



MAREMED PROJECT

2010-2013

OPPORTUNITIES FOR DEVELOPING
NEW FISHERIES MANAGEMENT TOOLS
IN THE MEDITERRANEAN AREA

TRANSFERABLE FISHING CONCESSIONS

REGIONAL MANAGEMENT PLANS FOR FISHERIES



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The efforts carried out at the Community level in order to set ambitious goals and develop sustainable tools for the economic growth of the fisheries sector are commendable, especially now that the new Common Fisheries Policy (CFP) and European Maritime and Fisheries Fund (EMFF) are coming into shape. In this framework, the contributions given by the MAREMED Project, and by Marche Region as the Coordinator of the Fisheries theme, are of high value. This international Project has allowed to outline and develop strategies and operational tools for sustainable fisheries which are finely-tuned on the Mediterranean Regions, thus ensuring that the European policy orientations and objectives are properly integrated and aligned with the specific Regional requirements. The MAREMED Project investigations on new management tools for fisheries have highlighted that Regional Management Plans can be an effective way to develop all-round sustainable fisheries policies. Managing fisheries at the local level is of the utmost importance in the Mediterranean area, where traditions and cultural peculiarities play a fundamental role in shaping the fisheries sector. Other management models, such as those based on Transferable Fishing Concessions (TFC), do not seem in general appropriate for the Mediterranean sea and its high complexity. Hence, there is satisfaction for the orientations expressed at the Community level for a non-mandatory introduction of TFC systems. Another relevant priority addressed

by the European regulations is related to the sustainable development of fisheries areas through various initiatives, such as the creation of fisheries local action groups and the promotion of fishing tourism activities. The MAREMED Project has provided preliminary insights and advice in order to make these initiatives more effective at the Mediterranean level.

Other relevant issues highlighted by Marche Region in the framework of this project are the importance to maintain the temporary protection period, to develop specific measures for sustainable fleet renewal and modernisation, to provide support for new fishing vessel construction, to develop a strategic vision for employment and generation renewal. In addition, it is important to base local development on simpler and more flexible tools which are better calibrated on local requirements. Finally, in the framework of the EU strategy for the Adriatic Ionian Macroregion, it is of the utmost relevance to add value to the Mediterranean specificities, with special attention to fisheries and aquaculture, in order to set the ground for the "blue growth" and for an effective integrated maritime policy.

SARA GIANNINI
Regional Commissioner for Fisheries



The main aim of MAREMED Project (MARitime REgions cooperation for MEDiterranean), financed through the Transnational Cooperation European Programme MED (<http://www.programmemed.eu/>), is to **strengthen the coordination and integration of Regional maritime policies in the Mediterranean area, and to align them with those in force at National, European and Mediterranean levels.** The project focuses on those constituents of maritime policies with a strong transnational dimension, namely Integrated Coastal Zone Management, pollution (including small and medium scale accidental coastal pollution), adaptation to climate change in coastal areas, fisheries and coastal and maritime data management.

The project has drawn together fourteen Regional partners from France, Italy, Spain, Greece and Cyprus, coordinated by Provence-Alpes-Côte d'Azur Region together with the Conference of Peripheral Maritime Regions (CPMR).

The MAREMED agenda allowed on the one hand, to develop best practices and operational tools to support decision-making and governance at the Regional level, and on the other, to provide European policy makers with political and technical contents for better shaping the next EU policy and financial programming period (2014-2020), taking into account the main outcomes delivered by the project.

Within this overarching framework, **Marche Region's Fishing Department has been the Coordinator of the Fisheries theme.** During the first project work phase, Marche Region has carried out an overall diagnostic assessment in order to evaluate the state of application of the principal maritime and fisheries policies at the Mediterranean level, especially focusing on Regions partners of MAREMED project. The second project work phase has been devoted to the development of a series of pilot actions, aimed at better understanding issues that during the diagnostic phase were identified as highly relevant for the Mediterranean.

