



**United Nations  
Environment Programme  
Mediterranean Action Plan**

Distr.: Limited  
24 February 2023  
Original: English

Meeting of the Ecosystem Approach Correspondence Group on Monitoring (CORMON) Biodiversity and Fisheries

Athens, Greece, 9-10 March 2023

**Agenda Item 3: 2023 Mediterranean Quality Status Report (2023 MED QSR): Content on Biodiversity, Non-indigenous species and Fisheries Ecological Objectives (EOs)**

**Draft 2023 MED QSR annotated Table of Contents**

For environmental and economic reasons, this document is printed in a limited number. Delegates are kindly requested to bring their copies to meetings and not to request additional copies.

### **Note by the Secretariat**

UNEP/MAP is following the planned activities for the preparation of the 2023 MED QSR and its methodological approach, outline, structure, and contents. The proposed contents and structure were discussed at the Integrated CORMON Meetings (1-3 December 2020) and further refined in consultation with the Contracting Parties and in line with the 2023 MED QSR Operational Implementation Plan, based on the results of the ongoing UNEP/MAP system work on monitoring, assessment scales and integrated assessment methodologies and tools. The proposed contents and structure were reviewed and endorsed by the 8<sup>th</sup> Meeting of the Ecosystem Approach Coordination Group (9 September 2021, UNEP/MED WG.514/12, Annex II), further developed intersessionally with the EcAp Task Force.

The main assessment chapters of the 2023 Med QSR will be based on assessments of Common Indicators (CI) and some Candidate Common Indicators (CCI) within Ecological Objectives (EO). If feasible, CIs will be integrated within EOs and across EOs, where data permit. Table 1 below provides annotated draft contents of the 2023 MED QSR.

The draft content of the assessment chapters on Biodiversity (EO 1), Non-indigenous Species (EO 2) and Fisheries (EO 3) are presented in Working Documents UNEP/MED WG.547/3– WG.547/9 to this meeting.

## List of Abbreviations / Acronyms

<b>ACCOBAMS</b>	Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area
<b>BAC</b>	Background Assessment Criteria
<b>BC</b>	Background concentrations
<b>CI</b>	Common Indicator
<b>CCI</b>	Candidate Common Indicator
<b>CMCC</b>	Copernicus Marine Service
<b>CMEMS</b>	Copernicus Marine Environment Monitoring Service
<b>COP</b>	Conference of the Parties
<b>CORMON</b>	Correspondence Group on Monitoring
<b>DD</b>	Data Dictionaries
<b>DS</b>	Data Standards
<b>EAC</b>	Environmental Assessment Criteria
<b>EcAp</b>	Ecosystem Approach
<b>EEA</b>	European Environment Agency
<b>EMODnet</b>	European Marine Observation and Data Network
<b>EO</b>	Ecological Objective
<b>ESA</b>	European Space Agency
<b>ETC-UMA</b>	European Topic Centre – University of Malaga
<b>EU</b>	European Union
<b>GEF</b>	Global Environment Facility
<b>GES</b>	Good Environmental Status
<b>GFCM</b>	General Fisheries Commission for the Mediterranean
<b>HELCOM</b>	Baltic Marine Environment Protection Commission - Helsinki Commission
<b>IMAP</b>	Integrated Monitoring and Assessment Programme
<b>IMO</b>	International Maritime Organisation
<b>MAP</b>	Mediterranean Action Plan
<b>MapX</b>	UN open-source maps
<b>MED POL</b>	Programme for the Assessment and Control of Marine Pollution in the Mediterranean Sea
<b>MPA</b>	Marine Protected Area
<b>MSFD</b>	Marine Strategy Framework Directive
<b>NEAT</b>	Nested Environmental status Assessment Tool
<b>NIS</b>	Non-indigenous Species
<b>OSPAR</b>	Convention for the Protection of the Marine Environment for the North-East Atlantic
<b>OWG</b>	Online Working Group
<b>PT</b>	Proficiency Tests
<b>QSR</b>	Quality Status Report
<b>TDA</b>	Transboundary Diagnostics Analysis



**Table 1. Proposed annotated content of the 2023 MED QSR.**

Annotated contents approved by the 8<sup>th</sup> Meeting of the Ecosystem Approach Coordination Group (9 September 2021, UNEP/MED WG.514/12, Annex II).

