CAMP Italy Project

FINAL REPORT

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NATIONAL PROJECT COORDINATOR

Ms Daniela Addis

PROJECT MAP COORDINATOR

Mr Marko Prem, PAP/RAC (Priority Actions Programme/Regional Activity Centre)

PROJECT PARTNER REPRESENTATIVES (TAVOLO CAMP or STEERING COMMITTEE)

For the Ministry of Environment, Land and Sea, General Directorate for Protection of Nature and Sea:

Mr Oliviero Montanaro, institutional representative

Mr Matteo Braida, scientific representative

For the Emilia-Romagna Region, Water, Air and Physical Agents Protection and Rehabilitation Service:

Ms Rosanna Bissoli, institutional representative

Mr Emanuele Cimatti, scientific representative

For the Autonomous Region of Sardinia, Sardinian Coastal Conservation Agency:

Mr Giorgio Onorato Cicalò, institutional representative

Mr Paolo Vargiu, scientific representative

For the Tuscany Region, Land Defence and Civil Protection Department, Valdarno Inferiore and Coast Public Works Office:

Mr Francesco Pistone, institutional representative

Mr Luigi Enrico Cipriani, scientific representative

TECHNICAL-OPERATIONAL SUPPORT REPRESENTATIVES

ISPRA (Italian National Institute for Environmental Protection and Research)

Mr Luciano Bonci

Mr Giampaolo Stasi

CoNISMa (National Inter-University Consortium for Marine Sciences)

Mr Annibale Cutrona

Ms Francesca Arduini

Mr Antonio Capone

Ms Chiara Innocenti

Ms Giuseppina Milia

Mr Edoardo Papa

Ms Tiziana Piretti

PROJECT SUPPORT WORKING GROUP

Ms Elisa Ulazzi, Team Leader - Horizontal Activity 1

Ms Ilda Mannino, Team Leader - Horizontal Activity 2

Ms Beatrice Giambastiani, Team Leader - Horizontal Activity 3

Mr Alessio Satta, Team Leader - Horizontal Activity 4

Ms Irene Sanguineti, Team Leader - Transversal Horizontal Activity

Mr Andrea Di Tomassi, Project Assistant

Ms Germana Borsetta, Project Assistant in first phase

TECHNICAL WORKING GROUP FOR INDIVIDUAL ACTIVITIES

For the Emilia-Romagna Region

Mr Emanuele Cimatti, Emilia-Romagna Region

Ms Silvia Bellacicco, Emilia-Romagna Region

Ms Marzia Di Marcello, Emilia-Romagna Region

Ms Angela Lucchi, Emilia-Romagna Region

Mr Paolo Luciani, Emilia-Romagna Region

Mr Christian Marasmi, Emilia-Romagna Region

Mr Roberto Montanari, Emilia-Romagna Region

Ms Luisa Perini, Emilia-Romagna Region

Mr Andrea Rapino, Emilia-Romagna Region

Ms Monica Soracase, Emilia-Romagna Region

Mr Attilio Rinaldi, Marine Research Centre Foundation

For the Autonomous Region of Sardinia

Mr Paolo Vargiu, Sardinian Coastal Conservation Agency

Ms Elisabetta Cardia, Sardinian Coastal Conservation Agency

Ms Claudia Dessy, Sardinian Coastal Conservation Agency

Ms Tiziana Lai, Sardinian Coastal Conservation Agency

Ms Veronica Pilia, Sardinian Coastal Conservation Agency

Ms Manuela Puddu, Sardinian Coastal Conservation Agency

Ms Tiziana Saba, Sardinian Coastal Conservation Agency

For the Tuscany Region

Mr Luigi Enrico Cipriani, Tuscany Region

Mr Carlo Brandini, LaMMA Consortium

Ms Letizia Costanza, LaMMA Consortium

Mr Bartolomeo Doronzo, LaMMA Consortium

Ms Valentina Grasso, LaMMA Consortium

Ms Lucia Innocenti, LaMMA Consortium

Mr Massimo Perna, LaMMA Consortium

Mr Stefano Taddei, LaMMA Consortium

Mr Giovanni Vitale, LaMMA Consortium

Ms Irene Mammì, University of Florence

Mr Enzo Pranzini, University of Florence

Local forums

Ms Emanuela Manca, facilitator

Project video production

Soc. Terratrema Film Srl, Mr Stefano Sampaolo

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ANNEXES

ANNEX 1: FEASIBILITY STUDY [EN]

ANNEX 2: INITIAL REPORT [EN]

ANNEX 3: THE JUDICIAL FRAMEWORK OF THE ICZM [IT]

ANNEX 4: TABLE COMPARING PROJECT OUTPUT, INDIVIDUAL ACTIVITIES AND HORIZONTAL ACTIVITIES [IT]

ANNEX 5: SUMMARY SHEETS SHOWING THE RESULTS OF INDIVIDUAL ACTIVITIES [IT/EN]

ANNEX 6: SUMMARY SHEETS SHOWING THE RESULTS OF HORIZONTAL ACTIVITIES [IT/EN]

ANNEX 7: MATRIX OF CONSISTENCY BETWEEN PROJECT ACTIVITIES AND THE ICZM PROTOCOL [IT/EN]

ANNEX 8: METHODOLOGY AND MAPPING OF THE STAKEHOLDERSS [IT/EN]

ANNEX 9: SURVEY TO ASSESS AWARENESS ABOUT ICZM [IT]

ANNEX 10: ICZM INDICATORS DATABASE [IT]

ANNEX 11: TABLE OF ICZM INDICATORS [IT]

ANNEX 12: DATA POLICY [IT]

ANNEX 13: TERRITORIAL DATA INFRASTRUCTURE [IT]

ANNEX 14: PUBLIC PARTICIPATION IN THE CAMP ITALY PROJECT [IT/EN]

ANNEX 15: SUPPLEMENTARY LOCAL FORUMS REPORT: EMILIA-ROMAGNA “LAND-SEA ITINERARIES”; TUSCANY “FOR AN INTEGRATED AND SUSTAINABLE MANAGEMENT OF CAPALBIO BEACH”; SARDINIA “INTEGRATED MANAGEMENT OF THE MUGONI COASTAL PINE FOREST SYSTEM” [IT]

ANNEX 16: REPORT ON THE DETAILED DISCUSSIONS SESSION: ROUND TABLE ON THE ROLE OF LOCAL AUTHORITIES IN THE MANAGEMENT AND PREVENTION OF MARINE WASTE (MARINE LITTER AND BEACH LITTER) [IT/EN]

ANNEX 17: COMMUNICATION PLAN [IT]

ANNEX 18: CAMP ITALY PROJECT COMMUNICATION ACTIVITIES [IT]

ANNEX 19: PUBLICATIONS [IT]

ANNEX 20: CAMP ITALY PROJECT BROCHURE [IT/EN]

ANNEX 21: REPORT OF THE FIRST CONFERENCE [EN]

ANNEX 22: MID-TERM CONFERENCE REPORT [IT/EN]

ANNEX 23: REPORT ON THE WORKSHOP "COASTAL PLANNING IN ITALY: INTEGRATED OR FRAGMENTED? REFLECTIONS AND

DISCUSSION FOR THE GOVERNANCE OF COASTAL AREAS [IT/EN]

ANNEX 24: FINAL CONFERENCE REPORT [IT/EN]

ANNEX 25: REPORT ON INTERNSHIPS IN CAMP ITALY AND CAMP FRANCE PROJECTS FOR THE FORMATION OF A KIND OF 'LIAISON OFFICER' BETWEEN THE TWO PROJECTS IN THE FRAMEWORK OF THE MEDITERRANEAN NETWORK OF CAMP PROJECTS [IT/EN]

ANNEX 26: INDIVIDUAL ACTIVITIES 1-2-3: INTEGRATED REPORT OF INDIVIDUAL ACTIVITIES 1-2-3 CAMP ITALY PROJECT OF THE TUSCANY REGION [IT]

ANNEX 27: INDIVIDUAL ACTIVITY 4: GUIDELIEN FOR AUTHORISATION AND USE OF SUBMERGED OFFSHORE SANDY DEPOSITS) [IT/EN]

ANNEX 28: INDIVIDUAL ACTIVITY 5: OPERATIONAL PROTOCOL FOR REQUALIFICATION AND CONSOLIDATION OF NATURAL AND/OR ARTIFICAL/RECONSTRUCTED DUNE BUNDS [IT/EN]

ANNEX 29: INDIVIDUAL ACTIVITY 5: DRAFT PLAN FOR THE IMPLEMENTATION OF THE OPERATING PROTOCOL'S REQUIREMENTS ANNEX 28 [IT]

ANNEX 30: INDIVIDUAL ACTIVITY 6: REPORT ON "CONSERVATION OF MARINE AND COASTAL BIODIVERSITY WITH SPECIAL REFERENCE TO THE PROTECTION OF MINOR FAUNA" [IT/EN]

ANNEX 31: INDIVIDUAL ACTIVITY 7: "DEVELOPMENT AND ENHANCEMENT OF NEW FORMS OF SUSTAINABLE TOURISM IN PROTECTED NATURE AREAS"[IT/EN]

ANNEX 32: INDIVIDUAL ACTIVITY 8: EDUCATION AND COMMUNICATION FOR SUSTAINABILITY [IT/EN]

ANNEX 33: INDIVIDUAL ACTIVITY 9: EXAMPLE REPORT ON THE PROJECT DRAFTED BY THE MUNICIPALITY OF TRINITÀ DI AGULTU IN THE LI FERULI LOCALITY [IT]

ANNEX 34: INDIVIDUAL ACTIVITY 10: REPORT ON THE PROGRESS OF WORKS FOR THE ECO-HOSTEL IN THE BUGGERRU LOCALITY [IT]

ANNEX 35: INDIVIDUAL ACTIVITY 11: G.I.R.A. - INTEGRATED MANAGEMENT OF INTEGRATA RESOURCES REGARDING THE FISHING OF SEA URCHINS, OCTOPUS AND LOBSTERS – MODEL AND METHODS FOR ENHANCING BIODIVERSITY, SUSTAINABLE FISHING AND THE LOCAL SOCIAL AND ECONOMIC SYSTEM [IT]

ANNEX 36: INDIVIDUAL ACTIVITY 12: REPORT ON CALCULATION MODELS REGARDING TOURISM CARRYING CAPACITY (TCC) APPLIED TO NATURAL AREAS (IMELS ACTION PROTOCOL “ANTHROPIC IMPACT DUE TO THE PRESSURE OF TOURISM

ACRONYMS

APT	Aziende di promozione Turistica (Tourism Promotion Companies)
ARPA	Agenzia Regionale Protezione Ambiente (Environmental Protection Regional Agency)
BP/RAC	Blue Plan Regional Activity Centre
CAMP	Coastal Area Management Programme
CBD	Convention on Biological Diversity
CCA	Carrying Capacity Assessment
CCC	Convention on Climate Change
CoNISMa	Consorzio Nazionale Interuniversitario per le Scienze del Mare (National Inter-University Consortium for Marine Sciences)
COP	Conference of Parties
EcAp	Ecosystem Approach
EEZ	Exclusive Economic Zone
EFPZ	Ecological and Fisheries Protection Zone
EIA	Environmental Impact Assessment
EMODnet	European Marine Observation and Data Network
EPZ	Ecological Protection Zone
EU	European Union
FPZ	Fisheries Protection Zone
GES	Good Environmental Status
GIS	Geographic Information Systems
HA	Horizontal Activity
IA	Individual Activity
ICM	Integrated Coastal Management
ICZM	Integrated Coastal Zone Management
IMO	International Maritime Organisation
LSI	Land Sea Interactions
MAB	Man and the Biosphere Programme
MAP	Mediterranean Action Plan
MCSD	Mediterranean Commission for Sustainable Development
MED POL	Mediterranean Pollution Programme
IMELS	Italian Ministry of Environment, Land and Sea
MSP	Marittime Spatial Planning
NGO	Non-Governmental Organisation
NPC	National Project Coordinator
PAP/RAC	Priority Actions Programme/Regional Activity Centre
PTCO	Project Technical Coordination Office
PSSA	Particularly Sensitive Sea Area
RAC	Regional Activity Centre
SDI	Spatial Data Infrastructure

SPA	Specially Protected Areas
SPA/RAC	Regional Activity Centre for Specially Protected Areas
SPAMI	Specially Protected Areas of Mediterranean Importance
TA	Thematic Area
TCC	Tourism Carrying Capacity
TOR	Terms of Reference
UN CSD	United Nations Commission for Sustainable Development
UNCED	United Nations Conference on Environment and Development
UNCLOS	United Nations Convention on the Law of the Sea
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WCC	World Coast Conference
WFS	Web Feature Service
WHC	Word Heritage Convention
WMC	Waste Management Centre
WMS	Web Map Service
WSC	Web Service Coverage
WSSD	World Summit on Sustainable Development

1 ABSTRACT

The CAMP Italy Project was established as part of the Coastal Areas Management Programme (CAMP) in 1989 as a programme which is part of the Mediterranean Sea protection activities undertaken by the Contracting Parties to the "Convention for Protection of the Marine Environment and the Coastal Region of the Mediterranean", or the **Barcelona Convention.** The CAMP, as a component of the "Piano di Azione del Mediterraneo" (Mediterranean Action Plan - MAP) - coordinated by the "Centro di Attività Regionale per il Programma di Azioni Prioritarie" (Priority Actions Programme Regional Activity Centre – **PAP/RAC**), under the supervision of UN Environment Mediterranean Action Plan (**UNEP-MAP**) - is focused on the implementation of coastal management projects developed for pilot areas located in the Mediterranean. The next generation of CAMP Projects will thus be based on the Protocol on Integrated Coastal Zone Management in the Mediterranean (**ICZM Protocol**) of the Barcelona Convention, which was adopted in 2008 and entered into force in 2011.

The proposal for activating the CAMP Italy Project – prepared by the Italian Ministry of Environment, Land and Sea (IMELS), in collaboration with the coastal Regions concerned, on the basis of the evaluation of naturalistic, anthropogenic and natural pressures aspects and governance tools in a sample of pilot areas – was submitted and formally approved by the Contracting Parties to the Barcelona Convention during COP 15 in 2008.

The main objective of CAMP Italy has concerned the development and implementation of strategies and procedures for sustainable development of coastal areas, in particular by identifying and testing ad hoc methodologies and tools for the **Management of Integrated Coastal Zones (ICZM)**, implementing the ICZM Protocol, in particularly significant pilot area in Italy. The Project stands out from CAMP Projects completed in other Mediterranean countries as being the first multi-area CAMP: it covers five pilot areas falling within the territory of three coastal Regions (Emilia-Romagna, Sardinia and Tuscany). The activities of CAMP Italy, incorporated within the regulatory framework of the Barcelona Convention and the European Union, have focused in particular on three Thematic Areas:

- **The planning of land and marine coastal areas;**
- **The protection, safeguarding and recovery of coastal and marine habitats;**
- **The sustainability of social and economic pressure on coastal areas.**

As part of these Thematic Areas, thanks to an agreement signed by IMELS and UNEP-MAP PAP/RAC, the partner Regions have realised numerous pilot actions in the two-year period 2014-2016, which regarded the marine as well as the land zones. These actions took into account different key ICZM themes, including: beach nourishment activities and their monitoring, dune protection, conservation of marine and coastal biodiversity, development of new forms of sustainable tourism, education and communication for the sustainability of coastal zones, sustainable use of beaches and protection of coastal ecosystems, enhancement of coastal historical and architectural heritage, and integrated management of fishery resources. Many technical and scientific documents were prepared on the above-mentioned themes during the Project, making it possible to develop innovative methodologies and tools for the planning and management of coastal zones.

In turn, Horizontal Activities – the pillars of the Project, which concern institutional coordination, capacity building, data collection and management, communication and participation – also provided basic tools and methodologies for the implementation of the ICZM. A non-exhaustive list includes: a methodology for assessment of coastal planning and management with respect to the ICZM Protocol and the Maritime Spatial Policy, with the preparation of a special consistency table of planning actions with the articles of the ICZM Protocol; an awareness survey concerning ICZM in Italy; an e-learning course in Italian on ICZM; the

methodology for mapping ICZM stakeholders and their classification; a Spatial Data Infrastructure (SDI) and an ICZM Indicators database; activation of a discussion forum on implementation of ICZM at local level as well as a virtual platform for public participation; communication and dissemination of results through different media and multimedia tools (Project videos in addition to recording and posting online of the most important appointments and meetings, website, publications, newsletters, conferences and other events, etc.).

Finally, we must mention the so-called Strategic note, i.e. a document on the significance of the CAMP Italy Project on *Maritime Spatial Planning (Maritime Spatial Planning - MSP*), The *Integrated Coastal Management (Integrated Coastal Management - ICM*) and land-sea / sea-land interactions (Land-Sea *Interactions - LSI*), Proactive or interpretation and guidance document, since the CAMP Project has allowed the testing and therefore proposals for concrete support both in the implementation of the Medium Term Strategy of the Barcelona Convention for the 2016-2021 period, and the definition **of a Regional Municipality framework for integrated coastal zone management in the Mediterranean** under the Barcelona system; and, ultimately, to provide support to the interpretation of the guidelines that will arise from the implementation of Directive 2014/89/EU of 23 July 2014, establishing a framework for Maritime Spatial Planning (MSP Directive). Note that, in order to analyse which interactions (*LSI*) were considered as part of the Individual Activities and how they were estimated and examined, a specific analytical method was developed and tested on Individual Activities selected as being significant.

The SWOT analysis of Individual Activities carried out by the Regions highlighted the quality and effectiveness of the tools and methodologies developed during the Project, in terms of interoperability and replicability. These instruments can provide valuable support to the implementation of planning and integrated management of marine and coastal zones, not only for the partner Regions but also for other Italian Regions and Mediterranean countries. The dissemination and promotion of Project outputs, as well as the consolidation of the results through application in other projects and/or geographic areas, are of paramount importance for ensuring their contribution to the implementation of the ICZM Protocol and of European Union legislation for the sector. It therefore becomes necessary to consider a specific activity of capitalising on the experience accumulated, also in terms of contributing to the above-mentioned Regional Municipality Framework for Integrated Coastal Zone Management in the Mediterranean. In this sense, the institutional arrangements concluded by IMELS during the execution of the CAMP Italy Project – first of all the two-year agreement with UNEP-MAP – are a concrete opportunity for *following up* on the results of the CAMP Italy Project.

2 INTRODUCTION

The ***Coastal Area Management Programme*** **(*CAMP)***, established in 1989, is part of the activities undertaken by the Contracting Parties to the "Convention on Protection of the Marine Environment and the Coastal Region of the Mediterranean", or the **Barcelona Convention**. As a component of the *Mediterranean Action Plan* (MAP), CAMP is oriented towards implementation of coastal management projects developed in pilot areas located in the Mediterranean, in which **Integrated Coastal Zone Management (ICZM)** is the main instrument for achieving sustainable development. The programme is coordinated by the Regional Activities Centre for the Priority Actions Programme (**PAP/RAC**) under the supervision of MED unit.

CAMP management Projects therefore have the main goal of developing and realising strategies and procedures for the sustainable development of coastal zones and, for this purpose, to identify and ad hoc apply methodologies and tools for the management of the above-mentioned zones on sample areas that are particularly significant.

Starting from the basic assumption that it is increasingly necessary for there to be greater knowledge and awareness of the sea and marine and coastal zones and that activities for promoting this are coordinated in the context of what is done at international level. The CAMP Italy Project has, in turn, identified the objective of testing policy activities and integrated coastal zone management in pilot areas that fall within the territory of three Regions.

The legal reference tool is the Protocol on Integrated Coastal Zone Management in the Mediterranean (**ICZM Protocol**) of the Barcelona Convention, which was adopted in Madrid on 21 January 2008 and entered into force on 24 March 2011. The Protocol establishes a common framework for Contracting Parties in order to promote and implement protection of areas of ecological and landscape interest, rational use of natural resources and integrated management of coastal zones.

Under the ICZM Protocol of the Barcelona Convention for the Mediterranean Sea and European Union legislation, in particular the Recommendation of 30 May 2002 on ICZM and, most recently, Directive 2014/89 on Maritime Spatial Planning (MSP), the activities of CAMP Italy have focused on three Thematic Areas:

- **Planning of marine and terrestrial coastal areas.**
- **Protection, preservation and restoration of coastal and marine habitats.**
- **Sustainability of socio-economic stress on the coastal zone.**

Within these Thematic Areas, thanks to an agreement signed between the Italian Ministry of Environment, Land and Sea (IMELS) and UNEP-MAP-PAP/RAC, the Regions of Emilia-Romagna, Tuscany and Sardinia (the latter with the Coastal Conservation Agency), ad hoc pilot actions have carried out to develop strategies and procedures for the rational use of coastal and marine resources and for environmental protection. The overall objective was to identify and test methodologies, tools and practices of sustainable development of the coast and enhance Italian historic and landscape heritage.

The Italian Project stands out from other international CAMP experience as being the first multi-area CAMP Project – covering five coastal areas in the territory of three Regions overlooking three seas (Mediterranean, Tyrrhenian and Adriatic) – for a total of about 900 km of coastline which has seen the implementation of fourteen pilot Activities, developed over a two-year period (2014-2016).

The activities carried out under the Project are briefly described in this Report (which refers to specific in-depth documents on specific aspects, attached in the Annex), which considers:

- The legal framework of ICZM at different levels – international, within the European Union and in Italy – with a focus on CAMP Projects;
- Description of the CAMP Italy Project and the geographical area in which it is tested, aims and objectives, Project activities and modalities for coordinated implementation of Project activities;
- A concise description of the main Project activities (divided into Individual or Specific Activities and Horizontal Activities), including,
  - for Horizontal Activities: the identification and mapping of ICZM stakeholders; institutional and inter-regional coordination; the Capacity building activities, which included the realisation of multilevel questionnaires and an e-learning platform; the data collection and management activities, including the ICZM indicators that have been developed, the so-called Data Policy, an Spatial Data Infrastructure (SDI) and guidelines for interoperability of the Information System; the activities related to public participation, communication (and its relative communication plan) and distribution with the tools developed (the Project Web Site, Social media such as Facebook, periodic newsletters, brochure design, publications, video productions), as well as the public events realised (at Project level with the Inception Conference, the Mid-Term Conference and the Final Conference; local events developed within each Individual Activity; thematic workshops); Networking in its different facets that affect ICZM expertise, the collection, sharing and management of data, the Network of CAMP Projects (CAMP or CAMP alike) in the Mediterranean;
  - for the Individual Activities: activities carried out in the context of the 14 Individual Activities, the assessment of which has enabled the formulation of a special table showing the consistency between Project Activities and the provisions of the ICZM Protocol;
- The analysis of Project Activities using the SWOT analysis technique, conducted with the aid of a table showing the interconnection between the articles of the ICZM Protocol and the Thematic Areas identified in the Project which group single Individual Activities, on which the SWOT analysis is performed for each CAMP Area. The analysis was performed on the structural cross-cutting articles identified (common to all Thematic Areas, articles 3, 5, 6, 7, 14, 15, ...) and the articles which characterise the Individual Thematic Areas;
- Analysis of Project activities, with lessons learned based on their assessment and from which related recommendations and proposals for effective implementation of the ICZM principles on key themes arise for each of them: institutional and inter-regional coordination; capacity building; data collection and management; public participation; communication and diffusion; networking; Thematic Areas;
- Identification of proposals for the development and improvement of coordination skills among the different institutions involved in coastal zone management (governance of the coastal area), both vertically (supply chain) and Horizontal (sectors chain), in which some Individual Activities can be grouped, consistent with the objectives pursued and the types of activities required;
- The development of elements for evaluating implementation and results for the CAMP Italy Project, in view of what was defined in the agreements signed by IMELS with UNEP-MAP and with partner Regions;
- Significance of the CAMP Italy Project vis-a-vis the Mediterranean context, in a perspective of comparison and contribution with respect to the processes currently under way;
- Follow-up activities, provided for both as institutional commitments already made and as recommendations in terms of interoperability and replicability in other areas in which results are

achieved and for the continuation of CAMP Italy Project activities, in particular for the maintenance and consolidation of the tools and methodologies developed, as well as the continuation of Individual Activities.

The CAMP Project is an essential tool for supporting the strengthening, at both national and Mediterranean level, the policy on ICZM and on Maritime Spatial Planning (MSP), since it enables the acquisition of experience, understanding of critical issues and testing of solutions, taking into account Land-Sea Interactions and promoting cooperation among Mediterranean States.

CAMP is a useful reservoir of best practices and of those processes to be integrated as part of the activities required of institutional stakeholders, with particular reference to actions in the field of "marine and coastal areas planning", a sector which has already highlighted the need for Italy to provide an appropriate legal instrument for coastal zone management, also in anticipation of the implementation of the above-mentioned Directive on Maritime Spatial Planning 2014/89/EU.

Finally, we can say that the CAMP Italy Project may serve as a bridge for future projects, also thanks to the cooperation experience acquired with the corresponding French CAMP Project (PAC Var) as part of the Mediterranean Network of CAMP Projects, thus a network of several projects around the Mediterranean for the sharing of best practices and experiences that facilitate the capitalisation of national ICZM/MSP experiences.

3 REFERENCE CONTEXT

3.1 The legal context of ICZM

Integrated Coastal Zone Management (**ICZM**) is a complex process that has different issues in terms of conflicts between the possible uses of the marine and land components of coastal zones, and necessarily starts with integrated and participatory planning of marine and coastal areas.

The **Communication from the Commission to the Council and the European Parliament on Integrated Coastal Zone Management: a Strategy for Europe, Brussels 27.09.2000**, defines the **ICZM** as *"... a dynamic, multi-disciplinary and iterative process to promote sustainable management of coastal zones. It covers the full cycle of information collection, planning (in its broadest sense), decision making, management and monitoring of implementation. ICZM uses the informed participation and cooperation of all stakeholders, in order to assess the goals in a given coastal area, and to take actions towards meeting these objectives. ICZM seeks, over the long-term, to balance environmental, economic, social, cultural and recreational objectives, all within the limits set by natural dynamics".*

Article 2 of the **Protocol on Integrated Coastal Zone Management in the Mediterranean to the Barcelona Convention (ICZM Protocol)**, which was adopted in Madrid on 21 January 2008 and entered into force on 24 March 2011, defines Integrated Coastal Zone Management as "*a dynamic process for the sustainable management and use of coastal zones, taking into account at the same time the fragility of coastal ecosystems and landscapes, the diversity of activities and uses, their interactions, the maritime orientation of certain activities and uses and their impact on both the marine and land parts*".

The **ICZM approach,** therefore, promotes the rational management of activities, in order to reconcile economic, social and cultural development while respecting the environment and landscapes. It is based on adequate knowledge of all the elements linked to the coastal zone and on appropriate *governance* which allows adequate and timely participation of those involved within a transparent decision making process.

The term "**integrated**" refers both to the objectives and to the many tools needed to achieve them. It involves vertical integration among the different authorities at different levels, and horizontal integration of the sectors that press on those areas; then there is an integration in time and space of the terrestrial and marine components of the target territory. Integrated coastal zone management therefore involves a **"new" management style**, which calls for **community collaboration and participation in the planning and implementation of management plans for all parties involved**. This explains the involvement also of residents in the innermost areas but whose activities also have effects on coastal areas.

WHY ICZM?	*... because the coastal zone is a fragile area from an environmental point of view;* *... because the coastal zone is the most valuable resource for Mediterranean countries, since it has been and continues to be the base for their development;* *... because management of those areas is particularly complex due to the numerous conflicts between users, as well as between users and the environment.*
FOR WHAT PURPOSE?	*To reconcile social, environmental and economic objectives and problems.*
HOW?	*Through an integrated approach (where integration takes place among different policies, sectors, disciplines, levels of government, in space and time).*
WHERE?	*In coastal zones, which include a land part and a marine part.*

	*For the **geographical definition of the coastal zone** see the scope of geographical coverage of the ICZM Protocol, provided for in Article 3 thereof:* ***Article 3. Geographical coverage*** *1. The area to which the Protocol applies shall be the Mediterranean Sea area as defined in Article 1 of the Convention. The area is also defined by:* *a) the seaward limit of the coastal zone, which shall be the external limit of the territorial sea of the Parties; and* *b) the landward limit of the coastal zone, which shall be the limit of the competent coastal units as defined by the Parties.* *2. If, within the limits of its sovereignty, a Party establishes limits different from those envisaged in paragraph 1 of this Article, it shall communicate a declaration to the Depositary at the time of the deposit of its instrument of ratification, acceptance, approval of, or accession to this Protocol, or at any other subsequent time, if:* *c) the seaward limit is less than the external limit of the territorial sea;* *d) the landward limit is different, either more or less, from the limits of the territory of coastal units as defined above, in order to apply, among other things, the ecosystem approach and economic and social criteria and to consider the specific needs of islands related to geomorphological characteristics and to take into account the negative effects of climate change.*
WHEN?	*Constantly: ICZM is a continuous process, with a long-term vision, which should be adaptive and proactive.*
WHO?	*Not only public institutions, but also the private sector and non-governmental organisations (NGOs), and all the stakeholders with responsibility and/or interest in the development or protection of coastal areas.* *For some, adequate and comprehensive information may be sufficient (passive role), while for others it is desirable that there be full involvement in the decision-making process required (for example) by dedicated legislative instruments, in spatial planning, in the choice of priorities for development of the productive fabric, and in the conservation of the environment and historical and cultural heritage. Some stakeholders concerned with ICZM (e.g. national, regional and municipal authorities) are also entitled to exercise a proactive role in the process of implementing ICZM, falling fully within their competences of administration, control and management.*

Source: Taken from the MedOpen Virtual ICZM Course, PAP/RAC.

The **integrated management of marine and coastal zones** is therefore the approach for effective management of these areas, covering the collection and management of data, participation, development of appropriate policies and adoption of related decisions. It is not intended to replace sectorial legal instruments (whether national, regional or local), but to integrate and harmonise them, proposing an interpretation in the light of ICZM principles, also through the adoption of common guidelines for the effective management of marine and coastal zones.

National, European Union (EU) and international legal systems overlap and intertwine on coastal and maritime territories affected by ICZM, in which the intervention of the stakeholders must be redefined, also through proper planning. The exercise of competences and responsibilities is at the centre of this difficult equation. To resolve it, ICZM is based on an innovative regulatory framework that encourages reflection, exchanges and multidisciplinary action at different levels.

The full version of the **ICZM legal framework** is provided in Annex 3.

3.1.1 ICZM at international level

The legally binding instrument on integrated coastal zone management is **the ICZM Protocol to the Barcelona Convention**. In fact, the ICZM Protocol envisages provisions aimed at the protection and sustainable development of coastal zones of the Mediterranean by introducing a set of principles, objectives and provisions for regulating analyses of environmental impact, protection of marine ecosystems, protection of coastal and island landscapes, defence of cultural heritage and the development of economic activities.

At international level, the management of coastal areas is treated in many legal instruments, not necessarily in the field of environmental protection. Numerous international instruments can be cited that are related to various intertwined themes that need to be taken into account as part of ICZM.

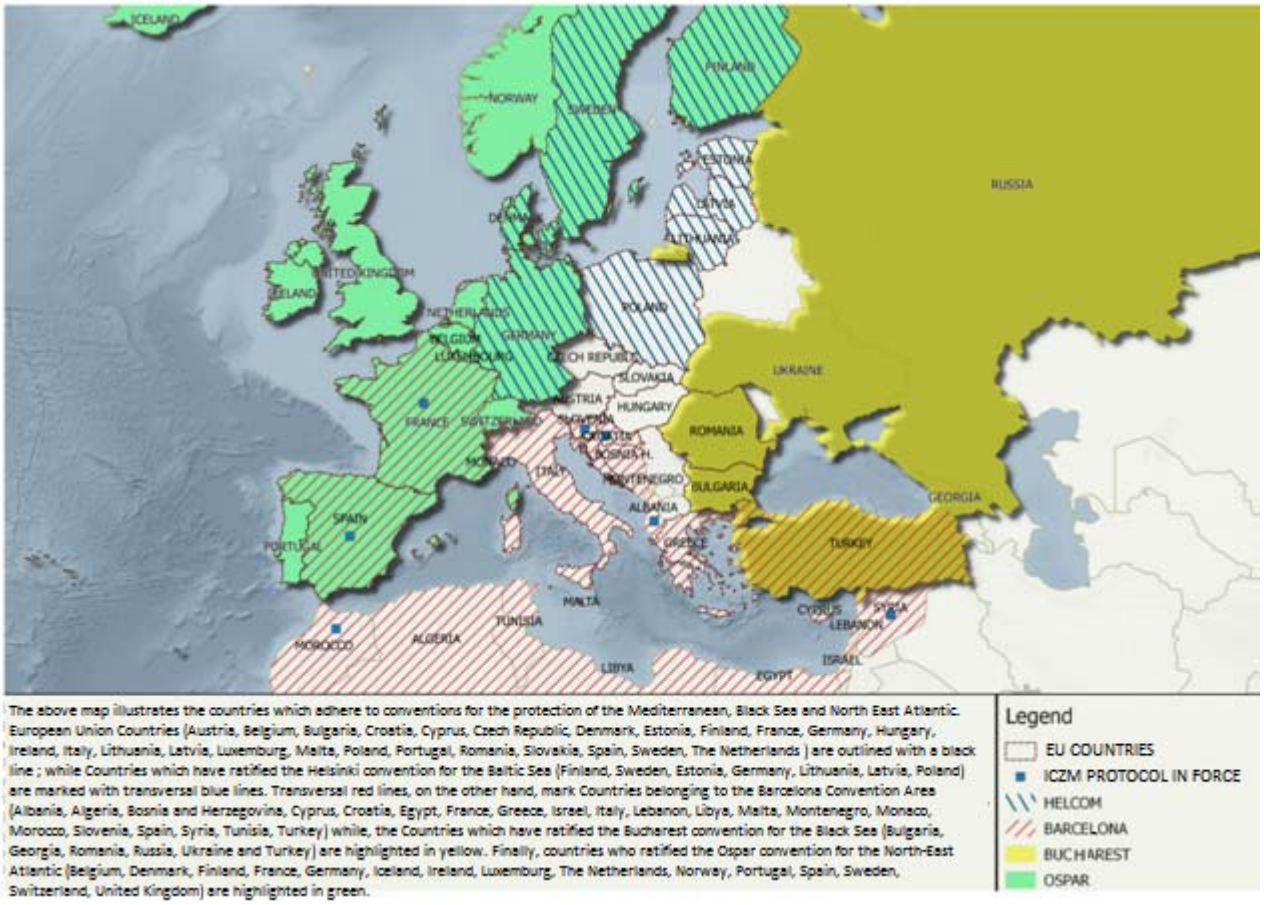
Albeit in a non-exhaustive manner (given the multiplicity and fragmentation of the legal sources), the following is a list of the main instruments adopted at international level which are relevant for the strengthening, or preparation, of national strategies for integrated coastal zone management', as well as 'plans and implementation programmes for coastal zones', as defined by the ICZM Protocol to the Barcelona Convention.

Main international reference instruments for ICZM.

1945	**UN Educational, Scientific and Cultural Organisation (UNESCO)** • The Man and the Biosphere Programme (MAB) • Intergovernmental Oceanographic Commission Coastal Area Management activities (IOC ICAM Programme) • The 1997 Methodological Guide to Integrated Coastal Zone Management
1948	**Convention on the International Maritime Organisation** • Resolutions of the International Maritime Organisation (IMO) and, in this context, the designation of Particularly Sensitive Sea Areas (PSSA)
1971	**Ramsar Convention on Wetlands**
1972	**Word Heritage Convention (WHC)**
1972/1992	**Convention on the Protection of the Marine Environment of the Baltic Sea Area (HELCOM)**
1973/1978	**International Convention for the Prevention of Pollution From Ships (Marpol Convention)**
1974/1992	**Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention)**
1976	**Ramoge Agreement to constitute a pilot zone for preventing and combating pollution of the marine environment**
1976/1995	**Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention)** and its 7 Protocols, with particular reference to: • LBS Protocol (Protocol for the Protection of the Mediterranean Sea against pollution from sources and activities located on the mainland) • Dumping Protocol (Protocol for the Prevention of Pollution in the Mediterranean Sea caused by discharges from vessels and aircraft) • Offshore Protocol (Protocol for the Protection of the Mediterranean Sea against pollution resulting from exploration and exploitation of the continental shelf, the seabed and its subsoil) • SPA/BD Protocol (Protocol on specially protected areas and biological diversity in the Mediterranean) • ICZM Protocol (Protocol on integrated coastal zone management) **COP 19 Athens Declaration,** which enshrines the commitment to implement the Mid-Term Strategy of UNEP-MAP for the period 2016-2021 • Decision IG.22/1 UNEP/MAP Mid-Term Strategy 2016-2021 • Decision IG.22/6 Regional Climate Change Adaptation Framework for the Mediterranean Marine and Coastal Areas • Decision IG.22/11 Mid-Term Evaluation of the Action Plan for the Implementation of the ICZM Protocol for the Mediterranean (2012-2019)
1982	**United Nations Convention on the Law of the Sea (UNCLOS)**, which provided for the establishment of

	instruments such as: • Exclusive Economic Zone (EEZ), from which the following are derived: Ecological Protection Zone (EPZ); Ecological and Fisheries Protection Zone (EFPZ); Fisheries Protection Zone (FPZ)
1991	**Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention)**
1992	**ACCOBAMS Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area**
1992	**Convention on Climate Change (CCC),** in particular the provision of Article 4, section 1, letter e)
1992	**Convention on the Protection of the Black Sea against Pollution (Black Sea Convention)**
1992	**United Nations Conference on Environment and Development (UNCED)** • Agenda 21, Chapter 17
1992	**Convention on Biological Diversity (CBD)** • 1995 Jakarta Mandate on Marine and Coastal Biological Diversity (Decision II/10) 1998 (Decision IV/5) • Integrated Marine and Coastal Area Management (IMCAM) approaches for Implementing the Convention on Biological Diversity
1993	**World Coast Conference (WCC)**
1995	**Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean (MAP Phase II)**
2000	**The Council of Europe Landscape Convention**
2002	**Pelagos Sanctuary for Mediterranean Marine Mammals**
2002	**World Summit on Sustainable Development (WSSD)** • The Millennium Ecosystem Assessment (MA, 2005) the most extensive and thorough assessment of the knowledge acquired to date on the status of ecosystems around the world. Specifically, with regard to coastal zones, the Report on "Marine and Coastal Ecosystems and Human Well-Being"
2005	**ICCAT Recommendation 04-12 on management measures concerning recreational fishing activities in the Mediterranean Sea (GFCM, 2005)**
2009	**Agreement on port status measures to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing**

In the international arena, a number of Regional Sea Conventions have been adopted that address issues and propose cooperative solutions for restricted geographic areas. These include the Helsinki Convention for Protection of the Baltic Sea Area (1972-1992); the OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic (1974-1992); the Convention for the Protection of the Black Sea Against Pollution of 1992 (also called the Bucharest Convention) and in particular the **Barcelona Convention of 1976-1995**. The following map shows the countries that adhere to these conventions.



The above map illustrates the countries which adhere to conventions for the protection of the Mediterranean, Black Sea and North East Atlantic. European Union Countries (Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Latvia, Luxemburg, Malta, Poland, Portugal, Romania, Slovakia, Spain, Sweden, The Netherlands) are outlined with a black line ; while Countries which have ratified the Helsinki convention for the Baltic Sea (Finland, Sweden, Estonia, Germany, Lithuania, Latvia, Poland) are marked with transversal blue lines. Transversal red lines, on the other hand, mark Countries belonging to the Barcelona Convention Area (Albania, Algeria, Bosnia and Herzegovina, Cyprus, Croatia, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Montenegro, Monaco, Morocco, Slovenia, Spain, Syria, Tunisia, Turkey) while, the Countries which have ratified the Bucharest convention for the Black Sea (Bulgaria, Georgia, Romania, Russia, Ukraine and Turkey) are highlighted in yellow. Finally, countries who ratified the Ospar convention for the North-East Atlantic (Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxemburg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom) are highlighted in green.

Figure 1: Map of the countries adhering to the Barcelona, Helcom, Bucharest and Ospar Conventions and which have ratified the ICZM Protocol.

ICZM Protocol

The ICZM Protocol to the Barcelona Convention, signed in Madrid on 21 January 2008 and which entered into force on 24 March 2011, provides a framework designed to stimulate a more concerted and integrated approach to coastal management, able to involve relevant public and private stakeholders, including civil society and economic operators.

The Protocol covers a wide range of provisions that local, regional and national administrations are required to implement in accordance with the principles of subsidiarity and proportionality. While the Barcelona System acts in support of integrated coastal zone management, it is the duty of the Contracting Parties to apply the principles and objectives of ICZM and to develop and implement the measures provided for in the Protocol on coastal territories, referring to the application of relevant sector legislation.

Article 5 of the Protocol stresses that the objective of ICZM is "to facilitate, through the rational planning of activities, the sustainable development of coastal zones by ensuring that the environment and landscapes are taken into account in harmony with economic, social and cultural development". Planning is thus presented as a starting element and the basis of management.

Article 18 of the Protocol, entitled "National coastal strategies, plans and programmes" contains provisions related to national strategies for integrated coastal zone management and plans and implementation programmes for coastal zones, which must be implemented or prepared consistently with the common regional framework referred to in Article 17, informing the PAP/RAC about the coordination mechanism put in place for such strategies.

Pursuant to section 2, the national strategy, which should be based on an analysis of the existing situation, must: i)

set objectives; ii) determine priorities with an indication of the reasons; iii) identify coastal ecosystems needing management; iv) identify all relevant stakeholders and processes; v) enumerate the measures to be taken; vi) specify their costs; vii) specify the institutional instruments and legal and financial means available; and viii) set an implementation schedule.

Pursuant to section 3, coastal plans and programmes, which may be self-standing or integrated in other plans and programmes, shall specify the orientations of the national strategy and implement it at an appropriate territorial level, determining, among other things, and where appropriate, the carrying capacities and conditions for the allocation and use of the respective marine and land parts of coastal zones.

Finally, pursuant to section 4, appropriate indicators shall be defined in order to evaluate the effectiveness of integrated coastal zone management strategies, plans and programmes, as well as the implementation progress in relation to the Protocol.

Objectives of integrated coastal zone management *(Article 5, ICZM Protocol)*	a) facilitate, through the rational planning of activities, the sustainable development of coastal zones by ensuring that the environment and landscapes are taken into account in harmony with economic, social and cultural development; b) preserve coastal zones for the benefit of current and future generations; c) ensure the sustainable use of natural resources, particularly with regard to water use; d) ensure preservation of the integrity of coastal ecosystems, landscapes and geomorphology; e) prevent and/or reduce the effects of natural hazards and in particular of climate change, which can be induced by natural or human activities; f) achieve consistency between public and private initiatives and between all decisions by the public authorities, at national, regional and local levels, which affect the use of the coastal zone.
General principles of integrated coastal zone management *(Article 6, ICZM Protocol)*	a) The biological wealth and the natural dynamics and functioning of the intertidal area and the complementary and interdependent nature of the marine part and the land part forming a single entity, shall be particularly taken into account. b) All elements relating to hydrological, geomorphological, climatic, ecological, socioeconomic and cultural systems shall be taken into account in an integrated manner, so as not to exceed the carrying capacity of the coastal zone and to prevent the negative effects of natural disasters and of development. c) The ecosystems approach to coastal planning and management shall be applied so as to ensure the sustainable development of coastal zones. d) Appropriate *governance* allowing adequate and timely participation in a transparent decision-making process by local populations and stakeholders in civil society concerned with coastal zones shall be ensured. e) Cross-sectorally organised institutional coordination of the various administrative services and regional and local authorities competent in coastal zones shall be required. f) The formulation of land use strategies, plans and programmes covering urban development and socioeconomic activities, as well as other relevant sectorial policies, shall be required. g) The multiplicity and diversity of activities in coastal zones shall be taken into account, and priority shall be given, where necessary, to public services and activities requiring, in terms of use and location, immediate proximity to the sea. h) The allocation of uses throughout the entire coastal zone should be balanced, and unnecessary concentration and urban sprawl should be avoided. i) Preliminary assessments shall be made of the risks associated with the various human activities and infrastructure so as to prevent and reduce their negative impact on coastal zones. j) Damage to the coastal environment shall be prevented and, where it occurs, appropriate restoration shall be effected.

3.1.2 ICZM in the European Union

At Union level, many initiatives and legal instruments have been adopted with positive results for the protection of species and natural habitats and coastal zones.

The **ICZM Demonstration Programme** (programme envisaged by the **Communication of the European Commission, COM(95)511, on the integrated management of coastal zones**) was carried out in the period 1996-1999, comprising 35 local and regional projects and six thematic studies (legislation, participation, technology, sectorial and territorial cooperation, EU policy and information), with the objectives of:

- providing technical information about the factors and mechanisms that promote or discourage sustainable management of coastal zones;
- stimulating a wide debate and exchange of information among the different stakeholders involved in the planning, management and use of Europe's coastal zones in order to reach a consensus on appropriate measures for the promotion of ICZM in Europe.

The need and methods for implementation of integrated management are determined in the basic principles of European Community action, set out in the Recommendation which indicates the strategic approach to be taken with regard to the management of coastal zones, considering it proper to arrange, preliminarily, a **National Assessment**, which:

- Takes into account (without being limited to) the following sectors and areas: fisheries and aquaculture - transport - energy - resource management - protection of natural habitats and species - cultural heritage - employment - regional development in rural and urban areas - tourism and the recreational sector - industry and mining - waste management - agriculture - education;
- Concerns all administrative levels;
- Analyses the interests, role and concerns of citizens, non-governmental organisations and the economic sector;
- Identifies the relevant interregional organisations and cooperation structures;
- Takes stock of policies and applicable legislative measures.

Based on the results of the National Assessment, Member States are encouraged to adopt a national strategy (or more than one strategy) for integrated coastal zone management.

Based on the experiences and results of the Demonstration Programme, the Commission adopted two documents:

- the "**Communication from the Commission to the Council and the European Parliament on Integrated Coastal Zone Management: a Strategy for Europe**" (**Brussels, 27/09/2000)**, outlining a series of conclusions and recommendations that constitute the EU Strategy for Integrated Coastal Zone Management.
- the "**Recommendation of the European Parliament and of the Council concerning the Implementation of Integrated Coastal Zone Management in Europe**", **adopted on 30 May 2002 (2002/413/EC)**, which (although not legally binding) covers the issue of integrated coastal zone management, and encourages Member States to implement coordinated policies (national strategies), stipulating agreements with neighbouring countries that border the same regional sea. The strategy should adopt ICZM principles, and should be preceded by an overall stocktaking to identify which major stakeholders, laws and institutions influence management of their respective coastal zones.

With the conclusion ('ratification') of the ICZM Protocol (Decision 2010/631/EU[1]), the European Union confirmed its commitment to encourage and promote adoption of integrated coastal zone management in

[1] Council Decision 2010/631/EU of 13 September 2010 concerning the conclusion, on behalf of the European Union, of the Protocol on Integrated Coastal Zone Management in the Mediterranean for the Convention on the protection of the Mediterranean Marine and Coastal Environment (Convention of Barcelona).

Member States. The EU has a significant role in the process of implementing the ICZM Protocol, given that it must ensure integration of the provisions laid down by the Protocol with the European legal system and thus ensure compliance with international commitments undertaken by the EU and its Member States in this area.

Framework of reference of European Union sector legislation *(illustrative and non-exhaustive list)*

- The Quality Required of Shellfish Waters Directive (79/923/EEC).
- Directive 85/337/EC and 97/11/EC (EIA, Environmental Impact Assessment), amended in 1997 and 2003, defines a set of procedures to which plants, works and interventions must be submitted in order to predict and estimate their environmental impact; identify and assess possible alternatives, also including the non-implementation of specific interventions; identify measures to minimise the impacts.
- The Urban Waste-Water Treatment Directive (91/271/EEC).
- The Directive concerning the protection of waters against pollution caused by nitrates from agricultural sources (91/676/EEC).
- Directive 92/43/EEC (the so-called "Habitats Directive") on the Conservation of the Natural Habitats of Wild Fauna and Flora (21 May 1992) and Directive 79/409/EEC (the so-called "Birds Directive") of 1979 concerning the Conservation of Wild Birds, which establish the European network known as Natura 2000.
- Directive 2000/60 / EC (Water Framework Directive - WFD) of 23 October 2000 establishing a framework for Community action in the field of water (inland surface and groundwater, transitional and coastal) and introduced an innovative approach in European legislation on water, from an environmental, administrative and management point of view. The Directive identifies the "river basin district "as a territorial unit of reference for the management of the basin. This is the area of land and sea composed of one or more neighbouring river basins together with their associated groundwaters and coastal waters. It establishes the adoption, for each river basin district, *of a Management plan* and a *programme of measures* which take into account the results of the analyses and studies carried out, measures that aim to: a) prevent deterioration, enhance and restore the condition of surface water bodies, to achieve a good chemical and ecological condition and reduce pollution discharges and emissions of hazardous substances; b) protect, enhance and restore the conditions of groundwater, prevent the pollution and deterioration and ensure a balance between abstraction and recharge; c) preserve protected areas.
- Directive 2001/42 / EC (SEA Strategic Environmental Assessment), which defines the systematic process of evaluation of the environmental consequences of plans and programmes intended to provide a framework of design activities.
- The Quality of Bathing Water Directive (76/160 / EEC, 2006/7/EC).
- Directive 2006/123/EC (Bolkestein Directive), on services in the internal market, converted into Italian law by Legislative Decree no. 59 of 26 March 2010, with which the concessions for bathing establishments may not be renewed automatically, but an "impartial" and "transparent" selection is required through tendering. The Directive therefore determines a potential change in the consolidated management of seaside tourism in coastal zones, or better, of coastal public lands.
- Directive 2007/2/EC (INSPIRE Directive, Infrastructure for Spatial Information in Europe), of 14 March 2007, converted into Italian law by Legislative Decree no. 32 of 27 January 2010, which established the national infrastructure for spatial information and environmental monitoring in Italy as a Community infrastructure node. INSPIRE aims to standardise and make acceptable, within the European Union, georeferenced environmental information, enabling it to support environmental policies or any other activities that may affect the environment.
- Directive 2007/60/EC (the flood Directive), of 26 November 2007, implemented in Italy with Legislative Decree 49/2010 on the assessment and management of risks from floods with reference to the preparation of hazard maps and flood risk.

