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REPORT OF SUSTAINABLE OCEAN INITIATIVE (SOI) NATIONAL CAPACITY DEVELOPMENT WORKSHOP FOR NAMIBIA

INTRODUCTION

1. In 2010, the Conference of the Parties to the Convention on Biological Diversity, at its tenth meeting, in Nagoya, Japan, adopted the Strategic Plan for Biodiversity 2011-2020, with its Aichi Biodiversity Targets. The mission of the Strategic Plan is to take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet's variety of life, and contributing to human well-being and poverty eradication.
2. The Conference of the Parties at its tenth meeting also undertook its in-depth review of the progress made in the implementation of the programme of work on marine and coastal biodiversity under the Convention, and provided further guidance for enhancing its implementation. As such, the Conference of the Parties urged Parties and other Governments to achieve long-term conservation, management and sustainable use of marine resources and coastal habitats, and to effectively manage marine protected areas, in order to safeguard marine and coastal biodiversity and marine ecosystem services, and sustainable livelihoods, and to adapt to climate change, through appropriate application of the precautionary approach and ecosystem approaches, including the use of available tools such as integrated river basin and integrated coastal zone management, marine spatial planning, and impact assessments (paragraph 15 of decision X/29).
3. The Parties then emphasized the need for training and capacity-building of developing country Parties, in particular the least developed countries and small island developing States, as well as countries with economies in transition, as well as through relevant regional initiatives, and that these training workshops should contribute to sharing experiences related to integrated management of marine resources and the implementation of marine and coastal spatial planning instruments, facilitate the conservation and sustainable use of marine and coastal biodiversity, and may address other regional priorities that are brought forward as these workshops are planned (paragraph 37 of decision X/29).
4. Subsequently, the Conference of the Parties to the Convention, at its eleventh meeting, further emphasized the urgent need for capacity-building on various issues/tools concerning the conservation and sustainable use of marine and coastal biodiversity, including ecologically or biologically significant

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marine areas (EBSAs), the impacts of climate change on coral reefs, marine debris, and marine spatial planning (paragraphs 14, 19, 20 and 21 of decision XI/17; paragraphs 12 and 27 of decision XI/18 A; paragraph 2(g) of decision XI/18 C; paragraphs 19 and 22 of decision XII/23).

5. Pursuant to the requests mentioned above, the Sustainable Ocean Initiative (SOI) was born at the margins of the tenth meeting of the Conference of the Parties, in collaboration with Japan, COP-10 President, as well as with various partners who were willing to provide the necessary expertise, technical and financial resources. The SOI concept was further developed in subsequent meetings, such as the SOI Programme Development Meeting (2-4 August 2011, Kanazawa, Japan), SOI Side Event at the sixteenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) (2 May 2012, Montreal, Canada), SOI high-level meeting (5 June 2012, Yeosu, Republic of Korea), and a high-level side event on SOI at the eleventh meeting of the Conference of the Parties to the Convention (17 October 2012, Hyderabad, India).

6. SOI is evolving as a global platform to build partnerships and enhance capacity to achieve the Aichi Biodiversity Targets related to marine and coastal biodiversity in a holistic manner (in particular Targets 6, 10 and 11)¹ by:

- (a) Facilitating the sharing and exchange of knowledge, information, experience and practices;
- (b) Creating partnerships that can provide targeted capacity-building and technical assistance in support of on-the-ground implementation priorities;
- (c) Enhancing interactive communication among global policy, science and local stakeholders;
- (d) Monitoring progress on Aichi Biodiversity Targets related to marine and coastal biodiversity;
- (e) Developing partnerships among different sectors and stakeholders at local, regional and global scales; and
- (f) Working together to achieve a balance between the conservation and sustainable use of marine biodiversity, and promoting flexible and diverse approaches towards this end.

