BALANCE WP4:

Development of a Baltic Sea marine area management framework

- with key inputs from WP1, WP2 & WP3

BALANCE Kick-Off meeting, Copenhagen, 31 Aug-1 Sept 2005

Contents of the presentation:

1. The structure of the group (partners)
2. Goal and objectives (overall aim & milestones)
3. Work programme: Framework for BS marine area management planning
4. Zoning (background & examples)
5. WP4 working process (framework, indicators & tools, stakeholder involvement)

Workpackage 4 structure:

WP4 Leader: Jan Ekebom,

Co-leaders: Ole Vestergaard, Jochen Lamp

WP4 Partners:

County Administration of Stockholm CABS (Sweden): ***Annelie Mattisson***

Swedish Envirnomental Protection Agency SEPA (Sweden) ***Cecilia Lindblad***

Danish Institute of Fisheries Research DIFRES (Denmark) ***Ole Vestergaard, Thomas Sörensen***

Estonian Marine Institute EMI (Estonia): ***Georg Martin, Jonne Kotta***

Metsähallitus Natural Heritage Services MH (Finland): ***Jan Ekebom, Minna Boström, Michael Haldin & N.N.***

World Wide Fund for Nature WWF (Germany): ***Jochen Lamp, Christiane Feucht***

WP4: Goal and objectives:

GOAL: Development of guidelines for Baltic Sea marine management framework

Objectives:

<u>Activity 1:</u> To synthesise a framework on how to apply marine zoning in management of marine areas

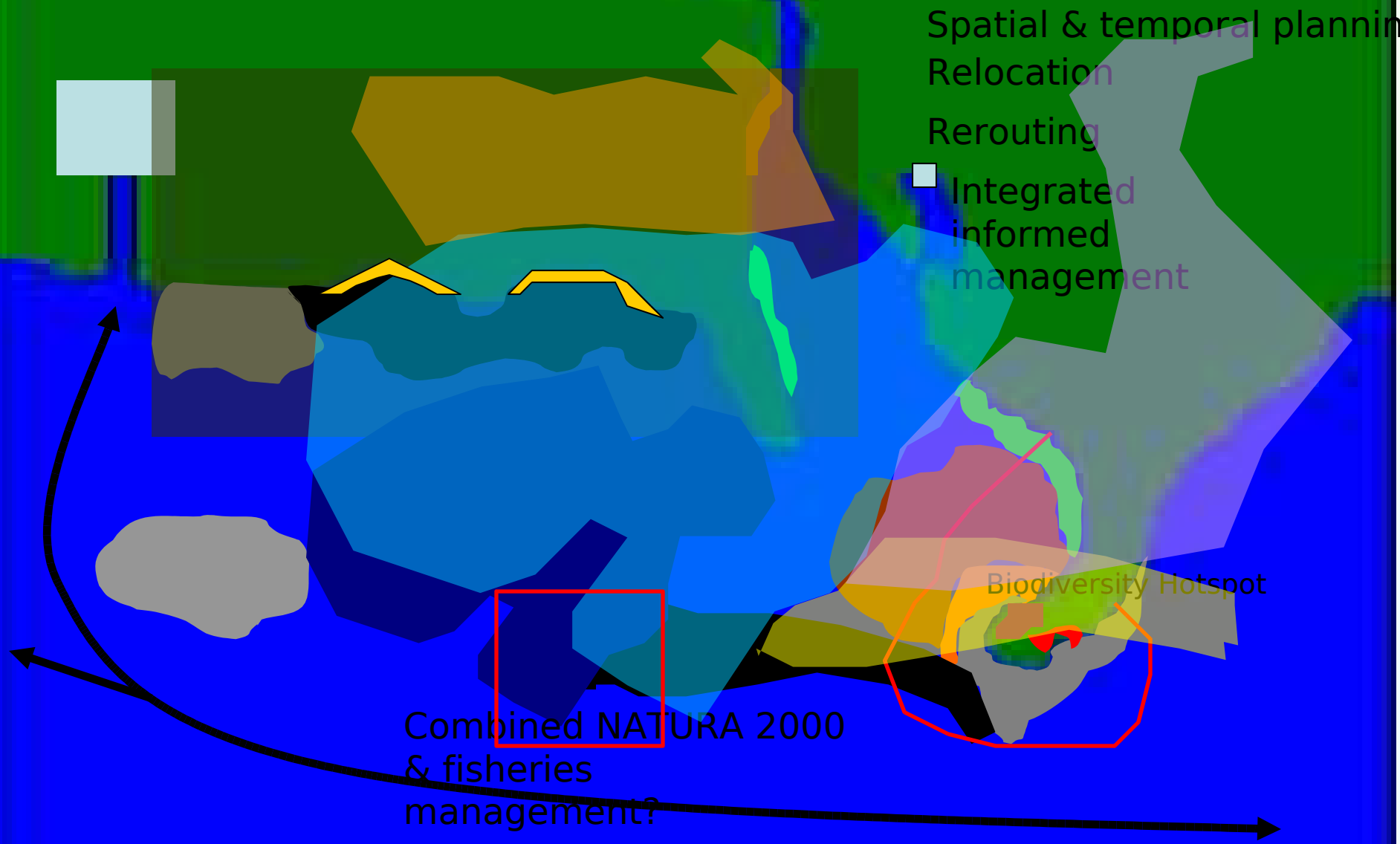
<u>Activity 2</u> (detailed part of Act.1): To produce GIS based methods (protocols, mostly GIS based) for management of marine areas with emphasis on the development of indices that quantify management efficiency

