AMP TOOLBOX GLOSSARY

- **Adaptive Marine Policy (AMP) Toolbox[14 30]:**

The AMP Toolbox is a one-stop repository of guidelines and resources to provide policy-makers, within the Mediterranean and Black Seas, the complete set of legal, scientific and predictive resources focused on the Marine Strategy Framework Directive (MSFD) to develop and implement effective adaptive marine policies over the long term.

Its main objective is to achieve or maintain Good Environmental Status (GES) required by the Marine Strategy Framework Directive (MSFD); as well as additional legislation and international agreements calling for the ecosystem-based approach to management of human activities impacting marine ecosystems.

Step 1 – Set the scene[30]:

This step defines the policy aims by identifying potential problem(s) and issue(s) regarding diverse uses of the marine ecosystem. For this, socio-economic and environmental analyses, combined with the review of existing institutional, political and legal framework in marine affairs, are established. In addition, generic environmental objectives are also set. Finally, it is crucial that stakeholders are clearly identified and get involved into each step of this process.

The scope and direction of necessary interventions are designed by comparing the current status of marine ecosystems with the desired one.

Step 2 – Assemble the basic policy[30]:

Once the issue(s) and desired objectives have been clearly addressed and defined (Step 1), the next necessary step (Step 2) is to propose diverse possible solution(s) and make an analysis of the policy proposals, considering in particular the existing measures.
Accordingly, Step 2 basically consists in two activities: (i) identifying, assessing, and prioritizing the measures (ii) ensuring the engagement of all stakeholders to enhance relevant and feasible ideas as well as to get the approval of the measures for a greater chance of success in the environmental managing process.

Step 3 – Make policy robust[30]:

The policy measures drafted must be assembled into a policy which is robust against future expected and unexpected conditions. Consequently, it is crucial to (i) identify key factors that affect policy performance as well as the scenarios to study the way these factors might evolve in the future; (ii) develop indicators to help trigger important policy adjustments when targeted objectives are not achieved.

Step 4 – Implement the policy[1][30]:

This step represents one of the key responsibilities for policy-makers. To be efficient, the implementation and development of environmental policies depend on various factors such as good governance, communication, sufficient financial resources, efficient coordination of actions, and stakeholder and public management, amongst others. It consists in a detailed planning and control of budget, thus the involvement of relevant institution(s) following a regularly updated protocol.

Step 5 – Evaluate and adjust policies[30]:

This step involves investigating (a) whether and to what extent the policy is effective in order to modulate or reformulate it if necessary, (b) how much of the problem has been addressed, (c) which action(s) need(s) to be conducted to optimise a sustainable management of the environment over time.

This implies constant monitoring and review process combined with the use of indicators previously established.

- ### Cost-Benefit Analysis (CBA)[4][12][19] :

CBA is a means of project or policy appraisal. It involves identifying and measuring, in monetary terms, as many of the costs and benefits as possible to relate to a particular project or course of action. This helps to determine whether the project or policy will produce a net gain or loss in economic welfare for society as a whole. The main stages of CBA consist in (i) defining the project, policy and/or management options (ii) characterizing the spatial and temporal scales of the analysis (iii) identifying the costs and benefits, and their monetary values (iv) calculating the "benefit-cost" ratios (v) assessing the impact(s) and examining which factor(s) positively or negatively influence the benefit costs. Nevertheless, CBA is not sufficient and should be associated with other studies such as Cost-Effectiveness Analysis (CEA), Multi-criteria Decision Analysis (MCDA).

- **Cost-Effectiveness Analysis (CEA)[9][33]:**

CEA is an economic methodology which evaluates the economically most efficient outcomes of a programme or project by measuring different relevant indicators depending on the objective (e.g. enhance education, improve human conditions, and restore a specific area). Then, it proposes different alternatives and priorities for the decision-maker(s) in order to determine potential and current strategy planning(s) (*ante* and intermediary evaluations) and its efficiency a posteriori (*post* evaluations).

