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Athens, Greece, 24-26 May 2023

Agenda item 3: Status of implementation activities by MED POL during 2022-2023 biennium

Progress of the Implementation of the MAP Programme of Work 2022- 2023 related to Land Based Pollution and Governance Themes executed by MED POL

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I. INTRODUCTION

- A. This report covers the activities and outputs carried out in the period between January 2022 and May 2023. The progress report is composed of a narrative part and two Annexes.
- B. The narrative part highlights the progress on the implementation of the Programme of Work (PoW) activities carried out during the 2022-2023 biennium, along with the status of implementation of the pollution-related Protocols of the Barcelona Convention and its monitoring and assessment aspects under Programme 1: “Pollution and Litter Free Mediterranean Programme,” and Programme 6: “Shared Vision of the Mediterranean Programme” of the Mid-Term Strategy (MTS) 2022-2027, including their related “Governance” elements executed by MED POL.
- C. Annex I presents a summary of the status of the information provided in the Reports on Measures taken by the Contracting Parties for the implementation of the technical aspects of Pollution related Protocols and respective Regional Plans in line with Article 26 of the Barcelona Convention and Article 13 of the LBS Protocol, for the period 2020-2021.
- D. Annex II presents the status of data submission on marine pollution monitoring by the Contracting Parties in line with Article 12 of the Barcelona Convention, and Articles 8 and 13 of the LBS Protocol and IMAP Decision (IG.22/7).

II. KEY HIGHLIGHTS

- 1) Developing three new Regional Plans for Agriculture, Aquaculture and Stormwater Management in line with Article 151 of the LBS Protocol;
- 2) Delivering the 2023 MED QSR road map:
 - a. Development and application of the assessment criteria for contaminants, nutrients and marine litter.
 - b. Preparation and application of the GES and alternative assessment methodologies;
 - c. Preparation of the IMAP Pollution and Marine Litter assessments of the 2023 Mediterranean Quality Status Report (2023 MED QSR).
 - d. Enhanced implementation of IMAP Pollution and Marine Litter Cluster by supporting national monitoring programmes built in line with the IMAP, the LBS Protocol and the Updated Regional Plan on Marine Litter Management; including capacity building.
 - e. Enhanced national monitoring data reporting in IMAP Info System for Pollution and Marine Litter Cluster.
- 3) Preparing the Transboundary Diagnostic Analysis (TDA-2023) for the Mediterranean Sea and Coast;
- 4) Updating the Guideline on Disposal of Inert, uncontaminated, inorganic geological materials under Dumping Protocol;
- 5) Developing three new guidelines on environmental standards for wastewater treatment for urban wastewater and pre-treatment for industry eligible for discharging to collecting system as well as regional ELVs for desalination;
- 6) Developing a new draft guideline on monitoring riverine inputs of marine litter.
- 7) Enhanced collaboration with key partners (ACCOBAMS, GEF, GFCM, GPML, IMO, MARLICE, Plastic Waste Partnership (PWP), SIDA and WES).

III. MTS PROGRAMME 5: GOVERNANCE

III.1 Governance Meetings

1. MED POL organized the following meetings:
 - a. The CorMon Pollution Meeting held on 27 and 30 May 2022, via videoconference (UNEP/MED WG.563/Inf.4). The Meeting participants provided their feedback regarding the progress related to the IMAP Pollution Cluster within the preparation of the 2023 MED QSR, along with their review and approval of the proposed assessment criteria for IMAP Common Indicator 17; new reference and boundary values for IMAP Common Indicator 13; application of the NEAT tool to support GES assessment in the Adriatic Sea; methodologies proposed for assessing the status of the marine environment in the areas with insufficient data; and Data Standards and Data Dictionaries for IMAP Common Indicators 18 and 20.
 - b. A second CorMon Pollution Meeting held on 1-2 March 2023, in Athens, Greece (UNEP/MED WG.563/Inf.9), to consider the Proposal of the 2023 MED QSR Pollution and Marine Litter Cluster Chapters. The work provided was approved and further directions were provided for the finalization of the eutrophication assessment and final adjustment of the assessments of CIs 17, 18, 19, 20, 21, 22 and 23 in the four Mediterranean sub-regions and related sub-divisions within the preparation of the final chapters for consideration of the Meeting of Integrated CORMONS which will take place on 27-28 June 2023.
 - c. Two CorMon Marine Litter Meetings held on 31 May 2022 (UNEP/MED WG.563/Inf.5) and 3 March 2023 (UNEP/MED WG.563/Inf.10). Both meetings culminated in the delivery of a number of substantive elements pertinent to the implementation of the IMAP EO10 (Marine Litter), including the development of Data Standards and Data Dictionaries for IMAP Candidate Indicator 24; Guidelines for Monitoring Riverine Inputs of Marine Litter; updating Baseline Values (BV); and establishing Threshold Values for IMAP Common Indicator 23 (seafloor macro-litter and floating microplastics).

III.2 Enhanced engagement with global and regional organizations and partners

2. MED POL led one of the subgroups of the Plastic Waste Partnerships under the Basel Convention. PWP Subgroup 2 Activity: “Collect information on best practices and lessons learned to set up and increase capacity for environmentally sound recycling plastic waste, e.g. through innovative approaches in cooperation with various stakeholders.” MED POL coordinated closely with the Basel Secretariat on finalizing the report entitled “Compilation of information on best practices and lessons learned to set up and increase capacity for environmentally sound recycling of plastic waste.”

3. MED POL conducted joint assessments for Candidate Indicator 26 (cCI 26) (low- and mid-frequency impulsive sounds) and the assessment of cCI 27 (continuous low frequency sound) with ACCOBAMS based on data reported by the Contracting Parties through the International Noise Register for the Mediterranean Sea region (managed by ACCOBAMS), as well as by using data generated through dedicated activities coordinated by the ACCOBAMS Secretariat. The assessment findings were presented to the Meeting of CorMon Pollution (27 and 30 May 2022) (UNEP/MED WG.563/Inf.4). Further to addressing suggestions received by the Contracting Parties, the findings will be submitted for approval of the Meeting of Integrated CorMons in June 2023.

4. MED POL participated in the Meeting of the MSFD Expert Network on Contaminants held in Nantes, France (24 and 25 October 2022). MED POL presented the achievements and ongoing activities within UNEP/MAP – IMAP Pollution monitoring and assessment portfolio related to eutrophication and contaminants and contributed to the discussion aimed at strengthening synergetic implementation of IMAP and MSFD.