<u>Activity 3</u> (detailed part of Act. 1): To present a template and methods for stakeholder involvement

Framework for BS marine area management planning

What is marine area management planning?

Zone planning based on natural heritage, living resources and stakeholder interests



A key management tool is zoning

Zones separate conflicting uses and range from e.g.:

- General (= sustainable) use
- National Park (‘no-take’)
- Preservation (‘no-go’)

Each zone type has a specific written objective

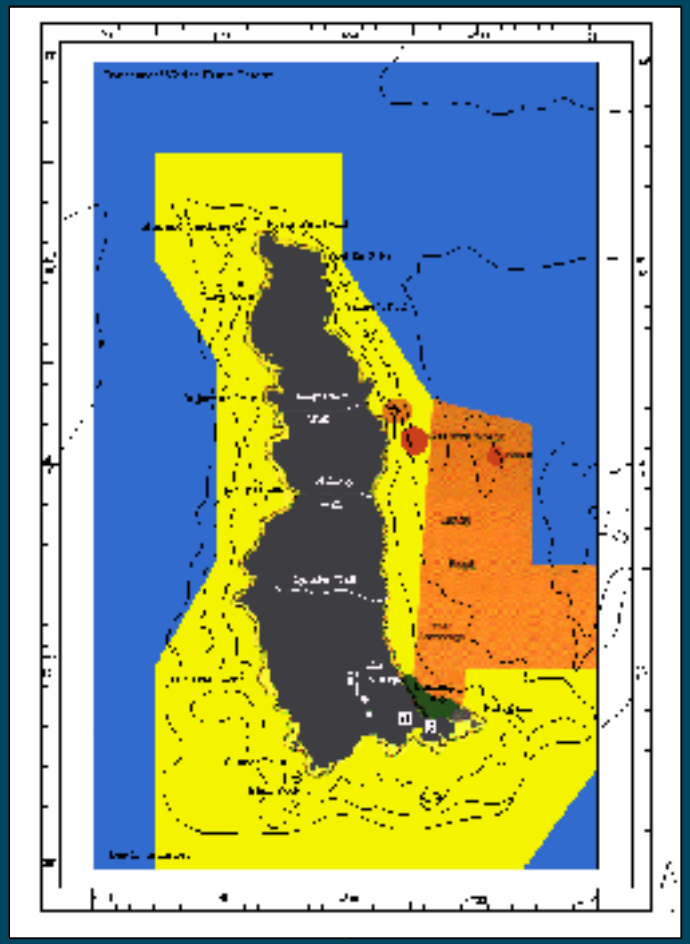
Modified from Jon Day, GBRMPA

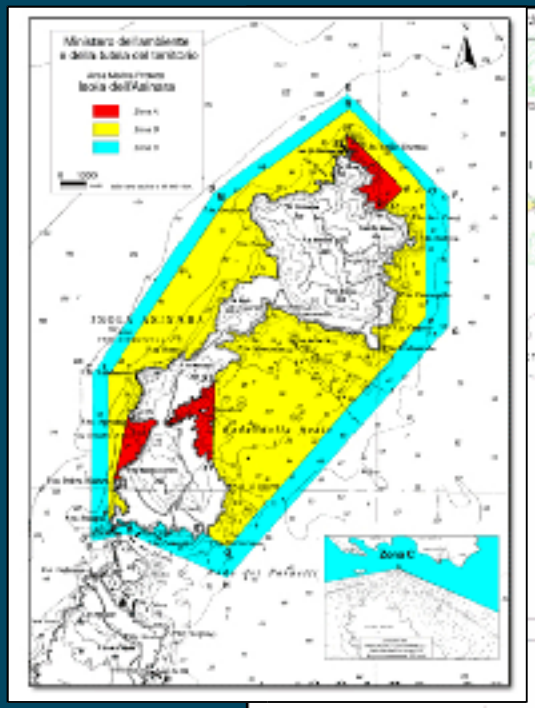
Section	Zone	Area (km^2)
Far Northern	General Use	62,525
	Habitat Protection	9,660
	Conservation Park	1,140
	National Park	11,422
	Buffer	152
	Preservation	220

Source: GBRMPA

ACTIVITIES GUIDE
(see *Zoning Plan* for details)

	General Use Zone	Habitat Protection Zone	Conservation Park Zone	Buffer Zone	Scientific Research Zone	Marine National Park Zone	Preservation Zone
Aquaculture	Permit	Permit	Permit [1]	✗	✗	✗	✗
Bait netting	✓	✓	✓	✗	✗	✗	✗
Boating, diving, photography	✓	✓	✓	✓	✓ [2]	✓	✗
Crabbing	✓	✓	✓ [3]	✗	✗	✗	✗
Harvest fishing for aquarium fish, coral and beachworm	Permit	Permit	Permit [1]	✗	✗	✗	✗
Harvest fishing for sea cucumber, trochus, tropical rock lobster	Permit	Permit	✗	✗	✗	✗	✗
Limited collecting	✓ [4]	✓ [4]	✓ [4]	✗	✗	✗	✗
Limited impact research	✓	✓	✓	✓ [5]	✓	✓ [5]	Permit
Limited spearfishing (snorkel only)	✓	✓	✓ [1]	✗	✗	✗	✗
