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**Preliminary analysis of area-based Management measures to support SDG  
implementation**

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# INTEGRATED MANAGEMENT AND GOVERNANCE STRATEGIES FOR DELIVERY OF OCEAN-RELATED SDGS

## UNEP-EC GPGC project

### 1. INTRODUCTION

### 2. DEFINING AREA-BASED PLANNING TOOLS

#### 2.1 Objective

The objective of A1 is to provide an overview of terms and definitions used regarding ‘area-based management tools’ including a description of the core elements of different area-based management tools, highlighting commonalities and differences. This will assist clarifying how concepts such as ‘spatial planning’, ‘integrated area-based management’ and a range of sector-led ABMTs are used and which specific policies or institutions are covered by them relevant to SDG implementation. Key questions to be addressed include:

- How are different area-based tools defined? What are their key elements?
- Are there core common features of, or synergies between, ABMTs that may be identified in order to address specific regional or national contexts?
- What ABMTs are available to support policy implementation to achieve ocean-related SDGs?

#### 2.2 Methods

A two stage approach will be undertaken:

- i. A focused literature review of area-based management terms/definitions used in ocean and coastal policies, strategies or management plans.
- ii. An analysis of practical case study examples of ABMTs used to implement ocean and coastal policies, protocols, action plans, as well as planning and management processes. The review will examine the overall characteristics and utility of different types of ABMTs, both multi-sector approaches (e.g. ICZM, MPAs, MSP, Ridge-to-Reef, others) and sector-specific approaches (e.g. Particularly Sensitive Seas Areas, fishing closures, others). A1 will analyze common elements and provide a typology of key features of different approaches. It will further highlight (a) the primary benefits and (b) the wider benefits of each approach.

#### 2.3 Definitions of ABMT

A focused literature review of area-based management terms/definitions used in ocean and coastal policies, strategies or management plans was undertaken. The results are presented in Tables 2.1-2.5, which provide an overview of terms and definitions used regarding area-based management tools (ABMT). The tables include a description of the core elements of a range of area-based management tools, highlighting commonalities and differences.

**Table 2.1: Definitions and core elements of Marine Spatial Planning<sup>1</sup>**

Definition	Core components	Source
[Marine Spatial Planning] is about	<ul style="list-style-type: none"><li>• Stakeholder engagement</li></ul>	European Commission

<sup>1</sup> Marine Spatial Planning / Maritime Spatial Planning / Marine Planning / Marine and Coastal Marine Spatial Planning

