



BALANCE

Baltic Sea Management - Nature Conservation and Sustainable Development of the Ecosystem through Spatial Planning

Kick-off Meeting, Copenhagen, Denmark

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Johnny Reker
The Danish Forest and Nature Agency
(Balance@sns.dk)



INTRODUCTION



Bubbling reef in the northern part of Kattegat. Photo: Dan Kaasby

- Setting the scene
- The BSR INTERREG IIIB programme
- The "BALANCE" aim
- Project structure (WP1-5)
- Concepts
 - Data & metadatabase
 - Baltic marine landscapes
 - Holistic habitat mapping
- MPA analysis & "blue corridors"
- Baltic Sea zone planning



SETTING THE SCENE



BSR INTERREG IIB region. The “BALANCE” project area includes The Baltic Sea, Kattegat & Skagerrak

- Conditions has been met
- 19 partners + 7 consultants
- 10 countries incl. Norway & U.S.A but excl. Russia
- Budget €4,3 mio. + €0,4 mio. in non-eligible funding
- Runs 2½ year from 1/7 2005
- Covers the entire Baltic Sea
- Largest project funded by the BSR INTERREG IIB Programme



BSR INTERREG IIB Measure 2.3

Enhancing good management of cultural and natural heritage, valuable landscapes and natural resources

Objectives:

- Using and strengthening the main assets of natural and cultural heritage in the interest of the entire Baltic Sea Region.
- Protecting and develop a continuum of natural landscapes as important elements in a BSR ecological network and “green corridors”.
- Promoting an efficient use and wise management of the BSR natural resources without endangering a necessary transformation of the economy of respective areas, strengthening sustainable forestry and energy production.



BSR INTERREG IIIB Measure 2.3

Expected impacts of the measure:

Developing spatial planning as a forceful tool for sustainable use of limited resources

Identifying "green corridors" and valuable natural areas for inclusion in the NATURA 2000 network

Fostering an increased public awareness of limited resources

Integrated strategies for and sustainable management of valuable cultural landscapes and rural development





BALANCE AIM

Aim:

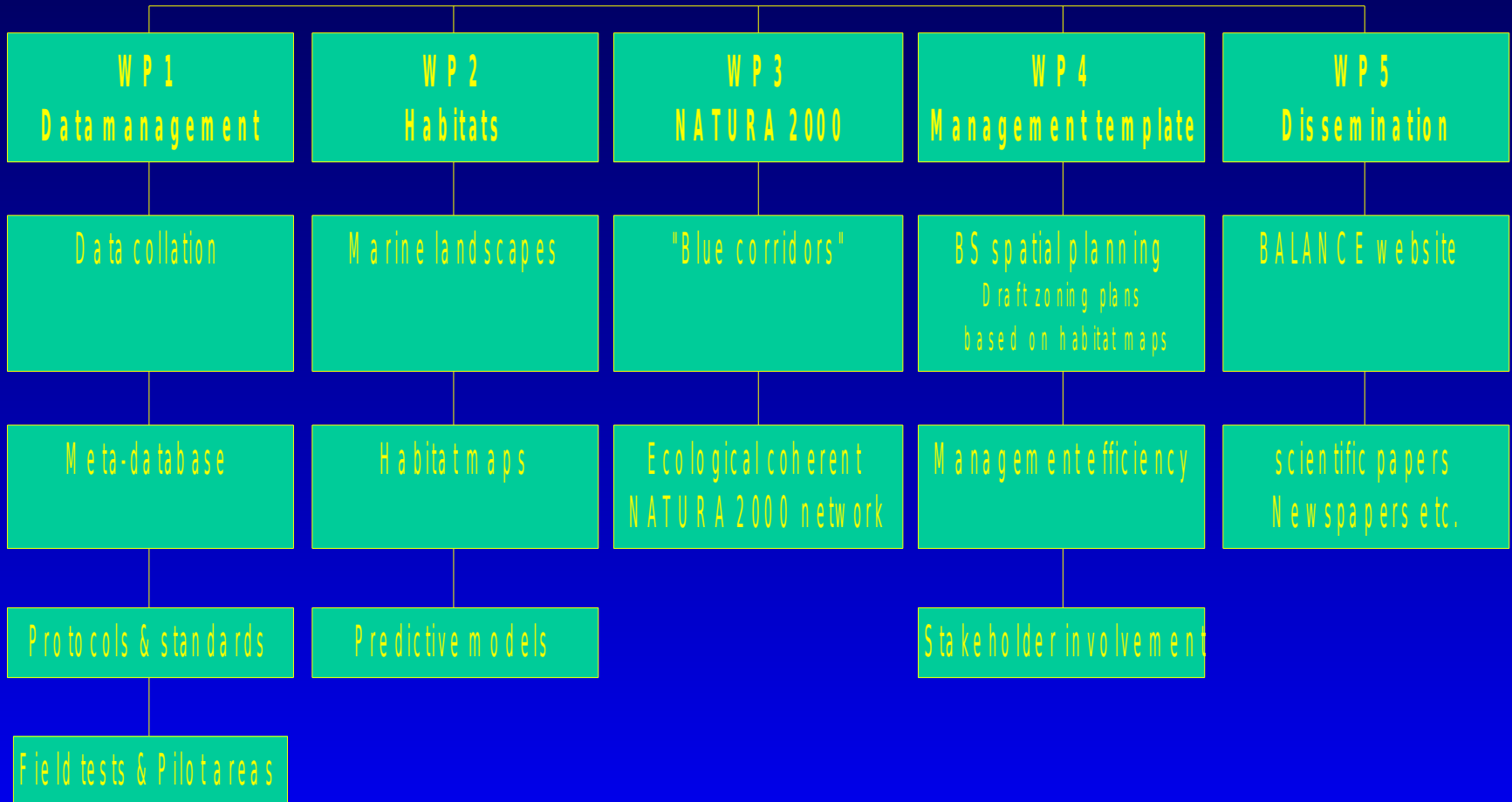
- Development of an informed management template for the Baltic Sea focused on marine spatial planning and cross-sectoral & transnational co-operation.

