

| Section [number]:<br>[title]  | Comment   | Response from the Experts   |
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| <b>Peru</b>   |   |   |
| [Page number 2],<br>[paragraph number 3]                                  | <p>Central to the outputs produced by the Regular Process, including the present brief, are two components. The first is the utilization of ocean observation and monitoring outputs and research to temporally assess physical, chemical, biological, <b>ecosystem</b>, social, economic and cultural components of coastal and marine environments to establish their current state, impacts currently affecting such environments, responses to those impacts and associated ongoing trends. The second component is the knowledge-brokering role the outputs of the Regular Process provide in increasing awareness of the ocean, the changes occurring in it, the human <b>activities direct and indirect</b> causing those changes and the progress being made in reducing and mitigating the impacts of human activities and <b>experiences of ecosystems restoration</b> on the marine environment. Through identifying both knowledge gaps and capacity needs, the Regular Process also provides direction to policymakers for the future development and deployment of sustained observation systems and delivery mechanisms that are required for enhancing knowledge and <b>transforming policies</b> and supporting national aspirations associated with sustainable development of coastal and marine ecosystems.</p> | <p>While we appreciate the suggested amendments, this text is standardized text that is included in all four briefs produced from the second WOA. As such including amended text in one brief would be inappropriate. No amendments made.</p> |
| <b>Section [III]: The current state of biodiversity and recent trends</b> | <p>Globally, mangroves are still decreasing and have been heavily affected by deforestation, <b>overexploitation mangroves fauna and pollution</b>. Recently the speed of mangrove losses has decreased from about 2 per cent per year to less than 0.4 per cent per year. Increasing human population</p>  | <p>Deforestation is a result of over exploitation and reductions as a result on habitat modification (including pollution). We have amended the text to “Globally, mangroves are still decreasing and have</p>                                |

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| <p>[Page number 8],<br/>[paragraph number 1]</p>  | <p>density and unplanned development in the coastal zone are the main threats to mangrove forests.</p>  | <p>been heavily affected by deforestation <u>as a result of overexploitation and habitat modification including pollution</u>"</p>  |
| <p><b>[IV] [Management tools and approaches for biodiversity]</b></p> <p>[Page number 10],<br/>[paragraph number 4 y 5]</p> | <p>Failure to integrally manage coastal activities is increasing risks for the sustainability <b>of ecosystems structure, functions, and ecosystem services or nature contributions to people</b>, including food security, tourism activities, and general human well-being. Industries such as tourism depend on the good condition and biodiversity of the areas where the activity is developed.</p> <p>Integrated modelling frameworks, within which scenarios can be explored – including changes to people and economies, governance structures, and the effects of climate change on <b>ecosystems</b> and maritime industries and the environment that are multisectoral and therefore provide whole-of-system approaches – allow for the identification of sustainable ocean use.</p> | <p>The text is referring to ecosystem services, which refers to the many varied benefits that humans are provided by a healthy natural environment – that is the regulating, provisioning, supporting and cultural services as identified in the examples included. Given that the sustainability of ecosystem services can only be achieved through the sustainability of ecosystem structure and functioning there is no need to repeat this in the text as it is implicit. No amendments made.</p> <p>The second paragraph is referring to scenario development that includes changes to people, economies and governance structures. Inclusion of ecosystems is out of place here. No amendments made</p> |
| <p><b>[VI] [Knowledge and capacity gaps]</b></p> <p>[Page number 12],<br/>[paragraph number 6]</p>                          | <p>Baseline biodiversity studies (for ecoregions or for habitats that are hotspots for biodiversity) are lacking for the mesophotic zone, most of the deep sea including slopes and canyons, underwater caves and many of the thousands of global seamounts. Biodiversity in these regions is still in a discovery phase and is currently largely unprotected, but it is increasingly</p>   | <p>We would prefer to keep the text as “growing human extractive activity” rather than over exploitation as deep sea ecosystems are particularly vulnerable to any form of activity. Therefore activity does not need</p>   |