Marche Region designed and developed the following pilot actions: (i) Regional Management Plans for Fisheries; (ii) Fishing Tourism; (iii) Priority Axis 4 of the EFF on Sustainable Development of Fisheries Areas and Fisheries Local Action Groups; (iv) Transferable Fishing Concessions (TFC) - transferability, modes of applicability and management model analysis for the Mediterranean area. This brochure presents an overview of **fisheries management issues in the Mediterranean area**, and the results of the two **MAREMED pilot actions focused on specific management tools:**

- 1 - Regional Management Plans for Fisheries
- 2 - Transferable Fishing Concessions (TFC): transferability, modes of applicability and management model analysis for the Mediterranean area

More information on Maremed project and its pilot actions can be found on the official website of the project: www.maremed.eu



The Mediterranean Sea is a semi-enclosed basin with a surface area of about 3 million km² (Black Sea included), which is about 0.8% of the world's total sea surface. The Mediterranean is considered one of the most important marine areas in the world for its peculiarities and biodiversity levels.

The two basic features of Mediterranean fisheries are **the large variety of caught species and the absence of large single-species stocks** (with some exceptions, such as the bluefin tuna). Fishing activities in the Mediterranean employ several hundreds of thousand of people and have **artisanal fisheries** characteristics. The Mediterranean fleet is mainly composed of a large number of small (80% are 12 m) and relatively old fishing vessels, most of them are polyvalent and use a high variety of fishing gears. Vessels have a capillary distribution along the whole coastline, with fragmented landing sites and markets. The most significant catches in economic terms are represented by demersal fish caught by multispecific bottom trawlers; several groundfish species have traditionally

held great commercial importance at the local level.

The Mediterranean area has high geographical and sociopolitical complexity, and it is also characterised by a strong human pressure: indeed, fishing vessels from more than 20 countries, spanning from EU Member States to non-EU Balkan countries to Northern African countries, share the same pool of fisheries resources. Therefore managing Mediterranean fisheries is a complex process, with the presence of a large number of different fishing fleets in the same (shared) areas using a wide diversity of fishing gears. **Mediterranean fisheries are highly diverse and show strong geographical variations, not only because of the existence of different marine environments, but also because of the diversity of socio-economic conditions.**

Fishing activities have been carried out in the Mediterranean for thousands of years; current patterns are therefore the result of a long history, and not simply the outcome of specific and relatively recent management policies. **The presence of multispecific stocks and the wide variety of fishing systems and gears have favoured the adoption of management systems mainly based on the regulation of fishing effort** (limiting vessels' engine power and tonnage, limiting the number of boats or licences, limiting the daily time at sea, establishing fishing restricted areas and, occasionally, implementing closed seasons and temporary protection periods), **on the definition of a minimum landing size for the relevant commercial species, and finally minimum mesh size is also implemented for certain gears.** Neither Total Allowed



Catches (except for bluefin tuna) nor other types of adaptive management are adopted in the Mediterranean. A management system based on **catch quotas** is however applied to some specific fishery segments, such as clam fisheries.

Governments are also supporting the fisheries sector through subsidies for modernization of vessels, infrastructure and fishing equipment, often using EU funds. In general, economic measures are more effective than technical ones in managing Mediterranean fisheries. Some fishermen organizations contribute to local fisheries regulation through gentlemen's agreements. In some cases and for limited periods, the associations have been able to implement a "self-regulation" system based on specific rules that were followed by the whole fishing community, a behaviour that has even been studied by social scientists. However, even in such cases government directives have higher priority on their own rules.

An interesting case study is that of **clam fisheries in the Adriatic Sea**, where formal

consortia have been created (in agreement with the producers) for the regulation and management of resource exploitation, and for carrying out seeding experiments. Dredge surveys are carried out in order to set specific Catch Quotas, and management decisions taken by the consortia are based on scientific advice. Community-based management is another interesting approach to Mediterranean fisheries management. It gives authority to fishermen for the development of a regulatory framework and the protection of resources and local fishing activities.