- **Disproportionate cost(s)[15][23]:**

Disproportionate cost has been mentioned within the Marine Strategy Framework Directive (2008/56/EC - Article 14.4) and the Water Framework Directive (2000/60/EC – Article 4, 4.4. and 4.5. sections). Ideally, it should be judged with reference to cost and benefit curves, considering the nature of the project and the possible time-frame derogation(s) to reach the environmental objective(s) (i.e. the Good Environmental Status). In fact, to assess the disproportionality, the calculation of (1) the Cost-Effectiveness Analysis (CEA) which underscore the most cost-effective selection of measures and describe the potential additional cost(s) (2) the Cost-Benefit Analysis (CBA) (3) and the Viability assessment according to socio-economic and ecological criteria are required.

- **Drivers, Pressures, State, Welfare and Response (DPSWR) Framework[5]:**

The DPSWR is a useful framework to connect the effects of the marine socio-economic uses with the marine ecosystems as wells as the environment changes, due to these effects, on human well-being. In addition, it is also valuable to identify adaptive measures when necessary.

Driver: activities and social factors driving these activities, that use directly and/or indirectly marine waters;

Pressure: a means by which at least one driver causes or contributes to a change in state;

State: (set of) attribute(s) of the natural environment that reflect(s) its integrity regarding a specific issue;

Welfare: a change in human welfare attributable to a change in state;

Response: an initiative intended to reduce at least one impact state or welfare change.

- **Environmental Impact Assessment (EIA)[29]:**

EIA is defined as a systematic process to predict, identify, and evaluate the environmental effects of proposed actions and projects. It is used to prevent and mitigate adverse impacts, enhance positive impacts and assist the rational use of natural resources to maximize the benefit of socio-economic development projects and ensuring sustainable development.

Once adverse impacts are identified from the proposed project, advance corrective measures can be incorporated into the project which helps developers to minimize environmental risks and financial costs.

- **Environmental Monitoring[40]:**

Environmental monitoring consists in a systematic approach to establish and/or assess the current state and processes of the ecosystem by collecting abiotic and/or biotic samples. In fact, analysing these samples help to determine and/or underscore any potential negative changes impacting species and/or its habitats (i.e. Environmental Impact Assessments), and define trends in environmental parameters. Furthermore, this surveillance should support the implementation of adaptive environmental policies to protect health of biodiversity and humans. Implicitly, it includes the involvement of governments, stakeholders, and the determination of relevant bio-indicators to follow the environment quality.

- **Global Monitoring for Environment and Security (GMES) Programme[11]:**

The GMES system, currently known as Copernicus (www.copernicus.eu), is a network for collecting and disseminating reliable and independent information concerning the environment and security. The data are obtained from monitoring the Earth from space and in-situ.
It aims at streamlining European activities and funds in the field of Earth observation. Consequently, it will assist decision-making by public and private authorities in Europe and support research.

- **Good Environmental Status (GES)[35]:**

The GES is defined as "*the environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive within their intrinsic conditions, and the use if the marine environment is at a level that is sustainable, thus safeguarding the potential for uses and activities by current and future generations*" within the Article 3 of the MSFD (2008/56/EC). It is based on 11 qualitative descriptors which imply that: (1) Biodiversity is maintained; (2) Non-indigenous species do not alter the ecosystem; (3) Population of commercial marine species is healthy; (4) Elements of food webs ensure long-term abundance and reproduction; (5) Eutrophication is minimised; (6) Sea-floor integrity ensures functioning of the ecosystem; (7) Permanent alteration of hydrographical conditions does not affect the ecosystem; (8) Concentrations of contaminants give no effects; (9) Contaminants in seafood are below safe levels; (10) Marine litter does not cause harm; and, (11) Introduction of energy (including underwater noise) does not affect the ecosystem.

- **Holistic management[24]:**

This concept is a whole comprehensive approach which considers social, economic and environmental aspects all together at a certain level of integration. Consequently, it is important to identify all the resources (e.g. humans, finances, equipment) and stakeholders involved into the management process. It consists in a planning process based on experts, marine surveys conducting in situ measurements and modelling tools in order to implement an efficient and sustainable marine management for current and future generations.

