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Joint Meeting of the Ecosystem Approach Correspondence Group on Marine Litter Monitoring
and ENI SEIS II Assessment of Horizon 2020/National Action Plans of Waste Indicators

Podgorica, Montenegro, 4-5 April 2019

**Agenda item 3: State of play of IMAP Implementation related to Marine Litter (EO10) and its further
development**

State of play of IMAP Implementation related to Marine Litter (EO10) and its further developments

*The meeting has been organized in collaboration with the European Union funded Project ENI SEIS II South
Implementation of the Shared Environmental Information System (SEIS) principles and practices in the ENP South
region – SEIS Support Mechanism*

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Note by the Secretariat

At their 19th Ordinary Meeting (COP 19, Athens, Greece, 9-12 February 2016), the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) adopted a novel and ambitious Integrated Monitoring and Assessment Programme and related Assessment Criteria (IMAP).

The IMAP foresees in its initial phase (2016-2019) of implementation, the following:

- Existing national monitoring and assessment programmes of Contracting Parties to be updated and integrated, in line with the IMAP structure, principles and common indicators;
- Good environmental status (GES) definitions to be updated and the assessment criteria to be further refined;
- Scale of reporting units to be defined, taking into account both ecological considerations and management purposes, following a nested approach;
- An updated and integrated data and information system for UN Environment/Mediterranean Action Plan (MAP)-Barcelona Convention with clearly set roles for data handling and assessment for the various components and with a user-friendly reporting platform for Contracting Parties to be developed.

In line with their commitment and UN Environment/MAP Programme of Work for 2018-2019, the Contracting Parties with the support of various projects, have progressed on national implementation of IMAP. Draft national monitoring programmes based on IMAP structure and objectives are close to be finalized or at the initial stage of implementation.

Decision IG. 23/6 on the 2017 MED QSR (COP 20, Tirana, Albania, 17-20 December 2017) recommended as general directions towards a successful 2023 Mediterranean Quality Status Report (2023 MED QSR) the following: (i) harmonization and standardization of monitoring and assessment methods; (ii) the improvement of availability and ensuring of long time series of quality assured data to monitor the trends in the status of the marine environment; (iii) the improvement of availability of the synchronized datasets for marine environment state assessment, including use of data stored in other databases where some of the Mediterranean countries regularly contribute; (iv) the improvement of data accessibility with the view to improving knowledge on the Mediterranean marine environment and ensuring that Info-MAP System is operational and continuously upgraded, to accommodate data submissions for all the IMAP Common Indicators.

The organization of the Ecosystem Approach Correspondence Group on Monitoring (CORMON) Marine Litter, in Podgorica, Montenegro (4 April 2019), with its discussions and recommendations, is expected to provide directions for the further development and finalization of the operational mechanisms for monitoring and assessing marine litter in the Mediterranean marine and coastal environment towards an integrated, basin-wide GES assessment aiming to progress the operationalization of IMAP Common Indicators 22 and 23, as well as to enhance the development of the IMAP Candidate Indicator 24.

The present Status report covers the activities and outputs carried out in the period from January 2018 to February 2019 and is aimed at reviewing the following issues for consideration of the participants to the meeting:

- a) Overview of implementation of IMAP EO10 Marine Litter;
- b) Data Standards and Data Dictionaries for IMAP EO10 Common Indicators 22 and 23;
- c) Monitoring Protocol for Floating microplastics;
- d) Integrated GES assessment including cross-cutting issues.

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List of Abbreviations / Acronyms

AaB	Adopt-a-beach
CI	Common Indicators
COP	Conference of the Parties
CORMON	Ecosystem Approach Correspondence Group on Monitoring
DD	Data Dictionaries
DPSIR	Driving Forces-Pressures-State-Impacts-Responses
DS	Data Standards
EcAp	Ecosystem Approach
EO	Ecological Objective
EU	European Union
GEF	Global Environment Facility
GES	Good Environmental Status
H2020	Horizon 2020
ICZM	Integrated Coastal Zone Management
IMAP	Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast and Related Assessment Criteria
IMELS	Italian Ministry for Environment, Land and Sea Protection
INFO-RAC	Regional Activity Centre for Information and Communication
MAP	Mediterranean Action Plan
MED POL	Mediterranean Pollution Assessment and Control Programme
MED QSR	Mediterranean Quality Status Report
MSFD	Marine Strategy Framework Directive
MTF	Mediterranean Trust Fund
NAP	National Action Plan
NGO	Non-Governmental Organization
PAP/RAC	Priority Actions Programme/Regional Activity Centre
SPA/RAC	Regional Activity Centre for Specially Protected Areas
SSFA	Small-Scale Funding Agreements
UN	United Nations

1. INTRODUCTION

1. The present Report presents the status of the implementation of the Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast and Related Assessment Criteria (IMAP), with regards to Ecological Objective 10 (EO10). It highlights the results and progress achieved under relevant themes of the UN Environment/ MAP Programme of Work for 2018-2019 by MED POL, in line with Decision IG.22/7 on IMAP (COP 19, Athens, Greece, 9-12 February 2016) and Decision IG.23/6 on the 2017 Mediterranean Quality Status Report – 2017 MED QSR (COP 20, Tirana, Albania, 17-20 December 2017) addressing marine litter monitoring and assessment.

2. PROGRESS IN THE IMPLEMENTATION OF IMAP EO10 MARINE LITTER

2.1 Marine Litter Monitoring for IMAP EO10 Common Indicators 22 and 23

2. In accordance with Decision IG.22/7 on IMAP, and Articles 11 and 12 of the Regional Plan on Marine Litter Management in the Mediterranean (Decision IG.21/7), all Contracting Parties to the Barcelona Convention shall establish marine litter monitoring programmes as well as to designate those competent authorities being responsible for marine litter monitoring. MAP/MED POL programme continues to support the Contracting Parties in implementing their respective national marine litter monitoring programmes. Small-Scale Funding Agreements (SSFAs) were concluded with Egypt, Israel, Lebanon (pending), Libya and Morocco, and most recently with Tunisia. They are financed through the Mediterranean Trust Fund (MTF), including a support of the EcAp-MEDII and Marine Litter MED Projects, with the aim to:

- i. Develop national monitoring programme on marine litter; and
- ii. Support the implementation of some pilot projects which include marine litter monitoring.