- Directive 2008/56/EC (MSFD or framework Directive on the strategy for the marine environment) of 17 June 2008 establishing a framework for Community action regarding marine environmental policy. The Directive establishes minimum requirements so that EU countries develop strategies to protect the marine ecosystem and ensure that economic activities related to the marine environment are sustainable. It ensures cooperation of the defined Marine Regions (North East Atlantic, Baltic, Mediterranean and Black Sea), through the creation of cross-border programmes. It contributes to the creation of a global network of marine protected areas and launches a dialogue with countries outside the EU.
- Directive 2008/98/EC (WFD), of 19 November 2008, entered into force on 12 December 2008, and amended by Commission Regulation (EU) No. 1357/2014 of 8 January 2015. The Directive establishes a legal framework for the handling of waste in the European Union, designed to protect the environment and human health, stressing the importance of adequate technical management, reuse and recycling of waste, aimed at reducing pressure over resources and improve their use.
- The Directive concerning integrated pollution prevention and control (IPPC Directive - 2008/1/EC).
- The Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law.
- Directive 2013/30/EU (Offshore Directive), of 12 June 2013, implemented in Italy by Legislative Decree no. 145 of 18 August 2015, on safety of operations at sea in the hydrocarbons sector. This legislation, passed after the accident in the Gulf of Mexico in April 2010, with the aim of harmonising the national laws of member countries, adopt as its basis the principles of preventive and corrective action, and the "polluter pays" principle, in order to order to prevent the occurrence of serious accidents in offshore operations in the hydrocarbon sector and to limit their consequences. This also means ensuring more efficient protection of marine environment and coastal economies against pollution by hydrocarbons.
- The Common Fisheries Policy (CFP), introduced for the first time in 70 years, which has undergone numerous upgrades, the last of which came into force 1 January 2014, which expressly refers to ICZM. The CFP consists of a series of standards for the management of fishing fleets in Europe and the conservation of fish stocks. Bringing fish stocks to sustainable levels, the new 2014 reform of the CFP aims to bring new prosperity to the fishing sector, end the dependence on subsidies and to create new opportunities for growth and employment in coastal areas. At the same time, it encourages industry responsibility for the proper administration of the seas.
- Directive 2014/89/EU (Directive on Maritime Spatial Planning - MSP) of 11 September 2014, implemented in Italy by Legislative Decree no. 201 of 17 October 2016, provides that each Member State must develop and implement maritime spatial planning to contribute to the sustainable development of the energy sectors of the sea, maritime transport and fisheries and the aquaculture sector for the conservation, protection and improvement of the environment, including climate change resilience. It specifies that maritime spatial planning must consider land-sea interactions. Among other objectives, it also promotes sustainable tourism and the extraction of raw materials.

3.1.3 ICZM in Italy

In Italy, the situation of coastal planning is still extremely fragmented and contradictory between the different powers of the State, Regions and municipalities. We therefore highlight the absence, in our legal system, of a specific regulatory definition of the concept of "zone" or "coastline".

Law no. 979 of 31 December 1982, which provided for a "**General plan of defence of the sea and the coastline**"[2], drafted by the Merchant Marine Ministry in agreement with the Regions, should have marked an important turning point in the policies regarding protection of the marine environment and coastal management. Unfortunately, at the moment we can only lament the delay in the issuance of the plan, which is still pending.

With regard to the so-called set back line, beyond the generic identification of the coastal strip of the first 300 metres as an asset subject to landscape constraints - provided for by the **Galasso Law** (Law no. 431, of 8 August 1985) and then by the **Code of cultural heritage and the landscape** (or **Urbani Code**, Legislative Decree no. 42 of 22 January 2004) - Italy does not have, outside of the protected areas, guidelines or active protection measures that allow the combatting of the ever increasing demand for coastal land transformation.

Similarly, the gradual occupation of the maritime domain can be traced, beyond the widespread phenomena of illegal building, to the lack of effective management policies geared to protecting public use and sensitive areas.

The report on the progress of ICZM in Europe shows how Italy still has a long way to go on ICZM. In particular, the formulation of a plan that is able to direct the actions of the stakeholders involved in various capacities in the ICZM is still on the agenda.

As a National Focal Point, the **Italian Ministry of Environment, Land and Sea** (IMELS) has the task of monitoring and promoting the implementation of the ICZM Protocol in Italy. For this reason, the IMELS has promoted the launch of a National Strategy for Integrated Coastal Zone Management, thereby acknowledging the ICZM as the best means of *governance* of marine and coastal areas.

Changes in the legal framework, which involved the transfer of core competencies on the coast by the state to the Regions, has led to the identification of a regional level for the implementation of planning policies and integrated management of the coast. In this context, it should be noted that some Italian Regions have implemented specific actions, including, for example:

- **Liguria**: it developed territorial plans dedicated to coastal areas a long time ago.
- **Calabria**: it has attempted to integrate the issues of environmental protection of the coastal strip by intervening within the RTCP (Regional Territorial Coordination Plan).
- **Sardinia**: it has attempted to integrate the issues of environmental protection of the coastal area by acting within the regional landscape plan and inserting a specific reference to integrated coastal zone management. With Regional Law no. 2 of 2007, it established the Coastal Conservatory Agency of Sardinia, with the task of dealing with the preservation, protection and enhancement of coastal ecosystems and the integrated management of coastal areas that are particularly important in terms of landscape and the environment, both in relation to property owned by the region, and that owned by other public or private entities. The specificity of this agency regards its mandate fully based on the application of the principles of Integrated Coastal Zone Management and its implementation at regional level, in collaboration with other regional and local institutions. Given its characteristics, the Coastal Conservatory Agency has been involved in the CAMP Italy Project since its early stages.
- **Emilia-Romagna**: adopted guidelines on integrated coastal zone management in 2005.

[2] The general defence plan of the sea and sea coasts from pollution and environmental standards, valid for the entire national territory, have been prepared taking into account the state and regional programmes also considering related matters, Community guidelines and international commitments.

- **Tuscany**: it has drafted a regional plan for integrated management of the coast for the purposes of geological rearrangement.
- **Emilia-Romagna, Latium and Marche**: they launched innovative programmes for coastal planning and management from an ICZM point of view, trying to use the experiences started in the late 1990s in Europe and internationally with demonstration programmes concerning the integrated management of coastal areas.

Other Regions, given the importance of the erosive problems of coastal areas, have focused on the management of this problem. The following are examples:

- **Latium** and **Abruzzi**: they have drawn up plans for defence and nourishment included in a system of planning and management of coastal areas.

See Annex 3 **ICZM legal framework** for further details.

3.2 CAMP Projects

The CAMP Programme (Coastal Area Management Programme) is focused on the implementation of practical projects for coastal zone management in selected areas in the Mediterranean, for application of the Management Integrated Coastal Zone Management (ICZM) instrument.

The following are the objectives of CAMP:

- facilitate the implementation of the ICZM Protocol at local level in selected areas;
- develop sustainable development strategies and practices in the Project areas;
- identify and apply relevant methodologies and tools;
- contribute to training at local, national and regional level; and
- ensure the widest possible use of the results achieved.

The programme is multi-level in nature, being focused on:

a) local level: implementing projects aimed at solving environmental priorities and solve problems in the project areas;
b) national level: contributing to the formulation and implementation of national policies and strategies through the results of the project and proposals and, indirectly, providing methodologies and procedures tested under specific national and local conditions;
c) regional level: disseminating the results and experience gained, contributing to the formulation of relevant policies and strategies at regional level; and
d) international level: cooperating, share experiences, and delivering results, methodologies and procedures to other Regions, potentially those included in the UNEP *Regional Seas Programme* .

The CAMP Projects are identified and selected according to selection criteria, and approved by the Ordinary Conference of the Contracting Parties to the Barcelona Convention. The selection criteria include the following: the sustainability of the Project; representativeness; regional interest in the problem addressed; the political commitment of the host authorities; the institutional capacity of the host country and in the Project area; the integration of the Project results in local and national policies; replicability.

Each CAMP Project is characterised by the presence of both specific common activities and activities mandatory for all Projects. These have a general nature and are essential for achieving the objectives of CAMP Projects; they require high-level coordination (Project) and integration of the same throughout the implementation phase of the Project and include:

a) Data collection and management;
b) A participatory programme;
c) Systemic sustainability analysis;
d) Planning activities/integrated management of the Project's areas; and
e) Final integration of the results and proposals for follow-up.

These activities are reflected in so-called "Horizontal **Activities**", which are typical of each CAMP Project and transverse to those which are instead called "**Individual Activities**", or specific or multi-sectoral actions, defined on the basis of the objectives and of the dominant issues in the Project area.

From its establishment, the CAMP programme has seen the implementation of 17 projects.

The period 1990-1998, saw the implementation of **two cycles** of the CAMP Programme. These have included the development of the following projects: Albania (The Albanian coast), Croatia (The Kastela Bay), Greece (The Island of Rhodes), Syria (The Syrian Coast), Tunisia (The City of Sfax) and Turkey (The Izmir Bay). The Project in Egypt (Fuka), was completed in 1999, while the project in Israel was completed in June 2000.

The **third cycle** of the Programme began in **1997** with the preparation of projects in Malta (concluded in November 2002), Lebanon (completed in December 2004), Algeria (completed in January 2005), Slovenia (concluded in January 2007), Cyprus (concluded in 2008) and Morocco (concluded in January 2010). CAMP Spain was completed in 2013, while CAMP France (like CAMP Italy) are being implemented.

Figure 2: Map of CAMP Projects, Source PAP/RAC

The CAMP Italy and CAMP France (or PAC Var) Projects, which were developed in parallel, collaborated operatively - thanks to the activation of an internship that supports both activities, as well as to the support of PAP/RAC - facilitating the exchange of data and best practices in order to propose possible routes of common development and provide the elements to set up a Mediterranean CAMP Network.

4 OVERVIEW OF THE CAMP ITALY PROJECT

Italy started the process for the approval of a CAMP Italy Project in 2007, submitting it to UNEP-MAP, also to fulfil its undertakings after the signature of the ICZM Protocol by the Italian State, contributing, through the testing of ICZM methodology, to the formulation and implementation of the national strategy for the integrated management of coastal areas. The Contracting Parties to the Barcelona Convention, at the fifteenth Conference of the Parties (COP 15), held in Almeria (Spain) on 15-18 January 2008, formally approved the proposal made by Italy for the implementation of a CAMP Project for Italy. In preparing the proposal, the Italian Ministry of Environment, Land and Sea, on the basis of criteria pre-defined by PAP/RAC, and therefore after evaluation of the naturalistic aspects, anthropogenic and natural pressures and the *governance* tools, Identified potentially eligible areas for the purpose of its national CAMP. This process provided for a first phase to study the characteristics of the territory, operated on a national scale for the identification of a representative group of Italian coastal Regions, and a later discussion and consultation phase with representatives of the Regions selected for the identification of specific areas.

There was therefore a **Feasibility Study** carried out in five Italian coastal areas, selected on the basis of the agreement with representatives of the Regions concerned (i.e. Emilia-Romagna, Latium, Liguria, Sardinia and Tuscany), who signed a **Memorandum of Understanding** (Rome, **2 December 2008**).

The Memorandum of Understanding and its Addendum - signed on 23 December 2013 between the IMELS and three of the five Regions involved, aimed at coordinating the activities of the partner institutions for the purpose of realisation of the Project - provided, in Article 2, for different Project stages or phases:

Phase A: Start-up of the Project (development of a Diagnostics Analysis (Feasibility Study), definition of the Project structure, formulation of the Terms of References and identification of funding sources);

Phase B: Formulation of the Project (Project Agreement drafting and signing, detailed formulation of Project activities, definition of data collection and data management, adaptation to the prerequisites);

Phase C: Implementation of the Project (preliminary activities aimed at defining the technical specifications of the Individual Activities of the Project (Individual and Horizontal Activities) and the definition of Terms of References for consultants, implementation of Project activities and integration and presentation of the final results and the drafting of proposals for a follow-up of the Project).

Follow up: Project activity results accumulation phase, for an overall duration of two years.

The Memorandum of Understanding of 2008 was followed by the **Memorandum of Understanding** between the IMELS and the PAP/RAC for the implementation of the Feasibility Study for the CAMP Italy Project, signed on **25 February 2009.** The Feasibility Study of the CAMP Italy Project, approved by PAP/RAC with a note dated **19 December 2012**, therefore constitutes the basis for the implementation of the Project. This formalisation, in accordance with the requirements of CAMP Projects and Article 2 of the Memorandum of Understanding of 2 December 2008, is the moment of transition from phase 'A' start-up of the Project, to phase 'B' Project formulation.

After approval of the Feasibility Study, on 23 December an **Addendum to the Memorandum of Understanding** was signed for the realisation of the CAMP Italy Project, as an institutional agreement with the Regions concerned (**Emilia-Romagna region, the Autonomous Region of Sardinia-Coasts Conservation Agency and the Tuscany Region**).

Based on these premises, on **27 March 27, 2014** the **Agreement** between the IMELS and the UNEP-MAP for the realization of the Project CAMP Italy was signed, for the period May 2014 - May 2016 and a period of post-Project implementation for the next two years.

After a tender for selection organised by PAP/RAC, in May 2014 the task was assigned to **the National Project Coordinator**, supported, following a tender for selection announced by CoNISMa/ISPRA, by five experts or **Team Leaders** to support the Project activities.

The presentation Conference and launch of the CAMP Italy Project *(or **Inception Conference**)*, was held in Alghero - in Tramariglio (SS) **on 12 November 2014**, which started the "C" phase of the Project (*Implementation*), with the sharing and approval of the ***Inception Report***. With it, in particular, an agreement was reached on the mode of action for achieving the Project objectives related to ICZM and the establishment of a partnership between the various institutions and stakeholders, with a view to creating a large Mediterranean CAMP Network; the pre-requisites for the technical specifications and operational details of the Project Activities, to define the objectives, activities, expected results, timetable, budget and the overall logical framework.

Note that, during the **XIV meeting of the CAMP round table**, held on 2 December 2015, the extension of the Project from 31 October 2016 to 31 **December 2016** was approved, with the Final Conference on 17 January 2017.

The Phases of the Project following an integrated approach in the ICZM planning process, consistent with the provisions of the Manual on the preparation and implementation of the CAMP Programme (UNEP/MAP, 1999) (Figure 3):

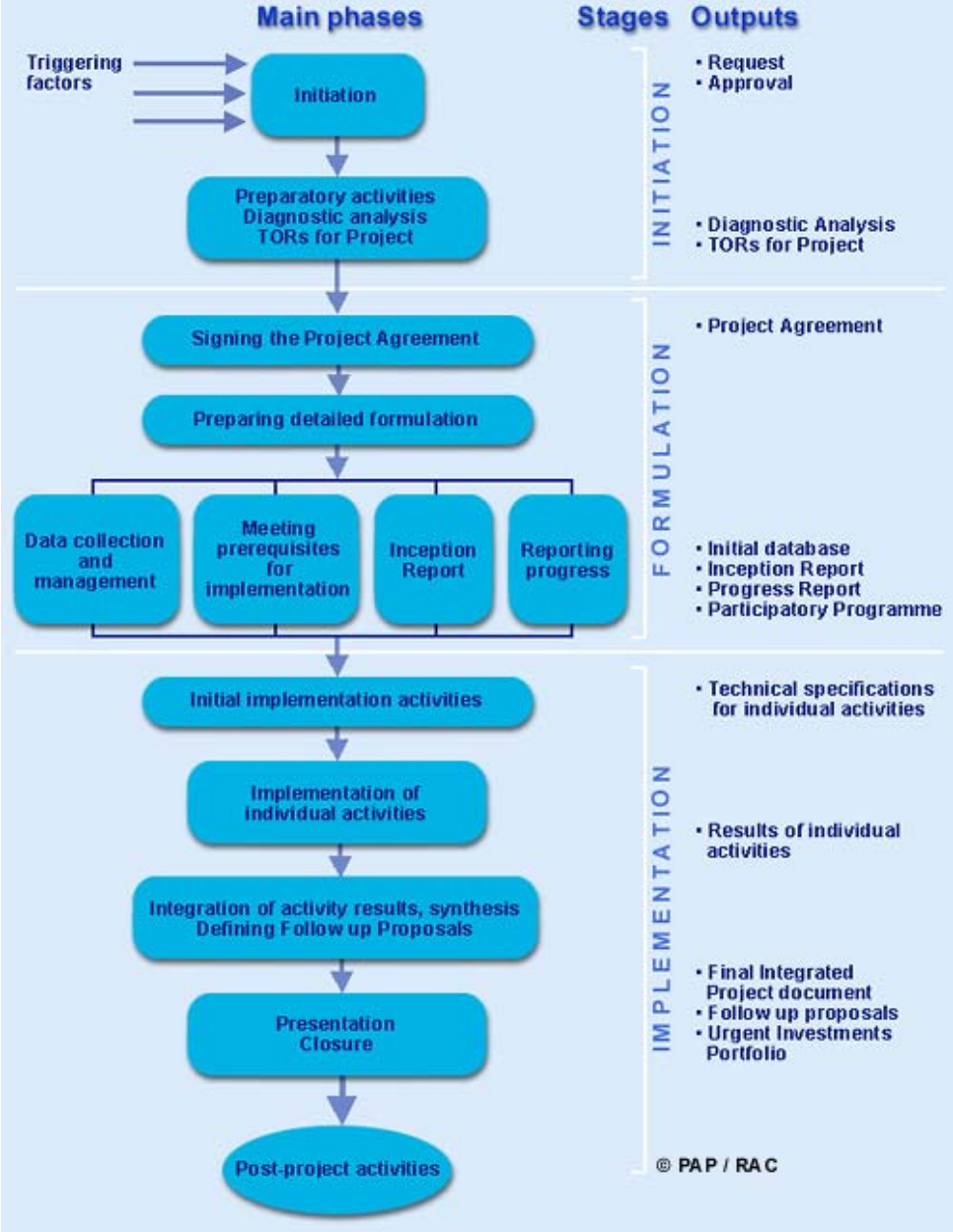


Figure 3: Phases of the Project (source: PAP/RAC Manual 1999).

4.1 Objectives of CAMP Italy

The **strategic goal** of the CAMP Italy Project, as defined in Annex 1 of the Supplementary Document to the Memorandum of Understanding of 23 December 2012, is that of "**experimenting integrated coastal zone management**" (with the implementation of the ICZM Protocol of the Barcelona Convention and both the EU ICZM Recommendation 2002) and, in particular, actions aimed at:

- a reduction in the critical issues (coastal erosion, loss of biodiversity, pollution);
- sustainable management of natural resources;
- the conservation of natural habitats and biodiversity;

The same document defines 7 complementary objectives, consisting of one or more targeted sectoral activities specifically aimed at:

- management of marine areas (such as management of activities regarding the extraction of sand from the seabed, aquaculture sites, etc.);
- the protection and enhancement of historical, cultural, landscape and environmental sustainability;
- diversity in tourism (new services centered on environmental and landscape specificity);
- environmental restoration and landscaping;
- the recovery and protection of the estuary and marine coastal area;
- knowledge aimed at describing and representing the territory and its resources, identifying the values, opportunities and weaknesses, giving reasons for the choices that emerge and evaluating the expected effects;
- the definition of evolutionary scenarios which policy interventions must face.

Annex 1 of the Supplementary Document to the Memorandum also defines the following as output of the Project CAMP Italy: "**the application of tools and methodologies for the planning of terrestrial and maritime coastal space (Maritime Spatial Planning), coordinating the programming, planning and regulation tools, in order to improve the coordination capacity of the different structures involved in the management of coastal areas (governance) and vertical (chain of the parties involved) and Horizontal (industrial sectors chain) integration".**

In the initial planning stage of the CAMP Italy, the expected results of the Project included the development of ICZM guidelines at national level, aimed at supporting the preparation of the National ICZM Strategy. Subsequently, considering:

- that Italy signed but has not ratified the ICZM Protocol - even if it is part of the legal system due to its ratification by the European Union with Decision 2010/631/EU of 13 September 2010[3] - thus, the definition and adoption of a National ICZM Strategy does not currently seem feasible in good time for the Project (the closing of which is set at 31 December 2016);
- that the new Directive 2014/89/EU came into force on 17 September 2014, establishing a framework for Maritime Spatial Planning in the EU (MSP), to be converted into law **by 18 September 2016.** The Directive provides that each Member State shall prepare and implement maritime spatial planning to contribute to the sustainable development of the energy sectors of the sea, maritime transport, fisheries and aquaculture for the conservation, protection and improvement of the environment, including resilience to the impact of climate change. Member States may also pursue other objectives, such as the promotion of sustainable tourism and sustainable extraction of raw materials; they must draft management regarding maritime space which identify the spatial and temporal distribution of relevant activities and relevant uses of their current marine waters, which include maritime transport routes and associated traffic flows, as well as tourism. Each Member State must designate the authority or authorities responsible for the implementation of the Directive. (*Source: Studies Service of the Chamber of Deputies*). Italy has approved Legislative Decree no. 201 of 17 October 2016, implementing Directive 2014/89/EU[4];

[3] Council Decision of 13 September 2010 concerning the conclusion, on behalf of the European Union, of the Protocol on Integrated Coastal Zone Management in the Mediterranean of the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean

[4] Legislative Decree no. 201 of 17 October 2016, published in the Official Journal 260 of 7 November 2016: http://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:decreto.legislativo:2016;201

the CAMP round table decided to adjust the Project's work programme and change the expected results. In particular, it was decided to consider the significance of the CAMP Italy Project compared to the interrelatedness of maritime spatial planning (MSP), Integrated Coastal Zone Management (ICZM or GIC) and land-sea and sea-land interactions (ITM/IMT).

There has therefore been a definition, as the expected result of the CAMP Italy Project, of an evaluation of the **significance of the CAMP Italy Project regarding the interrelatedness of the following issues**:

- **Integrated Coastal Zone Management (ICZM)**, with reference to the ICZM Protocol and Recommendation 2002/413/EC;
- **Maritime Spatial Planning (MSP)**, as mentioned in the relevant decisions taken by the COP 19 of the Barcelona Convention, and with reference to the MSP Directive 2014/89/EU and implementing Legislative Decree no. 201 of 17 October 2016;
- **related Land-Sea (and Sea-Land) Interactions (LSI)**;

with the drafting of a purposeful **or interpretation and guidance document.** In this sense, **the CAMP Project has allowed to test and then propose concrete support in the implementation of the Mid-Term Strategy 2016-2021 of the Barcelona Convention, including the establishment of a Regional Common Framework for Integrated Coastal Zone Management in the Mediterranean, set forth in Article 17 of the ICZM Protocol; and, ultimately, to support the interpretation of the guidelines that will arise from the implementation of the MSP Directive.**

4.2 Purposes and methods for the coordinated implementation of the Project Activities

The activities for the realisation of the CAMP Italy Project are aimed at promoting national, regional and local integrated coastal zone management, through the development and implementation of strategies and procedures for sustainable development of coastal areas and forms of local sustainable management. For this purpose, ad hoc methodologies and tools for the management of the above-mentioned particularly significant pilot sample areas have been identified and applied, providing for **the ability to integrate the activities and achievements.**

The applied **methodologies** agreed between the Project's partners, must have the characteristic of **replicability** and, **therefore, allow repetition later on**.

4.3 Project Areas

The CAMP Italy Project is a single multi-area Project covering 5 sea coastal areas, of medium/small size, in the territory of the Emilia-Romagna, Tuscany and Sardinia Regions:

Area 1 (Tuscany)	**The coastal area between the northern border with Liguria, to the north, and Livorno to the south, including the Tuscan Archipelago, except for the island of Giglio, Giannutri and other southern smaller islands.** The area stretches from the border of north-western Tuscany to the mouth of the river Calambrone, which is entirely included in a single physiographic unit that is 63.5 km long, and also includes the northern part of the Tuscan Archipelago with its five main islands: Gorgona, Capraia, Elba, Pianosa and Montecristo. From a morphological point of view the coastal territory is

	dominated by sandy beaches, except for the Tuscan archipelago, which has rocky shores. The northern part of the Tuscan coast has a high degree of urbanization initially developed in relation to the intense port activity in Carrara and Viareggio, and subsequently following the expansion of tourist sites, such as Marina di Massa and Forte dei Marmi and Viareggio Marina di Pietrasanta. The coastal area between the port of Viareggio and the mouth of the Arno River has a protected natural environment, which is located inside the regional natural park "Migliarino San Rossore-Massaciuccoli". The coastal population has increased considerably in Tuscany, with high growth rates from 1951-1981, and then a decline and stabilization to the present day. With the exception of island communities, the population density in Tuscan coastal municipalities is above the provincial average. Among the main impacts/risks present in the area, the following deserve special attention: increased pollution of waste water due to heavy tourist pressure, damage from moorings and berths in the sea, air pollution and pollution from contaminated sites (risk).
Area 2 (Emilia-Romagna)	**The coastal zone between the mouth of the Po di Goro river, to the north, and the mouth of the Rubicon River, to the south.** The area is located in the coastal area of the Emilia-Romagna region corresponding to the terminal segment of the broad alluvial plain (Po Valley). The coastline stretches from the mouth of the "Po di Goro", to the north, to the mouth of the river Tavollo in the south, with a total length of about 83 km. The geographical and geomorphological characteristics of the coastal area are complex and, locally, very diversified. The Emilia-Romagna coast has sandy bottoms, fine-grained, sandy beaches and coastal dunes; However, the shapes and characteristics of the beach-dune system along the coast vary depending on local weather conditions, geomorphological and geological characteristics, as well as the intensity of human activities. The coastal area is greatly affected by subsidence, natural and/or induced by human activities, with an average rate of nearly 8 mm/year and up to 5 km from the coastline. Overall, the coastal arc can be divided into two main areas: (1) a more northern part, extending from the mouth of the "Po di Goro" to "Saline di Cervia", which has many damp, salty environments and (2) a more southern part, with sandy beaches and inland, with relict beaches. The has protected and natural conservation areas and areas that are in the Po Delta Park territory, as well as numerous SCI/ZPS sites and the Natura 2000 network. The dynamics of the population shows a general increase since 1996, with a different intensity in different provinces. Many coastal municipalities have recorded an increase in immigration, higher than the regional average. Among the impacts/major risks present in the area, the following are particularly worthy of attention: coastal erosion, eutrophication, pollution, saltwater intrusion and subsidence.
Area 3 (Sardinia)	**The coastal area between Cape Li Canneddi, to the north, and Capo Galera to the south, including Piana island and Asinara Island.** Area 3, in northern Sardinia, stretches along the coast between "Capo Galera" (Alghero) to the promontory of Capuneddi, including the island of Asinara, with a linear development of 362 km of coast. The population density has significantly higher values than the regional average and the island's coastal municipalities. The 2001 census recorded a total number of houses close to 110,000 units, about 14% of the regional total and a quarter of the housing stock of the three municipalities. As for the impacts/risks desertification (Asinara), coastal erosion and pollution from the industrial area in Porto Torres are the most relevant factors.

Area 4 (Sardinia)	**The coastal area between Torre Pittinuri and the Blue Grotto, and the offshore islands.** Area 4, located in western Sardinia, extends from the southern end of the large bay of "Portixeddu-Buggerru", between the granite promontory of "Capo Pecora", the complex system of dunes in Scivu-Piscinas and the Gulf of Oristano, and ends with the rocky coasts of Montiferru ("Santa Caterina di Pittinurri"), with an overall linear extension of about 292 km. It is worth noting that the industrial port of Oristano, located at the centre of the Gulf, is the main node of this area's maritime traffic. This area has a resident population of more than 90,000 units, i.e. about 6% of the total region. The municipalities of Oristano, Terralba and Guspini account for 60% of the population, with a decisive impact on the social and economic profile of the area. In this area, there are more than 46,000 houses, around 6% of the regional housing stock and 10% of the units that are located in the coastal municipalities of Sardinia. There are two main risks for this sector: coastal erosion and the risk of flooding.
Area 5 (Tuscany)	**The coastal area between Principina a mare (in the province of Grosseto), as the northern boundary of the Regional Natural Park of Maremma, and the southern border with the Latium Region, including the Formiche di Grosseto, the islands of Giglio and Giannutri.** The area extends from "Principina a Mare" (Grosseto, Tuscany), on the northern border of Latium, for a total length of about 100 km. From a morphological point of view, the coastline has shallow beaches with sandy bottoms. The Argentario peninsula, with Giannella and Feniglia, interrupts the coastal plain morphology in the middle sector while sandy beaches, with low slopes, appear south of the cape and characterise the remaining coastal area. The whole area is in the Province of Grosseto and can be divided into two main sectors: the most northerly, including the towns of Grosseto and Magliano, and the southernmost, also known as "Costa d'Argento", which includes the southern end of the province of Grosseto and the towns of Monte Argentario, Orbetello and Capalbio ("Maremma Grossetana"). The physiographic units that most influences the sedimentology of the area is that of Monte Argentario and the river Ombrone. Between the promontory and the Ombrone delta, more than 10 km from the coast, lies a lens-shaped deposit, which is a maximum of about 26 m thick, probably of fluvial origin (Ombrone). From a geomorphological point of view, the coast in the province of Grosseto, up to Capalbio, is famous for its sandy and slightly sloping beaches. These characteristics are also typical of the area between the Bay of Talamone and the Argentario. The main sandy beaches are supplied by the alluvial sediments of the major rivers (Ombrone and Albegna). Like the northern part of Tuscany, the coastal population has increased steadily since the 1950s until the 1980s, only to suffer a slight decline in the last 30 years. In southern Tuscany, the Coastal municipalities have a higher density higher than the provincial average. This area is highly urbanised with intensive seasonal summer residences, producing a multiplier pressure effect on natural resources and on the coastal ecosystem. The main impacts/risks in this area are coastal erosion, the eutrophication of coastal lagoons, pollution from contaminated sites (risk), as well as from industrial sites and ports.

4.4 Project organisation

4.4.1 Institutional level

Under **UNEP-MAP PAP/RAC** coordination and supervision for the proper completion of CAMP Projects in the Mediterranean, the **Italian Ministry of Environment, Land and Sea** (**IMELS**) is the institution in charge of THE CAMP Italy Project, with the support of **PAP/RAC** which coordinates and oversees the correct implementation of CAMP Projects in the Mediterranean.

The general supervision of the Project and the ongoing national coordination between all institutions involved in the implementation of the CAMP Italy Project are ensured by the *Steering Committee* or coordination committee called the "**Tavolo CAMP**" (or **Steering Committee**), chaired by IMELS and composed of IMELS institutional representatives and partner Regions.

Each **Region**, regarding national coordination, is responsible for the implementation and monitoring of their own part and, in particular, for the Individual (or specific) Activities included in the CAMP Italy Project; it periodically updates the "Tavolo CAMP" regarding progress.

4.4.2 Operational level

International level

Under the coordination and supervision for the implementation of CAMP Projects in the Mediterranean, **PAP/RAC** supports the Italian Ministry of Environment, Land and Sea (IMELS), the institution in charge of the CAMP Italy Project. It supports the coordination of the Project, assisting in Project activities, including those relating to the implementation and publication of the *MedOpen course* agreement in Italian; the definition and agreement on strategies for the creation of the Mediterranean network of CAMP Projects; the organisation of Project Conferences, the definition and realisation of a shared internship with CAMP France.

Furthermore, the so-called UNEP-MAP system components, or ***MAP Component***, participate in the Project: five out of six of the Mediterranean Region Operation Centres (*Regional Activity Centres-RACs*) and the Mediterranean region Marine pollution assessment and control programme (MED POL). The MAP Components, located in different Mediterranean countries contribute, each in accordance with their level of experience in an environmental field and sustainable development, to the benefit of the Mediterranean community in the realisation of MAP activities. They are an additional support to the Project, providing assistance to the working group, in particular regarding the methodologies and approaches that are followed, and discussions on experiences. Where possible, they participate in working groups and Project activities.

INFO/RAC The Barcelona Convention Information and Communication Regional Activity Centre, based in Rome, is in charge of disseminating environmental information, establishing a dialogue with the media and raising awareness through all the tools and languages available for communication.

Contact person for the CAMP Italy Project: Claudio Maricchiolo.

RAC/SPA The Regional Activity Centre for Specially Protected Areas and biodiversity, based in Tunis, has been established to support Mediterranean countries in the implementation of the Protocol concerning specially protected areas and biodiversity in the Mediterranean.

CAMP Project contact: Lobna Ben Nakhla.

Plan Bleu The goal of the Plan Bleu, which is based in Sophia Antipolis-Marseille, is to help increase awareness of the Mediterranean countries and decision makers on the environment and sustainable development in the region, providing useful elements and future scenarios such as assistance in decision-making processes. Thanks to an environmental and sustainable development observatory and a centre for systemic and prospective analysis, BP's mission is to provide Mediterranean countries with assessments on the state and development in the Mediterranean, as well as a solid base for environmental and sustainable development of data, statistics and indicators to support their work and decision-making processes.

CAMP Project contact: Antoine Lafitte.

SCP/RAC The Regional Activity Centre for Sustainable Production and Consumption, based in Barcelona, is a centre for international cooperation with Mediterranean countries for the development and innovation in the production sector and civil society, based on more sustainable consumption and production models.

CAMP Project contact: Magali Outters.

MED POL The scientific and technical component of MAP, based in Athens, responsible for the implementation of the Protocols on land pollution, dumping and hazardous waste. MED POL assists Mediterranean countries in the formulation and implementation of pollution monitoring programmes, including pollution control measures and the preparation of action plans to eliminate pollution from land-based sources.

CAMP Project contact: Virginie Hart.

National level

The **National Coordinator of the CAMP Italy Project** (NPC) is responsible for the coordination and management of the Project; she coordinates the Project Working Group made up of experts in charge of implementing activities to support Project Activities and actions relating to the Thematic Areas; she interacts with the Steering Committee (or Tavolo CAMP) and works in close collaboration with IMELS, with the Regions and with PAP/RAC. To ensure the best possible operating coordination of the Project, for each Horizontal Activity (ref. § 4.5) the Tavolo CAMP has identified a **lead person** who liaises with the National Coordinator.

The National Coordinator and the lead persons of Individual (or Specific) Activities form **the Project Technical Coordination Office** (**PTCO**).

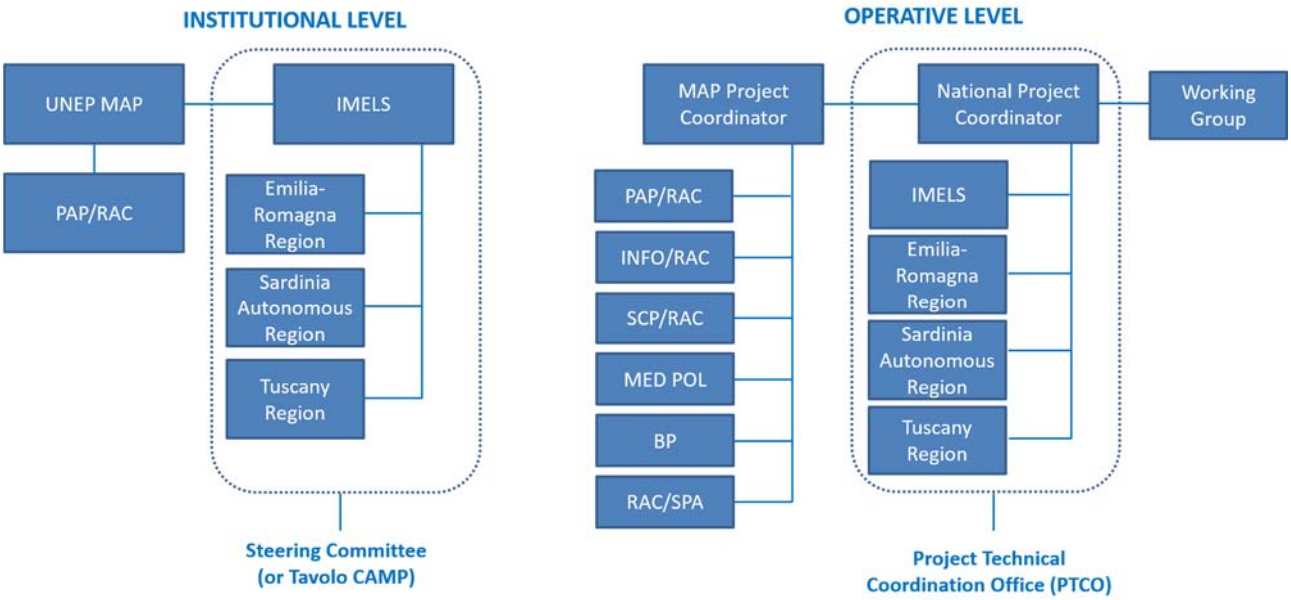


Figure 4: CAMP Italy organisational structure

4.5 CAMP Italy Project Activities

CAMP Italy Project activities are divided into activities at national, regional and local levels, and include:

Horizontal Activities, expressly defined by UNEP-MAP and common to all CAMP Projects, and

Individual Activities (or Specific), which represent specific activities on selected sample areas (CAMP Areas), aimed at promoting national, regional and local integrated coastal zone management, through the development and implementation of sustainable development strategies and procedures for sustainable development of coastal areas and forms of sustainable management at local level. They aim to test, develop and (where appropriate) to adopt methods and tools for the management of these areas, providing **the integration of activities and achievements, as well as replicability in time and space** (In other geographical contexts, in Italy and/or in the Mediterranean).

4.5.1 Horizontal Activities

The Project includes the following Horizontal Activities:

- **Horizontal Activity 1: Coordination, also institutional, and dissemination of the results**
- **Horizontal Activity 2: Capacity building**
- **Horizontal Activity 3: Data collection and management**
- **Horizontal Activity 4: Interregional coordination and public participation**
- **Cross-cutting Horizontal Activity: Communication and participatory processes**

They all involve the development of appropriate planning tools and methods in relation to ICZM, each for their own area of expertise, and contemplate: the analysis and identification of potential issues in the decision-making process and the subsequent definition and proposal of improvement and/or corrective actions; the planning of institutional development objectives including, where necessary, the involvement of interested parties and other relevant stakeholders; the promotion of the development of human resources and the strengthening of the management systems.

Table 1 summarises the objectives and activities provided by the Individual Horizontal Activities. Please note that the Horizontal Activities do not represent the activities for their own sake, but were conceived and designed within the Project to create synergy and interoperability, in terms of general objectives, methods and results. For example, it is evident that all the Horizontal Activities aim (i) to promote cross-institutional coordination between the different administrations and the local authorities in coastal areas, in order to facilitate the creation of an ICZM **national network** and **Mediterranean CAMP network**; (ii) to communicate Project goals and results, made available on the Project website; (iii) to monitor specific Individual activities; (iv) to analyse the lessons learnt from the Individual Activities, as a basis to submit ICZM implementation proposals, at national and regional levels; (v) for continuous updating also through contacts with other Projects and with the UNEP/MAP system.

Horizontal Activity 1 Coordination, also institutional, and dissemination of results	This activity includes support for: ▪ overall Project coordination and operational management, to ensure the full and timely implementation of all Activities and related actions; ▪ cross-sectoral institutional coordination between the different administrations concerned and local authorities in coastal areas for vertical integration and collaboration amongst public authorities, in order to pursue a better and efficient management of coastal areas, exchange of information and transparency; facilitate the creation of a national ICZM network and a Mediterranean CAMP network; ▪ cooperation between Project partners; ▪ monitoring of Individual Activities and evaluation of results and the lasting and

	sustainable nature of the specific actions; ▪ analysis of lessons learnt from Individual Activities as the basis for submitting proposals for ICZM implementation at national and regional level, presentation and dissemination of Project activities and results.
Horizontal Activity 2 **Capacity building**	The overall objective of this activity is to create, improve and strengthen the skills and experience and, in accordance with Article 15, section 2 of the ICZM Protocol, to ensure personnel training and optimisation of public administration skills as well as those of the other stakeholders involved at national, regional and local level participating in the CAMP Italy Project. This goal is pursued primarily through the design and implementation of innovative ways to maximise the effectiveness of the strategies outlined by UNEP and the EU on issues related to integrated coastal zone management policies.
Horizontal Activity 3 **Data collection and management**	In order to develop data collection tools and methods which provide an adequate overview of data management and critical solutions adopted as part of the Project actions, this Activity aims to develop: ▪ a Spatial Data Infrastructure (*SDI*) with GIS systems (*Geographic Information Systems*) to acquire and manage collected data; ▪ a critical analysis and homogenisation of data processing methods; ▪ an open source system to manage data in line with the INSPIRE Directive, in order to ensure public access to information from the Project activities of monitoring and observation mechanisms and networks.
Horizontal Activity 4 **Inter-regional coordination and public participation**	This Activity aims to support and promote inter-regional coordination for a better exchange of information and transparency between regional and local authorities in coastal areas; to transfer, agree and discuss the results of the critical analysis of the Project Activities with the public and private stakeholders involved in the planning, management and use of coastal areas, who have to ensure effective broad participation in future decision-making processes and in spatial planning processes; to ensure adequate and timely participation in decision making by local populations and stakeholders (industry associations, environmental groups, NGOs, general public).
Cross Horizontal Activity **Communication and participatory processes**	It was considered appropriate to provide a cross-action to the others, which includes activities concerning both communications (on the promotion of Project activities, on Project institutional communications, the ICZM method, the lessons learnt and results of the Project activities and the resulting proposals on the implementation of ICZM, at national and regional levels, at the mid-term and final conferences); and support for the management of participatory processes, with the involvement of stakeholders and the analysis of conflicts. These activities require the development of appropriate communication tools and methods and participatory processes in relation to ICZM and contemplate: the planning of the activity goals with the involvement, where necessary, of the interested parties and other relevant stakeholders; support to the management of participatory processes; the analysis and identification of potential problems and the subsequent definition and proposal of improvement actions and/or corrective actions; promotion and implementation of Project communication and the strengthening of participatory processes.

Table 1: CAMP Italy Project Horizontal Activities

4.5.2 Individual Activities (or specific) and Thematic Areas

Individual Activities (or Specific), concerning one or more CAMP Areas have been defined, based on the characteristics of the reference area, its peculiarities and needs, to develop appropriate planning and analysis tools and methods in relation to ICZM and contemplate:

- the analysis and identification of potential issues in the decision-making process and the subsequent definition and proposal of improvement and/or corrective actions;
- the planning of institutional development objectives using, where necessary, the involvement of interested parties and other relevant stakeholders;
- the promotion of the development of human resources and the strengthening of the management systems.

Regional Project partners, based on the analysis carried out as part of the Feasibility Study, in concert with the IMELS and PAP/RAC, have defined the realisation of 14 Individual Activities, including 3 in the Tuscany Region area, 5 in the Emilia-Romagna Region and 6 in the Autonomous Region of Sardinia. They are therefore the pilot Activities, for:

- testing existing methods and tools to evaluate effectiveness and replicability;
- propose new strategies and/or develop new guidelines or recommendations for the proper management of coastal zones;
- realise innovative projects aimed at protecting coastal zones or to increase their natural and social and economic value.

Individual Activities		
Cod.	***CAMP Area***	**Action**
1	***5***	Monitoring the effects of Tuscany beach nourishment activities in the South of Ansedonia
2	***1***	Evaluating feasibility and effectiveness of the use of alluvial sediments extracted from the Magra River drainage basin in order to restore eroding beaches in the annexed coastal cell
3	***1***	Protection of the dunes of Lacona (Elba Island)
4	***2***	Regulations for the removal of sand and material from marine quarries and preparation of guidelines governing the exploration and production of sediments in the seabed
5	***2***	Operational protocol for the reestablishment and consolidation of the dune belts (natural or artificial/reconstructed)
6	***2***	Conservation of marine and coastal biodiversity with special reference to the conservation of minor species
7	***2***	Development and exploitation of new forms of sustainable tourism in protected natural areas
8	***2***	Education and communication to sustainability
9	***3-4***	Implementation of specific actions aiming to the sustainable use of beaches and the protection of coastal zones
10	***4***	Enhancement of architectural heritage for the creation of the first eco-hostel in the coastal area for sustainable local development (Buggerru site)
11	***3-4***	GIRA– Integrated Fishing Resources Management
12	**3-1**	Asinara National Park and Pianosa Island (Tuscany Archipelago National Park) tourism Carrying Capacity Assessment.
13	***3-4***	Sardinian Center for coastal monitoring and assessment
14	***3-4***	Coastal vulnerability assessment tool

Table 2: CAMP Italy Project Individual Activities

The 14 Individual Activities can be grouped, in line with the objectives pursued and the type of activities they include, in the following three areas:

- **Planning of marine and terrestrial coastal areas.** The main objective is to improve the coordination capacities among different structures involved in coastal zone management (*governance* of the coastal area) and both vertical (network of subjects) and Horizontal (industry sectors) integration.
- **Protection, preservation and restoration of coastal and marine habitats**. The goal is to maintain ecosystem service flow through the reduction and control of human pressures and development of adaptation to the effects of climate change.
- **Sustainability of social-economic stress on coastal zone (in particular as regards tourism, fishing, structures for coastal defence).** The goal tends to ensure the sustainability of social and economic activities on the coastal area, through the application of the ecosystem approach and the economic evaluation of ecosystem services.

In view of the planned activities, the Individual Activities were grouped in 3 Thematic Areas, indicated in Table 3. The preliminary allocation of an Individual Activity to a Thematic Area takes into account the main objective of the action; it should also be emphasised that the interdisciplinary nature of the Individual Activities determines a contribution of the same to the other Thematic Areas.

Thematic Areas	*Individual Activities in CAMP Areas*
Action 1. Planning of marine and terrestrial coastal areas **Goal:** To improve the coordination capacities among different structures involved in coastal zone management (*governance* of the coastal area) and both vertical (network of subjects) and Horizontal (industry sectors) integration.	**Area 2: IA.4** Regulations for the removal of sand and material from marine quarries and preparation of guidelines governing the exploration and production of sediments in the seabed. **IA.5** Operational protocol for the reestablishment and consolidation of the dune belts (natural or artificial/reconstructed). **IA.8** Education and communication to sustainability**.** **Area 3: IA.13** Sardinian Center for coastal monitoring and assessment. **IA.14** Coastal vulnerability assessment tool. **Area 4: IA.9** Implementation of specific actions aiming to the sustainable use of beaches and the protection of coastal zones. **IA.13** Sardinian Center for coastal monitoring and assessment. **IA.14** Coastal vulnerability assessment tool. **Area 5: IA.1** Monitoring the effects of Tuscany beach nourishment activities in the South of Ansedonia.
Action 2. Protection, preservation and restoration of coastal and marine habitats **Goal:** To maintain ecosystem service flow through the reduction and control of human pressures and development of adaptation to the effects of climate change.	**Area 1: IA.2** Evaluating feasibility and effectiveness of the use of alluvial sediments extracted from the Magra River drainage basin in order to restore eroding beaches in the annexed coastal cell. **IA.3** Protection of the dunes of Lacona (Elba Island)**.** **Area 2: IA.6** Conservation of marine and coastal biodiversity with special reference to the conservation of minor species. **IA.8** Education and communication to sustainability.

Thematic Areas	*Individual Activities in CAMP Areas*
Action 3. Sustainability of social-economic stress on coastal zone **Goal:** To ensure the sustainability of socio-economic activities, on the coastal area, through the application of the ecosystem approach and the economic evaluation of ecosystem services, in particular as regards the sectors of tourism, fishing, industrial and power plants (both coastal and off-shore), defending coasts.	**Area 1: IA.12** Asinara National Park and Pianosa Island (Tuscany Archipelago National Park) tourism Carrying Capacity Assessment. **Area 2: IA.7** Development and exploitation of new forms of sustainable tourism in protected natural areas. **Area 3: IA.11** G.I.R.A. – Integrated Fishing Resources Management. **IA.12** Asinara National Park and Pianosa Island (Tuscany Archipelago National Park) tourism Carrying Capacity Assessment. **Area 4: IA.10** Enhancement of architectural heritage for the creation of the first eco-hostel in the coastal area for sustainable local development (Buggerru site). **IA.11** G.I.R.A. – Integrated Fishing Resources Management.

Table 3: Breakdown of Individual Activities by Thematic Area

The main objective of the breakdown of Individual Activities into Thematic Areas is the development of agreed governance models for ICZM and for its monitoring, in quantitative and qualitative terms, relating to:

(i) the promotion and implementation of **marine and terrestrial coastal area planning** systems;

(ii) the development of joint strategies for **protection, preservation and restoration of coastal and marine habitats** (including the prevention and mitigation of natural, industrial and technological hazards; the promotion of water saving interventions, efficiency in the management of the water mains and the improvement of drinking water quality, the reduction of pollutant emissions; etc.);

(iii) the development of joint intervention systems for the **sustainability of socio-economic pressures in the coastal zone**.

4.6 CAMP Italy Project activity schedule

The Project activity schedule is outlined in the overall time schedule (simplified) shown in Figure 5.

The time schedule briefly indicates the implementation times for the various Project phases (A, B, C, ref. §4) and, for the implementation of phase (C), the Horizontal and Individual Activitivities implementation schedules; it also indicates completed events and the important points of the reporting activities.

