



Mediterranean network to Assess and upgrade the Monitoring and Activity in the region

Funded under the EC Programme, Environment and Sustainable Development, Vth Framework Programme

What is MAMA and Why is this Questionnaire Important

MAMA - The Mediterranean network to Assess and upgrade Monitoring and forecasting Activity in the region is an ongoing thematic network funded under the EC Programme Energy, Environment and Sustainable Development within the 5th Framework Programme. With a consortium made up of focal institutions from all the Mediterranean countries, MAMA is staging a concerted effort among countries in the region to put in place the institutional linkages and regional platform to promote the establishment of an ocean observing and forecasting system in the region. MAMA focuses on the trans-national pooling of scientific and technological resources in the basin, through the sharing of experiences and the transfer of expertise, to bring capacities in operational oceanography at comparable levels, and provide an integrated effort towards the planning and design of the initial ocean observing and forecasting system in the Mediterranean. Furthermore, MAMA is interacting with all stakeholders and relevant organisations, working in the whole basin to trigger local awareness on the benefits of operational oceanography and ocean forecasting with dissemination of results and demonstration products, and building momentum towards long term commitments by governments. Within this effort MAMA is pioneering the implementation of GOOS by an unprecedented endeavour and novel approach that will put the region at the forefront of operational oceanography.

MAMA is structured into several work packages. This questionnaire aims to collect information along the Mediterranean coasts within the general objective of Task 8.1 in Workpackage 8 of **MAMA (Dissemination & Products**) which is to develop a demonstrator web-site **CEROSPIG** on **C**oastal **EROS** ion **P**rotection and **I**ntegrated Coastal Zone Management (ICZM) Guidance and information in general.

The outcome of the survey conducted by this questionnaire, which you are kindly invited to fill in, will be an important input to the development of CEROSPIG, bringing important information on the needs in your country on the subject as well as on the available relevant information and potential data providers on the subject in your country.

Who should fill the Questionnaire

Although this questionnaire is not a contractual obligation, it is open to be compiled on a voluntary basis by the country focal member institute participating in MAMA or directly by other relevant organizations in each country involved in coastal erosion protection and coastal management.

The questionnaire replies are expected to be collected by the MAMA focal country members who will send them to the MAMA Secretariat by fax, post, email or upload to the MAMA website via FTP.

However, it will be greatly appreciated if the questionnaire is sent directly via FTP by mail or as an email attachment to the MAMA Secretariat at the address given below. In such case please inform and copy the submitted questionnaire to the MAMA focal member institute. A prompt response and submission of the questionnaire before the end of September 2004 is much appreciated, and will enable us to prepare the CEROSPIG website according to plans and on schedule. Your cooperation in filling and sending the questionnaire and any available case studies information is essential to make CEROSPIG complete and useful.

Structure of the Questionnaire

Although the CEROSPIG web site demonstrator has been launched in its preliminary shape on the world wide web, the input requested in this questionnaire is very important for the finalisation of the CEROSPIG web tool to meet in the best way the potential user needs on guidance for protection against coastal erosion and integrated coastal zone management by learning from reported local case studies where available, for the benefit of both Mediterranean and worldwide coastal countries. The questionnaire is structured in four major sections:

A. Entry form signature of the organization/person filling the questionnaire.

B. Characterization of the Mediterranean coasts of your country::

- B1. A short description of your country coastal major natural features as known to you.
- B2. Information on coastal and/or marine man-made structures on your coast which you if available to you.

C. Description of coastal erosion state on the Mediterranean coasts of your country:

- C1. Description of coastal erosion state in your country as known to you.
- C2. Examples of protection measures implemented at your coasts as well as example(s) of case studies conducted in your country relevant to coastal erosion protection guidance and assistance.

D. Description of coastal zone management for Mediterranean coasts of your country:

- D1. Description of the responsible body(ies) for ICZM in your country.
- D2. Description of the needs of your organization in regards to capacity building and guidance on Coastal Engineering and Sustainable Integrated Coastal Zone Managements for the coastal zone monitored or managed by your organization.

This Questionnaire is available in 2 versions:

- 1. An electronic version which may be downloaded via the Internet or was sent to you as an email attachment file in OFFICE XP format, (CEROSPIG SHORT QUESTIONNAIRE.doc) or ACROBAT format (CEROSPIG SHORT QUESTIONNAIRE.pdf) or HTML (CEROSPIG SHORT QUESTIONNAIRE.html). The format file can be filled on-line via the Internet.
- 2. A printed version which was sent to you by mail or fax from MAMA focal partner institute in your country or directly from the MAMA Secretariat.