<b>Section</b>	<b>Annotations (8<sup>th</sup> EcAp CG)</b>
<b>Foreword</b> (1 page)	
<b>Acknowledgements</b> Advisory Board Authors/consultants List of experts consulted	For printed publication – online this can be replaced by the menu or tabs on the landing 2023 MED QSR page
<b>Acronyms and abbreviations</b>	For printed publication – online this can be replaced by the menu or tabs on the landing 2023 MED QSR page
<b>Table of Contents</b>	For printed publication – online this can be replaced by the menu or tabs on the landing 2023 MED QSR page
<b>Key findings or Executive Summary</b> (1-2 pages)	<b>NEW</b> – (see examples of HOLAS II and 2010 OSPAR QSR) for a more visual and shorter overview of key findings/conclusions of 2023 MED QSR for each Ecological Objective and other thematic (emerging topics) sections, as well as results of integrated assessment and DPSIR (possible through visual infographic such as in HOLAS II). The Executive Summary will be prepared in English, French, Spanish, and Arabic.
<b>Introduction (“About the QSR”)</b>  0.1. UNEP/MAP and the Barcelona Convention: vision, goals, and Ecological Objectives 0.2. Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast 0.3. Other key global and regional assessment processes 0.4. Approach and methodology for the preparation of the 2023 Mediterranean QSR	Presenting briefly EcAp and IMAP process in the Mediterranean, key decisions, links to SDGs and other global processes, progress on implementation and methodology for this QSR. Could use similar structure as 2017 MED QSR (copied here). The section on IMAP can present an update on national IMAP implementation per CI.  The integrated assessment methodology and specificities of DPSIR analysis at MAP level would be presented here in detail.  The full list of IMAP EOs and CIs could either be presented in a table here, or as an annex at the end of the publication (for online version, as a separate page/tab).  As an alternative, the approach and methodology can be presented in a stand-alone section after the Introduction, to give it more prominence.
<b>1. The Mediterranean Sea</b>  1.1. Environmental characteristics 1.1.1. The Mediterranean marine and coastal environment Geography, physiography and landscapes Circulation and water masses	Section providing an overview of the Mediterranean regional context in terms of environmental and socio-economic characteristics, similar to the 2017 MED QSR. In the printed version, this should come as the first section after the introduction to set the background/context for the quality assessment.  Compared to the 2017 MED QSR, a new sub-section

Section	Annotations (8 <sup>th</sup> EcAp CG)
<p>Hydrological and climatic setting Water and nutrient characteristics Biodiversity</p> <p>1.1.2. Climate change The Mediterranean region: a climate change hot-spot Sea level rise (SLR) Climate Change related risks, vulnerabilities and impacts Possible impacts on GES (<i>NEW</i>)</p> <p>1.2. Socioeconomic characteristics of the Mediterranean Introduction Population and development Tourism Maritime transport Energy, gas and oil exploration and exploitation, mining and manufacturing Fisheries and aquaculture Land-based pollution sources.</p> <p>1.3. Regional cooperation (<i>NEW</i>)</p> <p>Barcelona Convention and Protocols Other relevant regional policy frameworks (e.g., MSFD)</p>	<p>(1.3) is proposed to provide the regional policy and cooperation context in the Mediterranean under the Barcelona Convention. While the Introduction above will include a brief overview of the Barcelona Convention process and the implementation of the Ecosystem Approach, this sub-section could provide more in-depth information on relevant regional policy frameworks and regional cooperation efforts towards assessing and achieving GES. It could also explain the links to the MSFD.</p> <p>Section 1.1 (Environmental characteristics) or 2 (Socioeconomic characteristics) could briefly address ecosystem services and benefits (as part of the argument of why it is important to preserve ecosystems).</p> <p>The section on climate change (which was also included in 2017 MED QSR) should capitalize on MedECC results and be brief, if possible highlighting relevance and possible influence of climate change on aspects/indicators covered by IMAP (e.g., possible impacts of CC on eutrophication, habitats, species, NIS, coastal erosion). This can be a simple analysis relying on available global research if no regional analysis is available. This would make this part more integrated with the rest.</p>
<p><b>2. Mediterranean Quality Status Assessment</b></p> <p><b>2.1 Pollution and Litter Cluster</b></p> <p><b>2.1.1 Eutrophication (EO5)</b></p> <ul style="list-style-type: none"> <li>- Key findings (introductory paragraph)</li> <li>- Background information on eutrophication/trends and sources of pressure</li> <li>- Methodology: Common Indicators used in the assessment (CI 13-14) and assessment methodology</li> <li>- Integrated GES Assessment for EO5</li> <li>- Specific issues/trends per selected CI (possibly in the form of diagrams or figures, and maps if feasible)</li> <li>- Analysis and conclusions</li> </ul>	<p>For the 2023 edition of the QSR, a new approach is proposed by integrating CIs within specific Ecological Objectives (EO), and thereafter of EOs at the level of IMAP Clusters (rather than by individual CI which was the approach of the 2017 QSR). Each section corresponds to one of the 11 IMAP Ecological Objectives; sections are grouped by clusters (Pollution and Litter; Biodiversity and NIS; Coast and Hydrography) in the same order as 2017 QSR.</p> <p>In line with above, for each cluster, a final section is proposed providing elements towards integrated assessment within this cluster (across EOs) following the DPSIR approach, and possibly elements for integration with other clusters; or, if the methodology for integrated GES assessment per cluster is not ready, this section could provide an update on progress on methodologies and recommendations for next assessment.</p>
<p><b>2.1.2 Pollution (EO9)</b></p> <ul style="list-style-type: none"> <li>- Key findings (introductory paragraph)</li> <li>- Background information on pollution/contaminants, including trends and sources of pressure</li> <li>- Methodology: Common Indicators used in the assessment (CI 17-21) and</li> </ul>	<p>Each section per EO will include the following core elements:</p> <ul style="list-style-type: none"> <li>- a short paragraph with the key findings for this Ecological Objective (3-4 sentences max), which can be presented as a chapeau like in HOLAS II or in a box similar to OSPAR.</li> <li>- introduction to the issues associated with this Ecological</li> </ul>