Whatever the complexity of a system, **fisheries management always aims at achieving a balance between the status of fish stocks and catch levels, in order to ensure a long-term sustainability of fisheries.** This means that economic gains must be obtained without compromising the state of resources for future exploitation.

BACKGROUND

In 2009¹ the European Commission identified in fleet overcapacity and inefficiency associated to a general overfishing of stocks two of the main issues threatening the EU fisheries sector. The Green Paper "Reform of the Common Fisheries Policy" underlined a high criticism of the last 10 years of implementation of the CFP and advocated for its reform. In such a context, among the new measures scheduled by the legislative proposal published in 2011², the European Commission suggested a mandatory system of Transferable Fishing Concessions (TFC) for fisheries management, aiming at reducing fleet overcapacity and increasing economic viability of the fisheries sector.

Transferable Fishing Concessions (TFC) can be defined as a form of rights-based fisheries management that entitle the holder to a specific proportion of its Member State's annual fishing quota or allowable fishing effort. The mandatory introduction of a TFC system has however been widely opposed by Member States and it has been finally rejected by the European Parliament and Council. **The reformed CFP will therefore include the possibility to adopt a TFC system for fisheries management on a facultative basis at each Member State's discretion.** Indeed, given the diversity of fisheries in Europe, Member States should be allowed to choose the management system which is most appropriate for the specific characteristics and requirements of the national fisheries, based on a set of transparent criteria for economically viable, and environmentally and socially sustainable practices.

Stemming from these premises and in the framework of MAREMED project, **Marche Region coordinated and developed a pilot action on the applicability of Transferable Fishing Concessions (TFC) to the Mediterranean context**, in collaboration with other Project Partners, SVIM-Marche Region Development Agency and fisheries experts from the academic sector (Italy: Fano Marine Biology Laboratory of the University of Bologna, CNR-ISMAR of Ancona) and the private sector (Corsica: STARESO-Station de Recherches Sous-marines et Oceanographiques).

The study included an introductory analysis of the legal framework, background information and state of the art at the European level, and an evaluation of the appropriateness, transferability and modes of applicability of a fisheries management model based on a TFC system in the Mediterranean area, which is characterised by multispecific, multigear and small-scale fisheries, with a special focus on Marche Region and Corsica Region.

¹ EU COM (2009) 163 final. Green Paper "Reform of the Common Fisheries Policy".

² EU COM (2011a) 417 final. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "Reform of the Common Fisheries Policy".

EU COM (2011b) 425 final. Proposal for a Regulation of the European Parliament and of the Council on the Common Fisheries Policy.

CHALLENGES AND OPPORTUNITIES FOR A TFC-BASED MANAGEMENT MODEL IN THE MEDITERRANEAN SEA

Fisheries areas can be described as intertwined systems between one or more fish stocks and the group of fishermen exploiting them. The system's complexity depends on stock complexity, fleet size, technologies, etc.

As we have seen, the **Mediterranean system is intrinsically complex, since this area is characterised by fleets of diverse characteristics, using highly differentiated and mutually competitive fisheries systems, and exploiting fish communities characterised by the coexistence of a high number of interdependent populations of commercial interest.**

Within the non-Mediterranean EU context, which is the reference point for the development of European Community Regulations, the technical measures adopted for fisheries management have been mainly associated to the introduction of Total Allowed Catches (TAC), and this has facilitated the adoption of TFC-based systems. MAREMED partners observed that the TAC concept is based on biomass assessment for specific stocks and it is appropriate for single-species fishing; for this reason, management systems based on TACs and quotas are not broadly applicable in the Mediterranean (except for bluefin tuna). Fisheries management systems based on TACs and quotas, TFCs and similar rights-based systems have been developed during the last decades in a number of European countries (especially in Northern Europe). TFCs may be an appropriate management tool in such areas,



where fisheries regimes are characterised by industrial, monospecific and single-gear fishing. Conversely, a **fisheries management model based on TFC systems seems to be in general not appropriate and recommended for the Mediterranean context, due to the characteristics of its fisheries sector.** As we have seen, the Mediterranean sea is mainly characterised by artisanal small-scale fishing vessels, where each vessel usually catches a wide variety of species using several different fishing gears and systems, with high spatial and seasonal variability. All these features make the transferability potential of a TFC-based management system extremely low.