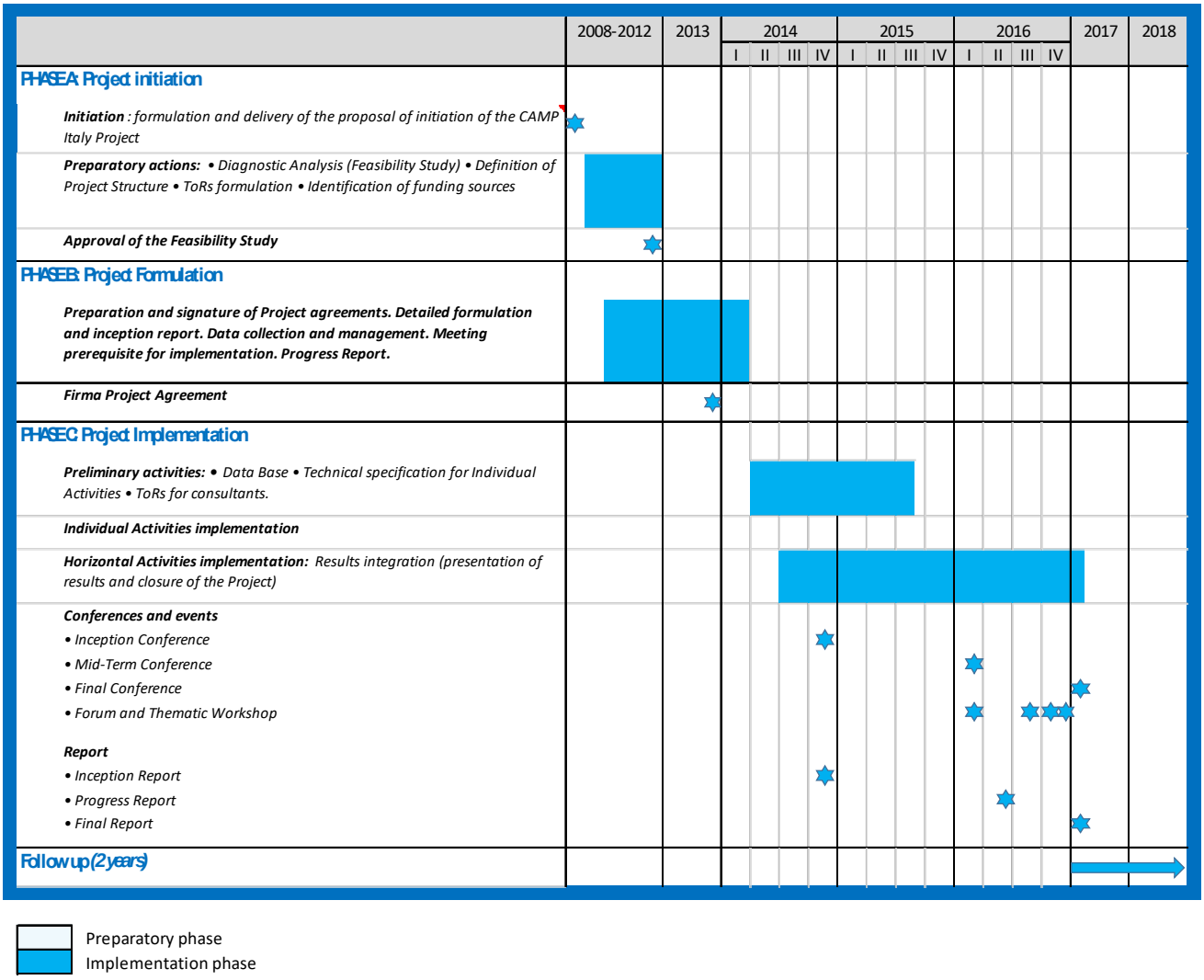


Figure 5: CAMP Italy Project activity schedule.

5 PROJECT ACTIVITIES SUMMARY

CAMP Italy Project activities, as described above, consist of Individual Activities and Horizontal Activities. A detailed description of the implementation activities in the Individual Activities and their results are shown in Annex 5 (**Individual Activity result summary** sheets) and in Annex 6 (**Horizontal Activity result summary sheets**).

Horizontal Activities and Individual Activities, while maintaining their clear definition, have been structured to be functional to each other:

- the **Individual Activities** use methods and tools for their activities designed within Horizontal Activities on those components which are fundamental to all their activities and can be defined as the integrated management of coastal areas, indicated in the ICZM protocol articles identified as structural cross-cutting (ICZM objectives and principles, institutional coordination, participation, awareness-raising, training, education and research, exchange of information and *best practices*, monitoring), regarding for example capacity building, data collection and management, event organisation;
- **Horizontal Activities capitalise** the results of the Individual Activities, through an analysis of lessons learned and an assessment of the sustainability and replicability of the methods and tools used.

Figure 6 exemplifies the integrated structure between Horizontal Activities and Individual Activities towards the establishment of contributions to the Thematic Areas and for the Project as a whole.

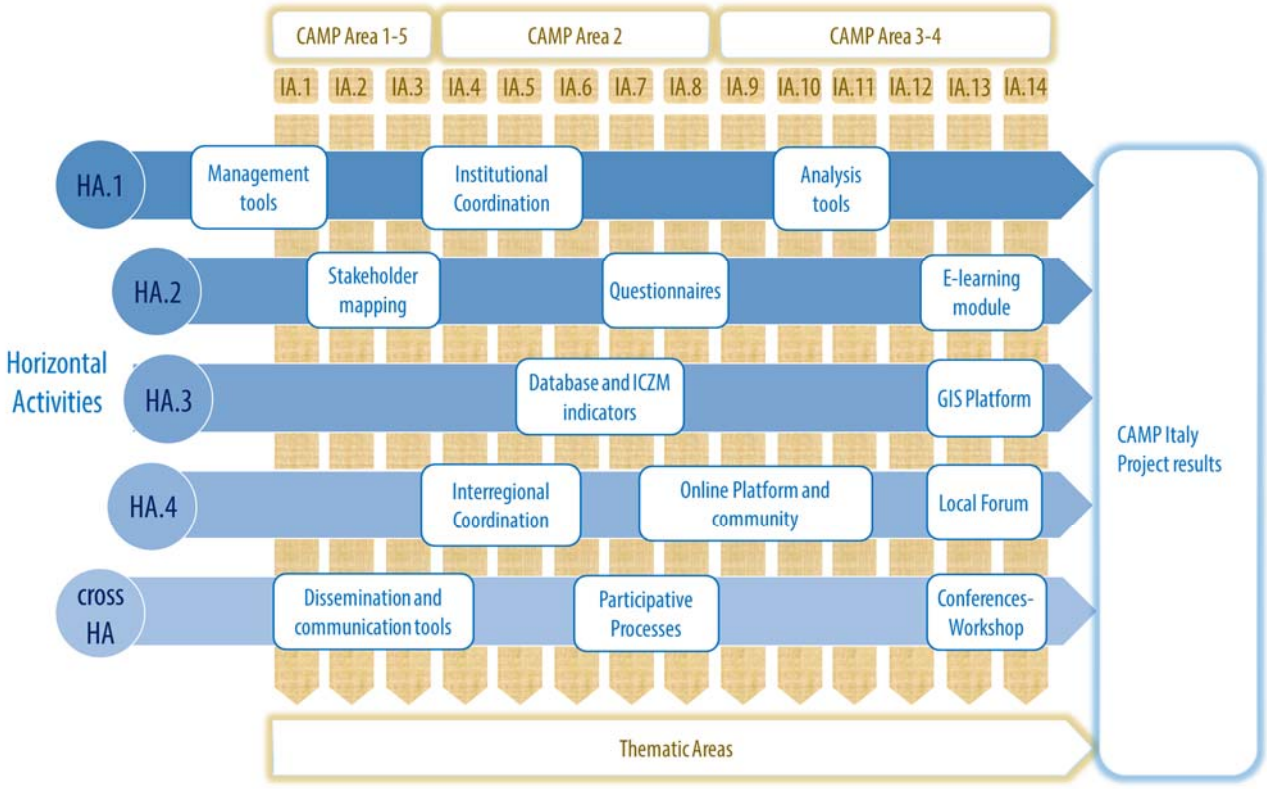


Figure 6: CAMP Italy Project integrated structure and interoperability among Horizontal Activities and Individual Activities.

In order to identify the reciprocal contributions, under Horizontal Activity 1 in support of the planning activity coordination activities and in consideration of the Horizontal activities to be implemented, a **Cross matrix of the foreseen Individual and Horizontal Activity outputs** was prepared.

Horizontal Activities (rows) transversal Individual Activities (columns), grouped into Thematic Areas, following the identified preliminary subdivision (ref. §4.5) (Figure 7). Based on the planned Individual Activities and/or their expected outputs, it identifies Individual Activities contributions in terms of results, products and, thus, content to the tools and methods developed within the framework of the Horizontal Activities. The crossings may concern the contribution of a single Individual Activity to a single Horizontal Activity, or jointly concern several Individual Activities or Horizontal Activities. The classification of the different contributions is functional for the planning of joint activities of all the Horizontal Activities and/or Individual Activities.

The developed tool, along with the overall activity time schedule, represents an operational and dynamic tool and, as such, has been updated at different stages of the implementation period, according to activity adjustments and/or changes, necessitated by the difficulties which arose with respect to the initial schedule. The full version can be found in **Annex 4**, and takes into account the products, methods and tools actually implemented by the Horizontal Activities and Individual Activities.

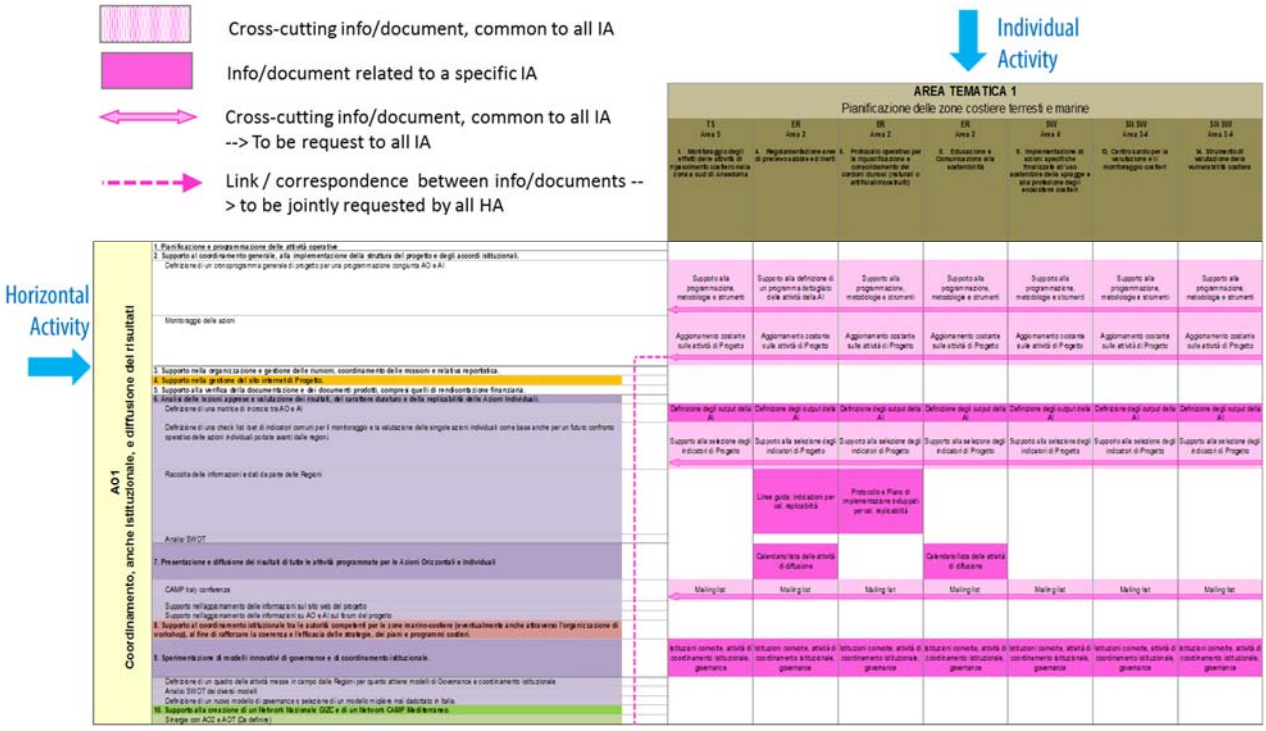


Figure 7: Cross matrix of Individual Activity and Horizontal Activity outputs.

The full list of Horizontal Activities and Individual Activities products and outputs is reported in Table 4 and Table 5 respectively.

In addition to those listed, the procedures and tools developed as part of Horizontal Activity 1 should also be mentioned, to support the overall coordination and operational management of the Project, and thus to ensure the full and timely implementation of all Activities and related actions, including:

- the creation of the list of contacts and shared meeting calendar;

- a platform for data sharing (Groupware, **http://Groupware.info-rac.org/camp-italy/**);
- an overall time schedule of activities to monitor activity progress and check for any deviations from the initial plan schedule and offset between Project activities;
- a procedure for document management in Groupware, including communication rules;
- a procedure for mission expense and generic expense reimbursement and related standard forms;
- the operating instructions for project expense financial reporting, including the "method of computation of the state of completion of the Individual Activities and Horizontal Activities" and related forms.

Table 4: List of CAMP Italy Project Horizontal Activity products

Activity	Name	Type of product	Link or position (from the link, click on "Show all version" to view the different documents)
All HAs	**Result summary Sheets of Horizontal Activities**	Fact Sheets	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-06_schede-di-sintesi-dei-risultati-delle-ao
HA 1	**The legal framework of ICZM in Italy**	Technical report	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-03_il-quadro-giuridico-della-gizc
HA 1	**Project output cross matrix between Individual Activities and Horizontal Activities**	Analysis Matrix	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-04_matrice-incrocio-output-ai-ao
HA 1	**Consistency matrix of Individual Activities with ICZM protocol articles**	Analysis Matrix	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-07_matrice-di-coerenza-delle-ai-con-gli-articoli-del
HA 2	**Stakeholder methods and mapping**	Technical Report	http://groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-08_metodologia-e-mappatura-degli-attori-interessati
HA 2	**Surveys to assess the level of knowledge of ICZM**	Technical Report Questionnaire (in Italian and English)	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-09_indagine-la-valutazione-del-livello-di-conoscenza
HA 2	**Basic e-learning course on ICZM in Italian**	On-line course	http://www.camp-italy.org/e-learning
HA 3	**ICZM Indicator Database**	Descriptive Report ICZM Indicator Matrix On-line Database	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-10_database-indicatori-gizc http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-11_matrice-indicatori-gizc http://www.camp-italy.org/indicatori
HA 3	**Data Policy**	Report	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-12_data-policy

Activity	Name	Type of product	Link or position *(from the link, click on "Show all version" to view the different documents)*
HA 3	**Spatial Data Infrastructure (SDI)**	Descriptive Report On-line platform: Geo-Platform, GeoServer, GeoNetwork	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-13_infrastruttura_dati-_territoriali http://www.geo.info-rac.org/geo-portal/ http://www.geo.info-rac.org/geoserver/web/ http://www.geo.info-rac.org/geonetwork/
HA 4	**Joincampitaly.org platform**	On-line platform	joincampitaly.org
HA 4	**Public participation in the CAMP Italy Project**	Descriptive rRport	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-14_partecipazione-pubblica-nel-progetto
THA	**Communication plan**	Communication Plan	http://groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-17_piano-di-comunicazione
THA	**Communication activities report**	Summary Report	http://groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-18_attivita-di-comunicazione-del-progetto-camp-italy
THA	**CAMP Italy Project brochure**	Brochure (in Italian and English)	http://groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-20_brochure-istituzionale
THA	**Project website**	Website (version in Italian and English	http://www.camp-italy.org/
THA	**CAMP Italy Facebook page**	Facebook page, social networking service on technology platform	https://www.facebook.com/progettoCAMPItaly/
THA	**3' emotional video**	Video	https://youtu.be/pSocdWpJ53s
THA	**15' institutional video**	Video	https://www.youtube.com/watch?v=XorIQIIXlXc&feature=em-share_video_user
All the HA	**Inception Conference Report**	Summary Report	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-21_rapporto-della-conferenza-iniziale
All the HA	**Mid-Term Conference Report**	Summary Report	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-22_rapporto-della-conferenza-di-medio-periodo
All the HA	**"Coastal Planning in Italy: integrated or fragmented? Reflections and comparisons for a coastal area governance", Workshop Report (21 March 2016)**	Summary Report	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-23_rapporto-del-workshop-pianificazione-costiera-italia

Activity	Name	Type of product	Link or position (from the link, click on "Show all version" to view the different documents)
All the HA	**Final Conference Report**	Summary Report	http://groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-24_rapporto-della-conferenza-finale
All the HA	**"Land-sea routes", Emilia-Romagna Region Forum Report (Cesenatico, 20 September 2016)**	Integrated Summary Report	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-15_report-finale-integrato-dei-forum-locali
All the HA	**"For an integrated and sustainable management of Capalbio Beach", Tuscany RegionForum Report (Capalbio, 27 October 27 2016)**		
All the HA	**"Integrated management of the coastal system of the Pineta Mugoni", Sardinia Region Forum Report (Alghero, 4 November 2016)**		
All the HA	**"The role of local governments in the management and prevention of marine litter (marine litter and beach litter)" Round Table Report (Alghero, 4 November 2016)**	Summary Report	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-16_rapporto-tavola-rotonda-marine-litter
All the HA	**"The Integrated Management of Coastal Areas in the Mediterranean and the European Union policies.", D. Addis, C. Maricchiolo, C. Ndong, S. Petit, Z. Skaricic. Reticula, no. 10/2015**	Publication	http://groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-19_pubblicazioni
All the HA	**"Towards the implementation of Integrated Coastal Zone Management in the Mediterranean: The CAMP Italy Project.", A. Satta, B.M.S. Giambastiani, D. Addis, I. Mannino, I. Sanguineti and E. Ulazzi, 2016. Nova publisher Ed, Chapter.ID_41771**	Publication	
All the HA	**Significance of the CAMP Italy Project compared to the inter-relations between Maritime Spatial Planning (MSP) - Integrated Coastal Management (ICM) - Land-Sea Interactions (LSI)**	Interpretative and Guideline Document	http://groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-38_nota-strategica-sulla-significativita-msp-icg-lsi

Table 5: List of CAMP Italy Project Individual Activity products

Activity	Name	Type of product	Link or position (from the link, click on "Show all version" to view the different documents)
All IAs	**Result summary Sheets of Individual Activities**	Fact Sheets	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-05_schede-di-sintesi-dei-risultati-delle-ai
IA.1 IA.2	**Integrated Report of the CAMP Italy Project Individual Activities of the Tuscany Region**	Technical Report	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-26_rapporto-integrato-

Activity	Name	Type of product	Link or position *(from the link, click on "Show all version" to view the different documents)*
IA.3			finale-azioni-individuali-1-2-3
IA.4	**Guidelines for the authorization and use of the off-shore submerged sand deposits.**	Guidelines	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-27_rapporto-finale-azione-individuale-4-regione-emilia
IA.5	**Operational Protocol for the reestablishment and consolidation of the dune belts (natural or artificial/ reconstructed).**	Protocol	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-28_azione-individuale-5-regione-emilia-romagna_protocollo
	Draft of the implementation Plan of the Operational Protocol.	Implementation Plan (draft)	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-29_azione-individuale-5-regione-emilia-romagna_piano
IA.6	**"Conservation of marine and coastal biodiversity with special reference to the protection of minor species" Report**	Technical Report Operational Plan Guidelines	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-30_azione-individuale-6-regione-emilia
	Aerial video by drone as an additional tool (not substitute) for monitoring plans	Video	
IA.7	**"Development and promotion of new forms of sustainable tourism in protected natural areas" Report**	Technical Report 6 land-sea tourist itineraries	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-31_azione-individuale-7-regione-emilia-romagna_forme
IA.8	**"Sustainability education and communication" Report**	Technical Report	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-32_azione-individuale-8-regione-emilia-romagna_educazione
IA.9	**Illustrative Report on the project carried out by the Municipality of Trinità di Agultu in Li Feruli**	Descriptive Report	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-33_azione-individuale-9-regione-sardegna_azioni
IA.10	**Report on the progress of the implementation of eco-hostel in the village of Buggerru**	Technical Report	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-34_azione-individuale-10-regione-sardegna_eco-ostello
IA.11	***Paracentrotus lividus* sea urchin integrated management and sustainable fishing model**	Technical Report	http://Groupware.info-rac.org/camp-italy-final-

Activity	Name	Type of product	Link or position *(from the link, click on "Show all version" to view the different documents)*
	in a western Sardinia CAMP Area		report/library/camp-italy-fr_allegato-35_azione-individuale-11-regione
	***Homarus gammarus lobster repopulation in* a northern Sardinia CAMP Area**	Technical Report	
	Innovative methods for the production increase of *Octopus vulgaris* common octopus and the enhancement of coastal biodiversity in a western Sardinia CAMP Area	Technical Report	
	Repopulation actions in the interests of *Homarus Gammarus lobster sustainable fishing in an* area of northern Sardinia (CAMP Area North - Sardinia)	Technical Report	
	Guidelines for sea urchin fishing in Sardinia	Guidelines	
	"The sea urchin: conservation and sustainable management" brochure	Brochure	
	"Sapori Zero Km" brand	Brand	
	Proposal of typical menus for local restaurants (support for the sale of quality products through the local tourist system)	Typical local menus	
IA.12	**Report on computational models of the Tourism Carrying Capacity (TCC) applied in Protected Areas and National Parks at the international level**.	Technical Report produced as part of the Protocol of the Italian Ministry of Environment, Land and Sea, circular Prot. 0048234\GAB - Action "Anthropogenic impact on tourism pressure in Protected Areas: interferences on the territory and biodiversity"	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-36_azione-individuale-12-regione-sardegna_rapporto-cct http://www.parcoasinara.org/
IA.13	**Sardinian Centre for coastal monitoring and evaluation report**	Technical Report	http://Groupware.info-rac.org/camp-italy-final-report/library/camp-italy-fr_allegato-37_azione-individuale-13-regione-sardegna_sira-struttura

5.1 Horizontal Activities

Horizontal Activities (HA), as we have seen, are intended to define and to apply, within Project activities, methods and tools supporting the integrated management of coastal areas; they are based on concepts of activity, the capacity for integration of results obtained, and the conditions of replicability over time (such that they can be repeated over time) and space (that is, in other geographical contexts). More generally,

one of the main objectives of the Horizontal Activities was to create the specific strategic value of the CAMP Project, allowing it to relate and synergise the results produced by the Individual Activities on different CAMP Areas within partner Regions.

The **methods and tools** implemented were defined, tested and adapted through a dynamic and synergic process between the Horizontal Activities in order to make them **interoperable and multi-functional** and more suitable for several Horizontal Activities and, more generally, a wide range of interdisciplinary activities, which characterise any action in the coastal zone management field. The tools were then identified to be functional where possible for several Project activities (HA or IA), as illustrated in Figure 8.

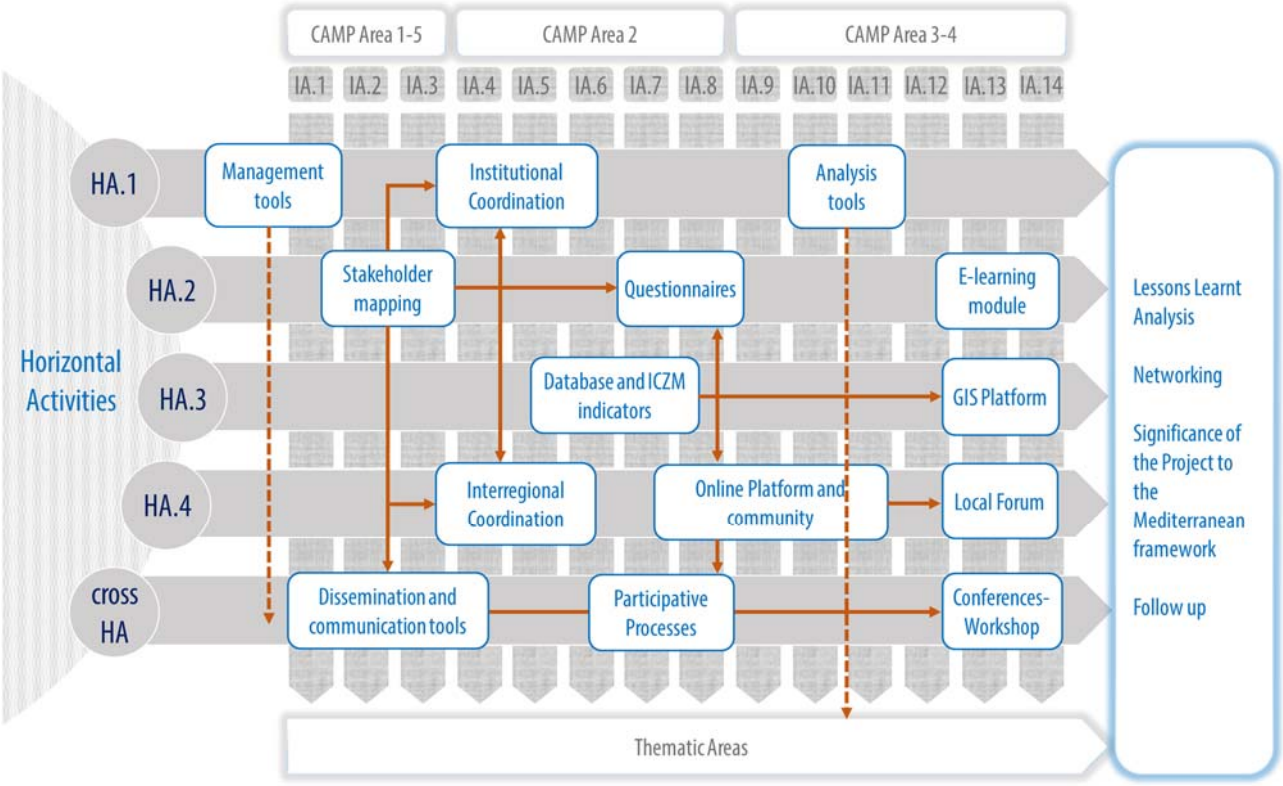


Figure 8: Links and synergies between Horizontal Activities and related tools and methods.

The following main results are summarised later in the document in terms of the synergic and integrated tools and methods developed as part of the Horizontal Activities:

- the ***method for the identification and mapping of ICZM stakeholders,*** developed as part of HA.2, using the Stakeholder Analysis tool, with the aim of identifying the stakeholders that an organisation must consider as a priority in its Stakeholder Engagement activities in a structured and effective manner. The adopted method has ensured its versatility in multiple uses for the implementation of Project activities, such as the definition and promotion of capacity building activities (HA.2, delivery of questionnaires, invitations to e-learning course); participatory activities (HA.4), communication and dissemination (THA), the definition of mailing lists for invitations to the thematic forums and conferences; support to institutional and inter-regional coordination (HA.1 and HA.4);
- the ***institutional coordination, including inter-regional coordination,*** realised as part of HA.1 and HA.4, during the entire Project implementation period, made possible the effective collaboration of

the Project partners and the involvement of other institutions for the implementation of Project activities;

- ***capacity building*** activities, developed as part of HA.2, in close synergy with the other Project activities, in particular in the organisation of conferences, workshops and forums, within HA.4 and THA;
- ***data collection and management,*** developed as part of HA.3, also useful for result dissemination (HA.1 and THA) and moments of capacity building (HA.2); as well as the synergy with the Individual Activities, for ICZM indicator calculation;
- ***public participation***, with the creation and management of the 'joincampitaly' platform, developed as part of HA.4, as a tool to support activities such as participation (blogs, questionnaires), capacity building (HA.2, surveys using questionnaires), the development of a network of experts (community) in the coastal zone management field (activity shared by all HA), or for the dissemination of Project results (HA.1 and THA);
- the activities of ***communication and dissemination of results*** developed under THA, based on specific criteria and guidelines;
- ***networking***, activity that characterised all Horizontal Activities and, more generally, the entire Project, with the development of methods and tools that can be a valid support for the development of the ICZM network in the Mediterranean;
- the ***Individual Activity consistency matrix with ICZM protocol items, an*** analysis tool developed as part of HA.1, useful for the analysis of lessons learned and the definition of the significance of the Project at the national level and for the Mediterranean.

The activities implemented and the main results obtained in Horizontal Activities are summarised, for each Horizontal action, in Annex 6 Horizontal Activity Summary Sheets, and in their specific technical documents (See. Table 4).

5.1.1 ICZM stakeholder identification and mapping

CAMP Italy Project Horizontal Activities begin from ICZM stakeholder mapping, using the stakeholder analysis approach, which aims to identify, in an organised and efficient manner, which interlocutors are to be considered. Mapping initially considered five CAMP Areas - the Project geographic focus areas - and then it was extended to the national territory and the Mediterranean basin area, with the aim of identifying on the one hand the recipients of the various Horizontal Activities, and on the other the stakeholders that need to be associated with the promotion of ICZM.

Mapping, carried out under Horizontal Activity 2, in close connection with the other Horizontal Activities, has identified both the macro categories of stakeholders who directly or indirectly affect coastal areas, and also their subcategories, as indicated in the table.

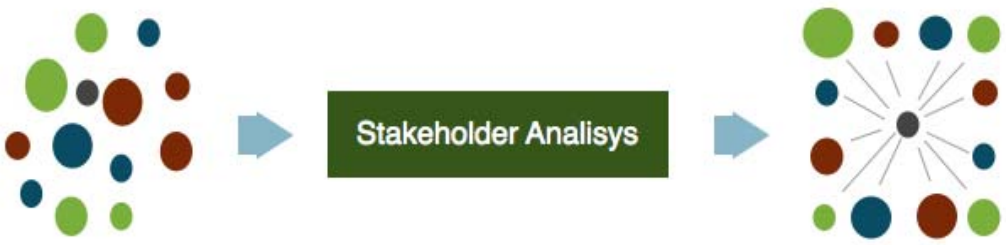


Figure 9: Stakeholder Analysis. Source: Focus Lab.

Stakeholder categories	Sub-Category
Public institutions and services	International organisations
	Ministries
	Regions (Regional Councils, Departments)
	Provinces
	Local authority networks and associations
	Municipalities
	National and Regional government Agencies
	Regional Environmental Protection Agency (ARPA)
	Port Authorities
	Harbour Offices
	Bodies managing Natural Protected Areas
	Land management entities (land reclamation, basin authorities, etc.)
	Public transport companies
	Security and protection services (forest rangers, civil defence, etc.)
	Utility providers (water, electricity, waste, etc.)
	Transport and road management companies (airports, ferries, trains, buses)
Economic entities	Companies operating in coastal zones
	Bathing facilities (including life guards and other employees)
	Fishermen and their cooperatives
	Hotel and catering sector (hotels, restaurants and their associations, APT - Tourist Promotion Companies etc.)
	Yachting
	Fish markets and fishmongers
	Aquaculture farms
	Breeding and herding
	Farms and food producers
	Associations and Unions
Experts	Universities
	Research Centres (including research projects, aquariums etc.)
	Professional Associations
	Freelancers/consultants/consulting firms
	Cultural/environmental associations
General public	Private citizens
	Students
	Tourists
	Consumer/citizen associations

Table 6: ICZM stakeholder macro-categories and sub-categories who, directly or indirectly, affect coastal areas.

Each stakeholder has been characterised according to a list of information which allows them to be selected according to need, such as involvement in a planning activity, invitation to a specific event, etc.

Stakeholders were mapped for the entire CAMP Italy Project and involved all the Project partners and MAP Components, who have provided their contact lists and helped to update and revise the database over time.

Thus more than 2,100 contacts were mapped in different scales.

What emerged is that this is currently not a practice carried out by the institutions involved in ICZM in a systematic way, as it was not planned. The institutions do not, therefore, have a reference database created for this purpose and systematically updated, but they build them according to a specific need, such as the realisation of an event, a discussion board, etc.

Taking this aspect into account, the activities developed and tested within CAMP Italy were codified in a method, thoroughly explained in Annex 8 **ICZM stakeholder mapping method**, which considers needs on the national and Mediterranean levels.

Since ICZM stakeholders should be systematically and continuously mapped by institutions, it is necessary, as stressed by the institutions involved in the CAMP Italy Project that this is set in the regulations for the concerned institutions' activities. To ensure further consistency and uniformity with mappings realised at different scales, the procedure should be codified and shared. For this purpose, it would be important that it is included amongst the activities in the new Regional Framework for ICZM in the Mediterranean.

The inclusion of a shared method in the Mediterranean area, under the Barcelona Convention umbrella, could meet that need.

5.1.2 Institutional and inter-regional coordination

Institutional coordination, meaning the involvement and coordination of all relevant administrative bodies, with the aim of improving the coherence of the various existing policies both vertically and horizontally, is a cardinal principle of ICZM, as ratified in Article 6 and set out in Article 7 of the ICZM protocol. It aims to create by comparison development opportunities for the definition of common ICZM policies and innovative practices, and which may at the same time be taken advantage of separately, in different contexts. The comparison of different experiences, beyond regional (**interregional coordination**) and domestic borders is an effective way to access new innovative ideas, different approaches, and new skills, and helps participants understand what works, what does not work and why, then becoming a tool for growth and improvement of local, regional, national, and international realities.

Article 6 - General principles of integrated coastal zone management

e) Organised cross-sectorial institutional coordination of the various administrative services and regional and local authorities competent in coastal zones must be guaranteed.

Article 7 - Coordination

1. For the purposes of integrated coastal zone management, the Parties shall:
   a) ensure institutional coordination, where necessary through appropriate bodies or mechanisms, in order to avoid sectoral approaches and facilitate comprehensive approaches;
   b) organise appropriate coordination between the various authorities for both the marine and the land parts of coastal zones in the different administrative services, at the national, regional and local levels;
   c) organise close coordination between national authorities and regional and local bodies concerning coastal strategies, plans and programmes and in relation to the various authorisations for activities; this may be achieved through joint consultative bodies or joint decision-making procedures.

2. National, regional and local coastal zone authorities shall, insofar as practicable, work together to strengthen the coherence and effectiveness of the coastal strategies, plans and programmes.

Horizontal Activity 1 has promoted the institutional coordination of the CAMP Italy Project, both on the Project level (coordination between institutional partners), and in Project activities (Horizontal Activities and Individual Activities). Horizontal Activity 4, at the same time, has promoted interregional coordination, with particular reference to Project partner Regions, who have worked closely with each other for the implementation of Project activities, the exchange of experiences and data, as well as for continuous comparison for the evaluation and validation of the methods and tools developed within the Project.

In order to facilitate the **institutional coordination of the CAMP Italy Project** and collaboration between partner administrations (Italian Ministry of Environment, Land and Sea, the Regions of Emilia-Romagna, Sardinia and Tuscany), instruments have been adopted in Horizontal Activity 1 to facilitate communications and to encourage the active participation of institution representatives, such as: the preparation of a shared calendar of work group coordination technical meetings, PTCO (Project Technical Coordination Office) and Tavolo CAMP meetings, scheduled approximately 3 months in advance, that has maximised participation; the use of remote communication technologies, also by sharing documents (via Skype and Google drive), which reduced travel and have created more moments of synergy among the stakeholders, even at a distance; data and GroupWare documents sharing platform, which allowed the updated information to be always available and has always promoted the sharing of knowledge.

Institutional coordination implemented within the Project is an example of cooperation between State and regional activities, including one in the autonomous Regions. Such cooperation is of special worth when considering, in the Italian legal framework, the not always linear division of responsibilities between the State and Regions. It is important to remember that the IMELS, as ICZM National Focal Point, has the task of monitoring and promoting the implementation of the ICZM protocol in Italy; to ensure that tools, measures, and provisions required to correctly process and implement strategies, plans, programmes, and projects which ensure the achievement of the objectives of ICZM are adopted during the entire process. With the aim of overcoming the fragmentation of responsibilities in this area, the IMELS has set up, thanks to the CAMP Project, an overall institutional cooperation for the integrated management of coastal areas through the involvement of regional and local authorities, in order to define common guidelines. Within the Project, therefore, the exchange of information, methods, and approaches between the Regions, and between them and the IMELS, both on the technical level (within the PTCO), and the institutional level (Tavolo CAMP), were key to the definition of applicable concrete methods for coastal management.

In particular, the collaboration between the Project partners has contributed to the definition of integrated methodologies and tools which are replicable in other Italian Regions (national level), and which have been developed in the context of the Horizontal Activities, thereby also contributing to the definition of a document on **CAMP Italy Project significance for Maritime Spatial Planning (MSP) - Integrated Coastal Management (ICM) - Land-Sea Interactions (LSI)**. The recommendatory document, which provides a key to understanding and interpretation, is based on the implementation of case studies carried out as part of the Individual Activities, and is intended to support the definition of a Common Regional Framework for Integrated Coastal Zone Management in the Mediterranean (ex Article 17 of the ICZM Protocol); as well as the implementation of the Barcelona Convention 2016-2021 Mid-Term Strategy. The document also has been submitted to the technical table for the implementation of the MSP Directive in Italy, as a document to support the drafting and interpretation of the guidelines that will arise from the implementation of MSP Directive.

In addition, the results of the Individual Activities, particularly those related to the management of coastal-marine and river sediments (Individual Activities 1, 2, 3, 4) are part of the inter-regional consultation process as part of the "National Table on coast erosion ", established by IMELS. The developed information

will be useful for the preparation of the "National Guidelines for dynamic coastal management".

The various events organised within the Project (initial conference, mid-term conference, final conference, local themed forums, ref. § 5.1.6, 'public events') represented, for project partners and the institutions that represent them, opportunities to share visions, strategies, concepts, and information regarding coastal management, which are necessary for the definition of shared and replicable common methods. Particularly:

- The exchange of experience by the institutions that participated in the initial conference (Alghero, 14 November 2014) has contributed to the definition and identification of decisions and methods that have been adopted at the Project level.
- At the mid-term conference (Bologna, 21 March 2016), partner administrations shared the preliminary Project results with other institutions in attendance, including representatives from PAP/RAC, the Regions of Latium and Veneto, local municipalities as well as ARPA, Basin Authority, Port Authorities, and Parks. In particular, during the afternoon session participatory workshop, the institutions discussed "Planning of terrestrial and marine coastal areas" (Thematic Area 1).
- At the final conference (Rome, 17 January 2017) partner administrations presented Project results to a national and international audience with particular reference to the methods and the instruments implemented in support of the Regional Framework for the Mediterranean in the implementation phase. Between the institutions represented, the Italian Ministry of Environment, Land and Sea, the Italian Ministry of Infrastructure and Transport, ISPRA, ARPA Liguria, Regions Emilia-Romagna, Tuscany, Sardinia and Latium. The comparison of experiences with other countries (France, Croatia, Spain, Greece) was important to sharing methods and approaches and identifying common needs, while laying the foundation for future collaborations and actions promoting ICZM at the Mediterranean level, especially since UNEP/MAP and PAP/RAC representatives were in attendance.
- Local forums also represented a chance for participating institutions to discuss coastal zone planning issues; the protection, preservation and restoration of coastal marine habitats; the sustainability of socio-economic pressures in the coastal zones; as well as marine litter. Please refer to § 5.1.5 for further details.

Institutional coordination, moreover, was also created within the implementation of the Individual Activities by concerned regional and local governments, in the light of the intended Project activities, in particular as regards the definition of the institutional agreements for activity planning and implementation; the exchange of experiences, data and information necessary for the activities; activities concerning participation and discussion of the results obtained; the sharing of results, even at regional and national levels.

As part of the Individual Activities, institutional coordination related to:

Emilia-Romagna Region

- The collaboration between the organisation's various internal services, with particular reference to the Soil Protection Service, Technical Services, and Basin Authority for the exchange of information, data, and experiences under Individual Activities 4 and 5;
- The collaboration with the Region of Tuscany (inter-regional coordination) for the exchange of information on Individual Activities 1 and 4;
- The collaboration with the Po Delta Park, the State Forestry Department and the City of Ravenna (vertical coordination), as well as with other relevant regional services, regarding the exchange of information and experience under Individual Activities 6 and 7;

Autonomous

- Institutional coordination of the 7 municipalities identified as beneficiaries of

Region of Sardinia- Coast Preservation Agency

funding for the implementation of specific actions aimed at the sustainable use of the beaches and the protection of coastal ecosystems, Individual Activity 9 (San Vero Milis, Trinità d'Agultu and Vignola, Arbus, Cabras, Alghero, Sorso, and Union of Municipalities Metalla and the Sea), in the design stage, the authorisation process and during work;

- The collaboration with the Department of Environmental Protection and the Municipality of Buggerru for the creation of the first eco-hostel for sustainable local development (Buggerru, Individual Activity 10).
- Institutional coordination with the Fisheries and Aquaculture Service and the Office of Agriculture and agricultural and pastoral reform, with the scientific support of the Marine Biodiversity Centre (Com.Bio.Ma.) for the development of activities concerning Individual Activity 11 GIRA. Concerned local agencies were involved in the Activity (including the municipalities of Buggerru, Arbus, Fluminimaggiore, San Vero Milis, Castelsardo, the Iglesias Forestry and Environmental Protection Service, the Portoscuso harbour master). It should be stressed that these coordination activities are well-established practices in project management and will also apply to future actions in ICZM;
- Institutional coordination with the National Park Authority and the National Park of the Tuscan Archipelago, as well as the Department of Humanities and Social Sciences of the University of Sassari, the Institute of Biometeorology of the National Research Council CNR - IBIMET (with offices in Florence, Bologna, Sassari and Rome), for the definition of a collaboration agreement that was supposed to be driving the implementation of the activities foreseen under Individual Activity 12, then not completed;
- Coordination with the Regional Department of Environmental Protection of the Sardinia Region, throughout the SIRA implementation period (Individual Activity 13), through meetings and technical meetings with the institutions concerned by the project;

Tuscany Region

- The collaboration with the Regions of Latium and Liguria (Horizontal coordination and inter-regional coordination) for the exchange of data and information regarding the coastal segments affected by Individual Activities 1 and 2;
- The collaboration with the Municipalities of Capalbio and Carrara (vertical coordination) as part of the Individual Activity 2 disclosure/dissemination activities (Carrara, October 6, 2016), as well as for the organisation of the local forum in Capalbio (October 27, 2016);
- The collaboration with the Director of the Tuscan Archipelago Park for the exchange of information on the morphological and sedimentological evolution of the Lacona Gulf beach-dune system (Individual Activity 3).

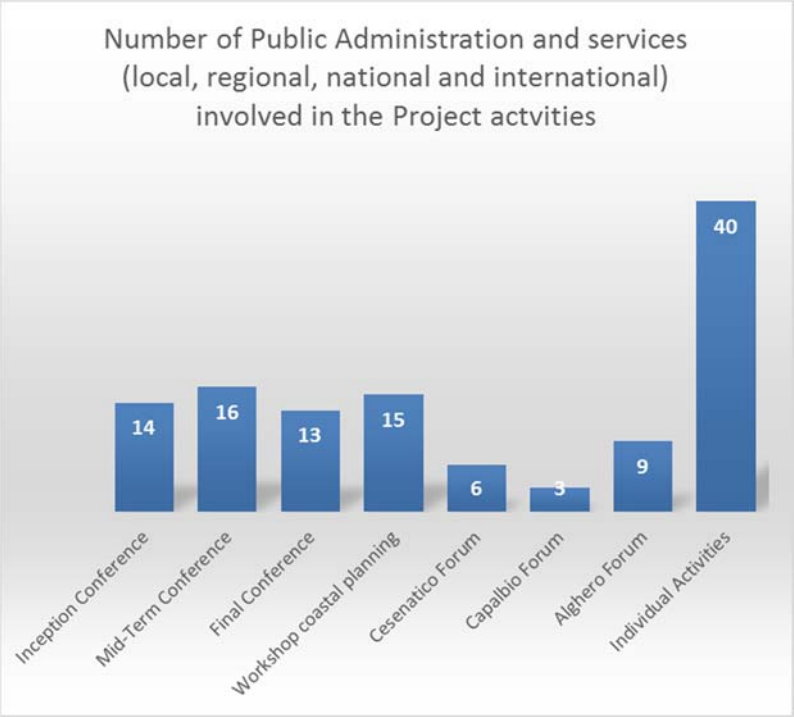


Figure 10: Summary of the institutions involved in CAMP Italy Project activities.

As to **interregional coordination**, the regional administrations involved in the CAMP Italy Project have strongly supported the need that the actions triggered within the individual geographical areas should not be incoherent or self-referential. They considered it appropriate to support an effort to ensure that interaction, synergy and integration with the experiences and systems of other Regions both directly (Emilia-Romagna, Tuscany, and Sardinia) and indirectly (Latium and Liguria) involved in the CAMP Italy Project were recognised among the planning actions and individual policy strategies conducted at the regional level. As part of the dissemination of good practice, particular attention has been devoted to Projects developed with the Individual Activities, which, during the implementation of the CAMP Project, provided results of significant value and were the subject of accolades for quality, including the transfer of good practice and virtuous experiences between different regional, provincial and municipal contexts, aimed at disseminating ICZM as a successful model for a sectorial approach to coastal zone management.

The inter-regional coordination activities under the Project were mainly conducted on four branches:

1. The co-design and exchange between the Tuscany Region and the Region of Liguria in pilot area 1.
2. The co-design and exchange between the Tuscany Region and the Region of Latium in pilot area 5.
3. The evaluation of the inter-regional coordination activities, past or current, between the Regions under ICZM.
4. Sharing models and common approaches developed within the CAMP Italy Project.

Regarding points 1 and 2, the Tuscany Region, due to consolidated collaboration with Latium and Liguria, has guaranteed a continuous exchange with the representatives of the two Regions, both through participation in bilateral meetings and by organising specific seminars. The inter-regional institutional coordination is an inescapable condition in design and management activities for coastal zones located on the administrative border between two Regions.

To better assess the level of cooperation and collaboration between Regions and possible areas for improvement, a custom questionnaire was prepared, addressed to the representatives of the three Regions involved in the CAMP Italy Project.

The results of this investigation are briefly provided below.

Among the main activities (current and past) for the exchange of information and experience, meaning coordination on ICZM issues between Regions, CAMP Regions have listed a long list of inter-regional cooperation projects, including: *Maremed* (Maritime Regions cooperation for MEDiterranean); *COASTANCE* (Strategies for action against coastal erosion and the effects of climate change for sustainable coastal planning in the Mediterranean area); *BEACHMED-e* (Strategic management of beach protection measures for the sustainable development of coastal areas of the Mediterranean); COASTGAP (Coastal governance and adaptation policies in the Mediterranean); *SHAPE* (Shaping a Holistic Approach to Protect the Adriatic Environment between coast and sea); *EUROSION; OURCOAST*: *PEARL* (Accessibility, usability and security of the coastal strip of the cross-border Regions); *Resmar* (Network of environmental protection in the maritime space - System Action A "network for coastal erosion monitoring"). All Regions have also indicated their commitment in the National Council for coastal erosion, promoted by the Italian Ministry of Environment, Land and Sea.

As regards interest and possible replication of CAMP Italy Project *deliverables/outputs* developed under the Individual activities from other Regions, this is a superior result, as summarised in Table 7.

	IA-1	IA-2	IA-3	IA-5	IA-6	IA-7	IA-9	IA-11
Emilia-Romagna Region	✓	✓	✓				✓	✓
Tuscany Region				✓	✓	✓	✓	✓
Sardinia region	✓	✓	✓	✓	✓	✓		

Table 7: Individual Activities deemed interesting as replicable in their region.

With regard to instruments and experiences developed by the CAMP Regions on ICZM matters that may be of interest to other partner Regions, the three Regions have especially worked on sharing data, experiences and information relating to the general theme of coastal dunes. The result of this exchange of knowledge and methods has been reflected in the operating protocol produced as part of Individual Activity 5 (pertaining to Emilia-Romagna), taking into account and making use of previous experiences of both Regions, with particular reference to Individual Activities 3 (Tuscany) and 9 (Sardinia).

As concerns the other ICZM tools and methods developed by each CAMP region, WHICH ARE deemed useful to share with the other Regions:

- The Emilia-Romagna Region considers it useful to continue the discussion and the exchange of the instruments, approaches and methods referred to the Guidelines for Integrated Coastal Zone Management, approved by Regional Council Resolution January 20, 2005, # 645. RAS, for its part, has confirmed its willingness to continue the dialogue and exchange of the instruments, approaches and methods contained in these Guidelines.

- The Regions of Tuscany and Sardinia have expressed their interest and therefore proposed to continue to work using the approaches and methods contained in the Guidelines for Coastal Erosion Management, established as part of the National Council for Coastal Erosion.

- All three CAMP Regions have indicated the usefulness of collaborating in new project proposals (of a national, inter-regional, European and international nature) for the development, updating and

implementation of both policies and best practices for the integrated management of coastal areas and in the context of the integrated maritime policy.

- RAS has shown its interest in sharing experience in the management of information systems for environmental data collection and processing (SIRA).

Finally, for what concerns the aspects and issues that require inter-regional coordination, or improving the existing one, the CAMP Regions (i) indicated the need for more discussions on the policy and government levels (Emilia-Romagna and Sardinia); (ii) proposed increased exchanges on the technical-institutional level, in particular as regards the inter-regional watersheds (Tuscany and Sardinia).

5.1.3 Capacity building

Integrated coastal zone management requires various types of knowledge, skills and abilities, not only legal, technical-scientific, but also planning, coordination, and participatory decision-making.

Horizontal Activity 2 "Capacity building" (HA2) was developed through three main activities:

- a survey to identify the level of knowledge on ICZM in the Project area, using the on-line questionnaire tool;
- an e-learning course on ICZM to fill indicated gaps;
- combined educational and participation activities.

The listed activities are added to those carried out by the Project partners within the Individual Activities (as detailed in section 5.2 and in their summary sheets, in **Annex 5**).

Following are more details on single Horizontal Activity 2 outputs.

Surveys to assess the level of knowledge of ICZM

The development of capacity building activities within the CAMP Italy Project started with the identification of knowledge gaps regarding ICZM by concerned stakeholders, gaps which need to be addressed. The method developed to achieve this goal has primarily used the on-line questionnaire tool; a choice that has the potential to reach, in a short period of time and with reduced economic resources, a large pool of respondents, albeit with the risk of collecting a small number of responses, given the lack of control and direct contact with the participants.

The questionnaire was based on the principles of integrated coastal zone management provided by the ICZM protocol, focusing questions on the main themes covered in the CAMP Italy Project Individual Activities, such as coastal erosion, the protection of biodiversity and the dunes, the carrying capacity, sustainable tourism, etc. The survey was supported by INFO RAC, which provided its platform dedicated to on-line surveys and their staff, as technical support for survey upload and management.