3. The development of respective national integrated monitoring and assessment programmes (national IMAPs) for marine litter has progressed and is currently under development in Albania, Bosnia and Herzegovina, Egypt, Israel, Libya, Montenegro, Morocco, and Turkey.

4. The Contracting Parties, which are EU Member States are in an advanced phase of implementation of their national integrated monitoring programmes on marine litter. The national monitoring programmes established in line with the EU MSFD provide the conditions for implementation of IMAP requirements considering also its specificities.

5. Capacity building workshops to support national implementation of IMAP and related criteria for marine litter, were organized in Egypt (Alexandria, 26 – 28 February 2018), Morocco (Rabat, 19-20 February 2018) and Libya (Tunis, Tunisia, 12-15 March 2018). The workshops addressed the methodological and practical aspects related to monitoring and assessment of marine environment with regards to marine litter IMAP Common Indicators 22 and 23, as well as provided guidance and on the ground support for the implementation of the “Adopt-a-beach” and “Fishing-for-Litter” pilots envisaged in the framework of the EU-funded Marine Litter MED Project.

6. The IMAP monitoring protocols and assessment methods, sample processing, metadata, reporting templates, as well as the examples of existing national monitoring schemes and capacities compared to IMAP requirements and the guidance factsheets have been presented and extensively discussed. Another set of capacity building workshops to support completion of respective national IMAP-based monitoring programmes preparation for marine litter has been initiated in March 2019 and is expected to continue till May 2019.

7. A training workshop on IMAP EO10 Marine Litter was organized in Podgorica, Montenegro, on 22 November 2018, in the framework of the GEF Adriatic Project, for national experts from Albania and Montenegro dealing with marine litter monitoring.

8. In the framework of the Cooperation Agreement with IMELS, training workshops focusing on the implementation of the Adopt-a-beach (AaB) pilots at national level, including a component for the development of the national monitoring programmes on marine litter, and in particular on beach marine litter, were organized in Budva, Montenegro (23 November 2018), in Tirana, Albania (17-18 December 2018), and in Sarajevo, Bosnia and Herzegovina (6 February 2019).

9. Important exchanges between the Contracting Parties took place in the Regional Meeting on IMAP Implementation: Best Practices, Gaps and Common Challenges, held in Rome, Italy, from 10 to 12 July 2018; This meeting gave a good picture on the state of play of national IMAP implementation, showcasing progress including on marine litter.

10. The UfM Horizon 2020 Initiative recognizes the importance of solid waste including marine litter as one of the three priority areas causing major pollution in the Mediterranean Sea. Reduction of marine litter at source requires effective solid waste management in land which will subsequently minimize the input of litter ending up in the marine and coastal environments. Sound information about the waste generated in land will assist the Mediterranean countries to set realistic quantifiable reduction targets. Several workshops have been organized in the framework of the Capacity Building Component of Horizon 2020, in cooperation with the Countries to support the preparation of national monitoring programmes. Work is also ongoing for development of national facts sheets for marine litter indicators under IMAP and the H2020/ NAP-related indicators.

2.2 Development of IMAP EO10 Candidate Indicator 24

11. The MED POL programme continues to support the Contracting Parties with regards to the development of the IMAP Candidate Indicator 24¹, with a particular focus on reducing the impact of marine litter and micro litter in biota with a particular focus on endangered species. The Regional Activity Centre for Specially Protected Areas (SPA/RAC) in consultation with UN Environment/MAP MED POL is implementing a number of concrete activities in the framework of the EU-funded Marine Litter MED project.

12. The report “*Defining the most representative species for IMAP Candidate Indicator 24*” (UNEP/MED WG.464/5) has been prepared (available in both English and French) by SPA RAC.

13. Two special training sessions on sea turtles litter ingestion were organized during the 2017-2018 biennium, in cooperation and in synergy with the EU-funded INDICIT project. The first, English-speaking, training session for sharing technical skills on marine litter ingested by or entangled by sea turtles was successfully organized in Portici, Naples on 6 July 2017, with the participation of experts in sea turtle from Tunisia, Lebanon, Egypt, and Israel. A second, sub-regional, French-speaking, training session was organized in the rescue centre of Monastir, Tunisia, in 1-2 November 2018, with the participation of 10 experts in sea turtle, veterinarians and scientists from Algeria, Libya, Lebanon, Morocco and Tunisia. Both training sessions addressed a number of issues such as the observation of necropsy and dissection of a digestive tract for the collection of debris ingested by a loggerhead turtle, as well as different steps of collecting the marine litter from the oesophagus, stomach and intestines. The trainings also included practical sessions to perform some operations on intestines and samples, and to classify and identify all the types of marine litter in accordance with the most recent monitoring protocol(s). Both training sessions aimed at providing tools for technicians who will carry out the monitoring of marine litter ingested by sea turtles in the Mediterranean.

14. A specific Protocol on monitoring the amount of marine litter ingested by or entangling the selected species to harmonize methods and data collection has been developed in both English and French language. Cooperation and synergies have been established between MED POL and several EU-funded projects (e.g. INDICIT, MEDSEALITTER, Life Euro Turtles projects) with the scope to ensure coherence between the different protocols that are under development from the respective projects. To this extent, an agreement is in place between the EU-funded Marine Litter MED and the

¹ “*Trends in the amount of litter ingested by or entangling marine organisms focusing on selected mammals, marine birds and marine turtles (EO10)*”.

INDICIT projects in order to develop a single unified consistent protocol for the Mediterranean. The specific Protocol describes the most suitable methods for monitoring the ingestion of marine litter by marine turtles in the Mediterranean, dead or alive. It also describes the methodology intended to assess in a harmonized way rates of entanglement of marine turtles in marine litter, as back-up to the pilot monitoring approach. The specific Protocol on monitoring the amount of marine litter ingested by or entangling the selected species (UNEP/MED WG.464/6) will be reviewed during this Meeting.

