



DEVELOPING AND MANAGING
COASTAL AND MARITIME AREAS,
FRAMEWORK CONDITIONS FOR
THE BLUE GROWTH IN THE
MEDITERRANEAN

WHAT PARTNERSHIP WITH
THE MEDITERRANEAN
REGIONS?

21st March 2013
European Parliament
Bruxelles

Strategies for coastal adaptation to climate change in the Mediterranean

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OVERVIEW

- 1. Main technical results**
- 2. Main issues and messages**
- 3. Next activities**



Book 1: Coherence between coastal vulnerability maps

Book 2: Shared tools for the forecast and management of the CC effects along the coast



Book 3: implementation of a Mediterranean network of coastal observatory





Boo1: Coherence between coastal vulnerability maps



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 1.4.2009
COM(2009) 147 final

WHITE PAPER

Adapting to climate change: Towards a European framework for action

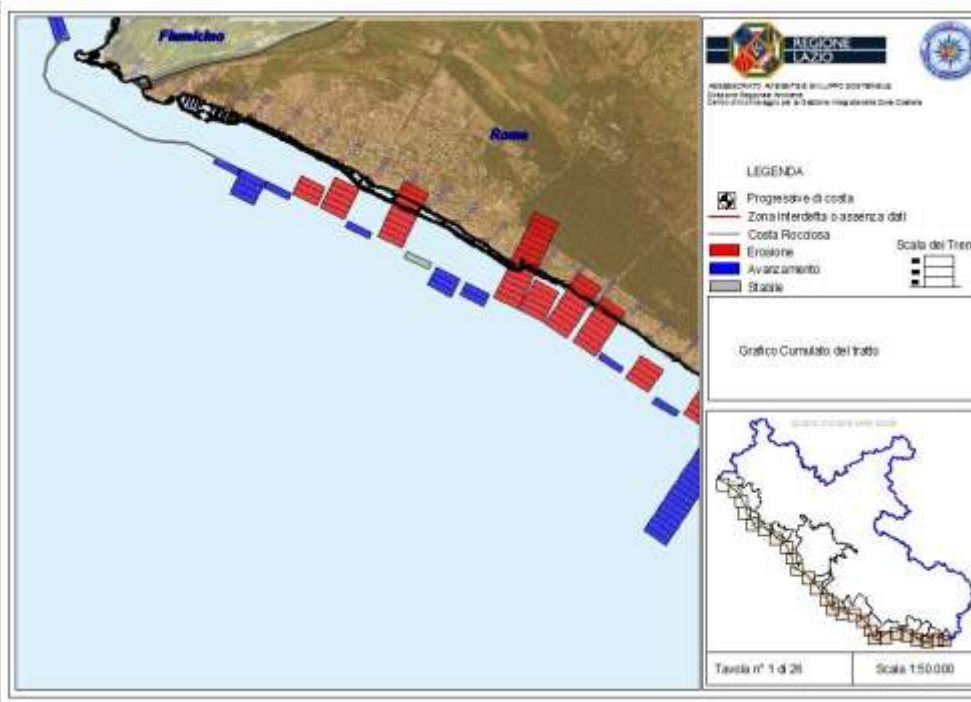
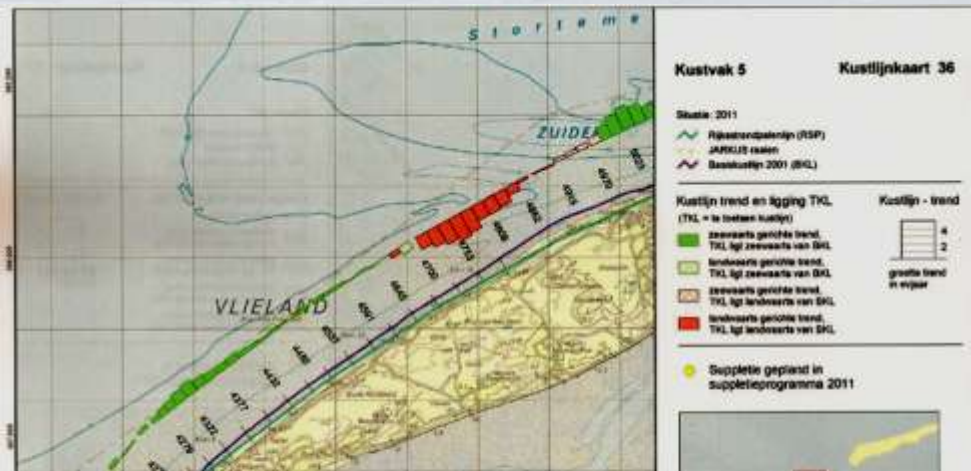
Book 1:

1. Reference to White Paper for Adaptation to CC

necessary to develop these tools. In cooperation with the Member States, vulnerability must be assessed against a wide range of climate scenarios and on different geographical scales so that adaptation measures can be defined as precisely as possible. The Commission is currently examining ways to improve the monitoring of impacts and adaptation measures in order to develop vulnerability indicators. More quantified information on the costs and benefits of adaptation is also urgently needed.