Definition	Core components	Source
planning when and where human activities take place at sea – to ensure these are as efficient and sustainable as possible.	<ul style="list-style-type: none"> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Transboundary cooperation</li> </ul>	Directorate-General For Maritime Affairs And Fisheries. (2017). Maritime spatial planning. Retrieved from <a href="https://ec.europa.eu/maritimeaffairs/policy/maritime_spatial_planning_en">https://ec.europa.eu/maritimeaffairs/policy/maritime_spatial_planning_en</a>
A cross-cutting policy tool enabling public authorities and stakeholders to apply a coordinated, integrated and trans-boundary approach.	<ul style="list-style-type: none"> <li>• Ecosystem approach</li> <li>• Stakeholder engagement</li> <li>• Based on best available data and information</li> <li>• Transboundary cooperation</li> <li>• Cooperation with third countries</li> <li>• Information sharing</li> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Cross-sectoral</li> </ul>	European Union. (2014). Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning. Official Journal of the European Union, 2014(April), 135–145. Retrieved from <a href="http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0089&amp;from=EN">http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0089&amp;from=EN</a>
A science-based tool that regions can use to address specific ocean management challenges and advance their goals for economic development and conservation. (...) This process is designed to decrease user conflict, improve planning and regulatory efficiencies, decrease associated costs and delays, engage affected communities and stakeholders, and preserve critical ecosystem functions and services.	<ul style="list-style-type: none"> <li>• Information sharing</li> <li>• Stakeholder engagement</li> <li>• Ecosystem approach</li> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Ecosystem Services</li> </ul>	National Oceanic and Atmospheric Administration (NOAA). (n.d.). Coastal and Marine Spatial Planning. Retrieved from <a href="https://cmsp.noaa.gov/">https://cmsp.noaa.gov/</a>
A strategic plan for regulating, managing and protecting the marine environment that addresses the multiple, cumulative and potentially conflicting uses of the sea.	<ul style="list-style-type: none"> <li>• N/a</li> </ul>	Department for Environment, Food and Rural Affairs (Defra) (2003) Planning in the Coastal and Marine Environment: Next Steps to Action. CoastNet conference, 1st October 2003.
A plan-led framework that enables integrated, forward-looking, consistent decision-making in relation to policies and practices across regional space.	<ul style="list-style-type: none"> <li>• Information sharing</li> <li>• Ecosystem approach</li> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Ecosystem Services</li> <li>• Strategic Environmental Assessment (SEA)</li> <li>• Cumulative Impact Assessment</li> <li>• Spatial analysis / Modelling</li> <li>• Stakeholder Engagement</li> <li>• Performance monitoring</li> </ul>	World Wildlife Fund (WWF) UK. (2005). Marine Spatial Planning. Retrieved from <a href="http://assets.wwf.org.uk/downloads/ma_msp_wa.pdf">http://assets.wwf.org.uk/downloads/ma_msp_wa.pdf</a>
Marine spatial planning (MSP) is a public process of analyzing and allocating the spatial and temporal	<ul style="list-style-type: none"> <li>• Ecosystem approach</li> <li>• Holistic approach (i.e. takes into account economic, social and environmental</li> </ul>	Ehler, C., & Douvere, F. (2009). Marine Spatial Planning: a step-by-step

Definition	Core components	Source
distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process.	<ul style="list-style-type: none"> <li>aspects)</li> <li>• Cross-sectoral</li> <li>• Adaptive management</li> <li>• Stakeholder engagement</li> </ul>	<p>approach toward ecosystem-based management.</p> <p><a href="http://doi.org/Intergovernmental%20Oceanographic%20Commission%20and%20Man%20and%20the%20Biosphere%20Programme">http://doi.org/Intergovernmental Oceanographic Commission and Man and the Biosphere Programme</a>. Retrieved from <a href="http://unesdoc.unesco.org/images/0018/001865/186559e.pdf">http://unesdoc.unesco.org/images/0018/001865/186559e.pdf</a></p>
Marine spatial planning (MSP) is a practical way to create and establish a more rational organization of the use of marine space and the interactions between its uses, to balance demands for development with the need to protect marine ecosystems, and to achieve social and economic objectives in an open and planned way.	<ul style="list-style-type: none"> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Cross-sectoral</li> </ul>	<p>Department of Environment, Food and Rural Affairs (DEFRA) (2009). <i>Managing Our Marine Resources: the Marine Management Organization</i>. Defra: London, UK. 38 p.</p>
Marine spatial planning (MSP) is a framework which provides a means for improving decision-making as it relates to the use of marine resources and space.	<ul style="list-style-type: none"> <li>• Ecosystem approach</li> <li>• Spatial analysis / Modelling</li> <li>• Adaptive management</li> <li>• Ecosystem Services</li> <li>• Scenario / trade-off analysis</li> <li>• Stakeholder engagement</li> <li>• Based on best available data and information</li> </ul>	<p>Global Environment Facility (GEF). (2012). <i>Marine Spatial Planning in the Context of the Convention on Biological Diversity</i>. GEF/STAP/C.43/Inf.05. Retrieved from <a href="http://www.unep.org/dgef/Portals/43/news/GEFSTAP_C43Inf_05_MarineSPContextConventiononBiologicalDiversity.pdf">http://www.unep.org/dgef/Portals/43/news/GEFSTAP_C43Inf_05_MarineSPContextConventiononBiologicalDiversity.pdf</a></p>