5. MED POL participated in the IMAP Pilot Project: “Towards Integrated Ecosystem Assessment and Ecosystem Management Approach in the Adriatic (Tunis, 10 November 2022). MED POL presented the outcomes of the SIDA-funded project implemented in the Adriatic and provided its feedback and response to comments raised by the countries.
6. MED POL participated in the National Symposium of Marine Monitoring and Evaluation in the Seas (Antalya, Türkiye, 6-9 December 2022). MED POL presented the achievements and ongoing activities within UNEP/MAP – IMAP Pollution monitoring and assessment programme related to eutrophication and contaminants and contributed to the discussion aimed at strengthening synergetic implementation of National Monitoring Programmes and IMAP in the Mediterranean region.
7. MED POL participated in the “Global Workshop on Source to Sea Management” which was held in Geneva, Switzerland on 14-16 December 2022. Noting that UNEP/MAP is assigned as “Partner,” MED POL contributed to delivery of dedicated presentation on the regulatory framework of the Barcelona Convention with a focus on the source-to-sea approach in planning. MED POL provided substantive and technical inputs relevant to the workshop outputs and activities, as well as insights to the possible avenues of collaborations with UNEP/MAP.
8. MED POL organized back-to-back meeting with the MARLICE 2022 International Forum on Marine Litter and Circular Economy in Seville, Spain in May 2022. Meeting presented an opportunity to organize an open session with OSPAR, HELCOM, BSC and the European Commission titled “Connecting Seas” with the aim to give visibility to the cooperation among the four European Regional Seas Conventions and also with the European Commission; and to initiate the discussion on the potential role of the regional seas in the framework of the envisaged new legally binding international instrument on plastic pollution, including in the marine environment.
9. MED POL is representing the UNEP/GPML Regional Nodes since 2021 participating actively in the Steering Committee of GPML, thus enhancing interaction with partners around the globe. In parallel, synergies have been also enhanced with GFCM on aspects pertinent to marine litter generation from aquaculture and fisheries.
10. In line with the MAP Programme of Work adopted by COP22 for the biennium 2022-2023, and further to the activities stipulated in the Letter of Agreement (signed on 9 October 2019) with the International Maritime Organization (IMO), the Joint Regional Meeting to Review the Updated Guidelines for the Dumping of Inert Uncontaminated Geological Materials and Sharing Best Practices to Support Implementation of the Dumping Protocol was held on 13-14 February 2023. The meeting addressed (a) assessment and management of dumping operations at sea; (b) management and monitoring under the Dumping Protocol; (c) requirements for the authorization of the dumping at sea of inert uncontaminated inorganic geological materials; and (d) sharing best practices and lessons learnt from implementation of the Dumping Protocol, with a focus on the disposal of inert uncontaminated geological materials as well as placement of artificial reefs.
11. MED POL is participating as guest speaker in the Global Water Summit: “Creating a Climate for Growth”, held from 8 to 10 May 2023 in Berlin, Germany. With over 800 delegates from 70 different countries, and an audience consisting of utility and corporate water leaders, technology and service providers, financiers and policy makers, MED POL is presenting UNEP/MAP experience on development of common environmental standards on desalination in the Mediterranean addressing questions on the global application of derived standards and potential challenges to tightening brine regulation in the Mediterranean region.
12. Following upon the organization of the Regional Workshop in Venice (21-23 January 2020, Venice, Italy), and approval of the Science We Need for the Mediterranean Sea We Want (SciNMeet) Programme, in October 2021, as the first Regional Programme within the implementation of the UN Decade on Ocean Science Implementation Plan, UNEP/MAP continues to support its implementation. The UNEP/MAP contributes to the work of the six Tasks Teams that are presently focused on proposing the activities for implementation of SciNMeet objectives, whereby it will host the policy component of the SciNMeet Secretariat. The First Meeting of the permanent Steering Committee is expected to be hosted by the UNEP/MAP in 2023. MED POL continues to work on the mobilization of the resources to strengthen the SPI component of IMAP implementation.

IV. MTS PROGRAMME 1. TOWARDS A POLLUTION AND LITTER FREE MEDITERRANEAN SEA AND COAST EMBRACING CIRCULAR ECONOMY

IV.1 Preparing the Regional Plans on Agriculture, Aquaculture and Stormwater Management

13. The 21st Ordinary Meeting of the Contracting Parties (COP-21) to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols (Naples, Italy, 2-5 December 2019) adopted Decision IG.24/10 which called for developing Regional Plans for Agriculture, Aquaculture and Stormwater Management.

14. Through this Decision IG.24/10, COP-21 endorsed the Main Elements which specify the structure and further details of the scope and objective of this Regional Plan, and requested the Secretariat to establish Working Groups of designated Experts in line with the Terms of References endorsed by the 89th Meeting of the Bureau to the Contracting Parties. The objective of the Working Groups is to deliver the new Regional Plans for consideration of the MED POL Focal Points Meeting. Further to this mandate, MED POL prepared draft proposals of the three aforementioned Regional Plans for the consideration of the Working Groups of Experts and coordinated the organization of two Working Group Meetings for each of the three Regional Plans.

15. MED POL organized the first Working Groups Meeting for the preparation of the Regional Plans on Agriculture, Aquaculture and Urban Stormwater Management in Athens, Greece from 25 to 27 October 2022 (UNEP/MED WG.563/Inf.6). First drafts of the three regional plans were discussed. Proposed measures were reviewed, and agreement was reached to submit additional comments to the Secretariat before holding the 2nd Working Groups Meeting on 22-23 May (back-to-back with the MED POL Focal Points Meeting). Further to incorporating comments of the Contracting Parties, MED POL is organizing the 2nd Working Groups Meeting on 22-23 May 2023 back-to-back with the MED POL Focal Points Meeting. Members of the Working Groups will review new comments and submit final drafts of the Regional Plans for the consideration of the MED POL Focal Points with the aim approve for submission to MAP Focal Points for approval and COP 23 for adoption.

16. In parallel with the development of the three new Regional Plans, MED POL has undertaken a study (UNEP/MED WG.563/Inf.15) to enable the Parties to assess the costs of implementation of the main regional and national measures proposed in the three Regional Plans on Agriculture, Aquaculture and Urban Stormwater Management and associated socioeconomic benefits. The assessment is presented to the Second Meeting of the Working Group which is expected to review the draft assessment findings and to provide its comments and substantive inputs, prior to submission to the MED POL Focal Points as an information document to be used by the Contracting Parties in estimating the costs and socioeconomic benefits for implementation of the three Regional Plans.

IV.2 Updating the Guidelines for the Dumping of Inert Uncontaminated Geological Materials

17. In line with Decisions IG.25/1 and IG.25/19 of COP 22 (Antalya, Türkiye, 7-10 December 2021) regarding the UNEP/MAP Medium-Term Strategy 2022-2027 and the Programme of Work and Budget for 2022-2023, MED POL updated Guidelines for Dumping of Inert Uncontaminated Geological Materials which were adopted by the Contracting Parties in COP14 (Portoroz, Slovenia, 8-11 November 2005). The update of the Guidelines (UNEP/MED 23WG.563/10) was undertaken in line with the requirements of Articles 4.2 and 6.2 of the Protocol for the Prevention and Elimination of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration (Dumping Protocol). It was further based on recent global and regional developments found in the London Convention/London Protocol (LC/LP) International Maritime Organization (IMO). Proposed updates were approved with minor modification in the “Meeting to Review the Updated Guidelines for the Dumping of Inert Uncontaminated Geological Materials and Sharing Best Practices to Support Implementation of the Dumping Protocol” held on 13-14 February 2023 (UNEP/MED 23WG.563/Inf.8), which recommended sharing with the MED POL Focal Points for their approval to submit to MAP Focal Points and COP23 for adoption.