Actions:

- 1 Identify & collation of available BS marine data (physical, biological, socio-economic), meta-database
- 2 Development of BS marine landscape & habitat maps
- 3 Assessment of the Baltic MPA network & development of the “blue corridors” concept
- 4 Stakeholder communication strategy & dissemination of results
- 5 Development of Baltic marine zoning plans in 2 pilot areas



PROJECT STRUCTURE





DATA

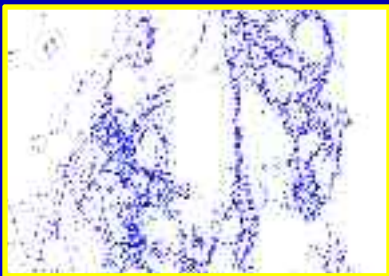
Data collation & meta-database Metadata:

- Who, where, why, when, how - survey, how - mapping



Scientific data:

- Physical (bathymetry, geology etc.)
- Biological (infauna, fish etc.)
- Added value (sensitivity etc.)



Sea floor and trawl lines, Fiskeriverket

Stakeholder / socio-economic data:

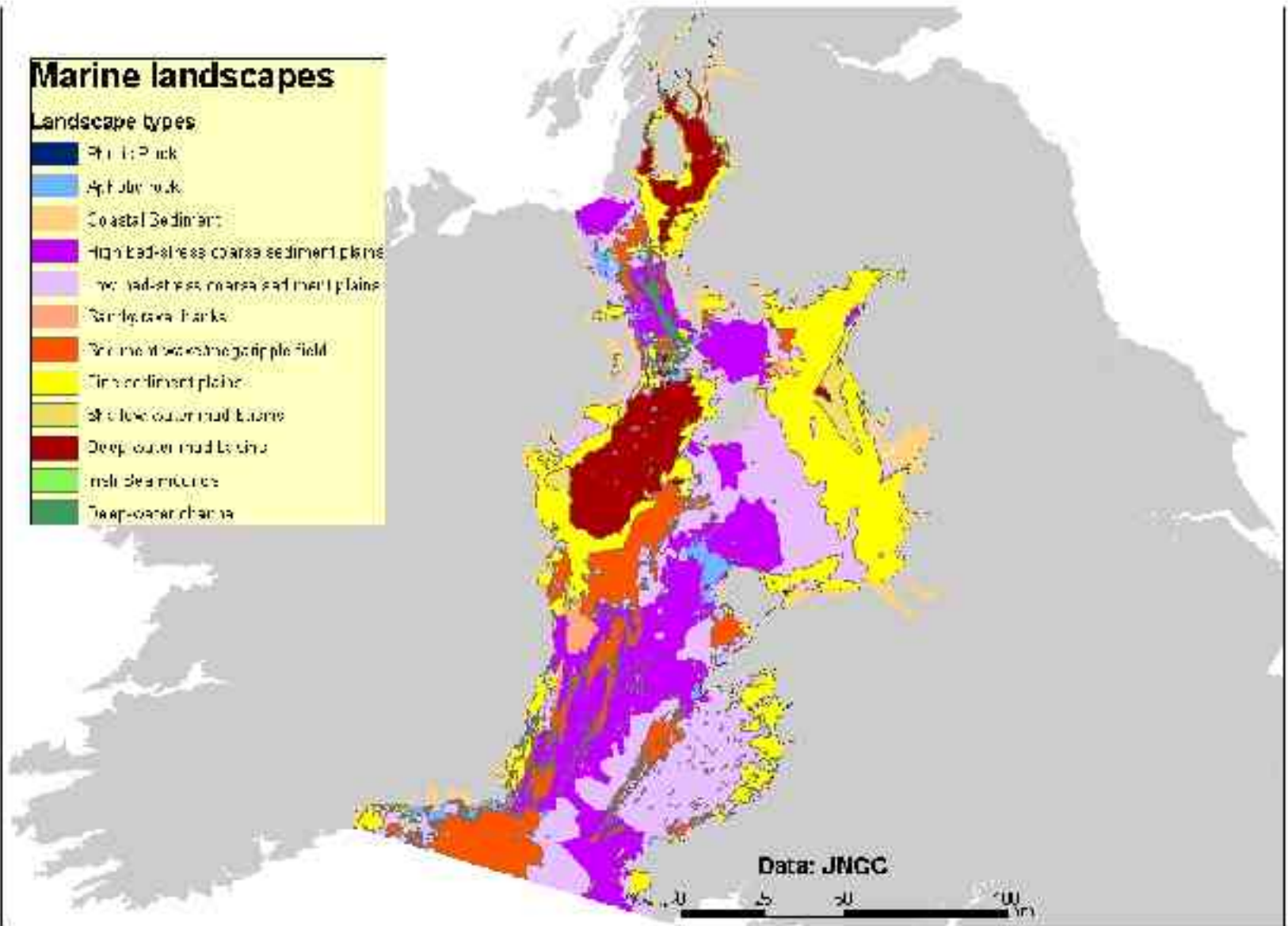
- Fisheries, shipping, cultural heritage, leisure activities etc.