The survey method included an initial test phase, to assess questionnaire operations; this was followed by an invitation to fill out the questionnaire, addressed to all concerned ICZM stakeholders in the mapped CAMP Italy Project areas. The invitation was mainly sent to reference Project partners for the geographic area of membership of the different stakeholders, since this mode, tested during the questionnaire testing phase, demonstrated the advantage of its use to gather a significant number of answers.

The questionnaire was then made accessible to all and its completion was promoted during all events organised by the Project or in which partners participated.

The questionnaire, translated into English, was also promoted on the Mediterranean basin level, with the cooperation of MAP Components, which helped to identify stakeholders of interest in Mediterranean countries and to promote it among them. The number of international respondents, however, was extremely small.

A total of 166 respondents completed the questionnaire in Italian; of these, most responded upon invitation (156, or 11% of those invited, a number in line with response rates reported in literature), while the remaining 10 completed it after it was opened and made accessible to all (as of January 29, 2017). Questionnaires were completed following the presentation of this instrument as part of specific events, through the distribution of information in the Project brochure or as part of oral presentations, but in limited numbers.

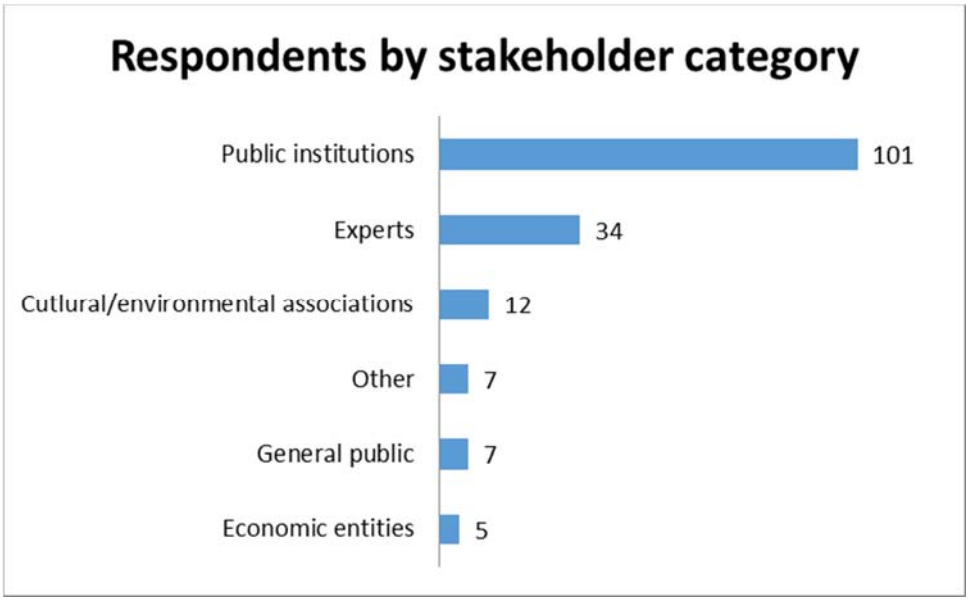


Figure 11: Chart with number of respondents by category.

Respondents to the questionnaire in Italian mostly belong to the public administration category (60.8% of respondents), which is also the most represented category in the Project database.

The survey showed that, in general, the sample demonstrates a good knowledge of the proposed themes, although there are still issues that deserve further investigation and require effort to raise awareness.

In particular, it is still unclear to some that the coastal zones, in addition to the terrestrial side, also have a sea-side to consider; furthermore, that ICZM does not solely focus on the environment, which does not coincide with the management of protected nature areas.

Knowledge on the existence of the ICZM protocol and other rules, such as, for example, the EU Directive on maritime spatial planning, particularly important in this context, must be further increased.

The indication of municipalities and Regions as reference bodies for ICZM is interesting, highlighting how coastal management is perceived as a local issue. The participation, involvement and coordination of all other stakeholders and clarification on what are the existing public bodies and their institutional duties deserves further investigation.

A topic of great interest was coastal erosion, but with the elements still not clear to all, in particular as regards training, which should focus on the factors that influence it and possible solutions.

As to the dunes, however, the functions they can play require more research; a similar case can be made for biodiversity.

Doubts were indicated on what sustainable tourism is: it would be rather important to clarify the concept and emerging opportunities, to be able to develop it in the most appropriate way. This is particularly relevant considering the recognition of tourism as a major economic activity in coastal areas. Still concerning activities of interest to ICZM, awareness should be increased that all those who have an influence on coastal zones, both land and sea, should be included in the management of it.

Another concept that needs to be discussed is the carrying capacity of a protected area, which several respondents confused with the natural resources of the same or the capacity of the protected area services.

Finally, a positive aspect is the interest on the part of many respondents to take part in a remote ICZM course (e-learning course), activity planned within the CAMP Italy Project.

It is noted that the evaluation questionnaires made for the three local forums (as part of public participation activities, described in paragraph 5.1.5), have confirmed the need, but also the interest of the stakeholders, in exploring these issues, confirming that the adopted survey method was effective.

Detailed analysis of the survey results are reported in Annex 9 **Surveys to assess the level of knowledge on ICZM**.

E-learning platform

To disseminate knowledge and promote awareness of ICZM processes, the CAMP Italy Project has promoted a free e-learning basic course in Italian on ICZM as a basis for an effective involvement of stakeholders, based on knowledge of coastal areas, their dynamics, the activities that affect them and related impacts, and policies for their management and governance, and available tools.

Specifically, it was decided to use the ICZM basic MedOpen virtual training course - created by PAP/RAC in English and in other languages of the Mediterranean Basin - with the aim of contributing to the development of a common knowledge base at the Mediterranean level. The CAMP Italy Project has therefore updated and translated it into Italian, in order to make it easily accessible to all ICZM Italy stakeholders. With the support of PAP/RAC, it then prepared the platform that hosts it.

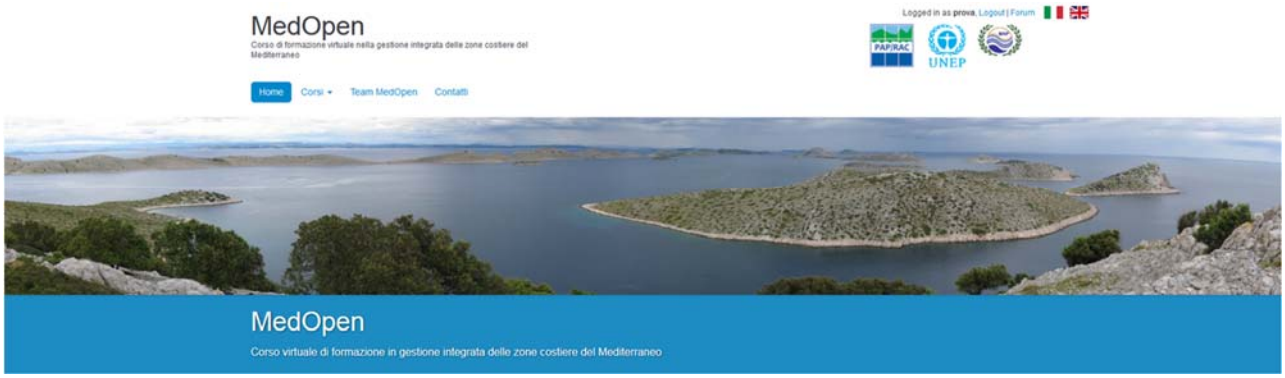


Figure 12: E-learning course platform.

E-learning courses are a very interesting tool for education and training, as they can help increase the knowledge on a broad scale at lower costs; a tool which, before the CAMP Italy Project, had not yet been introduced for ICZM in the Italian language in a format accessible to all, and free of charge.

The course consists of 12 lessons, which can be followed sequentially, but users can also choose to move from one lesson to another, depending on their interests. A test is planned for each lesson, and those who correctly answered more than 65% of the questions at the end of the course are awarded the **MedOpen ICZM Base certificate**.

The course was promoted through both Project communication tools, including the website and newsletters; and presented at all the events organised by the CAMP Italy Project and those on issues related to ICZM which were attended by Project partners.

In total, 70 people have enrolled in the course (as of January 26, 2017), showing that there is interest in the subject and also for the tool, which can support the dissemination of knowledge on ICZM. The different stakeholder categories are represented by the course participants, although the number of members from public administrations and economic stakeholders is less than experts from the academic and research world; this data can be linked to the fact that, for the latter, the study is an integral part of their profession and not something extra, which is seen as adding to their normal professional activities.

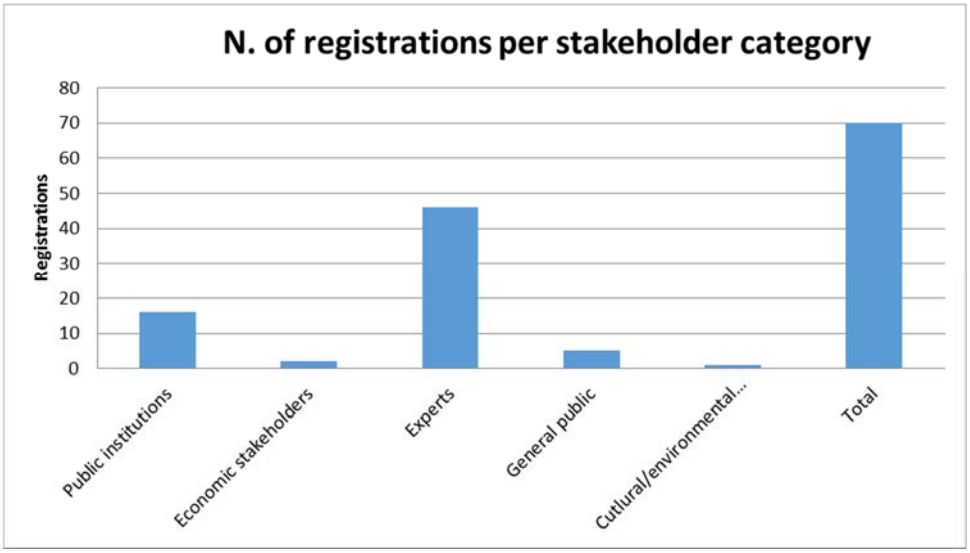


Table 8: Number of participants per stakeholder category and subcategory

At the end of the Project - also based on this observation - the course was promoted among University students and professors, in association with CoNISMa and its member Universities, a strategy that has led to a sharp increase in enrolments.

The course is available at link http://www.camp-italy.org/e-learning.

Other capacity building activities

In addition to the e-learning course, capacity building sessions were promoted within each event organised by the CAMP Italy Project, starting with participation workshops on the subject of coastal zone planning, which took place at the end of the mid-term conference and at the three thematic forums. These initiatives were designed with the dual objective of promoting participation and improving stakeholders' ability to manage coastal zones in an integrated way, starting with specific issues and practices.

Figure 13: Capacity building session slide in forums

At the beginning of each event, a brief introductory session on the key ICZM concepts was included, focusing on the issue considered within the event, in order to clarify and thus fill the gaps revealed by the ICZM knowledge survey. This first presentation was followed by specific ones, on the area and topic in question, to increase knowledge and provide a common basis to participate in the discussion. These presentations were given by experts from organisations that work directly on the issues considered, in particular the Marine Research Centre Foundation, the University of Pisa and the Regional Park of Porto Conte - Marine Protected Area of 'Capo Caccia-Isola Piana'.

The evaluation of these educational sessions and participatory events by forum participants - generally very positive - has confirmed the usefulness of the chosen format to increase the capacity of ICZM stakeholders.

5.1.4 Data collection and management

Horizontal Activity 3 "Data collection and management" (HA3) developed two main tools:

- an **on-line database**, to manage a series of indicators consistent with the ICZM principles applied to the Regions' Individual Activities; and
- a **Spatial Data Infrastructure (SDI)**, to collect information on the topic of coastal management, as it emerges from all Project Individual Activities.

These tools, with a user interface, have been implemented and made available to partners, with access credentials, on the Project site in order to share information and data.

Following are more details on Horizontal Activity 3 outputs.

ICZM Indicators

The CAMP Italy Project has developed a set of indicators for Integrated Coastal Management, divided into 4 groups: environmental, economic, social and governance indicators. The forty-six (46) indicators, consistent with ICZM protocol principles, are organised in a computer database, available on the Project website, which provides a user interface for their management and consultation.

Some of these indicators have been selected and applied to the Individual Activities, but the entire database can find wider applications. Indicators can be used in all studies that require the collection, integration and homogenisation of information about the coastal management knowledge base. The database, as well as information collected therein, are a useful tool to support both the Project activities and future Maritime Spatial Planning and Integrated Coastal Zone Management activities.

Analysis of indicators exploits the work completed and the results achieved in other international, national and regional projects and studies, also including indicators specifically developed for CAMP Italy Project activities. In many cases, the original methods were revised, supplemented, and/or adapted to the purposes of the Project; this, however, does not preclude the extension of the geographical area of application to different contexts, after checking the availability of data necessary to support the calculation.

The following is provided for each indicator:

- number, name, brief description and indicator category;
- sources used for the information, references to other similar indicators that can be used as an alternative to or in association with the selected one;
- information on the relevance and applicability to the various articles and paragraphs of the ICZM protocol;
- indicator method and composition (meaning the list of data and the minimum information necessary for the calculation, the type of expected end product and any explanatory notes).

The detailed description of the ICZM Indicator Database can be found in Annex 10 **ICZM Indicator Database** and Annex 11 **ICZM Indicator Matrix**. The database is also available on-line at the following web address: **http://www.camp-italy.org/indicatori** (Figure 14).

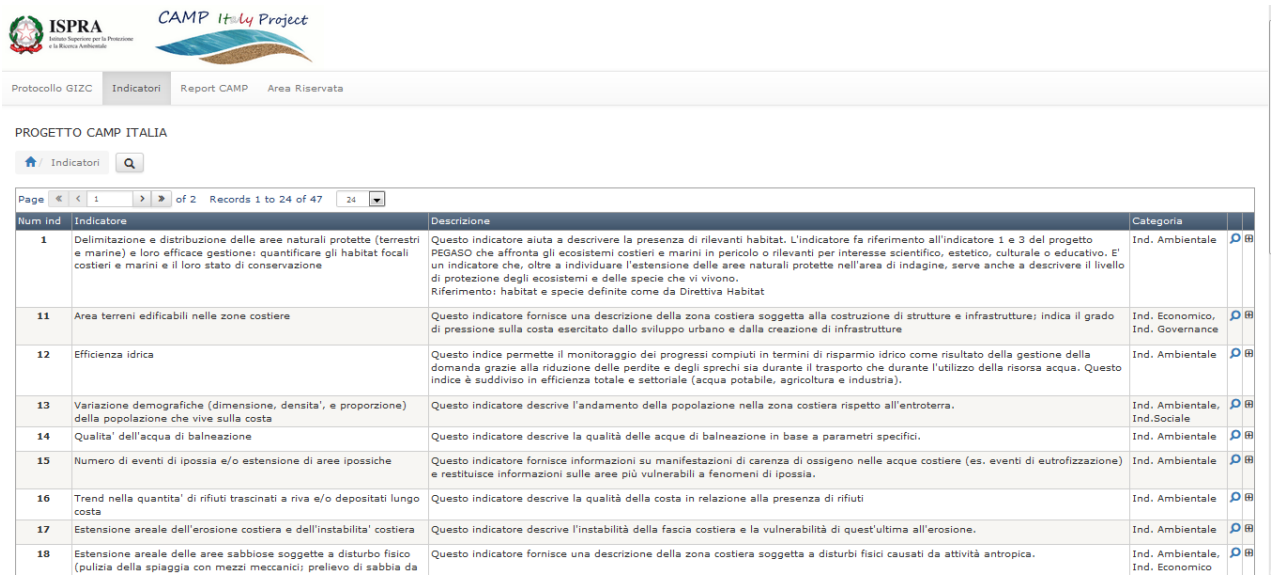


Figure 14: ICZM Indicator Database on the Project website

Data Policy

To support all HA3 activities, a 'Data Policy' document was drafted with the aim of identifying the access methods and use for data, information and products generated within CAMP Italy Project or resulting from activities related to it, even beyond the Project terms. The document aims to:

- indicate the license terms of use of the data, including use beyond Project terms;
- define access policies to information resources between partners (for example, access to intermediate data restricted to partners) during the Project;
- specify items relating to the appropriate quotation.

To ensure the reuse and sharing of data, the Project partners agreed on the usefulness of making the data created by and derived from the CAMP Project free of any upstream restriction and accessible to every user level. Therefore, the data access and use conditions, described in the document, have ensured that data processed in CAMP are fully reusable and accessible via search, reader and download services to any user level.

The document identifies the types of data and products processed and related to the Project, the general conditions of use of the latter and the main user communities that can benefit from the Project products.

For more information, please refer to Annex 12 **Data Policy**.

Spatial Data Infrastructure (SDI)

With the aim of gathering information in the field of coastal management and thus ensure the integration, standardisation and interoperability of data relating to the CAMP Areas and sharing them (at the national and international levels), the CAMP Italy Project has prepared a Spatial Data Infrastructure (*SDI*) (Figure 15).

This infrastructure allows access to data from Project activities and monitoring and observation networks and guarantees the maintenance of geospatial information even after the end of the Project, ensuring the continuation of follow-up activities, in line with the provisions of the ICZM protocol (Art. 16) and the European Union Directives, as implemented by Italian law (e.g. the Directive on the reuse of public sector information, also known as PSI Directive - Public Sector Information, Dir. 2003/98/EC, as amended by Dir. 2013/37/EU of 26 June 2013; Law 135/2012 "Spending review", Art. 12-quaterdecies), which are working for the full usability of the data created with public funds, even partial.

The data generated as part of Project activities and source data provided by the Partners are maintained and made accessible through the information platform operated by INFO RAC Center using standard interoperability protocols (OGC) and International standards (International Organization for Standardization ISO), in accordance with the INSPIRE principles (Directive 2007/2/EC INSPIRE - Infrastructure for Spatial Information in Europe).

The infrastructure consists of three components:

- Geo-Platform (http://www.geo.info-rac.org/geo-portal/) to view, manage, upload and download data. This infrastructure, created by geoSDI (CNR-IMAA research group) and customised for CAMP Italy, integrates and manages Web Map Service (WMS) and data, in both vector format (shapefiles) and raster format (geotiff), and exports and imports projects and runs other operations for legends and layout (Figure 15).
- GeoServer (http://www.geo.info-rac.org/geoserver/web/) for online access and the complete management of Web Feature Service (WFS), Web Coverage Service (WCS), and Web Map Service (WMS).

- GeoNetwork Opensource (http://www.geo.info-rac.org/geonetwork/) a Catalog Server with a GUI to manage the metadata associated with spatial datasets, to create different user profiles and view the maps associated with the published metadata. Metadata were produced by generating XML files in INSPIRE compliant format.

All technologies used in the development and implementation of the CAMP Italy SDI are open source.

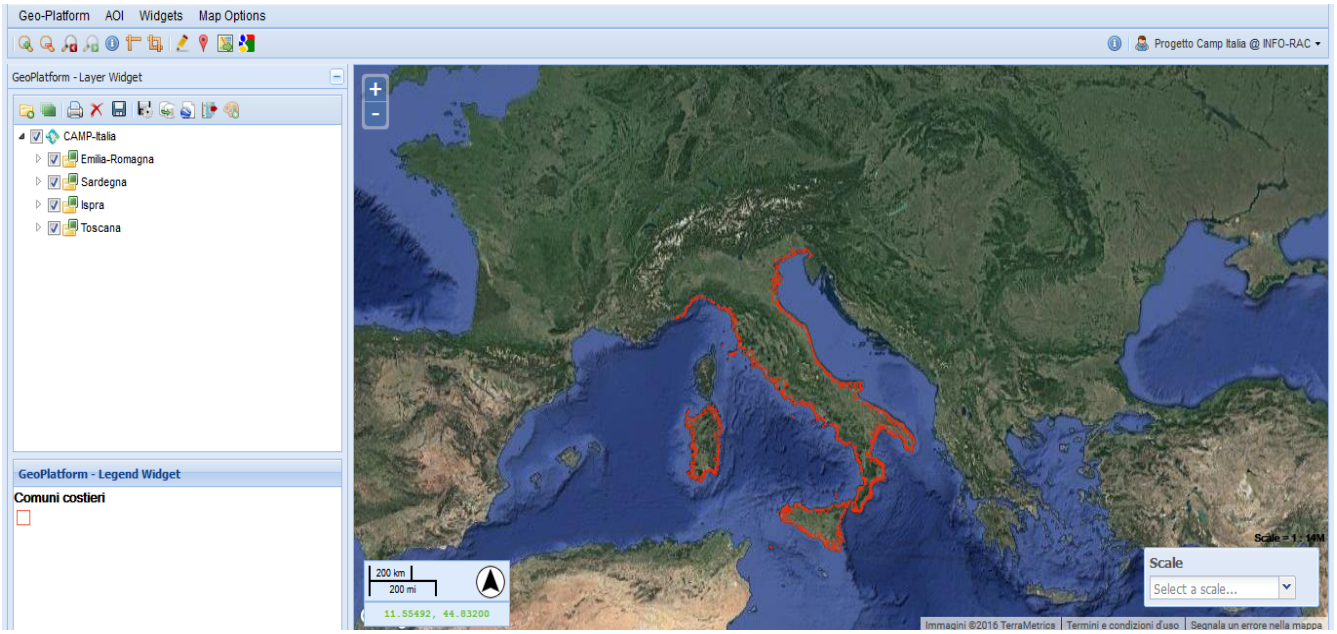


Figure 15: Project Geo-Platform.

❑ Accessibility

The Geo-Platform is available to all users, both public and private, and can be consulted online at the following web address: http://www.geo.info-rac.org/geo-portal/. Unregistered users should request access credentials from INFO RAC. Once logged in, the GUI is that of a classic GIS, with data organised in *layers,* where display can be enabled or disabled from the control panel on the left and with a command bar to save, import and export data and projects.

GeoServer and GeoNetwork Opensource, however, are freely available and the user need only enter 'CAMP' in the search window to access CAMP Italy Project information and a list of available datasets and metadata.

More information regarding Spatial Data Infrastructure and its data is provided in Annex 13 **Spatial Data Infrastructure**.

❑ Guidelines for computer system interoperability

Computer interoperability refers to the ability of a system to cooperate and exchange information or services with other systems in a more or less comprehensive, automated and effective manner with resource optimisation (efficiency, adequate response times, etc.). Computer system interoperability provides more complete and updated information, with positive consequences in organisational, operational and decision-making processes (design flexibility, time and cost reduction). This is especially important in the ICZM context, where the wealth of information is vast and complex and consists of different kinds of geographical data and environmental information created and managed by different entities. The heterogeneity of the data, the lack of complete documentation in support of the data and the

lack of compatibility between the spatial datasets are the main obstacles to the reuse of such information and system interoperability, resulting in the danger of data duplication and information fragmentation.

The goal of interoperability is therefore to facilitate intra- and inter-organisation interaction, on the basis of commonly agreed rules. The following indications have emerged from CAMP Italy experience to improve system interoperability, particularly with regard to the ICZM sector. Please note that, for the more technical aspects, please refer to the guidelines drawn up on the national and European level (see the 'National Guidelines for the Development of the Public Information Heritage 2016', produced by the Agency for Digital Italy, which propose a series of actions to support the usability and the release of data in open format and metadata; at the European level, the INSPIRE Directive 2007/2/EC, implemented in Italy by Legislative Decree 32/2010, defines a model of services and data infrastructure for spatial information sharing between the Member States of the European Union; the National Geoportal of the IMELS - http://www.pcn.minambiente.it/GN/ - National Access Point for the purposes of the INSPIRE Directive and, as such, for interoperability between systems).

Software Components

SDI data infrastructure is made up of a framework of geographic data, metadata, users and instruments interactively logged in order to use geographic data in an efficient and flexible manner. To meet these requirements and to ensure interoperability, the SDI is to be composed of:

- client software for viewing, querying and analysing spatial data (e.g. Project Geo-Platform);
- a catalogue service for the discovery, browsing and querying geographic metadata and services, spatial data, and other resources (e.g. Project GeoNetwork);
- services for geographical data - for the delivery and distribution of data via the Internet (e.g. Project Geoserver);
- processing services for data processing;
- spatial database - for the storage of data.

Interoperability is ensured by placing appropriate attention to so-called interfaces between these different software modules. The paths may be different: using appropriate standards, defining clear and accessible content (i.e. data that are mutually exchanged and/or transferred) and the rules to follow for interaction, and ultimately agreeing on the mode and solutions shared between interoperating modules (A.N.C.I. FV.G., 2015[5]). The various components of the SDI must communicate with each other using open and common standards of stakeholders, such as OGC WMS, WFS, and GML, ISO 19115 for geographic data.

Data recovery and access

Data recovery and an easy and fast access to data are necessary to ensure good usability of the information, allowing to overcome the process of "data discovery" that could involve: (i) file downloading, (ii) file loading in memory, and (iii) researching relevant data within the dataset. The problem takes on greater significance if the user does not know the structure of the data source, its physical location or even its existence (The Agency for Digital Italy, 2014[6]).

Federation of platforms

The elements of the federation of platforms offer the end user the ability to perform research and access to different platforms in one place. The federation of different platforms requires, in general, a preliminary

[5] **A.N.C.I. Friuli Venezia Giulia, 2015. Manifesto per l'integrazione e l'interoperabilità dei Sistemi Informativi degli Enti Locali. Ver. 1.2. A cura del Tavolo Tecnico sull'e-Government.**

[6] **The Agency for Digital Italy, 2014. Linee guida nazionali per la valorizzazione del patrimonio informativo pubblico (2014). Annex to the Commissioner's Determination n. 95/2014 dated 26/06/2014. Office of the Prime Minister of Italy, 119 pp.**

agreement between the entities wishing to federate their solutions. The sharing of a platform between several entities, as well as the federation of data catalogues, allows a search of multiple catalogues in a transparent manner, and are particularly useful tools in the context of ICZM issues, where the information assets are vast and the geographical platforms for the collection of data are already numerous and active (see paragraph 5.1.7 "Networking").

Quality of geographic data

From the point of view of the information, it is important to have, as far as possible, data structure models that are not particularly complex so that they are guaranteed to be compatible with the user's software tools. Geographic data are now managed from *open source* platforms that can be downloaded for free (e.g. QGIS), but that are not easy to use for a non-expert user.

The geographic data itself is quite complex to use, since it comprises a geometric representation, a topological structure, a set of attributes and a coordinate system which, if not based on specific shared standards, restricts its homogenisation and its sharing with other systems.

Another important aspect is the quality of the data, often neglected in terms of updating, and in terms of poor documentation of the data (metadating). Nowadays, the central problem is no longer how to find the information, but the ability to intervene in the other phases of the data value chain: the choice of the best source of information, control of data quality, integration of different sources, timeliness of data, etc. In this context, more today than in the past, it is necessary to review the processes and patterns of information systems, organising them in an organic and synoptic way. In fact, most of the time, the data are the result of a chain of processes in the course of which more intermediate products are generated. Understanding and governing the structure of this workflow is probably the key element of the whole optimisation process. For the realisation of what is appropriate to provide the administrations with strategic figures appointed to these very activities (e.g. data manager, database in charge, statistical officer, etc.). As the experience of the Project has shown, most of the times the critical concern is not the technical aspect - as now it is appropriate to provide satisfactory and flexible solutions in different application areas - but the managerial and organisational aspect, especially in terms of IT staff, costs, and dedicated financial resources.

The publication of the data on a Web-GIS, in addition to the obvious advantages already discussed, brings with it the question of the reliability of the data. Metadating plays an important role, especially where data are exposed to third party users. The quality of the metadata must be satisfactory both as regards the link between data-metadata and the level of detail of the metadata. We must follow the codes of conduct and common standard vocabularies, in compliance with current Italian legislation and the recent instructions, provided by the European Directive on the reuse of public sector information (PSI Directive) and the INSPIRE Directive.

License

Another important phase is the choice of license to be associated with the data. This choice is crucial because the terms of the license define the use that users may make of the data, the paternity of it, and methods of creation of any derivative works. It underlines the importance of associating with an open license data allowing compliance with the requirements of (i) interoperability, not merely to select a license that is valid and known only within the national borders and, as far as possible, (ii) maximum data reuse.

Please refer to the **Data Policy Document** (Annex 12) as regards the handling of the Project data.

5.1.5 Public participation

Public participation, organised within the CAMP Italy Project (as further described in **Appendix 14**), was based on two parallel actions:

- physical participation, in relation to each Individual Activity coordinated by the Regions
- Virtual participation, through the platform **http://www.joincampitaly.org/**

Public participation in the CAMP Italy Project was mainly characterised by the organisation of three local forums, which aim to promote public debate on ICZM, to raise awareness and to get opinions and demands of the participants on the proposed themes, in order to improve future decisions and administration choices.

The competent authorities have focused on a Thematic Area for each forum, relating to reducing Individual Activities in the territories, as shown in the following table.

Forum	Region	Research area	Individual Activities of reference
Cesenatico (20/09/2016)	Emilia-Romagna	Planning of terrestrial and marine coastal areas;	IA.6 Conservation of coastal marine biodiversity with particular reference to the conservation of minor species; IA.7 Development and exploitation of new forms of sustainable tourism in protected natural areas; IA.8 Education and communication on sustainability.
Capalbio (27/10/2016)	Tuscany	Protection, preservation and restoration of coastal marine habitat	IA.2 Feasibility study and efficiency of use of alluvial sediments extracted from the Magra river for beach nourishment eroded in adjacent sedimentary cell.
Alghero (04/11/2016)	Sardinia	Sustainability of socio-economic pressures in the coastal areas	IA.9 Implementation of specific actions aimed at sustainable use of the beaches and the protection of coastal ecosystems; IA.12 Evaluation of the tourist load capacity of the islands of Asinara and Pianosa.

Table 9: Local Forum in the CAMP Italy Project Regions.

Local forums are allowed to promote public debate on the topics and Individual Activities and to gather the views of participants on their needs and suggestions for improvement. The local forum reflected the contents of the forum, and of the Individual Activities blog presented on the joincampitaly.org platform. All three local forums were introduced by a thematic expert, which allowed participants to gain appropriate background context to the debate, and also provided capacity building activities.

Local stakeholders were involved, and experts and other carriers of key local interest selected for their role or interest in the process were directly involved, while accepting the participation of all those who were interested. The following Table 10 report shows the composition of the participants in the forum of the CAMP Italy Project.

	Cesenatico forum	Capalbio forum	Alghero forum
Public administration	10	3	19
Economic entities	8	11	3
Universities and Research Centres	4	5	5
Environmental associations	2	5	2
Citizens and associations of citizens	0	1	3
Total	***24***	***25***	***32***

Table 10: Composition of Participants of CAMP Italy Project Forums.

"Virtual" or so-called "online" participation took place exclusively through joincampitaly.org web platform, developed as an open, interactive and continuously updated forum, designed to enable all interested persons to actively participate in the issues of management of coastal zones and in the future design of the coastal territory. The platform was built using existing platforms and free *plug-ins* . The site contains online forums, Individual Activities blog, with the description of Individual activities and their progress, the *community* of users of the platform, and surveys. The joincampitaly.org site has been the virtual place where the topics were reported, relayed, discussed, and developed through the local forums.

The forum tool (Figure 16) allows for the stimulation and engagement of citizens, administrators, and all affected users, to bring out the issues of greatest interest, linking them with integrated management policies pursued by individual Regions under the coordination of the Italian Ministry of Environment, Land and Sea.

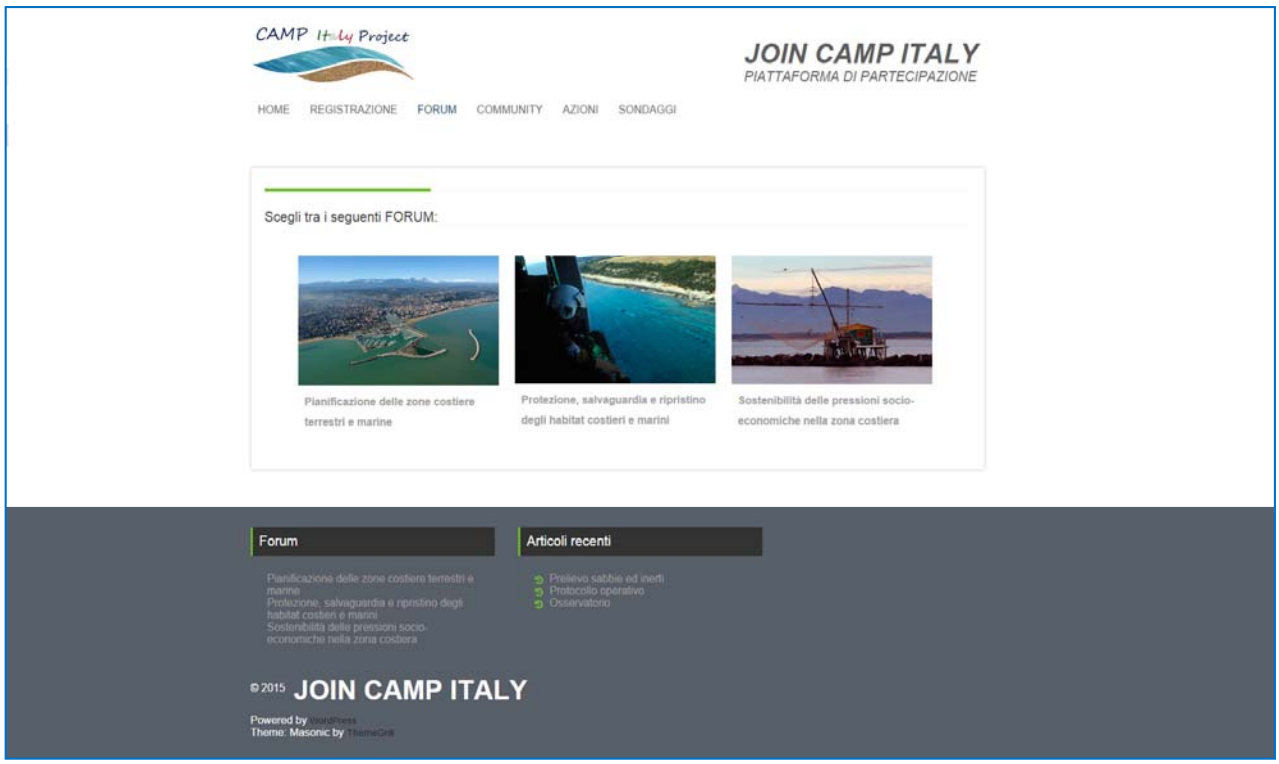


Figure 16: The joincampitaly platform forum page.

Access to the platform alone is free - anyone can consult it. To actively participate and thus be able to submit your contributions, you must register to the site and create a personal account. The polls, conversely, are open to all visitors without registration.

The platform was activated on April 12, 2016. Until 12 December 2016 the total number of visits amounted to 77,449 while the total number of individual visitors is 8,532. The monthly average values are equal to 9862 visits/month and 1,066 individual visitors/month. After the log in page, the most visited section of the platform is that of surveys, which follows one of the themes of the Forum. Most of the contacts on the platform come from Facebook (65%), followed by Google (24%), and then the Project site (11%). There are 125 subscribers to the *Community* and they represent the main categories of stakeholders: government, regional and local; Universities and research centres, private operators, and citizens.

5.1.6 Communication and dissemination

Communication plan

As the basic tool for planning all communication and dissemination activities, the plan was drawn up in order to guide the communication activities according to the objectives of the CAMP Italy Project, as well as being listed in Inception Report, namely:

- raising awareness on the issues of ICZM;
- providing support for participatory processes;
- providing support for capacity-building processes;
- supporting the development of the network between the different stakeholders;
- disseminating results and coverage of CAMP Italy and Mediterranean level in CAMP networks.

The following Figure 17 report illustrates how these objectives have been further developed and connected with other Horizontal Activities.

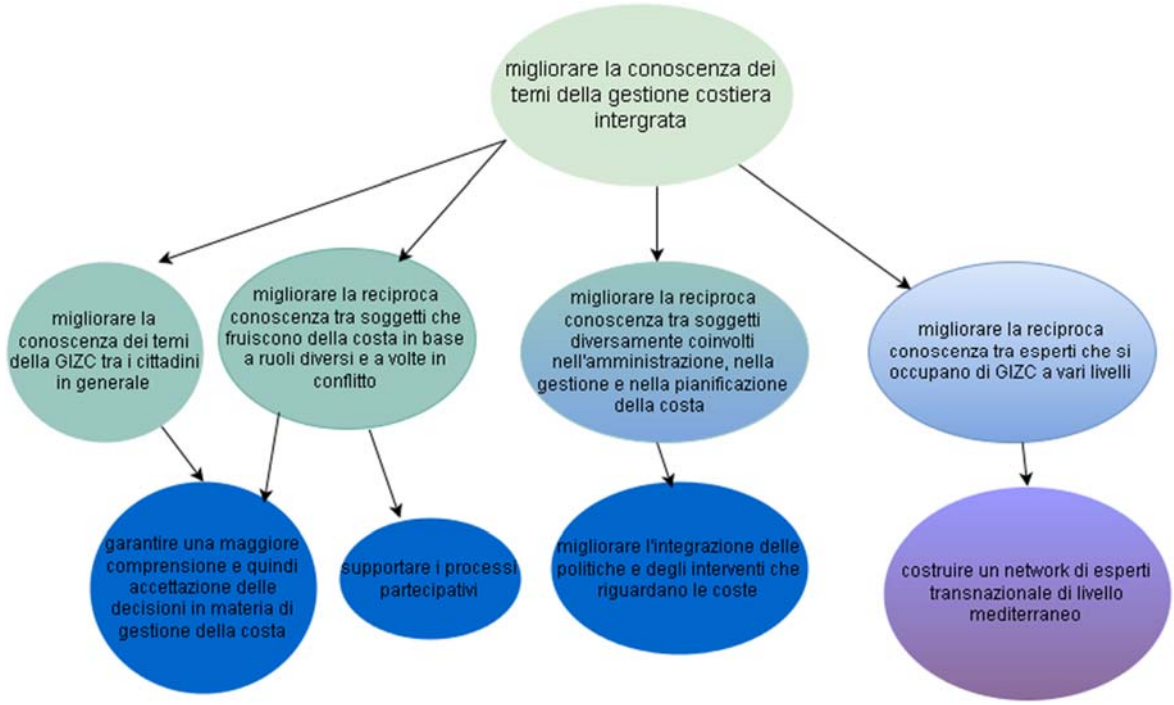


Figure 17: Objectives of the Communication Plan and synergies with other Project activities.

To develop a coherent communication strategy with the objectives listed above, the "Target" - the recipients of the communication activities need to be identified; the "messages" need to be defined which correspond to the content to be conveyed through communication; and the "tools" need to be identified, being the channels through which the messages reach the target:

- targets have been identified in collaboration with AO2 (see paragraph 5.1.3);
- as regards the messages, a set of key messages are chosen to identify the user and are valid for the three Thematic Areas of ICZM (and for all individual shares) that could be conveyed with respect to all targets:
  - ✓ the coasts are complex economic, social, environmental, and landscaped systems;
  - ✓ for fair coastal management, sustainable and lasting actions must be taken by institutions, economic entities, and citizens (public/private governance) and they must cooperate and adopt a cross-sectoral approach;
  - ✓ The ICZM Protocol provides a change of mentality with respect to the coasts;
  - ✓ CAMP promotes the ICZM approach.

Specific target messages have also been developed (to study them, refer to Annex 24 **Communication Plan**, and are useful to convey more personalised ICZM concepts. This list was considered as a "menu" from which the contents to be conveyed were selected each time.

Communication tools

Within the CAMP Italy Project we have developed a set of communication tools used to convey ICZM messages to the identified target, as shown below.

❑ Website

The www.camp-italy.org site was intended to be the collector of all information concerning the Project, in other words, a virtual place for getting to the heart of the activities of CAMP (Italian and English versions).

In simple language, the site allows all users to get an overview of the Project and, where considered useful to deepen certain topics, includes the ability to download technical documents (in the download section), consult the indicators database and visit the external platforms (joincampitaly and e-learning). The site also houses multimedia content such as videos and maps and features a constantly updated news section. The documents section leads to a platform that hosts all the major output of the Project.

Figure 18: Print screen of the web site of the CAMP Italy Project.

Social media

The use of social media was thought to reach a wider audience apart from the technical audience, thus the messages of CAMP were conveyed in a more simple and direct language.

The **Facebook** page in particular served as a sounding board for all CAMP activities and instruments, including Individual Activities; It allowed users to contact organisations and projects in the field of Integrated Coastal Management and convey content and broader initiatives not strictly related to the Project. Blog discussions were launched and continuously promoted through the Facebook page of the Forum.

The **Youtube** channel was activated to host and spread the audio-visual material produced over the life of the Project. In addition to the production of the Project, it hosts the videos made in the context of conferences, forums and public events of the Project.

Newsletter

The electronic newsletter has been activated and used to provide *ad hoc* updates on CAMP activities, aimed at a technical audience. It is written in two languages (Italian and English) in order to reach the experts and the network outside the national borders. Through the seven (7) numbers, local initiatives and events organised by the Project were disclosed; they were advertised through various tools such as the e-learning platform. The newsletter has been provided via the *email chimp platform*, which allows the management of large mailing lists, and dynamic page layout.

Brochure

The Project brochure was produced and printed in both Italian and English. It contains basic information about the Project, a synthetic insight into the Thematic Areas and a map of the CAMP Areas. The goal of this "traditional" instrument is to convey general ICZM/CAMP messages to all identified targets. 2000 copies were printed in Italian and 100 in English. The brochure has been delivered to the Project partners and distributed at events and initiatives.

Video productions

Audio-visual productions were made by the Company Terratrema Film srl, in the Italian and English versions, based on the different communication needs.

Video 3' has an emotional edge, wanting to convey to the general public, in one "glance", the basic concept of ICZM.

Video 15' aims to convey the key concepts of the Project (and therefore of the ICZM Protocol) more fully, including the experience gained with the CAMP. The video is aimed at large audiences (contains explanatory animation of the Protocol), along with the most skilled technicians and institutions.

In addition to being visible on the site and the dedicated YouTube channel, the video material was used during communication events, to convey ICZM messages. In fact, videos and reports of the workshops and seminars - act as amplifiers with respect to the themes conveyed by individual events.

Figure 19: Screenshot of emotional video of CAMP Italy Project.

Public events

Events - seminars, conferences, workshops - provide an important opportunity for meetings between different stakeholders, useful to improve the understanding of ICZM issues, to promote the networking of knowledge and experiences and improve mutual understanding between different stakeholders, both public and private.

❑ Inception Conference, Mid-Term Conference, Final Conference

During the Project, three Project Conferences were organised, as key moments for the dissemination of Project activities, wherein it was agreed to disclose more technical content of the Project, providing in-depth thematic sections in the presence of all the partners and some supporters.

For every event a report was drawn up which summarised the content of the interventions and contributions of the participants. All reports are available on the Project website.

Conference	Place and date	Title	Number of participants
Inception Conference	Alghero, 12 November 2014	Inception Conference of CAMP Italy Project.	39
Mid-Term Conference	Bologna, 21 March 2016	Middle-Term Conference 'Actions and tools for Coastal Management'.	76
Final Conference	Rome, 17 January 2017	Final Conference 'Caring for our coasts: comparing Mediterranean and Italian experiences'.	62

Table 11: Conferences realised in the CAMP Italy Project.

❑ Local events organised as part of the Individual Activities

As part of the Individual Activities, we have had numerous meetings in the area, aiming to raise awareness on the issues of coastal management and to promote the activities of the Project.

Events and initiatives (26 in total) have been addressed mainly for citizens, schools and teachers. The following table summarises the activities carried out; while for a more detailed discussion, please refer to the Individual Activities summary Sheets.

Territory	Activity of Reference	Event description	Number of participants
Tuscany Region CAMP Areas 1 and 5	IA.1 Monitoring the effects of beach nourishment activities in the area south of Ansedonia IA.2 Assessment of the feasibility and effectiveness of the reuse of alluvial sediments extracted from the Magra river, for beach nourishment of the relevant coasts. IA.3 Protection of the dunes of Lacona (Island of Elba).	Events in which the CAMP Italy Project and the activities of the realised Individual Activities in Tuscany were presented: **ScienzaEstate (Sesto Fiorentino CNR - Research Area, 8-9 June 2016)** - Installation of a part of the stand with posters and projection of the emotional video, continuous projection of a presentation. **Festambiente (5-15 August 2016)** - Participation at the stand of the Region of Tuscany, emotional video projection, distribution of brochures. **Bright night of researchers on 30 September 2016 at the Natural History Museums of Maremma in Grosseto**. Deepening the understanding of the evolution of morphological coasts and the effects of climate change in CAMP Areas. **Seminar on coastal erosion (Marina di Carrara, 6 October 2016)** - discussion of the results of the Project and of the questionnaire sent to local stakeholders. **Seminar on coastal erosion on 28 October 2016 at the Museum of Natural History of Maremma in Grosseto** - Evaluation of the knowledge of coastal erosion tests and lectures, modulated on the testing which took place, with distribution of the Project brochures and the activities carried out in the Project in terms of coastal monitoring were noted.	Approximately 200 for 'Festambiente' and 'ScienzaEstate' Approximately 30 for Carrara event. 50 students of two classes of ISIS (Agriculture) Leopold II of Grosseto.
Emilia-Romagna Region **CAMP 2 Area**	IA.6 Conservation of coastal marine biodiversity with particular reference to the conservation of minor species;	Communication campaigns and environmental education targeted at primary and secondary schools, teachers and citizens, to raise awareness on the importance of minor fauna and the related ecosystem services. Training/education in the classroom. Five (5) meetings in the area: • two meetings in Ferrara, at the Natural History Museum, one of the students and the other of citizens; • an Aquarium meeting at the "Navi" in Cattolica; • a meeting at the "Cetacean Foundation" in Riccione; • a meeting at the Marine Research Foundation	500 students 40 citizens 16 teachers

Territory	Activity of Reference	Event description	Number of participants
		Centre of Cesenatico.	
	IA.7 Development and exploitation of new forms of sustainable tourism in protected natural areas;	four (4) workshops with excursions were organised, with the support of the Marine Research Foundation Centre, in the area: • Oasi di Torre Abate di Santa Giustina (FE); • Museo NatuRa di Sant'Alberto (RA); • Visit the Bevanella Magic Cube centre in Bevanella Savio (RA); • Hookipa bathing establishment of Marina di Ravenna (RA).	130 participants
	IA.8 Education and communication on sustainability.	Three participation (3) initiatives, with installation of a station dedicated to CAMP Italy and distribution of information materials: • June 5, 2016, Savio (RA); • June 17, 2016, Marina di Ravenna (RA); • June 25, 2016, Saline di Cervia (RA).	103 participants
3 and 4 CAMP Areas in Sardinia	IA.10 Enhancement of historical coastal architectural heritage for the creation of the first eco-hostel for sustainable local development (Buggerru locations)	Event to promote the project (Buggerru Municipality), with the presentation of the intervention to be carried out on the property and the management of the hostel.	Approximately 100
	IA.11 G.I.R.A. - Integrated Management of Fisheries Resources	International workshop on "Conservation and management of the sea urchin, *Paracentrotus lividus*, in Mediterranean". Presentation of the case study of the CAMP Project in Sardinia. (Palermo, 8-9 October 2010). The CAMP activities have also been conducted in: - Workshop on "Life SteRNA: preserving opportunities only for target birds or fish populations of the area? Let's Talk" (14 July 2016), organised within the Life + SteRNA project. - Final conference of the Life + SteRNA Project (29 July 2016), with the presentation of the activities carried out under the action.	
	IA.13 Sardinian Center for evaluation and coastal monitoring	Dissemination events of the SIRA system, part of which was presented in the CAMP section: - "Navigating the sea of data: SIRA environment in Sardinia is summarised in a database of the PA businesses and citizens" - SMAU (Florence, 14-15 July 2015); - "SIRA Sardinia, data management, and environmental	

Territory	Activity of Reference	Event description	Number of participants
		proceedings" (Cagliari, Fair pavilion, 27 April 27 2015).	
	IA.14 Tool for assessment of coastal vulnerability	Wider dissemination event with the presentation of CAMP activities: - "Achieving the goal of 2 °C, experiences and best practices at regional level and dialogue with citizens on climate change" (Cagliari, 21 October 2016).	

Table 12: Scheme of local events developed in the context of Individual Activities.

❑ Thematic workshops

To explore the depth of specific issues of CAMP Italy Project, two workshops were organised:

- One entitled "**The planning of terrestrial and marine coastal areas**", arranged immediately after the Mid-Term Conference (Bologna, 21 March 21 2016), with the aim of stimulating the dialogue between local communities and government agencies, businesses, non-governmental organisations, social stakeholders and citizens, through proper representation and consideration of the main relevant interests, in order to contribute to overcoming the fragmentation of responsibilities between the different levels of government (national, regional and local) and to thus contribute to the development of an integrated planning as part of a national ICZM strategy;
- The other, in the form of a **Roundtable, entitled 'The role of local governments in the management and prevention of marine litter (marine litter and beach litter)'** (Alghero, 4 November 2016), with the aim of promoting discussion on the issue of marine litter, through the contribution of regional and national experts, which was attended by representatives of the Italian Ministry of Environment, Land and Sea, Asinara National Park, Regional ARPA, CNR-LAMMA Consortium. During the debate, the interlocutors have focused on contribution that local authorities can give in terms of measures and initiatives to prevent, reduce or (preferably) eliminate the phenomenon of marine litter, bringing out as priorities the measures of prevention and the environmental education of all persons who, for various reasons, make use of marine and coastal areas.