18. As recommended by the Contracting Parties, MED POL continues to circulate on a biennial basis thematic Questionnaires to collect best practices from the Contracting Parties on implementation of the Dumping Protocol. This practice continued in the biennium 2022-2023. Findings of collected best practices by the Contracting Parties are summarized and appended to the updated Compendium of Best Practices for Implementation of Dumping Protocol (2023) (UNEP/MED WG.554/4). The Compendium was shared with the Contracting Parties in the “Meeting to Review the Updated Guidelines for the Dumping of Inert Uncontaminated Geological Materials and Sharing Best Practices to Support Implementation of the Dumping Protocol” held on 13-14 February 2023 (UNEP/MED 23WG.563/Inf.8).

IV.3 Preparing Technical Guidelines in Support of Implementation of the Regional Plans

19. In support of implementation of the Regional Plans for Urban Wastewater Treatment and Sewage Sludge Management, MED POL prepared in coordination with the GEF-funded MedProgramme two guidelines: (1) “Regional guideline on pre-treatment standards and applicable BATs for industrial sectors eligible to discharge to urban wastewater collection systems” (UNEP/MED 23WG.563/11) providing the knowhow to operators of wastewater treatment plants and industrial facilities as well as regulators on means by which protection of collection systems and wastewater treatment plants can be achieved caused by undesired effects of direct discharges from eligible industrial facilities and the collective discharges of pre-treated wastewater from Organized Industrial Zones; and (2) “Regional guideline on available treatment technologies for urban wastewater and sewage sludge and decision support systems (DSS) for their selection” (UNEP/MED 23WG.563/12) addressing a number of technical aspects included in the adopted measures of the Regional Plans; more specifically, treatment of wastewater and sewage sludge; reclamation and reuse of treated wastewater; efficient operation and energy/nutrients recovery from treatment processes; and use of alternative energy sources based on advanced technologies which can be prioritized by applying Decision Support Systems (DSS). Both documents were discussed in a Regional Meeting of experts hosted by the Government of Türkiye in Ankara on 22 and 23 November 2022 (UNEP/MED 23WG.563/Inf.7). The Meeting approved the guidelines and recommended their submission to the Meeting of the MED POL Focal Points for approval.

20. MED POL has also prepared regional standards on desalination technologies in coordination with the GEF-funded MedProgramme. A Guideline (UNEP/MED WG.563/13) building on previous Updated Guidelines on Desalination Activities (IG.23/13, COP20, Tirana, Albania, 17-20 December 2020) was prepared. It recommends proven desalination technologies as well as common discharge standards to be established at the regional level. The Guideline proposes regional Effluent Limit Values (ELVs) for discharges and a greater context for aspects of available state of the art desalination technologies and their possible implementation and Decision Support Systems (DSS) aiming to assist policy makers/facilities’ operators in selection of the appropriate treatment technologies to achieve sustainable desalination.

21. MED POL presented the Guideline on Regional Standards for Discharge from Desalination Plants and Decision Support Systems for Sustainable Desalination Technologies in the Mediterranean to the “Regional meeting to review guidelines on available treatment technologies for urban wastewater and sludge, industrial pre-treatment, and environmental standards and available desalination treatment technologies” held in Ankara on 22-23 November 2022 (UNEP/MED 23WG.563/Inf.7). The Meeting approved the document and recommended its submission to the MED POL Focal Points for approval.

IV.4 Enhancing the implementation of MED POL reporting tools developed to assess pollution loads from land-based sources and activities

22. Further to developing Guidelines for Common Methodologies on Estimation Techniques for the National Baseline Budget (NBB) for diffuse source releases from agriculture and from point source releases from aquaculture in the 2020-2021 biennium, COP22 (Antalya, Türkiye on 7-8 December 2021) in its Decision IG.25/19 on the Programme of Work and Budget for 2022-2023

requested the MED POL Programme to implement the aforesaid Guidelines and share the best practices at regional level with the aim to enhance knowledge on estimating and reporting of emission loads. To that extent, MED POL is in the process of finalizing terms of reference for three national and one regional consultants to pilot implementation of the estimation methodologies in agriculture and aquaculture, including data reporting, in three countries: Bosnia and Herzegovina, Israel and Morocco. Work will entail evaluation of sectors' contribution to the overall loads. It will be undertaken during the 2nd half of 2023. The findings and outcome of the pilot implementation is aimed at setting examples to be replicated by other Contracting Parties during for the next cycle of NBB planned in the biennium 2024-2025. These will be shared in a Meeting of Best Practices scheduled for October 2023.

IV.5 National, sub-regional, regional actions to boost implementation of the Marine Litter Regional Plan

23. In the framework of the EU-funded Marine Litter MED II Project, MED POL provided support to boost the implementation of the updated Regional Plan on Marine Litter Management in the Mediterranean through the implementation of pilot actions in Algeria, Egypt, Israel, Lebanon, Libya, Morocco and Tunisia. To date, Small Scale Funding Agreements (SSFAs) were concluded and signed with 9 countries under the Marine Litter MED II Project. Adopt-a-beach is implemented in 14 sites in 4 countries. Fishing-for-Litter practices are implemented in three countries with the participation of more than 25 fishing vessels addressing sea-based sources of marine litter undergoing in 6 new ports and marinas.

24. MED POL is also providing support in boosting the implementation of the updated Regional Plan on Marine Litter Management in the Mediterranean through the Cooperation Agreement between UNEP/MAP and the Italian Ministry of Environment and Energy Security. To date, two SSFAs are in place with Bosnia and Herzegovina, and Montenegro, and one is under finalization with Albania. Adopt-a-Beach (2 beaches per country) and Fishing-for-Litter (up to 5 fishermen per country) pilot actions are supported and undergoing successfully in two countries (Bosnia and Herzegovina and Montenegro).

25. MED POL successfully organized back-to-back with the MARLICE International Forum on Marine Litter and Circular Economy (17-18 May 2022, Sevilla, Spain) the 3rd version of the Regional Meeting on Marine Litter Best Practices (UNEP/MED WG.563/Inf.3). During the Meeting an overview of measures/instruments to prevent, control and manage marine litter generation from wastewater treatment plants, aquaculture activities, riverine inputs, and shipping was presented, as well as policy recommendations in order to move forward towards GES for IMAE EO10. UNEP/MAP and MED POL have been also actively involved in the preparation of the "Connecting Seas – Regional Seas Conventions Alliance" with the participation of HELCOM, OSPAR, BSC and the European Commission.

26. With regards to the Regional Cooperation Platform on Marine Litter in the Mediterranean; recalling that the Platform was set-up in 2016 as an open-ended group of regional and international partners with mandates and activities contributing, on a voluntary basis, to the environmentally sound management of marine litter in the Mediterranean, MED POL organized on 6 July 2022 the 5th Meeting of the Regional Cooperation Platform. The Meeting was attended by representatives of the ACCOBAMS, European Environment Agency (EEA), European Topic Centre (ETC), HELMEPA, IFREMER, MEDASSET, MIO-ECSDE, Union for the Mediterranean (UfM), Waste Free Oceans (WFO), as well as MAP Components (MedWaves and SPA/RAC). The Meeting adopted the Joint Work Plan for the biennium 2022-2023 depicting the legally binding measures included in the [updated Regional Plan for Marine Litter Management in the Mediterranean](#) which was adopted by COP22 (Antalya 7-10 December 2021). At the conclusion of their Meeting, members of the Platform mandated the Secretariat to follow-up with the individual members on mapping their activities in 2023 against the Joint Work Plan template; as well as organizing a meeting in mid-2023 for discussion of proposals for the new Joint Work Plan for the biennium 2024-2025. The 6th Meeting of the Regional Cooperation Platform is planned to be held online in July 2023.