In addition, coordination should be enhanced where Member States spearhead important adaptation research.

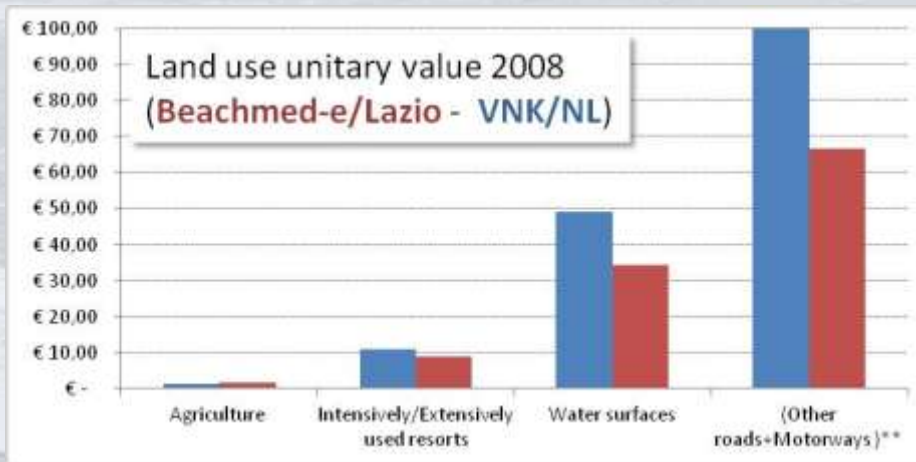
Action (EU and Member States)



Book 1: Coherence between coastal vulnerability maps

- Reference to the VNK Netherland main governmental project and other plans/methods
- Adoption or proposition of standards for the coastal erosion representation

✓ **Erosion Atlas**

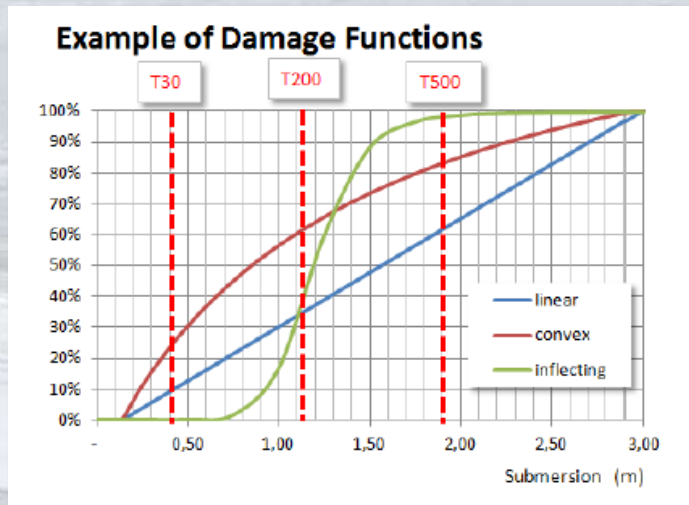


Exposed Goods assessment
fully transferable

Book 1: Coherence between coastal vulnerability maps

- Reference to the VNK
Netherland main
governmental project and
other plans/methods
- Adoption of methodologies
consistent with Directive
70/2006 /CE -Flood Risk

✓ **COFLERMap**



$$DF(Sr_{x,y}) = \frac{Sr_{x,y}^{\alpha}}{(k_2 + (k_1 * Sr_{x,y} + k_0)^{\alpha})} - DF_0$$

$$R_{i,Pm} = E_i * A_i * ID_i * \sum_{n=0}^{n=N} (DF_{i,n} + DF_{i,n+1}) \frac{1}{2} * (P_n - P_{n+1})$$

Original formulas for a simplified
but coherent method

Book 1: Coherence between coastal vulnerability maps

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other plans/methods
- Adoption of methodologies
consistent with Directive
70/2006 /CE -Flood Risk

✓ **COFLERMap**



Risk localization and quantitative assessment for its territorial representation.