**Table 2.2. Definitions are core elements of Integrated Coastal Management**

Definition	Core components	Source
Integrated coastal management aims for the coordinated application of the different policies affecting the coastal zone and related to activities such as nature protection, aquaculture, fisheries, agriculture, industry, off shore wind energy, shipping, tourism, development of infrastructure and mitigation and adaptation to climate change.	<ul style="list-style-type: none"> <li>• Cross-sectoral</li> <li>• Ecosystem approach</li> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Stakeholder engagement</li> <li>• Based on best available data and information</li> </ul>	<p>European Commission Directorate-General for Environment. (2016). <i>Integrated Coastal Management</i>. Retrieved from <a href="http://ec.europa.eu/environment/iczm/index_en.htm">http://ec.europa.eu/environment/iczm/index_en.htm</a></p>
The overall objective of an integrated management programme, like ICZM, is to provide for the best long-term and sustainable use of coastal natural resources and for perpetual maintenance of the most natural environment.	<ul style="list-style-type: none"> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Naturalness</li> <li>• Ecosystem approach</li> <li>• Long-term</li> </ul>	<p>FAO (Food and Agriculture Organisation). Clark, J. R. (Ed.). (1995). <i>Coastal zone Management handbook</i>. CRC Press.</p>
[ICZM] is the most appropriate process to address current and long-term	<ul style="list-style-type: none"> <li>• Adaptive management</li> <li>• Holistic approach (i.e. takes into account</li> </ul>	<p>Intergovernmental Panel on Climate Change</p>

Definition	Core components	Source
coastal management issues, including habitat loss, degradation of water quality, changes in hydrological cycles, depletion of coastal resources, and adaptation to sea level rise and other impacts of global climate change. (...) However, it should be noted that (...) there is no unique “recipe” for the process of ICZM; rather, it should be regarded as a range of concepts and techniques that can be adapted to different situations and circumstances.	<p>economic, social and environmental aspects)</p> <ul style="list-style-type: none"> <li>• Scenario / trade-off analysis</li> <li>• Stakeholder engagement</li> <li>• Spatial analysis / modelling</li> <li>• Based on best available data and information</li> <li>• Performance monitoring</li> <li>• Ecosystem approach</li> </ul>	(IPCC). (1994). World Coast Conference 1993 Conference Report. Retrieved from <a href="http://www.coastalcooperation.net/documents/WCC93PreparingtomeettheCoastalChallengesofthe21stCenturywcc93conference.pdf">http://www.coastalcooperation.net/documents/WCC93PreparingtomeettheCoastalChallengesofthe21stCenturywcc93conference.pdf</a>
Various definitions	<ul style="list-style-type: none"> <li>• N/a</li> </ul>	Vallega, A. (2002). Coastal Management: the Integration Principle
Integrated Coastal Zone Management (ICZM), is a planning and coordinating process which deals with development management and coastal resources and which is focused on the land/water interface.	<ul style="list-style-type: none"> <li>• Based on best available data and information</li> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Cross-sectoral</li> <li>• Stakeholder engagement</li> <li>• Naturalness</li> </ul>	Clark, J. R. (2002). Integrated management of coastal zones. FAO Fisheries Technical Paper. No. 327. Rome, FAO. 167p.
Coastal zone management involves managing coastal areas to balance environmental, economic, human health, and human activities.	<ul style="list-style-type: none"> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> </ul>	National Oceanic and Atmospheric Administration (NOAA). (n.d.). What is coastal zone management? Retrieved from <a href="http://oceanservice.noaa.gov/facts/czm.html">http://oceanservice.noaa.gov/facts/czm.html</a>
A dynamic, multidisciplinary and iterative process to promote sustainable management of coastal zones. It covers the full cycle of information collection, planning (in its broadest sense), decision making, management and monitoring of implementation.	<ul style="list-style-type: none"> <li>• Based on best available data and information</li> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Stakeholder engagement</li> <li>• Adaptive management</li> <li>• Cross-sectoral</li> <li>• Performance monitoring</li> </ul>	European Union. (2000). Integrated Coastal Zone Management: A strategy for Europe. Official Journal of the European Union, 27. Retrieved from <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2000:0547:FIN:EN:PDF">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2000:0547:FIN:EN:PDF</a>
CZM is a process of governance and consists of the legal and institutional framework necessary to ensure that development and management plans for coastal zones are integrated with environmental (including social) goals and are made with the participation of those affected	<ul style="list-style-type: none"> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Stakeholder engagement</li> <li>• Cross-sectoral</li> <li>• Adaptive management</li> <li>• Scenario / trade-off analysis</li> <li>• Precautionary principle</li> <li>• Polluter pays principle</li> <li>• Resource accounting</li> <li>• Transboundary cooperation</li> <li>• Intergenerational equity</li> </ul>	The World Bank. Post, J. C., & Lundin, C. G. (Eds). (1996). Guidelines for integrated coastal zone management. Environmentally Sustainable Development Studies and Monographs Series. Retrieved from <a href="http://elibrary.worldbank.org/doi/book/10.1596/0-8213-3735-1">http://elibrary.worldbank.org/doi/book/10.1596/0-8213-3735-1</a>
[ICZM is] a dynamic process for the sustainable management and use of coastal zones, taking into account at the same time the fragility of coastal ecosystems and landscapes, the	<ul style="list-style-type: none"> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Stakeholder engagement</li> <li>• Cross-sectoral</li> </ul>	UNEP/MAP/PAP (2008). Protocol on Integrated Coastal Zone Management in the Mediterranean. Split, Priority Actions