UK MARINE LANDSCAPES

Marine landscapes

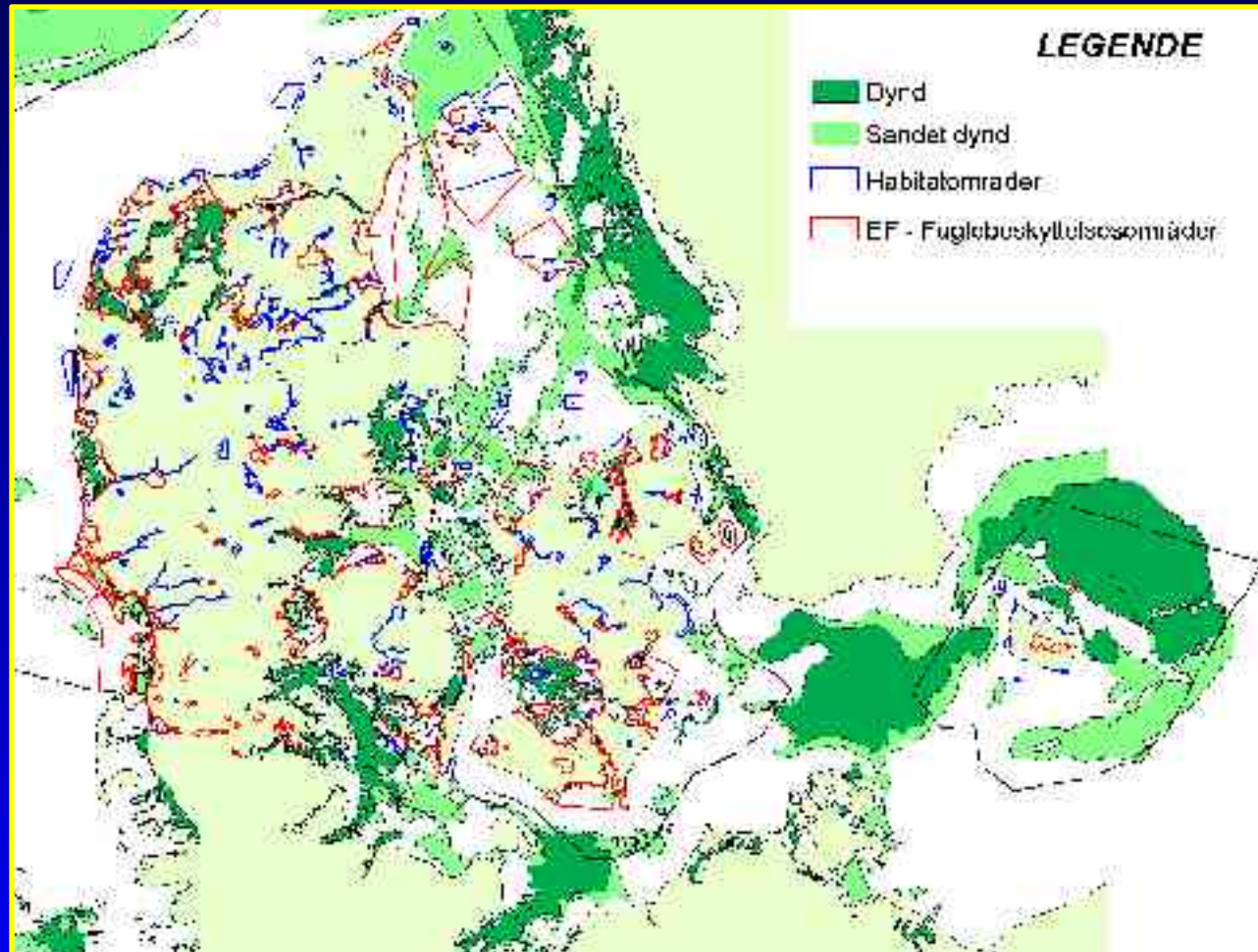
Landscape types

- Photic Rock
- Apical Rock
- Coastal Sediment
- High load-stress coarse sediment plains
- Low load-stress coarse sediment plains
- Sandy area Banks
- Brine at low estuarine ripple field
- Tinny continent plume
- Shallow outer mud flats
- Deep outer mud flats
- Mid-depth muds
- Deep-water channels





BALTIC MARINE LANDSCAPES?



