



MAREMED

“MARitime REgions cooperation for MEDiterranean”

Adaptation to Climate Change on Coastal
areas (Pilot Actions)

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**REGIONE
LAZIO**

Adaptation to Climate Change on coastal area (PILOT ACTIONS – Component 3)

DELIVERABLES – ACC books

Diagnosis phase & Pilot Action N°1 “Coherence between coastal vulnerability maps”



Pilot Action N°2 “Shared tools for the forecast and management of the CC effects along the coast”



Pilot Action N°3 “Implementation of a coastal Observatory Network in the Mediterranean Basin”



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Adaptation to Climate Change on coastal area (PILOT ACTIONS – Component 3)

Pilot Action title

Inventory of Atlases and datasets concerning coastal risks

Guidelines, taking into account of the issued cartographies of the regional atlases.

Guidelines for the elaboration of a extreme climatic events dataset.

Updating & consideration after Diagnosis phase

Coastal risk Maps must be coherent with Flood Directive 2007/60/EC. The questionnaire shows that Regions don't share a common method to represent risk in Map fully compliant with FDR. So the objective of an inventory of the existent Maps is not so useful any longer whilst the common Guidelines become almost compulsive.

Very diversified low flood probability have been assumed by national authorities (e.g. 10.000 years for Netherlands, 500 years for Italy, etc.) Nowadays the valuable target is not to establish criteria for a common dataset linked to extreme events but a flexible and common risk model able to manage different hazard datasets.

Diagnosis phase & Pilot Action N°1

"Compared analysis between coastal vulnerability maps "



Delivery July 2012



Adaptation to Climate Change on coastal area (PILOT ACTIONS – Component 3)

Pilot Action title

Valorization of the cross border projects concerning the adaptation to CC. Inventory of the cross border projects concerning ACC managed by the partners; synthesis and diffusion of the results useful for administrations.

Updating & considerations after Diagnosis phase

The wide margin of error in long-term forecasts still doesn't allow liable risk analysis and adaptation policies at regional scale and the attention to the exposition to the current coastal hazards is obviously prevalent. Nevertheless at global scale, analysis like PESETA project (JRC – IPTS 2007), based on a model like DIVA, gave a matter of fact framework about the annual costs of the expected CC damages and the adaptation costs as well. This kind of representation is the powerful tool to start adaptation policies.

Pilot Action N°2

“Shared tools for the forecast and management of the CC effects along the coast”



Delivery November 2012



Adaptation to Climate Change on coastal area (PILOT ACTIONS – Component 3)

Pilot Action title

Network of the Cartographic Observatories. Feasibility study for a network of cartographic tools and observatories of the partners (technical, financial and juridical aspects) and linkages with Mediterranean IMP.

Updating & considerations after diagnosis phase

After the BEACHMED-e Regional Framework Operation and its sub-project OBSEMEDI, a first inventory of public structures dealing with coastal defense monitoring is available and a Report on the monitoring activities as well. Other European projects are looking for a network of coastal observatories and GIS platform is strongly needed. The Final Report of the "Option for coastal information systems", commissioned by DG Environment to THETIS (2011), is another important source of information for a census of the Coastal Information Systems .

Pilot Action N°3

"Implementation of a coastal Observatory Network in the Mediterranean Basin"