Definition	Core components	Source
diversity of activities and uses, their interactions, the maritime orientation of certain activities and uses and their impact on both the marine and land parts.	<ul style="list-style-type: none"> <li>• Adaptive management</li> <li>• Ecosystem approach</li> <li>• Information sharing</li> <li>• Based on best available data and information</li> <li>• Cross-sectoral</li> <li>• Transboundary cooperation</li> </ul>	Programme. Retrieved from <a href="http://www.pap-thecoastcentre.org/pdfs/Protoloc_publicacija_May09.pdf">http://www.pap-thecoastcentre.org/pdfs/Protoloc_publicacija_May09.pdf</a>

**Table 2.3 Definitions are core elements of Marine Protected Area Management**

Definition	Core components	Source
A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. (...) This implies that MPAs must be mapped and have boundaries that are legally defined.(...) In MPAs, management may need to address the airspace above the sea surface, the actual water surface, the water column (or parts of it), the seabed and the sub-seabed, or just one or a combination of two or more of these elements	<ul style="list-style-type: none"> <li>• Transboundary cooperation</li> <li>• Based on best available data and information</li> <li>• Spatial analysis / modelling</li> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Long-term</li> <li>• Protect key biodiversity features</li> <li>• Ecosystem services</li> </ul>	Day J., Dudley N., Hockings M., Holmes G., Laffoley D., Stolton S. & S. Wells, 2012. Guidelines for applying the IUCN Protected Area Management Categories to Marine Protected Areas. Gland, Switzerland: IUCN. 36pp.
An area designated and effectively managed to protect marine ecosystems, processes, habitats, and species, which can contribute to the restoration and replenishment of resources for social, economic, and cultural enrichment.	<ul style="list-style-type: none"> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Ecosystem approach</li> <li>• Building ecosystem resilience</li> <li>• Protect vulnerable / critical habitats and/or species</li> <li>• Protect key biodiversity features</li> <li>• Replenish fish stocks</li> <li>• Stakeholder engagement</li> <li>• Part of an integrated management plan</li> <li>• Enforcement</li> <li>• Financial sustainability</li> </ul>	World Wildlife Fund (WWF). (2017). Marine Protected Areas. Retrieved from <a href="http://wwf.panda.org/wh_at_we_do/how_we_work/our_global_goals/oceans/solutions/protection/protected_areas/">http://wwf.panda.org/wh_at_we_do/how_we_work/our_global_goals/oceans/solutions/protection/protected_areas/</a>
An MPA network is essential (...) to integrated marine nature conservation and other marine activities in pursuing its vision for clean healthy, safe, productive and biologically diverse oceans and seas.	<ul style="list-style-type: none"> <li>• Risk assessment</li> <li>• Stakeholder engagement</li> <li>• Protect vulnerable / critical habitats and/or species</li> <li>• Cumulative impact assessment</li> <li>• Cross-sectoral</li> <li>• Performance monitoring</li> <li>• Enforcement</li> <li>• Spatial analysis/ modelling</li> </ul>	Liley, D., Morris, R. K. A., Cruickshanks, K., Macleod, C., Underhill-Day, J., Brereton, T., & Mitchell, J. (2012). Identifying best practice in management of activities on Marine Protected Areas. Natural England Commissioned Reports (Vol. 108). Retrieved from <a href="http://publications.naturalengland.org.uk/publication/3800278">http://publications.naturalengland.org.uk/publication/3800278</a>