Line fishing	✓ [6]	✓ [6]	✓ [7]	✗	✗	✗	✗
Netting (other than bait netting)	✓	✓	✗	✗	✗	✗	✗
Research (other than limited impact)	Permit	Permit	Permit	Permit	Permit	Permit	Permit
Shipping (other than in a designated shipping area)	✓	✗	✗	✗	✗	✗	✗
Tourism program	Permit	Permit	Permit	Permit	Permit	Permit	✗
Traditional use of marine resources	✓ [8]	✓ [8]	✓ [8]	✓ [8]	✓ [8]	✓ [8]	✗ [8]
Trawling	✓	✗	✗	✗	✗	✗	✗
Trolling	✓ [6]	✓ [6]	✓ [6]	✓ [6,9]	✗	✗	✗





ACTIVITY					
Recreational	Yes	Yes	Yes	Yes	No
	Yes	Yes	Yes	Yes	No
	Yes	Yes	Yes	Yes	No
	Yes	Yes	No	No	No
Commercial	Yes	Yes	No	No	No
	Yes	Yes	No	Yes	No
	Yes	Yes	Yes	No	No
	Yes	Yes	Yes	Limited	No
	Yes	Yes	Trolling	Yes	No
Collecting	Permit	Permit	Permit	Permit	No
	Permit	Permit	Permit	Permit	Permit

ZONING

Great Barrier Reef operating principles for zoning

Some examples:

Minimum of 20% per bioregion/habitat type in no-take areas

More than one example of ‘no-take’ per bioregion to maximise protection if adversely affected

Represent diversity of plants and animals across:

- northern to southern reef
- inshore to offshore

Also protect biophysically special or unique places

Multiple use MPA's

Depending on the MPA Goal:

Multiple use MPAs over broad areas can provide for high levels of protection in specific areas while allowing a range of reasonable uses to occur in other zones within MPA.

A spectrum of zones may be required if MPA is very large or a complex area.