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|  | <p>vulnerable to the confluence of changing climate and growing human <b>overexploitation</b>, contamination and waste disposal on continental margins. Improved ocean observation, biodiversity, <b>biological communities, taxonomic, genetic and biochemical components characterizations</b>, knowledge and technology transfer are needed, in particular in Oceania, Africa and South America.</p> <p>Failure to achieve the integrated understanding of human pressures on the ocean is increasing the risks to the benefits that people and <b>future generations</b> draw from the ocean, including in terms of food safety and security, material provision, <b>economic opportunities</b>, human health and well-being, coastal safety and the conservation of key ecosystem services.</p>   | <p>to be overexploitative to have an impact. No amendments made.</p> <p>Biodiversity characterisation includes the characterisation of biological communities including taxonomic and genetic definition. There is therefore no need to repeat specificities in the text. No amendments made.</p> <p>We have amended the text to " ...the risks to the benefits that people, <u>both now and into the future</u>, draw from the ocean, including in terms of food safety and security, <u>economic opportunities</u>, material provision..."</p> |
| <p>[Page number 13],<br/>[paragraph number 9 and 10]</p> | <p>Studies of cumulative effects tend to be focused on existing and past activities in the marine environment. Assessments that allow foresighting are needed to inform planning of future activities and support adaptive management and prioritize conservation activities. Such assessments will require increased transboundary cooperation, the strengthening of science-policy links, greater coordination between social and natural sciences and between science and civil society, including industry, <b>business, financial sector</b> and the recognition of traditional knowledge.</p> <p>Continued growth in the global human population will require enhanced efficiencies to be found in the food sectors to respond to associated increased demand. New technologies that support</p> | <p>The text has been amended to "... between science and civil society, including industry <b>and business</b> and the recognition of traditional knowledge."</p> <p>The text is referring to sustainable practices associated with food sectors. It is already identified that good governance should recognise and address environmental concerns. The suggested additions</p>   |

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|  | <p>sustainable practices of <b>marine biodiversity</b> will need to be developed and implemented. The aquaculture industry needs to <b>apply an ecosystem approach</b> to implement good governance as the sector further expands, intensifies, and diversifies. This governance should recognize relevant environmental and social concerns and include conscious efforts to address them in a transparent evidence-based manner.</p> | <p>are therefore out of place or repetitive. No amendments made.</p>   |
| <p>[Page number 14],<br/>[paragraph number 3]</p>                            | <p>Knowledge of the key stages in implementing the <b>space planning</b> and policy process for marine management <b>and marine biodiversity conservation</b>, as well as the metrics for measuring and monitoring the effectiveness of management measures, are key requirements for countries that are starting to implement management approaches.</p>  | <p>The planning process being referred to here in the text is comprehensive – so not only includes the spatial planning process but the whole planning process that is needed for marine management. Further marine management refers to all forms of management not just conservation management. So the suggested text changes the context of the paragraph to one that is solely focused on conservation management and does not include all forms of management of human activities. No amendments made.</p> |
| <p>[VII]<br/>[Considerations for the third cycle of the Regular Process]</p> | <p>These include the need for the Group of Experts in developing outputs of the third cycle, to consider more directly:<br/>(a) Emerging policy areas, including those associated with blue and aquatic foods, <b>key biodiversity marine areas</b>, and blue transformations changes;</p>   | <p>The text of this section directly reflects submissions made by intergovernmental agencies and member states during the development of the brief. It would therefore be inappropriate to modify these submissions. Further</p>   |

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|   | <p>(b) Opportunities provided through the blue economy, including emerging and novel technologies and solutions, <b>taking into account nature-based solutions</b>;</p> <p>(c) Gaps in the enabling environment for the science needed to progress and deliver global initiatives, innovations and solutions, including finance, linkages with <b>business</b>, industry and support from Governments;</p> <p>(d) Progress on achieving the transformations committed to by the High-level Panel for a Sustainable Ocean Economy. These include commitments to a range of transformations associated with ocean health, <b>marine biodiversity conservation, marine protected areas</b>, ocean wealth, ocean equity, ocean finance and ocean knowledge required for achieving a sustainable ocean economy by 2030;</p> | <p>part (d) is referring to the transformations identified by the High Level Panel for a Sustainable Economy; modifying these would be inappropriate. No amendments made.</p>   |
| <b>UK</b>   |  |   |
| <p>General comment applicable to overall brief document</p> | <p>The brief does not capture the conclusions on impact to marine natural capital in WOA II Volume II. In particular, there is a gap in understanding of marine biodiversity ecosystem services and natural capital. This is important for embedding externalities into financial investments, which are particularly low for the marine environment.</p>  | <p>It would be useful for the reviewer to identify what text they are referring to in volume 2 of the WOA2, so that there is a clear understanding of what conclusions they are referring to. This would be particularly useful as the impacts on natural capital (i.e. the natural environment and benefits it provides) are highlighted throughout WOA2, and not just in a particular chapter of volume 2 and these are summarized in sections I and III while risks are summarized in sections IV and V. The reviewer also appears to consider natural capital to be somehow separate to ecosystem</p> |