Definition	Core components	Source
Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment.	<ul style="list-style-type: none"> <li>• Enforcement</li> <li>• Stakeholder engagement</li> <li>• Protect key biodiversity features</li> <li>• Transboundary cooperation</li> <li>• Establishment in ABNJ</li> <li>• Cross-sectoral</li> <li>• Zoning</li> <li>• Adaptive management</li> <li>• Financial sustainability</li> <li>• Performance monitoring</li> <li>• Replenish fish stocks</li> </ul>	Kelleher, G. (1999). Guidelines for Marine Protected Areas. IUCN, Gland, Switzerland and Cambridge, UK. xxiv +107pp. Retrieved from <a href="http://www.birdlist.org/downloads/iucn/pag-003-guidelines-marine-pas.pdf">http://www.birdlist.org/downloads/iucn/pag-003-guidelines-marine-pas.pdf</a>
Same as Day et al. 2012: A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.	<ul style="list-style-type: none"> <li>• Top-down and bottom-up management</li> <li>• Market incentives</li> <li>• Collaborative management</li> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Protect key biodiversity features</li> </ul>	Jones, P. J. S., Qiu, W., & De Santo, E. (2011). Governing Marine Protected Areas: Getting the Balance Right. United Nations Environment Programme Technical Report. Retrieved from <a href="http://www.mpag.info/governing-mpas-final-technical-report-web-res.pdf">http://www.mpag.info/governing-mpas-final-technical-report-web-res.pdf</a>
Marine Protected Areas (MPA) are areas set aside to protect marine ecosystems. They are an example of an area-based management measure relevant to EBA; others include integrated coastal management (ICM) and marine spatial planning (MSP). MPAs have a clearly defined geographical space, which is recognised, dedicated and managed (through legal or other effective means) to achieve long-term conservation of nature, along with associated ecosystem services and cultural values.	<ul style="list-style-type: none"> <li>• Ecosystem approach</li> <li>• Spatial analysis / modelling</li> <li>• Ecosystem services</li> <li>• Stakeholder engagement</li> <li>• Holistic approach (i.e. takes into account economic, social and environmental aspects)</li> <li>• Protect key biodiversity features</li> <li>• Adaptive management</li> <li>• Protect vulnerable / critical habitats and/or species</li> <li>• Enforcement</li> <li>• Performance monitoring</li> <li>• Zoning</li> <li>• Connectivity (terrestrial-marine)</li> <li>• Building ecosystem resilience</li> </ul>	United Nations Environment Programme. (2017). Marine Protected Areas (MPAs). Retrieved from <a href="http://web.unep.org/coastal-eba/content/marine-protected-areas-mpas">http://web.unep.org/coastal-eba/content/marine-protected-areas-mpas</a>

**Table 2.4 Definitions are core elements of Ridge to Reef Management**

Definition	Core components	Source
Healthy and well-managed river basins and coastal areas where people and nature thrive, is the vision behind IUCN's initiative, 'Ridge to Reef' (R2R). (...) R2R aims to protect, demonstrate sustainable approaches, and provide better economic understanding of the links between salt and freshwater ecosystems.	<ul style="list-style-type: none"> <li>• Protect key biodiversity features</li> <li>• Ecosystem services</li> <li>• Protect vulnerable / critical habitats and/or species</li> <li>• Building ecosystem resilience</li> <li>• Increase livelihood of Small Island Developing States (SIDS)</li> </ul>	International Union for Conservation of Nature (IUCN). (2017). Ridge to Reef. Retrieved from <a href="https://www.iucn.org/the-me/water/our-work/ridge-reef">https://www.iucn.org/the-me/water/our-work/ridge-reef</a>
The goal of the (...) 'Ridge-to-Reef' (R2R) program is to maintain and	<ul style="list-style-type: none"> <li>• Ecosystem services</li> <li>• Holistic approach (i.e. takes into account</li> </ul>	United Nations Sustainable Development