Section	Annotations (8 <sup>th</sup> EcAp CG)
<p>assessment methodology</p> <ul style="list-style-type: none"> <li>- Integrated GES Assessment for EO9</li> <li>- Specific issues/trends per selected CI (possibly in the form of diagrams or figures, and maps if feasible)</li> <li>- Analysis and conclusions</li> </ul>	<p>Objective (trends, sources of pressure, targets, as feasible and applicable).</p> <ul style="list-style-type: none"> <li>- a presentation of Common Indicators used for the assessment and brief description of applied GES methodology, including use of the criteria of assessment within aggregation of assessment findings at optimally nested scales of assessment, as well as visualization of the assessment findings by applying the tools as feasible within selected specific GES assessment methodology i.e., maps/ graphs/ infographics;</li> <li>- Integrated assessment for the EO using the DPSIR approach as far as possible, based on results of CI assessment; and if possible, comparison with 2017 QSR</li> <li>- Specific highlights for individual Common Indicators in case they need to be given particular attention (can be in boxes).</li> <li>- Analysis/conclusions on compliance and non-compliance with GES targets, along with the proposals of next steps to further measures/efforts to be put in place towards GES achievement what is the future outlook and what are the risks, challenges to look out for). This last sub-section could also highlight data gap issues and further efforts required to improve data availability.</li> </ul>
<p><b>2.1.3 Marine Litter (EO10)</b></p> <ul style="list-style-type: none"> <li>- Key findings (introductory paragraph)</li> <li>- Background information on marine litter, including trends and sources of pressure</li> <li>- Methodology: Common Indicators used in the assessment (CI 22-23) and assessment methodology; CCI24 could be presented in a separate box to update on its status</li> <li>- Integrated GES Assessment for EO10</li> <li>- Specific issues/trends per selected CI (possibly in the form of diagrams or figures, and maps if feasible)</li> <li>- Analysis and conclusions</li> </ul>	<p>For each cluster, the assessment will be based on mandatory IMAP Common Indicators monitored and reported by Contracting Parties. Where possible, information/update will also be provided for Candidate Common Indicators as part of relevant chapters/sections based on available data (CCI24, 25, 26 and 27).</p>
<p><b>2.2 Biodiversity and NIS Cluster</b></p> <p><b>2.2.1 Biodiversity (EO1)</b></p> <ul style="list-style-type: none"> <li>- Key findings (introductory paragraph)</li> <li>- Background information on Habitats and Species, including trends and sources of pressure</li> <li>- Methodology: Common Indicators used in the assessment (CI 1-5) and assessment methodology</li> <li>- Integrated Assessment for EO1</li> <li>- Specific issues/trends per selected CI/taxa/main species (possibly in the form of box)</li> <li>- Analysis and conclusions</li> </ul>	<p>See explanation above of structure per cluster and per EO sub-section.</p> <p>Section 2.2.1 (EO1) will include background information on habitats and species, which should refer to trends and sources of pressure, the status of knowledge on every concerned habitat / species group across Mediterranean countries/sub-regions.</p> <p>Section 2.2.1 should present one integrated assessment per component of biodiversity (e.g., one assessment for habitats, one for marine mammals, one for seabirds, one for marine turtles)</p>
<p><b>2.2.2 Non-indigenous Species (EO2)</b></p> <ul style="list-style-type: none"> <li>- Key findings (introductory paragraph)</li> <li>- Background information on NIS, including trends and sources of pressure</li> <li>- Methodology: Common Indicators used in the assessment (CI 6) and assessment methodology</li> </ul>	<p>Section 2.2.2 (EO2) will be based mainly on the results of the baseline assessment of NIS and the national lists shared by the Contracting Parties, with possible contribution from the results of sub-regional pilots. The geographical scope of the data and scales used will be clearly presented in the methodology sub-section. A special box could be added to describe the sub-regional</p>