- **Infrastructure for Spatial Information in the European Community (INSPIRE) Directive (2007/2/EC)[34]:**

The EU INSPIRE Directive, published in 2007, aims to establish the infrastructure for spatial information exploited by the EU Member states in order to protect the environment. In fact, this directive obligates the EU public authorities to make their geographical data (e.g. satellite maps, buildings, roads, forests, urban areas, amongst others) available to the public and share the information between each other. Implementation of this directive has required an important effort in term of normalization at European scale. The INSPIRE Spatial Data Themes have been used in the Inventory of Research projects related to the Ecosystem based management, accessible from the Knowledge Base.

- **Integrated Coastal Zone Management (ICZM)[41]:**

ICZM is a dynamic process for the sustainable management and use of coastal zones based on the ecosystem-approach (EcAp). It considers simultaneously the fragility of coastal ecosystems and landscapes, the diversity of activities and uses, their interactions, the maritime orientation of certain activities, and their impact on both the marine and land parts.

It covers the full cycle of information collection, planning, decision-making, management and monitoring of implementation. Consequently, all relevant stakeholders should get involved along this process to ensure an efficient preservation of coastal areas and sustainable exploitation of natural resources.

- **International Union for Conservation of Nature (IUCN) Red list[20]:**

The IUCN Red list is a checklist of taxa describing general features of the aquatic and terrestrial species, but also assessing the conservation status. By following the existing IUCN Red list categories and criteria guideline, the level of extinction of a species can be established, such as Vulnerable (VU), Endangered (EN), and Critically endangered (CR), amongst others.

It aims to clearly highlight which species require specific attention due to an important level of threat in order to protect them by implementing efficient conservation measures and increase the scientific knowledge if needed.

- **MAP-EcAp[16]:**

The ecosystem-approach (EcAp) is a strategy for the integrated management of land, water and living resources that promoted conservation and sustainable use in an equitable way. As such, it is the guiding principle to all policy implementation and development undertaken under the auspices of UNEP/MAP Barcelona Convention.

EcAp also refers to a specific process under the UNEP/MAP Barcelona Convention, as its Contracting Parties have committed to implement it in the Mediterranean with the ultimate objective of achieving the GES of marine water bodies. This process aims to reach the GES through informed management decisions, based on integrated quantitative assessment and monitoring of the Marine and Coastal Environment. EcAp processes are harmonized with those of the MSFD.

- **Marine Protected Area (MPA)[27]:**

Marine Protected Area is defined by the IUCN as 'a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values'. It is considered as a marine management tool to achieve ecological and socio-economic objectives such as preserving marine habitats and threatened, depleted and/or commercial species, regulating human activities in order to prevent detrimental effects on the marine ecosystem. The techniques which are commonly implemented consist in prohibiting and/or limiting the access to this specific designed area to anthropic marine uses.

- **Marine Strategy Framework Directive (MSFD – 2008/56/EC)[35]:**

The EU Marine Strategy Framework Directive (2008/56/EC), published in June 2008, is the environmental pillar of the European Union's Integrated Marine policy and considers pre-existing legislations such as the Water Framework Directive (2000/60/EC) and Habitats Directive (92/43/EEC), amongst others. The objective is to achieve the Good Environmental Status (GES) by 2020 through 11 qualitative descriptors. The Directive also calls for the establishment of environmental targets and associated indicators to guide progress towards achieving GES. Additionally, due to the trans-boundary nature of marine ecosystems, the GES needs to be attained at a regional or sub-regional level thereby requiring coordination across countries within the same region or sub-region.

MSFD Descriptor 1 – Conservation of Biodiversity[3][26]:

"The objective is that the marine biodiversity is maintained". It means that the number and quality of habitats, as well as the species distribution and abundance are adapted to existing physiographic, geographical and climatic conditions.