Delivery March 2013

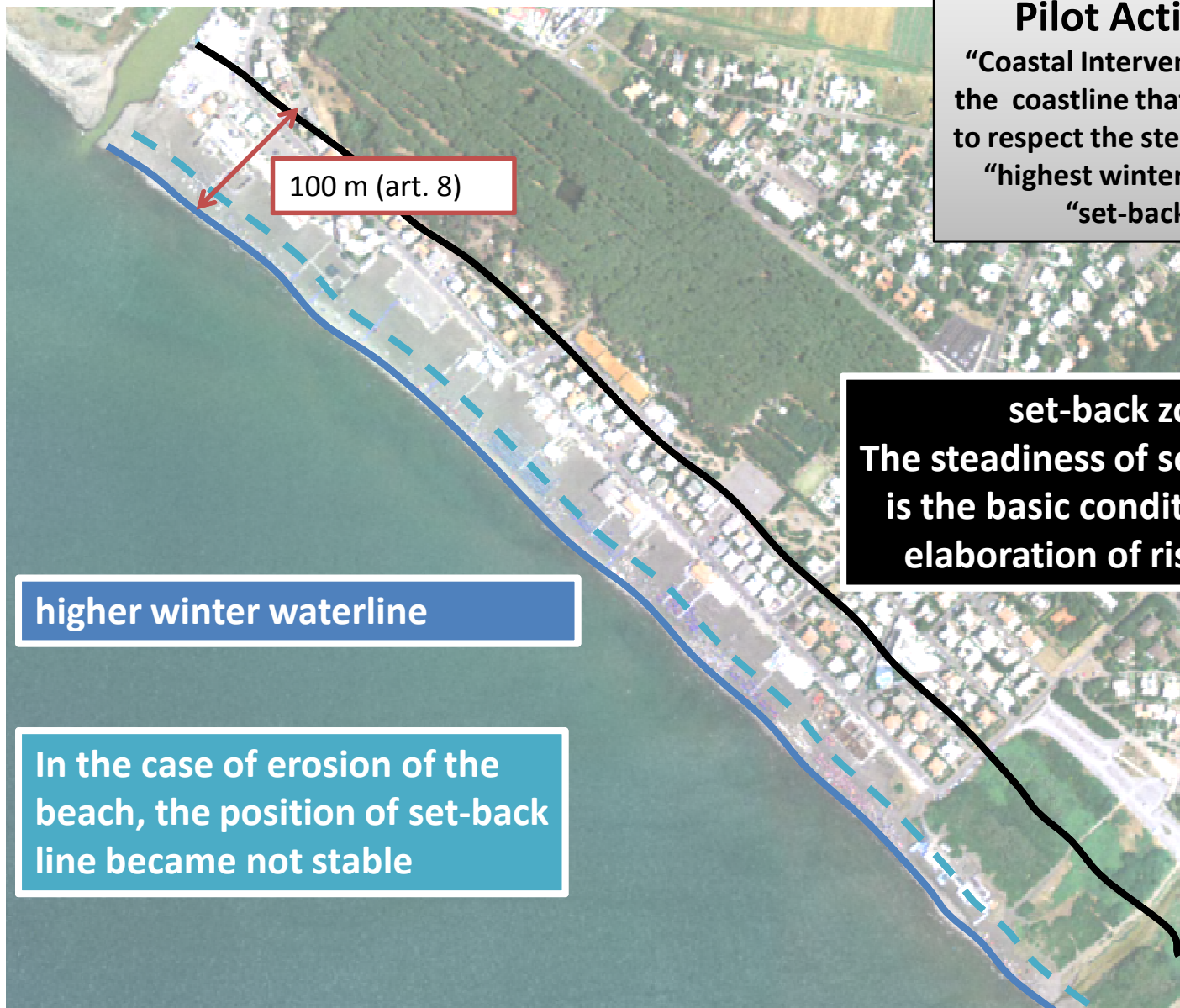
PROPOSAL OF INTEGRATION TO PILOT ACTIONS

Starting from the integration proposed by Emilia-Romagna Region, Lazio Region proposes the development of a methodology for the management of the “highest winter water” line as stated in the art.8 of the ICZM protocol for the erosion consequences.