To speed up the data input assimilation in a database using the CEROSPIG development the prefered compilation of the questionnaire is on the computerized digital version, but if you cannot do it then a clear handwritten filled questionnaire is also welcome. In addition, case study reports or information you may want to submit as examples of coastal erosion counteractions or ICZM implemented can be sent via normal mail to the MAMA Secretariat.

Please remember that the input requested in this questionnaire from you is very important for the successful development of the CEROSPIG in a way meeting your organization and country needs for guidance and tools relevant to protection against coastal erosion and sustainable integrated coastal zone management of your country coasts!

Questionnaire Filling Guidance

As a general note on the filling of the questionnaire - In most sections it is possible to enter more than one selection. Please make your choice by using the check boxes where available. In cases where only one answer is necessary this is stated specifically.

The approximate duration for filling the questionnaire is less than 1 hour if you have the available information, otherwise is even less.

For a quick and usefull filling:

- 1. Please save this questionnaire to your hard disk.
- 2. Type your answers/details in the items with lines.
- 3. Choose the best described item in the checkbox items. To do that select the checkbox, double click it, at the "default value" frame check the "checked" option.
- 4. Save all your changes.
- 5. Attach your saved file to the reply mail.

Submission Address of the Questionnaire is:

Via email: Aldo Drago" <aldo.drago@um.edu.mt> By post: Aldo Drago, MAMA Secretariat IOI Malta Operational Centre, University of Malta c/o 43, Flat 1, Valley Road, Birkirkara, BKR 10, <u>MALTA</u> Via Fax: +(356) 2144 0972

SECTION A

Entry Form Signature

	Last Name, First Name	organization initials
Name of questionnaire replier /		
organization initials		

> Compiled on behalf of:

≻	Institute:	×
	Street Address:	~
	Zip Code:	>
	Town/City:	>
	Country:	~
	Telephone:	~
\mathbf{A}	Fax:	>
	Email Address:	>

Compilation Date :

SECTION B

CHARACTERIZATION OF THE COASTS MONITORED AND/OR MANAGED BY YOUR ORGANIZATION

B1 – Short description of your coasts natural major features as known to you

B1.1 Geographic Location of the coasts monitored or studied by your organization

B 1.1.1 – Specific Location of Major Coastal Sector(s) described (add additional lines if necessary). Reference should be made only to Major sectors. Below options for up to 3 sectors are listed, but you can use less or add more if necessary.

Sector Name and Description

Sector 1	My 1 Sector name Nile Littoral Cell northern sector (Gaza – Acre)
Sector 2	My 2 Sector name Northern coast of Israel (Acre – Rosh Haniqra)
Sector 3	My 3 Sector name

B 1.1.2 – Specific Boundaries of the Major Coastal Sector(s) described above. Please indicate also the position of the sector in your country (Northern / Eastern / Southern / Western) part by filling N / E / S / W.

Sector Coordinates Boundaries (Optional)			otional)	Located in (N/E/S/W) part	
Sector 1					
Sector 2					
Sector 3					

You may use the <u>Cerospig Locator</u> tool to find the coordinates of the boundaries of your coastal sector.

- **B1.2** Quick characterization of the coast(s) described in B 1.1.1 if you have the requested information (partial information is also welcome; add additional lines if necessary).
- B 1.2 Describe what is the kind of the majority of the material of the coast (rock, sand, mud). Mark all types applicable.

Sector No. 1	Rock	Sand	Mud
Sector No. 2	Rock	Sand	🗌 Mud
Sector No. 2	Rock	Sand	Mud

B 1.2.1 – For rock describe its type (Mark all types applicable).

Sector No. 1	Soft Rock	Brittle rock
Sector No. 2	Soft Rock	Brittle rock
Sector No. 3	Soft Rock	Brittle rock

B 1.2.2 – If it is sand describe its characteristics (Mark all types applicable) :

B 1.2.2.a – By general average grain size at the waterline:

Sector No. 1	Coarse	🗌 Fine	Uery fine
Sector No. 2	Coarse	Fine	Uery fine
Sector No. 3	Coarse	Fine	Uery fine

B 1.2.2.b – By grain size at the waterline, if you have information on it:

Sector No. 1	Average sand grain diameter $D_{50\%} =$	mm
Sector No. 2	Average sand grain diameter $D_{50\%} =$	mm
Sector No. 3	Average sand grain diameter $D_{50\%} =$	mm

B 1.2.2.c – By grain size gradation at the waterline, if you have information on it:

In Sector No. 1	The sand is	Uniform size	☐ Well graded
In Sector No. 2	The sand is	Uniform size	☐ Well graded
In Sector No. 3	The sand is	Uniform size	☐ Well graded

B 1.3 – Describe what major natural features are present in the coastal sector(s) (select all appropriate, and add additional lines if necessary for additional major coastal sectors)

Sector	River Estuary	Rocky	Exposed	Protected	Barred
No. 1		headland	straight coast	bay coast	coast
Sector	River Estuary	Rocky	Exposed	Protected	Barred
No. 2		headland	straight coast	bay coast	coast
Sector	River Estuary	Rocky	Exposed	Protected	Barred
No. 3		headland	straight coast	bay coast	coast

B 1.4 – Please describe major features of the wave climate on the Mediterranean coast of your sectors if you have the requested information (partial information is also welcome):

Sector 1:

B 1.4.1.1 – The deep water significant wave height most of the time is less than _____ meter.

- B 1.4.2 .1– The peak wave period most of the time is less than _____ seconds.
- B 1.4.3.1 During strong wave storms the deep water significant wave height can reach more than _____ meter.
- B 1.4.4.1 The peak wave period in such storms may reach periods above _____ seconds.
- B 1.4.4.1 The wave direction in such storms is:

torms is from varying directions
1

Sector 2:

B 1.4.1.2 – The deep water significant wave height most of the time is less than_____ meter.

B 1.4.2 .2– The peak wave period most of the time is less than_____ seconds.

B 1.4.3.2 – During strong wave storms the deep water significant wave height can reach more than_____ meter.

B 1.4.4.2 – The peak wave period in such storms may reach periods above_____ seconds.

B 1.4.4.2 – The wave direction in such storms is:

Always from same directional interval | In various storms is from varying directions

Sector 3:

B 1.4.1.3 – The deep water significant wave height most of the time is less than _____ meter.

B 1.4.2 .3– The peak wave period most of the time is less than _____ seconds.

B 1.4.3.3 – During strong wave storms the deep water significant wave height can reach more than_____ meter.

- B 1.4.4.3 The peak wave period in such storms may reach periods above_____ seconds.
- B 1.4.4.3 The wave direction in such storms is:

Always from same directional interval	various storms is from varying directions
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- B 1.5 Describe major natural features of the wind climate on the Mediterranean coasts of your country if you have the requested information (partial information is also welcome):
- B 1.5.1 Most of the time per average year the winds are

Sector No. 1	U Weak	Mild	Strong	Ury Strong
Sector No. 2	🗌 Weak	Mild	Strong	Ury Strong
Sector No. 3	U Weak	Mild	Strong	Ury Strong

B 1.5.2 – Most of the time per average year the winds are coming from

Sector No. 1	One directional sector	Varying directions	Blow onshore	Blow offshore
Sector No. 2	One directional sector	Uarying directions	Blow onshore	Blow offshore
Sector No. 3	One directional sector	Uarying directions	Blow onshore	Blow offshore

B 1.5.3 – During stormy conditions the strong winds are coming from

Sector No. 1	One directional sector	Varying directions	Blow onshore	Blow offshore
Sector No. 2	One directional sector	Uarying directions	Blow onshore	Blow offshore
Sector No. 3	One directional sector	Varying directions	Blow onshore	Blow offshore

- B 1.6 Please describe the major natural beach features in the coastal sectors mentioned in B 1.1.1 if you have the requested information (partial information is also welcome):
- B 1.6.1 Most of the beaches in the coastal sector are:

Sector No. 1	Very narrow			Very Wide
Sector No. 2	Very narrow	□ Narrow	Wide	□ Very Wide
Sector No. 3	Very narrow	□ Narrow	Wide	□ Very Wide

B 1.6.2 – The slope of the foreshore in the coastal sector is in general:

Sector No. 1	Very steep	Steep	Mild	U Very Mild
Sector No. 2	Very steep	Steep	Mild	U Very Mild
Sector No. 3	Ury steep	Steep	Mild	U Very Mild

B 1.6.3 – The slope of the coast profile is generally:

Sector No. 1	Uery steep	Steep	Mild	U Very Mild
Sector No. 2	U Very steep	Steep	Mild	U Very Mild
Sector No. 3	Very steep	Steep	Mild	U Very Mild

B 1.6.4 – Usually in the coastal sector described the beach profile ends on land with a

Sector No. 1	High cliff	Low cliff	Sandy dune
Sector No. 2	High cliff	Low cliff	Sandy dune
Sector No. 3	High cliff	Low cliff	Sandy dune

B 1.6.5 – The beach cliff material consists mainly of

Sector No. 1	Hard Rock	Soft Rock	Cemented sand	Sand and clay
Sector No. 2	Hard Rock	Soft Rock	Cemented sand	Sand and clay
Sector No. 3	Hard Rock	Soft Rock	Cemented sand	Sand and clay

B 1.7 – Describe major natural offshore features of your country coast(s) :

B 1.7.1 – Are there any islands off your country coast(s)?

