

# Horizon 2020 Integrated Regional Assessment 2019

## Note on Draft Outline

### Introduction

Five years after the publication of the first indicator-based assessment “Horizon 2020 Mediterranean report - Toward shared environmental information systems” (2014), the second H2020 regional assessment will provide an evidence-based analysis of the progress in reducing pollution from the main land-based sources (waste, water and industrial emissions) in the Mediterranean. The H2020/NAP set of indicators developed in the first phase of H2020 Initiative (2007-2014) and further refined and updated in the second phase (2015-2020), allow for the regular production and sharing of quality assessed data and information, that will constitute the core of the indicator-based thematic assessment. However, the upcoming report aims to provide a more integrated assessment of the main pollution issues, their sources and the responses put in place to tackle them, supported by ongoing initiatives under the Barcelona Convention, such as the Mediterranean Strategy for Sustainable Development (MSSD), the Ecosystem Approach (EcAp) and its Integrated Monitoring and Assessment Programme (IMAP), the Sustainable Consumption and Production (SCP) action plan, the Regional Plans and National Action Plans (NAPs). The second H2020 assessment will complement and integrate other regional assessments, such as the State of Environment and Development (SoED) report, currently in preparation, and the Quality Status Report for the Mediterranean Sea (2017, 2023) based on the 11 Ecological Objectives for achieving Good Environment Status.

### Process

The process leading to the development of the second H2020 regional assessment relies heavily on the level of engagement and participation of national stakeholders, building on the collection and streamlined reporting of data and the production of the national assessment. Progress on the development of the technical content associated to the three thematic areas was achieved during the regional thematic workshops organized in the period March-July 2019. This series of workshops brought together thematic experts from the region with the aim to further contribute to the development of H2020/NAP indicators, engage in the preparation of the H2020 indicator-based assessment report and enhance capacities on the use of indicator-based assessments to inform national policy.