Framework for BS marine area management planning

BALANCE WP4 working process

WP4 understanding of BALANCE working process

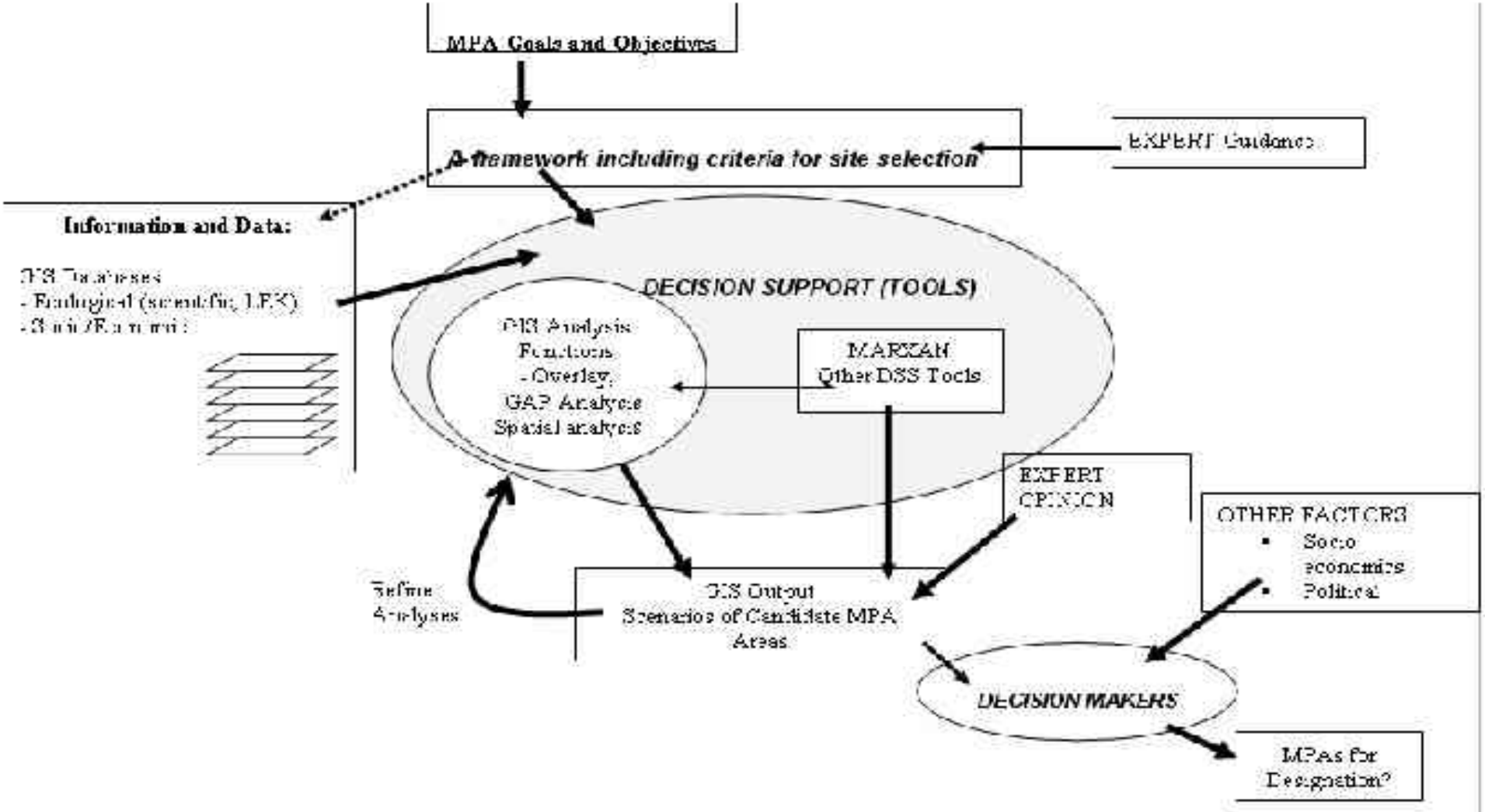
Data requirements

Mapping requirements

Representativity analysis

Guidelines for marine management planning

BALANCE Marine Management framework

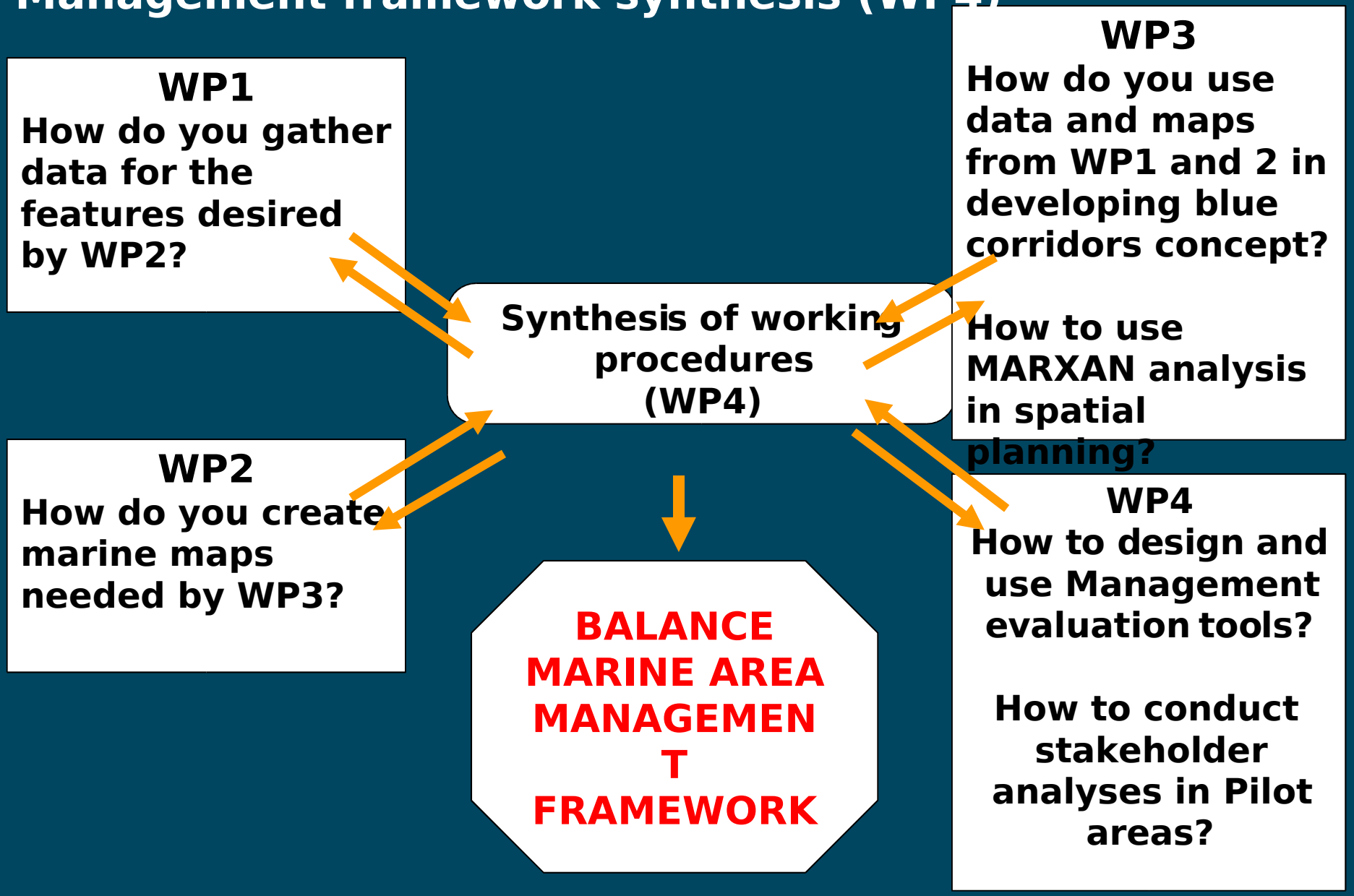


Source: Hussein Alidina (*in press*)

Framework for BS marine area management planning

BALANCE WP4 requirements from WP1, WP2, WP3 and WP4

Management framework synthesis (WP4)



Framework for BS marine area management planning

Introduction

Overaching aims of management framework WP4, All

Relevant authorities responsible for the marine area WP4

Existing legal frameworks in pilot areas WP4

Rationale for designation and description of marine area feature(s)