Definition	Core components	Source
enhance (...) countries' ecosystem goods and services (provisioning, regulating, supporting and cultural) through integrated approaches to land, water, forest, biodiversity and coastal resource management that contribute to poverty reduction, sustainable livelihoods and climate resilience.	<p>economic, social and environmental aspects)</p> <ul style="list-style-type: none"> <li>• Capacity building</li> <li>• Technology transfer</li> <li>• Information sharing</li> <li>• Stakeholder engagement</li> </ul>	Platform. (2017). PacSIDS Ridge to Reef Programme Partnership. Retrieved from <a href="https://sustainabledevelopment.un.org/partnership/?p=7315">https://sustainabledevelopment.un.org/partnership/?p=7315</a>

**Table 2.5 Definitions are core elements of Particularly Sensitive Sea Areas**

Definition	Core components	Source
A Particularly Sensitive Sea Area (PSSA) is an area that needs special protection through action by the International Maritime Organisation (IMO) because of its significance for recognized ecological or socio-economic or scientific reasons and which may be vulnerable to damage by international maritime activities.	<ul style="list-style-type: none"> <li>• Protect vulnerable / critical habitats and/or species</li> <li>• Protect key biodiversity features</li> <li>• Ecological rarity</li> <li>• Controlled maritime activities</li> <li>• Naturalness</li> <li>• Cultural heritage</li> <li>• Social, economic or human dependency</li> <li>• Scientific or educational value</li> </ul>	International Maritime Organisation. (2006). Resolution A.982(24) Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas. Retrieved from <a href="http://www.imo.org/en/OurWork/Environment/PSAs/Documents/A24-Res.982.pdf">http://www.imo.org/en/OurWork/Environment/PSAs/Documents/A24-Res.982.pdf</a>
Designation of a Particularly Sensitive Sea Area (PSSA) is a comprehensive management tool at the international level for reviewing attributes within an area that are vulnerable to damage by international shipping and for determining the most appropriate protective measures available through the International Maritime Organization (IMO) to address that vulnerability.	<ul style="list-style-type: none"> <li>• Cultural heritage</li> <li>• Ecological rarity</li> <li>• Controlled maritime activities</li> <li>• Protect vulnerable / critical habitats and/or species</li> <li>• Protect key biodiversity features</li> </ul>	Common Wadden Sea Secretariat. (2017). Shipping - Particularly Sensitive Sea Area (PSSA). Retrieved from <a href="http://www.waddensea-secretariat.org/management/shipping-particularly-sensitive-sea-area-pssa">http://www.waddensea-secretariat.org/management/shipping-particularly-sensitive-sea-area-pssa</a>
Valuable marine areas identified as at risk from international maritime activities.	<ul style="list-style-type: none"> <li>• Protect vulnerable / critical habitats and/or species</li> <li>• Protect key biodiversity features</li> <li>• Ecological rarity</li> <li>• Controlled maritime activities</li> <li>• Naturalness</li> <li>• Cultural heritage</li> <li>• Social, economic or human dependency</li> <li>• Scientific or educational value</li> </ul>	UNEP-WCMC 2014, Biodiversity A-Z website: <a href="http://www.biodiversitya-z.org">www.biodiversitya-z.org</a> , UNEP-WCMC, Cambridge, UK.

#### **2.4 Comparative analysis of core components of ABMT**

Common core components noted in at least two definitions of each ABMT are presented in a summary list of core components of each ABMT tools included in Tables 2.1-2.5.