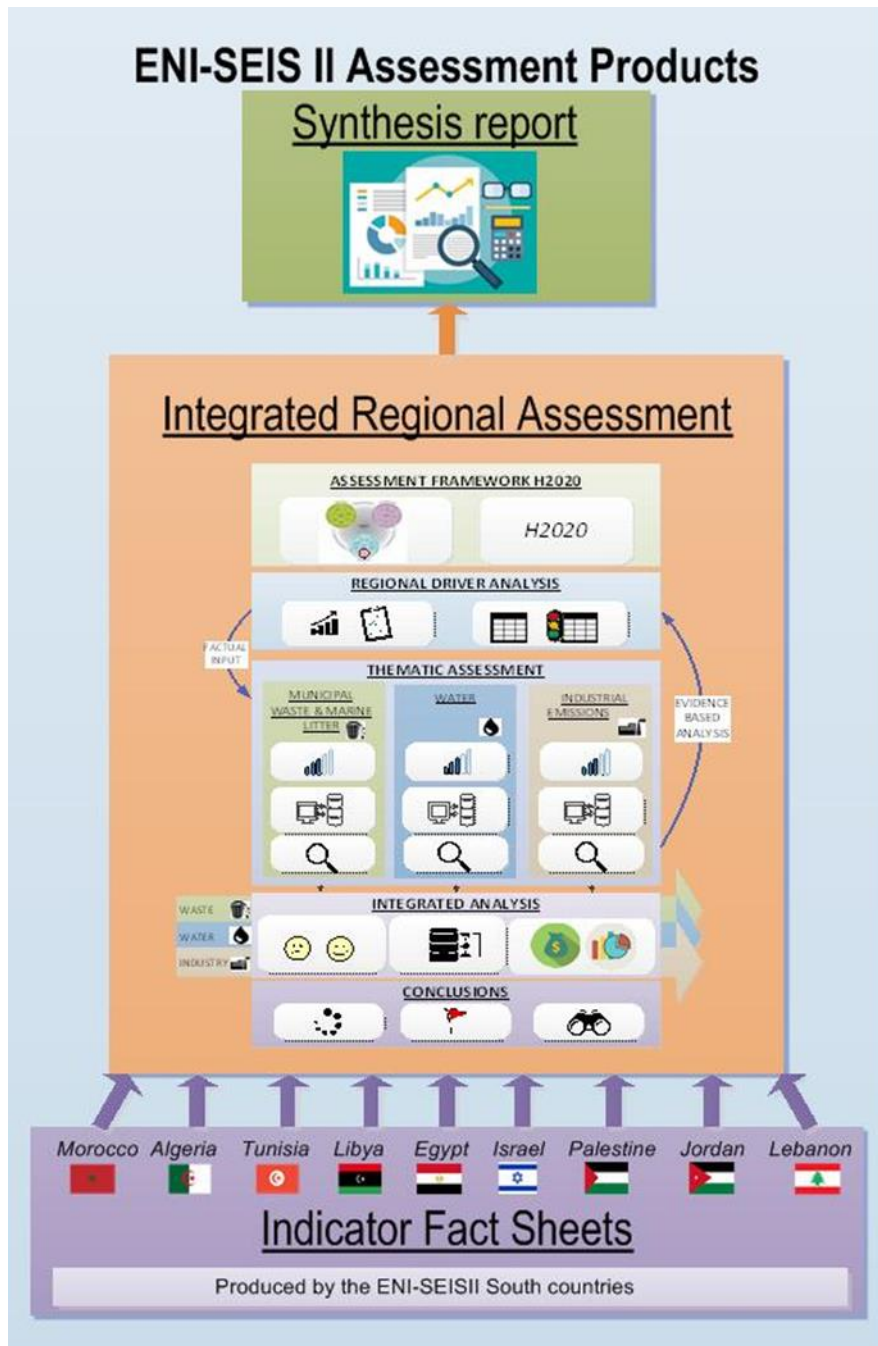
### Assessment components

The second H2020 regional assessment will consist of three main products :

1. **National Indicator Fact Sheets:** reports developed by the ENP-South countries with the support of technical assistance provided as part of the Small-Scale Funding Agreements (SSFAs), describing their national situation with respect to the H2020 indicators, in line with the Indicator Specification sheets and the guidance on Indicator Assessment;