Pilot Action N°4

**“Coastal Intervention Line CIL:
the coastline that must be hold
to respect the steadiness of the
“highest winter water” and
“set-back line”**



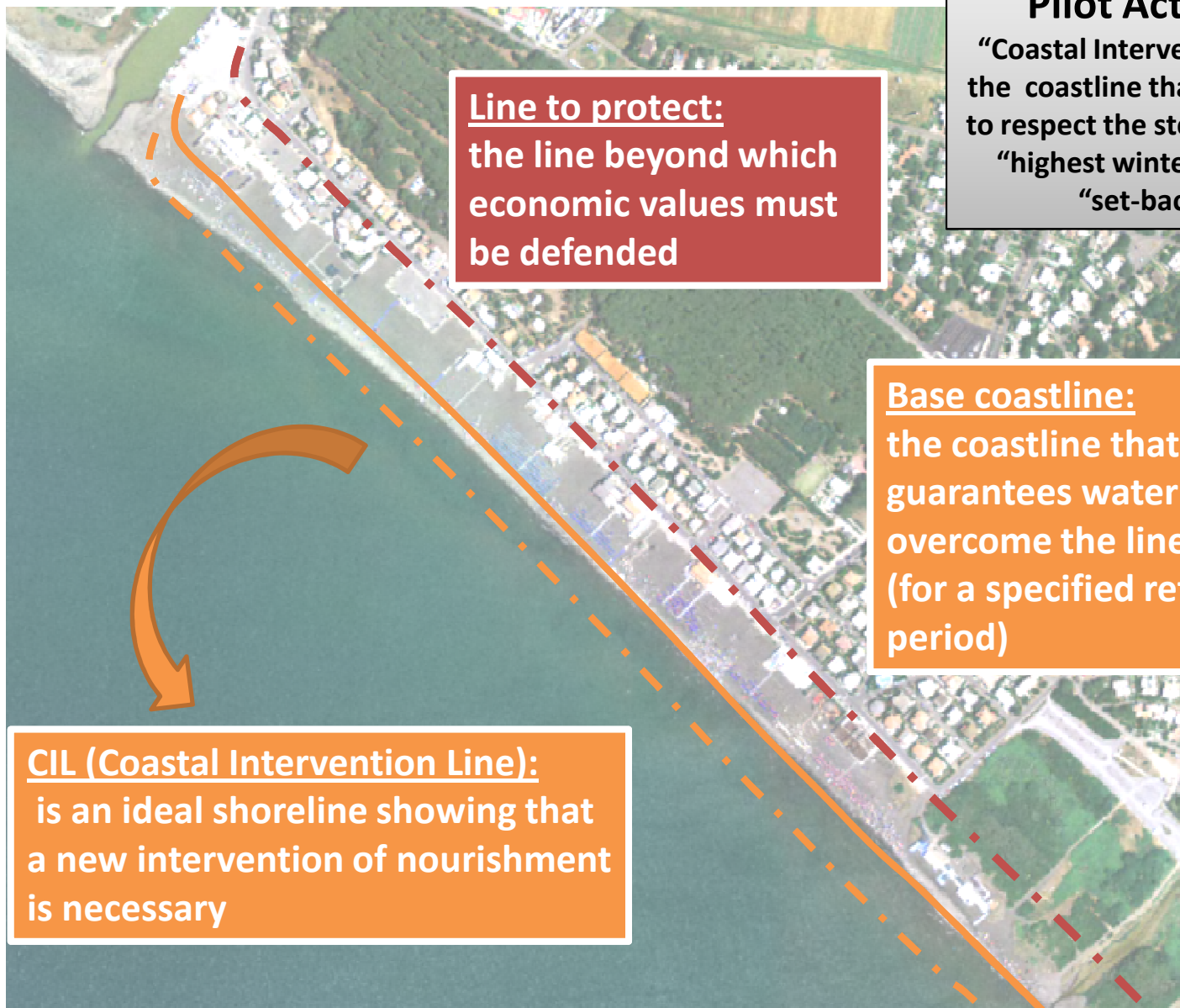


Pilot Action N°4

“Coastal Intervention Line CIL: the coastline that must be hold to respect the steadiness of the “highest winter water” and “set-back line”



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Line to protect:
the line beyond which
economic values must
be defended

Base coastline:
the coastline that
guarantees water didn't
overcome the line to protect
(for a specified return
period)

CIL (Coastal Intervention Line):
is an ideal shoreline showing that
a new intervention of nourishment
is necessary

Pilot Action N°4
"Coastal Intervention Line CIL:
the coastline that must be hold
to respect the steadiness of the
"highest winter water" and
"set-back line"