IV.6. Pilot actions to prevent, eliminate and dispose of obsolete chemicals

27. MED POL is executing Child project 1.1 (Phase 1) under the GEF-funded MedProgramme. Phase 1 of the project aims to implement environmentally sound disposal of 2000 tons of PCBs in eligible Contracting Parties. In this context, an international tender was concluded awarding contracts for the collection, transport and final disposal of Polychlorinated biphenyls (PCBs)-containing equipment of 451 tons in Algeria and of 271 tons in Lebanon. The implementation of the contracts is commencing in the 2nd quarter of 2023. To this aim, legal agreement with Algeria (SSFA) and national support (SCA) for Lebanon was concluded with both countries to facilitate implementation of these contracts.

28. Under Child project 1.1 (Phase 2), MED POL is preparing the groundwork to undertake a PCB-containing inventory in Algeria, Albania, Bosnia and Herzegovina, Morocco and Tunisia. This inventory will be used for prioritisation-setting of the next PCB disposal procurement requests. Inventory and sampling of new persistent organic pollutants (POPs) (PFAs, HBCD, SCCPs) is under preparation for Lebanon, Morocco and Tunisia. Policy roadmaps to update the national legislation to the current commitments under the Stockholm Convention are being drafted. For activities related to mercury, drafting of environmentally sound management plans is planned for Algeria, Morocco and Tunisia as well as the inventory and sampling of potentially mercury-containing thermometers in Lebanon and Tunisia.

V. MTS PROGRAMME 6. TOWARDS MONITORING, ASSESSMENT, KNOWLEDGE AND VISION OF THE MEDITERRANEAN SEA AND COAST FOR INFORMED DECISION-MAKING

V.1 Strengthening implementation of national IMAP-based monitoring programmes for all clusters and delivering quality assured data

29. In coordination with the EU-funded EcAp MED III Project (2020-2023) “Support to Efficient Implementation of the Ecosystem Approach-based Integrated Monitoring and Assessment of the Mediterranean Sea and Coasts and to delivery of data-based 2023 Quality Status Report in synergy with the EU MSFD,” and the IMAP-MPA Project (2019-2023) “Towards achieving the Good Environmental Status of the Mediterranean Sea and coast through an ecologically representative and efficiently managed and monitored network of Marine Protected Areas,” MED POL provided support to concluding and implementing SSFAs with 7 project participating countries (Lebanon, Israel, Egypt, Libya, Tunisia, Algeria and Morocco). Support included substantive content of the SSFAs and ToRs-activities and outputs; substantive coaching and guidelines regarding implementation of substantive activities within the monitoring and assessment efforts for IMAP Pollution Cluster at national level; providing training modalities for national counterparts and contributing to training workshops, as required; addressing the substantive queries of the CPs related to IMAP Pollution Cluster, as required, during the implementation phase of the SSFAs; providing advice on knowledge transfer to national counterparts regarding the developments achieved within MED POL activities at regional level.

30. MED POL is also providing direct support to strengthening implementation of national monitoring programmes on pollution and marine litter to Montenegro with the support of the Italian Ministry of Environment and Energy Security, and Bosnia and Herzegovina (using MTF funds), which is planned in the 2nd half of 2023. Specifically, support is provided in relation to IMAP Common Indicators 13 & 14, 17, 18, 22 and 23 which contributes to the assessment of the marine environment of the Adriatic Sea Sub-region.

31. MED POL contributed to the UNEP-implemented SIDA funded project aiming to support GES assessment. Specifically, MED POL undertook implementation of the eutrophication assessment i.e. IMAP Common Indicators 13 and 14 in the Adriatic Sea Sub-region, as well as inter-comparison and harmonization of the NEAT GES Assessment and CHASE+ Assessment methodologies in the Adriatic Sea and the Western Mediterranean Sea Sub-regions.

32. MED POL contributed to the ongoing IMAP-based monitoring programmes for marine litter in the Mediterranean. MED POL followed up with 15 countries for uploading datasets for beach macro-litter (M1), seafloor macro-litter (M2) and floating microplastics (M3) extended over the period 2016-2022, which have been used for development of the 2023 MED QSR, as well as for updating the Baseline Values (BV) and establishing Threshold Values (TV) for IMAP Common Indicator 23 (seafloor macro-litter and floating microplastics).

33. MED POL also provided support for the review of joint communication products prepared and dispatched in the framework of the above projects, with a brochure translated into four languages (English, French, Spanish and Arabic); a video clip;¹ and a joint article published on the UNEP/MAP website.²

V.2 Upgrading the assessment component of IMAP including possible integrated assessment for all IMAP clusters

34. In line with the Decision IG.23/6 of COP 20 related to the 2017 Mediterranean Quality Status Report (MED QSR), and Decision IG.24/4 of COP21 providing the 2023 MED QSR Roadmap implementation (Naples, Italy, December 2019), and further to the Programme of Work and Budget for the 2022–2023 biennium, MED POL implemented activities to deliver the outputs defined within seven (7) processes and milestones of the 2023 MED QSR Roadmap. This resulted in significant achievements related to i) setting the new and upgraded assessment criteria, ii) defining IMAP spatial assessment units (SAUs) from the areas of monitoring by applying IMAP nested approach; and iii) the preparation and implementation of IMAP Pollution assessment methodologies.

35. The Meetings of CorMon Pollution (27 and 30 May 2022) (UNEP/MED WG.563/Inf.4) and CorMon Marine Litter (3 March 2023) (UNEP/MED WG.563/Inf.5) approved the following assessment criteria prepared by MED POL regarding contaminants, nutrients and marine litter. These are being submitted for endorsement of the MED POL Focal Points with a view to their integration into Decision on the 2023 MED QSR foreseen for submission to the upcoming COP23.

- a) The new Background Concentrations (BC) and Background Assessment Concentrations (BAC) for IMAP Common Indicator 17;
- b) The new Environmental Assessment Criteria (EAC) for IMAP Common Indicator 20;
- c) Further alignment of the list of EAC values for IMAP Common Indicator 17 with the sources originally used i.e., Long et al. (1995) and OSPAR (2009);
- d) The Mediterranean EAC values for CI 20 which are based on the maximum regulatory levels for certain contaminants in foodstuffs included in EC/EU Directives 1881/2006, 1259/2011 and amendments 488/2014 and 1005/2015;
- e) The new and updated reference conditions and boundary values of Chl_a, TP and DIN for the Adriatic Sea Sub-region coastal and open (offshore) waters, along with the two updates of the names of water types to ensure consistency of the assessment criteria included in Decision 22/7 with the classification included in Commission Decision 2013/480/EU;
- f) The possible approaches for future upgrade of EAC for IMAP Common Indicators 17 and 18; and
- g) The updated Baseline Values (BV) and Threshold Values (TV) for IMAP Common Indicator 23 (i.e., seafloor macro-litter and floating microplastics).