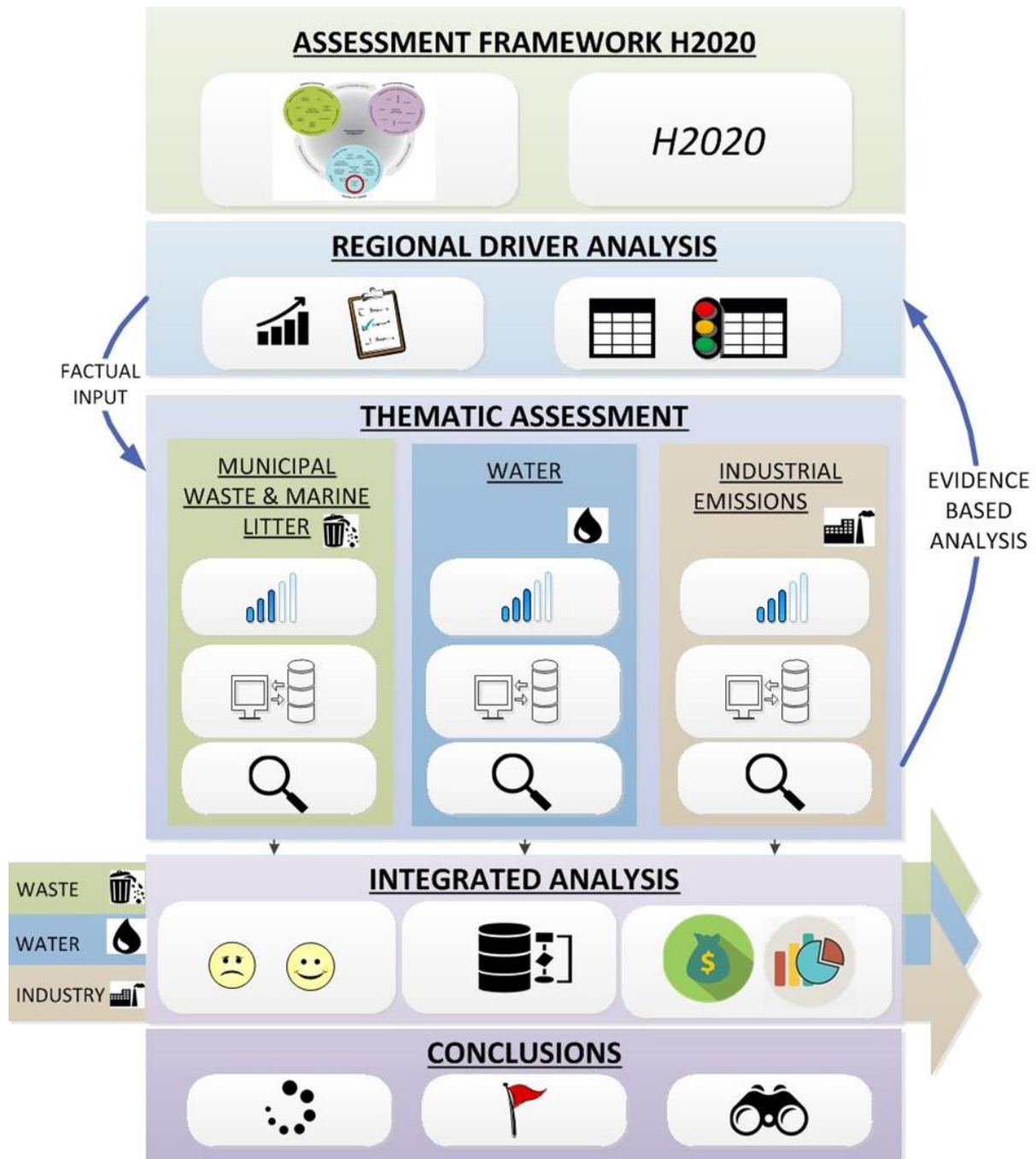


2. **Integrated Regional Assessment:** a basin wide integrated assessment addressing the three priority areas of H2020 and progress towards reduction of the key sources of pollution, in particular on how H2020 Initiative has contributed to such achievements;
3. **Synthesis report:** including infographics with key messages from the regional assessment, achievements, lessons learned and main recommendations.



## Integrated regional assessment framework

The current assessment framework provides the main building blocks which are being developed in parallel through dedicated thematic support and activities.



1. **Chapter 1** introduces the overarching concept of Ecosystem Based Management (EBM) and its relevance for a holistic systematic approach. It explains which components of EBM are covered by the H2020 assessment framework, delineating the boundaries of the pollution definition.
2. **Chapter 2** provides an analysis of the regional drivers behind the pressures of pollution. Socio-economic trends and regional policies related to the three priority areas are discussed and analysed in view of the key pressures considered.
3. **Chapter 3** is the core of the assessment, composed of three parallel thematic assessments on municipal waste & marine litter, water and industrial emissions. In this chapter, indicator trends, the progress on data and information in the region and uncertainties related to the indicators are provided, together with an explanation of the findings in light of the responses and drivers.
4. **Chapter 4** provides an integrated, cross-cutting analysis of pollution in the Mediterranean, with a critical appraisal of responses including investments (sectorial, capacities, infrastructure, data infrastructure etc).
5. **Chapter 5** provides the key messages on the progress of reducing pollution in the Mediterranean, reflecting on the current approach and the capacities and needs in view of Post 2020 UfM Strategy/initiative.



## Annotated outline

The following outline elaborates on the content of each building block in the assessment framework, highlighting the key questions to be addressed in each sub-section.

<b>A. ASSESSMENT FRAMEWORK H2020</b>		
<b>Chapter 1: Assessment framework</b>		
<i>Description: brief description of Mediterranean policy framework, the H2020 initiative and underlying Ecosystem Based approach to the management of the Mediterranean Sea</i>		
<b>Sub-sections</b>	<b>Key Questions</b>	<b>Annotations</b>
<b>1.1 Framing of policy boundaries</b>	<p><i>What is the policy framework in which H2020 Initiative for a Cleaner Mediterranean Sea should be seen?</i></p> <p><i>How does the H2020 regional assessment build upon existing initiatives and assessments?</i></p>	<p>→ Reference to the Mediterranean policy framework</p> <p>→ LBS Protocol/NAPs tackling pollution sources on one hand and IMAP focusing on status/impacts</p> <p>→ H2020 Initiative for a cleaner Mediterranean Sea could be considered as the link between the two</p> <p>→ 3 components of H2020: PRPI (Investments, with a table of investments), Capacity Building (Infographic on capacity building process) and Review and Monitoring</p> <p>→ Three thematic clusters and cross-cutting themes</p> <p>→ Need for a systemic and holistic approach when assessing pollution.</p>
<b>1.2 Ecosystem Based Management concept</b>	<p><i>Why is there a need for an ecosystem-based management approach, and how does the assessment relate to the concept?</i></p>	