15. Within the framework of assessment of available data to propose GES Targets concerning the amounts of litter ingested by or entangling the sea turtles, a specific questionnaire has been prepared and disseminated through the SPA/RAC focal points and the Mediterranean Marine turtles' specialists Network. Based on the responses received from the questionnaire, the first draft of the report "*Assessment of the available data to propose GES targets for IMAP Candidate Indicator 24*" has been prepared (UNEP/MED WG.464/Inf.3).

16. Furthermore, an agreement is under preparation with the marine turtle rescue centres in Tunisia and in Lebanon, to test and use the specific protocol, which is the next and final step under this project component. Meanwhile, SPA/RAC is defining the executing phases for the preparation of an operational strategy for monitoring the IMAP Candidate Indicator 24.

2.3 Data Standards and Data Dictionaries for IMAP EO 10 Marine Litter

17. The Data Standards and Data Dictionaries (DSs and DDs) set the basic information on data reporting within IMAP in Excel file spreadsheets format. They are aimed at guiding the data providers into filling the future Metadata Templates, the formats to be developed in accordance with this basic information on data reporting.

18. To that effect, and in close consultations with MED POL, INFO/RAC prepared the proposal of the DSs and DDs for the IMAP Common Indicators 22 and 23 (UNEP/MED WG.464/4), for review and comments by the CORMON Marine Litter Meeting under Agenda item 4.

19. The DSs and DDs for the IMAP Common Indicators 22 and 23 are based on the Metadata Reporting Templates for beach and seafloor marine litter, previously approved by the CORMON Marine Litter (Madrid, Spain, 28 Feb. – 1 Mar. 2017) and the MED POL Focal Points (Rome, Italy, 29-31 May 2017) Meetings, also considering related IMAP Indicator Guidance Fact Sheets.

20. For floating microplastics, the DSs and DDs are newly introduced for review to this meeting (UNEP/MED WG.464/4). MED POL in cooperation with InfoRAC are introducing for review and feedback of this meeting the basic methodological elements describing the sampling methodology and laboratory techniques and analysis for floating microplastics (UNEP/MED WG.464/Inf.4) prepared in line with the IMAP Guidance Factsheets. The proposed methodological elements for monitoring floating microplastics aim to provide technical guidance and to facilitate for the Contracting Parties to evaluate the abundance and composition of microplastic, found afloat in the Mediterranean.

21. Based on the developments at regional, European, as well as on other Regional Seas, an updated and revised IMAP list of beach marine litter items is proposed and provided under Annex I to the present document, using as reference the IMAP list of beach marine litter items as included in the IMAP Guidance Document (UNEP/MED IG.22/Inf.7), and as proposed by the Informal Online Working Group on Marine Litter.²

² [UNEP\(DEPI\)/MED WG.411/Inf.10](#): 1st Report of the Informal Online Working Group on Marine Litter

3. INTEGRATED GES ASSESSMENT FOR MARINE LITTER

3.1 2023 MED QSR Roadmap

22. In line with the findings of the 2017 MED QSR and Decision IG.23/6, as well the recommendations of the IMAP Best Practices Meeting laid out in UNEP/MED WG.450/3, the Secretariat has prepared the 2023 MED QSR Roadmap and Needs Assessment. It provides for a vision of a better integrated and DPSIR-based GES assessment of the 2023 MED QSR along with a short list of key priority needs, main processes and milestones and related outputs.

23. The 87th Meeting of the Bureau considered and welcomed the 2023 MED QSR Roadmap and Needs Assessment that was thereafter presented to members of the EcAp Coordination Group for written consultation, and consequently concluded by the end of 2018, as requested by COP 20. The 2023 MED QSR Roadmap and Needs Assessment, is being integrated into the proposal of the UN Environment/MAP Programme of Work (PoW) for 2020-2021.

24. In the framework of the 2023 MED QSR Roadmap, a number of activities with regards to marine litter are proposed as part of the 2020-2021 PoW, in addition to the activities which are currently implemented. These new activities include support for the development and implementation of the national monitoring programmes on marine litter; strengthening collaboration on a number of cross-cutting related issues; completion of work for the scale of assessment and integrated GES assessment; as well as expanding IMAP Info System for all marine litter indicators.

3.2 Cross-Cutting issues and common challenges

25. Based on common region-wide agreed Common Indicators (CIs) per Ecological Objectives (EOs), the underlying aim of IMAP is to monitor and assess the status of the marine and coastal environment towards the achievement of Good Environmental Status (GES) of the Mediterranean Sea and Coast. The determination of GES and the assessment on its achievement includes the main elements of the ecosystem and is closely linked to the effects of pressures from human activities (e.g. pressure-based ecological objectives). The evaluation of all IMAP EOs and its consideration as functional units of the marine ecosystem as a whole should allow the definition and assessment of achievement of GES.

26. Further work is required on a number of issues including: (i) the harmonization of monitoring and assessment methods; (ii) the definition of links between assessment scales, pressures and cumulative impacts on ecosystem components; (iii) the improvement of long time series of quality assured data to monitor the trends; and (iv) the improvement of data management and data accessibility through the MAP Info-System for all the IMAP Common Indicators (CIs). However, there is a need to address these issues in more detail for the period (2019-2021), and to this respect, criteria for assessments, reference and limit levels (baselines, thresholds, etc.), aggregation rules for the CIs and EOs, assessment scales (spatial/temporal), as well as continuous review of work progresses are considered critical to ensure an effective implementation of IMAP.

3.2.1 GRID/Table approach for marine litter

27. Pressures can be considered in the two following ways: (i) at source, i.e. focusing on the primary and main activities generating the pressure; this aspect is relevant for setting environmental targets and defining measures aiming at reducing the pressures in order to achieve or maintain GES; and (ii) at sea, i.e. the level of pressure in the marine environment to which the different elements of the ecosystem are subjected; this aspect is particularly relevant for determining GES for both IMAP pressure-based and status-based Common Indicators.