A management system based on TFCs or similar rights-based systems may perhaps be considered for the Mediterranean **only for specific fisheries resources, fishing areas, and fishing gears.** For example, a TFC system based on catch or time quotas may perhaps be feasible for **small-scale pelagic fisheries in the Adriatic Sea, such as anchovy and sardine fishing targeted by purse seining and pair**



trawling. For these fisheries, a management system based on Individual Catch Quotas, which could be integrated into a TFC concept, is already applied on the basis of legal requirements (national or EU regulations) or, in some Regions, of a self-regulated management. However, in the latter case the quotas fixed on a voluntary base are mostly market-driven, and biological considerations play only a secondary role.

In addition, such a system could be applied to the whole Adriatic sea only after having assessed the status of small-scale pelagic fish stocks for the entire basin, which implies a thorough data collection from all countries which share this basin. Moreover, the potential negative effects of this system on discard levels should also be taken into account. The application of this system would require stricter surveillance and control activities by fishermen associations and control bodies, but this may not always be feasible.

In Marche Region, TFC-related systems may be considered also for specific single-species and

single-gear fisheries such as **clam fisheries**, with direct management by Fishermen Consortia or Producers' Organizations, which have the responsibility to determine quotas within the overall limits defined by Member States.

Clam fisheries carried out with hydraulic dredges is based on the exploitation of sedentary resources (clams and other shellfish) and it is already regulated by a system based on **Territorial Use Rights in Fisheries (TURF)**. Marche Region has given in concession to each local clam fisheries fleet a specific area where fishermen have exclusive fishing rights, provided that they respect time and catch quotas. Recently, this territorial plan has been integrated by a **comprehensive Regional Management Plan**, which covers several coastal fishing systems (dredges, small-scale fisheries, mussel farming) and aims at harmonising the different interests at stake. Indeed, this is one of the main aims of management plans, which seem to be a more adequate tool for fisheries management in the Mediterranean, as highlighted by the MAREMED pilot action described below.



BACKGROUND

Through the «Management Plan» concept, the Common Fisheries Policy (CFP) has introduced a new approach to the management of maritime areas and the conservation and sustainable exploitation of fish and marine resources.

This approach aims at **safeguarding the marine environment as a whole** (the so-called ecosystem approach), and at enhancing a **sustainable management of fisheries by directly involving fishermen in the decision-making process** through a bottom-up approach.

The management plan tool gives fishermen a leading role and full responsibility for the management of specific fishing areas. Also, it facilitates the joint discussion of common issues, thus enhancing the outline of common and shared solutions. Indeed, a management plan can only be effective if it draws together all actors and stakeholders which are relevant for the safeguard, sustainable exploitation and management of a specific marine area, such as (i) fishermen, in terms of individual

fishing operators, enterprises and category associations, (ii) local authorities and public bodies (Region, province, municipalities, Harbour Authority, Coastal Guard, local administrations responsible for marine protected areas, etc), (iii) scientific research institutes carrying out studies and surveys in the area, since fishermen should partner with scientists to answer questions of mutual interest and address relevant management questions.

In this way, it is possible to create a sort of **territorial governance that takes into account all aspects (economic, social, biological, ecological, juridical, etc) affecting an area, thus allowing its effective management.**

The development of a management plan at the Regional level allows to solve issues that are related to a specific territorial structure and marine environment.

Such a management plan is tuned on the real needs of local communities, and it supports the conservation and sustainable use of fish and marine resources in a more exhaustive and appropriate way.