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<p><b>1.3 Regional Assessment – evaluating the progress of the H2020 Initiative</b></p>	<p><i>What is the main question the assessment tries to answer? e.g. what is the progress in depolluting the Mediterranean? (rephrase)</i></p>	<ul style="list-style-type: none"> <li>→ Formulation of the main question</li> <li>→ Description on how this is addressed in the assessment components</li> <li>→ Scope and objectives of present Assessment (incl. geographic coverage and assessment period)</li> <li>→ Include H2020 assessment framework schematic</li> <li>→ Main outcomes of H2020 2014 assessment and Extension of H2020 scope in Phase II SEIS</li> </ul>
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<p><b>B. REGIONAL ANALYSIS – Drivers &amp; Responses – what makes change happen</b></p>		
<p><b>Chapter 2: Regional analysis of drivers and responses</b>  <i>Description: Analysis of main regional drivers behind the pressures of pollution and main responses. Socio-economic trends and regional policies will be discussed and analysed in the light of the thematic assessment on the progress on addressing pressures of pollution for the three components of pollution.</i></p>		
<p><i>Sub-sections</i></p>	<p><i>Key Questions</i></p>	<p><i>Annotations</i></p>
<p><b>2.1 Socio-economic trends</b></p>	<p><i>What are the socio-economic trends that can explain the trends in the 3 thematic areas?</i></p>	<ul style="list-style-type: none"> <li>→ Graphs and short descriptions on socio-economic trends. (Population, urbanization, economic growth, geopolitical issues + refugee camps, water scarcity. Geophysical trends in relation to these socio-economic trends. Climate &amp; climate change incl., temperature and rainfall changes, water shortage, sea-level rise, acidification)</li> <li>→ Input from “FEMISE” 2017 report</li> <li>→ Using symbols to show the contribution of trends to a thematic area</li> </ul>
<p><b>2.2 Regional policies Institutional &amp; policy context</b></p>	<p><i>Which regional policies play a role in addressing the trends in the 3 thematic areas?</i></p>	<ul style="list-style-type: none"> <li>→ Regional policy setting – Barcelona Convention and LBS Protocol, NAPs, IMAP, MSSD, SCP, SDGs, other initiatives etc. As an infographic with short description.</li> </ul>



		→ Highlight of the main policies addressing the different thematic areas, table form (using same symbols)? Association agreements – institutional + cooperation
<b>2.3 Investments</b>	<i>Which investments have been done regionally focussing on tackling land-based sources of pollution in the Mediterranean? Were these investments useful?</i>	→ Overview of investments and impacts. Table-form but where to get this information from? → No indicators on evaluating investments are available → Refer to case studies e.g. EIB final documents on PRPI / MehSIP; e.g. the example of Lake Bizert as best practice, following the funding that Tunisia received from H2020.
<b>2.4 Knowledge base (Drivers &amp; Response)</b>		
<b>2.5 Evidence-based analysis of regional drivers and responses</b>		→ Integration, using the output of chapter 3, together with the facts from 2.1, 2.2, 2.3. Output in form of traffic lights.