Sector No. 1	Yes, many	☐ Yes, a few	Yes, one	None
Sector No. 2	Yes, many	🗌 Yes, a few	Yes, one	None
Sector No. 3	☐ Yes, many	🗌 Yes, a few	Yes, one	None

B 1.7.2 – Are there any constant spits or tombolo formations behind the islands?

Sector No. 1	Tombolo	🗌 Spit	None	Various
Sector No. 2	Tombolo	Spit	None	Various
Sector No. 3	Tombolo	Spit Spit	☐ None	Various

B 1.7.3 – Are there any major lagunar formations?

Sector No. 1	Yes	No No
Sector No. 2	Yes	No
Sector No. 3	Yes	No No

B 1.8 – Characterize the sediment transport in the coastal sectors mentioned in B 1.1.1., if you have that information:

B 1.8.1 – Is a strong one directional longshore sediment transport present ?

Sector No. 1	Yes	No, 2 strong	No, 2 weak	Strong on-offshore
Sector No. 2	Yes	No, 2 strong	🗌 No, 2 weak	Strong on-offshore
Sector No. 3	Yes	No, 2 strong	No, 2 weak	Strong on-offshore

B2 - General description of coastal and marine man-made structures on your coast

B 2.1 – Characterize the major coastal structures present in the coastal sectors described in B 1.1.1

B 2.1.1 – Are there any major ports, marinas, cooling basins or other coastal structures present in the coastal sector(s)

Sector No. 1	🗌 Many	A few	One One	None
Sector No. 2	Many	A few	One	None
Sector No. 3	Many	A few	One	None

- B 2.1.2 If your previous answer is yes, describe the major structures
- B 2.1.2.1.a Structure Concise Description (Add lines as necessary)

Sector	Type of structure (port, marina, etc.)	Name and Description

SECTION C

DESCRIPTION OF COASTAL EROSION STATE WITHIN YOUR COASTAL SECTOR(S)

C1 – Description of coastal erosion state at the coastal sectors described in B 1.1.1

C 1.1 – Do you estimate that generally the coastline sector is eroding or accreting?

Sector No. 1	Eroding		Is Stable	Varies
Sector No. 2	Eroding	☐ Accreting	Is Stable	Varies
Sector No. 3	Eroding		Is Stable	U Varies

C 1.2 – If you estimate that your beaches are eroding, how do you estimate its state?

Sector No. 1	Minor, local	Chronic erosion	Acute Erosion
Sector No. 2	Minor, local	Chronic erosion	Acute Erosion
Sector No. 3	Minor, local	Chronic erosion	Acute Erosion

(<u>Local erosion</u> is induced by a coastal structure. <u>Chronic erosion</u> is usually caused by a gradient in longshore transport and takes place in the breakerzone. <u>Acute erosion</u> is caused by a sudden event, such as by a storm event.)

C2 – Protection measures implemented at your coasts, case studies describing experience with protective means, identification of needs for coastal erosion protection guidance and assistance.

Please provide the information requested below if you have it, partial information is also welcome.

C 2.1 – Which means have been used to prevent or remediate the coastal erosion? (Select all applicable)

Sector No. 1	Hard structures	Soft structures	☐ None
Sector No. 2	Hard structures	Soft structures	□ None
Sector No. 3	Hard structures	Soft structures	□ None

Sector No. 1	Nourishment	Coast reorientation	□ None
Sector No. 2	Nourishment	Coast reorientation	□ None
Sector No. 3	Nourishment	Coast reorientation	None

C 2.2 – If hard structures have been used then of what type?

Sector No. 1	Sea wall	Detached breakwater	🗌 Groin	Other
Sector No. 2	🗌 Sea wall	Detached breakwater	Groin 🗌	Other
Sector No. 3	🗌 Sea wall	Detached breakwater	Groin 🗌	Other

C 2.3 – If soft structures have been used then of what type?

Sector No. 1	Artificial seaweed	Sand bags	Geotextiles	Other
Sector No. 2	Artificial seaweed	Sand bags	Geotextiles	Other
Sector No. 3	Artificial seaweed	Sand bags	Geotextiles	Other

C 2.4 – If other soft structures have been used then of which type?