Soft sediments and MPA's in Danish waters. Source: GEUS & SNS

PILOT AREAS





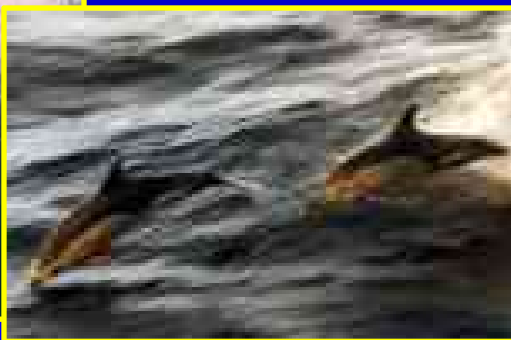
MARINE HABITATS



Benthic habitats



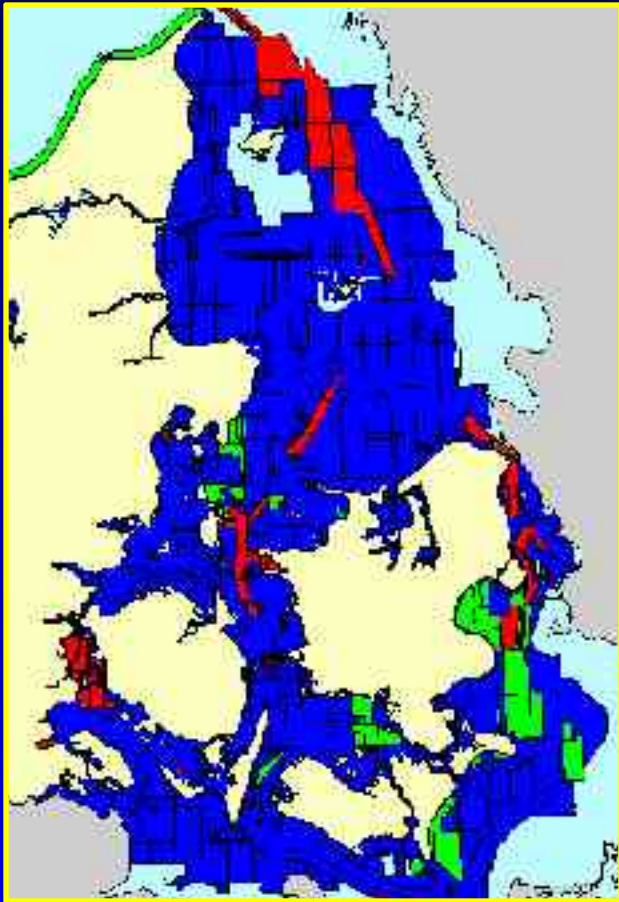
Essential fish habitats



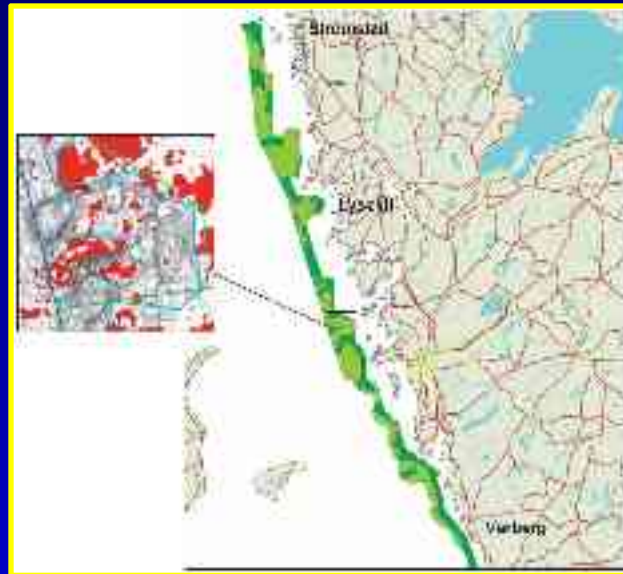
Pelagic habitats



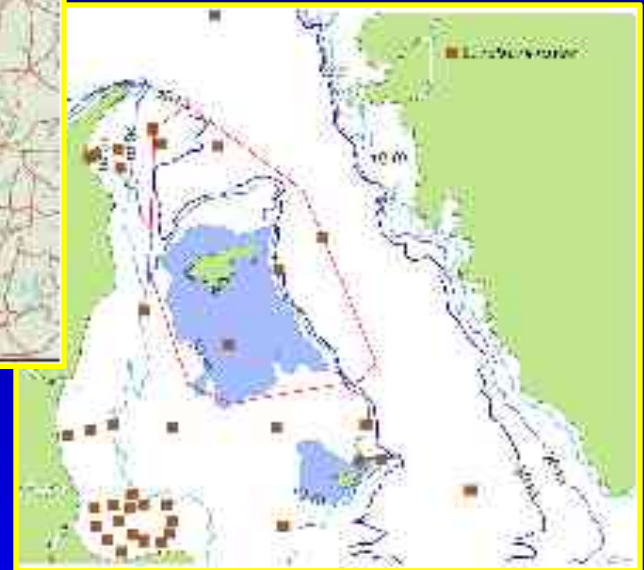
DATA SETS IN PILOT AREA 1



Multibeam coverage (red), The Royal Danish Administration of Navigation & Hydrography



Multibeam on the Swedish west coast & trawl effort. Fiskeriverket



Stations with data on infauna on sand and soft sediment, NERI.