36. Further to the setting of the integration and aggregation rules for monitoring and assessment in 2021, the IMAP Spatial Assessment Units were defined in the Adriatic and the Western Mediterranean Sea Sub-regions to serve as a basis for GES assessment of IMAP Pollution and Marine Litter Indicators.

¹ <https://www.youtube.com/watch?v=oTdQIID-8B0>

² <https://www.unep.org/unepmap/news/news/how-unepmap-eu-funded-projects-achieving-good-environmental-status-Mediterranean>

37. Regarding development, testing and implementation of the GES and alternative environmental assessment methodologies, further to applying the integration and aggregation rules within the IMAP nested scheme and the DPSIR approach, MED POL developed and applied the following methods, as appropriate, for the preparation of the thematic assessments for the Aegean-Levantine Sea, the Adriatic Sea, the Central Mediterranean Sea and the Western Mediterranean Sea Sub-regions:

- a) the NEAT IMAP GES assessment methodology along the nested areas of assessment (CIs 13, 14 and 17);
- b) the CHASE+ assessment methodology (CIs 13, 14, 17, 22 and 23);
- c) the simplified EQR methodology and the simplified G/M assessment comparison methodology (CI 14);
- d) the assessment approach for biological effects based on the use of the literature sources;
- e) the assessment approach for contaminants in seafood based on the concentration limits for the contaminants regulated in EU;
- f) the assessment approach for bathing water quality based on the complementary use of the assessment results as presented in the Assessment report from the European Environment Agency (EEA) on the State of Bathing Water Quality in 2020 and the assessment of monitoring data reported for IMAP; and
- g) the adapted exposure index and assessment methodology as provided in the document “Setting of EU Threshold Values for impulsive and continuous underwater sound.

V.3 Delivering the 2023 MED Quality Status Report (QSR)

38. MED POL undertook the preparation of the Proposal of the 2023 MED QSR Pollution and Marine Litter Chapters successively and further to the conclusions and recommendations of the Meetings of CorMon on Pollution Monitoring (2-3 April 2019, 1-3 December 2020, 26-28 April 2021, 27 and 30 May 2022); Meetings of the Online Working Groups on Eutrophication and Contaminants (June 2021); Meeting of the MED POL Focal Points (May 2019, May, July and September 2021); and Meetings of the EcAp Coordination Group (September 2019, September 2021 and July 2022) related to the technical documents on the assessment criteria, rules for integration and aggregation, the assessment methodologies and their testing in different areas of the Mediterranean. Moreover, an important contribution was provided, and an overall basis was set, during the Regional Meeting on IMAP Implementation “Best Practices, Gaps and Common Challenges” (Rome, Italy, 10-12 July 2018) which was organized in the context of applying different tools related to GES assessment.

39. Further to the new and/or updated assessment criteria for Common Indicators 13, 17 and 20, as well as the assessment methodologies set for IMAP Common Indicators 13 & 14; 17, 18, 20 and 21, MED POL integrated and aggregated the assessment findings generated per sub-division by using available datasets into the assessment findings for four Mediterranean sub-regions. However, due to insufficient and non-optimal data quality reporting as required by Decision IG. 23/6 on the 2017 MED QSR, it was not possible to ensure optimal application of the integration and aggregation rules. This in turn affected the optimal integration of IMAP Common Indicators within specific Ecological Objectives, and thereafter of Ecological Objectives at the level of IMAP Clusters, rather than by individual Common Indicator which was the approach of the 2017 MED QSR. Nevertheless, compatible methodologies for GES assessment were used for EO5 and EO9, as well as for EO10 to a certain extent. This will facilitate optimal integration of the Ecological Objectives in the future QSRs.

40. MED POL provided in documents UNEP/MED WG.563/Inf.11 and UNEP/MED WG.563/Inf.12 (MED QSR Report: Proposals of IMAP Pollution and Marine Litter Cluster) detailed overview of data reported by the Contracting Parties to IMAP InfoSystem as of 2017, along with issues related to data reporting and quality, as well as alternative data sources used to compensate the lack of data for the preparation of the 2023 MED QSR. Summary overview of the reported data is included in Annex II of the present document.

41. In order to avoid possible bias in the Mediterranean regional assessment that may occur as a result of the use of different assessment methodologies in different areas, MED POL performed

comparisons to decrease uncertainty and to harmonize among assessments performed in different sub-regions and sub-divisions, with different number of sampling locations and measurements. The harmonization of the NEAT and CHASE+ assessment methodologies was as good as possible. They are still different methodologies and the results are not identical; however, the harmonization ensured their alignment to the extent which prevents bias assessment of the four Mediterranean sub-regions within the preparation of the 2023 MED QSR. The NEAT supports the GES assessment, while the CHASE+ rather supports assessment of the area with insufficient data for the GES assessment.

42. The MED POL Pollution and Marine Litter Cluster Chapters of the 2023 MED QSR were reviewed by the Meeting of the Ecosystem Approach Correspondence Group on Pollution Monitoring (1-2 March 2023) and the Meeting of the Ecosystem Approach Correspondence Group on Marine Litter (3 March 2023). Further to approval of the assessment findings, along with the proposals provided for their finalization, work is ongoing with the aim to prepare revised assessments for the consideration of the Meeting of Integrated CorMons which will be held on 27-28 June 2023.

V.4 Strengthening national capacities to apply harmonized and standardized monitoring and assessment practices related to pollution and marine litter in line with IMAP

43. Further to the results achieved in proficiency testing over a 25-year period, the UNEP/MAP-MED POL in collaboration with the IAEA/MESL (International Atomic Energy Agency/Marine Environmental Studies Laboratory) continues implementation of the traditional proficient testing (PT) related to the determination of trace metals and organic contaminants in sediment and biota matrixes, along with the organization of the training; however, by ensuring their adjustment to the requirements of IMAP CI17.

44. To support implementation of the national activities, renegotiation of the UN to UN Agreement for 2022 and 2023 between UNEP/MAP-MED POL Programme and MESL took place in the period from June to October 2022. Upon signature of this Agreement, the Proficiency Tests (PTs) have been launched, along with the preparation of related Training Courses on the analysis of trace elements and organic pollutants in marine samples which will take place in November 2023.

45. Further to conclusions of the 2021 Meetings of MED POL Focal Points and CorMon Pollution Meetings, MED POL is directing the ongoing activities to strengthening of the national capacities by preparation of the inter-laboratory comparisons/proficiency testing for the analysis of nutrients, biomarkers, and contaminants in commonly consumed seafood. The ongoing activities undertaken within the present collaboration with IAEA will result in the preparation of the programmes for nutrients and contaminants in commonly consumed seafood, whereby the programme for biomarkers is expected to be provided during in the coming biennium. Ongoing activities also continue to address the specific knowledge gaps of the IMAP competent laboratories, along with the technical missions to the IMAP competent laboratories in the greatest need.