Describe _	 Sector No. 1
Describe _	 Sector No. 2
Describe _	 Sector No. 3

C 2.5 – If one or more protection means have been used, which are most cost effective in your opinion for your coast(s)?

Sector No. 1	Hard structures	Soft Structures	☐ Nourishment	Coast reorientation	Other
Sector No. 2	Hard structures	Soft structures	Nourishment	Coast reorientation	Other
Sector No. 3	Hard structures	Soft Structures	Nourishment	Coast reorientation	Other

C 2.6 – Which erosion protection means in your opinion are to be recommended?

Sector No. 1	Hard structures	Soft Structures	☐ Nourishment	Coast reorientation	Other
Sector No. 2	Hard structures	Soft Structures	☐ Nourishment	Coast reorientation	Other
Sector No. 3	Hard structures	Soft Structures	Nourishment	Coast reorientation	Other

C 2.7 – Does your country have a routine coastal erosion prevention maintenance program?

No

Yes

If yes, please describe concisely:

C 2.8 - Can you provide documented information of case studies of coastal erosion?

 Yes
 No

 If yes, please send to MAMA secretariat by mail the case study/ies information (both printed and/or digital format welcome). If available also in digital format (such as doc or pdf format papers) please send them as soon as possible via email to the MAMA secretariat.

 C 2.9 - What are your needs regarding protection against coastal erosion?

 C Capacity building
 Expert guidance

 Statistical meteo-marine data
 Modeling

 If other please describe in a concise way below:
 Other

SECTION D

DESCRIPTION OF COASTAL ZONE MANAGEMENT IN YOUR COASTAL SECTOR(S)

D1 – Identification of the responsible bodies for ICZM, the sources and types of data available for ICZM from vour organization and/or other bodies in vour area

D.1.1 Please provide identification of the responsible body(ies) for Integrated Coastal Zone Management regarding your country coasts.

\triangleright	Contact person:
⊳	Title:
⊳	Position:
\triangleright	Organization:
\triangleright	Street Address:
\triangleright	Zip Code:
\triangleright	Town/City:
⊳	Country:
⊳	Telephone:
≻	Fax:
	Email Address:

D.1.2 Please provide if available identification of other bodies in your country holding information relevant for Integrated Coastal Zone Management.

\triangleright	Contact person:
\triangleright	Title:
	Position:
	Organization:
	Street Address:
	Zip Code:
	Town/City:
	Country:
	Telephone:
	Fax:
	Email Address:

Questionnaire on Coastal Erosion Protection and Integrated Coastal Zone Management State at the Coasts of the Mediterranean Sea				
D.1.3 Please indicate the types of information relevant for Integrated Coastal Zone Management regarding your country coasts existing in your institution				
	Topographic charts	Bathymetric charts	Waterline position data	
	Aerial historic photographs	Meteo-marine local data	Beach profiles data	
	Coastal structures	Coastal maintenance	🗌 Coastal use data	

data		
☐ Marinas and ports	Cooling basins	Water intakes or outfalls
🗌 Touristic data	Natural resources	☐ Other

D2 – Identification of the needs of your organization in regards to capacity building and guidance on Sustainable Integrated Coastal Zone Managements for the coastal zone monitored or managed by your organization

D2.1 – What are the needs regarding ICZM for your institution as assessed by you?

Capacity building	Expert guidance				
Statistical meteo-marine data	Modeling				
Financial assistance	☐ Other				
If other please describe in a concise way below:					

D2.2 – What kind of information would you like to reach using the CEROSPIG web site Demonstrator? (Select all applicable)

Methods for ICZM	Expert location			
Statistical meteo-marine data	Modeling tools			
Software	Case studies			
Manufacturers	Suppliers			
🗌 Near real time data	Equipment			
Education	Modeling consultants			
Publications, manuals	Conferences			
Links to other sources	Other			
If <u>other</u> please describe in a concise way below your wishes:				

D 2.3 - Can you provide documented information of case studies on ICZM in your country?

Yes

No

If yes, please send to MAMA secretariat by mail the case study/ies information (both printed and/or digital format welcome). If available also in digital format (such as doc or pdf format papers) please send them as soon as possible via email to the MAMA secretariat. If you are a MAMA member, you can upload your case study also on the CEROSPIG web site in the sub-site of your organization.

THANK YOU FOR FILLING THIS QUESTIONNAIRE. YOUR INPUT WILL HELP TO DEVELOP THE CEROSPIG WEB SITE TO MEET BEST POSSIBLE YOUR NEEDS AND EXPECTATIONS.