Book 1: Coherence between coastal vulnerability maps

- **Reference to the VNK
Netherland main
governmental project and
other plans/methods**
- **Adoption of methodologies
consistent with Directive
70/2006 /CE -Flood Risk**

✓ COFLERMap

Book 2: Shared tools for the forecast and management of the CC effects along the coast



Book 2 : Shared tools for the forecast and management of the CC effects along the coast



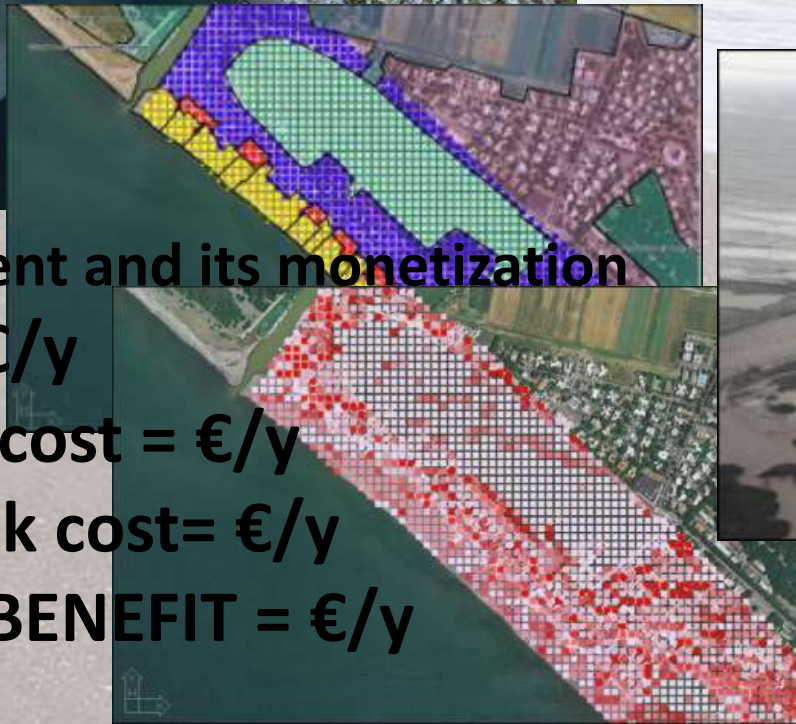
Risk Assessment and its monetization

Risk cost = €/y

Adaptation cost = €/y

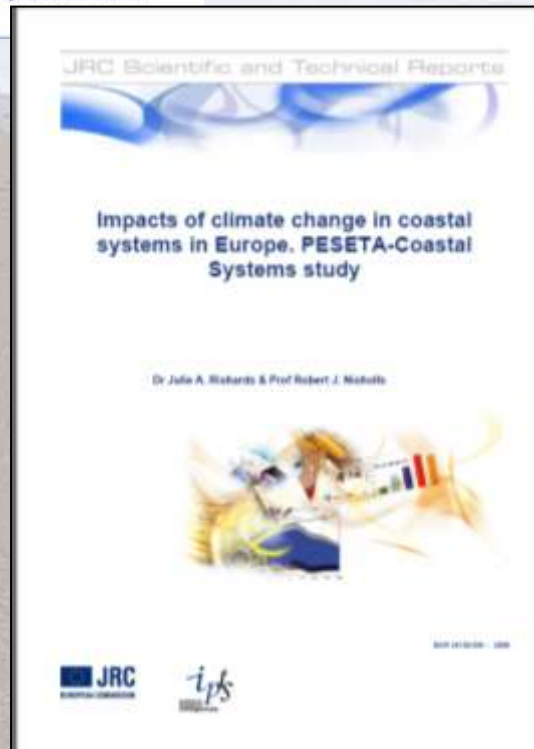
Residual Risk cost = €/y

$R - (A + RR) = \text{BENEFIT} = \text{€/y}$



Fiora River's Mouth
Flood 12/11/2012





Book 2: Shared tools for the forecast and management of the CC effects along the coast

1. Reference to White Paper for Adaptation to CC
2. Adoption of methodologies consistent with DG MARE
3. Adoption or proposition of standards for the coastal adaptation costs at Mediterranean scale (DIVA model)