V.5 Developing monitoring protocols and guidelines

46. MED POL developed guidelines for monitoring microplastics deriving from wastewater treatment plants and riverine inputs of marine litter (under Marine Litter MED II project). In support of the development process, the Online Working Group on Marine Litter (OWG-ML) was activated with membership of more than 20 experts from Turkey, Spain, Italy, Croatia, Israel, Tunisia, France, Slovenia, Morocco and EC/JRC. The Guidelines extract from the most applied methodologies for monitoring riverine inputs of marine litter. At this stage, the focus is on monitoring macro- and micro-litter through the application of visual observations, surveys on the riverbanks and dams; and the use of manta nets, water pumps and floats. MED POL submitted the Guidelines to the CorMon Marine Litter Meeting (Athens, Greece, 3 March 2023) (UNEP/MED WG.563/Inf.10), which recommended preparation of an updated version to be presented to the upcoming Integrated CorMon Meeting (Athens, Greece, 27-28 June 2023). The Guidelines attracted the attention of and shared with a number of Regional Seas (i.e., HELCOM, OSPAR, BSC) for their comments and inputs towards an effort to prepare common guidelines for all regional seas.

47. MED POL is also in the process of preparing Guidelines for monitoring microplastics from wastewater treatment plants. Work is expected to be completed in the 3rd Quarter of 2023.

V.6 Expanding and improving the monitoring and forecasting capacities in the marine environment through integrating networks

48. Given the lack of quality-assured homogenous data preventing the application of the NEAT, EQR and simplified EQR assessment methodologies, MED POL proceeded to prepare the assessments of eutrophication within the 2023 MED QSR (with exception of the Adriatic Sea Sub-region) by evaluating Chla satellite-derived data, as available from the services of COPERNICUS.

49. Further actions aimed at setting the methodology for use of forecasting and modeling services for monitoring and assessment of eutrophication will be undertaken in 2023 by using sources allocated within the Cooperation Agreement with the Italian Ministry of environment and Energy Security.

V.7 Preparation of the Transboundary Diagnostic Analysis (TDA) for the Mediterranean Sea

50. In coordination with, and support of the GEF-funded Mediterranean Sea Programme (MedProgramme/Child Project CP1.1), the Secretariat (MED POL) prepared an update of the 2005 Transboundary Diagnostic Analysis (TDA) for the Mediterranean Sea and Coast. The assessment and reporting of the TDA was performed based on the global GEF TDA/SAP methodology (October 2020 Guidelines).³ This methodology focuses on strengthening regional cooperation frameworks as a means for identifying priorities and actions.

51. The 2023 update of the TDA for the Mediterranean is undertaken further to recent emerging global issues and agendas such as related scientific updates and developments; holistic ecosystem-based management approaches; marine litter issues; new regional and global indicators frameworks; gender and social perspectives; sustainable economy trends; COVID-19 effects and digital technologies; as well as transitions in progress in the Mediterranean region which are impacting the Mediterranean Sea Large Marine Ecosystem (LME). To this aim, the 2023 TDA is aimed to update and strengthen the knowledge and connections between several environmental issues such as impact of climate change on natural and socio-economic systems, impact of emerging pollution on marine ecosystems, and potential for sustainable blue economy (to mention a few) and their causes.

52. The progress on the preparation of the TDA report was presented to the Second Project Steering Committee (SC) Meeting of the MedProgramme, Child Project 1.1 (Sarajevo, 14-15 March 2023). The Steering Committee agreed to convene an additional TDA-SC Meeting in 4th Quarter of 2023 for the initial endorsement of the report prior to submission to the next Child Project 1.1 SC Meeting planned for the 1st Quarter of 2024 for approval. The pre-publication version of the TDA report is shared with the present Meeting as information document UNEP/MED WG.563/Inf.13.

³ <https://iwlearn.net/resolveuid/2cc6db95-cc24-46e6-8f18-8c894c156a27>

Annex I

Status of level of information provided in the Reports for the biennium 2022-2023 on measures taken by the Contracting Parties for the implementation of the technical aspects of Pollution related Protocols in line with Article 26 of the Barcelona Convention and Article 13 of the LBS Protocol
(as of the 13th of April 2023)

Status of level of the information provided in the Reports on measures taken by the Contracting Parties for the implementation of the technical aspects of Pollution related Protocols in line with Article 26 of the Barcelona Convention and Article 13 of the LBS Protocol (+) information provided; (-) information not provided, (+-) information not complete, (NA) data not available/Report not submitted or at draft stage

Countries	Dumping Protocol							LBS Protocol					
	Table I	Table 2a	Table 2b	Table 3	Table 4	Table 5	Table 6	Table I	Table II	Table III	Table IV	Table V	Table VI
Albania	N/A (Not submitted)							N/A (Not submitted)					
Algeria	N/A (Not submitted)							N/A (Not submitted)					
Bosnia and Herzegovina	+	-			+	+	NA	+	-	+	+	+	+
Croatia	+	-/+	-	-	-	+	NA	+	+	+	+	+	+
Cyprus	N/A (Report at Draft Stage)							+	-/+	+	+	+	+
Egypt	N/A (Not submitted)							N/A (Not submitted)					
EU	+	+	+	+	+	+	+	+	+	+	+	+	+
France	+	+	+	+	+	+	+	N/A (Report at Draft Stage)					
Greece	N/A (Report at Draft Stage)							N/A (Report at Draft Stage)					
Israel	N/A (Report at Draft Stage)							N/A (Report at Draft Stage)					
Italy	+	+	+	+	+	+	+	+	-	+	+	-	-
Lebanon	N/A (Report at Draft Stage)							N/A (Report at Draft Stage)					
Libya	N/A (Not submitted)							N/A (Not submitted)					
Malta	N/A (Report at Draft Stage)							N/A (Report at Draft Stage)					
Monaco	N/A (Not submitted)							N/A (Report at Draft Stage)					
Montenegro	N/A (Not submitted)							N/A (Report at Draft Stage)					
Morocco	+	+	+/-	+	+/-	+	+	+	-	+	+	+	+
Slovenia	+	+	+	-	-	+	+	+	+	+	+	+	+
Spain	N/A (Report at Draft Stage)							N/A (Report at Draft Stage)					
Syria	N/A (Not submitted)							N/A (Not submitted)					
Tunisia	N/A (Not submitted)							N/A (Not submitted)					
Turkey	+	-	-	-	-	+	N/A	+	-	+	+	+	-

Annex II
Data availability in IMAP IS (including some data reported in offline format to MED POL) by
31st October 2022, the cut-off date for data reporting, for preparation of the Pollution
Assessments within the 2023 MED QSR

Introduction

1. Tables 1 to 9 provide an overview of data reported by the CPs into IMAP IS for Common Indicators 13 & 14; 17 and 21, whereby no data were reported for Common Indicators 18 and 20. The below overview includes data reported by 31st of October 2022; the cut-off date for data reporting. These data were used for the preparation of the pollution assessments within the 2023 MED QSR. The below presentation of data does not include the complementary sources of data used for the pollution assessments.