## C. THEMATIC ASSESSMENT

### Chapter 3: Thematic assessment

*Description: Parallel assessment of three thematics: Municipal waste & Marine litter, Water and Industrial emissions, with the H2020/NAP indicators at the core supplemented by additional available information. Indicator trends, the progress on data and information in the region and uncertainties related to the indicators, and an explanation of the findings in light of the responses and drivers will be provided. Short introduction as to how to read this chapter.*

<i>Sub-sections</i>	<i>Key Questions</i>	<i>Annotations</i>
<b>3.1 Priority Area 1 – Municipal waste and marine litter</b>		
<b>3.1.1 Waste and Marine litter trends</b>	<i>What are the trends in municipal solid waste generation?</i>	→ Overview of the waste indicator trends → Case studies to fill in the blanks and highlight best practice → Link to marine Litter activities in the Med (e.g. ML regional plan, SCP framework, IMAP ML indicators, regional assessments and



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	<p><i>Is appropriate disposal and treatment improving?</i></p> <p><i>What is the extension of the issue of marine litter in the Mediterranean?</i></p>	<p>studies) to inform on impacts of mismanaged waste (quantities e.g. beach litter, socio-economic and environmental impacts of ML) → Include case-studies/highlights from countries? (e.g. beach litter monitoring in Egypt and Jordan?)</p>
3.1.2 Waste and Marine litter data and information process	<p><i>How is the monitoring and reporting on waste progressing in the region?</i></p>	<p>→ Description of the progress of data, infrastructure and cooperation, including the quality of data</p>
3.1.3 Waste and Marine litter assessment	<p><i>Why is municipal solid waste a priority issue in the Med region? What are the main factors impacting waste management in the Mediterranean?</i></p> <p><i>Is the issue of municipal waste and marine litter improving?</i></p>	<p>→ Findings in light of the regional drivers and responses</p> <p>→ Description of uncertainties and how countries are addressing these</p> <p>→ Do the indicators sufficiently assess the problem and how are they related to other regional indicators?</p> <p>Informal waste management, overall management &amp; recycling linking to circular economy Pressures growing faster than actions Link to post H2020 agenda – circular economy element is key Key messages</p>
<b>Sub-sections</b>	<b>Key Questions</b>	<b>Annotations</b>
<b>3.2 Priority Area 2 – Water</b>		





<p><b>3.2.1</b> Water trends</p>	<p><i>What is the progress in access to improved and safely managed sanitation systems?</i></p> <p><i>What is the progress in municipal wastewater management? Have inputs from untreated wastewater pollution decreased?</i></p> <p><i>Is the quality of coastal and marine waters improving?</i></p>	<p>→ Overview of the water indicator trends</p> <p>→ Case studies to fill in the blanks and highlight best practice</p> <p>→ Include <b>case-study</b> (e.g. Jordan as a selected pilot for SDG 6 reporting)</p> <p>→ Include <b>case-study</b> (e.g. bathing water quality and public information in Morocco)</p>
<p><b>3.2.2</b> Water data and information process</p>	<p><i>How is the monitoring and reporting on waste progressing in the region?</i></p>	<p>→ Progress on <b>data infrastructure &amp; cooperation</b> in relation to priority area (incl. National Water Information Systems/Water Knowledge Platforms developments Morocco, Jordan, Tunisia, Lebanon)</p>
<p><b>3.2.3</b> Water assessment</p>	<p><i>Why are water and sanitation priority issues in the Med region?</i></p> <p><i>What are the main factors impacting sanitation, water quantity and quality in the Mediterranean?</i></p> <p><i>What are the challenges relating to freshwater resources and water scarcity in the region?</i></p>	<p>→ Findings in light of the regional drivers e.g. population growth, GDP, economic sectors) and responses</p> <p>→ Description of uncertainties and how countries are addressing these</p> <p>→ Do the indicators sufficiently assess the problem and how are they related to other regional indicators?</p>



	<p><i>What are the impacts of wastewater pollution on the environment and human health?</i></p>	<p>→ Water scarcity in the context of climate change (e.g. change in rainfall) and socio-economic pressures (population densities, refugees, pollution, ect)</p> <p>→ Narrative on freshwater resource management (supporting indicators, e.g. water use efficiency)</p> <p>→ Use Indicator 4.3 (wastewater re-use) to inform and highlight the potential of using non-conventional water sources</p> <p>→ Case-study of a country’s wastewater re-use (e.g. Egypt: <a href="https://link.springer.com/chapter/10.1007/698_2010_76">https://link.springer.com/chapter/10.1007/698_2010_76</a> ; Wastewater reuse in coastal sites in Tunisia and Egypt, as part of the SWIM’s demo project IMPROWARE)</p> <p>→ Issue of eutrophication (possibly also including other indicators and assessment on e.g. Chl, O2/anoxic areas, etc – EcAp)</p> <p>→ Bathing water quality degradation as a health issue and impact on coastal tourism, linking also with trends and importance of this economic sector to the region</p>
<p><b>3.3 Priority Area 3 – Industrial emissions and hazardous waste</b></p>		
<p><b>3.3.1 Industrial emissions trends</b></p>	<p><i>What are the main trends in industrial emissions?</i></p> <p><i>What are the main trends in hazardous waste management?</i></p>	<p>→ Overview of the industrial emissions indicator trends</p> <p>→ Case studies to fill in the blanks and highlight best practice</p>