First of all, the biodiversity is characterized according to 3 levels (a) diversity of living environments at different scales (from the cell structure to ocean); (b) diversity of species and its interactions between them and with the ecosystem; (c) genetic diversity between individuals within the same species.

To assess the conservation status of marine species and its habitats, scientific researches in genomics, Geographic Information System (GIS), and marine ecology, amongst other studies, are conducted. Furthermore, it also implies to clearly identify the socio-economic pressures on the marine environment. In addition, the legacy framework needs to be established to evaluate the marine policies' efficiency.

MSFD Descriptor 2 – Non-indigenous species[3][26]:

This goal of this descriptor is that *alien marine species, passively or actively introduced due to anthropic maritime activities, do not adversely affect the ecosystems*. In fact, the non-indigenous species may lead to unpredictable and irreversible changes within the marine ecosystem, such as inter-specific competition, predation, and/or the modification of habitats or food webs. In that context, these species are considered as invasive. Furthermore, the introduction of alien species may also cause economic impacts on human health (e.g. algal blooms).

Basically, the scientific studies aim to record the presence of invasive alien species, assess their negative and/or positive impacts on the marine ecosystem, socio-economic activities, and humans' health as well as determine their origins.

MSFD Descriptor 3 – Population of all commercially exploited fish and shellfish in good health[3][26]:

"Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock". In order to ensure these statements, the level of pressure of fishing activity is assessed following indicators such as the Maximum Sustainable Yield (MSY) index, or the catch per unit of effort (CPUE), amongst others. In addition, the reproductive ability of the stock is also considered by determining the Spawning Stock Biomass (SSB) for example. Finally, healthy and abundant stocks are characterised by high proportion of individuals, included large ones; therefore, the age classes and quantities of the stocks will be estimated from marine monitoring surveys.

MSFD Descriptor 4 – Abundant and diversified Marine Food Webs[3][26]:

"All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive ability". It involves (i) the monitoring of productivity (production per unit biomass) of key species or trophic groups (ii) the proportion of selected species at the top of food webs being assessed to address the structure, size and abundance of each component of the marine ecosystem (iii) the quantitative sampling studies and analyses to determine the distribution trends of key trophic groups/species are also undertaken.

MSFD Descriptor 5 – Reduced Eutrophication[3 26]:

"Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algal blooms and oxygen deficiency in bottom waters". Eutrophication is characterised by high nutrients' concentrations within the water column due to anthropic activities. Consequently, nutrient ratios (e.g. silica, nitrogen, and phosphorus), and the indirect and direct effects of nutrient enrichment will be measured. Dissolved Oxygen (DO), water transparency and/or turbidity are also relevant indicators in order to determine the level of eutrophication. Finally, the observation of algal bloom events as well as the presence of opportunistic macroalgae communities may also reveal this phenomenon.

MSFD Descriptor 6 – Sea-floor integrity preserved[3 26]:

"Sea-floor integrity is at a level that ensures that the structure and functions of the marine ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected". It means that different indexes need to be monitored such as the type, abundance, biomass and areal extent of relevant biogenic substrate in order to measure if the habitats are not damaged due to human activities. Moreover, the presence of particularly sensitive and/or tolerant species (i.e. diversity, specific richness, ratio between opportunistic and sensitive species) may describe significant changes in the condition and function of benthic communities.

MSFD Descriptor 7 – Minimum alteration of hydrographical conditions[3 26]:

"Permanent alteration of hydrographical conditions does not adversely affect marine ecosystems". The diverse criterion selected to measure the alteration state mainly consist in identifying and monitoring (i) the spatial characterisation of permanent alterations such as the measurement of the positive or negative extension of a specific habitat (ii) the impact(s) of permanent hydrographical changes on spawning, breeding, feeding areas, and migratory routes of the species functioning.