2. This presentation of data availability is undertaken from section 4 of UNEP/MAP WG.556/3 document related to the Proposal of IMAP Pollution Chapters of the 2023 MED QSR, as presented to the Meeting of CorMon Pollution (1-2 March). A few corrections suggested by the Meeting are not reflected here below since they will be included in the revised version of the IMAP Pollution Cluster Chapters which afterward will be submitted for consideration by the Meeting of Integrated CorMons (27-28 June 2023).

Country	Year	Amon	Ntri	Ntra	Phos	Tphs	Slca	Cphl	Temp	Psal	Doxy
	2021	-	-	-	-	-	-	-	-	-	-
Slovenia	2016	99	99	99	99	99	99	99	99	99	99
	2017	160	160	160	160	160	160	160	288	288	288
	2018	184	184	184	184	184	184	184	296	296	296
	2019	160	160	160	160	160	160	160	240	240	240
	2020	141	141	141	141	141	141	162	165	165	165
	2021	150	150	150	150	150	150	180	180	180	180

Table 3: Data availability by country and year for the Central Mediterranean Sea Sub-region (CEN)
Sub-region showing data reported by the CPs for the assessment of EO5 (CI 13 and CI 14) up to 31st Oct 2022.

Country	Year	Amon	Ntri	Ntra	Phos	Tphs	Slca	Cphl	Temp	Psal	Doxy
Greece	2016-2021	No data provided									
Italy	2016	By 31 st October 2022, Italy reported data relevant to the Central Mediterranean Sea Sub-region, in 4 data files with all together 260 208 data points up to 2018-2019 On 16 Dec 2022 data for 2020 were also provided. Without building of a dedicated quality assured database, it is impossible to analyse the data availability and ensure their use for the assessment. It should be noted that quantum of data reported guarantees a near monthly sampling frequency on 11 profiles with 4 stations.									
	2017										
	2018										
	2019										
	2020										
2021											
Libya	2016-2021	No data provided									
Malta	2016	-	-	-	-	-	-	-	-	-	-
	2017	93	93	93	93	93	93	263	263	263	263
	2018	165	165	165	165	165	165	480	481	481	473
	2019	59	59	59	59	59	59	78	77	77	77
	2020	-	-	-	-	-	-	-	-	-	-
	2021	-	-	-	-	-	-	-	-	-	-
Tunisia	2016-2021	No data provided									

Table 4. Data availability by country and year for the Western Mediterranean Sea Sub-region (WMS)
Sub-region showing data reported by the CPs for the assessment of EO5 (CI 13 and CI 14).

Country	Year	Amon	Ntri	Ntra	Phos	Tphs	Slca	Cphl	Temp	Psal	Doxy
Algeria	2016-2021	No data provided									
France	2016	-	-	-	-	-	-	130	179	179	74
	2017	66	-	66	66	-	43	130	324	340	116
	2018	56	-	56	56	-	56	129	326	326	108
	2019	126	-	126	126	-	126	126	344	342	117
	2020	102	-	102	102	-	95	120	349	350	129
Morocco	2016-2021	No valid data provided									
Italy	2015-2020	By 31 st October 2022, Italy reported data relevant to the WMS Sub-region, in 4 data files with all together 1,081,853 data points up to 2019. On 17 Nov 2022 data for 2020 were also provided. Without building of a dedicated quality assured database, it is impossible to analyse the data availability and ensure their use for the assessment. It should be noted that quantum of data reported guarantees a near monthly sampling frequency on 27 profiles with 4 stations in the 5-year period. All IMAP mandatory parameters were measured.									
Spain	2019	8	86	86	95	-	-	95	95	95	95
	2020	306	311	311	295	-	-	290	304	304	310
	2021	300	300	300	141	-	-	294	302	302	302
	2022	274	322	322	168	-	-	291	318	318	318
Tunisia	2016-2021	No data provided									

Amon - Ammonium; Ntri- Nitrite; Ntra – Nitrate; Phos – Orthophosphate; Tphs—Total phosphorous; Slca – Orthosilicate; Cphl – Chlorophyll *a*; Temp – temperature; Psal – Salinity; Doxy – Dissolved Oxygen.

Table 5.a. Data availability by country and year for the assessment of EO 9 – CI 17 (contaminants) in the Aegean Sea (AEGS) sub-division of AEL.

Source	IMAP-File	Country	Sub-division	Year	Cd	Hg	Pb	Σ_{16} PAHs	Σ_5 PAHs	Σ_7 PCBs	Lindane	Dieldrin
Sediment												
IMAP_IS	446	Turkey	AEGS	2018	32	32	32	0	32	31	31	31
IMAP_IS	652	Greece	AEGS	2019	5	0	5	11	11	11	0	0
IMAP_IS	652	Greece	AEGS	2020	29	0	29	10	10	10	0	0

Table 5.b. Data availability by country and year for the assessment of EO 9 – CI 17 (contaminants) in the Levantine Sea Sub-division (LEVS) Sub-division of AEL.

Source	IMAP_File	Country	Year	Cd	Hg	Pb	Σ_{16} PAHs	Σ_5 PAHs	Σ_7 PCBs	Lindane	Dieldrin
Sediment											
IMAP_IS	497	Cyprus	2017	7	7	7					
IMAP_IS	497 ⁴	Cyprus	2018	4	4	4					
IMAP_IS	634	Cyprus	2019	2	2	2		2			
IMAP_IS	634	Cyprus	2020	6	6	6		6			
IMAP_IS	634	Cyprus	2021	6	5	6					
IMAP_IS	652	Greece	2019	3	0	3	4*	4			
IMAP_IS	588	Israel	2020	14	14	14					
IMAP_IS	531 ⁵	Israel	2019	16	16	16					
MED POL		Israel	2017	14	14	14					
IMAP_IS	585	Israel	2018	11	11	11					
IMAP_IS	118	Lebanon	2019	17	17	17	19		19		
IMAP_IS	445	Türkiye	2018	33	33	33		33	33	33	33
M. barbatus											
IMAP_IS	636	Cyprus#	2020	6	6	0		6	8	8	8
IMAP_IS	636	Cyprus#	2021	8	8	0		6	4	4	4
IMAP_IS	585 ⁶	Israel	2018	13	13	0					
IMAP_IS	410	Israel	2019	7	7	0					
IMAP_IS	588	Israel	2020	10	12	0					
IMAP_IS	152	Lebanon	2019	14	14	14		6	3		
IMAP_IS	323	Türkiye	2015	25	25	25	25^				

Table 6. Data availability per year and country for the assessment of EO 9 – CI 17 (contaminants) in the Adriatic Sea (ADR) Sub-region.