Publications

The CAMP Italy Project will also include two publications:

- an article entitled "**The Integrated Management of Coastal Areas in the Mediterranean Policy and the European Union**", published in the journal, Periodic Retícula - technical scientific publication of ISPRA - inside the number 10 "Integrated Planning of Marine-Coast range". In the articles about CAMP projects and in particular the CAMP Italy Project the inspiration for the structuring of future ICZM initiatives in the Mediterranean were cited as good practice. The publication can be downloaded at http://www.isprambiente.gov.it/it/pubblicazioni/periodici-tecnici/reticula/reticula-n.10-2015-numero-monografico;
- The scientific paper entitled **"Towards the Implementation of Integrated Coastal Zone Management in the Mediterranean: the CAMP Italy Project**" in the book "Coastal Zones Management, Assessment and Current Challenges" edited by Gina Moran, published in 2016 by "Nova Science Publishers ", in which the Project is shown as part of the regulatory environment and Italian governance. The

activities of CAMP Italy (Individual and Horizontal Activities) are analysed as to their contribution in the definition of national and regional strategies for integrated coastal management.

5.1.7 Networking

The ability to "network" (networking) can serve to further disseminate the results of CAMP Italy Project. Networking means building relationships between people and organisations which have interests and common objectives, with the aim of sharing information, ideas and resources and creating opportunities for further development of the Project. The same ICZM Protocol devotes many parts to "networking" through, for example, the exchange of information and activities of common interest (article 27).

The networking activities, developed jointly by the Horizontal Activities, throughout the implementation phase of the CAMP Italy Project, were based on two parallel actions:

- The use and implementation of the contacts that are derived directly from the Project, from beneficiaries and stakeholders interested and involved in the various Project activities;
- Participation in events (workshops, conferences, etc.) organised on the topic of ICZM or on related issues at local, national and international level

with the aim of contributing to the creation of:

- an ICZM Network (Regional, National and Mediterranean level), which aims at linking national and international consultants on ICZM and Maritime Spatial Planning;
- a national and international network for the collection, sharing and data management;
- a Network of CAMP and projects similar *to* CAMP in the Mediterranean, with the aim to create a system to share and to communicate these projects in the future.

The paragraphs below summarise the main networking activities undertaken during the period of implementation of the Project, mainly achieved with the help of tools and methodologies developed within the framework of the Horizontal Activities (as described in the previous chapters).

Network of ICZM skills

Knowledge of the Italian and Mediterranean context by partners of the CAMP Italy Project has allowed us to capitalise on existing contacts and longstanding relationships, which have facilitated the consolidation of the international role of the CAMP Italy Project.

The mapping of the stakeholders and the joincampitaly platform represented the basic tools to promote the connection between national and international consultants and the networking of their activities. The ICZM experts were identified and invited to register on the platform. It is worth emphasising that the profiles card has been designed precisely to give space to the experiences of the members of the *community* (to the extent permitted by the free platform used), and a *chat* option has been inserted to allow a quick and immediate exchange among experts. Since its *online* commissioning the joincampitaly platform *community* relied on the registration of **more than 130 experts and people interested in issues of ICZM**. Registration for the *Community* was promoted through various communication channels (Facebook, website, newsletters) and through participation in events organised by the management of third party costs, including:

- The ICM meetings and MSP Expert Group (Athens 2014 and Brussels 2015);
- the Coast Day 2014 (Tunisia), 2015 (France) and 2016 (Spain);
- The Final Conference of the CAMP Almeria Project and CAMP Montenegro and the Inception Conference of CAMP France;

- The GREAT Med Project (Generating a Risk and Ecological Analysis Toolkit for the Mediterranean), in which institutions, research organisations and industries came together to address the issues of integrated management of the coastal zone (Rome, 2015);
- the National Conference of the National Group for Coastal Environmental Research (GNRAC), on the theme of beach management, coastal processes and sustainable tourism (Ravenna, 2016);
- the COAST-Coastal Zone and Sea Management and Protection Event (Ferrara 2016);
- The Clean Sea Life (GIE LIFE15/IT/000999) Project, aimed at raising awareness and public awareness on the problem of marine litter (Alghero-Rome, 2016);
- The COP22 of International convention on Climate Change, in particular the Round Table, has seen the comparison of experiences with *Conservatoire du Littoral* (VAR CAP coordinator), the CAMP Italy Project, the National Agency for the Protection of the Coasts of Tunisia (APAL), the Ministry of Environment and Territory of Morocco, PAP/RAC and PB (Marrakech, 11 November 2016).

Members of *Community* have actively participated in the debate on the Forum, proposing new topics for discussion. There has been particular interest in the issues related to maritime state concessions and the recent evolution of the Bolkestein Directive. The discussion on this topic has focused on the need to combine the protection of the beach and, in particular, the dune ecosystems with the uses mentioned in the concession. Another issue that has aroused strong interest of some members of the Community is to be discontinued in the Adriatic offshore platforms, which is an important issue in the context of the Maritime Spatial Planning and land-sea and sea-land interactions. Members of *Community* then participated in several polls published regularly on the platform, expressing their interest in participating and continuing this experience of national and international network.

At inter-regional and national level, networking is promoted through public events, cited *above*, organised with a participatory approach, particularly at Project conferences, the workshop on coastal planning in Italy and the workshop on marine litter, which saw the participation of actors from other Regions and have been an opportunity to meet and improve trade between the different stakeholders at a national and regional scale. Altogether, in the activities of the CAMP Italy Project a total of more than 160 experts were involved or took part in ICZM.

It is emphasised that the participation of representatives of MAP Component, in some of the events held, jointly contributed also to create synergies at the Mediterranean level, thus allowing, on the one hand the sharing of international experience in favour of national, regional, and local powers, and on the other the sharing of local practical examples that can be shared and capitalised on at an international level.

All results of the CAMP Italy Project were shared through the GroupWare platform (http://Groupware.info-rac.org/camp-italy-final-report/library). The methodologies and tools developed are then made available to all experts in the field.

Network for the collection, sharing and data management

With the goal of creating a national and international network for the collection, sharing and management of data, other sources of information have been identified, in addition to those provided by the CAMP Italy Project, that can support the future activities related to Maritime Spatial Planning and the Integrated Coastal Zone Management (MSP/ICZM), such as:

- EMODnet (European Marine Observation and Data Network. http://www.emodnet.eu/) The European marine observation and data network, which now has more than 160 organisations aiming at collection, integration and sharing of datasets in the marine and coastal environment in order to ensure the quality, standardisation, harmonisation and interoperability of data, and access to and unrestricted use of the information available on coastal and marine areas by both public and private users. Specifically, "Coastal Mapping", the recent activities started by EMODnet in 2015, has as a main objective the development of a digital coastal mapping programme in the EU, and the development of

good practice standards. The portal will allow users to view, perform customised searches of, and download data and metadata from public and private sources through a single portal. The SDI of the CAMP Italy Project would fit in this context, and make an important contribution to it, with particular reference to the products of the Individual Activities, such as bathymetry, monitoring coastlines, rate of coastal erosion, etc. These data could also be of interest for the EMODnet Data Ingestion project, which is carried out by a European network of 44 organisations (government departments, marine research institutes and small and medium-sized enterprises). The EMODnet Data Ingestion project has the aim to simplify the data assimilation process so that the owner of such data from public and private sectors can easily release their data for safekeeping and subsequent distribution through EMODnet. This will help increase the productivity of those who work on marine issues, and will increase the accessibility and interoperability of marine data.

Among the partner organisations that contribute to the implementation of the data on EMODnet, ISPRA also appears, which is already within the network of CAMP Projects as INFO/RAC. ISPRA has also actively participated in the activities of the Project, especially for the development and customisation of the Project SDI.

- European projects in the field of ICZM, include the Pegasus Project and its Pegaso SDI (http://pegasosdi.uab.es/geoportal/), which are designed for sharing data on the integrated management of coastal zones and marine areas of the Mediterranean and Black Sea. As part of the COASTGAP project (http://coastgap.facecoast.eu/), which aims to capitalise on several good practices in terms of ICZM in the Mediterranean area, Pegaso SDI has been linked to three new regional SDIs (Latium, Emilia-Romagna, and Liguria), to integrate mapping of coastal areas on the PEGASO Geoportal. The geographical platform of CAMP Italy Project has not yet been integrated into Pegasus SDI, but the data produced complies with the standards, as well as the ICZM indicators, some of which have been calculated by applying the methodology developed by the PEGASO project, and so could be integrated into Pegaso Coastal Atlas (http://pegasosdi.uab.es/geoportal/index.php/atlas).
- Copernicus (www.copernicus.eu/) is a European system for the monitoring of Earth, and is a complex set of systems that collect and manage environmental data on land, sea, atmosphere, climate change, etc. from multiple sources (satellites, in-situ sensors, etc.). The main users of Copernicus services are the politicians and public authorities who need information to develop environmental policies. In this context, the CAMP Italy Project datasets could be used to support services related to biodiversity and environmental protection, tourism, marine and coastal monitoring.
- European Atlas of the Sea (https://ec.europa.eu/maritimeaffairs/atlas_en), developed by the European Commission, offers a variety of information on Europe's seas, including greater interest in the issues addressed by the CAMP Italy Project, such as bathymetry, coastal erosion, fish stocks, aquaculture, maritime transport, tourism, and marine protected areas (MPAs).

At the national level, collaboration between CAMP Italy and the Italian National Mountain Rescue Corps (CNSAS) for the construction of high resolution 3D mapping scenarios of some CAMP Areas is launched. The modelling scenario assumes the availability of raster data, digital terrain models and vector data from the Project partners.

Also as part of the national network, a section dedicated to CAMP Italy Project was created on the LaMMA Consortium website, on the open data section (http://dati.lamma.toscana.it/organization/camp-italy), where the marine and coastal data processed in other projects are also collected.

CAMP Network in the Mediterranean

During the Coast Day celebration in Tunis on 25 September 25 2014, the proposal to develop a Mediterranean Network of CAMP Projects was approved, which was strongly desired and supported by Italy and CAMP Italy Project.

The CAMP Projects have assumed a crucial role in the UNEP-MAP framework and national strategies for the implementation of Integrated Coastal Zone Management, as well as in related issues of management of marine protected areas (MPAs) and the Maritime Spatial Planning (MSP). With the creation of the Network we intend to pursue common goals with elements of cohesion and harmonisation. The CAMP Projects are a great alternative, and a concrete and tangible solution.

The importance of CAMP Projects, and in general the ICZM/MSP projects, is clear, as they are essential to strengthen both national and Mediterranean policies, allowing you to gain experience in ICZM and MSP, in particular regarding analysis and understanding of the critical issues. There is great interest for the development of a Mediterranean Network which allows us to share and learn from others' experiences, find common strategies to be adopted in the Mediterranean field, foster coordination and cooperation in the Mediterranean area, test and improve the ecosystem approach in all CAMP Projects in connection with the MSP, the ECAP process, the European Marine Strategy, and the associated Good Ecological Status (Good Environmental Status - GES).

Future developments will concern the connection between the ICZM/MSP and other mechanisms and systems (such as the Marine Strategy and the associated ecosystem or ECAP approach), emphasising the crucial collaboration between the CAMP (the enriched network of new Italian and French projects and the anticipated Greek project) and their common interest in coastal planning. The Network, when well developed, will offer the possibility of contributing to coastal marine environment and promoting sustainable development of the Mediterranean, contributing to the implementation of the so-called 'Blue Growth', the long-term strategy to support a sustainable growth in the marine and maritime sectors.

The general **objectives of the Mediterranean Network** are to develop tools for:

- testing and implementing the Barcelona Convention and its Protocols to define a Common Regional Framework for Integrated Coastal Zone Management (and Maritime Spatial Planning) in the Mediterranean, in line and in connection with the policies and the EU legislation (Integrated Maritime Policy, MSP, ICZM, integrated offshore coastal management, the EcAp process as an interconnection with the European Directive on Marine Strategy, the Specially Protected Areas of Mediterranean Importance (SPAMI), as well as the interconnection with Natura 2000 network, and... more).
- sharing ideas, experiences, and good practices to spread virtuous environmental policies, respectful of the territories and peoples;
- drawing up and adopting common guidelines.

The feedback on CAMP Projects conducted by experts in the PAP/RAC, and their recommendations, provide **key elements to explore and develop the CAMP Network**. The lessons learned from the (previous and current) CAMP experiences are reference points for the development of this network. In addition, the concept of networking, especially with reference to the network of ICZM/MSP projects, will be a key element to be included in the Athens Declaration.

Another key element is to strengthen cross-border cooperation in the Mediterranean, through the creation of cross-border CAMP Projects, involving the participation of most Mediterranean States, to establish a

partnership and a network of projects on integrated coastal management, in order to share its outputs, the results of the experiences and skills acquired, for example with the establishment of a joint technical committee to the Mediterranean area, or by adopting common communication and participation strategies (websites, news, etc.)

The Mediterranean Network will have a **common identity** (logo, website, image, message). Therefore, the site will be one of the key elements: the CAMP Italy Project website has already established a model for the CAMP French Project, with the idea of the latter becoming one with the remaining Mediterranean Network.

The following elements of harmonisation have been identified as common aspects to be included in the Network:

- For the Network website and individual projects relating thereto, sessions relating to information visible to the public and common to the sites; news, programming, outputs, products of the projects, the same network, connections, or links;
- The creation of a common section (GroupWare) where working documents between the various Project partners are shared, with people holding specific access credentials;
- The collection and management of datasets, with a common approach at the Mediterranean level, starting from the Italian and French ones;
- The creation of a list of experts in the field (the Italian experience, by creating a short list, could be an example of the prospect of a Mediterranean network: http://www.conisma.it/it/bandi-e-gare-2/avvisi-per-selezione-di-personale/);
- Another point of interest and connection may be formed by the consideration of the Specially Protected Areas of Mediterranean Importance (SPAMI) or of the planned issues and instruments in the other Protocols of the Barcelona Convention;
- Regarding the activities of capacity building, it involves the use and further development of the MedOpen course on ICZM, available on the website of PAP/RAC (now not only in English, but also in Italian and French).

The contribution of MAP Components

As part of the network of CAMP Italy Projects, MAP Components plays an important role in the coordination and consolidation of the Network at the Mediterranean level, due to their institutional role to contribute, each with their own expertise in specific areas, to the protection environment and the promotion of sustainable development, for the benefit of the Mediterranean community.

Within the CAMP Project, with particular reference to the methods and the approaches used, the exchange of information and experience have contributed to the realisation of the Project activities, in addition to participating in or contributing to conferences and/or other events organised as part of the Project. The MAP Components contributions are briefly described below:

PAP/RAC As well as providing test and support for the smooth progress of Project activities and contributing to the planning of Horizontal Activities, it also advises on the proposed methodologies.

It has also actively collaborated in preparing and putting the e-learning course in Italian on line; and it transversely supports the Project communication activities.

It has contributed to the definition and funding, while also providing technical support and assistance for networking among CAMP Italy and CAMP France (PAC Var).

INFO/RAC It has guaranteed constant support and assistance throughout the implementation of the Project, with particular reference to:

- implementation and maintenance of the online document sharing system (GroupWare), also part of the networking between the two ICZM experiences of Italy and France, creating a special section of sharing documents between the two projects;
- creation, maintenance and updating of the Project site;
- using the questionnaire on ICZM, in Italian and English and putting it online;
- development and customisation of Spatial Data Infrastructure (SDI) Project;
- customisation of the ICZM indicators database;
- support for the definition of the Data Policy document;
- supporting the definition and implementation of the Project communication plan and the conception of videos.

SPA/RAC The Centre coordinates the initiative of the SPAMI (Specially Protected Areas of Mediterranean Importance), included some marine protected areas (MPAs) involved in the CAMP Italy Project, as the MPA of 'Penisola del Sinis-Isola Mal di Ventre' and the MPA of 'Capo Caccia-Isola Piana', both in Sardinia. During the course of the Project were held some informal meetings on the value of this initiative for the international debate on ICZM and how such recognition could be extended to other Italian MPAs.

Blue Plan It has contributed to the planning of Horizontal Activities, providing suggestions on the proposals and, in particular methodologies, through the sharing of reference documents, which one can refer for the performance of activities and/or the definition of methodologies and approaches. It then secured a review of certain documents related to the activities, in particular on the basis of participatory processes developed with IMAGINE, methodology that has been shared with the coordination group of CAMP Italy.

It has contributed to the mapping of ICZM stakeholders and the circulation of the questionnaire on ICZM in English, as well as data collection and management, providing guidance on how to integrate the ICZM Indicators Database.

SCP/RAC It has contributed to the exchange of information on proposed methodologies, providing food for thought for programming and instruments adopted, with particular reference to the Horizontal Activities and tools for communication.

It has contributed to the mapping of ICZM stakeholders and the circulation of the questionnaire on ICZM in English.

It has made available tools developed within the framework of the Road Map for Sustainable Consumption and Production in the Mediterranean and, more specifically, the aspects related to sustainable tourism to the CAMP Italy Project.

MED POL The MED POL collaboration has mainly covered the support to the creation of a session on the increase in *marine litter* as part of activities related to the Thematic Areas. MED POL has also contributed to the exchange of information, with particular reference to usable database.

In addition, for the duration of the Project - thanks to the participation of both the National Coordinator and the IMELS contact person in meetings organised in various contexts - it has been constantly guaranteed, on the one hand, that all information and outputs of the Barcelona system (Decisions of the COP, working papers and reports of the COP and the MAP Components) were duly taken into account and integrated in the Project; on the other hand, that the results of the Project were constantly shared with the same Barcelona system. It has been also guaranteed a close collaboration with the MAP Project Coordinator, the Deputy Director of PAP/RAC, Mr Marko Prem, as well as with Mr Sylvain Petit of PAP/RAC.

Collaboration with other CAMP Projects

In terms of design, collaboration with other CAMP Projects mainly related to the close collaboration with CAMP France (PAC VAR), which has seen, besides the exchange of methodologies and information, active collaboration in the promotion of their activities (through newsletters, Facebook, etc.).

As part of the ICZM networking at international/Mediterranean level, it is important to highlight the internship experience, with the collaboration and sharing of data and experience among CAMP Italy and CAMP France (PAC Var), which is summarised in the following box.

Collaboration and sharing of information and experiences among CAMP Italy and CAMP France (PAC Var)

The internship lasted eight months, two of which were passed at the headquarters of the PAC Var in Aix en Provence (France).

The main objective of the internship was to create a link between the two projects, in the framework of the CAMP Network, developing and tracking activities in a comparative way, particularly with regard to the comparative analysis of models of governance, participatory processes and communication/dissemination, and processing of evidence supporting the preparation of the strategic notes of MSP/ICZM/ITM.

The end result of the internship is in fact a comparative study between the CAMP Projects in France and Italy which, including a description of the two projects and their main results, followed by a SWOT analysis and a reflection on *lessons learned* from the two projects and how they can help future CAMP Projects, highlights elements required for the realisation of a joint methodology for the mapping of stakeholders for participatory processes in both ICZM projects (CAMP and CAMP *alike*).

To achieve those goals, the intern has been directly involved in the specific activities of the CAMP Projects in Italy and France, in particular through:

- Operational support for capacity building activities (the Forum for public participation in CAMP Areas in Italy and in Var (France) and the workshop within the Mid-Term Conference of CAMP Italy);
- Participation in the coordination meetings of both Projects;
- The review of the study *"Evaluation of sea and coastal management policies in Var for the implementation of the ICZM Protocol" and* the development of policy mapping and local players in Var for ICZM.
- Support the sharing of data between the two Projects, including through the GroupWareplatform.
- Collaboration in the translation of activity reports concerning the activities of the two Projects, in order to facilitate the exchange of information and expertise between the two CAMP Projects.

An in-depth picture of the work done and the results obtained are reported in the final report of the stage, attached to this document and available in **Annex 25**.

It should be further noted that the Project, in its implementation phase, has witnessed:

- The collaboration with CAMP France (CAP VAR) for the exchange of information and methodologies for the promotion of their activities (through newsletters, Facebook) and the realisation of shared stages with CAMP Italy;
- The collaboration and coordination with CAMP France, CAMP Almeria (Spain), CAMP Morocco, CAMP Slovenia and CAMP Montenegro on the issue of governance and participation, and the proposal to develop a joint Mediterranean Network of CAMP Projects;
- The participation of the National Coordinator in multiple conferences and technical meetings with the representatives of other projects and activities related to the ICZM theme, including:
  - ✓ The ICM meetings and MSP Expert Group (Athens 2014 and Brussels 2015);
  - ✓ the Coast Day 2014 (Tunisia), 2015 (France) and 2016 (Spain);
  - ✓ The Final Conference of the CAMP Almeria Project and CAMP Montenegro and the Inception Conference of CAMP France;
  - ✓ The GREAT Med Project (Generating a Risk and Ecological Analysis Toolkit for the Mediterranean), in which institutions, research organisations and industries came together to address the issues of integrated management of the coastal zone (Rome, 2015);
  - ✓ the National Conference of the National Group for Coastal Environmental Research (GNRAC), on the theme of beach management, coastal processes and sustainable tourism (Ravenna, 2016);
  - ✓ the COAST-Coastal Zone and Sea Management and Protection Event (Ferrara 2016);
  - ✓ The Clean Sea Life (GIE LIFE15/IT/000999) Project, aimed at raising awareness and public awareness on the problem of marine litter (Alghero-Rome, 2016);
  - ✓ The COP22 of International convention on Climate Change, in particular, the Round Table has seen the comparison of experiences with *Conservatoire du Littoral* (VAR CAP coordinator), the CAMP Italy Project, the National Agency for the Protection of the Coasts of Tunisia (APAL), the Ministry of Environment and Territory of Morocco, PAP/RAC and PB (Marrakech, 11 November 2016).

Another moment to highlight the technical presentation of the CAMP Italy Project is at Universitat Autonoma de Barcelona (Spain) and its comparison with the INN-COASTS project, developed in the Catalan coastal areas, as a potential collaborative opportunity, along with synergy and exchange of experience gained through the ICZM theme.

5.2 Individual Activities

Individual Activity 1: Monitoring the effects of Tuscany beach nourishment activities in the South of Ansedonia. (Tuscany Region, CAMP Area 5)

The Activity was designed with the objective of testing appropriate monitoring techniques to assess the effectiveness of the recovery and restoration of the beach dune systems with high natural value and low human impact along the coastline between Ansedonia and the mouth of Fiora river.

In the first phase we collected and systematised the existing data on the aforementioned coast, for the delineation of the initial scenario of the shoreline, coastal bathymetry and sedimentological characteristics of the beach. The construction of the initial scenario has been completed with major campaigns in the field; particularly the shore line (before and after an intense storm event), bathymetric surveys of the area (before and after an intense storm event), collection of emerged and submerged specimens on the beach, and photogrammetric survey of the beach/dune.

The meteoric, morphological, and sedimentological marine data collected by the Project have been processed through a numerical model aimed at the interpretation of the dynamics of sediments during the meteoric marine events that occurred between the first and second relief (Delft-3D).

With the numerical model, it was possible to carry out the evaluation of the evolution of coasts in the long run, ascertaining that the coast of Capalbio is subject to fluctuations of the shoreline in alternately large areas of the coast, but as a whole from 1954 to today, which has led to a reduction in sandy shore.

It was also possible to evaluate the preservation works carried out; specifically, the intervention characterised by the use of geo-containers has overcome a moment of localised erosion in some places without compromising the coastal dynamics with hard work and - thanks to the morphological surveys of the emerged beach - it was possible to evaluate the positive effect of windbreaks on the recovery of the dune system.

Under this action, awareness and public participation aimed at different target stakeholders were developed to improve understanding of issues related to coastal dynamics and foster public debate.

Individual Activity 2: Evaluating feasibility and effectiveness of the use of alluvial sediments extracted from the Magra River drainage basin in order to restore eroding beaches in the annexed coastal cell. (Tuscany Region, CAMP Area 1)

Such Activity is used to assess sediment dynamics at the level of physiographic units and the effectiveness of the recovery and restoration of the sandy coast through the use of local sediments, in the coastal area on the border between Liguria and Tuscany, with particular reference to the river sediments of the Magra river, to arrive at an integrated management of coastal and river sediments.

The first phase of work was devoted to the collection of pre-existing morphological and sedimentological data and the realisation of major campaigns on the field, in particular surveys of the shoreline, bathymetric surveys with single-beam technical measurements of the morphology of the emerged beach with GPS - RTK technology, collecting samples from the submerged and emerged beach.

The processing of data allowed improving the knowledge on the evolution of costs in the long run in the first place by noting that the shoreline between Bocca di Magra and the port of Marina di Carrara as a whole is going through a time of relative stability and that the interventions made (protected nourishment with geo containers) have helped to stabilise the shoreline. Finally, it was possible to ascertain how the material now present at the mouth of the river, although they have contributed to an expansion of the sandy beach, have non-optimal textural characteristics for the nourishment of this coast.

Under the Activity were developed communication and training activities on issues related to coastal dynamics and interregional public interventions.

Individual Activity 3: Protection of the dunes of Lacona (Elba). (Tuscany Region, CAMP Area 1)

This Activity is aimed at testing appropriate monitoring techniques to assess the state of conservation, preservation, and enjoyment of the beach dune system (the last stretch of the Tuscan Archipelago dune) with high nature value and low human impact.

The first period of activity has been devoted to the collection of existing data on the coast under consideration, for the delineation of initial scenario. Then the activity was proceeded with significant new campaigns along the shoreline, the bathymetric survey with single-beam technique, relief morphology of emerged beach with GPS - RTK technology, through photogrammetric collection of samples on the emerged and submerged beach with drones.

The collected data was then analysed and processed. The dynamics of the beach sediments (typical morphology of the study area) was reconstructed and interpreted through implementation of numerical X-beach code in two dimensions.

The Project activities have enabled us to perform the primary evaluation of the development of the dune/beach system, ascertaining that the sea in front of the sandy beach does not have many or substantial attack points for waves during extreme events, but the gradual reduction of the sandy shore exposes it to the risk. Subsequently we evaluated actionable strategies for the restoration and/or conservation of dunes, as the basis for the development of recommendations for the implementation of a coastal sediment Management Plan (CSMP) to restore the beach/dune system. Specifically, it was estimated that an action of beach nourishment with suitable sediments (fluvial sediments deposited during flood events) could be an important element for the extraordinary maintenance of the beach.

Individual Activity 4: Regulations for the removal of sand and material from marine quarries. (Emilia-Romagna Region, CAMP Area 2)

The Activity was intended to define the Emilia-Romagna guidelines for standardisation at national level for research and the operating license of use of sedimentary deposits above and below the seabed, within the confines of the territorial waters.

After reviewing experiences on research and management of submerged offshore sand deposits at national, European, and international levels, the "in_Sand" and "env_Sand" information systems were examined from both technological aspects, along with methodological, regulatory, authorisation and governance aspects related to research and use of submerged offshore sand deposits for beach nourishment and coastal dredging of submerged offshore sand deposits.

The guidelines drawn up make a contribution towards governing the exploration and production of sediments in the seabed, as an important tool for the government to regulate retrieval of marine sand and aggregates from quarries. The drafted document considers a variety of related issues such as:

- Environmental: conservation of coastal and marine ecosystems and reduction of the environmental impact related to the removal of sediments from marine deposits;
- Social: improved utilisation management of marine sediments by operators and local authorities;
- Economic: development of an effective tool for the integrated management of the extracted material, which could also be transferred to national and similar international contexts;
- Professional: increase in employment opportunities within the sediment management system in their area of use.

Individual Activity 5: Operational protocol for the reestablishment and consolidation of the dune belts (natural or artificial/reconstructed). (Emilia-Romagna Region, CAMP Area 2)

The goal of this Activity was to draw up a protocol of technical-scientific nature for the redevelopment and consolidation of natural and/or artificial dune bars, applicable not only to the Adriatic and Tyrrhenian coast, but also to other coastal areas of Mediterranean with similar geomorphology and vegetation.

The protocol was developed starting from experiences in Emilia-Romagna and in other national and European areas and identifies lines of action for the rehabilitation and consolidation of dune ridges, especially through techniques and methodologies derived from natural engineering. The document provides a set of best practices for the cleanliness of the beach and the dune and its garbage collection, against the damage of flora and fauna, for the regulation of access to mechanical means, for the location, lighting and green furnishing of bathing facilities and services, and finally proposes a sustainable complex seaside model.

Individual Activity 6: Conservation of marine and coastal biodiversity with special reference to the conservation of minor species. (Emilia-Romagna Region, CAMP Area 2)

Activity 6 in the Emilia-Romagna Region was intended to contribute to the protection of biodiversity of the coastal region through the implementation of conservation measures, with particular reference to the minor fauna and sea turtle (*Caretta caretta*).

With regard to minor fauna, the main insistent threat factors in the study area, such as the destruction and fragmentation of habitats, the spread of invasive alien species, were treated with continued climate change analysis along with the description of communities and species and value of bio-indicators of the "minor fauna" and the related conservation measures. A particular section of the document was dedicated to the conservation measures to protect sea turtles from the point of view of primary aid standards for accidentally captured specimens of conservation measures. Under the monitoring profile guidelines for the collection of data for the study of other species is provided.

In concrete terms, this activity led to the drafting of seven guidelines for the conservation of minor coastal fauna fish species, 13 guidelines for the management and conservation of small mammals, 6 guidelines for maintenance, 16 for support interventions in the conservation of invertebrates.

Individual Activity 7: Development and exploitation of new forms of sustainable tourism in protected natural areas. (Emilia-Romagna Region, CAMP Area 2)

This Activity was implemented to promote sustainable tourism through the creation of naturalistic-cultural routes which can increase the potential of the coastal territory.

Land use methods based on the valuation of the natural heritage of the coastal and inland areas, and environmental education are designed on these bases. After a study of the area in question, which also included the identification of protected natural areas, 6 different land-sea routes have been identified as falling under the geographical scope defined article 3 of ICZM protocol and still included in the Po Delta Park territory. For each route the following aspects are defined; expected results, description, major environmental and cultural aspects, travel times and best time recommended, mode and means (foot, bike, boat, car, etc.,) planned activities, and media used.

These routes have helped to promote a new tourism approach, based on environmental sustainability and usability even in low season, to enhance the specific coastal ecosystems through tourist routes. This allowed us to involve different target populations, citizens, tourists, students and convey the contents of the Project.

Individual Activity 8: Education and Communication to sustainability. (Emilia-Romagna Region, CAMP Area 2)

This Activity was aimed at the development of a strategy for education and communication of effective and durable environmental sustainability and can combine the technical skills, scientific knowledge, culture, and environmental awareness of the parties involved.

In the preliminary phase of the AI, a stakeholder analysis was conducted to verify the sensitivity, level of knowledge and a willingness to be involved in the issues of Integrated Coastal Zone Management of those who, for various reasons, operate in the areas affected by the Project. 48 stakeholders were selected to conduct a survey, the results of which have directed the drafting of a communication plan structured on several points.

As for the design of the communication plan we analysed the various opportunities provided by the web, from the most classical and well-established, to the most innovative and cutting edge. For each of these we have assessed the strategies and methods of management and updating.

The activities were therefore planned to develop a comprehensive strategy on the web (website and social networks) and an analysis of the proposal of a web journal.

Another activity was the one that led to the definition of a proposal for the creation of a web TV channel and the preparation of proposals for content and structure for documentaries and educational events.

Finally 3 informative events were organised for the diffusion of the themes of the CAMP Italy Project.

Individual Activity 9: Implementation of specific actions aiming to the sustainable use of beaches and the protection of coastal zones. (Autonomous Region of Sardinia, CAMP Area 3-4)

The lack of awareness about the need for sustainable use of coastal areas is due to improper and irresponsible use, which contributes to the degradation of the environmental components of the resource and of the beach in general. For this reason, the Coastal Conservatory Agency of Sardinia has developed an action with the aim of safeguarding the natural and environmental resources of sandy coasts, with particular reference to the beach/dune systems and related abstracts.

The Activity sought to address this issue through the development of an overall management strategy of resource use, with low-impact interventions acting indirectly on the system, i.e. reducing the effects of human interaction, and ultimately stimulating local governance, collective participation, and good practices. In the Project, seven (7) coastal Municipalities were involved, with which cooperation agreements were signed.

Individual Activity 10: Enhancement of architectural heritage for the creation of the first eco-hostel in the coastal area for sustainable local development (Buggerru site). (Autonomous Region of Sardinia, CAMP Area 4)

This Activity centred on hostels in the City of Bugerru, and was intended to encourage the reuse of historic government-owned corporation buildings, incorporating environmental sustainability requirements, with a view to consolidating local tourist offerings through the enhancement of endogenous resources, and identifying models of use, management, and sustainable planning.

The Coastal Conservatory Agency of Sardinia has therefore initiated the renovation of the property, which is designed according to high standards of housing and the energy efficiency of building systems. The structure will not be directly managed by the Agency, but will be entrusted, in conjunction with the City of Buggerru, to a private entity selected by public tender. The criteria for selection are given by the Project objectives, which will be critical for the seasonal adjustment of tourism flows and eco-friendly management of the hotel.

Prior to the start of work, the Agency shall enter into an agreement for the training of twenty unemployed young people with the purpose of creating highly qualified professionals, and to strengthen local human resources for work placement in degrees to ensure high quality of services in the tourism industry.

The proposed model can be replicated on a regional scale for the creation of the network of eco-hostels and can promote awareness and participation of tourists in the themes and methods of protection and conservation of resources in the coastal marine area.

Individual Activity 11: GIRA - Integrated Fishing Resources Management. (Autonomous Region of Sardinia, CAMP Area 3-4)

The Autonomous Region of Sardinia - Coastal Conservatory Agency has developed this Activity with the objective of defining a fisheries management model through an integrated system of environmental protection and support of traditional productive activities.

The Activity was divided into three sub-actions: a "Model of Integrated and sustainable fishing of the sea urchin, *Paracentrotus lividus* in a CAMP Area of West Sardinia", "Lobster restocking, *Homarus gammarus* CAMP in an area of northern Sardinia" and "Innovative methods for the increase of production of the common octopus, *Octopus vulgaris*, and the enhancement of biodiversity in the coastal area of West Sardinia CAMP".

After an initial phase dedicated to the collection of data on the subject of species study, and activation of work with local institutions, it was possible to identify the biological protection areas (in Buggerru, San Vero Milis, Castelsardo Municipalities) and test techniques for the sustainable exploitation of the species studied. The methods and techniques have been shared with local fish operators and institutions. In parallel, communication activities have been developed aimed at tourists and students, for improving awareness about biodiversity issues and fisheries sustainability.

Individual Activity 12: Asinara National Park and Pianosa Island (Tuscany Archipelago National Park) tourism Carrying Capacity Assessment. (Autonomous Region of Sardinia, CAMP Area 3)

This Activity is aimed at defining a tool to support public decision-makers and local governments for the development of a tourism model suitable for each island, which, on the grounds of the tourist carrying capacity, can pursue the best use and resource management.

For this purpose, it was necessary to carry out an analysis of the environmental conditions of the area, the social context, and the existing pressure of tourism based on which a proposal for different management models was formulated, for the restoration of assets and recovery of the asset architecture existing in the two islands.

The Activity was to be realised through a collaboration agreement between various institutions (Coastal Conservatory Agency of Sardinia, Department of Humanities and Social Sciences of the University of Sassari, the National Research Council CNR Institute of Biometeorology - IBIMET (with offices in Florence, Bologna, Sassari, and Rome), Asinara National Park, National Park of the Tuscan Archipelago). Despite sharing the objectives and methodology, for administrative reasons the agreement prepared was not signed. It was therefore not possible to complete the planned activities.

However, in the preparation period of the Agreement, the bodies involved have shared the preparatory studies developed under the Protocol of the Italian Ministry of Environment, Land and Sea with the Coastal Conservatory Agency of Sardinia. The Report on computational models of the Tourism Carrying Capacity (TCC), applied in protected areas and national parks worldwide, is now available to be applied to other situations.

Individual Activity 13: Sardinian Center for coastal monitoring and assessment. (Autonomous Region of Sardinia, CAMP Area 3-4)

This Activity was aimed at the installation of a functional information system for observing phenomena in the marine area and in particular in CAMP Areas and in monitoring the implementation of the activities on the coast. The database so created allows for the integration of the information and environmental data collected and managed separately by each institution and share them on a regional network.

It has been created the "Osservatorio delle Coste" module (which will complement the regional SIRA system), that houses two sections: 1) A land registry called "coastal public property assets" in support of the management of Conservation Areas, containing all information related to these areas, and its technical and administrative level - areas are of two types, single structures, or buildings and areas containing larger structures/buildings. 2) A section that evaluates the environmental state of the coastal strip at the municipal level, through the production of various indicators. The input data for the development of

indicators is provided in part by the Coastal Conservatory Agency of Sardinia and in part by planned integration with the SIRA database to improve the access and management of all information relating to coastal phenomena, the dissemination of results at various levels of government and the various categories of private entities, gaining efficiency and time. Users will be able to select data from other subjects and combine sections through a plurality of indicators, using maps, graphs, tables, reports, and other useful tools for understanding the evolution of coastal processes.

Individual Activity 14: Coastal vulnerability assessment tool. (Autonomous Region of Sardinia, CAMP Area 3-4)

The goal of this Activity was to evaluate coastal vulnerability following the increase of the sea level as a result of climate change. The Activity envisaged in the original draft included elaboration of a method for the assessment of coastal vulnerability. The method to be developed, adapted for the coastal environment of Sardinia, and integrated with the Regional Environmental Information System (SIRA), was intended to provide a map of vulnerability of sub-CAMP Areas in the region to be made available to local authorities as a support tool for land planning.

For administrative reasons it was not possible to carry on the activities planned during the implementation period of the CAMP Project. Activities related to the assessment of coastal vulnerability and, more generally, relating to the national policy coordination in the implementation of national and regional strategy for adapting to climate change are carried outside the CAMP Project, by the 'Assessorato Difesa dell'Ambiente' of Sardinia.

For detailed analysis and further study of Individual Activities refer to Annex 5 **Summaries of the results of Individual Activities**.

5.3 Matrix of consistency between the Activities of the Project and the ICZM Protocol forecasts

With the objective of analysing the contribution of the activities of the Project against the implementation of the provisions of the ICZM Protocol a matrix of analysis called "matrix of consistency between the Activities of the Project and the forecasts of the ICZM Protocol" was drafted (following the ICZM consistence matrix).

The matrix is structured as follows:

- The column includes, in order, the Horizontal Activities and Individual Activities, grouped by Thematic Areas, according to the preliminary subdivision identified and described in the paragraph 4.5.
- The line lists the items of the ICZM Protocol, grouped as per the respective Parties of the Protocol. It is specified only articles of Parts I, II, III and IV were considered.

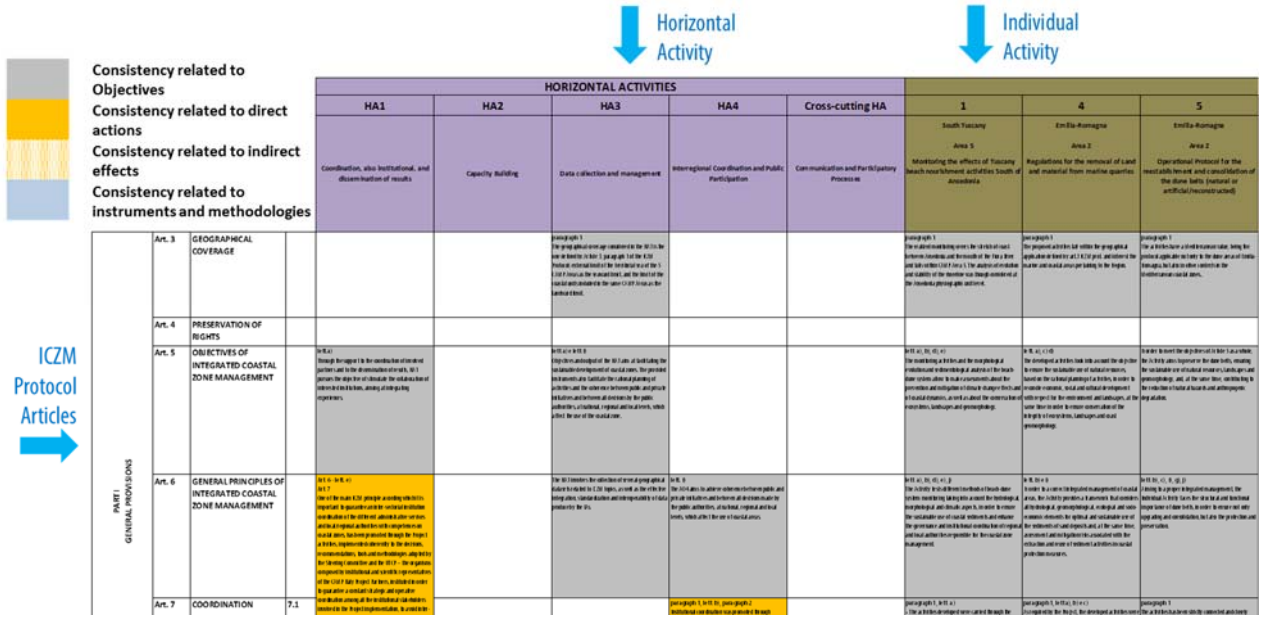


Figure20: Illustration of the structure of the matrix of consistency between the Activities of the Project and the ICZM Protocol forecasts.

The matrix identifies, for each Individual and Horizontal Activity, the relationship (r.) and relevance (r.), of the articles of the Protocol that have been implemented and, for each action, describes the contribution of the activity in terms of implementation and therefore interpretation of the provisions of the Protocol. Correlations and appliances are divided into:

- r. and r. of goal: these are ICZM actions, and are defined as related and relevant to all the target items; the matrix detailing the kind of relevance and correlation;
- direct r. and r., or from activities in which they have found direct application of the provisions referred to in the article/les of reference;
- indirect r. and r., or when the actions, where despite not having found direct application of the provisions referred to in the article/les of reference, have contributed, albeit indirectly, to the implementation of these provisions;
- r. and r. for tools and methodologies, that is when the activity has implemented methodologies or has contributed to the definition of regulated methodologies and tools that are provided in the article/les of reference.

The matrix is shown in condensed form (without descriptive texts) below figure 21, while the full version is provided in **Annex 7**.

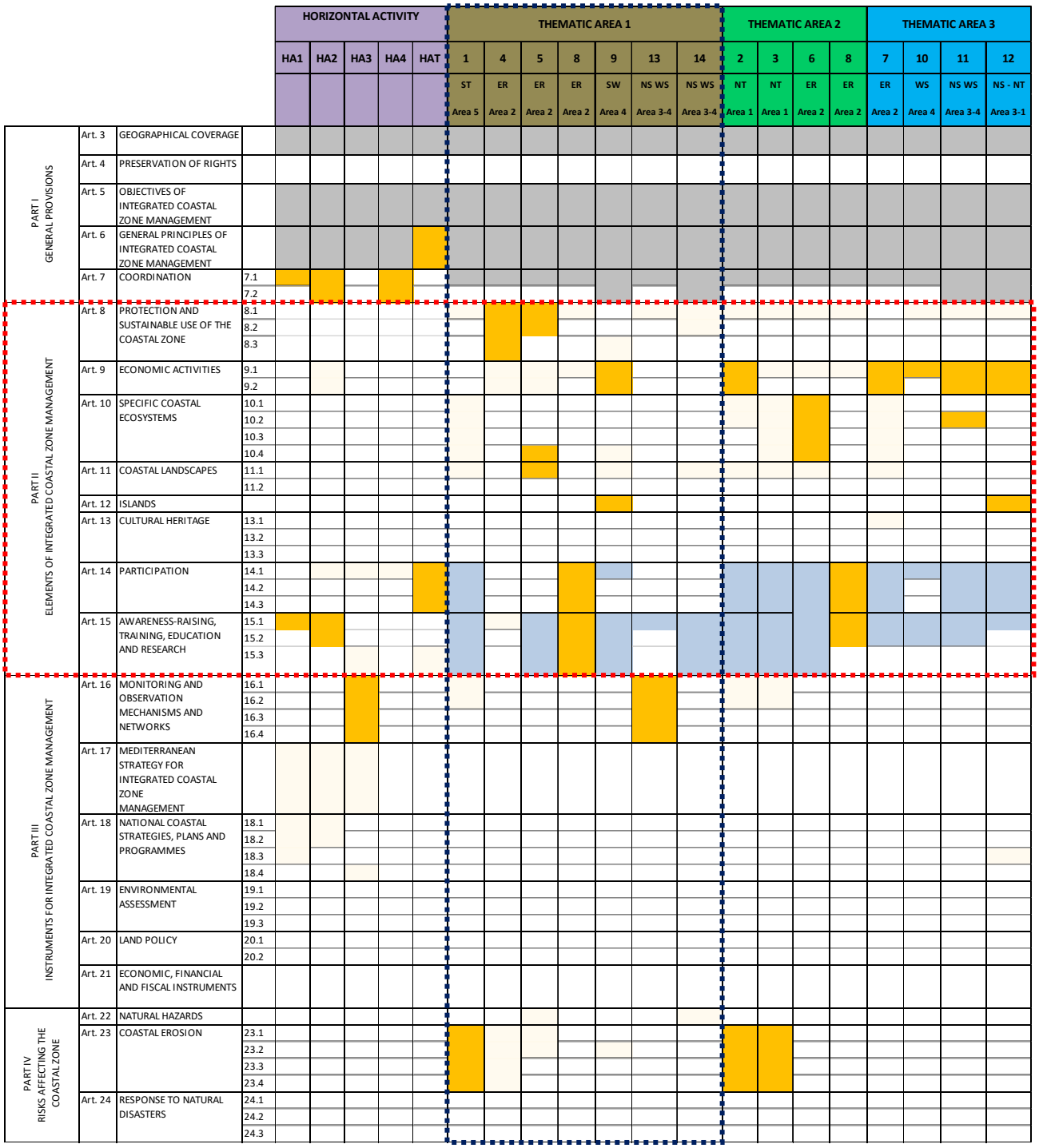


figure 21: Correlations and appliances of the Project Activities with the ICZM Protocol items identified and described in the Integrated Consistency Matrix of Coastal Zone Management (reproduced in full in Annex 7).

The matrix thus created can have different interpretations:

- read vertically (blue box in figure 21), evidenced, for Individual Activities or groups (taken together with Horizontal Activities or Individual Activities divided according to Thematic Areas) of articles of ICZM Protocol that have found application in the Project. More Protocol items are identified by column index as interdisciplinary and are integrated with different aspects of ICZM;

- read Horizontally (red box in figure 21), shows how many and what Activities have been implemented consistently with the provisions in an article or as a part of the ICZM Protocol; the greater the number of Activities identified by line, the greater the impact and contribution of the Project to that particular theme or aspect of the ICZM Protocol.

An analysis of correlations and fixtures of the Project Activities with the ICZM Protocol articles, (identified and summarised in figure 21), clearly shows that overall the Project Activities in the light of the principles and objectives of ICZM (articles 5 and 6 and, more generally, Part I), have:

- in a more or less homogeneous manner, considering all the elements of ICZM (Part II);
- contributed to the development of methodologies and tools both for monitoring and observation, and in support of the definition of strategies, local and national plans and programmes as well as a Mediterranean strategy for integrated coastal zone management (Part III, articles 16, 17 and 18);
- contributed to the definition of the risk analysis scenarios and instruments that affect the coastal zones (Part IV, Articles 22 and 23), while not dealing with methodologies and response tools for natural disasters (Article 24).

6 ANALYSIS OF THE PROJECT CAMP ITALY - SWOT ANALYSIS

A detailed analysis of the Project Individual Activities has been made with SWOT methodology, identifying the strengths *(*Strengths), weaknesses (Weaknesses*)*, opportunities (*Opportunities*) and threats (*Threats*).

Figure 22: Generic SWOT analysis diagram.

Based on the analysis carried out by following the methodology of the **Matrix of consistency between the Activities of the Project and the forecasts of the ICZM Protocol**, it has been prepared in a suitable matrix interconnection between the articles of the ICZM Protocol and Thematic Areas (TA), which group Individual Activities, which is performed, for CAMP Area, SWOT analysis.

The analysis was therefore based on the content of the ICZM Protocol; in particular, are considered both items identified as structural cross-cutting and, as such, common to all the IAs, which were grouped in a further area defined by 'General Area'; both items that characterize the single Thematic Areas.

The SWOT analysis has been set:

- For **CAMP Area** (columns) and, therefore, for the geographical areas where the Project is divided. It is noted that in view of the commonality of some Activities for both CAMP and taking into account areas of incomplete implementation of some of them, we proceeded by combining the analysis for Areas 3 and 4 (Sardinia Region).
- For **Thematic Area** (rows):

- A Thematic Area defined as '**General**', which lists the basic components of all their activities defined as integrated coastal zone management, which refers to the ICZM Protocol items identified as structural cross-cutting: Part I - Articles. 3, 5, 6, 7, on the geographical scope, ICZM objectives and principles and institutional coordination; Part II - Articles. 14 and 15 and Part IV - Articles. 25 and 27 on participation, awareness raising, training, education and research and the exchange of information and *best practices*; Part III - Art. 16 on monitoring;
- The Thematic Area on the **planning of terrestrial and marine coastal areas**, and related articles that characterize it: Part II - Articles. 8, 9, 10, 11, 12, 13 as regulatory, environmental, cultural, socio-economic and anthropogenic that must be taken into account in marine and coastal planning; Part III - Articles. 17, 18, 19, 20 as instruments for ICZM planning; Part IV - Articles. 22, 23, 24 with respect to policies to prevent natural hazards;
- The Thematic Area on the **protection, preservation and restoration of coastal and marine habitats** and the related articles that characterize it: Part II - Articles. 8, 10, 11, 12 on the elements to be considered and measures to be taken to the sustainable management and preservation of natural habitats, landscapes and coastal ecosystems;
- The Thematic Area on the **sustainability of socio-economic pressures in the coastal area** and the related articles that characterize it: Part II - Articles. 8 and 9,Part III - Articles. 19 and 20, Part IV - Art. 23, on the elements to consider, tools and measures for sustainable and integrated management of activities, which preserve natural resources.

Given the multi-function of some items, it specifies that some of them were considered in more areas (Art. 8-12, 19-20, 23); on the contrary, other articles of the ICZM Protocol have not been considered or are not relevant to the identified areas (Art. 1-2, 4, 21, 26, 28-29), or because they related to the operation and entry into force of the ICZM Protocol as an international legal instrument (Part VI on institutional arrangements, Art. 30-33, and Part VII on Final Provisions, Art. 34-40). (Cfr. Figure 24).