Marine area description WP1, WP2

1. **Physical features, WP1, WP2**
2. **Hydrographic features, WP1, WP2**
3. **Geological features, WP1, WP2**
4. **Biological features WP1, WP2**

Framework for BS marine area management planning

Development of action plan for marine area management

List of potential management measures **WP4**

Detailed monitoring programme for the marine area and reporting structure **WP4**

Development of success criteria to be monitored **WP4**

Framework for BS marine area management planning

Marine area management objectives

List of area specific management objectives for the features of the marine area (e.g. Marxan input) WP3-4, all

Outline monitoring requirements WP4

Existing uses which may cause deterioration, depletion or disturbance to features

Ranked list of activities in pilot areas causing deterioration, depletion or disturbance

1. within marine area boundary WP3-4, all
2. from outside marine area boundary WP3-4, all

Matrix of stakeholder interests and perceptions WP4

Framework for BS marine area management planning

Status of marine area management

- Assessment of existing human activities (resource use, recreation, fisheries) WP 3-4, all
- Identification of gaps in management WP 3-4

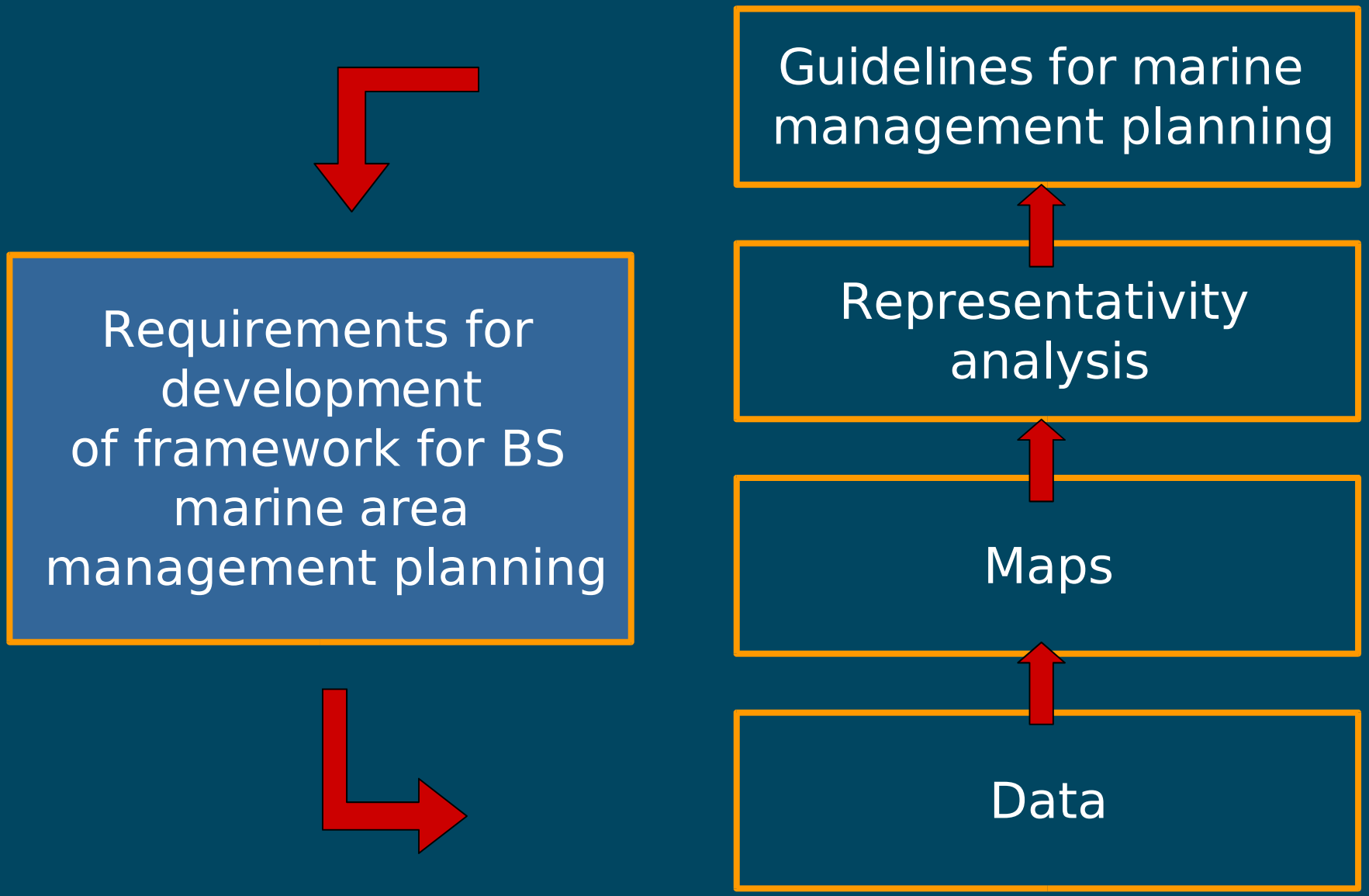
Zoning

- Production of marine area maps illustrating zoning scheme WP3-4
- Description of pilot zoning scheme WP4
- Detailed rationale behind zoning scheme (based on Marxan analyses and stakeholders) WP3-4

Evaluation of management effectiveness

- Evaluation of management effectiveness (based on success-criteria) WP4

Conceptual framework for Baltic Sea marine area management planning



WP4 Indicators of management effectiveness

Framework for BS marine area management planning

- Development of GIS tools (protocols, examples, indicators for marine area management
  - GIS tools for management planning
  - GIS tools for marine area management efficiency evaluation
  - GIS tools for stakeholder involvement

Framework for BS marine area management planning

Tools for management planning (done together with other WPs):

For describing the features of the marine area

For identifying potential threats and pressures in the marine area

For how to link non-georeferences datasources* into GIS

* ***Municipalities and authorities have statistical or descriptive data that can be used for quantifying patterns (degree of urban sprawl, governance of areas, economic status of areas and how these develop)***

Framework for BS marine area management planning

Tools for management efficiency evaluation

First step: Definition of success criteria

Quantitative indicators for evaluation of how marine nature conservation goals have been achieved

- Use of focal species (position, cover, depth range)

Quantitative indicators for evaluation of how the socio-economic goals have been achieved and if there is indcation of negative impact of potential threats