Source	IMAP-File	Country	Year	Cd	Hg	Pb	Σ_{16} PAHs	Σ_5 PAHs	Σ_7 PCBs	Lindane	Dieldrin	Hexachlorobenzene	p,p'DDE
Sediment													
IMAP_IS		Albania	2020	6	6	6		6					
IMAP_IS	520	Croatia	2017	37	37	37							
IMAP_IS	520	Croatia	2019	30	30	30							
		Greece	2018	1		1	1						
IMAP_IS	457	Italy	2016	42	42	42	23	38	38	52		52	
IMAP_IS	457	Italy	2017	40	40	40	14	30	22	41		41	

⁴ Replaced IMAP file 125⁵ Replaced IMAP file 410⁶ Replaced IMAP file 71

Source	IMAP-File	Country	Year	Cd	Hg	Pb	Σ_{16} PAHs	Σ_5 PAHs	Σ_7 PCBs	Lindane	Dieldrin	Hexachlorobenzene	p,p' DDE
IMAP_IS	457	Italy	2018	24	24	24	14	17	16	30		30	
IMAP_IS	457	Italy	2019	11		26				26		10	
MED POL		Montenegro	2016	5	5	5							
MED POL		Montenegro	2017	15	15	15							
MED POL		Montenegro	2018	6	6	6	6						
IMAP_IS		Montenegro	2019	29	29	29	29	29	29	12	29	29	29
IMAP_IS		Montenegro	2020	12	12	12	12	12	12	12	12	12	12
IMAP_IS		Montenegro	2021	19	19	19							
MED POL		Slovenia	2018				1	1					
IMAP_IS	204,657	Slovenia	2019	5	5	5	5	5	5	5	5	5	5
<i>M. galloprovincialis</i>													
IMAP_IS	520	Croatia	2019	19	19	19			19				
IMAP_IS	520	Croatia	2020	18	16	18							
IMAP_IS	460	Italy	2016	8	15	8		4		8		15	
IMAP_IS	460	Italy	2017	10	18	10		11		10		18	
IMAP_IS	460	Italy	2018	8	19	8		8		12		16	
IMAP_IS	460	Italy	2019		7							7	
MED POL		Montenegro	2018	8	8	8	8						
IMAP_IS		Montenegro	2019	10	10	10	11	11	11				
IMAP_IS		Montenegro	2020	10	10	10	10	10	10				
MED POL		Slovenia	2017	3	3	3							
IMAP_IS		Slovenia	2018	3	3	3							
IMAP_IS	204,657	Slovenia	2019	3	3	3	3	3					
IMAP_IS	439,658	Slovenia	2020	3	3	3	3	3					
IMAP_IS	656	Slovenia	2021	3	3	3		3					
<i>M. barbatus</i>													
IMAP_IS	520	Croatia	2019	1		1							
IMAP_IS	520	Croatia	2020	2	2	2							
IMAP_IS	520	Croatia	2020	8	8	8							
MED POL		Montenegro	2018	8	8	8							

Table 7. Data availability per year and country for the assessment of EO 9 – CI 17 (contaminants) in the Central Mediterranean (CEN) Sub-region.

Source	IMAP-File	Country	Sub-division	Year	Cd	Hg	Pb	Σ_{16} PAHs	Σ_5 PAHs	Σ_7 PCBs
Sediment										
IMAP-IS	652	Greece	IONS	2018				2	2	
IMAP-IS	652	Greece	CENS	2018				1	1	

Source	IMAP-File	Country	Sub-division	Year	Cd	Hg	Pb	Σ_{16} PAHs	Σ_5 PAHs	Σ_7 PCBs
IMAP-IS	652	Greece	IONS	2019				18	18	
IMAP-IS	652	Greece	IONS	2020	2	0	2			
IMAP-IS	652	Greece	CENS	2020	2	0	2			
IMAP-IS	489	Malta	CENS	2017	12	12	12		15	
IMAP-IS	489	Malta	CENS	2018	10	10	10		10	
<i>M. barbatus</i>										
IMAP_IS	489	Malta	CENS	2017	3	3	3			
IMAP_IS	489	Malta	CENS	2019	2	2	2			

Table 8. Data availability per year and country for the assessment of EO 9 – CI 17 (contaminants) in the Western Mediterranean Sea (WMS) Sub-region.

Source	IMAP-File	Country	Year	Cd	Hg	Pb	Σ_{16} PAHs	Σ_5 PAHs	Σ_7 PCBs	Lindane	Dieldrin	Hexachloro benzene	p,p' DDE
Sediment													
IMAP_IS	224	France	2016	23	23	23							
IMAP_IS	469	Italy	2016	98	56	98		49	7	77		77	
IMAP_IS	469	Italy	2017	55	50	42		14		31		31	
IMAP_IS	469	Italy	2018	98	94	88		56	25	68		68	
IMAP_IS	469	Italy	2019	55	42	53		24		39		0	
IMAP_IS	243	Morocco	2016	11		11							
IMAP_IS	243	Morocco	2017	11	11	11							
IMAP_IS	243	Morocco	2018	11	11	11							
IMAP_IS	593	Spain	2016	54	54	54			54	54	54	54	54
IMAP_IS	623	Spain	2016					54					
<i>M. galloprovincialis</i>													
IMAP-IS	495	France	2018	23	23	23	23	23		23	23	23	
Reported to UNEP/MAP File 'Extraction_RNO MV_2018_2022.csv'		France	2018	19	38	19	7		7				
Reported to UNEP/MAP		France	2019	20	40	20	15		15				
Reported to UNEP/MAP		France	2020	30	30	30	13		13				
Reported to UNEP/MAP		France	2021	28	28	28	15		15				

Source	IMAP-File	Country	Year	Cd	Hg	Pb	Σ_{16} PAHs	Σ_5 PAHs	Σ_7 PCBs	Lindane	Dieldrin	Hexachloro benzene	p,p' DDE
IMAP-IS	494	Italy	2016		12							12	
IMAP-IS	494	Italy	2017		23							23	
IMAP-IS	494	Italy	2018		15							13	
IMAP-IS	494	Italy	2019									2	
IMAP-IS	650	Morocco	2019	4	4	4							
IMAP-IS	650	Morocco	2020	4	4	1							
IMAP-IS	650	Morocco	2021	4	4	4							
IMAP-IS	517	Spain	2017						25	25	25	25	25
IMAP-IS	619	Spain	2017	25	25	25							
IMAP-IS	620	Spain	2019	45	45	45							

Table 9 Data availability per year and country for the assessment of EO 9 – CI 21 in the Mediterranean.

Source	IMAP file	Country	Sub-region	Year
IMAP-IS	403	Morocco	WMS	2018
IMAP-IS	404	Morocco	WMS	2019
IMAP-IS	616	Morocco	WMS	2020-2021
IMAP-IS	547-551	Spain	WMS	2017-2021
IMAP-IS	262	Bosnia and Herzegovina	ADR	2015-2020
IMAP-IS	385	Croatia	ADR	2016-2020
IMAP-IS	653	Croatia	ADR	2021
IMAP-IS	655	Croatia	ADR	2022
IMAP-IS	#	Montenegro	ADR	2017-2021
IMAP-IS	146	Slovenia	ADR	2019
IMAP-IS	440	Slovenia	ADR	2020
IMAP-IS	642	Slovenia	ADR	2021
IMAP-IS	490*	Malta	CEN	2016-2020
IMAP-IS	147	Lebanon	AEL	2019
IMAP-IS	649	Lebanon	AEL	2017-2021
IMAP-IS	605	Israel	AEL	2021

Reported directly to MED POL, still to be uploaded in the IMAP-IS, *data available in draft status