28. With its EOs and CIs, IMAP is the multidimensional measurement and assessment system of the Barcelona Convention within the application of the DPSIR approach. Therefore, the elaboration of a table with these two dimensions of the IMAP (i.e. by using the IMAP measurement information through Common Indicators cross-checked along their potential sources and origin) would produce an

assessment which should allow elucidating priority actions for natural/anthropogenic drivers and related policy responses.

29. Overall interrelationship between pressures and impacts for IMAP EO 10 Common Indicators 22 and 23, are provided under Table 1. This Table was prepared and presented during the Regional Meeting on IMAP Implementation Best³ (Rome, Italy, 10-12 July 2018), and the experts participating in this CORMON Marine Litter meeting are expected to review it, provide input as appropriate, and to be fully completed.

Table 1: Overall interrelationships between the IMAP EO 10, Common Indicators 22 and 23, and the main activities in terms of pressures in the Mediterranean Sea (based on ICZM Protocol and other Barcelona Convention’s Protocols).

EO	Common Indicator	Non construction zone	Natural Hazards	Natural disasters	Climate change	Agriculture & forestry run offs	coastal urbanization	Damming (demand on water)	Waste water discharges	Industry	tourism/frequentation	Yachting	Marine mining	Dredging	Desalination	coastal artificialisation	Port operations	Offshore structures	cables and pipelines	Shipping	oil and gas extraction	renewable energy	Fishing (incl. Recreational)	Sea-based food harvesting	Extraction of genetic resources	Aquaculture	Solid waste disposal	Storage of gases	Research and education	defence operations	Dumping of munitions
		Litter	10	CI22 Beached litter																											
		CI 23 Litter at sea																													

	Significant contribution of the activity to pressure
	Minor contribution of the activity to pressure
	No activity but possible development of the activity
	No contribution to pressure

30. Following the first step, experts can/may better define/refine specific interactions, for activities contributing to pressures at Common Indicator level for marine litter. The proposed approach is to cross-map appropriate activities (with minor and significant contribution to pressures) with the Common Indicators, considering sub-regions, or, if relevant and appropriate, subdivisions (using as appropriate the nested approach). An example of pressure/impacts interactions at sub-regional level for key pressures, for IMAP EO10 Common Indicator 23, also considering subdivisions, which may be subject to a possible further analysis, as appropriate, is provided in Table 2.

31. Table 2 was prepared and presented during the Regional Meeting on IMAP Implementation Best¹⁰ (Rome, Italy, 10-12 July 2018), for the four sub regions established in the Mediterranean for assessment purposes in the framework of Ecosystem Approach Roadmap. Some metrics and subdivisions are still to be refined to improve the analysis, prior to setting up any management strategy. This approach can support the definition of areas/sectors where appropriate reduction and management measures will be needed. It can also provide priorities in terms of specific baselines, thresholds, and finally targets, and support the monitoring of associated measures’ efficiency.

³ Included in the Working Document: UNEP/MED WG.450/3.

Table 2: Interrelationships between the IMAP EO10 Common Indicator 23 and activities contributing to pressures with consideration of scale of assessment (nested approach) in different sub-regions⁴.

EO	SUB REGION	SUBDIVISION	Natural hazards	Natural disasters	Climate change	Coastal urbanization	Waste water discharges	Industry	Tourism	Shipping	Fishing (incl. Recreational)	Solid waste disposal							
			EO 10, Common Indicator 23	Sub Region I	Subdivision a	Green	Red	Green	Red	Yellow	Red	Yellow	Yellow	Yellow	Yellow				
Subdivision b	Green	Red			Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow						
Subdivision c	Green	Red			Green	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Yellow	Yellow						
Subdivision d	Green	Yellow			Green	Green	Green	Green	Green	Green	Green	Green	Green						
Subdivision e	Green	Yellow			Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow						
Subdivision f	Green	Red			Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Yellow					
Sub Region II	Subdivision a																		
	Subdivision b																		
	Subdivision c																		
	Subdivision d																		
Sub region III																			
Sub Region IV																			

32. Table 2 is an example of a GRID/Table template for mapping pressure/impacts interactions for IMAP EO Common Indicators 22 and 23, taking into account the relevant geographical scale (i.e. sub-region, sub-division, etc.) and is expected to be the starting point to be completed to advance in a future integrated Med QSR 2023, at least for the four eco-regions established in the Mediterranean for assessment purposes in the framework of implementing the Ecosystem Approach Roadmap and 2023 MED QSR Road map.

33. Following the analysis presented in Table 2, the experts participating to the present CORMON Marine Litter meeting, are expected to review, complete and provide input on the tables included under Annex II to the present report, with the scope to better define the specific interaction between the activities contributing to pressures, and IMAP EO10 Common Indicators 22 and 23 around the Mediterranean. The experts should feel free to propose additional activities inspiring from the list of activities (i.e. ICZM Protocol activities) as provided for in Table 1.

3.2.2 Scoreboards Method: Quantifying pressures/impacts relationships; risk-based approach

34. Mapping of pressures/impacts relationships can be done using a risk-based approach. Risk-based approach is particularly effective for Ecological Objectives that are spatially patchy and where pressures are applied at specific locations. It is recommended to map the pressures that are most likely to have significant impacts, considering the vulnerability of various elements of the ecosystem.

35. Similarly, to the GRID/Table Approach, a variety of scales are necessary to reflect state-based assessments (i.e. ecologically-relevant scales for the various ecosystem elements: species, habitats, ecosystems), and pressure-based assessments aimed to guide management of human activities to reduce their impacts. The GRID/Table approach and the quantitative risk-based methodological

⁴ Four sub-regions have been defined for practical reasons and for the purpose of the UN Environment/MAP 2011 Initial Integrated Assessment (UNEP(DEPI)/MED WG.363/Inf.21), namely the Western Mediterranean, Ionian and Central Mediterranean, Adriatic Sea and Aegean-Levantine.

scoreboard approaches that rely on the calculation of numeric scores (i.e. criteria which should be based on EOs assessments along the spatial distribution of pressures-impacts and risks to the marine environment) for the IMAP integrated assessments could be seen as tools to support implementation of the DPSIR approach.