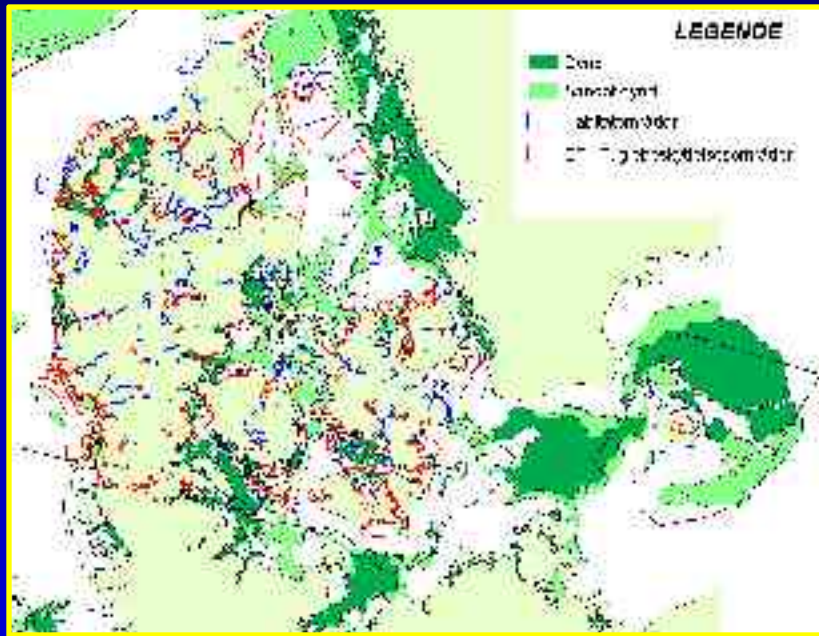
MPA ANALYSIS

Broad scale assessment:

- 1) Continuum of marine landscapes (representativity)
- 2) Coherence between marine landscapes

Detailed assessment:

- 1) Continuum of habitats
- 2) Coherence between habitats



Soft sediments and MPA's in Danish waters.

Source: GEUS & SNS



"BLUE CORRIDORS"



- Infauna larval dispersal by dominating currents to vulnerable areas (distance, time of spawning etc.)
- Fish migration from spawning areas to feeding grounds (Cod, Pike etc.)
- *Fucus serratus* spore dispersal need hard bottom stepping stones
- Crab migration increased by vegetative corridors e.g. *Zostera marina* beds
- Needed for an ecological coherent Natura 2000 & MPA network