Section	Annotations (8 <sup>th</sup> EcAp CG)
<ul style="list-style-type: none"> <li>- Integrated Assessment for EO2</li> <li>- Specific issues/trends per species/main sources/hotspots/most vulnerable areas to NIS (possibly in the form of box)</li> <li>- Analysis and conclusions</li> </ul>	<p>pilots and joint monitoring efforts. The section on specific issues/trends may provide trends per taxonomic group or eco-functional group of species, and will include a focus on main sources, hotspots, and most vulnerable areas to NIS, as well as a reference to the establishment of regional and sub-regional list of invasive species to be monitored.</p>
<p><b>2.2.3 Harvest of commercially exploited fish and shellfish (EO3)</b></p> <ul style="list-style-type: none"> <li>- Key findings (introductory paragraph)</li> <li>- Background information on commercial fisheries and trends</li> <li>- Methodology: Common Indicators used in the assessment (CI 7-12) and assessment methodology</li> <li>- Integrated Assessment for EO3</li> <li>- Specific issues/trends per selected CI/species (possibly in the form of box - tbc)</li> <li>- Analysis and conclusions</li> </ul>	<p>Section 2.2.3 (EO3) will be prepared with support from GFCM based on their database. A clear link will be provided between CI 12 (By-catch of vulnerable and non-target species) to CI 2 (Condition of the habitat's typical species and communities) and CI 5 (Population demographic characteristics). The conclusions will include focus on commercial species that are listed in Annex III of the Barcelona Convention Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean ("Species whose exploitation is regulated").</p>
<p><b>2.2.4 Elements for Marine Food Webs (EO4) and Sea-floor integrity (EO6) (NEW)</b></p> <ul style="list-style-type: none"> <li>- EO4 <ul style="list-style-type: none"> <li>- Key issues and sources of pressure</li> <li>- State of the art on data, monitoring and assessment</li> <li>- Preliminary assessment for EO4 and conclusions</li> </ul> </li> <li>- EO6 <ul style="list-style-type: none"> <li>- Key issues and sources of pressure</li> <li>- State of the art on data, monitoring and assessment</li> </ul> </li> <li>- Preliminary assessment for EO6 and conclusions</li> </ul>	<p>Section 2.2.4 (EO4 and EO6) relates to Ecological Objectives for which Common Indicators have not been developed yet and will be advanced during the 2020-2021 and 2022-2023 biennia. In the absence of IMAP monitoring data for these two EOs, the section could build on and reflect available data sources identified and approved through CORMONs, available technologies and techniques for monitoring, provide a preliminary assessment to the extent possible, and draw conclusions and recommendations for further monitoring and assessment of EO4 and EO6 (and if possible, recommendations for measures based on identified key issues/pressures related to these EO).</p> <p>Explore the possibility for including seafloor integrity, recognizing the EO6 is under development, with clear links between the common indicator fact sheet, to undertake assessment for the biodiversity component, i.e., for species.</p>
<p><b>2.3 Coast and Hydrography Cluster</b></p> <p><b>2.3.1 Hydrography (EO7)</b></p> <ul style="list-style-type: none"> <li>- Key findings (introductory paragraph)</li> <li>- Background information on Hydrography, including trends and sources of pressure</li> <li>- Methodology: Common Indicators used in the assessment (CI 15) and assessment methodology</li> <li>- Specific issues/trends per habitat or type of pressure (possibly in the form of box - tbc)</li> <li>- Analysis and conclusions</li> </ul>	<p>See explanation above of structure per cluster and per EO sub-section.</p> <p>A box on innovative coastal products and data collection and assessment methods and technologies could be added (e.g., Copernicus, EMODnet, Marinomica)</p> <p>Strengthen the link between hydrography and biodiversity, particularly regarding habitats</p> <p>Due to the high complexity of this Common Indicator, a baseline assessment may be conducted at this stage.</p>