CHALLENGES AND OPPORTUNITIES FOR MANAGEMENT PLANS IN THE MEDITERRANEAN SEA

In the Mediterranean, effective management systems can only be based on the adoption of **multidimensional and multiannual planning tools**, which are able to ensure both resource conservation and socio-economic viability of fisheries through a single management scheme. Another crucial issue is that fisheries should be managed at a level as local as possible, involving all actors and stakeholders that are relevant for a specific area. **EU decisions should therefore provide a general and overarching framework, to be subsequently adapted to the specific requirements of the different areas.** With regard to the Mediterranean, EU regulations have regrettably not been followed by capillary planning and harmonization of management rules among countries part of the General Fisheries Commission for the Mediterranean (GFCM).

At present, it is still early to draw a balance on the effectiveness of management plans on Mediterranean maritime resources and fishermen incomes. Indeed, the results of the MAREMED project have shown that **in the Mediterranean most management plans are still in progress or awaiting for approval.** A total of 15 National Plans and 6 Regional Plans have been developed throughout the Regions involved in MAREMED project, as shown in Fig. 1-a,b below.

According to data and information provided by project partners, Regional Management Plans mainly refer to fleets that use a variety of fishing

MANAGEMENT PLANS FOR FISHERIES AT NATIONAL LEVEL

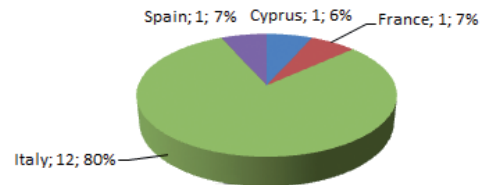


Fig. 1-a. Overall, 15 management plans have been developed at the national level throughout the Regions involved in the MAREMED project. The figure shows the proportion for each project partner (at the State level).

MANAGEMENT PLANS FOR FISHERIES AT REGIONAL LEVEL

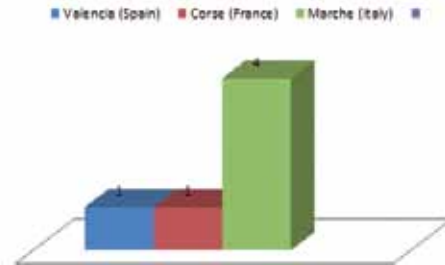


Fig. 1-b. Overall, 6 management plans have been developed at the Regional level throughout the Regions involved in the MAREMED project. The figure shows the proportion for each project partner (at the Region level).

gears and systems (e.g. bottom trawling, seining, longlines, small-scale fisheries' gears), and therefore they are not focused on single species due to the multi-specificity of Mediterranean fisheries: whatever the fishing system used, catches are almost always multispecific. Indeed, management plans tend to refer mainly to broad categories, such as demersal and/or pelagic fish resources, with just a few exceptions (for example, Corse Region has developed a management plan focused on a single target species caught with

a specific fishing gear: the European spiny lobster caught with traps).

Specific **measures and actions** included in Regional management plans are related to (i) an increase in net mesh size (more selective fishing gears), (ii) spatial and temporal restrictions on the use of fishing gears, (iii) restrictions in the number of fishing licences, (iv) specific restrictions on bottom trawling, (v) measures for the conservation of traditional fisheries, also by means of specific derogations to the EU and/or national regulations.

The **MAIN GOALS** of management plans, in the long run, are:

- to maintain fishermen incomes
- to enhance a sustainable use of resources
- to safeguard the marine environment, for example creating protected marine areas in sensitive zones (e.g. seagrass beds, maerl bottoms, nursery areas) where fishing is prohibited

The **MAIN CRITICAL ASPECTS** of management plans are related to:

- difficulties in obtaining correct and reliable data and information from fishermen and scientists (not enough scientific data available)
- difficulties in evaluating the degree of implementation of the technical measures included in the plans at the local level
- difficulties in overcoming conflicts between different types of fisheries operating in the same marine area