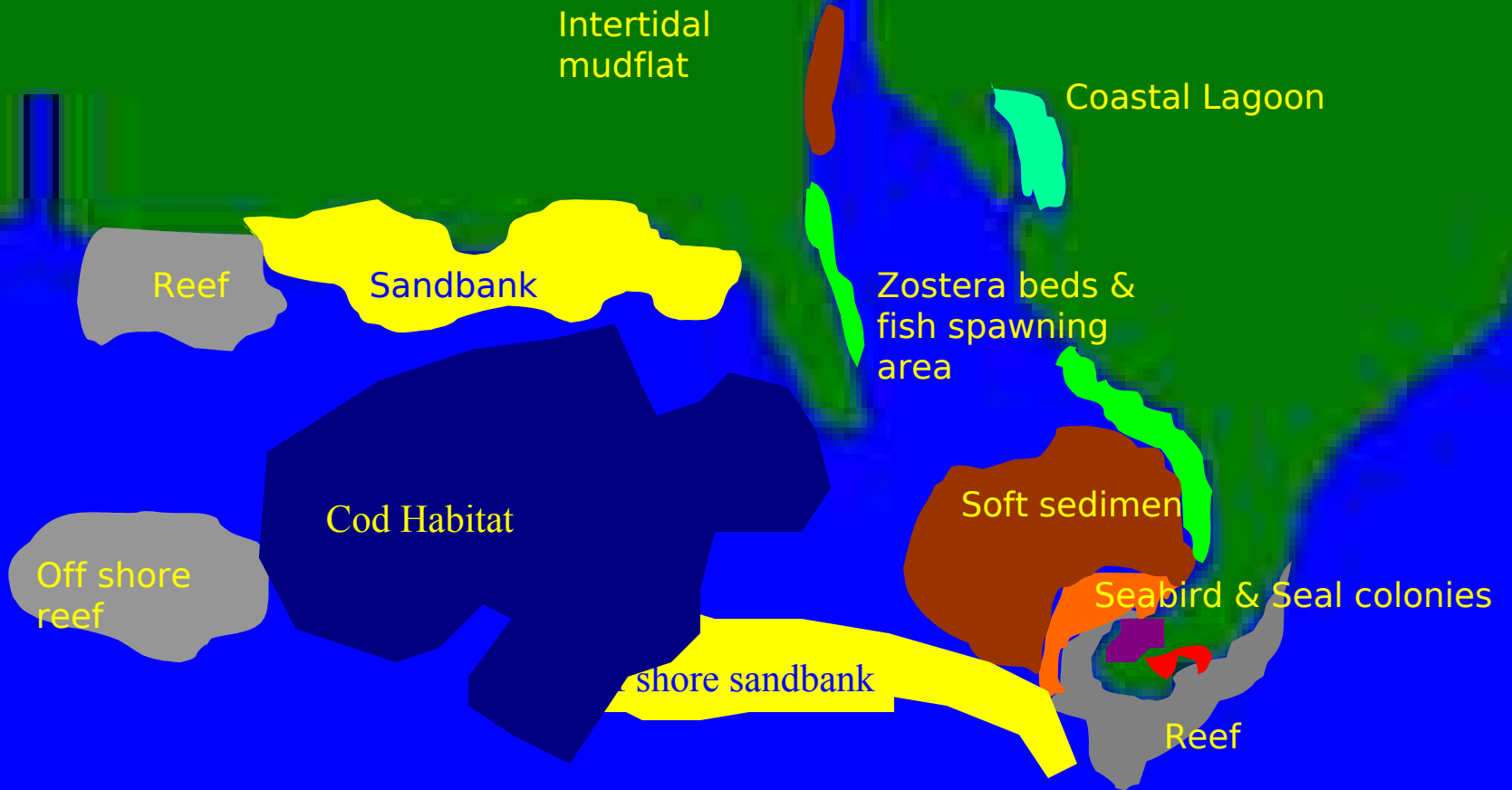


PLANING THE BALTIC SEA

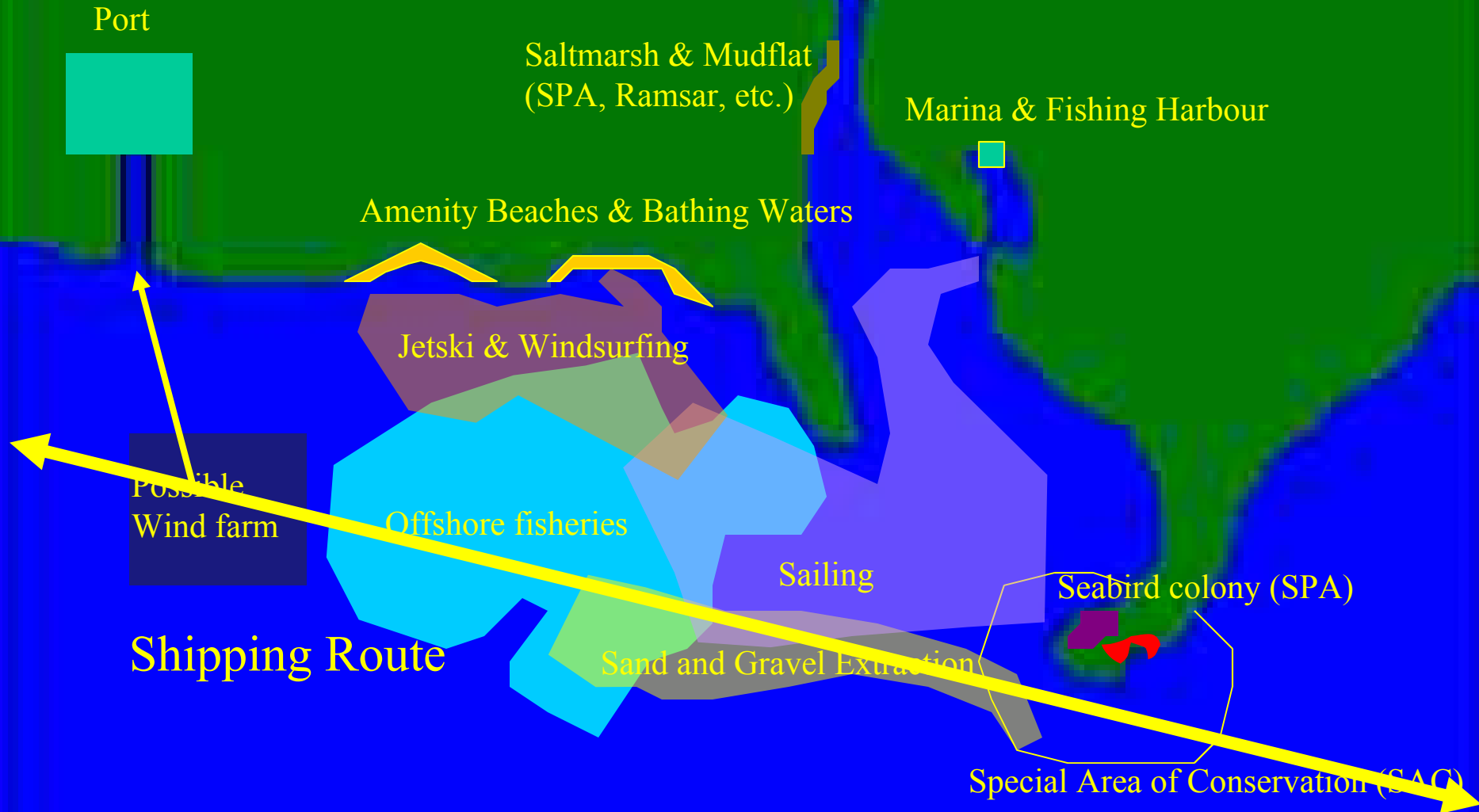
Broad-area integrated management based on zoning of a large area is more effective than management of small isolated areas, because:

- *Ecologically* - it recognises temporal/spatial scales at which the ecosystem operates.
- *Practically* - it is easier to manage, it buffer and dilutes impacts of activities in adjacent areas to e.g. MPAs.
- *Socially* - help to resolve and separating conflicting uses thus ensuring all reasonable uses can occur with minimum conflict.
- *Economically* - integration within a larger area will have lower costs per spatial area than a series of small separate MPAs.

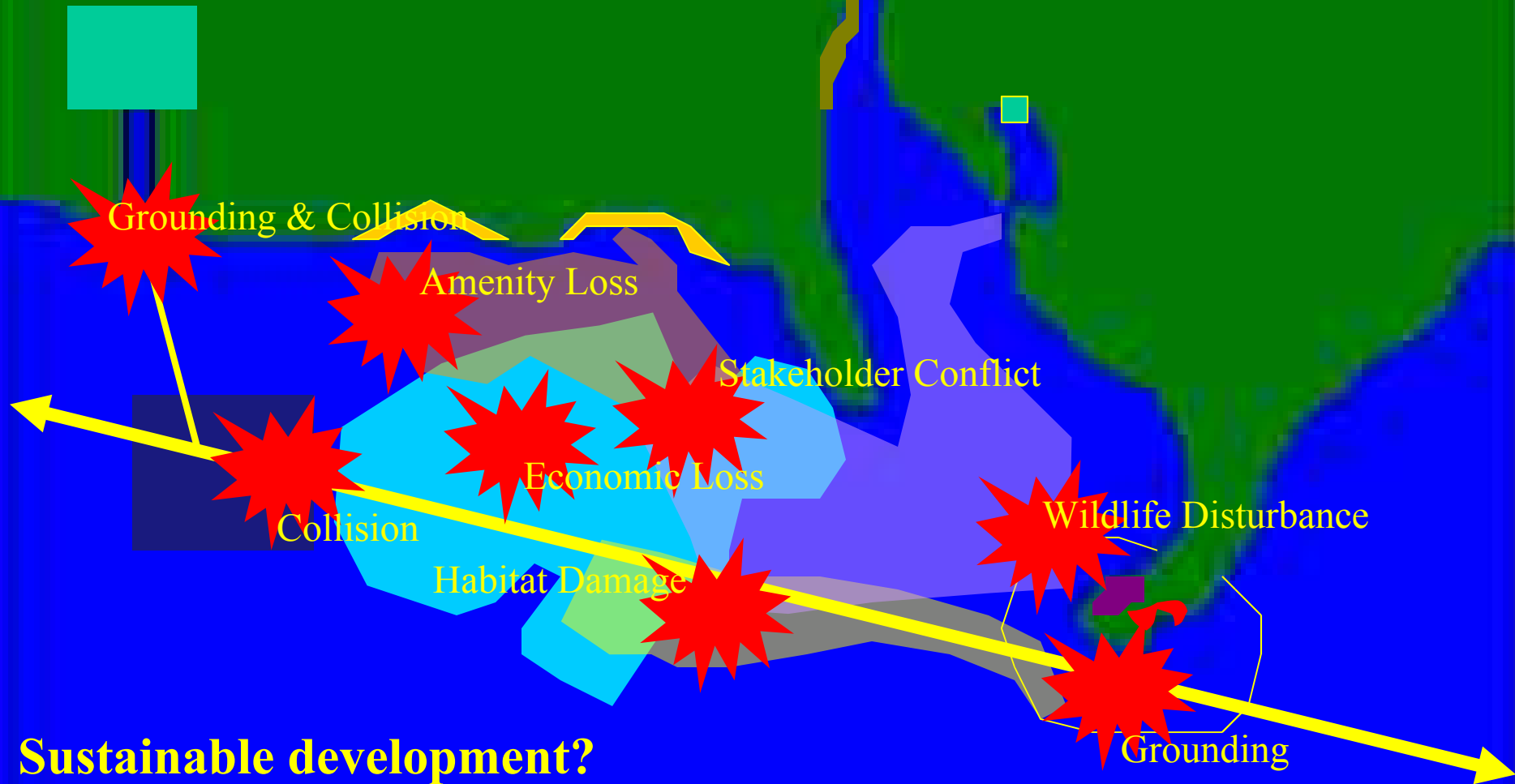
Natural Heritage & Living Resource Identification through habitat mapping