36. Scoreboard methods are similar to the GRID/Table approach; however, it uses numeric scores (i.e. assignment of a numeric value by categories) rather than colours alone, to allow calculating derived quantitative information. As well, the chosen scales would shape the final results obtained by scorecard methods and these are even more powerful when used with a risk-based approach focus.

37. In the absence of quantitative assessment criteria, semi-quantitative approaches should be a basis for mapping and quantifying the interrelation of drivers-pressures-impacts-state-responses relying on the best available expert judgment. Given the fact that IMAP implementation is at stage when monitoring and assessment scales are to be updated/agreed and tested, as well as aggregation and integration rules fully defined, at present the semi-quantitative scoreboards method is useful for mapping the interrelation of drivers-pressures-impacts-state-responses of complex processes, such as those present in the marine environment (e.g. considering in the vertical axis the economic activities and the natural elements that have great relevance according to the ICZM Protocol and other Barcelona Convention`s Protocols, whilst in the horizontal axis the EcAp/IMAP EOs and CIs). Scoreboards method should provide insights on impacts, which are directly relevant to the state-based assessment of the ecosystem with sufficient detail (e.g. impact on non-commercial species by incidental by-catch which would need to be separated into at least the specified species groups of birds, mammals, reptiles and fish; and preferably at species level, to feed into species-level assessments).

38. The state-based integrated assessments, combining the state-based Common Indicators as a set of ecosystem elements in a holistic manner, should cover the overall pressure-based Common Indicators affecting it (e.g. the state assessment of the benthic ecosystem should evaluate together the impact from the pressures such as physical loss, physical disturbance, non-indigenous species, nutrient enrichment, removal of species and others). Therefore, this level of detail based on the IMAP EOs and CIs should be the primary methodological basis to develop scoreboard, as well as assign scores, while relying on the best available expert judgment.

39. The added value of the combined synthesis of the semi-quantitative approaches and expert judgment is a clear vision on the requirements and responsibilities from both the managerial and measurement systems. Table 3 details the activities (originated by main drivers) which are commonly known and aligned with the current IMAP multidimensional measurement system (with their Ecological Objectives and Common Indicators) to address current scenarios of Pressures-State-Impacts. The table provided in UNEP/MED WG.463/Inf.10 presents an extension of this interrelation, relating specifically IMAP, as the measurements system of the Barcelona Convention with relevant responses provided through relevant regional policies.

40. Under Annex III to the present report, an example of overall interrelationships between the IMAP EO10 Common and Candidate Indicators (i.e. 22, 23, and 24) and the DPSIR framework applied to the coastal and marine ecosystem. It details the activities (originated by main drivers) which are commonly known and aligned with the current IMAP multidimensional measurement system (with their Ecological Objectives and Common Indicators) to address current scenarios of Pressures-State-Impacts.

ANNEX I
Revised IMAP List of Beach Marine Litter Items

ID ⁵	PLASTIC/POLYSTYRENE	N° Items	Weight
G1	4/6-pack yokes, six-pack rings		
G3	Shopping bags incl. pieces		
G4	Small plastic bags, e.g. freezer bags incl. pieces		
G5	Plastic bag collective role; <u>The part that</u> what remains from rip-off plastic bags		
G7/G8	Drink bottles		
G9	Cleaner bottles & containers		
G10	Food containers incl. fast food containers		
G11	Beach use related cosmetic bottles and containers, e.g. Sunblocks		
G13	Other bottles & containers (<u>drums</u>)		
G14	Engine oil bottles & containers <50 cm		
G15	Engine oil bottles & containers >50 cm		
G16	Jerry cans (square plastic containers with handle)		
G17	Injection gun containers (including nozzles)		
G18	Crates and containers / baskets (<u>not fish boxes</u>)		
G19	<u>Vehicle</u> Car parts (<u>made of artificial polymer or fibre glass</u>)		
G21/24	Plastic caps and/ lids <u>drinks</u> (including rings from bottle caps/lids)		
G26	Cigarette lighters		
G27	Cigarette butts and filters		
G28	Pens and pen lids		
G29	Combs/hair brushes/sunglasses		
G30/31	Crisps packets/sweets wrappers/ Lolly sticks		
G32	Toys and party poppers		
G33	Cups and cup lids		
G34/ 35	Cutlery, <u>plates</u> and trays/ Straws and stirrers		
<u>G35</u>	<u>Straws and stirrers</u>		
G36	<u>Heavy duty sacks (e.g. f</u> Fertiliser/ <u>or animal feed</u> bags <u>sacks</u>)		
G37	Mesh vegetable bags (<u>e.g. vegetables, fruits and other products</u>)		
G40	Gloves (washing up)		
G41	Gloves (industrial/professional rubber gloves)		
G42	Crab/lobster pots and tops		
G43	Tags (fishing and industry)		
G44	Octopus pots		
G45	<u>Mesh bags (e.g. m</u> M <u>ussels nets, net sacks, o</u> O <u>yster nets including</u> plastic <u>stoppers</u> pieces)		
G46	Oyster trays (round from oyster cultures)		
G47	Plastic sheeting from mussel culture (Tahitians)		
G49	Rope (diameter more than 1cm)		

⁵ The allocated codes may be revised in the near future.