Section	Annotations (8 <sup>th</sup> EcAp CG)
<p>2.3.2 Coastal ecosystems and landscapes (EO8)</p> <ul style="list-style-type: none"> <li>- Key findings (introductory paragraph)</li> <li>- Background information on Coastal ecosystems, including trends and sources of pressure (a box on climate change and coastal erosion could be added)</li> <li>- Methodology: Common Indicators used in the assessment (CI 16) and assessment methodology, CCI25 could be presented in a separate box to update on its status</li> </ul>	<p>See explanation above of structure per cluster and per EO sub-section.</p> <p>A box on innovative coastal products and data collection and assessment methods and technologies could be added (e.g., Copernicus, EMODnet, Marinomica)</p> <p>Strengthen the link between hydrography and biodiversity, particularly regarding habitats</p> <p>Due to the high complexity of this Common Indicator, a baseline assessment may be conducted at this stage.</p>
<p>2.4 Towards an integrated assessment of GES in the Mediterranean</p>	<p>Depending on level of progress on UNEP/MAP integrated assessment methodologies, this section could propose a brief DPSIR-based integrated GES assessment of the Mediterranean Sea and Coast and cumulative pressures and impacts; or describe current efforts and status of progress on developing these methodologies, and summarize key pressures, overall state and impacts based on the assessments provided in sections 2.1-2.3.</p>
<p><b>3. UNEP/MAP Actions and Measures to Address Pressures and Protect the Mediterranean Sea and Coast</b></p>	<p><i>(NEW)</i> This section could include an analysis of existing measures and actions undertaken at the regional level in the Mediterranean as part of MAP Barcelona Convention, to address specific pressures and improve the status of the Sea and Coast in relation to the Ecological Objectives and Common Indicators under IMAP. An analysis of the effectiveness of the measures could be proposed (at least briefly).</p> <p>Boxes could focus on specific achievements to be highlighted (e.g., SPAMI, SOx ECA, Pollution and Marine Litter Regional Plans, Key Species and Habitats Regional Action Plans, ICZM/CRF). This section could highlight in particular efforts for integrated ecosystem management.</p>
<p><b>4. Conclusions and ways forward/future outlook</b></p> <p>4.1 Key issues, risks and priorities</p> <p>4.2 Recommendations for priority actions/measures</p> <p>4.3 Recommendations for future monitoring and assessment</p>	<p>This section could provide a summary of main issues identified in the QSR through the assessment, and an analysis of overall status and trends based on the assessment, as well as possible future risks, if no action is taken.</p> <p>It should then include recommendations on possible priority areas of action and measures to be developed to address key pressures and drivers. This part can also highlight some ongoing and planned efforts identified as particularly effective (e.g., SOx ECA).</p> <p>Finally, it should identify key challenges and provide recommendations in relation to data gaps to be addressed for the next QSR (2029) and monitoring and assessment methods.</p>
<p><b>Annexes</b></p>	<p>The Annexes will include any additional useful information, such as the list of IMAP EOs and CIs, if not</p>

<b>Section</b>	<b>Annotations (8<sup>th</sup> EcAp CG)</b>
List of IMAP EOs and CIs Species list Marine habitats list Sub-regional case studies Other Annexes tbd	included in the introduction; list of key species and habitats considered; specific case studies (if not included in boxes inside the thematic chapters) etc.
<b>Glossary</b>	For the printed publication – online this can be replaced by the menu or tabs on the landing 2023 MED QSR page.
<b>References</b>	For the printed publication – online this can be replaced by the menu or tabs on the landing 2023 MED QSR page, or at bottom of each section/page.
<b>Illustrations/photo credits</b>	For the printed publication – online this can be replaced by the menu or tabs on the landing 2023 MED QSR page, or at bottom of each section/page.