7. SOI focuses on achieving a balance between the conservation and sustainable use of marine and coastal biodiversity, through applying an action-oriented, holistic and integrated capacity-building framework. SOI is committed to building bridges between biodiversity conservation and resource management sectors.

8. Requests from the Conference of the Parties related to training and capacity development for marine activities emanating from its tenth and eleventh meetings, and the imperative to enhance progress towards the Aichi Biodiversity Targets, underlined the need to scale up SOI activities. In this regard, the SOI Global Partnership Meeting was held in Seoul on 6 and 7 October 2014, to develop a new action plan for the Sustainable Ocean Initiative. The output of this meeting, the SOI Action Plan 2015-2020, was subsequently welcomed by the SOI High-level Meeting, which was held on 16 October 2014 during the high-level segment of the twelfth meeting of the Conference of the Parties, in Pyeongchang, Republic of Korea.

¹ **Target 6:** By 2020, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits; **Target 10:** By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning; **Target 11:** By 2020, at least 17 per cent of terrestrial and inland water areas, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

9. The SOI Action Plan 2015-2020 outlines activities in the following areas:
- (a) Global partnership meetings;
 - (b) Regional workshops and learning exchange programme;
 - (c) Facilitating on-the-ground implementation through national training and exchange;
 - (d) Local leaders forum;
 - (e) Training of trainers;
 - (f) Web-based information sharing and coordination.
10. Building upon the experiences described above, the Executive Secretary convened the Sustainable Ocean Initiative (SOI) National Capacity Development Workshop for Namibia, jointly with the Government of Namibia, with financial support from the Government of Republic of Korea (through the EXPO 2010 Yeosu Korea Foundation and the Korea Maritime Institute) as well as the Government of the Federal Republic of Germany (through the BCC-GIZ Benguela Current Marine Spatial Management and Governance Project, financed by the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, BMUB), Swakopmund, Namibia, 13-16 October 2015.
11. The workshop focused on identifying the potential impacts of commodity mining activities in the context of the environmental and socioeconomic values of Namibia's marine resources. It also aimed to enhance the capacity of relevant policymakers and managers in Namibia to apply integrated assessment and planning tools to strengthen existing national efforts toward the long-term sustainable development of Namibian marine resources. This included the use of tools and approaches such as the application of biodiversity-inclusive impact assessments (e.g., environmental impact assessment and strategic environmental assessment) and marine spatial planning (MSP), among others.
12. Participants in the workshop comprised officials and experts from different ministries in the country who are responsible for addressing aspects of marine commodity mining as well as policies/plans on integrated marine and coastal area management at national and/or regional levels. As such, the participants were expected to be in a position to translate the knowledge and skills gained during the workshop into concrete actions in support of implementation at national levels. The full list of participants is attached as annex I.
13. The emphasis of the workshop was therefore on exchange of information and knowledge, active learning of skills and tools, and building national-level partnerships for continuous information-sharing and capacity-building in pursuit of the mission of the Sustainable Ocean Initiative. Likewise, the workshop format featured a mix of presentations with question-and-answer sessions, interactive group exercises, and discussions in plenary session and break-out groups.
14. Details of the organization of the workshop are provided in annex II.

ITEM 1. OPENING OF THE WORKSHOP

15. On behalf of the Government of Namibia, Mr Moses Maurihungirire, Permanent Secretary of the Ministry of Fisheries and Marine Resources, welcomed the participants and delivered his opening statement. He thanked the CBD Secretariat for convening, as well as the Governments of Korea and Germany for providing financial resources for organizing, this workshop. He also thanked the CBD Secretariat for inviting resource speakers and organizing the workshop. He highlighted in his statement the four key considerations for natural resources management, such as economic, ecological, environmental and social aspects. He then explained how ecological economics can play a role in linking the issues related to ecosystems and economic systems in holistic, integrated and broad perspectives. He pointed out that environmental values should be incorporated in the national accounting system, as natural capitals, which will enable the governments and stakeholders to apply the precautionary approach in an effective manner. As such, he encouraged the workshop participants to focus on integrative approaches,

linking closely economy and ecology, in addressing the critical issues of marine resources management and sustainable ocean development in Namibia.