MSFD Descriptor 8 – Concentrations on contaminants with no negative effects[3 26]:

"Concentrations of contaminants are at levels not giving rise to pollution effects". The thresholds of substances or groups of substances are already established by current legislations such as the Water Framework Directive (2000/60/EC) and Environmental Quality Standards Directive (2008/105/EC). They will be measured within the water column, the sediment and the marine biota to assess and ensure a healthy marine ecosystem for short, mid and long-terms. In fact, it is important to highlight if there is a negative cause/effect relationship on marine organisms due to the concentration of (toxic) contaminants in an area. Finally, the occurrence, origin (where possible), extent of significant pollution events should also be defined.

MSFD Descriptor 9 – No contaminants in fish or other seafood[3][26]:

"Contaminants in fish and other seafood for human consumption do not exceed levels established by Community legislation or other relevant standards". This descriptor requires existing monitoring programmes which consist in estimating the levels, number, and frequency of contaminants within edible tissues of marine organisms commercially exploited. It mainly refers to contaminants such as heavy metals (e.g. Lead Pb, Cadmium Cd, Mercury Hg) and Persistent Organic Pollutants (POPs – e.g. PCBs, DDTs). In addition, the status of the marine environment will be also taken into account in order to establish priorities of conservation and/or protection of specific coastal and/or marine areas.

MSFD Descriptor 10 – Limited marine litter[3][26]:

"Properties and quantities of marine litter do not cause harm to the coastal and marine environment". By establishing the trends in the amount of litter within the water column, on beaches and in the marine biota for the coastal and marine environments, it may be possible to assess the potential pollution. First, it is important to characterise the macro (> 5 mm) and micro items (< 5 mm) such as the composition, spatial distribution and the source (when possible). Then, measuring the socio-economic, ecological and physiological impact(s) is also crucial to evaluate the phenomenon and implement coherent and adaptive marine policies afterwards.

MSFD Descriptor 11 – Energy and underwater noise[3][26]:

"Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment". The monitoring needs are quite large as there is a data deficiency regarding the distribution in time and place of loud, low and mid frequency impulsive sounds as well as for continuous low frequency sound. Indeed, one of the requirements is a set of underwater noise observatories for each regional sea expectation such as ESONET (European Seas Observatory NETwork – www.oceanlab.abdn.ac.uk) or LIDO (LIstening to the Deep Ocean environment – http://listentothedeep.com). This descriptor aims to define the intensity, spatial distribution, and anthropogenic sound sources, especially those which entail significant impact(s) on marine organisms (e.g. marine mammals).

- **Marine Spatial Planning (MSP)[8]:**

Marine Spatial Planning (MSP) is a dynamic process which aims to organize and optimize, ecologically and socio-economically, the different marine anthropic activities by analysing and zoning their spatio-temporal distributions for a marine region. It is an adaptive step-by-step concept, based on ecosystem-approaches, which provides an integrated framework toward efficient marine management guides and plans. It involves multi-stakeholders in order to increase the development and implementation's efficiency, prevent any conflicts (user/user and/or user/marine environment), and reach a coherent monitoring and evaluating performance.

- **Mediterranean Action Plan (UNEP/MAP)[37]:**

Initiated in 1975 by the United Nations Environment Programme (UNEP), the Mediterranean Action Plan is a regional cooperative effort involving 21 countries bordering the Mediterranean Sea. In the beginning, its issues have been focused on identifying and tackling marine pollution. Then, it has progressively included an ecosystem-based management of human activities impacting marine and coastal ecosystems by formulating environmental policies requirements, optimizing the options for policy-makers and enhancing better governance. The main objective is to achieve sustainable development of marine resources for a long-term scale.

- **MedPAN Network[25]:**

The Mediterranean Protected Areas Network (MedPAN) is a network which has been created to preserve, protect marine biodiversity, and synchronize coherent marine management of maritime activities in a sustainable way. By implementing Marine Protected Areas (MPAs), promoting partnerships between Mediterranean countries, enhancing cooperation and collaboration operations, MedPAN consequently increase management effectiveness of the Mediterranean basin at different scales (short, mid and long terms). Organisations such as RAC-SPA of the UNEP/MAP, WWF, and GFCM are key-players in this process, amongst others.