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|                                    |   | <p>services when in fact natural capital includes ecosystem services – see <a href="https://seea.un.org/content/natural-capital-and-ecosystem-services-faq">https://seea.un.org/content/natural-capital-and-ecosystem-services-faq</a>.</p> <p>Explicit consideration of the identification and valuing of environmental assets (e.g. environmental economic accounting) was not included in WOA2 and so introducing such text would not reflect the content of WOA2 which this brief is summarizing. No amendments made.</p> |
| <p>[Page 5], Paragraph 21 (19)</p> | <p>The changes now make the paragraph slightly ambiguous; the original text listed eutrophication, contamination, and human activities as separate risks. The additional information included in the revised text makes it unclear to the reader as to whether the risks following “eutrophication” are examples and elaborations of eutrophication and relies on the reader knowing that they are not in order to clearly understand the risks listed.</p> <p>To improve clarity, we suggest putting the examples into brackets and use commas (as in the original text) to indicate listing of risks.</p> | <p>The text has been amended to “...and risk of <u>contamination including</u> eutrophication<sup>6</sup>, <del>contamination through</del> discharges of nutrients and hazardous substance inputs <del>and</del> marine debris, including microplastics and nanoplastics. <u>Other risks caused by growing human population include, and those associated with</u> human activities throughout coastal zones, including coastal development (including for tourism), ....”</p>   |
| <p>[Page 5], Paragraph 22 (23)</p> | <p>The paragraph refers to marine debris, which is typically above nano scale in size (e.g. waste, fishing gear etc). It is not clear whether the PCC and pharmaceutical products referred to in the additional text on new emerging contaminants means the packaging, containers, and physical items such as masks or sanitary products, or the components (such as chemicals) of some of these products. If the latter, and referring to contaminants, we suggest it</p>  | <p>The paragraph refers to marine debris, dumping at sea and new emerging concerns associated with solid waste pollutants. Given that this brief is meant to be summarizing the text of WOA2,</p>   |

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|                                    | <p>might be more appropriate to include this in a paragraph about chemical pollution or POP.</p>   | <p>specific details on each component can be referred to in the relevant chapters of WOA2. No amendments made.</p>   |
| <p>[Page 7], Paragraph 39 (54)</p> | <p>While the examples provided of coral reefs that have experienced severe bleaching are valid, we think it is important to recognize that this is a global issue.</p> <p>We would therefore suggest the following change to the text:</p> <p><i>‘Ocean warming and marine heatwaves have led to severe bleaching and mass mortality of corals, <b>including</b> around Australia....’</i></p>   | <p>We have amended the text as suggested.</p>  |
| <p>[Page 9], Paragraph 51 (28)</p> | <p>We welcome and thanks the authors for the changes made in response to our previous comment on this paragraph.</p> <p>However, we still think that the specific reference to ‘life history distributions of species’ is too restrictive in definition.</p> <p>We would therefore suggest the following change to the text:</p> <p><u>‘Marine protected areas are conservation tools designed to improve biodiversity protection in a defined marine area to achieve specific long-term conservation objectives, with association ecosystem services and cultural values by encompassing spatial scales that reflect the life history distributions of species in a defined marine area through specific, long term conservation objectives.’</u></p> | <p>We agree that the definition has become confused by the multiple (differing) suggestions made by multiple member States. We have therefore reverted the text to that provided in chapter 27 of the WOA2: “Marine protected areas provide specific protection mechanisms for specific areas of the ocean. The areas can take many forms, covering varying spatial scales and providing varying levels of marine environmental protection. Marine protected areas have increased rapidly in both number and size in recent years, largely in response to internationally agreed targets under the Convention on Biological Diversity and the 2030</p> |

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|                              |  | Agenda, and are an important tool for marine conservation”  |
| [Page 14], Paragraph 87 (92) | <p>We welcome and thanks the authors for the changes made in response to our previous comment on this paragraph.</p> <p>We are not sure that the final point, '<i>Further, studies on the effectiveness of protected areas do not break down impacts...</i>' is accurate / clear and suggest deletion.</p> | As this is text suggested by another member State, it would not be appropriate to delete this text. No amendments made. |