The set of Individual Activities was affected to a limited extent on the overall geographic areas CAMP and to the economic and environmental fields concerned. It follows, therefore, that the relevance to the articles of the ICZM Protocol, as articulated in the four Thematic Areas, was partial in particular with reference to the articles of the ICZM Protocol Part III.

Forecasts of the ICZM Protocol considered for Thematic Areas	*Individual Activities*				
	CAMP Area 1	*CAMP Area 2*	*CAMP Area3*	*CAMP Area 4*	*CAMP Area 5*
General Area Part I: Articles 3, 5, 6, 7, Part II: Articles 14, 15 Part III: Article 16 Part IV: Art. 25, 27	Structural cross-cutting articles common to all AT				
Thematic Area 1 Part II: Articles 8, 9, 10, 11, 12, 13 Part III: Arts. 17, 18, 19, 20 Part IV: Arts. 22, 23, 24	**AI.2 and AI.3** Combined disposed Arts. 9, 10, 11, 23 (Art. 8 c., and p. Indirect)	**AI.4** Combined disposed Arts. 8, 9, 23 **AI.5** Combined disposed Arts. 8, 9, 10, 11, 23 **AI.8** Combined disposed Arts. 8, 9	**AI.9*** Combined disposed Arts. 8, 9, 10, 11, 12, 23 **AI.13**** Combined disposed Arts. 8, 23 **AI.14**** **AI.11** Combined disposed Arts. 8, 10		**AI.1** Combined disposed Arts. 9, 10, 11, 23
Thematic Area 2 Part II Arts. 8, 10, 11, 12	**AI.2 and AI.3** Combined disposed Arts. 10, 11 (Art. 8 c., and p. Indirect)	**AI.6** Combined disposed Arts. 8,10, 11 **AI.8** Art. 8 **AI.5** Combined disposed Arts. 8, 10	**AI.9*** Combined disposed Arts. 8, 10, 11, 12 **AI.11** Combined disposed Arts. 8, 10 **AI.12****		**AI.1** Combined disposed Arts. 8,10
Thematic Area 3 Part II: Articles 8 and 9 Part III: Arts. 19 and 20 Part IV: Art. 23	**AI.2 and AI.3** Art. 9 **AI.12****	**AI.7** Art. 9 **AI.5** Art. 9	**AI.11 and AI.12**** Art. 9 **AI.9*** Art. 9	**AI.10**** Art. 9	**AI.1** Art. 9

* Activity carried out in a much reduced form.

** Activity unrealised.

Figure 23: Summary of the consistency of Individual Activities with the articles of the ICZM Protocol for CAMP Areas and Thematic Areas.

The SWOT analysis scheme has been, therefore, applied to each intersection of a CAMP Area and a Thematic Area, according to the scheme exemplified in Figure 24, highlighting the correlation, the relevance and contribution of the Individual Activities to implementation of the articles of the ICZM Protocol (analysed by 'Matrix of consistency between the Activities of the Project and the forecasts of the ICZM Protocol', set out in paragraph 5.3) and, in particular:

a. the activities implemented in terms of institutional coordination and an integrated approach;
b. the synergies among the Individual Activities;
c. replicability of the methodologies, tools and models proposed and tested, regionally, nationally and internationally.

The scheme has been developed taking into account both the completed Activities and the uncompleted Individual Activities, since even the failure (within the agreed terms) of a scheduled Activity may be useful for the analysis of lessons learned, especially in terms of weaknesses or critical issues for the implementation of similar activities in similar contexts, or for the identification of obstacles and / or the need for correct planning and / or implementation of similar actions.

Forecasts of the ICZM Protocol considered for Thematic Areas	*Individual Activities* *CAMP Area* *General context of the Area, identifying the main characteristics of the in relation to the individual Activities (e.g. prevalence of coastal erosion, fishing activities ...).*	
General Area	*S*	*W*
	O	*T*
Thematic Area 1	*S*	*W*
	O	*T*
Thematic Area 2	*S*	*W*
	O	*T*
Thematic Area 3	*S*	*W*
	O	*T*

Figure 24: integrated SWOT analysis diagram of the Individual Activities for CAMP Areas and Thematic Areas.

The SWOT analysis below:

- it is based on the findings of actors for evaluating implementation and results of the Project (Chapter 8);
- it is the basis of further analysis of the lessons learned (Chapter 77);
- it is used in the development of recommendations for the management of coastal areas (Chapter 7);
- it is also functional for the identification of the significance of the Project at the Mediterranean level (Chapter 9);
- it is the basis of the considerations and suggestions for follow-up to the Project (Chapter 10).

6.1 SWOT Analysis for CAMP Area 1 (Tuscany)

<table>
<tr><td rowspan="2">Forecasts of the ICZM Protocol considered for Thematic Areas</td><td colspan="2">Individual Activities</td></tr>
<tr><td colspan="2">CAMP Area 1

CAMP Area 1 extends from the northwestern border of Tuscany Calambrone to the mouth of the river, which is included entirely in a single physiographic units of 63.5 km in length; also it includes the northern part of the Tuscan Archipelago, with its five main islands: Gorgona, Capraia, Elba, Pianosa and Montecristo.

From the point of view of the coastal territory morphology it is dominated by sandy beaches, except for the Tuscan Archipelago, characterised by rocky shores. The northern part of the Tuscan coast displays a high degree of urbanisation, initially developed in relation to the intense port activity in Carrara and Viareggio, and subsequently following the expansion of tourist sites, such as Marina di Massa and Forte dei Marmi and Viareggio Marina di Pietrasanta. The coastal area between the port of Viareggio and the mouth of the Arno River boasts a better-preserved natural environment, which is located within the Regional Natural Park of "Migliarino San Rossore-Massaciuccoli".

Among the main impacts / risks present in the area, the following deserve special attention: increased pollution of wastewater due to heavy tourist pressure, damage from moorings and berths in the sea, air pollution and pollution from contaminated sites (risk).

■ The area has been affected by two Individual Activities:

A.I. 2: Assessment of the feasibility and effectiveness of the reuse of the extracted alluvial sediments from the river Magra, for the nourishment of the relevant coasts. In particular, the activities have affected coastlines including between the mouth of the Magra River and the port of Marina di Carrara.

A.I. 3: Protection of the dunes of Lacona (Elba). In particular, the activities have involved the Lacona beach-dune system, from the beach up to a depth of about -8 m.</td></tr>
<tr><td>General Area

Part I: Articles 3, 5, 6, 7,
Part II: Articles 14, 15
Part III: Article 16
Part IV: Art. 25, 27</td><td>S
The Activities implemented have considered the basic ICZM components. In particular:

■ Thegeographical scope, considering the coastal area both on the land and sea sides.

■ The objectives and principles of ICZM, particularly arational planning of activities (which are aimed at the results of the monitoring activities and the analysis of the morphological and sedimentological evolution of</td><td>W

■ The beach-dune system in question was only extended to a depth of about 8 metres for the part at sea. The reliefs therefore did not affect the prairies of Posidonia present at below this depth.</td></tr>
</table>

	the coast), with particular reference to the definition of measures appropriate for **prevention/reduction of the effects of natural hazards**, linked to coastal erosion, for the purposes of maintenance of the **geomorphological integrity of the coastal area, the coastal ecosystems and landscapes** and, more generally, the**preservation of coastal areas** for the benefit of future generations. In addition, activities have properly considered the **dynamics and functioning of the intertidal zone, as well as the complementary and interdependent nature of the respective marine and terrestrial parts, which constitute a single entity; have taken into account in an integrated manner elements relating to hydrological, geomorphological, climatic and ecological systems**. The results of the analyses carried out are an important knowledge base to be able to **prevent harm to the coastal environment**, and, if necessary, **provide for an adequate recovery**. The**public access to information collected** is guaranteed thanks to the publication of the data and the results of numerical models (on portals of the LaMMA Consortium, the Tuscany Region and Project Spatial Data Infrastructure - SDI).	
	■ The activities include **institutional coordination** with local and regional public bodies (Tuscany Region, coastal municipalities, National Park Authority, Port Authority). There has been an increase in **interregional coordination** with the neighbouring Regions of Latium and Liguria, for the collection and exchange of information prior to the traits of the neighboring coast; as well as with the Emilia-Romagna and Sardinia Regions for the exchange of information, knowledge and good practices for the development of strategies, in this case for the restoration and consolidation of dune ridges. [[placeholder]]The improved institutional and inter-regional coordination has allowed the use of the results of activities under the "National Table on coastal erosion", thus contributing to **coordination between national and regional authorities**.	■ The absence of a **plan for institutional and intersectoral coordination** among the various administrative services and regional and local authorities in coastal areas affects the programming of relevant activities of the coast and cannot guarantee an efficient time-frame for the implementation of activities. The increased inter-regional coordination and that at the national level is considered a compelling best practices, but as such - and where not replicated and extended - with a limited effectiveness both on the national and temporal scales.
	■ The **participation**. The results and methods of analysis developed have also been shared with the stakeholders, involving them in the evaluation	■ The activities of **participation** were not planned from the beginning of the activities and concerned only some areas and some issues,

	and analysis processes. ■ The activities of awareness-raising, training, education and research and exchange of information and best practices. The activities of **raising awareness and training on issues of ICZM** were carried out through participation and presentation of results in events organised by third parties, or made part of the activities, with the organisation of seminars; through training activities aimed mainly at schools, to sensitise the younger generation on coastal erosion and climate change. ■ The collaboration and involvement of industry experts (LaMMA Consortium, University of Florence, Geocoste Srl) has promoted the **interdisciplinary scientific research on ICZM**. In particular, monitoring made it possible to evaluate the evolution of coastal systems through the collection of existing data and the comparison with data collection, sharing knowledge on the evolution and impacts of coastal erosion with the local community and nationally. ■ The monitoring activities carried out there have contributed to **updating the regional and national**databases regarding coastal areas. The datasets, collected and processed as part of the monitoring of this Area, have helped to strengthen the coherence of the data, in compliance with the INSPIRE Directive.	particularly the issue of coastal erosion and climate change. Local governance has allowed the participation of stakeholders during the final phase of the presentation of results. ■ The **training** actions have not been provided for all Activities shares and have not had a specific focus on building capacity among actors to make profitable use of what is produced by the same Activities. ■ The incomplete availability of and accessibility to the coastal spatial data produced in the CAMP 1 Area, as still being validated by the Tuscany Region, limits the use, exchange and consequently the capitalisation of the results of the Project.
	O ■ **Optimise and make permanent interregional** institutional coordination, the overriding aim being to adopt inter-regional agreements / protocols on shared and joint major **coastal systemic components** that have interregional impact (such as for instance the reuse of alluvial sediments and dredging and handling of the fluvial sediments, also in order to restore or maintain the hydraulic efficiency and the sediment balance of the beach). Through the comparison and exchange of experience with other	**T** ■ The **complexity and diversity of the actors** and institutional processes involved, in **the absence of national reference standards** which could provide an articulated prediction, and a regional legislation, where this exists, still with significantly differentiated content, with results limited to a context that essentially relies on volunteers, the achievement of the results and, in particular, the adoption of formal agreements / conciliation protocols. The lack of definition of rules and formalisation of the process may lead

	Regions, the model could also be used and implemented on a national scale.	to unsatisfactory results.
	■ **Expanding the framework of knowledge on the specific needs** of the population in relation to ICZM issues, through targeted surveys, for example with the periodic sending of questionnaires (taking as an example what was elaborated on the issue of coastal erosion and its impact on local socio-economic activities). Extend the investigation into the framework of knowledge to other coastal Regions (note: the Liguria Region has already shown interest in this regard) and/or on a national scale.	■ A **lack of interest** of the population in participating in the investigation of ICZM issues could lead to a reduced number of responses and thus give no meaningful information.
	■ **Periodically replicate parcipitative events,** capitalising the interest and willingness expressed by the parties, intervened in the activities carried out, to evaluate actions to protect the coast, to be agreed with the authorities responsible for coastal management.	■ The **belated and ineffective involvement of** public and private actors causes a lack of participation and interest in the proposed events.
	■ **Replicate and enhance the activities of both dissemination of results** of studies submitted in the regional, national and Mediterranean areas to contribute to integrated coastal zone management; **and of building awareness** on issues of ICZM and the natural and socioeconomic value of the beach-dune system.	■ The **lack of proper planning for the necessary financial resources** could result in a limitation to the tools and then to the dissemination of results. An inadequately timely communication of proposed events could limit the reachable pool of users.
	■ The updating of regional and national databases related to coastal zones, as well as the strengthening of the existing coastal monitoring mechanisms may contribute to **informing the public, to facilitating decision-making at public and private levels, and to promoting the exchange of scientific experience, data and good practices.** Themodelling activities developed in this CAMP Area may be of future interest to the Tuscan regional structures, particularly in the context of initiatives such as the MAREGOT (Interreg Maritime Italy-France, 2017-2019) project, or of the monitoring activities for the regional-scale planning which the Tuscany Region has assigned to LaMMA Consortium as of 2017.	■ The **lack of funding**, as well as **the lack of planning for a monitoring programme,** in the long run, may limit the regular maintenance and updating of regional and national inventories of coastal zones.
	■ In order to **promote the exchange of good practices**, the	

	methodological approach used to calculate ICZM indicators (environmental and economic) applied to this CAMP Area could be extended to the entire Tuscan coast for a regional evaluation and to promote the updating of national inventories of coastal zones.	
Thematic Area 1 Part II: Articles 8, 9, 10, 11, 12, 13 Part III: Arts. 17, 18, 19, 20 Part IV: Arts. 22, 23, 24	**S** ■ The monitoring activities performed have been planned and programmed taking into consideration, and **in line with, the elements of regional and national planning**, with particular reference to the "Territorial plan with reference to landscaping", the "Operational Document required by LR 80/2015" and the "Project for integrated management plan of the Coast for the purposes of hydrogeological Reorganisation", which provided, among other things, for monitoring the intervention for recovery of the beach-dune system in 2010, the object of the activities, as well as for the Individual Activity 3, therules of the National Park of the Tuscan Archipelago. ■ **The results and data arising from monitoring, analysis** and assessments on the stability of **the beach-dune system** and the effectiveness of interventions made in the past, provide an important **framework of scientific and technical reference** which takes into account in an integrated manner the elements relating to hydrological, geomorphological, climatic and ecological systems **to support planning of future interventions of preservation, recovery and / or restoration of the shoreline, and therefore of the relevant ecosystems and the coastal landscape**. ■ The monitoring and integrated numerical models developed represent **valuable tools in support of ICZM planning**, helping to define scenarios, and then to provide guidance for the identification of intervention solutions. The **sharing** of results and data, as well as of tools and applications, is necessary to define supra-regional plans / programmes / strategies (for example, indications were supplied to define a protocol for the restoration and consolidation of dune ridges, adopted by the Emilia-Romagna Region under Individual Activity 5 (CAMP Area 2).	**W** ■ **There is no medium to long term monitoring programme** for the beach-dune system, which allows advance planning of interventions and maintenance of the beach-dune balance. The monitoring programmes, as a rule, are located and planned in areas well known for instability or affected by extreme events that cause erosion, with the need for recovery and / or restoration of natural and / or socio-economic features of the system. ■ The **assessments** carried out on the effectiveness of the shoreline recovery interventions are **not accompanied by a cost-benefit analysis** of the same, which is important for technically and economically sustainable planning of future interventions in the medium to long term. ■ Localised monitoring and models applied at an **inadequate scale** are likely to provide information that does not take into account variables (natural and / or man-made) at a large scale and thus make the programming and planning of interventions that are unsustainable over time.

	■ For the purposes of **definition of prevention and management strategies and policies of natural hazards nationwide**, the results of the activities carried out represent a valuable contribution to the process of **interregional coordination** as part of the "National Table on Coastal Erosion", with particular reference to the preparation of the "National Guidelines for the management of coastal dynamics."	■ The absence of an adequate **interregional coordination** can determine the failure to agree on the adoption of appropriate tools to support planning: Failure to consult with the Liguria Region did not allow the definition of protocols for the reuse of alluvial sediments and dredging and handling of the fluvial sediments.
	O	**T**
	■ Definition of a **periodic and standardised interregional monitoring plan** to control the stability of the beach-dune system, and the advance planning and long-term interventions required to ensure the protection and preservation of the natural, landscape and cultural and socio-economic aspects of the system itself. The plan, discussed in national contexts such as the National Table on Coastal Erosion, could also become a benchmark for the adoption of a policy framework at the national level.	■ The lack of adequate **consultation between stakeholders**, at the interregional and national level, and adequate economic and financial instruments, represents a threat to the implementation of a monitoring plan at regional and national level.
	■ Adoption of **interregional agreements on shared and joint management** of the main coastal systemic components that have inter-regional impact (such as for example the reuse of alluvial sediments, dredging activities and handling of fluvial sediments, also in order to restore or maintain the hydraulic efficiency and the sediment balance of the beach, or the protection of the dune system).	■ The absence of a **National Strategy on Integrated Coastal Zone Management** to guide the planning process is likely to make sectoral planning instruments and interregional levels inconsistent with each other.
	■ Adoption of a **National Strategy on Integrated Coastal Zone Management** defining objectives, methodologies and tools in support of the definition of coastal zone plans and programmes. The strategy is to capitalise on the analysis of the existing situation which arises from the various activities already implemented at the local, region and national levels. The results of the activities carried out in the CAMP 1 areas give their contribution to the component relating to the integrated management of fluvial and marine coastal sediments in order to more effectively prevent and mitigate the negative impact of coastal erosion and, therefore, also to the prevention and management of natural hazards.	■ The absence of adequate **institutional coordination at the national level,** which also results from a non-coherent overlapping of skills in the field of coastal zone management, may cause delays in the coordination procedure and, ultimately, the failure to define a *vision* at national level.

Thematic Area 2 Part II: Articles 8, 10, 11, 12	**S** The Activities implemented have considered the **aspects to promote for the sustainable management and conservation of natural habitats**, landscapes and coastal ecosystems. In particular: ■ The activities implemented have helped to provide **criteria for the sustainable use of coastal areas and reduced consumption of natural resources (sand)**, by testing appropriate monitoring techniques to assess the effectiveness of the interventions for the recovery and restoration of the beach-dune systems with a high natural value and different degrees of human and/or tourist use, evaluating techniques for recovering and reusing river sediments for recovery operations and restoration interventions of beaches. ■ The implemented activities provide a knowledge base for the **definition and adoption of measures and/or interventions aimed at protecting, conserving and restoring specific coastal**, land (dunes) and marine (Posidonia beds) ecosystems. The assessments conducted regarding the recovery and reuse of river sediments for the recovery and restoration of beaches, contribute to a reduction in the consumption of natural resources, increased resilience and sustainability of the beach system, as well as providing aspects that could regulate the extraction of marine and river sediments.	**W** ■ The lack **of planning for appropriate pre- and post-monitoring of coastal interventions** limits the overall assessment of how effective the management measure adopted have been, and prevents its replication in other contexts. ■ The lack of a complete, adequate and updated knowledge base of the territory (such as the details on riverine inputs, the sedimentary deficit on physiographic unit, etc.) constitutes an obstacle to the protection and sustainable use of coastal areas, in addition to the planning and adoption of measures to conserve the characteristics of specific coastal ecosystems (in this case dunes and Posidonia beds).
	O ■ Capitalising on the results of previous studies (monitoring, interventions, etc.) makes it possible to **expand the knowledge base for the coastal territory** and to reconstruct a more detailed picture of the current state of the coast, its dynamics of morphological and sedimentological transformation, providing important contributions on which to base effective and timely mitigation strategies for events and the recovery of the beach-dune system's quality. ■ The measures identified to increase shoreline resilience (e.g.	**T** ■ Non-effective and untimely **sharing of the results of activities**, the data collected and knowledge acquired does not make it possible adequately to capitalise on these for the protection, conservation and restoration of coastal and marine ecosystems. Sharing should be done promptly (to avoid data no longer being current, given the extreme dynamism of the areas involved) and at all levels of government involved. ■ In order for the measures identified for the sustainable management

	outsourcing strategies, possibly encouraging movement by allowing for increased volumes and surfaces), if properly applied, could have positive repercussions in terms of the environment (maintaining environmental quality of the territory), socially (tourism, positive impact on the local population) and economically (no construction of rigid defences but rather soft interventions that reduce human pressures on coastal and marine ecosystems). ■ An **assessment of feasible strategies** for the restoration and/or conservation of dunes and specifications to draft a coastal sediment management plan for the restoration of the beach/dune system could be used to prepare the ordinary and extraordinary maintenance work for the beach-dune system by coastal municipalities in the CAMP 1 Area.	and protection of natural habitats and landscapes to be adopted and have a positive impact in environmental, social and economic terms, it is necessary to ensure participation and **involvement by local residents** in the protection of coastal ecosystems, based on their knowledge and local customs.
Thematic Area 3 Part II: Articles 8 and 9 Part III: Articles 19 and 20 Part IV: Art. 23	**S** ■ Assessments carried out in the scope of the recovery and reuse of river sediments for recovery interventions for beaches contribute to providing aspects for **the regulation of the economic activities of excavation, exploitation and reuse of natural resources** (marine and river sediments), while respecting natural habitats, ecosystems and coastal landscapes. These assessments have taken into account the economic value of the beach in terms of its related economic activity. The activities considered the main **human pressures characterising the coastal system** being analysed, such as urban centres, tourist activities, and the presence of port and coastal defence infrastructure. ■ Activities have shown that **monitoring** is a valuable tool for developing economic activities to ensure the sustainable use of coastal areas ■ **Sharing results on the activities that were implemented** with key ICZM players in the area, has made it possible to **promote codes of good practice for the proper management of the beach-dune system, and reduce pressure on the system itself** at the level of the public authorities, economic operators and non-governmental organisations.	**W** ■ A costs-benefit **analysis is lacking for** the activity envisaged (sediment removal), which would also be useful for economic operators in the sector. ■ In the envisaged activities of preparing agreements/protocols, there was no **involvement from economic players** operating in the extraction of sediments and beach replenishment activities. The actions relating to dune protection (Lacona) lacked the full participation of others that in various degrees manage or are responsible for the area (Tuscan Archipelago National Park Authority) including tour operators working in the area.

	O ■ Application of the results pertinent to the recovery and reuse of river sediments for recovery interventions of the beaches on **a regional and/or inter-regional scale**, which also includes a costs-benefit analysis of the proposed activity (extraction, handling and positioning of the fluvial and marine coastal sediments), with direct involvement by economic operators in the sector. ■ Drawing up an **inter-regional agreement/protocol for the reuse of alluvial sediments extracted from the river,** with the direct involvement of economic players, with specific reference to those working in the extraction of sediments and beach replenishment activities.	**T** ■ Lack of adequate **information and data** to apply the analysis and evaluation tools at a regional and/or inter-regional level; as well as adequate **funds** to implement monitoring and/or surveying to collect the necessary data and information. ■ The Region's failure to adopt the Protocol on the extraction of sediments compromises its regulatory and binding scope, also in respect of economic operators. ■ Inadequate **involvement by economic operators** could make it difficult to sustain results over time.

6.2 SWOT analysis for CAMP Area 2 (Emilia-Romagna Region)

	Individual Activities
Forecasts of the ICZM Protocol considered for Thematic Areas	***CAMP Area 2*** The area is located in the coastal area of the Emilia-Romagna region corresponding to the terminal portion of the broad alluvial plain (Po Valley). The coastline stretches from the mouth of the "Po di Goro" to the north down to the mouth of the Tavollo river in the south, with a total length of about 83 km. The geographical and geomorphological characteristics of the coastal zone are complex and highly diversified on a local level. The Emilia-Romagna coast is characterised by fine-grained sandy seabeds, extensive beaches and coastal dunes; however, the shapes and characteristics of the beach-dune system along the coast vary depending on local weather conditions, the geomorphological and geological characteristics, as well as the intensity of human activities. The coastal area is greatly influenced by subsidence, both natural and/or induced by human activities, at an average rate of nearly 8 mm/year and up to 5 km from the coastline. Overall, the coastal arc can be divided into two main areas: (1) the more northerly section, extending from the mouth of the "Po di Goro" to "Saline di Cervia", which typically has several humid and brackish environments and (2) the more southerly section, characterised by sandy beaches and inland, by empty beaches.

<table>
<tr><td></td><td colspan="2">The area includes natural protection and conservation areas and zone, falling within the Po Delta Park territory, as well as numerous SCI/SPA sites and Natura 2000 Network sites.

Included among the major impacts/risks in the area, the following are particularly worthy of mention: mass tourism, coastal erosion, eutrophication, pollution, saltwater intrusion and subsidence.

■ Five Individual Activities have been implemented in the Area, which essentially involved the entire coastal area including the CAMP Area:

A.I.4: Regulation on areas for the removal of sands and aggregates.

A.I.5: Operational Protocol for the rehabilitation and consolidation of dune bars (natural or artificial/rebuilt).

A.I.6: Conservation of marine and coastal marine biodiversity with special reference to the conservation of minor species.

A.I.7: Development and exploitation of new forms of sustainable tourism in protected natural areas.

A.I.8: Education and communication on sustainability.</td></tr>
<tr><td>General Area

Part II: Articles 8, 9, 10, 11, 12, 13
Part III: Articles 17, 18, 19, 20
Part IV: Articles 22, 23, 24</td><td>S

The Activities implemented have taken into consideration the basic ICZM components. In particular:

■ The scope of the geographic application, considering the coastal area of regional relevance, both in terms of the land and the marine portion, according to the planned activities.

■ The ICZM objectives and principles, especially regarding the sustainable development of coastal areas based on the rational planning of activities (that the conservation actions of marine and coastal biodiversity, protection and recovery of dune ridges, management of coastal marine sediments for the purpose of maintenance interventions/rehabilitation of the sandy area, development in protected natural areas and development of new forms of sustainable tourism are all working towards), so as to reconcile economic, social and cultural development with environmental protection, with particular reference to the definition of measures aimed at ensuring the sustainable use of natural resources and the prevention/reduction of the effects of natural risks, associated mainly with human activities, for the purpose of maintaining the geomorphological integrity of the</td><td>W

■ The geographic scope, while in accordance with the provisions of the planned activities, was confined (as a land and marine limit) to the availability of existing information. Individual Activities have not made provision for the collection of additional data.</td></tr>
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	coastline, coastal ecosystems and landscapes and, more generally, the **conservation of coastal areas** for the benefit of future generations. The activities have properly taken into consideration **the biological heritage and natural dynamics and functioning of the intertidal area and the complementary nature and interdependence of the marine and land portions, which constitute a single entity, by adopting an ecosystem approach**, where applicable**;** the activities took **an integrated approach to the elements relating to the hydrological, geomorphological, climatic and ecological systems,** as well as **socio-economic and cultural** aspects**,** with particular reference to the **multitude and diversity of activities and public services related to them**, located in the coastal areas under consideration. The results of the analyses represent an important knowledge base about the **risks associated with the different human activities**, with particular reference to fishing, **in order to prevent and reduce their negative impact on coastal zones**, and where necessary, **provide for adequate recovery**.	
	■ The activities implemented have been based on close **coordination at an institutional** level between the regional services involved (Protection and Reclamation of Water, Air and Physical agents, Soil protection, Technical Services and Basin Authority) and with other public bodies (Po Delta Park Authority, the National Forestry Corps). Inter-regional **coordination** with the Region of Tuscany has increased, with regard to the exchange of information, knowledge and good practices for the development of strategies aimed at restoring and consolidating the crests of the dunes and the management of marine and coastal sediments, for the purpose of rehabilitation measures for the beach-dune system. The improved institutional and inter-regional coordination has made it possible to use the results of the activities in the scope of the "National Table on coastal erosion", thus contributing to **coordination between national and regional authorities**.	■ The increased inter-regional coordination and at national level is considered an impressive best practice, but as such is limited in its effectiveness both on a national and temporal level, if it is not replicated and extended.
	■ The activities undertaken have seen **ongoing involvement and participation** by the stakeholders involved, both the public bodies (the Po Delta Park Authority, the National Forestry Corps, Department of Tourism at the Municipality of Ravenna) and sector operators and specialists (e.g.	■ Not all Individual Activities foresaw **participation** during the stage of implementation of activities. Local governance has only made it possible for stakeholders to participate during the final phase when results are presented. For the CAMP Italy Project, no specific tools for the

	Cesenatico Marine Research Centre Foundation, "Cetacea" Foundation in Riccione, Society for Nature Studies in Romagna). Participation has continued, after an analysis of stakeholders with the staging of events, with the aim of promoting discussion and debate among stakeholders around the issues related to the sustainable management and promotion of the territory and its resources. ■ The raising of **awareness, training, education and research** and exchange of information and best practices. Communication material was produced to promote land-sea itineraries with tourists. A comprehensive communication strategy was prepared pertinent to the Web and specific suggestions have been made, starting from the analysis of best practices, in terms of rehabilitating and consolidating the dune bars and removing sand and aggregates to protect the dunes. Information and training events were also organised on the protection of minor species, the protection of natural resources, the protection of ecosystems and important habitats, the importance of participation in the ICZM process, new forms of sustainable tourism and on specific coastal ecosystems. Results were shared and presented at events organised by third parties, or as part of the activities, with specific seminars also organised; training activities, mainly directed at schools, raised awareness among the younger generation on the issue of coastal erosion and climate change. ■ The activities have tested the tools and measures to be adopted in programmes **to raise awareness and media monitoring,** by proposing, inter alia, a low cost methodology and the non-invasive aerial monitoring of environments that are particularly sensitive and have a high environmental value, using a high-definition drone, which was found to be an additional instrument (not a substitute) to be used in monitoring plans and therefore a methodology that can be exported at regional level.	participation of the Emilia-Romagna Region, such "IoPartecipo" were used. ■ It would be useful to **share more of the communication strategy** with other partners, which could have benefitted from it and positioned it within their own AI. Greater synergy between local communication activities and those general to the Project could have multiplied the results. ■ In general, **there was no capacity building strategy**, aimed at the possible end users of the technical-scientific documents produced, which would have supported their effective application.
	O ■ **Optimise institutional inter-regional** coordination and make it a permanent feature, with the priority of adopting inter-regional	**T**

	Agreements/Protocols on the shared and joint management of the main **coastal system components** that have an inter-regional impact (e.g. the protection and rehabilitation of dune ridges). Based on discussion and the exchange of experiences with other Regions, the model could also be used and implemented on a national scale. ■ **Adopt a system of participation, or adapt existing systems**, to allow for participation by stakeholders, including during the stages to prepare technical-scientific documents, by also using citizen science, where the citizen himself contributes to the collection of data and field observation, thus also creating greater personal environmental awareness. All documents produced should be **shared** with **stakeholders**, especially those operating in the fisheries and tourism sectors. Replicate events, such as the Forum, to maximize participation results. ■ The **education and communication programmes** on sustainability include sound proposals on the content and structure of educational tools and events, to be implemented in coastal areas to raise public awareness on ICZM issues (e.g. sustainable tourism, biodiversity conservation, coastal and marine habitats). Full involvement by local schools in using the land-sea routes could represent an important opportunity for the consolidation and continuity of environmental education activities.	■ The lack of an **appropriate public participation programme**, directed at all stakeholders, from the early stages, could hinder the implementation of future plans and programmes and, therefore, impact on the proper and timely implementation of the latter. The lack of a **presentation to stakeholders regarding** the tools developed compromises their implementation. ■ The lack of funds allocated for training and raising awareness could limit the implementation of this type of events and consequently the dissemination of results.
Thematic Area 1 Part II: Articles 8, 9, 10, 11, 12, 13 Part III: Articles 17, 18, 19, 20 Part IV: Articles 22, 23, 24	**S** ■ Activities have been developed in line with current **regulations** , with particular reference to the Guidelines for Integrated Coastal Zone Management (approved by Resolution No. 645 of 20 January 2005), taking into account all **the environmental, cultural, anthropic and socio-economic factors that must be included in the ICZM Planning**. In particular: - The *Guidelines* (both *for the conservation of marine and coastal biodiversity, and to promote sustainable fishing that operates with selective capture methods*, supplemented by those regarding communication to raise awareness of the stakeholders involved),	**W** ■ The tools developed (plan, protocol, guidelines, recommendations), albeit with recognised technical-scientific value, **are not binding on the planning process regarding interventions in** coastal areas**.**

	provide a good example of integration of the **requirements of environmental protection with the rules on the management and use of marine and** coastal areas when planning, and are a valuable technical and scientific support for the planning of interventions related to the protection, conservation and promotion of specific habitats, aimed at the promotion of "minor fauna." - The *Guidelines and Recommendations for the authorisation and use of submerged offshore sand deposits* have as their objective **to minimise the use of natural resources**, by implementing the **regulations on the extraction of sand** to prevent disruption to the **balance of coastal ecosystems**; they also propose some **good practices** such as the methodologies and planning tools to identify and resolve conflicts between uses of the sea in the coastal-marine area. Based on inter-regional coordination, they will be useful for the preparation of the "National Guidelines for the management of coastal dynamics." - The *operational Protocol for the rehabilitation and consolidation of dune* bars (natural or artificial/reconstructed) provides **measures for their conservation and compliance for their sustainable management**, including some aspects relating to **waste** management on beaches**.** - The 6 land-sea routes developed encourage **sustainable coastal tourism that conserves coastal ecosystems, the natural resources, cultural heritage and coastal landscapes**; **promoting specific forms of coastal tourism, including cultural and rural tourism and ecotourism, while respecting the traditions of local populations**. ■ The activities carried out are based on sharing and capitalising on previous work and results from other projects and work tables, **thus** promoting **codes of good practice at the level of the public authorities, economic operators and non-governmental organisations**. ■ The activities implemented are attributable to the **policies for the**	■ The guidelines produced have a range limited to the reference context,

	prevention of natural risks, those of natural or man-made origins, to the extent that they provide information useful for **vulnerability assessments** on coastal habitats, with the **adoption of measures necessary both to maintain or restore the coast's natural capacity to adapt to changes,** as well as **measures to minimise the effects** of economic activities on the dune bars, constituting an **important natural elements defending the coasts from erosion**.	because they are not part of a broader territorial plan from a geographic (regional, national, Mediterranean planning) and thematic perspective (prevention policies for natural risks).
	O ■ The **adoption of the tools** developed can **support Public Authorities in coastal zone planning** at regional and national level, and in view of the Regional Municipality Framework for the ICZM in the Mediterranean. ■ It would be useful **to** have additional information in the documents, to provide clear indications on the opportunities and priorities related to the interventions.	**T** ■ The lack of overall planning, which also considers the aspects **studied in the completed activities, could undermine the work done: if the tools prepared are not formally incorporated into the management plans** (e.g. seabed), they are unlikely to be considered as part of the programming process and action planning processes. ■ The **opportunity to add to the prepared** documents that has been identified, could make the process to formally adopt these tools long and complicated.
Thematic Area 2 Part II: Articles 8, 10, 11, 12	**S** ■ The activities implemented took into consideration the **aspects promoting the sustainable management and conservation of natural habitats**, **landscapes and coastal ecosystems**. In particular, they contribute to identifying **principles and criteria aimed at conserving the characteristics of specific coastal environments,** such as coastal dunes; river mouths; thermophilic mesophilic and hygrophilous coastal woodlands; wetlands and brackish lagoons, as well as marine habitats and 'non-habitats' (dead wood); they provide a knowledge base for the **definition and adoption of measures and interventions aimed at the protection, conservation and restoration of specific coastal ecosystems**. ■ The proposed measures for the protection of coastal areas and their ecosystems, which include land-sea routes, are designed and developed	**W** ■ The lack of a complete, adequate and up to date knowledge base on the conservation status of biodiversity (see fragmented information and

	with the objective of protecting habitats and promoting knowledge of specific coastal ecosystems (woodlands and coastal pine forests, transitional waters, coastal dunes, marine habitats), focusing on the biological heritage and an ecosystem approach. ■ Environmental sustainability criteria for the long term were identified. ■ The measures developed (protocols and guidelines) identify the main factors of the persistent threat to coastal habitats (use, destruction and fragmentation of habitats, spread of invasive alien species, climate change, extinction of 'key species'), the interactions of anthropogenic pressures on biodiversity and the related ecosystem services, the relative mitigation measures regarding the impacts and solutions in support of coastal and marine ecosystems.	datasets not constantly updated) represents a limit to the protection and sustainable use of coastal zones. ■ The proposed measures - in particular protocols for the sustainable use of coastal areas and the protection of coastal landscapes - must be based on an ecosystem approach and comparative cost-benefit analysis. The economic evaluation of the environmental components cannot be separated from the choices and decisions that are made on ecosystems. In the Protocol for the rehabilitation and consolidation of dune bars, for example, this part is missing. ■ The absence of a detailed account of all **the key roles played by dunes,** and information of the need to consider the **level of human activities on the site** and of a **map of the socio-economic activities** that limit the proposed measures - in particular, the operating Protocol for the rehabilitation and consolidation of the natural and/or artificial/rebuilt dune bars.
	O ■ Replicability of the developed activities in other Regions, insofar as they add a value in terms of methodologies to safeguarding measures for the protection of the characteristics of certain specific coastal and marine ecosystems and for the use of natural resources (see Indications for the removal of sands and inert materials). ■ Develop greater knowledge of the species and distribution size of the populations of coastal and marine ecosystems, in order for both to facilitate the adoption of measures to ensure the protection of coastal landscapes and its ecosystems; both to better guide the management actions, to monitor its effectiveness and suggesting improvements.	**T** ■ The failure to adopt, with or as part of binding instruments (eg. management plans of the beach floor), of the proposed action, can compromise its application, thwarting the activities, which are likely to remain purely descriptive and non-functional to ensure the protection of coastal landscapes and marine ecosystems.

	■ Appropriately apply the measures developed and directions identified for its potential positive effects in terms of the environment (environmental quality of the territory), social (tourism, positive impact on the local population) and economic (maintenance of ecosystem services).	■ The occasional and momentary contingencies must be overcome in favour of planning and programming, that the identified measures are taken in a broader and complex context, ensuring the participation and **involvement of stakeholders** in the protection of coastal ecosystems based on their knowledge and local practice.
Thematic Area 3 Part II: Articles 8 and 9 Part III: Articles 19 and 20 Part IV: Article 23	**S** ■ The implemented activities have contributed to propose **sustainable development actions of traditional coastal activities** (in particular as it regards the fishing operations with means of selective capture and the protection of threatened marine species) **and sustainable coastal tourism actions,** in favour of a reduction of seasonal tourism pressure and for the benefit of the protection of the dunes. Moreover, to provide a knowledge base for the definition and adoption of measures and interventions aimed at the development of sustainable tourism and the conservation of ecosystem services, through the reduction and control of human pressures (e.g. fish). ■ Setting specific targets for **limitation of anthropogenic impacts** (e.g. tourist use), which are a useful tool for planning of new ecotourism products. ■ Definition of guidelines for the **promoting sustainable small-scale fisheries** operating with selective media, for the conservation of protected species. ■ The proposed measures have identified **alternative methods of use** of the territory (the Delta del Po Park), contributing to the enhancement and preservation of coastal ecosystems and the coastal landscape, while respecting the load capacity, with the aim to inform/educate tourists on the need to protect the habitats and foster the knowledge of specific coastal ecosystems.	**W** ■ The absence of specific recommendations **for the mitigation of impacts** of specific coastal economic activities in the Adriatic (such as research of hydrocarbons, nautical tourism and seasonal tourism). ■ The lack of an integrated management approach even on a regional scale (such as the consideration of road and rail links), can compromise the viability of sustainable tourism activities.

	O ■ The dissemination of guidelines for promotion of sustainable artisanal fisheries, if properly applied, would provide important benefits in socio-economic (for the fisheries sector) and environmental terms (conservation of fish resources). ■ The activities and the proposed methodologies (particularly those within the development of land-sea routes) will sustainably promote the economic and tourism potential of coastal areas (development of sustainable tourism). ■ The adoption of land-sea routes by all public and private stakeholders, and their continued participation in management decisions could be a good practice for the natural protected areas.	**T** ■ The failure to adopt, with or as part of binding instruments, the proposed measures (Guidelines for Sustainable Fishing Guide), can affect the application and, ?in particular, implementation by local fleets. ■ The possible lack of complete usability of the proposed instruments (defined path) constitute an obstacle to their development and success. ■ The lack of involvement of tour operators in the implementation of land-sea routes would prevent the complete success of the implemented activities, reducing their effects in economic terms and visibility. ■ The lack of a **presentation to stakeholders regarding** the tools developed compromises their implementation.

6.3 SWOT analysis for CAMP Areas 3 and 4 (Sardinia Region)

	Individual Activities
Forecasts of the ICZM Protocol considered for Thematic Areas	***CAMP Area 3*** CAMP **Area 3** of northern Sardinia, stretches along the coast between the promontory of Capuneddi north, and "Capo Galera" (Alghero) to the south, including the Piana island and the island of Asinara, along with a 362 km coastline. This area, compared to the rest of the territory, sees a very high population density and the presence of four of the major population centres of Sardinia; It includes the industrial area of Porto Torres. The most significant impacts/risks are desertification, coastal erosion and pollution arising from the industrial area of Porto Torres. ***CAMP Area 4*** **CAMP Area 4** in western Sardinia, extends from the southern tip of the large bay of "Portixeddu-Buggerru", including the granite promontory of "Capo Pecora", the complex dune system of Scivu-Piscinas and the Gulf of Oristano and ends with the rocky coast of Montiferru ("Santa Caterina di

	Pittinurri"), with a total length of about 292 km. It is important to consider that the industrial port of Oristano, located in the middle of the Gulf, is the hub of maritime traffic in this area. The two main risks to this area of coastal erosion and flooding. ■ The two areas should have been affected by six Individual Activities: I.A. 9: Implementation of specific actions aimed at sustainable use of the beaches and the protection of coastal ecosystems, the Spanish municipalities of Costa Paradiso, Alghero and Sorso, San Vero Milis municipalities, Arbus, Cabras and Union of Municipalities of Metalla and the Sea . The activities were only implemented in two of the seven municipalities: in Northern Sardinia, coastal stretches between the towns of Trinity in Agultu while in western Sardinia, coastal sections between the Union of Municipalities of Metalla and the Sea. I.A. 10: Enhancement of historical coastal architectural heritage for the creation of the first eco-hostel for sustainable local development (Buggerru locations) I.A. 11: I.M.F.R. - Integrated Management of Fisheries Resources. In particular, the activities have affected the coastlines of Buggerru, San Vero Milis and Castelsardo municipalities. I.A. 12: Evaluation of capacity of the National Park of the island of Asinara and Pianosa in the Park of the Tuscan Archipelago. I.A. 13: Sardinian Centre for evaluation and coastal monitoring I.A. 14: Tool for assessment of coastal vulnerability The SWOT analysis for the two areas of CAMP 3 and 4, falling in the territory of the Autonomous Region of Sardinia, has been carried out in a unified manner, because of the six Individual Activities envisaged by the Project, the I.A.11 of I.M.F.R. has been realised as expected from the Project except for the component relating to the lobster restocking, partially realised; one was carried out in a much reduced form (I.A.9 coast call: two municipalities out of seven planned) and others were unrealised (I.A.10, 12, 13 and 14), in particular due to the inadequate capacity of the primary institutional entity to evaluate the temporal and procedural aspects necessary for the realisation of the Activities.	
General Area Part I: Articles 3, 5, 6, 7, Part II: Articles 14, 15 Part III: Article 16 Part IV: Articles 25, 27	**S** The Activities implemented have considered the basic ICZM components. In particular: ■ **Geographical scope**, Considering that the coastal area is part land and part sea; in particular: the land area for the town of Trinity in Agultu, the Union of Municipalities of Metalla and the Sea (I.A. 9); the sear area in front of the Buggerru municipalities, San Vero Milis, Castelsardo ("Secche di Castelsardo") for the restocking of the sea urchin and octopus, as well	**W** ■ Omission of certain Activities (I.A.10, 12, 13 and 14), that were concerned with the coastal stretches of Buggerru Municipalities (I.A.10), the island of Asinara and Pianosa of the Tuscan Archipelago (I.A.12),the two areas of the CAMP (I.A. 13 and 14); as well as the very limited production of another (I.A.9, two of the expected seven municipalities),

	as lobster (I.A. 11 of I.M.F.R.). ■ The **objectives and principles of ICZM**, in particular a **sustainable development of coastal areas through a rational planning of activities** (which are addressed to the safeguard measures and rehabilitation and/or reconstruction of dunes and beaches and lobster restocking). In order to reconcile economic development, social and cultural development with environmental protection, with particular reference to the definition of measures to **ensure the sustainable use of natural resources** and **prevention/reduction of the effects of natural hazards**, related mainly to human activities, for the purpose of maintaining the 'geomorphological **integrity of the land ecosystems and coastal landscapes** and, more generally, the **preservation of coastal areas** for the benefit of future generations. The activities have properly taken into consideration **the biological heritage and natural dynamics and functioning of the intertidal area and the complementary nature and interdependence of the marine and land portions, which constitute a single entity,** by adopting an **ecosystem approach, where applicable; the activities took an integrated approach to the elements relating to the hydrological, geomorphological, climatic and ecological systems,** as well as **socio-economic and cultural** aspects**,** with particular reference to the **multitude and diversity of activities and public services related to them**, located in the coastal areas under consideration. The results of the analyses represent an important knowledge base about the **risks associated with the different human activities**, with particular reference to fishing, **in order to prevent and reduce their negative impact on coastal zones**, and where necessary, **provide for adequate recovery**. ■ The activities are considered for the **institutional coordination between** different public bodies (municipalities, region, forestry, police, Harbour Master. In an Activity (I.A.11 of I.M.F.R.) a working group was formed (Coastal Conservatory Agency of Sardinia, the Office of Agriculture and Agro-Pastoral Fishing Reform Service, Competence Centre on Marine Biodiversity (Com.Bio.Ma)) for operational coordination and supervision on implementation of the Project, in order	have limited the geographical scope of the activities, therefore, reducing the significance of the proposed methodologies. ■ Inadequate **planning of regional institutional coordination** (I) the planning stage (in particular for the assessment of the timing related to the data collection work is not available), resulted in the failure to complete a number of activities within the terms of the Project; (ii) in complex interventions, which require a multiplicity of bodies called upon to express opinion assessment, has affected our times for the approval of projects, the award of the work and implementation thereof, thus not ensuring the effective timing for the implementation of activities, which determined the failure to finalise within the Project time. ■ The training actions have not been provided for all Activities shares and have not had a specific focus on building capacity among actors to make profitable use of what is produced by the same Activities. Failure for specific **sharing of the communication strategy** with other partners, which could benefit from it and test it within their own I.A. Capacity building activities that would be important to promote implementation have not been made or planned (I.A. 13 of SIRA and I.A. 14, tool for assessment of coastal vulnerability

	to promote the integration of fisheries with the socio-economic fabric of the local areas and sustainable tourism activities.	
	■ The activities undertaken have seen the **involvement and participation** of local authorities, citizens and economic operators, involved, among other things, in the debate on the issue of coastal zone management and planning and carrying capacity, as well as on the theme of Marine Litter.	■ The lack of an **appropriate program of public participation** addressed to all interested stakeholders can affect the success and/or completion of the planned activities. In particular, the lack of involvement of stakeholders such as fishermen, from the earliest stages of design, did not allow the joint definition of the area of lobster restocking and thus the completion of the I.M.F.R. activities and agreements provided.
	■ The activities of **awareness and training on issues of ICZM**, (and in particular on sustainable fisheries), have been realised through the participation and presentation of results in events organised by third parties, or made part of the activities, with the organisation of specific seminars and/or training activities; specific training activities directed to fishermen have been implemented as part of the I.M.F.R., while the direct involvement of concerned municipal officials has meant that they could develop skills and expertise in the field of ICZM, with particular reference to the promotion of sustainable fisheries and actions and measures for the protection and/or restoration of dunes and beaches, and sustainable development.	■ Failure **to maintain participating shares** can determine an increasing disinterest of the stakeholders and citizens.
	■ Collaboration and the involvement of industry experts (University of Cagliari, Sassari University, Com.Bio.ma.) has promoted the direct exchange of experiences, methodologies and data and contributed to the **interdisciplinary scientific research on ICZM**, with particular reference to testing and validation of experimental models for the assessment of stocks of the species concerned.	
	■ The data collected, analyses performed and the results obtained (in particular concerning the activity of restocking of fish species considered as part of I.M.F.R.) help fuel and update **local and regional databases**, and are important for future restocking actions of the fish species.	■ The incomplete availability and accessibility to the coastal spatial data products in CAMP 3 and 4 areas (with particular reference to both the redevelopment projects of the dunes and the I.A. 9; both of SIRA dataset), restrict the use, exchange and consequently the capitalisation of the results of the Project.

