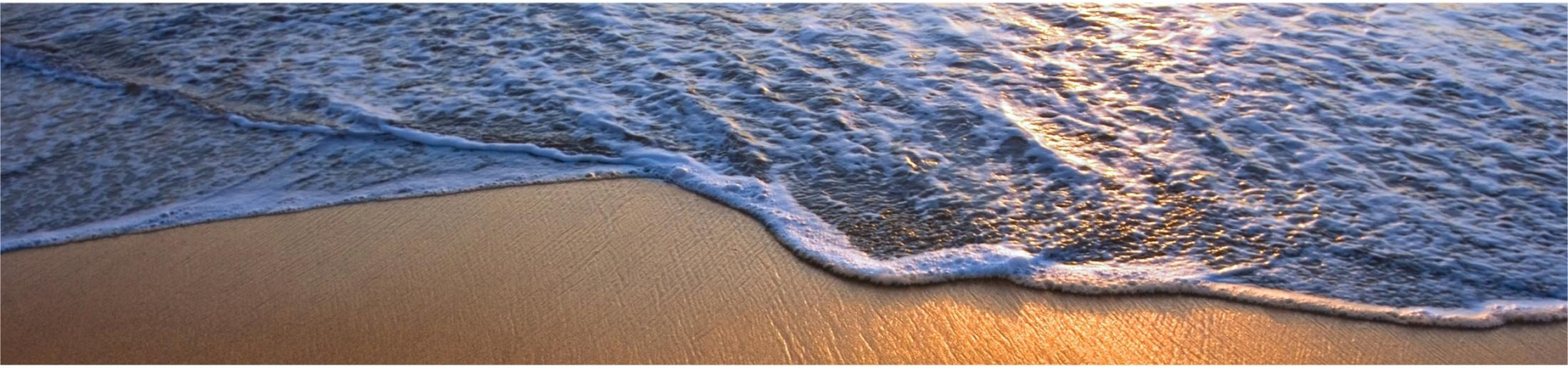
- A number of different actors may have collected original field data
- Everybody people should, ideally, have easy access to each other's data resources
- This makes possible, for example, re-analysis of once collected and analysed data resources (e.g. environmental change can best be detected by comparing two equally collected datasets)
- Scientists often hesitate to share their "own" datasets in a joint data resource; for this, forms of environmental data repositories and rules thereabout should be developed

# Updates needed!

- With time, environment and societal preferences may change and scientific research makes progress all the time
- The knowledge base of the MSP should therefore be revisited on a regular basis
- Pressure for the design and implementation of appropriate monitoring systems with sound indicators
- The actuality of the information basis of even an existing MSP system should be re-assessed at regular intervals to make the MSP framework *adaptive*

# Communicate, understandably

- Communication from experts to decision-makers and general public can be cumbersome
- Specialists have their own ways of speaking and they are critical towards their own results
- Decision-makers must do their job anyway, quesstimations may thus be preferred
- MSP should involve information portal available 24/7
- Both simplified and deeper-level primary data contents can be delivered simultaneously
- The MSP executing team should include populatization specialists with broad understanding and excellent communication skills



# Thank you, these were just some outlines - now, it is time to discuss