- **Multi-Criteria Decision Analysis (MCDA)[6][36]:**

Multi-Criteria Decision Analysis (MCDA) is a valuable strategic tool to support decision-makers by considering many alternatives and exposing their advantages and disadvantages in order to finally select the most relevant option and implement the meaningful environmental measures to achieve the targeted objectives. It helps to design priorities regarding environment management, adjust measures and protocols. However, it is crucial to clearly identify goal(s), consider all alternatives, evaluate the criteria of interest, and define the outcomes associated with each alternative taken into account.

- **Natura 2000 Network[10]:**

Natura 2000 Network is a set of natural (or semi-natural), terrestrial and marine areas which were identified and selected by European member states for preservation and protection programmes, considering the socio-economic context of areas under their jurisdiction. In fact, these sites or species represent an important heritage value, a rarity or fragility of wildlife, animal or plant, and their habitats.

This network aims to maintain biodiversity, ensure preservation and/or protection of species and/or its habitats, but also combine with socio-economic interests. By designing Special Protection Areas (SPAs) and Special Areas of Conservation (SACs), under regulations such as Bird and Habitats Directives (79/409/EEC and 92/43/EEC), and Convention of Biological Diversity (1992), Natura 2000 Network optimises suitable environmental management of natural resources.

- **Pilot case:**

The AMP Toolbox has been developed through a participatory approach. Stakeholder platforms involved in MSFD implementation have been set in four areas named PERSEUS Pilot cases: the Balearic Sea and Gulf of Lyon, the Northern Adriatic Sea, the Aegean Sea/Saronikos Gulf and the Western Black Sea. In these areas, expectations of selected stakeholders regarding support they may need to develop programme of measures (PoMs) aiming to achieve the Good Environmental Status (GES) have been collected and synthetized. These Pilot cases have been also be used for the first tests of the AMP Toolbox. It is the reason why the Knowledge Base embedded in the Toolbox is richer for these areas.

- **Policy-maker[39]:**

A person that defines the environmental objectives and outcomes by designing relevant environmental policies in accordance with the scientific and socio-economic data previously collected. The policy-makers play a crucial role within the dynamic of good decision-making.

Policy-makers provide a written statement of policies and/or directions in order to establish a sustainable and holistic management of the environment and its natural resources at different scales (e.g. national, regional, and local). They carefully, formally and precisely draft guidance(s) on the issues to be taken into account in reaching the best decision(s), considering the socio-economic context, the state of the ecosystem, and in accordance with the current legislation.

- **Programme of Measures (PoMs)[13]:**

Based on the initial assessment of the environment in the context of the MSFD, a Programme of Measures (PoMs) is an integrated set of measures selected according to ecological, economic and social criteria. These criteria are balanced through an integrated decision-making process to create an environment of sustainable management. Economic analysis will support the selection of the most cost-effective combinations of measures.

The objective is to pursue the environmental targets to prevent further deterioration with the overall aim of achieving and/or maintaining the Good Environmental Status (GES) by 2020 required by the MSFD.

- **Scenario development[28]:**

In the framework of adaptive policy elaboration, a scenario development is a methodological framework, based on existing literature and hypothesis, which considers current and future stakeholders' needs from ecological and socio-economic contexts. It reflects different assumptions about how current trends will unfold, how critical uncertainties will play out and what new factors will come into play. Furthermore, by defining clear objectives and being robust, it stimulates stakeholders' involvement.

It aims to provide better policy or decision support by highlighting the priorities and actions to facilitate adaptation to future change(s).

- **Signposts and trigger points[17][32]:**

Some of the inherent variability in socio-economic and ecologic conditions under which a policy must operate can be anticipated, and monitoring can help trigger important policy adjustments to keep the policy functioning well. The monitoring plan, including signposts and trigger points are designed before the implementation of the policy and prevent to face unintended impacts by tracking and define potential difficulties despite uncertainty.

Signposts - critical information to monitor so as to determine whether policy adjustment or reassessment is required.

Trigger points - threshold values of signpost indicators that put in place specific policy adjustments.