	O	T
	■ **Adopt an appropriate structured institutional coordination model** between local and regional public bodies for **streamlining** the process of implementation of ICZM projects in the field and facilitate the sharing of data and information for development **of integrated systems in support of ICZM**. Consider a special **conventional model**, through which the involved public entities, coordinate the exercise of their functions with a view to achieving a common result in a complementary and mutually reinforcing manner, (such as the agreement between public administrations to regulate the conduct of collaboration in activities of common interest, *former* article 15, L. 241/1990), which could be used as a template for ICZM activities. The model of coordination should also **facilitate the sharing of data and information** for the **full operation of integrated systems in support of** ICZM (For example SIRA, with particular reference to "Cost Monitoring" Module).	■ The **complexity and diversity of the stakeholders** and institutional processes involved in the **absence of a national reference legislation on ICZM,** which regulates the division of responsibilities and roles, and regional legislation, if any, for still significantly differentiated content, conditions in an essentially voluntary context for achieving results of an effective ICZM.
	■ **Develop an appropriate program of participation** for stakeholders, to ensure effective and timely implementation of planned activities, present and in the future, sometimes for the development and eventual replication of the redevelopment projects of coastal areas and the protection of biological resources, as well as to promote socio-economic activities, especially tourism and fishing. Maintaining the program of participation is crucial to ensure the sustainability of medium-long term of the realised activities.	■ The **non-activation of real participatory processes** can undermine the sustainability of the medium - long period of activities undertaken and jeopardise any future activities; in addition, a **belated and ineffective involvement of public and private stakeholders** could lead to **a lack of interest and low participation**, of the population and economic operators, the proposed activities to determine the non-achievement of the expected results.
	■ **Replicate, strengthen and make permanent the activities of dissemination of results** of studies submitted at the regional, national and Mediterranean Regions to contribute to integrated coastal zone management **and awareness** for different players on integrated coastal zone management and the most important specific issues considered in different contexts.	
	■The update of the regional and national databases on coastal areas, are needed **to help informing the public, to facilitate decision-making in public and private domains, and to promote the exchange of scientific**	■ There **lack** and the non-homogeneity **of existing data** could lead to difficulties in the implementation of an integrated system. Inadequate communication of the system may limit its use and therefore its

	experience, data and good practices.	usefulness.
Thematic Area 1 Part II: Articles 8, 9, 10, 11, 12, 13 Part III: Articles 17, 18, 19, 20 Part IV: Articles 22, 23, 24	**S** ■ The Activities have been developed in line with current **regulatory** sustainable use of the beaches and the protection of coastal ecosystems, with particular reference to the Regional Landscape Plan and conservation actions, defined in the Management Plan of the 'Foci del Coghinas' SCI. The activities **take into account** some of the **environmental, anthropogenic and socio-economic factors that must be included in ICZM Planning**. In particular: - Zones have been set up for Biological Protection **to ensure that fishing practices are compatible with sustainable use of natural marine resources** and ensure that the coastal and maritime economy is adapted to the fragile nature of coastal zones and marine resources are protected from pollution by promoting codes of good practice among public authorities, economic stakeholders and non-governmental organisations. - **Codes of good practice were promoted among public authorities, economic stakeholders and non-governmental organisations, to be considered at the planning stage**, and measures to minimise the effects of the activities and the existing structures on coastal erosion, **in particular for the restoration and preservation of the dunes, important natural elements to defend the coasts from erosion** and **to maintain or restore the natural capacity of the coast to adapt to climate changes, including those caused by rising sea levels;** - **Sustainable coastal tourism** that **preserves ecosystems, natural resources, cultural heritage and landscapes, has been encouraged using models of use, management and sustainable planning for the beach systems, shared between public and private interests and** the usage of such systems calibrated with the conservation and economic and social sustainability of the use.	**W** ■ The partial implementation of the I.A.9 work(two municipalities out of seven) has significantly limited its relevance in terms of geographical representation. ■ There is a lack of **coordination in** the planning between the municipalities involved (I.A.9); therefore there is a lack the ability of network among the activities to be carried out.

	O ■ The codes of good practice, as well as the Guidelines (e.g. those for sea urchin fishing in Sardinia) must be reference tools for planning of coastal areas, enhancing economic activities, such as fishing, compatible with the sustainable use of natural marine resources. The establishment of ZTB for the maintenance of stocks of commercially exploitable biological resources (e.g. sea urchin and octopus) are a model to be replicated in other regional, national and even at the Mediterranean level contexts. ■Capitalising on the results of the activities, with respect to safeguarding and structural and functional integrity reconstitution of natural and environmental resources of sandy coasts at risk of being compromised or degraded, prevention and management of natural hazards, as well as the repopulation of fish species; this is the enhancement of the historical and architectural coastal heritage.	**T** ■ The adoption of instruments of protection that imply restrictions on economic activity, such as ZTB, must be preceded by an adequate assessment of the possibility of consensus among the stakeholders (in this case, fishermen).
Thematic Area 2 Part II: Articles 8, 10, 11, 12	**S** The Activities implemented are considered important **for elements to promote the protection and sustainable use of coastal zones and the preservation of natural habitats and coastal ecosystems**. In particular: ■ The implemented activities have contributed to providing elements for **conservation and exploitation of marine biodiversity** in order to limit the excessive pumping phenomenon and facilitated the sustainable management of fishery resources (e.g. fishing practices that have been developed sustainable are compatible with sustainable use of natural marine resources through the use and testing of equipment and highly selective capture, low impact systems, and thus oriented to the maintenance and protection of marine biodiversity). ■ The implemented activities have contributed to the adoption of **measures to ensure, through regulatory, planning and management tools**, **the protection and conservation of marine and coastal areas,** with	**W** ■ The lack of involvement from the earliest stages of design, of local stakeholders who are directly concerned (fishermen) did not allow the implementation of activities (lobster restocking). The issues raised have been detrimental to the completion of the operation on time, thus limiting the capitalization of results, the possibility of limiting the excessive fishing phenomenon and to facilitate the sustainable management of fisheries resources. The involvement of stakeholders should be planned from the outset in order to bring out any critical issues during the preliminary planning of the Project. ■ The lack of a complete, adequate and updated knowledge base of fish stocks, constitutes a limit to the protection and sustainable use of resources, as well as to the planning and adoption of measures aimed at protecting the characteristics of marine ecosystems. ■ Failure to assess the carrying capacity of the islands, particularly that of

	particular regard to the hosting habitats and species of high conservation value. ■ The implemented activities have identified **solutions for the sustainable use of coastal areas** in CAMP Area under review, taking into account specific local conditions, such as solutions to relocate and reduce the human load (retraining and protection of the beach-dune system, sustainable fruition, sustainable management of *oceanic* beaches) and solutions to encourage sustainable coastal tourism that allows the preservation of primary environmental, local cultural and social resources. ■ The results and the data resulting from the activities have allowed us to acquire scientific information relevant to the protection and conservation of marine and coastal areas that are home to the vulnerable species habitat (in particular, for the I.M.F.R. project).	small islands, prevented the adoption of a necessary tool for the development of activities compatible with the specific characteristics of island environments, in particular for the transport, tourism, fishing and waste sectors, as well as for the sustainable management of water resources. ■ Difficulties (time and cost) of marine monitoring for assessment of fish stocks of the species concerned make it challenging to extend the results on a larger scale. ■ Inadequate data collection and its systematization and computerization through Web-GIS geographic platform is likely to impede the full implementation of planned or tested methodologies.
	O ■ The measures identified, including through appropriate regulatory standards for the conservation and enhancement of marine biodiversity (establishment of BPT [Biological Protection Zone]) and the sustainable use of coastal areas, represent forms of protection of the beach-dune systems, including through the mitigation of anthropic impacts, which are easily replicated in similar contexts, local or otherwise.	**T** ■ The monitoring and experimental restocking of fish species activities, require the active collaboration of local fishermen; their non-participation or limited support of local economic realities can compromise the success of the Activities undertaken.
Thematic Area 3 Part II: Articles 8 and 9 Part III: Articles 19 and 20 Part IV: Article 23	**S** ■ The implemented activities provide useful tools to ensure **the use and sustainable management of economic activities** for the territory, such as tourism and fisheries, in order to preserve natural habitats, natural resources and coastal ecosystems. ■ The creation of restocking areas for fishing not only aims to increase the biological resilience of marine areas under consideration, but also supports quality production by increasing sustainable fisheries.	**W** ■ The failure to adopt shared solutions with economic operators involved in the Activity may endanger the completion of the Activity. ■ The method adopted for the CCT does not take into account, in an integrated manner, all elements relating to hydrological, geomorphological, climatic, ecological, socioeconomic and cultural systems; moreover, it does not adequately take into account the use of the marine portion.

	■ The interventions implemented, aimed at the sustainable use of beaches and the protection of coastal ecosystems, some of which include raising awareness of the public to the issue of responsible consumption, are the basis for a seasonal adjustment of tourist flow and represent forms of mitigation of anthropic impacts and protection of the beach-dune systems, which are easily replicated in similar contexts and neighboring coastal municipalities.	■ The lack of coordination of the bodies responsible for environmental supervision has made the sea urchin recovery area vulnerable (at Capo Pecora), reducing the positive effects of the spill over phenomenon of mature specimens. ■ There was a lack of greater synergy, between the fishing industry and the tourism sector, for the sustainability of results, also from a socioeconomic point of view.
	O ■ Developing methodologies of Tourist Carrying Capacity, also in order to define the monitoring indicators of the development of tourism activities, to ensure the sustainable use of coastal zones and reduce pressures that exceed their carrying capacity. The methodology should be a necessary tool for the promotion of activities compatible with the specific characteristics insular environment (transport, tourism, fishing) as well as for the sustainable management of water resources. ■ Starting from the sharing of studies concerning the methods for calculation of the Tourism Carrying Capacity (TCC) applied in protected areas and National Parks at the international level, the methods could represent a valuable contribution to the ICZM, although not directly developed within the Project CAMP Italy. ■ The fisheries management model developed for CAMP Areas, has confirmed the relevance of forms of regulation for responsible fishing and incentives to support and promote the sale of quality products through the local tourism industry, on a regional and national scale. ■ The scientific information collected during the scientific monitoring of the area could be shared with other marine-coastal areas of Sardinia and, where relevant, of other marine and coastal areas.	**T** ■ The lack of implementation of the action on TCC, did not allow for testing of an important method on anthropogenic impacts and economic aspects in coordination with another Region, jeopardizing the possibility of its replicability. ■ Failure to raise actions in the short term, is likely to make the data relative to scientific monitoring obsolete, thus negating the initial investment. ■ The lack of follow-up activities, eg. for actions of biological protection of fish stocks, may constitute an economic loss for businesses that could benefit from the positive effects of resource recovery.

6.4 SWOT Analysis for CAMP 5 (Tuscany Region) Areas

<table>
<tr><td rowspan="2">Forecasts of the ICZM Protocol considered for Thematic Areas</td><td colspan="2">Individual Activities</td></tr>
<tr><td colspan="2">CAMP Area 5

The CAMP Area 5 extends from "Principina a Mare" (Grosseto, Tuscany), on the northern border of Latium, for a total length of about 100 km. Specifically, the activities have affected coastlines included between Ansedonia and the mouth of the Fiora River. From a morphological point of view, the stretch of coast has shallow beaches with sandy bottoms. The Argentario promontory, with the 'tomboli' (dunes) of Giannella and Feniglia, breaks the coastal plain morphology in the central segment while sandy beaches, with low slopes, appear south of the promontory and characterize the remaining coastal area. The area is completely contained within the Province of Grosseto, and can be divided into two main segments: the northernmost including the municipalities of Grosseto and Magliano, and the southernmost, also known as "Costa d'Argento", which includes the southern end of the Province of Grosseto and the municipalities of Monte Argentario, Orbetello and Capalbio ("Maremma Grossetana"). The physiographic unit that most influences the sedimentology of the area is that of Monte Argentario and the Ombrone river. Between the promontory and the Ombrone delta, more than 10 km from the coast, lies a lens-shaped deposit, probably of fluvial origin (Ombrone), with a maximum thickness of approximately 26 m. From a geomorphological point of view, the coast in the Province of Grosseto, up to Capalbio, is characterized by sandy and slightly sloping beaches. These characteristics are also typical of the area between the Gulf of Talamone and the Argentario. The main sandy beaches are supplied by the alluvial sediments of the major rivers (Ombrone and Albegna).

This area is highly urbanized with intensive seasonal summer residences, producing a multiplier effect of pressure on natural resources and on the coastal ecosystem. Coastal erosion, eutrophication of coastal lagoons, pollution from contaminated sites (risk) as well as from industrial sites and ports, are the most relevant impacts/risks in this area.

■ The Area has been affected by an Individual Activity:

A.I. 1: Monitoring the effects of beach nourishment activities in the area south of Ansedonia. In particular, the activities have affected the coastal stretches between the Ansedonia coastal stretch and the mouth of the Fiora River.</td></tr>
<tr><td>General Area

Part I: Articles 3, 5, 6, 7,
Part II: Articles 14, 15
Part III: Article 16
Part IV: Art. 25, 27</td><td>S

The Activities implemented have taken into consideration the basic ICZM components. Specifically:

■ The geographical scope, considering the coastal area both on the land and sea sides.

■ The objectives and principles of ICZM, particularly the rational</td><td>W

■ The beach-dune system in question was only extended to a bathymetric range of approximately 8 meters for the part at sea. The findings, therefore, did not affect the Posidonia prairies present below this depth.</td></tr>
</table>

	planning of activities (which are aimed at the results of the monitoring activities and the analysis of the morphological and sedimentological evolution of the coast), with particular reference to the definition of measures appropriate for**the prevention/reduction of the effects of natural hazards</ g>, linked to coastal erosion, for the purposes of maintenance of the**, geomorphological integrity of the coastal area, the coastal ecosystems and landscapes **geomorphological integrity of the coastal area, the coastal ecosystems and landscapes** and, more generally, the **preservation of coastal areas** for the benefit of future generations. In addition, the activities have properly considered the **dynamics and functioning of the intertidal zone, as well as the complementary and interdependence of the respective marine and terrestrial portions, which constitute a single entity; they have taken into account, in an integrated manner, the elements relating to hydrological, geomorphological, climatic and ecological systems**. The results of the analyses carried out are an important knowledge base to be able to **prevent harm to the coastal environment**, and, where necessary, **provide for an adequate recovery**. The**public access to information collected** is guaranteed thanks to the publication of the data and the results of numerical models (on the LaMMA Consortium portals, the Tuscany Region and Project Spatial Data Infrastructure). ■ The activities include the **institutional coordination** of local and regional public bodies (Tuscany Region, coastal municipalities). The **interregional coordination** with the Latium Region was increased for the collection and exchange of prior information on the stretches of the neighboring coast. The improved institutional and interregional coordination has made it possible to use the results of the activities in the scope of the "National Table on Coastal Erosion", thus contributing to **coordination between national and regional authorities**. ■ Participation . The results and methods of analysis developed, have also been shared with the stakeholders, involving them in the evaluation and analysis processes during the progression of activities.	■ The absence of a **plan for institutional and intersectoral coordination** among the various administrative services and regional and local authorities in coastal areas, affects the programming of relevant activities of the coast and cannot guarantee an efficient time-frame for the implementation of activities. The increased interregional national level coordination is considered an impressive best practice, but as such is limited in its effectiveness both on a national and temporal level, if it is not replicated and extended. ■ The activities of **participation** were not planned from the beginning and only regarded some areas and some issues, particularly the issue of coastal erosion and climate change, and the impact on the socioeconomic activities, specifically concerning the seasonal bathing season. ■ The **training** activities have not had a specific focus on building capacity among actors to make profitable use of what is produced by said Activities.

	■ The activities of **awareness and training on ICZM issues** were carried out through participation and presentation of results in events organized by third parties, or made part of the activities, with the organization of specific seminars; through training activities aimed mainly at schools, to sensitize the younger generation on coastal erosion and climate change. Specifically, students in the schools concerned were involved through an evaluation test on knowledge of the coastal erosion issue and traditional lectures adapted to the test results, with distribution of Project brochures and an overview of the activities carried out in the Project in terms of coastal monitoring. ■ The collaboration and involvement of industry experts (LaMMA Consortium, University of Florence, Geocoste Srl) has promoted **interdisciplinary scientific research on ICZM**. In particular, monitoring has also made it possible to evaluate the evolution of coastal systems through the collection of existing data and the comparison with data collected, sharing knowledge on the evolution and impacts of coastal erosion with the local community and nationally. ■ Monitoring activities carried out, have contributed to **updating of the regional and national** databases regarding coastal areas. The datasets, collected and processed as part of the monitoring of this Area, have helped to strengthen the coherence of the data, in compliance with the INSPIRE Directive.	■ The incomplete availability and accessibility to the coastal spatial data produced in the CAMP 5 Area, because they are still being validated by the Tuscany Region, limits the use, the exchange and consequently the capitalization of the results of the Project.
	O ■ **Optimize and make permanent interregional** institutional coordination, with the main aim of adopting interregional Agreements/protocols on shared and joint management of the main **coastal systemic components** that have interregional impact (such as, for example, the management of marine and coastal sediments to preserve beach resources for environmental and socioeconomic purposes).	**T** ■ The **complexity and diversity of the actors** and institutional processes involved, in the **absence of national reference standards** which could provide an articulated forecast, and a regional legislation, where this exists, to date, still with significantly differentiated content, essentially relies on volunteers to achieve the results and, in particular, the adoption of formal agreements/conciliation protocols. The lack of definition of regulations and formalization of the process may

	Through the comparison and exchange of experience with other Regions, the model could also be used and implemented on a national scale. ■ **Expand the framework of knowledge on the specific needs** of the population in relation to ICZM issues, through periodic sending of questionnaires (taking an example from that created on the issue of coastal erosion and its impact on local socioeconomic activities carried out in the CAMP 1 Area), to be addressed to all regional coastal municipalities, and possibly to other coastal Regions and/or on a national scale. ■ **Periodically duplicate participative events,** capitalizing the interest and willingness expressed by the parties intervening in the activities carried out to evaluate actions to protect the coast, to be coordinated with the authorities responsible for coastal management. ■ **Duplicate and enhance the activities of dissemination of results** for studies completed on a regional, national and Mediterranean scale, to contribute to integrated coastal zone management **and to build awareness** on ICZM issues and the natural and socioeconomic value of the beach-dune system. ■ The updating of regional and national databases related to coastal zones, as well as the strengthening of the existing coastal monitoring mechanisms may contribute to **informing the public, to facilitating decision-making at public and private levels, and to promoting the exchange of scientific experience, data and good practices.** Themodeling activities developed in this CAMP Area may be of future interest to the Tuscan regional structures, particularly in the context of initiatives such as the MAREGOT project (Cross-Border Cooperation Program Italy-France Maritime, 2017-2019), or of the monitoring activities for the regional-scale planning that the Tuscany Region has assigned to the LaMMA Consortium as of 2017. ■ In order to **promote the exchange of good practices**, the	lead to unsatisfactory results. ■ A **lack of interest** of the population in participating in the investigations, could lead to a reduced number of responses and thus provide no meaningful information. ■ The **belated and ineffective involvement of** public and private actors, causes a lack of participation and interest in the proposed events. ■ The **lack of proper planning for the necessary financial resources** could result in limited tools and thus affect the dissemination of results. An inadequately timely communication of proposed events, could limit the reachable pool of users. ■ The **lack of funding**, as well as the **lack of planning for a monitoring** program, in the long run, may limit the regular maintenance and updating of regional and national inventories of coastal zones.

	methodological approach used to calculate ICZM indicators (environmental and economic) applied to this CAMP Area could be extended to the entire Tuscan coast for a regional evaluation and to promote the updating of national inventories of coastal zones.	
Thematic Area 1 Part II: Articles 8, 9, 10, 11, 12, 13 Part III: Articles 17, 18, 19, 20 Part IV: Articles 22, 23, 24	**S** ■ The monitoring activities performed, have been planned and programmed taking into consideration, and **in line with, the elements of regional and national planning**, with particular reference to the "Territorial plan with reference to landscaping", the "Operational Document required by Regional Law 80/2015" and the "Project for integrated management plan of the Coast for the purposes of Hydrogeological Reorganization", which provided, among other things, for monitoring the intervention for recovery of the beach-dune system in 2010, the object of the activities. ■ **The results and data arising from the monitoring and analysis activities** and assessments made on the stability **the beach-dune system** and the effectiveness of interventions made in the past, which take into account, in an integrated manner, the elements relating to hydrological, geomorphological, climatic and ecological, provide an important **framework of technical and scientific reference to support planning future actions of preservation, recovery and/or restoration of the shoreline, thus, the relevant ecosystems and the coastal landscape**. ■ The monitoring and integrated numerical models developed represent **valuable tools in support of ICZM planning**, helping to define scenarios, and then to provide guidance for the identification of intervention solutions. There **sharing** of results and data, as well as the tools and applications, is important for the **definition of plans/programs/strategies of supra-regional importance**. ■ For the purposes of **definition of prevention and management strategies and policies of natural hazards nationwide**, the results of the activities carried out represent a valuable contribution to the process of	**W** ■ **There is no medium to long term monitoring programme** for the beach-dune system, which allows advance planning of interventions and maintenance of the beach-dune balance. The monitoring programs, as a rule, are located and planned in areas well known for instability or affected by extreme events that cause erosion, with the need for recovery and/or restoration of natural and/or socio-economic features of the system. ■ The **assessments** carried out on the effectiveness of the shoreline recovery interventions are **not accompanied by a cost-benefit analysis** of the same, which is important for technically and economically sustainable planning of future interventions in the medium to long term. ■ Localized monitoring and models applied at an **inadequate scale** are likely to provide information that does not take into account variables (natural and / or man-made) at a large scale and thus make the programming and planning of interventions that are unsustainable over time. ■ The absence of an adequate **interregional coordination** can determine the failure to agree on the adoption of appropriate tools to support planning: failure to coordinate with the Latium Region did not allow the definition of a joint protocol for the management of sediments between

	interregional coordination as part of the "National Table on Coastal Erosion", with particular reference to the preparation of the "National Guidelines for the management of coastal dynamics."	neighboring Regions.
	O ■ Definition of a **periodic and standardized interregional monitoring plan** to control the stability of the beach-dune system, and the advance planning and long-term interventions required to ensure the protection and preservation of the natural, landscape and cultural and socio-economic aspects of the system itself. The plan, discussed in national contexts such as the National Table on Coastal Erosion, could also become a benchmark for the adoption of a policy framework at the national level. ■ Theadoption of **interregional Agreements on shared and joint management** of the main coastal systemic components that have interregional impact (such as, for example, the reuse of coastal marine sediments in order to maintain and/or restore the beach-dune system). ■ Adoption of a **National Strategy on Integrated Coastal Zone Management** defining objectives, methodologies and tools in support of the definition of coastal zone plans and programs. The strategy is to capitalize on the analysis of the existing situation which arises from the various activities already implemented at the local, regional and national levels. The results of the activities carried out in the CAMP 5 Area, give their contribution to the component relating to the integrated management of fluvial and marine coastal sediments in order to more effectively prevent and mitigate the negative impact of coastal erosion and, therefore, also to the prevention and management of natural hazards.	**T** ■ The lack of adequate **consultation between stakeholders**, at the interregional and national level, and adequate economic and financial instruments, represents a threat to the implementation of a monitoring plan at regional and national level. ■ The absence of a **national strategy on ICZM** to guide the planning process, is likely to make sectoral planning tools or interregional plans inconsistent with each other. ■ The absence of adequate **institutional coordination at a national level**, which also results from a non-coherent overlapping of skills in the field of coastal zone management, may cause delays in the coordination procedure and, ultimately, the failure to define a *vision* at national level.
Thematic Area 2 Part II: Articles 8, 10, 11, 12	**S** The Activities implemented have considered the **aspects to promote for the sustainable management and conservation of natural habitats**,	**W**

	landscapes and coastal ecosystems. Specifically: ■ The implemented activities, have helped to provide **criteria for sustainable use of coastal areas and for reducing the consumption of natural resources (sand)** testing appropriate monitoring techniques to assess the effectiveness of recovery and restoration (past and present) interventions of beach-dune systems with high natural value and a high degree of anthropization and summer tourism value. ■ The activities have helped to provide guidance for reducing the consumption of natural resources (sand), help increase resilience and thesustainable use of the coast, through monitoring of the current state of the beach, defining the historical evolution of the stretch of coast, and evaluating techniques for recovering and reusing river sediments, for recovery and restoration of the beach. ■ The implemented activities provide a knowledge base for the **definition and adoption of measures and/or actions aimed at the protection, preservation and restoration of specific** terrestrial coastal ecosystems (dunes, wetlands) and marine ecosystems (Posidonia prairies) and **enhancement of the landscape, aesthetic and natural characteristics** of this CAMP Area.	■ The lack **of planning of appropriate pre- and post-monitoring of coastal interventions,** limits the overall assessment of how effective the management measure adopted have been, and prevents its replication in other contexts. ■ The lack of a complete, adequate and updated knowledge base of the territory (such as the details on riverine inputs, the sedimentary deficit on physiographic unit, etc.) constitutes an obstacle to the protection and sustainable use of coastal areas, in addition to the planning and adoption of measures to conserve the characteristics of specific coastal ecosystems (in this case, dunes and the Posidonia prairies).
	O ■ Capitalizing on the results of previous studies (monitoring, interventions, etc.) makes it possible to **expand the knowledge base for the coastal territory** and to reconstruct a more detailed picture of the current state of the coast, its dynamics of morphological and sedimentological transformation, providing important contributions on which to base effective and timely mitigation strategies for events and the recovery of the beach-dune system's quality. ■ The measures identified to increase shoreline resilience (e.g. outsourcing strategies, possibly encouraging movement by allowing for increased volumes and surfaces), if properly applied, could have positive	**T** ■ Non-effective and timely **sharing of the results of activities**, the data collected, and knowledge acquired, does not make it possible to adequately capitalize on these for the protection, conservation and restoration of coastal and marine ecosystems. Sharing should be done promptly (to avoid data no longer being current, given the extreme dynamism of the areas involved) and at all levels of government involved. ■ In order for the measures identified for the sustainable management and protection of natural habitats and landscapes to be adopted and have a positive impact in environmental, social and economic terms,

	repercussions in terms of the environment (maintaining environmental quality of the territory), socially (tourism, positive impact on the local population) and economically (no construction of rigid defenses but rather, soft interventions that reduce human pressures on coastal and marine ecosystems). ■ An **assessment of feasible** strategies for the restoration and/or conservation of dunes and specifications to draft a coastal sediment management plan for the restoration of the beach/dune system could be used to prepare the ordinary and extraordinary maintenance work for the beach-dune system by coastal municipalities in the CAMP 5 Area of the Tuscany Region.	ensure participation and **involvement by local residents** in the protection of coastal ecosystems, based on their local knowledge and customs.
Thematic Area 3 Part II: Articles 8 and 9 Part III: Articles 19 and 20 Part IV: Article 23	**S** ■ Assessments carried out under the Activity contribute to providing elements for **the regulation of economic activities of excavation, exploitation and reuse of natural resources** (marine and river sediments), in respect of natural habitats, ecosystems and coastal landscapes. These assessments have taken into account the economic value of the beach in terms of its related economic activity. The activities considered the main **anthropic pressures characterizing the coastal system** analyzed, such as urban centers, tourist activities, the presence of port and coastal defense infrastructure. ■ Activities have shown that **monitoring** is a valuable tool for developing economic activities to ensure the sustainable use of coastal areas. ■ **Sharing results on the activities that were implemented** with key ICZM players in the area, has made it possible to **promote codes of good practice for the proper management of the beach-dune system, and reduce pressure on system itself** at the level of the public authorities, economic operators and non-governmental organisations.	**W** ■ A costs-benefit **analysis is lacking for** the envisaged activity (sediment removal), which would also be useful for economic operators in the sector. ■ In the envisaged activities of preparing agreements/protocols, there was no **involvement from economic players** operating in the extraction of sediments and beach replenishment activities.
	O ■ Definition of a **periodic and standardized interregional monitoring**	**T** ■ Lack of adequate **information and data** to apply the analysis and

	plan to control the stability of the beach-dune system, and the advance planning and long-term interventions required to ensure the protection and preservation of the natural, landscape and cultural and socio-economic aspects of the system itself. ■ Adoption of **interregional agreements on shared and joint management** of the main coastal systemic components that have inter-regional impact (such as for example the reuse of alluvial sediments, dredging activities and handling of fluvial sediments, also in order to restore or maintain the hydraulic efficiency and the sediment balance of the beach, or the protection of the dune system). ■ Application of the results pertinent to the recovery and reuse of river sediments for recovery interventions of the beaches on **a regional and/or interregional scale**, which also includes a costs-benefit analysis of the proposed activity (extraction, handling and positioning of the fluvial and marine coastal sediments), with direct involvement by economic operators in the sector. ■ Drawing up an **inter-regional agreement/protocol for the reuse of alluvial sediments extracted from the river** (present at the mouth of the Magra river), with the direct involvement of economic players, with specific reference to those working in the extraction of sediments and beach replenishment activities.	evaluation tools at a regional and/or interregional level; as well as adequate **funds** to implement monitoring and/or surveying to collect the necessary data and information. ■ The Region's failure to adopt the Protocol on the extraction of sediments compromises its regulatory and binding scope, also in respect of economic operators. ■ Inadequate **involvement by economic operators** could make it difficult to sustain results over time.

7 LESSONS LEARNED AND RECOMMENDATIONS

Based on the explanation and analysis of the implementation of project activities in the preceding chapters, it is possible to highlight the critical issues and potential useful for guiding future action in this field.

In particular, the SWOT analysis, as referred to in Chap. 6, allows to analyse the lessons learned and to make recommendations for the integrated coastal zone management. The following is a summary list of the most important lessons learned and related recommendations, aimed at providing useful contributions and suggesting courses of action as a basis for the proposals on the implementation of the ICZM at the national and Mediterranean level, starting with the experience of the CAMP Italy Project.

The following table summarises and groups by priority, the analysis of the lessons learned and key recommendations arising therefrom.

Table 133: Key lessons learned from Project Actions and recommendations resulting from the analysis of lessons learned.

Lessons learned	Recommendations
General Thematic Area	
• The **complexity** of the institutional processes involved, the **diversity of interests of the actors** involved, the **absence of a national reference legislation** on ICZM providing for a structured discipline, and the presence of a regional legislation, if any, with content that is still significantly differentiated, lead to an essentially voluntary context for achieving results in the ICZM processes.	• The adoption of a **national reference legislation** and related **national strategy on Integrated Coastal Zone Management** is required for identifying objectives, methodologies and tools for assisting the definition of coastal zone plans and programmes, to guide the programming and planning processes also at the interregional level. The strategy is to capitalise on the analysis of the existing situation which arises from the various activities already implemented at the local, regional and national levels.
• The absence of a **plan for institutional and cross-sectoral coordination** among the various administrative services and regional and local authorities in coastal areas affects the programming of relevant coast activities and does not guarantee an efficient time-frame for their implementation. The increased interregional coordination and that at the national level is considered a fundamental element, but, if not replicated and extended - with limited effectiveness both on a national and temporal level.	• In the absence of such a national regulatory framework, you need to establish an appropriate institutional process in charge of ICZM, or designate the competent authority for the implementation of ICZM (in particular, the ICZM Protocol of the Barcelona Convention and its reference standard).
• The adoption of conventional models (e.g. Under Article 15, Law 241/1990), in particular when the administrations involved are numerous and with different needs, as well as the selection of an operator, may require timing which must be adequately considered in the programming phase.	• **Create institutional coordination** between local government and regional authorities and other relevant parties, which facilitates data and information sharing for developing **integrated systems in support of ICZM**. To this end, you can also consider a **conventional model**, through which the public administrations coordinate the exercise of their functions with a view to achieving a common result in a complementary and mutually reinforcing manner, (e.g. The agreement between public administrations to regulate the joint implementation of activities of common interest, pursuant to Article 15, Law 241/1990).
• The collaboration and involvement of industry experts has promoted a direct exchange of experiences, methodologies and data and contributed to the **interdisciplinary scientific**	• To make **interregional institutional coordination**

Lessons learned	Recommendations
research on ICZM. • **The results and data arising from monitoring, analysis** and assessments on the stability of the **beach-dune system** and of the effectiveness of interventions made in the past, provide an important **scientific and technical reference framework** which takes into account in an integrated manner the elements relating to hydrological, geomorphological, climatic and ecological systems for **supporting the planning of future interventions for preservation, recovery and/or restoration of the shoreline and, therefore, of the relevant ecosystems and the coastal landscape**. • Project activities (AI) have shown how **monitoring** is an essential tool to ensure the management of coastal areas and the sustainable development of economic activities. • The activities have tested the tools and measures to be adopted in programmes aimed at raising awareness and **support in monitoring,** by proposing, inter alia, a low cost and non-invasive method for aerial monitoring of environments that are particularly sensitive and have a high environmental value, using a high-definition drone which was found to be an additional instrument (not a substitute) to be used in monitoring plans and, therefore, a method that can be exported at the regional level. • Failure **to implement real participatory processes** can undermine the sustainability of the medium - long period of activities undertaken and jeopardise any future activities; in addition, a **belated and ineffective involvement of public and private stakeholders** could lead to **a lack of interest and low participation** of the population and economic operators in the proposed activities, leading to failure in achieving the expected results.	permanent and structural for the shared and joint management of the main **coastal system components** that have an interregional impact. • To adopt a **regular and standardised monitoring plan at the regional, interregional and national level** for controlling the main natural components of the coastline and for long-term planning of the interventions required to ensure the protection and preservation of the natural landscape system as well as cultural and socio-economic of the system itself, also for the adoption of a planning policy framework at the national level. • To provide **monitoring activities that should include pre and post-assessments of coastal intervention,** also for the purposes of an overall assessment of the effectiveness of the measure adopted and the possibility to apply it to other contexts. • To provide monitoring and models applied on **a suitable scale.** • **To adopt a participation system, or adapt existing systems**, to allow the participation of stakeholders from the beginning of the activities also through the use of *citizen science*, where the citizen itself contributes to the data collection and field observation, also creating greater individual environmental awareness. All the documents produced should be **shared** with **stakeholders**. • **To repeat participation events periodically,** capitalising the interest and willingness expressed by the parties intervened in the activities carried out, to evaluate actions aimed at protecting the coast, to be agreed with the authorities responsible for coastal management. • In terms of the possible continuation of direct participation in CAMP areas, there are two

Lessons learned	Recommendations
• Sharing **results on the activities that were implemented** with key ICZM players in the area, has made it possible to **promote codes of good practice for the proper management of the beach-dune system and reduce pressure on the system itself** at the level of the public authorities, economic operators and non-governmental organisations.	proposed strategies: (i) the provision of local forums on ICZM as permanent spaces for discussing the planning and management processes of coastal areas and for proposing new ideas for ICZM at local level; (ii) the means already made available by the Regions (e.g. IoPartecipo Emilia-Romagna) for participation linked to individual ICZM projects. • **To increase the knowledge on specific needs** of the population in relation to ICZM issues through targeted surveys, taking care of how to generate **interest** in the population to participate and, therefore, to provide meaningful information. • **To repeat and enhance awareness and dissemination of the results of** studies made at the regional, national and Mediterranean level, to contribute to the integrated management of coastal areas also on specific aspects.
Thematic Area 1 • Capitalising on the results of previous studies (monitoring, interventions, etc.) enables to **expand the knowledge base for the coastal territory** and to reconstruct a more detailed picture of the current state of the coast, of its morphological and sedimentological transformation dynamics, providing important contributions on which to base effective and timely mitigation strategies for events and the recovery of the beach-dune system's quality. • The monitoring and integrated numerical models developed represent **valuable tools in support of ICZM planning**, helping to define scenarios and, therefore, to provide guidance for the identification of intervention solutions. **Sharing** results and data, as well as tools and applications, is necessary for establishing programmes and strategies which have a supra-regional importance. • For **defining strategies and natural risk prevention and management policies at national level**, the results of the activities (and particularly AI. 2 and 3) represent a valuable contribution to the **interregional** planning process as part of the "National Round Table on coastal erosion", with particular reference to the preparation of the "National Guidelines for coastal dynamics management".	• To capitalise on the results of the Project, using appropriate processes and **regulations in the planning process regarding** the interventions in coastal areas**.** • To employ, implementing interregional coordination, the **good practice** developed by the project, such as methodologies and planning tools for identifying and resolving conflicts between uses of the sea in the coastal marine space, for preparing the "National Guidelines for coastal dynamics management". • To capitalise on the results of earlier coastal studies, for **expanding the knowledge base of the coastal territory, and for a** timely **sharing of the results of the activities**, collected data and knowledge gained with all the institutional entities involved. • **Assessments** on the effectiveness of coastal interventions **must be accompanied by a cost-benefit analysis** of them for the purposes of medium and long-term planning, also useful for economic operators involved in the sector. • To **monitor** and **apply models** on a **suitable scale,** in order to provide directions that take into account variables (natural and/or man-made) on a large scale, to make programming and planning of interventions sustainable in time.

Lessons learned	Recommendations
	• Apply the guidelines developed to a wider regional planning, both from a geographical (regional, national and Mediterranean planning) and thematic point of view (prevention policies for natural hazards). • Apply the methodologies and tools developed to **management plans** (e.g. beach plan), so they are properly considered as part of the programming process and intervention planning.
Thematic Area 2	
• The lack of a complete, adequate and up to date **knowledge base** of the territory and of the state of biodiversity conservation (i.e. fragmented information and datasets that are not constantly updated), constitutes an obstacle to the planning of activities related to the protection and sustainable use of coastal areas. • The measures identified to **increase shoreline resilience** (e.g. outsourcing strategies, possibly encouraging movement by allowing for increased volumes and surfaces), if properly applied, could have positive repercussions in terms of the environment (maintaining environmental quality of the territory), social (tourism, positive impact on the local population) and economic (no construction of rigid defences but rather soft interventions that reduce human pressure on coastal and marine ecosystems). • The activities have tested tools and measures (e.g. AI 1 monitoring; mapping stakeholders, etc.) to be adopted in awareness and **monitoring support** programmes**,** proposing, inter alia, a low-cost and non-invasive method of aerial monitoring (e.g. high definition drone, AI.6) of particularly sensitive environments with high environmental value, exportable to a larger scale. • Inadequate **data collection** and its systematisation and computerisation through the Web-GIS geographic platform are likely to prevent the full implementation of planned or tested methodologies. • **Assessment of the carrying capacity** of the islands, particularly that of small islands, is a necessary tool for the development of activities compatible with the specific characteristics of island environments, in particular for the transport, tourism, fishing and	• Base the measures intended to be proposed on an **ecosystem approach** and on a **cost-benefit comparative analysis**. The economic assessment of the environmental components cannot be separated from the choices and decisions that are made on ecosystems. • **Develop greater knowledge** of the distribution of the species and size of the populations of coastal and marine ecosystems, in order to both facilitate the adoption of measures that ensure the protection of the coastal landscape and its ecosystems, and to better guide the management interventions, monitoring the effectiveness and suggesting improvements. • Formalise **regulatory processes** (e.g. in the fisheries sector) at the regional level to make the results of CAMP actions effective and permanent. • Provide, especially for small islands, such as tools as the **evaluation of the tourist carrying capacity** (TCC), necessary for the development of activities compatible with the specific characteristics of the environment. The method adopted for the TCC

Lessons learned	Recommendations
waste sectors, as well as for the sustainable management of water resources.	should take into account, in an integrated manner, all the elements relating to the hydrological, geomorphological, climatic, ecological, socioeconomic and cultural systems; moreover, it must adequately take into account the use of the marine portion.
• Lack of **participation** by the local economic organisations can compromise the success of the actions undertaken.	• Ensure the **participation** and **involvement of stakeholders** in the protection of coastal ecosystems based on their knowledge and local customs, in identifying measures for the sustainable management and protection of natural habitats and landscapes.
• The implemented activities have identified **solutions for the sustainable use of coastal zones** of the CAMP Area taking into account specific local conditions, such as solutions to relocate and reduce the anthropogenic pressure (beach redevelopment, sustainable use, beach cleaning, access to beaches) and solutions to encourage sustainable coastal tourism that allows the preservation of local primary environmental, cultural and social resources.	
• The activities for monitoring and experimental restocking of fish species require the active collaboration of local fishermen; their **non-participation** or limited support of local economic organisations can compromise the success of the actions undertaken.	
Thematic Area 3	
• The activities have shown that **monitoring** is a valuable tool for developing economic activities to ensure the sustainable use of coastal areas.	• In order to ensure sustainable development of economic activities in coastal areas, it is recommended to use the **ecosystem approach** and tools such as **monitoring**; to encourage sustainable development practices of traditional coastal activities and sustainable coastal tourism actions, because they favour a reduction in the seasonal tourism pressure, also for the benefit of the protection of particular ecosystems (e.g. Dunes).
• The implemented activities have shown that interventions aimed at the sustainable development of traditional coastal activities and sustainable coastal tourism **promote a reduction in the seasonal tourism pressure**, also for the benefit of the protection of fragile coastal environments (e.g. Dunes).	
• The developed land-sea routes encourage **sustainable coastal tourism** that preserves the ecosystems, the natural resources, cultural heritage and coastal landscapes; promoting specific forms of coastal tourism, including cultural and rural tourism and ecotourism, while respecting the traditions of local populations.	• Adoption of land-sea routes by the public and private actors concerned, providing for their continued participation (with the involvement of tour operators) in management decisions, is a good practice, not only for the natural protected areas.
• The choice of **reusing existing brownfield sites,** to	• Programme sustainable reception facilities with

Lessons learned	Recommendations
create new sustainable reception facilities, can pave the way for other initiatives, reducing the pressure of investors towards the construction of new facilities on the coast. • The good practices for the achievement of a high eco-efficiency, applied to **renovated buildings intended for tourist accommodation**, in particular the reduction of water consumption and energy efficiency, can be transferred to other organisations (regional and national tourism sector).	high eco-efficiency, promoting **the reuse of abandoned existing buildings and discouraging the construction of new facilities on the coast**.

7.1 Lesson Learnt from the Horizontal Activities

7.1.1 Institutional and inter-regional coordination

The CAMP Italy Project has set up a de facto "privileged place" for sharing knowledge, needs, initiatives, as well as tools and methodologies and, above all, to define a common strategic vision for the promotion and implementation of ICZM.

The dialogue among institutions involved in the implemented events, highlighted the following needs:

- There is a need to define an ICZM model, strictly connected to the MSP and the sectorial Directives (such as the Water Frame Directive, Directive 2000/60/EC): there are different visions on goals and wording. According to different situations, it can be very difficult to coordinate and establish a dialogue between partners in order to achieve a common goal. It is therefore important to make clarity about who is responsible for what and then define in more detail what the responsibilities of the different institutions on the coastal zones management and related services are.
- There is a need to define a National ICZM Strategy and reference institution for ICZM, to serve as a reference to regional and local levels. The experiences of some Regions - such as Emilia-Romagna, and its adopted ICZM guidelines; or Sardinia, and the Sardinian Coastal Conservation Agency, as institutional body devoted to the implementation of ICZM - can represent models to be replicated in other Italian Regions.
- ICZM is not only institutional coordination, but also scientific research and practical and tangible actions. It is therefore essential to involve all stakeholders, in order to transmit knowledge to future generations and increase the dissemination of results, lessons learned among different institutions and actors involved in the ICZM process, to capitalize on the experiences of other institutions adapting them to their site-specific context, also in view of financial resources saving.

Within the CAMP Italy Project, the active collaboration of the partner administrations (IMELS, the Emilia-Romagna, Tuscany and Sardinia Regions) has shown that the sharing of methodologies and tools used, the exchange of experience and expertise can make a tangible contribution to the implementation of specific actions and the definition and development of interoperable and replicable methodologies at local, regional, national and international level.

In terms of interregional coordination, the dialogue among Regions underlined the natural tendency to create interregional partnerships. These opportunities arise in an informal setting and are quite related to funding opportunities (e.g. European projects). At the same time, it is evident the absence of a formal and

stable interregional coordination related to ICZM. The CAMP Italy Project is an attempt to interregional coordination, notwithstanding on a limited number of Regions. Despite the interest to cooperate, also expressed through the specific questionnaire on this issue, during the Project duration it has been very difficult to motivate the interest of the Regions on general aspects. The natural inclination of the Regions is to work mainly in the EU funded projects, where very high co-financing rates (sometimes 100%) allow the creation of strategic interregional activities for the territories. The work done in the Project implementation phase has shown that a greater interregional coordination on issues of ICZM can lead to a common benefit for the Regions and for the thematic policies tailed by the Italian Ministry of Environment, Land and Sea.

7.1.2 Capacity building

In order to manage the coastal zone in an integrated way it is necessary to have on the one hand a high technical/scientific knowledge of these areas, the physical processes characterizing them, the integration between the anthropic and natural component, the measures and technologies that can be adopted to manage them. On the other hand, the capacity to put in action an integrated management is need, passing through the coordination of different actors and their involvement in the management, since planning. In order to implement the ICZM, it is necessary to start investigating the existing stakeholders' knowledge and capacity and fill the gaps, if any. This was the path developed and tested by the CAMP Italy Project though the capacity building activity, that, as explained in section 5.1.3, included four main activities: (i) the identification of the knowledge gaps, by an on-line survey; (ii) the use of a basic e-learning course on ICZM, to widen and build a common knowledge among all stakeholders; (iii) participatory workshops, including an introductory learning session; (iv) information, awareness rising, dissemination and education activities, mainly for a general public and students; this last typology of activities was mainly carried out in the framework of the individual activities.

Both distance and face to face learning tools were used in the CAMP Italy Project, that allowed to test and compare the effectiveness of the different methodologies and the results they produced, as detailed in section 5.1.3, getting lessons and proposals.

As concerns the methodologies used in the CAMP Italy Project, the e-learning basic course on ICZM represented the first free one in Italian on this topic. The course was developed starting from the PAP/RAC basic MedOpen virtual course on ICZM for the Mediterranean, existing in English and in other languages of the Mediterranean, that was translated, updated and adapted to the Italian context. That tool was chosen, as mean to build a common knowledge basis on ICZM in the Mediterrean. Seventy registrations were recorded, from different stakeholders.

Moreover it has to be considered that the various stakeholders have different knowledge and involvement needs: public administration representatives have to manage the coastal zones, therefore they need to develop knowledge and capabilities necessary to this purpose; socio-economic stakeholders need to be able to actively participate in the management, to this purpose face to face participatory events seem a better solution, as the high appreciation from the participants for those held during the Project showed.

7.1.3 Data collection and management

As specified in the paragraph 5.1.4., the strategy of the CAMP Italy Project has been based on the open access to data. All technologies used in the development and implementation of the HA3 products are open source. However, these software technologies often have limitations, especially in the GUI (i.e. information displaying and loading) and layouts handling. These technical aspects sometime make open source software less attractive than other systems and limit their increasing use, especially for a non-expert user.

The ICZM Indicator Database has been based on the review and updating of the indicators already present in the literature, or on the results of other projects, international, national, and regional. During this activity, it was showed that several ICZM indicators already exist and, while addressing similar issues, they use different methodological approaches, often reaching inconsistent final results. This confirms the usefulness of having a single shared database with details and precise methodologies in order to ensure the standardization and consistency of the results, both on local and larger scale. The environmental, social, economic and governance indicators collected in the ICZM Indicators Database of the Project could find a broader application (national level), promoting the updating of national inventories of coastal zones.

Regarding the Information System, the experience gained from the Project has led to the development of guidelines for the interoperability of the information system (cf. paragraph 5.1.4.). Despite various limitations and delays due to organizational and implementation issues, the HA 3 actions have supported the update and integration of the existing coastal and marine datasets of the Project partners, especially related to the CAMP Areas. Open data sharing and access will allow optimizing decision making in the field of coastal zone management.

7.1.4 Public participation

The strategy for promoting public participation within the CAMP Italy project, as specified in paragraph 5.1.5, was based on two main axes: (i) the online participation through the joincampitaly.org platform and (ii) the direct participation of the actors, through the organization of three local forums. In terms of lessons learned, a specific analysis was performed for each of the two axes. As for the online participation, the joincampitaly.org site was developed at no cost, through the wordpress platform. The different sections of the website have been made through free plug-ins that, as such, have several drawbacks and do not allow interconnectivity between the different sections of the platform. Despite these limitations, the number of visitors was quite high (1,000 visitors per month) while the members of the Community reached 130. The number of visitors is still growing, reflecting the strong interest in the issues of the Project CAMP Italy. The results obtained for the online participation underline the opportunity to keep alive the project site and open the joincampitaly platform even after the end of the Project, simplifying and strengthening its web structure. In particular, its interactivity with social networks such as Facebook, Twitter, Instagram and WhatsApp should be improved. As for the direct participation, public meetings held in Cesenatico, Capalbio and Alghero have achieved the goal of involving the local public and private entities in the implementation of the Individual Activities of the CAMP Italy Project, and facilitated the exchange of ideas, opinions, suggestions, to bring out problems and solutions on the relationship between environment, economy and society in selected coastal areas. The three locations have been identified for their representative value of CAMP areas and for their direct involvement in the development of the Individual Activities. The discussions generated within the three forums were very stimulating, reflecting the differences that characterize the different territories in the field of ICZM and highlighting the peculiarities of the territory in relation to its promotion and tourism development. The suggestions received and collected during the meetings were incorporated in a final document (**Annex 14**), which analysed the strengths and weaknesses of the issues addressed in the forum itself. Moreover, in these locations the joincampitaly platform was presented. The platform is still available for all users interested in continuing the discussion on the topics addressed during the meetings.

7.1.5 Communication and result dissemination

Communication and dissemination activities have facilitated to convey the themes of Integrated Coastal Zone Management and the contents of the ICZM Protocol towards a wide and varied audience. While

partner Regions have focused on specific issues, mainly related to the themes of the developed Individual Activities, the tools used at Project level made possible to convey most strategic messages.

As foreseen in the communication plan, within the Project, it was necessary to work on both levels that actually coexist. ICZM has, in fact, a large number of messages that embrace very different themes: to face them simultaneously is quite complex.

The goal of communication in the ICZM framework – i.e. to change behaviour of the actors involved in ICZM - requires a great coordination effort. Such a task will remain in the hands of the institutions that participated in the Project. The CAMP experience shows that without the work of fitting and planning different aspects, the variety of activities related to ICZM get lost in a universe of non-organic content, which are therefore not effective.

7.1.6 Networking

All activities implemented by the Project have helped to develop the network through, for example, the exchange of information and activities of common interest, encouraging and supporting the exchange of knowledge, experience and data through the development of special tools.

The networking between the institutions and actors involved in the ICZM, both from the local scale to the Mediterranean and international ones, is essential to share experiences and create synergies. During the activities of institutional and inter-regional coordination, it has been shown the importance and the need to develop tools and moments for the consolidation of the network of knowledge, best practices and successful cases, as an example to be replicated, but also as an example on which to build future activities. Moreover it has appeared that the network development depends on the concrete funding opportunities, such as public funded projects (e.g. EC, UNEP).

The institution in charge of the Network could be the INFO RAC, as MAP Component (Mediterranean level) associated with ISPRA (national level). This collaboration could be the link between the national networks (in Italian language) with the international network (in English language). Other MAP component should actively contribute in the maintenance of the Network at international level and also for the development of the Network of CAMP projects.