Activity Identification & Monitoring

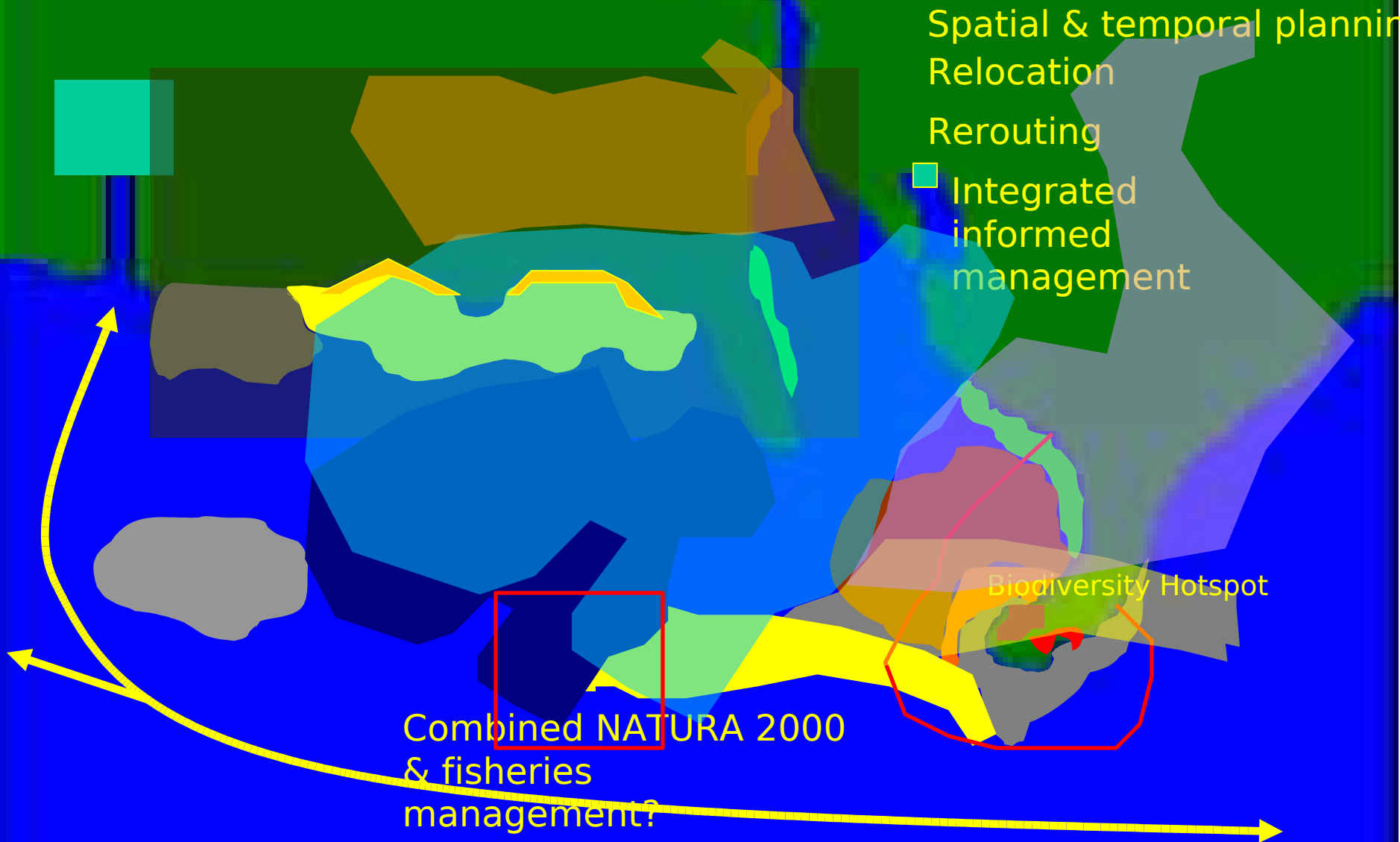


Potential stakeholder conflicts?



Sustainable development?

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





BALTIC ZONE PLANING

- Data review, collation and access (WP1).
- Classification & habitat mapping (WP2).
- Review of existing MPAs (WP3).
- Identification of potential new networks that achive the ecological and socio-economic objective of sustainable development (WP3).
- Selection of an optimal network that maximise beneficial and minimise detrimental impacts considering social, economic & management implications (WP3&4).
- Draft zoning plan - prepare, and release for public comments, a draft inshore and off shore zoning plan (WP3&4).
- Final zoning implemented (life after BALANCE).



**THANK YOU FOR
YOUR ATTENTION!**

For further information
[http://www.balance-
eu.org](http://www.balance-eu.org)

BALANCE@SNS.DK