- **Social networking[7]:**

Facilitated by the Internet, social networking is widely used for enhancing or constraining collective actions. It represents a tool for adaptive forms of governance and co-management of the ecosystem as it promotes cooperation and communication operations between diverse entities (e.g. countries, regions, organizations).

Four idealized network models for social movements were defined by Diani 2003 depending on the segmentation which concerns the coordination/interaction work, and the centralization of the information: (i) "clique" movement; (ii) "wheel/star" structure; (iii) "policephalous" structure, and (iv) segmented-decentralized structure.

- **Specially Protected Areas of Mediterranean Importance (SPAMIs)' list[38]:**

The SPAMIs' list has been established by the Mediterranean Action Plan (MAP) as part of the Barcelona Convention through the Specially Protected Areas and Biological Diversity (SPA/BD) Protocol. Its management is ensured by the Regional Activity Centre for Specially Protected Areas (RAC/SPA) while the SPA/BD Protocol provides the selection criteria and procedures about protected marine and coastal that could be considered within the SPAMIs' list.

Its goals are to promote cooperation in the management and conservation of marine and coastal zones, as well as in the protection of threatened species and their habitats.

- **Special Area of Conservation (SAC)[31]:**

The Article 1 of the Habitats Directive (92/43/EEC) defines Special Area of Conservation (SAC) as "*a site of Community importance designated by the Member States through a statutory, administrative and/or contractual act where the necessary conservation measures are applied for the maintenance or restoration, at a favourable conservation status, of the natural habitats and/or the populations of the species for which the site is designated*". The main objectives are to prevent the deterioration of the ecosystem by determining priorities and implementing conservation measures, to restore, and to protect/preserve the biodiversity.

- **Special Protection Area (SPA)[22]:**

Designated by Member states, in compliance with the Birds Directive (79/409/EEC) obligations, the Special Protection Area (SPA) is selected because of the presence of rare and vulnerable birds, and for regularly occurring migratory species. It is identified and delimitated exclusively based on scientific criteria and should form a coherent network to ensure the most suitable territories in order to achieve an efficient protection of the vulnerable and migratory species. This site automatically becomes part of the [Natura 2000 Network](#) which aims to maintain biodiversity, ensure preservation and/or protection of species and/or its habitats, but also combine with socio-economic interests.

- **Stakeholder[1]:**

A person, institution, organisation or group that has some interest in a particular ecosystem such as oceans, seas, forests, aquatic areas, lands, amongst others. The stakeholders get involved into environmental management project(s) and play an essential role within the decision-making process. Therefore, their engagement and cooperation are crucial in order to prevent conflicts, to optimize improvement(s), and to tackle the socio-economic and ecological issues of the aquatic and/or terrestrial areas. They can positively and/or negatively affect the ecosystem depending mainly on communication, management and monitoring measures' efficiency and the implementation of laws at different scale.

- **SWOT Analysis[21]:**

The SWOT analysis summarises the Strengths, Weaknesses, Opportunities and Threats of an environmental strategy development and is useful as a basis to elaborate and assess future courses of action. It is a comparative method which assumes that the key environmental impacts have been previously clearly established. It focuses on the relationship between the environmental influences and strategic capabilities of a process such as policy-making, implementing measures, monitoring programmes, amongst others. It aims to characterise the positive and negative points in order to improve and optimise the success of the outcomes (i.e GES, sustainable development).

- **Uncertainties[2 18]:**

Fundamental and inevitable feature, uncertainty is a specific situation where the current state of knowledge is such that (i) the order or nature of things is unknown, (ii) the consequences, extent, or magnitude of circumstances, conditions, or events is unpredictable, and (iii) credible probabilities to possible outcomes cannot assigned. Although too much uncertainty is undesirable, thus manageable uncertainty provides the opportunity to make decisions. It can be tackled by increasing the knowledge about the ecosystem and socio-economic context; implementing operational predictive modelling; anticipating and assessing (potential) impacts and issues, amongst others.

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