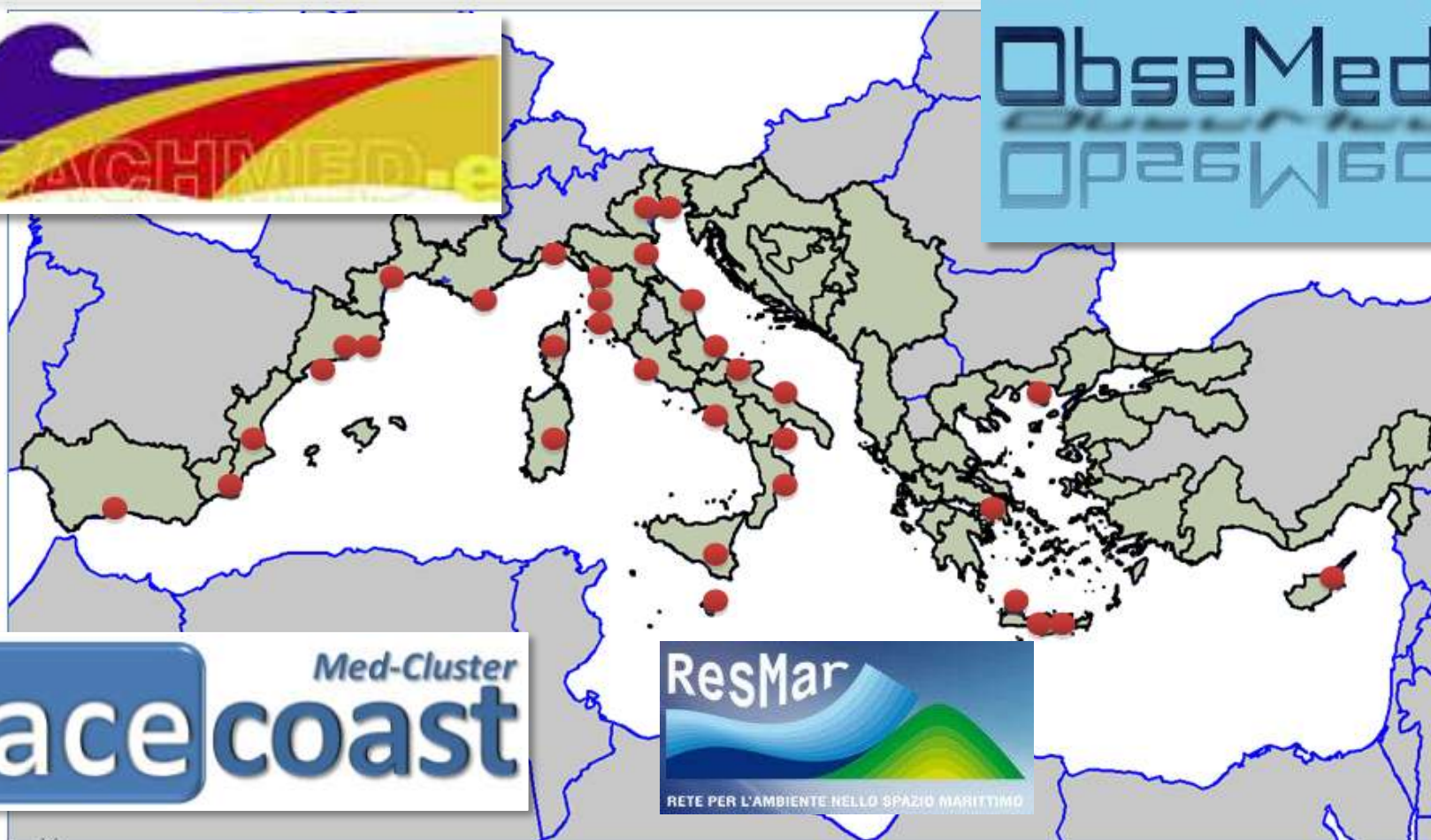
Book 3: implementation of a coastal observatory network in the Mediterranean EURIOMCODE

1. Reference to BEACHMED-e RFO – OBSEMedI subproject
2. Perspective for further development



Part 3: implementation of a coastal observatory network in the Mediterranean

EURIOMCODE





Part 3: implementation of a coastal observatory network in the Mediterranean EURIOMCODE

SURVEY FORM		
National Flag	Structure	Maps
		
Structure		

SURVEY FORM		
National Flag	Structure	Maps
		
Structure Logo		

SURVEY FORM		
National Flag	Structure	Maps
		
Structure Logo		

INFORMATION ON THE STRUCTURE AND THE CONCERNED COAST	
Country:	Spain
Region:	Andalucía
Department/Province:	Málaga
Reference Structure:	Comunidad Autónoma de Andalucía
Name Structure:	
Type of structure:	Public Administration
Stretch of coast dealt:	
Length and type of coast:	

ADDRESS	
Street, ZIP Code, City:	Paseo de la Farola, 12 - 29016 - Málaga

CONTACT PERSON	
Name:	
Position:	
Phone:	
Email:	

2. Main issues and messages