In particular, as regards the Network of CAMP projects, it is worth highlighting how the network should aim to compare the projects and their results, identifying the main results that can be exported and replicated to other Mediterranean contexts, and above all, can contribute to 'implementation of the ICZM Protocol. Document sharing, strategies and tools developed within the CAMP projects could be supported by the system of data sharing (Groupware) following specific standard coding and classification, based on the Article of the ICZM Protocol, which they refer to. The **Matrix of consistency between the Project Activities and the ICZM Protocol**, provided by the Project CAMP Italy, can be a valuable tool to support these assessments and the CAMP network in the Mediterranean.

The Network for data collection and management was based on the identification of other sources of information, in addition to those provided by the Project that could support the activities related to Maritime Spatial Planning and Integrated Coastal Zone Management (MSP / ICZM), widely discussed in section 5.1.7. In this context, all entities that generate datasets should conform to recognized standards and should be responsible for the constant and continuous dataset update.

7.2 Lesson Learnt from the Thematic Areas

7.2.1 Planning of marine and terrestrial coastal areas

The coastal zones, as transition areas between the terrestrial and the marine ones, are characterised by fragile environments, complex geomorphological and hydrogeological, ecological and social dynamics.

Frequent conditions that make difficult coastal zone planning

- Poor understanding of coastal processes and dynamics, limiting the coastal management;
- Lack of adequate stakeholders' involvement, both in the planning and implementation phase of management strategies;
- Regulation and policy inadequacy, hindering mainly long term goals of sustainable coastal management;
- Bureaucracy and poor coordination among the different authorities limit the possibility to offer solutions meeting the real local needs;
- Lack of resources and support from the central authorities to favour local initiatives for sustainable management of coastal zones.

Coastal planning has to be able to adapt to territory transformation, with the help of adequate control and orientation measures. Coastal areas are defined as "sensitive" areas, being finite and decreasing resource, and for this reason specific legislative and planning tools have to be developed in an **integrated** and **participative** way.

The **participation** of the stakeholders involved in planning and management of coastal zones is fundamental for an effective implementation of ICZM. The participation purpose is to ensure integration among sectors and administrative levels, as requested by the ICZM Protocol.

Participation to be effective needs to be based on the **knowledge** of the problems to be managed by all involved stakeholders, as well as the **capacity** of public authorities to promote, manage and facilitate the participation. The information, education and awareness raising events and capacity building activities specific for public administration play a key role.

Competences overlapping should be solved also trough a sound planning. ICZM is based on an innovative legislative framework that support the reflection, the exchange and multidisciplinary action at different scales.

The CAMP Italy results, through products, methodologies and tools developed by Individual and Horizontal Activities, represent a valid contribution to a holistic planning of coastal zones and activities affecting them.

In particular:

- The developed **scientific-technical reports** and the implemented **databases**, represent an important knowledge basis of the coastal areas for the **assessment**, **planning** and **monitoring** of future possible actions (ref. Tuscany Region IA.1, 2 and 3, Emilia-Romagna Region IA.6, Sardinia Region IA.11).
- The **guidelines**, **recommendations**, **protocols** and the **instructions** for the development of strategies and action plans, represent **important tools to support planning**, with particular reference to the intervention for conservation and safeguard of biodiversity, important natural habitat and species (sea urchin, sea turtles, minor fauna) in relation to the topics covered by the IA (ref. Tuscany Region IA.1, 2 and 3, Emilia-Romagna Region IA.4-5-6, Sardinia Region IA.11).
- **Solutions and project proposed and/or realized to support sustainable tourism** and local coastal economy development (Emilia-Romagna Region IA.5 and 7, Sardinia Region IA.9, 10 and 11) represent **valid replicable reference models** for coastal socio-economic activities planning and pressures on coastal zones reduction.

- The **Matrix of consistency between the Activities of the Project and the ICZM Protocol** forecasts represent a valid analysis tool of the planned activities, for the assessment of the consistency between the activities and the Protocol articles.
- The methodology developed in the document on "**Significance of the CAMP Italy Project regarding maritime spatial planning, integrated coastal management, land-sea interactions**", with the mapping and analysis of the ecosystem services on the specific analysis area and the impact assessment of different CAMP activities, are important tools for the definition of the common Interregional Framework for ICZM in the Mediterranean, under the Barcelona Convention.
- **The Methodology for mapping Stakeholders** to be involved in ICZM represents a fundamental starting point for their involvement in the process.
- The **communication and education plans**, together with **participatory tools** developed and tested in the Project represent a good basis for the development of knowledge and capacities needed for supporting planning and stakeholder involvement in the process.

7.2.2 Protection, preservation and restoration of coastal and marine habitats

Ensuring preservation of the ecosystem integrity is one of the objectives of the ICZM Protocol (Art. 5). The importance of ecosystems is related to their ecosystem services (*Millennium Ecosystem Assessment*, 2005[7]), which is the ability to provide people and environment with different essential goods and services, such as:

- Provisioning services (food, water and other raw materials);
- Regulating services, which control the climate, the air and water quality, soil formation, and mitigate natural hazards such as erosion, etc.;
- Cultural services, which include non-material benefits, such as cultural identity, the recreational use of nature, etc.;
- Supporting services, which include the creation of habitats and conservation of biodiversity.

The integrated management of coastal zones should focus, not only on preventing the degradation of the coastal and marine environments, but also on strengthening the defences against the dangers that can threaten these environments. There is the need to move toward an approach that is based on the concept of ecological network, in which the human activities are as much compatible as possible with the environment (ISPRA, 2009[8]).

The Project activities, focused on biodiversity and conservation of habitats and species that characterize the coastal and marine environment, are intended to preserve the flow of ecosystem services by reducing and controlling the anthropogenic pressures that insist on particular habitats, and by improving the adaptation strategies to climate change. Specially, the Tuscany Region has evaluated the effectiveness of the recovery and restoration of sandy beaches subjected to a different degree of human and / or tourist use through the usage of river and coastal sediments, also in consideration of the effects of climate change. The Emilia-Romagna Region has considered the main habitats and specific coastal ecosystems (coastal dunes, river mouths; coastal thermophilic, mesophilic and hygrophilous forests, wetlands; brackish lagoons), as well as marine habitats. In addition, it has defined long-term environmental sustainability criteria for the development and consolidation of natural and artificial dunes, the re-naturalization of river mouths and degraded coastal areas, and for the protection and conservation of habitats and species with

[7] **Millennium Ecosystem Assessment, 2005. Ecosystem and Human Well-being: Synthesis. Island Press, Washington, DC.**

[8] **ISPRA, 2005. Il ripristino degli ecosistemi marico-costieri e la difesa delle coste sabbiose nelle Aree protette. Report ISPRA 100/2009.**

high conservation value. Finally, the Sardinia Region has implemented actions for the conservation and exploitation of marine biodiversity in order to limit the phenomenon of over-fishing and facilitate the sustainable management of fisheries resources. It has also identified concrete solutions for the relocations and decrease of the anthropic impacts on coastal areas by encouraging sustainable coastal tourism. The lessons learnt from these activities contribute to the preservation of ecosystems and to the enhancement of landscape, aesthetic and natural features of the CAMP areas, safeguarding their primary resources.

Thus emerges the importance of protection and consolidation of coastal dunes in order to ensure their multiple roles in the coastal protection, such as sediment reservoir against erosion, physical barrier against extreme events (storms and storm surges), fresh water reservoir and recharge zone of coastal aquifer against saltwater intrusion, and important ecological niches characterized by high environmental value and fragile ecological equilibrium. The dune reconstruction and protection measures are strictly related to the site-specific characteristics of the coastal area in which they are implemented; guidelines or best practices identified in the management protocols should include SWOT analysis (i.e. analysis of the strengths, weaknesses, opportunities and threats) of each intervention in the different contexts of application. The Tuscany's IAs bring out a series of considerations about coastal defence techniques. The use of 'hard' engineering structures was the historical approach used in Italy for coast protection. This approach has been largely abandoned in favour of 'soft' interventions, such as beach nourishment, which, however, cannot be considered without environmental consequences, especially in term of large amount of required sediment. As it is clear from the studies in the Tuscan CAMP Areas, there are different types of 'soft' interventions that have proven their effectiveness in stabilizing the shoreline, such as submerged and emerged geo-containers, as well as windbreaks for protection and recovery of the dune. In general, it should be noted that a well-planned and continuous monitoring (pre- and post- intervention) would guarantee the correct assessment of the durability of the intervention itself. The results of Project IAs on these topics have been also brought to the attention of the National Table on coastal erosion that has the aim to define national guidelines for the management of coastal dynamics.

As regards the tools and methodologies to support data elaboration, the Project IAs confirm the importance of numerical modelling for studying coastal dynamics, in particular solid transport processes, bathymetry evolution, morphology of emerged and submerged beach, as well as the effects of defence structures on the coastline, both at local and regional scale. In the ICZM context, the use of numerical models can help to identify the risks connected to extreme events or to evaluate long-term trends of coast, and then to plan interventions. However, it is essential to remember that no model, even the most refined and complete one, is able to take account of all the relevant and concomitant coastal processes. Please refer to the reports of the Tuscany Region for a more detailed discussion of this aspect.

From the IA 6 of Emilia-Romagna Region we can extrapolate important considerations regarding the interactions of anthropogenic pressures with biodiversity and ecosystem services, and an analysis of possible interventions for the protection and preservation of coastal and marine ecosystems. Even this pilot action highlights the importance of having medium- and long- term monitoring program of ecosystems. Monitoring should follow standard protocols and procedures to ensure comparability of the collected data. Decreasing the habitat fragmentation and identifying and preserving sites holding endangered species, are the main objectives of a plan that aims to rehabilitate coastal areas and increase biodiversity. It is necessary to create ecological networks and ecological corridors in order to connect various natural and semi-natural elements with the aim of reducing habitat fragmentation. The IA 6 provides several measures that can also be taken at the local level to increase the general ecological permeability of an area. The IA 11 of Sardinia highlights the importance of integrating coastal and marine activities, such as fishing, with the socio-economic sectors of the local areas, encouraging the involvement of local actors in the monitoring phases of fish stocks in order to develop a greater awareness on the fish amount, production processes, and

compliance with the rules of fishing (minimum catching size), etc. An important system of certification is represented by the EU Ecolabel, which helps to identify products and services that have a reduced environmental impact throughout their life cycle (EC Regulation n. 66/2010[9]).

7.2.3 Sustainability of social-economic stress on coastal zone

The coastal areas are used for a large number of socio-economic activities. These multiple uses are not always mutually compatible and may give rise to a wide range of pressures for coastal ecosystems. The terrestrial part of the coastal area is used for activities such as urban settlements, agriculture, industry and services, aquaculture, etc. The marine part for activities related to maritime transport, fisheries, mining, etc.

The coastal areas are exposed to an increasing demand for social and economic development. These pressures, as essential part of the economic growth, led in the last decades to a coastal anthropization linear model that focuses exactly on the coastline where leisure activities related to beach and sea are developed. The economic activities that insist on coastal zones use limited natural resources and may impact coastal ecosystems if the principles of protection and environmental sustainability are not respected.

The Project CAMP Italy has directly considered tourism and fishing activities through the Individual Activity 7 of Emilia-Romagna Region and Individual Activity 11 of Sardinia Region, and, indirectly, coastal defence through Individual Activities 1 and 3 of Tuscany Region, 4 of Emilia-Romagna Region and 9 of Sardinia Region. Individual Activities 7 (and as planned also Individual Activities 10 and 12) were specifically dedicated to sustainable tourism while IA.11 is the only action of the Project CAMP Italy devoted to sustainable fishing. Tourism is one of the fastest growing sectors in Italy, particularly in coastal areas and small islands. Marine and coastal environment quality is the most significant part of the tourism product offered by a tourism destination. A successful tourism strategy will try, therefore, to maximize the functional overall benefits to tourism development, preserving the natural environment and improving the socio-cultural context from which it depends.

The beaches are the main attraction of tourism and one of the main sources of income. One of the most serious consequences of coastal tourism, concentrated in the summer season, is that of a general decrease in the quality of coastal marine waters. Discharges of waste water, especially if handled improperly, are the most common source of negative effects on biota. The reduction of biodiversity and the reduction of natural resources are the other two major impacts of tourism on coastal systems. On the one hand the tendency to exploit of marine and coastal resources and the related ecosystem services related to the increase in economic value of the coastal area and on the other the need to reduce, mitigate and make sustainable its negative social and environmental impact. Environmental change is an inevitable consequence of the growth of coastal tourism and becomes essential to maintain this change within acceptable limits. Planning and coastal zone management must be based on knowledge of social, economic and environmental carrying capacity, and at the same time of tourists satisfaction. The carrying capacity refers to the ability of an ecosystem to support the use of natural resources. The strategy of the CAMP Italy Project as regard to sustainable tourism has been based on the definition of specific management models potentially replicable to other coastal zones in the same Region or in other part of Italy.

All individual Activities have been carried out with an informal participatory approach while for the Individual Activity 7 "Development and exploitation in protected natural areas of new forms of sustainable

[9] **EC Regulation n. 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel. 30.1.2010 Official Journal of the European Union, L27 1-19.**

tourism" a structured participatory process was adopted, which culminated with a local forum held in Cesenatico on the 20 September 2016. The other economic activities considered in the Project CAMP Italy is fishing. The sustainability of fisheries is threatened by coastal degradation due to the fact that most species reproduce close to the coast. In the process of planning and management of fishery resources a balance between the need to preserve biodiversity and habitats for present and future generations, and the need to support the fishing industry is required. The project called “G.I.R.A.” (Individual Activity 11), developed within the CAMP Italy project, allowed to establish a fisheries management model through an integrated system of environmental protection and support of traditional productive activities.

In terms of results, the CAMP Italy Project represents a concrete contribution towards the enhancement of the sustainability of socio-economic activities that affect the coastal area.

8 ASSESSMENT ELEMENTS FOR RESULTS OBTAINED

To assess the implementation of the Project and results obtained, combined evaluations of the results were carried out, focussing on elements laid down in the agreement between UNEP-MAP (United Nations Environment Programme/Mediterranean Action Plan) and IMELS (Italian Ministry of Environment, Land and Sea) on 26 March 2014, and its associated annexes, and in agreements with the Regions, in particular the addendum to the Memorandum of Understanding of 2 December 2008, signed on 23 December 2013 by IMELS and the Regions of Emilia-Romagna, Sardinia and Tuscany.

The descriptions contained in the target themes of the indicators were therefore considered, although the evaluation is not based *in the strict sense* of indicators for assessing the level of adequacy or success of the activities implemented, but on the basis of a so-called "expert judgement."

The following two sets of assessment elements were thus identified:

- **Elements for evaluating implementation**: these relate to the correct and timely implementation of Project Activities, both individually and overall. The evaluation takes into account activities actually implemented, and how much of the budget was used in relation to the amount projected. Specifically, 21 elements have been identified for evaluating implementation at Project level.
- **Elements for evaluating results**: these relate to the evaluation of Project results as they become available during the implementation phase and at expected times in the follow-up period, as well as the effects the Project has nationally and across the Mediterranean area. 14 items in total were identified for results evaluation.

The evaluation takes into account data and information gathered during implementation of the Project Activities, as well as results obtained and outputs produced. Note that qualitative evaluation is not based simply on numerical values but also takes into account elements such as difficulties arising from external factors encountered during the implementation phase and measures taken to overcome any obstacles, as well as the capacity to respond to these obstacles from the perspective of the overall Project and in respect of cooperation between Project partners.

The table below shows a list of assessment elements with descriptions, values (where applicable) and the related evaluation.

8.1 Factors for evaluating implementation

No	Evaluation element	Description	Value	Qualitative evaluation
1	Percentage of Individual Activities implemented, as envisaged by the Project workplan and technical specification	No. of Activities implemented/ no. of Activities projected x 100	78%	The 5 Horizontal Activities (HAs), with some adjustments resulting from Project requirements, were fully implemented. 5 of the 14 Activities (IAs) planned (CAMP Areas 3 and 4, IAs 9, 10, 12, 13 and 14) were not fully implemented. The result may be considered satisfactory in spite of the failure to implement certain Activities, mainly concentrated in two of the five CAMP Areas.
2	Timely implementation of the Project - percentage of the extension period to the Project, if any, compared to the original timescale for the Project.	Months of extension/ months projected x 100	90%	The Project was extended by three months on top of the 30 months originally planned. This was a limited extension compared to other projects. The timeliness of the Project was evaluated rather than the effects of slippage. The result may be considered satisfactory.
3	Compliance with approved budget (Horizontal Activities)	Percentage of budget used compared to projected budget	100%	The Budget for Horizontal Activities was adhered to. 100% was spent in relation to the estimated budget. The result may be considered satisfactory.
4	Adherence to approved budget for Individual Activities	Percentage of budget used compared to projected budget	-- (*)	xxx %(*) was spent in relation to the estimated budget: 5 Activities (CAMP Areas 3 and 4, IAs 9, 10, 12, 13 and 14) did not implement Activities and only one of these (IA 9) incurred costs charged to the Project. Of the costs incurred by partner Regions, xxx %(*) was eligible for co-financing by IMELS as they were in partial compliance with expenditure eligibility rules. The result may be considered only partially satisfactory.

No	Evaluation element	Description	Value	Qualitative evaluation
				(*) The final value will be inserted after the financial reporting.
5	Percentage of outputs produced compared to number of outputs projected	no. of outputs produced by the Project/ no. of outputs projected x 100	75%	HAs achieved 90% of expected outputs (**ref. evaluation element 12**), while IAs achieved 60% of expected outputs. The number of outputs produced by the Project is generally satisfactory, taking into account the complexity of the Project and the fact that failed implementations were mainly concentrated in two of the five CAMP Areas. Note that some of the tools and methodologies developed can be useful for ICZM purposes at national and Mediterranean level. The result may be considered satisfactory.
6	Number of people trained	No. of people trained in Project Activities + no. of people trained with the MedOpen course	~1000	Number of people trained: those who participated in forums and Project workshops (130), training activities for the various IAs (809) and the online course (70 up to 26 January 2017), the two interns and all partner representatives who actively took part in the Project, who contributed to developing overall knowledge and skills relating to ICZM. The result may be considered satisfactory with regard to the people who took part in the various events and activities for the online course, which was sponsored by the partners and participating CoNISMa universities, and also participants so far registered for the MedOpen course.
7	Expansion of existing database (approx. percentage of expansion)	Did the Project produce a sustainable shared coastal information system?		The Project has implemented a Spatial Data Infrastructure (SDI) for sharing coastal data. Limitations: the Web-GIS platform is only visible and accessible to individual users after entering login details; the Project datasets are not yet integrated with other ICZM datasets (which give access to services such as EMODnet Data Ingestion) in order to create a Mediterranean network of CAMP Projects; there have been delays in delivering datasets and this has limited their

No	Evaluation element	Description	Value	Qualitative evaluation
				implementation and standardisation in the Information System. HA3 tools and results have been used to update the coastal and marine database of Regions in CAMP Areas. Among the 14 IAs of the Project, 5 envisaged the development and updating of coastal databases, and of these 4 were completed (80% - three IAs in Tuscany and one in Sardinia). The result may be considered only partially satisfactory.
8	Number of national / local experts Involved in the Project.	No. of experts involved in implementation of HAs (including conferences and forums) and IAs	> 330	The following were involved in implementing the Project: a national coordinator and 5 team leaders; more than 300 experts for the Individual Activities; 12 experts for the MAP component. 9 of the experts signed up with the Community took part in the joincampitaly debate. The result may be considered satisfactory.
9	Number of actions involved	No. of forums + no. of actions launched by the platform and rolled out by IAs	27	The public participation strategy included: virtual participation in activities via the http://www.joincampitaly.org/ platform (a forum covering all Thematic Areas, blogs by IAs, surveys and a chat open to community members); on-site participation, with the creation of three local forums (one for each Thematic Area); 23 public involvement actions in IAs. The result may be considered satisfactory, given the complexity of the themes and diversity of contexts and stakeholders involved.
10	Number of stakeholders Involved in the programme	No. of subscribers to the platform No. of participants taking part in events	> 900	Direct and indirect participation in activities received strong support from the public and demonstrated great interest among stakeholders. The joincampitaly platform has 129 registered members, who have been in contact and involved throughout the process. 3 local forums were attended by 77 people, who were interested in participating in future forums. The result may be considered

No	Evaluation element	Description	Value	Qualitative evaluation
				satisfactory, given the complexity of the themes and diversity of contexts and stakeholders involved.
11	Contribution of MAP consultants, experts and professionals.			MAP experts contributed to implementation of Project Activities, albeit not continuously and in different ways depending on the particular RAC; they provided feedback on methodology, exchange of information and experience, and creation and maintenance of tools. Greater participation of MAP representatives in technical and public meetings that took place while the Project was ongoing would have been helpful. The result may be considered only partially satisfactory.

8.1.1 Horizontal Activities

No.	Evaluation element	Description	Value	Qualitative evaluation
12	Percentage of results achieved in respect of results projected	No. of results achieved/ no. of projected results x 100	90%	The HAs achieved the expected results, although not those projected in the inception report due to the lack of contributions and results from some IAs, and sometimes due to the absence of timely and substantial input by the IA. Methodologies adopted and tools applied were based on the concepts of combining activities and results obtained, and the possibility of replicating them at different times and in different spaces (other geographical contexts). By using tools that enable Project Activities to be analysed in conjunction with those of the HA, this has enabled all IA results from different CAMP Areas in partner Regions to be combined. The strategic value of the HAs is therefore

No.	Evaluation element	Description	Value	Qualitative evaluation
				interpreted by their definition of methodologies and tools that support ICZM. The result may be considered satisfactory.
13	No. of people who completed questionnaires		177	The sample of people from the database who completed the questionnaire in Italian is in line with percentages reported in the literature. Fewer completed the English version of the questionnaire (designed to extend the survey to the Mediterranean), and the number of those who completed it once open access was provided was also less, even though it was promoted on several occasions. The result may be considered fairly satisfactory.
14	Quality of available data			Coastal datasets from partner Regions were produced using sophisticated tools as well as monitoring and sampling methods in accordance with international standards. Data generated as part of Project Activities and source data provided by the partners are maintained and made accessible on the information platform operated by INFO/RAC, using interoperability protocols and ISO (International Organisation for Standardisation) standards, in compliance with INSPIRE principles (Directive 2007/2/EC INSPIRE). The result may be considered satisfactory.
15	Data harmonisation			The delay in developing and concluding the IAs has reduced the overall time remaining for finalising the planned Activities. Late delivery of datasets has caused a delay in the implementation and limited homogenisation of data, formats and coordinating systems in the Project SDI. The result may be considered only partially satisfactory.
16	Data availability			The datasets produced during the Project Activities are made available on the Project SDI and in some open data sections on Project partner websites (e.g.

No.	Evaluation element	Description	Value	Qualitative evaluation
				the LaMMA Consortium website). Not all the data produced and outputs of Project IAs have been put in digital format to be included into the Information System. However, the result may be considered satisfactory.
17	Data access (open source portals)			All technological components used to develop the ICZM Indicator database and the Project SDI are Free Open Source. However, login details must be requested from INFO/RAC to access Geo-Platform, and upload/download, view or query Project datasets. The result may be considered fairly satisfactory.
18	No. of active visitors to the web site		2,869	In the period March 2016 - January 2017 there were 2,869 visitors in total, with an average of around 260 visitors per month. This number of visitors is considered adequate for a specialist project such as CAMP Italy, compared with INFO/RAC. The result may be considered satisfactory.
19	No. of visitors to the joincampitaly platform		11,000	The joincampitaly platform has seen a steady growth in terms of visits and interactions: 11,000 individual visitors in 10 months, with an average of 1000 visitors per month, or more than 30 per day. An encouraging result considering that the freeware tool used is a basic version in terms of connectivity with social networks and other media. The result may be considered satisfactory.
20	No. of visitors to Facebook profile		4,380	The Facebook page has had a total of 4,380 visitors. The page provides *followers* with updates on all stages of Project implementation. The page has 303 likes and is linked to the CAP VAR (CAMP France) Project page. The result may be considered fairly satisfactory, taking into account the limited number of likes in comparison with total visitors.
21	No. of visitors to CAMP Italy videos (YouTube)		1,710	An emotive video and an information video (Italian and English versions of each), in addition to videos of communications events and local forums, have

No.	Evaluation element	Description	Value	Qualitative evaluation
				been filmed, presented and screened on several occasions, nationally and internationally. The emotive video has had 1710 views. The result may be considered satisfactory.

8.2 Elements for evaluating results

No.	Evaluation elements	Description	Qualitative evaluation
22	Provision of an integrated solution for sustainable development of the Project Area.	Has the Project enabled integrated solutions to be identified for sustainable development of the coastal areas in question?	A dynamic process combining Horizontal Activities has enabled the **methodologies and tools** used to be identified, and in some cases tested and adapted, to make them **interoperable and multifunctional,** and suitable for various interdisciplinary activities characteristic of the action in coastal zone management. The IAs have developed a set of products as tools that can be replicated or applied to other coastal areas nationally and internationally. The result may be considered satisfactory.
23	Sustainability of actions/solutions adopted for implementing Project Activities.	Did the local governance remain active after the Project ended? Was the Project a stand-alone action, or did it align with sub-national and national strategies (e.g. spatial plans)?	The tools and methodology used were based on the concepts of integrating activities and results, and replicating them in other times and spaces. The CAMP Regions have proposed and implemented activities for which there is institutional interest in their implementation over time. Most of the activities have the potential to continue in the follow-up phase. The result may be considered satisfactory.

No.	Evaluation elements	Description	Qualitative evaluation
24	Promotion of the sustainable use of major resources in the Project Area, or improved protection of resource productivity and ecosystems.	Has the Project promoted and/or implemented measures for the sustainable use of coastal resources in the CAMP Project Areas?	Measures have been proposed for the sustainable development of coastal activities, especially marine areas. The result may be considered satisfactory.
25	Implementation at Project level and country level.	Was the Project a stand-alone action, or did it align with sub-national and national strategies (e.g. spatial plans)? Did the Project influence national policies or strategies? (coastal/sectoral)? Did the Project influence changes in legislation and regulations at national level or sub-national region level?	The methodology developed and applied supported sustainable development policies in the Mediterranean, regarding in particular the definition of a Regional Common Framework for Integrated Coastal Zone Management in the Mediterranean (see article 17 of the ICZM Protocol). The result may be considered satisfactory.
26	Improved measures for protection against pollution, preparedness for emergencies, protection of natural habitats and biodiversity, and conservation of historic and cultural values, etc.	Have concrete measures to deal with pollution, emergencies, protection of natural habitats and biodiversity, preservation of historical and cultural values, etc. been put in place?	The IAs that were tested, whilst beneficial for the territory in question, are micro-strategy actions with limited impact. The result may be considered fairly satisfactory.
27	Introduction of capacity-building activities.	Did the ICZM CAMP contribute to building capacity in the area?	The Project has helped to increase ICZM capacity in the territory, particularly with its communication and participatory activities (online course and training carried out at

No.	Evaluation elements	Description	Qualitative evaluation
		Did the Project influence changes in educational or research programmes?	forums) for the specific activities carried out by individual. The result may be considered satisfactory.
28	Introduction of participatory activities and practices in the host country.	Was there major participation?	Participation is one of the pillars of CAMP Projects. For the CAMP Italy Project a virtual platform was used that had over 10,000 visitors, and participation in forums by local stakeholders (77 people), who contributed to implementation of the IAs and dissemination of results. The result may be considered satisfactory.
29	Formulation of a follow-up on the basis of the Project results.	Has the Project identified any follow-up action? Did the local governance remain active after the Project ended?	The Project has identified a follow-up programme. IMELS has adopted some measures that represent a concrete opportunity to continue some of the activities undertaken by the Project or consolidate the results of them with new development opportunities, for example the adoption of a major bilateral agreement with UNEP-MAP that includes a specific case for implementing the CAMP Project's Mediterranean network. The result may be considered satisfactory.
30	Increased public awareness.	Did the Project contribute to developing awareness of the importance of coastal zones and ICZM?	More than 20,000 people in total were reached by the primarily online communication tools (email newsletters, visits to the site, views of YouTube videos and Facebook posts, event participants, individual visitors to the joincampitaly platform, e-learning users). Awareness was promoted via all Project channels and directly to the various targets (institutions, experts, economic stakeholders and the public in general). The result may be considered satisfactory.
31	Input to national practices, such as:		The Project has defined and in some cases tested a series of **interoperable and multifunctional methodologies and tools** suitable for a wide range of interdisciplinary

No.	Evaluation elements	Description	Qualitative evaluation
	- application of tools and methodologies; - implementation of recommendations related to improvement of institutional and legal arrangements in the country or Project Area; - application of Project results in other areas of the host country; - initiation of similar programmes in the country; - assistance by host country institutions and teams in other countries, if any.		activities and applicable to any other ICZM project. The result may be considered satisfactory.
32	Contribution to the ICZM Mediterranean Network	Did the Project coordinate in any way with other CAMP Projects? Did the Project contribute to identification or (if applicable) implementation of the ICZM Protocol? (EU MS only) Did the Project support the implementation of EU legislation and policy (water, coast, marine)?	The Project was crucial for launching the idea, and therefore implementing the network of CAMP and similar projects; it created synergies with CAMP and other projects in which the partners were involved. All Activities carried out by the Project contributed to networking through, for example, exchange of information and activities of common interest. The Project also involved: - collaboration with CAMP France (CAP VAR) for exchanging information and methodologies, promoting respective activities and sharing an internship with CAMP Italy. - collaboration and coordination with CAMP France, CAMP Almeria/Spain, CAMP Morocco, CAMP Slovenia and CAMP Montenegro for governance and participation, and the proposal to develop a joint network of Mediterranean CAMP Projects;

No.	Evaluation elements	Description	Qualitative evaluation
			In terms of the Project's contribution to implementing EU legislation and policies, the proposal document on the **significance of the CAMP Italy Project in respect of MSP, ICM and LSI** has been drawn up to support the establishment of a Regional Common Framework for ICZM in the Mediterranean (article 17 of the ICZM Protocol), and implementation of the 2016-2021 mid-term strategy of the Barcelona Convention. The result may be considered satisfactory.
33	Indicators and evaluation	Did the Project contribute to developing the national framework for evaluation of coastal policies?	The entire database has wider applications for all studies that require collection, integration, and standardisation of data relating to the accumulation of knowledge on coastal management. The database and the information stored in it are a useful tool for supporting the Project Activities and future MSP (Maritime Spatial Planning) and ICZM activities. The result may be considered only partially satisfactory.
34	Obstacles and barriers	Did the Project encounter any obstacles (technical/institutional)?	In the absence of any national legislation in the area of ICZM, the Project encountered some technical and institutional obstacles in implementing some of the activities; in particular, for example: - the absence of national legislation on ICZM (the ICZM Protocol not being as yet ratified by the Italian government); - one of the Project Partners, the Coastal Conservation Agency of Sardinia, going into receivership and having a reduced staffing level throughout the entire implementation phase (2014-2016); - administrative reorganisation of some of the partners (the Regions of Tuscany and Emilia-Romagna);

No.	Evaluation elements	Description	Qualitative evaluation
			- the frequent lack of standardised data. The result can be considered only partially satisfactory.
35	Horizontal impact	Did the Project trigger or support other local ICZM projects?	The Project interacted with and subsequently supported other projects, including local projects or projects with local repercussions. The result may be considered satisfactory.

9 SIGNIFICANCE OF THE CAMP ITALY PROJECT WITHIN THE OVERALL CONTEXT OF THE MEDITERRANEAN

This chapter describes the part that CAMP Italy plays within the context of ICZM in the Mediterranean.

As mentioned, the Mediterranean coastal zones are still exposed to severe environmental pressures and degradation of coastal resources. Within this context, the CAMP Projects, which implement the ICZM Protocol of the Barcelona Convention as a reference tool, are an important starting point for encouraging a more concerted and integrated approach involving public and private stakeholders, which include civic society and businesses. This kind of inclusive approach is essential for addressing these problems effectively and achieving more sustainable development of the Mediterranean coastal areas. The concept of CAMP has evolved over the years, enabling concrete tools to support development of the coastal areas to be tested. CAMP Projects therefore are not only useful in solving problems specific to coastal areas, but are also carried out with the aim of reinforcing the national framework for marine and coastal management, both by supporting the establishment of various tools, in particular those adopted by UNEP-MAP (mainly the ICZM Protocol) and the European Union (including the marine strategy framework directive and the directive on maritime spatial planning).

These Projects are important not only for the host countries but for the entire UNEP-MAP system and all contracting countries to the Barcelona Convention. Networking is another essential element for getting other initiatives focussing on marine and coastal areas involved, so that it becomes a veritable network of coastal communities.

The CAMP Italy Project is a fourth-generation Project, created at the time the ICZM Protocol was drafted and adopted (2008), and put into effect when it became law in 2011. With the CAMP Project, Italy is honouring the commitment it took on when it signed the ICZM Protocol, embracing the entire ICZM philosophy; it has taken into consideration every type of situation found throughout the entire marine coastal environment in Italy. CAMP Italy is notable for its complexity, its extensive geographic coverage, the cases it handles and even its organisational and governance structure that make it unique within Mediterranean CAMP Projects.

Through a series of pilot Activities, the CAMP Italy Project has developed strategies and procedures for utilising coastal and marine resources in rational ways that protect the environment, with the aim of effectively identifying and testing methods, tools and practices for sustainable development of the coast, and enhancing Italy's historic and natural heritage.

In the words of the United Nations Environment Programme/Mediterranean Action Plan coordinator and United Nations Barcelona Convention secretariat, CAMP Italy is a prime example of the value of the concept underlying this type of initiative. It has made an enormous contribution to implementing the Barcelona Convention Protocol for integrated management of Mediterranean coastal areas in Italy as a major tool for accomplishing sustainable development.

It has also enabled objectives such as the future implementation of CAMP Projects to be tested and analysed, which require two developments in order to become even more useful as tools for implementing ICZM:

i. formation of a **CAMP Projects Network**; this development is included in the bilateral agreement between Italy (IMELS) and UNEP-MAP, and is aimed at transforming what are currently localised experiments where exchange of information and *best practice* is down to the goodwill of individual project organisers, into a structured, permanent tool that obtains results and data from the projects that are implemented, increases awareness of protocol implementation, and constitutes

an additional basis for reflection when planning new CAMP Projects, in order to take advantage of the experience gained;

ii. implementation of **transnational and international CAMP Projects** where the ICZM process should interact and integrate increasingly with other strategic and legal tools covering various marine-coastal issues, not just as concerns that particular country but involving multiple nations based on proximity of coastal and/or marine areas. These could include a CAMP primarily concerned with marine issues, involving several nations or sub-Regions of Mediterranean countries (as included in the EU directive on Marine Strategy). On an international level, the bilateral agreement between Italy (IMELS) and UNEP-MAP, which includes development of the network of CAMP Projects in its implementation plan, will enable the Italian experience to be rolled out across new international CAMP Projects.

The CAMP Italy Project, then, has developed tools and methodologies that are useful not only for managing the Project and within the national context, but can be replicated within CAMP Network Projects throughout the Mediterranean area and by the ICZM Common Regional Framework in the Mediterranean, and may be used by institutions responsible for coastal management, including international organisations operating in the Mediterranean area. As demonstrated earlier, there have been various results which are summarised here:

- First of all, the important **partnership with CAMP France** (CAP Var) that has been developed, including a joint internship.
- In terms of the targeted themes, **tools (specifically, operational guidelines and protocols) and strategies** have been developed through the implementation of Individual Activities, which can be replicated in other Mediterranean contexts for coastal planning, protection of biodiversity and ecosystem services, and in terms of the natural and anthropic element, reducing human-related effects on coastal areas related to activities such as fishing and tourism.
- By coordinating the activities of different institutions, the Project has enabled central and regional administrations to work together more effectively by developing integrated management and analysis tools for actions and results, such as the **Matrix for coordinating Project Activities with articles in the ICZM Protocol** to evaluate the compatibility of activities with respect to ICZM, which by applying them at the concept stage for ICZM projects may also prove useful in designing them.
- The **networking** activities carried out have enabled sharing of experiences and information between individual experts and institutions, with a variety of ICZM skills that can be used in the Mediterranean context.
- **Capacity building activities** have enabled dissemination of knowledge and development of skills in ICZM-themed areas which have filled knowledge gaps, with free access to online courses on ICZM in Italy in particular; this has prepared the way for a **methodology for mapping and categorising ICZM stakeholders** by establishing a database of information and contacts. This methodology will be easy to replicate in other Mediterranean contexts, and will be taken into account more immediately by CAMP France in its forthcoming public participation activities.
- **Tools and methodologies for collecting, analysing and organising data** have been developed; in particular, an online database for managing a series of indicators compatible with ICZM principles, and a Spatial Data Infrastructure for gathering information on coastal management, with an **open-source data management system** in line with INSPIRE Directive designed to disseminate information and data amongst stakeholders.
- Participation activity has engendered information and discussion on ICZM issues, with the creation in particular of the **joincampitaly.org online platform** for **public participation,** which can be replicated for other contexts.
- Two important **Project videos** have been produced (one short, emotive video and one institutional; both available in Italian and English), that can be used as tools for communicating ICZM themes and promoting them to the wider public, both in the Mediterranean area and internationally.

- Finally, the CAMP Italy Project has made a major contribution within the Mediterranean context with the analysis work it has carried out on the **significance of the Project for Maritime Spatial Planning (MSP), Integrated Coastal Management (ICM) and Land-Sea Interactions (LSI)**, which is covered in the following section (see **Annex 38 f**or the full version); a propositional or interpretational guideline document resulting from the CAMP Project, which provides material support for implementation of the Barcelona Convention medium-term strategy for 2016-2021 to be tested and subsequently proposed, and for identifying a Common Regional Framework for integrated management of Mediterranean coastal areas.

The activities undertaken and the tools and methodologies designed for sharing and exchanging knowledge and experiences, and for facilitating coordination between the various institutions and sectors involved, which have been developed and tested, have highlighted how these can make a positive contribution to implementing specific actions and identifying and developing interoperable methodologies replicable not just locally, regionally or nationally, but also internationally, and as such are compliant with the identification of a common strategic view on promoting and implementing ICZM.

9.1 Significance of the CAMP Italy Project in the context of Maritime Spatial Planning (MSP), Integrated Coastal Management (ICM) and Land-Sea Interactions (LSI).

The CAMP Italy Project was set up with the **strategic aim** of "**testing integrated coastal zone management**" (carrying out the provisions of the Barcelona Convention ICZM Protocol and EU ICZM Recommendation of 2002), by **applying tools and methodologies for planning coastal terrestrial and maritime space, and coordinating programming, planning and regulatory tools, to improve the capacity to coordinate the various structures involved in coastal zone management (governance), and vertical (stakeholders involved) and horizontal (industry sectors) integration**.

The Project was designed, therefore, to carry out actions aimed at:

- reducing critical issues (physical alterations of the coastal zone, loss of biodiversity, pollution);
- sustainable management of natural resources;
- conservation of natural habitats and biodiversity.

Having considered the national legal framework for the implementation phase of the Project, with particular reference to the absence of a specific legal instrument on ICZM (as Italy has not yet ratified the Barcelona Convention Protocol on Integrated Coastal Zone Management), the Project Steering Committee (Tavolo CAMP) decided to aim the results of the Project Activities at evaluating **the significance of the CAMP Italy Project in respect of the following issues:**

- **Integrated Coastal Management** (**ICZM** or **ICM**), of which the ICZM Protocol and European Union sector regulations (including recommendation 2002/413/EC);
- **Maritime Spatial Planning** (**MSP**), considered in the relevant Decisions taken by Barcelona Convention COP 19 as an innovative element that the Contracting Parties decided to implement over the following two years, subject to directive MSP 2014/89/EU and related Italian legislative decree no. 201 of 17 October 2016 for its implementation;
- related **Land-Sea Interactions** (**LSI**).

The interpretive document on the significance of CAMP Italy in the context of MSP, ICM and LSI, therefore, is proposed as a tool to support the attempt at the joint consideration of the ICZM Protocol and MSP

directive which is currently underway, by identifying a way of analysing land-sea interactions (for which there is no current uniform definition at international level).

Two **instruments** have been implemented and tested on some CAMP Italy Project Individual Activity:

i. a **matrix for analysing LSI**, which sets out a standardised approach for identifying LSI in respect of an Individual Activity (or Project Activity), and which analyses elements such as the geographical reference area, the main ecosystem services, human activity/pressure and natural phenomena, and the main policy and planning tools. The matrix also requires a gap analysis of the activity to identify improved proposals for appropriate consideration of SLI for similar activities;

ii. a **tool for analysing the mapping of ecosystem services and related LSI, and evaluation of the impact and effects of planning and management activities for coastal zones**. The suggested approach has enabled identification of a **significance matrix**, which connects human activity with the impacts it has on ecosystem services and reciprocal interactions, in socio-economic and environmental sustainability terms. The matrix, therefore, enables identification of the most suitable management method to ensure ecosystem services continue, and also analysis of the influence the actions have on them.

The methods and tools proposed can be applied equally to any coastal zone management activity, whether already implemented, in the planning stage, or newly-developed; an ex-post application enables evaluation of how consistent a specific activity is with ICZM, MSP and LSI; ex-ante application enables consideration of an activity in terms of its ICZM, MSP and LSI elements. It is precisely this dual interpretation that makes it an extremely versatile and effective tool, and is therefore useful for a number of different applications, such as evaluating or planning coastal zone management projects.

In this sense, **the CAMP Italy Project has enabled the testing of, and subsequently material support for, implementation 2016-2021 *Mid-Term Strategy* of the Barcelona Convention, including definition of a Common Regional Framework for Integrated Coastal Zone Management in the Mediterranean** (article 17 of the ICZM Protocol), and ultimately **assistance in interpreting the criteria and guidelines that will arise from implementation of the MSP directive** that must be taken into account in preparing for MSP.

The best way to capitalise on the results achieved and the experience gained during the Project is to continue working in an integrated fashion, by creating in particular a *follow up* to CAMP Italy; in the words of the PAP/RAC Director, this would be an enormous contribution to implementing the Common Regional Framework for ICZM in the Mediterranean.

10 FOLLOW-UP

The Project envisages a post-Project phase in which to capitalise on the results achieved and continue to reinforce and disseminate them, especially with regard to cooperation and networking. This activity will initially be carried out by the Project partners for their own institutional activities, and will cover monitoring and verification of how the activities are applied and results obtained.

Specifically:

- in terms of Individual Activities carried out, Regions will check their durability over time (which constitutes an essential characteristic of CAMP Project Activities) and the effect they have on overall integrated management of the coastal zone (which constitutes their "strategic" value);
- in terms of Horizontal Activities carried out, IMELS and PAP/RAC will cooperate to promote knowledge, potential for replication, and use of planning methodologies and tools developed by the CAMP Project, as applicable, for plans, programmes and activities at national, regional and international level.

To this end, the following have been considered:

- results achieved by the Project Activities, giving rise to suggestions for progressing them. The CAMP Regions have carried out certain activities, and it is their primary interest to implement them over time and see most of them continue in the follow-up phase;
- commitments made by the institutions concerned, both nationally and internationally; the application of Project results and continuation of certain activities may be beneficial for initiatives to carry out these commitments.

These are illustrated below.

10.1 Replicability and durability of Project Activities

Analysis and evaluation of the results achieved by the Project Activities, as referred to above, allows proposals to be put forward for possible continuation of the Project, involving monitoring them in terms of replicability and durability of actions by integrating strategic results for inclusion in the *modus operandi* of the institutions involved.

The table below lists the main results achieved by Individual Activities, and associated proposals put forward on the basis of lessons learned from the Project.

Individual Activity	Result	Proposal
AI1	• Digital database of existing data on the stretch of coast considered for the initial scenario. • Analysis and interpretation of data on morphology and sediment, for estimating levels of sediment along the stretches of coastline concerned. • Results of processing data on marine	• Sharing of data and methodologies developed; optimisation and application of this methodology in other parts of Tuscany and in other Regions. • Development and implementation of the initiative created with the local forums, to increase involvement of local stakeholders. • Consider surveying more individuals within a

Individual Activity	Result	Proposal
	weather, morphology and sediment with a digital model, to interpret sediment dynamics in the wake of marine weather events occurring between the first and second surveys. • Awareness-raising activities for ICZM.	greater number of categories.
AI2	• Digital database of existing data on the stretch of coast considered for the initial scenario. • Specific protocol drafted for the use of river sediments for beach nourishment, as part of integrated coastal and watershed management. • Results of processing historic data on climate, morphology and sediment, using digital models to interpret the sediment dynamics of various marine weather systems around the coast. • Maps of how the shoreline has evolved over a long period, produced with digital models of sediment levels along the shore. • Seminar on coastal erosion with discussion of Project results, and a questionnaire addressed to commercial beach holiday and tour operators in Carrara, to evaluate awareness of the problem of coastal erosion and its impact on seaside activities.	• Sharing of data and methodologies developed; optimisation and application of this methodology in other parts of Tuscany and in other Regions. • Development and implementation of the initiative created with the local forums, to increase involvement of local stakeholders. • Consider surveying more individuals within a greater number of categories.
AI3	• Processing data in digital format (e.g. digital shoreline). • Analysis and interpretation of data on morphology and sediment to estimate levels of sediment along the stretches of coastline concerned. • Existing database on the stretch of coast considered for the initial scenario. • Results of processing historic data on morphology and sediment using specific morphological evolution models.	• Sharing of data and methodologies developed; optimisation and application of this methodology in other parts of Tuscany and in other Regions. • Development and implementation of the initiative created with the local forum to increase involvement of local stakeholders, in particular protected natural areas (Tuscan Archipelago national park).
AI4	• Gathering information from existing studies and projects for quantitative and qualitative analysis of sediment in the area concerned. • Definition of guidelines for integrated management of deposits and an approach to using this.	• Sharing of data and methodologies developed; exploiting and applying results and methodologies in other parts of Emilia-Romagna and in other Regions. • Adoption and application of the guidelines proposed at regional, inter-regional and national level. • Development and implementation of the initiative created with the local forums, to

Individual Activity	Result	Proposal
		increase involvement of local stakeholders. • Consider surveying more individuals within a greater number of categories.
AI5	• Operational protocol for redevelopment and consolidation of natural and/or artificial/reconstructed dune belts • Draft plan for implementation of the protocol.	• Sharing of data and methodologies developed; exploiting and applying results and methodologies in other parts of Emilia-Romagna and in other Regions. • Development and implementation of the initiative created with the local forums, to increase involvement of local stakeholders. • Consider surveying more individuals within a greater number of categories.
AI6	• Report on the conservation status of species and habitats in coastal areas of Emilia-Romagna, in particular the Po Delta Park. • Guidelines for the protection of species and habitats under consideration.	• Sharing of data and methodologies developed; exploiting and applying results and methodologies, the guidelines in particular, in other areas of Emilia-Romagna and other Regions. • Development and implementation of the initiative created with the local forums, to increase involvement of local stakeholders. • Consider surveying more individuals within a greater number of categories.
AI7	• Planning of 6 land-sea routes: 1) The Bosco Eliceo landscape, history, food and wine; 2) Forests shaped by man, San Vitale and Punte Alberete; 3) The transitional waters from Comacchio to the mouth of the Bevano; 4) Route through the dunes; 5) The Crab, marine habitat; 6) Cervia-Cesenatico.	• Sharing of data and methodologies developed; exploiting and applying results and methodologies for using the territory in low season, in other parts of Emilia-Romagna and other Regions. • Development and implementation of the initiative created with local forums, extending it to other planned itineraries to increase involvement of local stakeholders.
AI8	• Proposal for a comprehensive strategy of online environmental education and creation of a web journal and web TV based on an analysis of current availability of means.	• Sharing of data and methodologies developed; exploiting and applying results and methodologies in other areas of Emilia-Romagna and other Regions. • Implementation of strategies for the web and other social communication channels.
AI9	• Path connecting the beach to the car park with a removable wooden walkway; consolidation and re-naturalisation of dunes by planting natural species; rationalisation of rest area and awareness-raising campaign by brochure distribution, signage and setting up an information point.	• Sharing of data and methodologies developed and to be developed; capitalization and application of the results and methodologies to other autonomous areas in Sardinia and other Regions. • Development and implementation of the initiative created with the local forums, to increase involvement of local stakeholders.
AI11	• Establishment of biological protection zones. • Testing of techniques for sustainable	• Sharing of data and methodologies developed; optimisation and application of results and methodologies in other autonomous areas in

Individual Activity	Result	Proposal
	exploitation of species concerned. • Raising awareness among sector operators to environmental protection issues and eco-sustainable fishing, involving local authorities and supervisory agencies. • Raising awareness on the issues of environmental protection, fishing and various types of sustainable consumption at all levels. • Introduction and application of methods for resolving traditional conflicts over the use of marine space. • Sharing of scientific knowledge on the biology and ecology of the species concerned. • Organisation of educational workshops at schools in the local areas.	Sardinia and other Regions with similar features and levels of criticality. • Completion of the activities planned and started to test lobster restocking. • Development and implementation of the initiative created with the local forums, to increase involvement of local stakeholders.

Table 14: Results obtained and proposals.

10.2 Commitments by institutions involved

As the CAMP Italy Project was being rolled out, IMELS took on institutional commitments both nationally and internationally, requiring initiatives that could be facilitated by applying the Project results and continuing certain activities in order to meet these commitments.

The most important agreement is the bilateral agreement between IMELS and UNEP-MAP, which identifies a number of areas of cooperation that form part of their mandate and the strategies for fulfilling it, and the work programme approved by the contracting parties to the Barcelona Convention, including:

- creation of the Mediterranean Network of CAMP Projects;
- promotion of governance tools for 'Blue Growth', including ICZM and other relevant instruments.

Reference may also be made to the twin projects co-funded by the EU, in which IMELS is a partner, created to form a supporting structure for the implementation of MSP, and incorporating direct involvement by major institutional partners:

- the 'SIMWESTMED' project for the Western Mediterranean;
- the 'SUPREME' project, for the Eastern Mediterranean.

Although relating to distinct geographical areas involving different countries and partners, the two projects involve the same activities in principle, which, as mentioned, could utilise the results of the CAMP Italy Project.