G50	String and cord (diameter less than 1 cm)		
G53	Nets and pieces of net < 50 cm		
G54	Nets and pieces of net > 50 cm		
G56	Tangled nets/cord		
G57/58	Fish boxes <u>–(e.g. plastic or expanded polystyrene)</u>		
G59	Fishing line/ <u>monofilament (angling tangled and not tangled)</u>		
G60	Light sticks (tubes with fluid) incl. Packaging		
G62/63	<u>Floats for fishing nets/–Buoys (e.g. marking fishing gear, shipping routes, mooring boats etc.)</u>		
G65	Buckets		
G66	Strapping bands		
G67	Sheets, industrial packaging, plastic sheeting <u>(i.e. non-food packaging/transport packaging)</u>		
G68	Fibre glass <u>items and /fragments</u>		
G69	Hard hats/Helmets		
G70	Shotgun cartridges		
G71	Shoes <u>and /sandals made of artificial polymere mateial</u>		
G73	<u>Foam spongeOther foam sponge items (i.e. matrices, sponge, etc.)</u>		
G75	Plastic/polystyrene pieces $0 \leq 2.5$ cm		
G76	Plastic/polystyrene pieces 2.5 cm $\rightarrow < 50$ cm		
G77	Plastic/polystyrene pieces > 50 cm		
G91	Biomass holder from sewage treatment plants <u>and aquaculture</u>		
G124	Other plastic/polystyrene items (identifiable) including fragments		
	<i>Please specify the items included in G124:</i>		
		Total N° Items	Total Weight

ID	RUBBER	N° Items	Weight
G125	Balloons, <u>balloon ribbons, strings, plastic valves</u> and balloon sticks		
G127	Rubber boots		
G128	Tyres and belts		
G134	Other rubber pieces		
	<i>Please specify the items included in G134</i>		
		Total N° Items	Total Weight

ID	CLOTH	N° Items	Weight
G137	Clothing / rags (clothing, hats, towels)		
G138	Shoes, and sandals <u>and flipflops</u> (e.g. l leather, cloth)		
G141	Carpet & Furnishing		
G140	Sacking (hessian)		
G145	Other textiles (incl. <u>pieces of cloths, rags, etc.</u>)		
	<i>Please specify the items included in G145</i>		
		Total N° Items	Total Weight

ID	PAPER / CARDBOARD	N° Items	Weight
G147	Paper bags		
G148	Cardboard (boxes & fragments)		
G150	Cartons/Tetrapack Milk		
G151	Cartons/Tetrapack (others <u>non-milk</u>)		
G152	Cigarette packets (<u>incl. plastic covering of the cigarette packet</u>)		
G153	Cups, food trays, food wrappers, drink containers		
G154	Newspapers & magazines		
G158	Other paper items (<u>, including incl. fragments</u>)		
	<i>Please specify the items included in G158</i>		
		Total N° Items	Total Weight

ID	PROCESSED / WORKED WOOD	N° Items	Weight
G159	Corks		
G160/161	Pallets / Processed timber		
G162	Crates, <u>boxes, baskets</u>		
G163	Crab/lobster pots		
G164	Fish boxes		
G165	Ice-cream sticks, chip forks, chopsticks, toothpicks		
G166	Paint brushes		
G171	Other wood < 50 cm		
	<i>Please specify the items included in G171</i>		
G172	Other wood > 50 cm		
	<i>Please specify the items included in G172</i>		
		Total N° Items	Total Weight

ID	METAL	N° Items	Weight
G174	Aerosol/Spray cans industry		
G175	Cans (beverage)		
G176	Cans (food)		
G177	Foil wrappers, aluminium foil		
G178	Bottle caps, lids & pull tabs		
G179	Disposable BBQ's		
G180	Appliances (refrigerators, washers, etc.)		
G182	Fishing related (weights, sinkers, lures, hooks)		
G184	Lobster/crab pots		
G186	Industrial scrap		
G187	Drum <u>and barrels</u> ; (e.g. oil, <u>chemicals</u>)		
G190	Paint tins		
G191	Wire, wire mesh, barbed wire		
G198	Other metal pieces < 50 cm		
	<i>Please specify the items included in G198</i>		
G199	Other metal pieces > 50 cm		
	<i>Please specify the items included in G199</i>		
		Total N° Items	Total Weight

ID	GLASS	N° Items	Weight
G200	Bottles (<u>incl. pieces</u>)		
G202	Light bulbs		
G208	Glass fragments > 2.5cm		
G210a	Other glass items		
	<i>Please specify the items included in G210a</i>		
		Total N° Items	Total Weight

ID	CERAMICS	N° Items	Weight
G204	Construction material (brick, cement, pipes)		
G207	Octopus pots		
G208	Ceramic fragments >2.5cm		
G210b	Other ceramic/ <u>potterys</u> items		
	<i>Please specify the items included in G210b</i>		
		Total N° Items	Total Weight

ID	SANITARY WASTE	N° Items	Weight
G95	Cotton bud sticks		
G96	Sanitary towels/panty liners/backing strips		
G97	Toilet fresheners		
G98	Diapers/nappies		
G133	Condoms (incl. packaging)		
G144	Tampons and tampon applicators		
	Other sanitary waste		
	<i>Please specify the other sanitary items</i>		
		Total N° Items	Total Weight

ID	MEDICAL WASTE	N° Items	Weight
G99	Syringes/needles		
G100	Medical/Pharmaceuticals containers/tubes		
G211	Other medical items (swabs, bandaging, adhesive plaster etc.)		
	<i>Please specify the items included in G211</i>		
		Total N° Items	Total Weight

ID	PARAFFIN/WAX PIECES	N° Items	Weight
G213	Paraffin/Wax		
		Total N° Items	Total Weight

ANNEX II

Mapping of pressures/impacts interactions for IMAP EO10 Common Indicators 22 and 23, per ICZM Activity, taking into account the relevant geographical scale

(The tables under Annex II should be filled by the experts participating to the CORMON Marine Litter)

GRID/Table for IMAP Common Indicator 22 Integrated Assessments under the nested assessment approach:

Scaled GRID pressures/impact approach	Sub-Regions ⁶	Sub-Areas ⁷	Natural Hazards	Natural Disasters	Climate Change	Coastal Urbanization	Waste Water Discharges	Industry	Tourism	Shipping	Fishing (incl. recreational)	Solid Waste Disposal	...	
Common Indicator 22 (Ecological Objective 10)	Western Mediterranean Sea	North Western (NWMS)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*		
		Alboran Sea (ALBS)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
		Tyrrhenian Sea (TYRS)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
	Adriatic Sea	North Adriatic (NADR)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
		Middle Adriatic (MADR)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
		South Adriatic (SADR)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
	Central Mediterranean and Ionian Seas	Central (CEN)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
		Ionian Sea (IONS)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
	Aegean and Levantine Seas	Aegean Sea (AEGS)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
		Levantine (LEVS)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	

⁶ The four subregions (i.e. eco-regions) have been already defined for practical reasons and for the purpose of the UN Environment/MAP 2011 Initial Integrated Assessment (UNEP(DEPI)/MED WG.363/Inf.21) and the Med QSR 2017, namely the Western Mediterranean, Ionian and Central Mediterranean, Adriatic Sea and Aegean-Levantine Seas.