The **MAIN POSITIVE IMPACT** of management plans is that fishermen are forced to join in,

and therefore they are made responsible for, and directly involved in, the management of fishing areas. Management plans can be a vital tool for the conservation of biodiversity and the sustainable exploitation of resources in the Mediterranean, a sea populated by a high variety of species characterised by periodical and seasonal fluctuations. **Some specific recommendations can be drawn for the development of a fisheries management plan model finely-tuned on the Mediterranean area:**

- a) the area interested by the management plan should be defined at a level as local as possible (small management unit);
- b) the management plan should be focused on a single type of fishing system or gear and on just a few target species;
- c) a good knowledge of both biological and environmental characteristics and of socio-economic aspects should be achieved for the area of interest;
- d) the management plan should be shared and developed together with local fishermen, involving them from the very beginning of a plan's creation;
- e) regular monitoring, control and surveillance activities should be carried out, in order to verify the correct implementation of measures included in management plans.

Stemming from this project's results, such recommendations have been further developed in order to provide a series of common and shared guidelines for the development of effective management plans in the Mediterranean, as shown in the following schematic overview.

GUIDELINES FOR DEVELOPING FISHERIES MANAGEMENT PLANS IN THE MEDITERRANEAN SEA

Among MAREMED project partners, national guidelines for the development of management plans for fisheries have been created only by Cyprus (Fishing Effort Adjustment Plan of the Cyprus fleet, 2010) and Italy (Procedures and Implementation of Local Management Plans Ministry of Agriculture, Food and Forestry). These guidelines are mainly based on the management plans developed by these two Mediterranean countries, also taking into account FAO Technical Guidelines for Responsible Fisheries (1997) in support to the implementation of the Code of Conduct for Responsible Fisheries (1995).

The guidelines provide a general scheme for the outline of a management plan, and suggest some basic concepts that are relevant for the development of a sound plan. The main chapters that should be included in a management plan are indicated, and for each chapter some aspects are analysed more in detail. Specific suggestions for the Mediterranean area are also provided.

MANAGEMENT PLAN SCHEME

Chapter I – General part: Identification of the relevant area (management unit), scope of the management plan, description of target fish stock, marine resources and environment, subjects involved (fleet segment), legislative and operational framework.

Chapter II – Management plan structure: Definition of objectives, indication of measures and actions, definition and quantification of performance indicators.

Chapter III – Identification of the managing body and operational rules, including monitoring, control and surveillance activities.

Chapter IV – Identification of the research body in charge of scientific monitoring.

Chapter V – Financial instruments in support of the local management plan.

CHAPTER I – GENERAL PART

- Characterisation of the management plan scope.
- Identification of geographical limits and description of the management unit characteristics.
- Territorial and environmental description of the area interested by the plan.
- Description of fish and marine resources and habitats.
- Description of fisheries activities and spatial distribution of fishing effort in the relevant area.
- Legislative and operational framework already in place in the relevant area.

→ The management unit should be a **homogeneous area** with regard to both environmental and management features, and it should be defined **at a level as local as possible**.

→ A **map with specific references and coordinates** must be included, so that the area can be clearly identified from a geographical point of view.

→ It is important to identify the **fishing activities and fleet segment** relevant for the management plan, as well as the target species to be included.

Data and information on fleet and state of resources should be described in terms of:

- Type and characteristics of fishing vessels,
- Type and characteristics of fishing gears,
- Fishing systems, catch trends in recent years in terms of landings (fishing activity production),
- Commercial/economic value,
- Costs and gains.

Data must be accurate and reliable, and as detailed as possible. They should describe fishing activity in the area both in spatial terms (fishing zones) and in temporal terms (fishing frequency and duration).

If possible, data and information on fishing activity should be presented by means of tables and graphs.

Data on fish and marine resources should include all biological and ecological knowledge that could be relevant for the area.

The legislative and operational framework aims at providing an exhaustive description of the interrelation between physical, biological, socio-economic, management and regulatory features.