- Gain to local communities from a managed marine area with a zoning plan
- Impact of urban sprawl and development(buildings, construction activities)
- Impact of ship & boat traffic

Quantitative indicators for evaluation of how the governance of marine area management is carried out

- Number of registred court cases in an area
- Degree of public participation

Framework for BS marine area management planning

Data needs from other WPs

GIS data is needed primaliry from BALANCE areas 2 and 3 since the draft zoning plan will be made for these areas or parts thereof

Abiotic data: bathymetry, shoreline, geology
Biological data: habitats, species data, MARXAN

Socio economic data:
georeferenced data on constructions (buildings, harbours/marinas, piers...)
ship-lanes, boat routes, roads/ferry routes
georeferenced data on demography (human population)
georeference data on local economy (companies, location...)

Governance data:
Number of registred court cases in an area
Degree of public participation

WP4 Stakeholder involvement and collection of socioeconomic information

Stakeholder Involvement

- Agree on common “rules of the game”, principles for the whole process of planning, decision making and monitoring
- Create ownership for the process and the results
- Stakeholders participation fosters information/understanding
- Builds trust and reliability on all sides
- Communication is crucial (how, when, media of comms)
- Target groups are different and should be approached differently (local to regional, professions, different scale of involvement)

Approaches and activities

- Explore existing best practice in communication of values and creating awareness/commitment (best practice models and draft communication strategy)
- Define stakeholder groups and communication tools adapted to the pilot areas and for the Baltic Region
- Develop GIS-based information material for public information, adapted to the target groups
- Find ways to integrate stakeholder knowledge into the evaluation and planning process (indicators, use patterns)
- Integration of public/stakeholders in management processes can be formalized by standardized submission/feedback software and templates
- Different tools (questionnaire, interviews, media, key-spokespersons involvement) should be checked and adapted to different types of areas and conflicts/demands (coastal/offshore, touristic, multi-use areas)

Results and benefits

- Increased transparency in the management process
- Adaptive maps as discussion and decision-making tool
- Stakeholder communication fora with contact points at local and regional level
- Capacity building for stakeholder involvement and management processes
- Commonly agreed recommendations for stakeholder participation
- Creating communication standards

thank you