16. On behalf of the Executive Secretary of the CBD, Mr. Braulio Dias, Ms. Jihyun Lee (Environmental Affairs Officer for marine and coastal biodiversity at the CBD Secretariat) delivered the opening statement. She thanked the Government of Namibia for the workshop, highlighting the collaborative efforts made by different Ministries through the leadership role provided by the Ministry of Fisheries and Marine Resources. She acknowledged, with great appreciation, the financial contribution of the Government of the Republic of Korea, through the EXPO 2010 Yeosu Korea Foundation, and that of the Government of the Federal Republic of Germany, through the BCC-GIZ Benguela Current Marine Spatial Management and Governance Project, for the organization of this workshop. She reminded the participants of previous collaboration between the CBD Secretariat and the Government of Namibia in convening the South-Eastern Atlantic Regional Workshop to Facilitate the Description of Ecologically or Biologically Significant Marine Areas (EBSAs) in April 2013, in Swakopmund, emphasizing the importance of the cold Benguela Current ecosystem, which produced a nutrient-rich upwelling system that supported some of the highest concentrations of marine life in the world. Biodiversity and the natural environment were of critical importance to Namibia. She also highlighted that sectors based on natural resources, such as fisheries, agriculture, mining and tourism were essential to the Namibian economy, and around 70 per cent of Namibia's population was directly dependent on the natural resource base for income, food, medicinal and health needs, fuel and shelter. She provided the vision, mission and approaches of the Sustainable Ocean Initiative, as a global partnership platform focused on facilitating information-sharing and learning exchanges across sectors, improving the scientific basis for implementation, and providing opportunities for targeted training and technical assistance. She then explained the main purpose of the meeting, which aimed to enhance understanding of the relationship between the environmental and socioeconomic value of Namibia's marine biodiversity and resources, and the potential impacts of commodity mining activities on the identified values; to discuss ways and means to incorporate this understanding into the application of integrated planning and management tools to further strengthen existing national efforts toward the long-term sustainable development of Namibia's marine resources and the conservation of its marine biodiversity. She hoped that the workshop participants would take the tools and knowledge gained at this workshop and integrate them into their respective management and scientific activities at the regional, national and subnational levels.

17. On behalf of the Ministry of Mines and Energy, Mr. Erasmus Shivolo, Mining Commissioner, delivered his opening statement. He thanked the organizers for inviting officials from his Ministry. He introduced his Ministry, as an institution that promoted exploitation of natural resources, highlighting that every institution had its own roles for sustainable development. He then explained the Ministry's current work regarding offshore diamond mining and the licensing of offshore phosphate mining activities. He highlighted that all different stakeholders had a common vision towards sustainable development, and mining could contribute to the economic development in a sustainable manner through proper science-based management and regulation.

18. On behalf of the Ministry of Environment and Tourism, Ms. Saima Angula, Deputy Director of Environmental Assessments and Waste Management delivered the opening statement. She expressed her gratitude for inviting the officers from her Ministry to be part of the workshop. She thanked the organizers for providing the necessary technical support and financial resources. She assured that her Ministry was represented by a strong team at the workshop, and they would be able to make meaningful contributions and take the messages back to their work for application. She highlighted that this workshop was convened at the right time as her country faced challenging issues related to marine phosphate mining and marine habitats protection, especially for the sustainability of important fishery resources and habitats. She hoped that this workshop would enable them to broaden the expertise and knowledge of relevant stakeholders and enable them to take responsible and informed decisions.

19. On behalf of the Ministry of Works and Transport, Mr. George Tshatumbu, Acting Director of Maritime Affairs, delivered his opening statement. He expressed his gratitude to be engaged in this workshop that will discuss issues on marine sustainability. He introduced briefly the work of this Ministry focusing on maritime transport and regulating various maritime activities. He looked forward to sharing the experiences of his Ministry with various participants.