⁷ The subareas (i.e. sub-regional seas/basins) have been defined according to availability of database sources for the purpose of development of the assessment criteria for pollution (UNEP(DEPI)/MED WG.427/Inf.3). Subareas might correspond initially to Contracting Parties coastal zones and offshore areas. Other subareas may be defined.

* The cells should be field (tbf) by the experts participating to the CORMON Marine Litter meeting (Podgorica, Montenegro, 4 April 2019), with **red**, **orange**, **yellow**, or **green** color.

GRID/Table for IMAP Common Indicator 23 Integrated Assessments under the nested assessment approach:

Scaled GRID pressures/impact approach	Sub-Regions ⁸	Sub-Areas ⁹	Natural Hazards	Natural Disasters	Climate Change	Coastal Urbanization	Waste Water Discharges	Industry	Tourism	Shipping	Fishing (incl. recreational)	Solid Waste Disposal	...	
Common Indicator 23 (Ecological Objective 10)	Western Mediterranean Sea	North Western (NWMS)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*		
		Alboran Sea (ALBS)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
		Tyrrhenian Sea (TYRS)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
	Adriatic Sea	North Adriatic (NADR)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
		Middle Adriatic (MADR)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
		South Adriatic (SADR)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
	Central Mediterranean and Ionian Seas	Central (CEN)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
		Ionian Sea (IONS)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
	Aegean and Levantine Seas	Aegean Sea (AEGS)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	
		Levantine (LEVS)	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	(tbf by CORMON ML)*	

⁸ The four subregions (i.e. eco-regions) have been already defined for practical reasons and for the purpose of the UN Environment/MAP 2011 Initial Integrated Assessment (UNEP(DEPI)/MED WG.363/Inf.21) and the Med QSR 2017, namely the Western Mediterranean, Ionian and Central Mediterranean, Adriatic Sea and Aegean-Levantine Seas.

⁹ The subareas (i.e. sub-regional seas/basins) have been defined according to availability of database sources for the purpose of development of the assessment criteria for pollution (UNEP(DEPI)/MED WG.427/Inf.3). Subareas might correspond initially to Contracting Parties coastal zones and offshore areas. Other subareas may be defined.

* The cells should be field (tbf) by the experts participating to the CORMON Marine Litter meeting (Podgorica, Montenegro, 4 April 2019), with **red**, **orange**, **yellow**, or **green** color.

ANNEX III
**Examples of Score Boards for Addressing Interrelationships Between IMAP EO10 Common
and Candidate Indicators (i.e. 22, 23, and 24) and the DPSIR framework applied to the coastal
and marine ecosystem**

(The tables under Annex III should be filled by the experts participating
to the CORMON Marine Litter)

Scoreboard example for Agriculture:

(choose 0, 1, 2 or 3 to estimate impact)

None (0)

Low (1)

Moderate (2)

High (3)

		COASTAL AREA					
Economic (Driver)		Pressure	State	Impact (Ecosystem Services, Welfare)	IMAP EOs CIs	IMPACT SCORE	Regional policy (Response)
	Activity type				Pressure, Impact and State-based indicators	% of total impacts	UN Barcelona Convention
I. AGRICULTURE	Crops (any)	Runoff (river litter)	Costal litter occurrence (beach, surface and seabed)	Species threaten Natural resources affected Landscape visual impairment	MARINE LITTER (EO10) : CI22, CI23, CI24	[to be filled by the CORMON ML experts with one of the colors and numbers as provided above]	Regional Plan on Marine Litter Management in the Mediterranean Action Plan for the management of the Mediterranean Monk Seal
	SEAWARD - LAGOONS - ISLANDS - OFFSHORE						
		Pressure	State	Impact (Ecosystem Services, Welfare)	IMAP EOs CIs	IMPACT SCORE	Action Plan for the Conservation of Mediterranean Marine Turtle
	Crops (effects seaward)	Runoff (river litter)	Costal litter occurrence (surface, water column, seabed and deep-sea bed)	Long-lived species threaten Natural resources affected Marine ecosystems deterioration	MARINE LITTER (EO10) : CI22, CI23, CI24	[to be filled by the CORMON ML experts with one of the colors and numbers as provided above]	Action Plan for the conservation of cetaceans in the Mediterranean Sea (SAP/BIO)

Scoreboard example for Industry:

(choose 0, 1, 2 or 3 to estimate impact)

None (0)	Low (1)	Moderate (2)	High (3)
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COASTAL AREA								
Economic (Driver)		Pressure	State	Impact (Ecosystem Services, Welfare)	IMAP EOs CIs	IMPACT SCORE	Regional policy (Response)	
	Activity type				Pressure, Impact and State-based indicators	% of total impacts	UN Barcelona Convention	
2. INDUSTRY (LAND-BASEDSOURCES)	Diverse Industrial Activities	Litter increase	Riverine and coastal litter occurrence (surface, beach)	Species threaten Natural resources affected Coastal visual impairment	MARINE LITTER (EO10) : CI22, CI23, CI24	[to be filled by the CORMON ML experts with one of the colors and numbers as provided above]	SPA and Biological Diversity Protocol	
	SEAWARD - LAGOONS - ISLANDS - OFFSHORE							
		Pressure	State	Impact (Ecosystem Services, Welfare)	IMAP EOs CIs	IMPACT SCORE		
		Activity type			Pressure, Impact and State-based indicators	% of total impacts		
		Litter pollution (spread)	Coastal and offshore contamination (surface, water column, seabed, deep-sea bed)	Long-lived species threaten Natural resources affected Marine ecosystems deterioration	MARINE LITTER (EO10) : CI22, CI23, CI24	[to be filled by the CORMON ML experts with one of the colors and numbers as provided above]		