<p><b>3.3.2</b> Industrial emissions data and information process</p>	<p><i>How is the monitoring and reporting on industrial emissions progressing in the region?</i></p>	<p>→ Description of the progress of data, infrastructure and cooperation in related to industrial emissions</p>
<p><b>3.3.3</b> Industrial emissions and hazardous waste assessment</p>	<p><i>Is the issue of industrial emissions and hazardous waste management improving?</i></p> <p><i>What are the key impacts of industrial emissions?</i></p>	<p>→ Findings in light of the regional drivers (GDP, economic sectors, changes in land-use and activities, climate change, policy changes, geopolitical issues, ...) and responses (e.g. regional plans, NAPs, PRTR)</p> <p>→ Linking emissions to state indicator e.g. Indicator 5.2 on nutrients in coastal and marine waters</p> <p>→ Description of uncertainties and how countries are addressing these</p> <p>→ Do the indicators sufficiently assess the problem and how are they related to other regional indicators?</p> <p>→ Impacts of emissions on hazardous waste and priority toxic substances, and contaminated sites/hotspots</p>



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## D. INTEGRATED ANALYSIS

### Chapter 4: INTEGRATED ANALYSIS

*Description:* Outcomes of the previous chapters will serve as input in the cross-cutting integrated analysis on pollution in the Mediterranean. Here a critical appraisal of trends and responses will be made, which will be linked to investments (sectorial, capacities, infrastructure, data infrastructure etc).

<i>Sub-sections</i>	<i>Key Questions</i>	<i>Annotations</i>
<b>4.1 Key trends related to pollution in the Mediterranean</b>	<i>Which trends best reflect this progress and which stay behind?</i>	→ Highlight important trends and achievements from the thematic assessment with respect to main outcomes of H2020 2014 assessment → Why is it not enough to tackle pollution on its own. E.g. Agriculture is not included as H2020 focus is on point sources. How big a source is it?
<b>4.2 Data infrastructure and cooperation Knowledge gap</b>	<i>How was the process set up?</i>  <i>What are the main developments in data infrastructure and cooperation in the region?</i>  <i>How are these activities reflected in the regional assessment relative to the 2014 assessment?</i>	→ Process indicators e.g. % countries reporting data, countries having infrastructure in place (questionnaire?) → Governance indicators → Zooming in specific achievements and improvements in each thematic section → Comparison with 2014 assessment Pillars of SEIS
<b>4.3 Cross-linkages between thematics</b>		→ e.g. land-based sources such as industrial emissions and riverine inputs, socio-economics, climate change, tourism etc
<b>4.4 Cross-linkages between responses</b>	<i>Are there innovative solutions pushing for change?</i>	→ e.g. Circular Economy, Sustainable Consumption and Production, Blue economy, Nature Based Solutions for pollution control → Case Studies from countries; link to QSR to SoED



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<b>E. CONCLUSIONS</b>		
<b>Chapter 5: CONCLUSIONS</b>		
<i>Description: The final chapter will provide key messages on the progress of having a cleaner Mediterranean, will reflect on the current approach and a need for a more holistic approach in the future.</i>		
<i>Sub-sections</i>	<i>Key Questions</i>	<i>Annotations</i>
<b>5.1 Key messages</b>		→ Synthesis of key outcomes from thematic assessments, progress on data infrastructure and reporting, impact of H2020
<b>5.2 Towards a holistic approach</b>		→ Need to go towards Ecosystem Based Management
<b>5.3 What lies beyond the Horizon</b>		→ A forward-looking vision: Linking to SDG goals and MSSD → Post Horizon 2020 priorities



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