SPECIFIC RECOMMENDATIONS FOR THE MEDITERRANEAN

A good **characterisation of the management unit** can highlight the peculiarities of the area and strengthen the rationale behind a management plan. Since the Mediterranean is characterised by multi-species and multi-gear fisheries, it is recommended to develop **a set of separate management plans for different fishing gears/systems and target species**. If this is not possible, it is better to concentrate the efforts on a single management plan

focused on the most common fishing system, representative of a relevant fleet segment, or on one or a few fish species that have good local economic value or specificity. In this way, the management plan can support traditional fisheries and the local economy, giving an added value to local products and strengthening the relationship of the plan with the coastal territory, the conservation of its resources and the valorisation of its social and economic features.

CHAPTER II – MANAGEMENT PLAN STRUCTURE

- National management measures already in place in the area (Marine Protected Areas, fishing Quotas, etc).
- Specific management measures and actions proposed for the period of implementation of the local management plan.
- Definition of global and specific objectives of the management plan.
- Definition and quantification of performance indicators.

→ **Management objectives** should be precisely defined in order to contribute to the sustainable exploitation of stocks and marine ecosystems.

→ **Measures and actions** proposed in a local management plan should be more restrictive than those included in the European and national regulations. In particular, the plan should include technical measures aimed at increasing fishing gear selectivity and decreasing discards and by-catches, until the “zero discard” objective is reached.

→ A clear definition of timeframes and safeguard mechanisms in order to face and correct unforeseen developments should be set.

→ Objectives should take into account all possible **impacts** of the adoption of a local management plan: **biological, ecological and environmental**, as well as **socio-economic aspects**.

→ For each specific objective, a **performance indicator** should be identified and quantified starting from the baseline data (state of the art at the moment of the plan's inception), so that a standardised assessment of results and goal achievement can be carried out at regular intervals.

SPECIFIC RECOMMENDATIONS FOR THE MEDITERRANEAN

The part of the management plan which includes all specific measures and actions to be developed and the objectives to be accomplished should be discussed in conjunction with all stakeholders during a series of preliminary meetings involving fishermen, public administrations, scientists, and all relevant actors.

These **joint actions are preliminary** to the preparation of a management plan and are aimed at **avoiding evaluation mistakes** in the applicability of a plan, as well as **conflicts between stakeholders** during the implementation phase.

The importance of reaching wide consensus on the management plan is stressed also by the European regulations.

CHAPTER III – IDENTIFICATION OF THE MANAGING BODY AND OPERATIONAL RULES

- Identification of the Managing Body in charge of implementing the plan according to the operational rules set in the plan itself.
- Identification of the Reference Authority in charge of Monitoring, Control and Surveillance (MCS) activities to verify the accomplishment of technical measures.

→ The Managing Body should be **representative of subjects and categories** involved in the management plan. Its main functions are to coordinate the actions and interventions required by the plan and **to carry out MCS** activities, in collaboration with the reference authority in charge of controls when this is a separate entity.

→ The Reference Authority, on the basis of a **MCS** programme aimed at verifying the correct implementation of the plan, should allocate all required resources and determine a sanctioning system for those who do not respect the rules indicated in the plan.

SPECIFIC RECOMMENDATIONS FOR THE MEDITERRANEAN

The success of a management plan is related to its representativity in terms of categories of stakeholders involved: the more the categories that are represented by the Management Body, the more the aspects that can be taken into account, discussed and assessed in order to reach consensus and make the management plan effective. The ideal Managing Body in the Mediterranean is based on a **transversal**

governance concept and composed of all coastal community stakeholders (fishermen consortia, local organisations and bodies, scientists, etc).

An effective fisheries management is only possible if there is close cooperation and mutual acceptance between the interest groups, usually dominated by fisheries interests, and the management authority.

The debate between interest groups is made easier when all such groups have a real interest in the matter at stake.