##### *Core components of MSP*

- Adaptive management
- Based on best available data and information
- Cross-sectoral
- Ecosystem approach



- Ecosystem Services
- Holistic approach
- Information sharing
- Performance monitoring
- Scenario / trade-off analysis
- Spatial analysis / Modelling
- Stakeholder engagement
- Transboundary cooperation

#### *Core components of ICM*

- Adaptive management
- Based on best available data and information
- Cross-sectoral
- Ecosystem approach
- Holistic approach
- Naturalness
- Performance monitoring
- Scenario / trade-off analysis
- Stakeholder engagement
- Transboundary cooperation

#### *Core components of MPA management*

- Adaptive management
- Building ecosystem resilience
- Cross-sectoral
- Ecosystem approach
- Ecosystem services
- Enforcement
- Financial sustainability
- Holistic approach
- Performance monitoring
- Protect key biodiversity features
- Protect vulnerable / critical habitats and/or species
- Replenish fish stocks
- Spatial analysis/ modelling
- Stakeholder engagement
- Transboundary cooperation
- Zoning

#### *Core elements of the ridge to reef approach*

- Building ecosystem resilience
- Capacity building
- Ecosystem services
- Holistic approach
- Increase livelihood of Small Island Developing States (SIDS)
- Information sharing
- Protect key biodiversity features
- Stakeholder engagement
- Technology transfer

#### *Core elements of PPSA*

- Controlled maritime activities
- Cultural heritage
- Ecological rarity
- Naturalness
- Protect key biodiversity features
- Scientific or educational value
- Social, economic or human dependency

## **2.5 Cross-cutting core components of ABMT**

The common features across the five ABMT included in this analysis are:

- Adaptive management
- Based on best available data and information
- Building ecosystem resilience
- Cross-sectoral
- Includes cultural heritage
- Ecosystem approach
- Ecosystem Services
- Holistic approach
- Information sharing
- Naturalness
- Performance monitoring
- Protection of key biodiversity features
- Scenario / trade-off analysis
- Spatial analysis/ modelling
- Stakeholder engagement
- Transboundary cooperation

## **3. OPERATIONALIZING AREA-BASED MANAGEMENT FOR SDG IMPLEMENTATION**

### **3.1 Objective**

The objective of activity A2 is to develop evidence-based guidance on the utility, effectiveness and customization of different ABMTs to support implementation of marine and coastal policies at the global, regional and national level to support the delivery of ocean-related SDGs. This includes identifying possible barriers, enabling conditions and impact pathways for effective and efficient application of area-based management tools in different regional and national contexts. In order to inform this objective, a key element of activity A2 is to collate 20-25 practice examples of ABMTs used for the implementation of different types of marine and coastal policies. The identification and analysis of ABMT practice examples will be undertaken through 1) a focused literature review of selected key international publications, guidance documents and reports; and 2) interviews with regional and national ABMT practitioners and decision-makers identified through Regional Seas Programmes and other networks. The selection and analysis of practice examples will be further refined at an expert workshop. The ABMTs will be evaluated to assess typical challenges/barriers in applying ABMTs and possible common enabling conditions that facilitate effective area-based management for implementation of marine and coastal policies that support SDGs.

### **3.2 Progress to date**

An initial global sweep of ABMTs has been undertaken and 23 practice examples initially identified as suitable for inclusion in the study (composed of 2 ICZM examples, 8 MPA examples, 9 MSP examples, 2 Ridge to Reef examples, 1 PSSA and 1 fisheries closure). Each of these was assessed to identify evidence of links to the delivery of SDG targets. The list of oceans-related SDGs is drawn from a draft internal UN Environment working

document and will be reviewed to ensure it is consistent with other descriptions of oceans-related SDGs. The oceans-related SDGs used in this initial analysis are presented under the spreadsheet tab ‘Oceans SDG list’. In most cases, there was no explicit mention of the SDGs in relation to the ABMT practice example. Therefore an assessment had to be made according to the *potential* for each ABMT to contribute to the delivery of each oceans related SDG. The assessment used the following three classifications of contribution:

- ABMT can directly contribute to the delivery of this SDG
- ABMT has the potential to contribute to the delivery this SDG
- ABMT has no realistic opportunity to contribute to the delivery of this SDG

The summary analysis of how each ABMT type can potentially contribute to SDG delivery is presented in Table A.