Scoreboard example for Aquaculture:

(choose 0, 1, 2 or 3 to estimate impact)

None (0)

Low (1)

Moderate (2)

High (3)

Economic (Driver)	COASTAL AREA				IMAP EOs CIs	IMPACT SCORE	Regional policy (Response)
	Activity type	Pressure	State	Impact (Ecosystem Services, Welfare)			
					Pressure, Impact and State-based indicators	% of total impacts	UN Barcelona Convention
3. AQUACULTURE	Coastal aquaculture (shellfish farming, Fish farming)	Marine Litter and Microplastic Generation	Marine Litter and Microplastic generation; lying on the seafloor and float around the Mediterranean	Effect on biota, microplastic ingestion,	MARINE LITTER (EO10) : CI23, CI24	[to be filled by the CORMON ML experts with one of the colors and numbers as provided above]	Regional Plan on Marine Litter Management in the Mediterranean SPA and Biological Biodiversity Protocol

Scoreboard example for Fisheries:

(choose 0, 1, 2 or 3 to estimate impact)

None (0)

Low (1)

Moderate (2)

High (3)

Economic (Driver)	COASTAL AREA				IMAP EOs CIs	IMPACT SCORE	Regional policy (Response)
	Activity type	Pressure	State	Impact (Ecosystem Services, Welfare)			
					Pressure, Impact and State-based indicators	% of total impacts	UN Barcelona Convention
4. FISHERIES	Fishing vessels (artisanal, trawling, etc.)	Marine Litter and Microplastic Generation, "Ghost Fishing"	Marine Litter and Microplastic spread in the water column and on the seafloor,	Effect on marine, biota, ALDFG, Ghost-fishing	MARINE LITTER (EO10) : CI23, CI24	[to be filled by the CORMON ML experts with one of the colors and numbers as provided above]	Regulations and MPAs, SPAs, SPAMIs

Scoreboard example for Tourism, Sporting, Recreational Activities:

(choose 0, 1, 2 or 3 to estimate impact)

None (0)

Low (1)

Moderate (2)

High (3)

COASTAL AREA								
Economic (Driver)		Pressure	State	Impact (Ecosystem Services, Welfare)	IMAP EOs CIs	IMPACT SCORE	Regional policy (Response)	
	Activity type				Pressure, Impact and State-based indicators	% of total impacts	UN Barcelona Convention	
5. TOURISM, SPORTING, RECREATIONAL ACTIVITIES	Urban/Real-state development	Waste generation (marine litter, wastewater treatment plants). Urban effluents Microbiological pollution	Degradation of land, air and water sources. Occurrence of pathogens	Soil, habitats and coastal forestry loss. Bathing water quality detriment	MARINE LITTER (EO10) : CI22, CI23	[to be filled by the CORMON ML experts with one of the colors and numbers as provided above]	LBS Protocol Action Plan for the conservation of marine vegetation in the Mediterranean Sea	
	SEAWARD - LAGOONS - ISLANDS - OFFSHORE							Action Plan for the conservation of bird species listed in Annex II of the Protocol on Specially Protected Areas and Biological Diversity
		Pressure	State	Impact (Ecosystem Services, Welfare)	IMAP EOs CIs	IMPACT SCORE		
	Urban/Real-state development				Pressure, Impact and State-based indicators	% of total impacts		
	Urban/Real-state development (only lagoons, islands, etc.)	Waste generation (marine litter, wastewater treatment plants). Urban effluents Microbiological pollution	Degradation of land, air and water sources. Occurrence of pathogens	Soil, habitats and coastal forestry loss. Bathing water quality detriment	MARINE LITTER (EO10) : CI22, CI23	[to be filled by the CORMON ML experts with one of the colors and numbers as provided above]		

Scoreboard example for Infrastructure, Energy Facilities, Ports and Maritime:

(choose 0, 1, 2 or 3 to estimate impact)

None (0)

Low (1)

Moderate (2)

High (3)

	COASTAL AREA						
Economic (Driver)		Pressure	State	Impact (Ecosystem Services, Welfare)	IMAP EOs CIs	IMPACT SCORE	Regional policy (Response)
	Activity type				Pressure, Impact and State-based indicators	% of total impacts	UN Barcelona Convention
7) INFRASTRUCTURE, ENERGY FACILITIES, PORTS AND MARITIME WORKS AND STRUCTURES	Port/Harbour developments	Waste generation (litter, waste port facilities, effluents)	Coastal fragmentation	Biodiversity (natural) impaired Ecological connectivity loss	MARINE LITTER (EO10) : CI22, CI23	[to be filled by the CORMON ML experts with one of the colors and numbers as provided above]	ICZM Protocol and other UN related conventions LBS Protocol

Scoreboard example for Maritime Activities:

(choose 0, 1, 2 or 3 to estimate impact)

None (0)

Low (1)

Moderate (2)

High (3)

		COASTAL AREA					
Economic (Driver)		Pressure	State	Impact (Ecosystem Services, Welfare)	IMAP EOs CIs	IMPACT SCORE	Regional policy (Response)
	Activity type				Pressure, Impact and State-based indicators	% of total impacts	UN Barcelona Convention
8. MARITIME ACTIVITIES	Shipping traffic (commercial, ferries, military, cruise liners)	Introduction of pollutants and noise, litter	Water column habitats decline	Healthy coastal water and habitats decline	MARINE LITTER (EO10) : CI22, CI24		
	SEAWARD - LAGOONS - ISLANDS - OFFSHORE						
		Pressure	State	Impact (Ecosystem Services, Welfare)	IMAP EOs CIs	IMPACT SCORE	
		Activity type			Pressure, Impact and State-based indicators	% of total impacts	
		Shipping traffic (commercial, ferries, military, cruise liners)	Introduction of pollutants and noise, litter	Water column habitats decline	Healthy coastal water and habitats decline	MARINE LITTER (EO10) : CI22, CI24	