The authority is responsible for ensuring that only **really interested parties are allowed to participate in the consultation** and that this consultation takes place and leads, as far as possible, to consensus and optimal decisions. This will require the establishment of structures and responsibilities within the management authority to:

- identify the valid interest groups;
- set up discussion and joint decision-making bodies, with clearly defined responsibilities, and to ensure that they meet on a regular basis;
- ensure adequate dissemination of research results, fisheries statistics, rules and other relevant material so that all interest groups are fully informed on fisheries management issues, and in the position to fulfill their responsibilities;
- publish and disseminate annual reports of the fisheries management authority.

The purpose of a **Monitoring, Control and Surveillance (MCS) system** is to ensure that fishery policy in general and the conservation and management arrangements for a specific fishery are implemented fully and expeditiously.

The more the fishermen are involved in the management process, the less the need for a formal MCS system to ensure compliance with the rules. Indeed, if fishermen are strongly involved in management plans, they will infringe regulations less frequently and will also take greater surveillance responsibility.

CHAPTER IV – IDENTIFICATION OF THE RESEARCH BODY IN CHARGE OF SCIENTIFIC MONITORING

- Identification of a suitable and experienced research body that can be in charge of carrying out environmental monitoring, and possibly scientific studies and surveys, in the area.

→ The research body in charge of scientific monitoring should have a **specific knowledge of biological, ecological and environmental characteristics** of the area included in the management plan, and should be involved in the preliminary (ex ante) assessment of the species and habitat status in the area.

→ The scientific body should carry out monitoring activities aimed at **assessing the biological impact of technical measures** adopted during (in itinere) and after (ex post) the plan's implementation. The assessment should be based on performance indicators indicated in the management plan.

SPECIFIC RECOMMENDATIONS FOR THE MEDITERRANEAN

The research body in charge of monitoring target species and impacts of the plan on the marine environment should collaborate with fishermen and relevant categories in order to obtain reliable fisheries data and information. It is recommended that the scientific body is situated in the local territory involved in the management plan, so that it has already developed a long-term relationship with subjects present in the area, and a good experience and knowledge of habitats and species living in the area.

The research body should also carry out scientific surveys aimed at monitoring and verifying data received from fishermen, and the impacts of measures on biological resources, in order to assess effectiveness through specific biological indicators. The outcomes should give **management indications to fishermen and management plan authorities**, so that the plan can be modified if necessary.

The mutual relationship between fishermen and scientists is often neglected due to the difficult interactions between the two worlds. Some preliminary meetings should be organised and facilitated by local administrations, so that the two parts can start a dialogue.

It would also be useful if **scientific results could be disseminated** among all local operators, stakeholders and interested parts, during ad hoc dissemination events such as seminars or operator training courses.

CHAPTER V – FINANCIAL INSTRUMENTS IN SUPPORT OF THE LOCAL MANAGEMENT PLAN

- Identification of suitable financial instruments to implement the management plan.

Financial contributions in support of local management plans (EFF art. 37, point m) can be allocated for the following types of intervention:

- Feasibility studies of the management plan
- Scientific consultancies
- Scientific monitoring of the plan
- Dissemination of results achieved by the plan

SPECIFIC RECOMMENDATIONS FOR THE MEDITERRANEAN

It is recommended to involve competent Local Administrations (e.g. Region) from the very **beginning** of a management plan development. The role of Local Administrations should be to **inspire and coordinate all different local components, in addition to their administrative and financial role.**

With specific regard to financial issues, it must be noted that bureaucratic procedures are often long, complex and not flexible, therefore an early planning of resource allocation by the Local Administration can increase the possibility to **allocate and manage at best the financial resources available** at the local territory's administration level.

All materials produced by Marche Region in the framework of MAREMED project, including **Reports, Recommendation Papers, Brochures and Audiovisual Tools**, can be downloaded from the official website of the project www.maremed.eu and from the website of Marche Region's Fishing Department www.pesca.marche.it. Printed copies are also available on demand, and can be requested at the following contacts.

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