**Table A. Summary of applicability of ABMTs (by type) to implement policies for delivery of ocean-related SDGs’**

ABMT	Ocean-relevant Sustainable Development Goals																
	1.4	1.5	2.1	2.3	2.4	3.9	5.5	6.3	6.4	6.5	6.6	8.4	8.9	9a	11.4	11.5	11b
ICZM	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Ridge to Reef	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
MPA	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
MSP	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
PSSA	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Fisheries closure	Red	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green

ABMT	12.2	12.4	12.5	12.6	12.8	12a	13.1	13.2	13.3	13b	14.1	14.2	14.3	14.4	14.5	14.6
ICZM	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Ridge to Reef	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
MPA	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
MSP	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
PSSA	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Fisheries closure	Green	Red	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green

ABMT	14.7	14b	14.c	15.1	15.2	15.3	15.9	16.7	17.3	17.9	17.2	17.2
ICZM	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Ridge to Reef	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
MPA	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
MSP	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
PSSA	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Fisheries closure	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green




 ABMT can directly contribute to the delivery of this SDG  
 ABMT has the potential to contribute to the delivery this SDG  
 ABMT has no realistic opportunity to contribute to the delivery of this SDG

Table A shows clearly that ABMTs can facilitate the development and implementation of marine and coastal polices for ocean-related SDGs. In many cases, ABMTs can directly contribute to SDGs. For example SDG target 12.2 ‘By 2030, achieve the sustainable management and efficient use of natural resources’ can be directly addressed through management measures applied to specific areas through any of the ABMTs examined, indeed this may be seen as part of the core function of ABMTs. In other cases, the degree to which a contribution can be made to an SDG is a function of how the ABMT is applied and the management challenges at a given site. For example, SDG target 12.6 ‘Encourage companies, especially large and transnational companies, to adopt sustainable practices’ has the potential to be delivered via ABMTs if business practices are management considerations at a particular site and if management measures are applied through the ABMT to support sustainable business practices.

The performance of each ABMTs that included multiple sectors and which included both land and sea was broadly consistent for each SDG target. It was notable that ICZM and ridge to reef ABMTs were very similar in their performance against SDG targets, as were MPAs and SDGs. However, there was variation, and in some cases certain ABMTs were more applicable than others. For example, SDG target 15.1 *‘By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements’* could be directly addressed by ICZM which has a terrestrial component and can use the connectivity between inland and coastal wetlands to develop appropriate management measures. In contrast, there is potential that an MPA could contribute to this target through a coastal wetland protected area, while there is no realistic possibility that a MSP process could contribute to this target.

Notably, the single sector ABMTs (PSSA and fisheries closure) demonstrated a much reduced capacity to support the delivery of SDGs than multi-sector and multi-realm (land *and* sea) approaches. In most cases, the single sector ABMTs were restricted in their SDG target contribution by the limited focus of their management measures. However, the specific focus of single-sector ABMTs was useful in some, albeit limited, circumstances. For example, PSSAs were the only example of an ABMT that directly contributed to SDG target 12.6 *‘Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle’* through their direct role in creating change in how shipping businesses undertake their activities in sensitive marine areas.

From this initial analysis, it would seem that ICZM and ridge-to-reef ABMTs are most applicable to support the delivery of ocean-related SDG targets. This is largely because of the core feature of these ABMTs is that they include both land and marine areas in a combined management approach, as such, have the capacity to address some of the more terrestrially-orientated SDG targets than either MPAs, MSP or the single sector ABMTs. It should be stressed however, that these are interim conclusions based on limited analysis at this point. Further analysis will be undertaken to explore all of the key questions further.

#### **4. CONCLUSIONS**

It is concluded that:

- ABMTs have very similar core components.
- ABMTs can make a contribution to the delivery of SDGs.
- Further investigation is needed on the development of synergistic approaches to the application of ABMTs to support SDG delivery.