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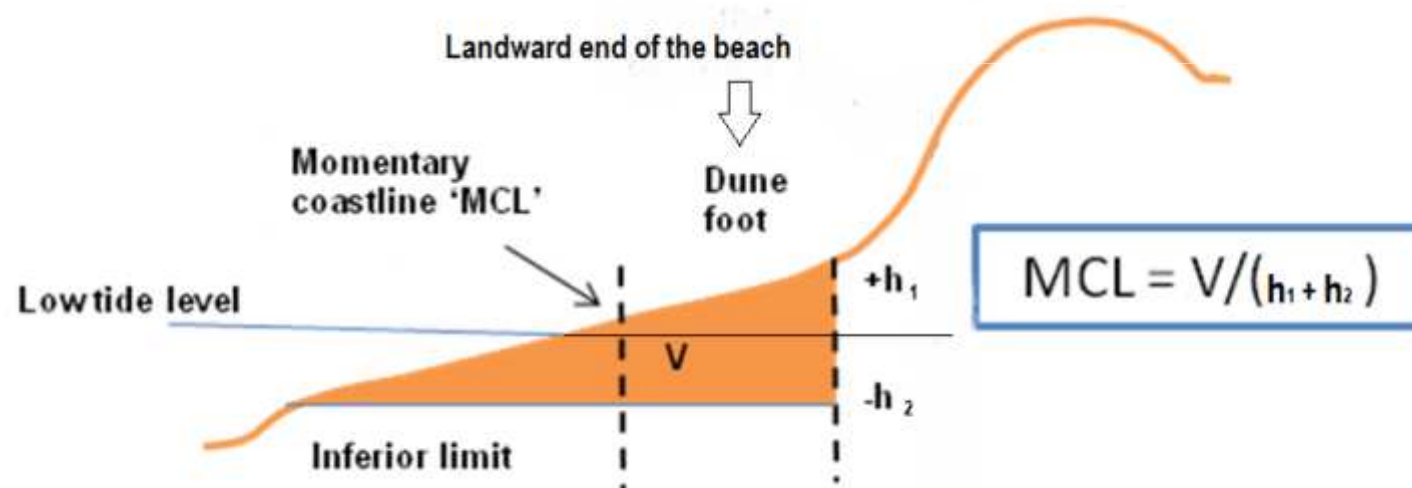


The construction of CIL is elaborated taking account a national Dutch project approach that is based on volumetric approach

Pilot Action N°4

“Coastal Intervention Line CIL: the coastline that must be hold to respect the steadiness of the “highest winter water” and “set-back line”

New morphological parameter to consider → Momentary Coastline MCL (it represents volumetric condition of the beach)





Programme Med



The purposes for this Pilot action integration are:

Pilot Action N°4

“Coastal Intervention Line CIL:
the coastline that must be hold
to respect the steadiness of the
“highest winter water” and
“set-back line”

- Developing a methodology for the definition of the Coastal Intervention Line CIL (this methodology is compliant with Mediterranean coastal Administrations needs)

- Costs of maintenance and monitoring of CIL

- Methods for CIL representation in Maps

- Real application on a significant stretch of coast



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Additional budget allocation and deliverables are:

Pilot Action N°4

**“Coastal Intervention Line CIL:
the coastline that must be hold
to respect the steadiness of the
“highest winter water” and
“set-back line”**

Action a)

Production of a report (BOOK n.4 - "Coastal Intervention Line CIL: the coastline that must be hold to respect the steadiness of the set-back line") describing the methodology to define the CIL and all the monitoring tools necessary to adopt this methodology.

•Additional Budget allocation = € 20.000,00

Action b)

An experimental application of the model on the Lazio Region's coast area

•Additional Budget allocation = € 10.000,00



VNK/FLORIS project (Flood risks and safety in the Netherlands on Map)

REGIONE LAZIO/ RIJKSWATERSTAAT (Water Management Ag.)

1st Meeting in Utrecht on 13th April 2011

2nd Meeting in Amsterdam on 4th July 2012