ITEM 2. WORKSHOP BACKGROUND, OBJECTIVES, SCOPE AND EXPECTED OUTPUTS

20. The workshop was organized in plenary and break-out-group sessions. The Secretariat, in consultation with the host Government, invited two workshop co-chairs, Mr. Moses Maurihungirire (Permanent Secretary of the Ministry of Fisheries and Marine Resources) and Mr. David Johnson (Coordinator of the Global Ocean Biodiversity Initiative), to moderate the workshop discussion at the plenary session.

21. Ms. Bronwen Currie (Ministry of Fisheries and Marine Resources) gave an overview of the workshop background and the national context of the workshop, specifically with regard to developing national capacity and scientific basis to meet the challenges related to sustainability of Namibia's fisheries resources and habitats.

22. Ms. Jihyun Lee (CBD Secretariat) gave an overview of the workshop objectives, scope and expected outputs, and briefed participants on the meeting documents as well as background documents made available at the workshop.

23. Ms. Lisa Levin (Resource Speaker) provided a presentation on ecosystem services provided by marine biodiversity, highlighting how significantly various economic sectors in Namibia depended on healthy marine ecosystems and biodiversity for their sustainability.

24. The participants were then invited to introduce themselves and share their views on the expected outputs/outcomes of the workshop.

25. Summary of above presentations are provided in annex III.

ITEM 3. VALUES OF AND VISION FOR NAMIBIA'S MARINE BIODIVERSITY AND RESOURCES

26. Under this agenda item, selected participants were invited to provide presentations on the environmental and socioeconomic values of Namibia's marine biodiversity and resources, including:

- Ms. Saima Angula (Ministry of Environment and Tourism)'s presentation on supporting the sustainability of Namibia's marine biodiversity and resources;
- Mr. Rudi Cloete (Ministry of Fisheries and Marine Resources)'s presentation on the environmental and socioeconomic values of Namibia's marine biodiversity and resources; and
- Ms. Gabi Schneider (Ministry of Mines and Energy)'s presentation on socioeconomic value of the non-living marine resources of Namibia and responsible exploration and mining with special emphasis on co-existence and management of offshore economic activities.

27. Summaries of the above presentations are provided in annex III. Following the presentations, workshop participants were invited to ask questions on the presentations.

28. The workshop participants were then invited to identify a long-term vision for sustainable development of Namibia's marine resources, focusing on the following questions:

- What is the long-term vision and what are the goals for the sustainable development of Namibia's marine resources?

- What are the values of marine biodiversity and resources in Namibia in support of a long-term vision for sustainable ocean development and related goals?
- How will the long-term vision and related goals and values be collectively owned by different sectors and stakeholder?

29. The summary of group discussion is provided in annex IV.

ITEM 4. IDENTIFYING THE POTENTIAL IMPACTS OF COMMODITY MINING ACTIVITIES IN THE CONTEXT OF ENVIRONMENTAL AND SOCIOECONOMIC VALUES OF NAMIBIA'S MARINE BIODIVERSITY AND RESOURCES

30. Under this agenda item, selected participants and resource speakers were invited to provide theme presentations on identifying the potential impacts of commodity mining activities, including:

- Mr. Jean-Paul Roux (Ministry of Fisheries and Marine Resources)'s presentation on fisheries management, ecosystems and biodiversity conservation in the northern Benguela;
- Ms. Kaatri Brumfitt (Ministry of Environment and Tourism)'s presentation on the potential ecological or biological impacts from commodity mining activities on Namibia's marine biodiversity and resources, including fisheries;
- Ms. Lisa Levin (Resource Speaker)'s presentation on marine commodity mining and its potential impacts on ecosystem functions and services;
- Mr. Tony Leiman (Resource Speaker)'s presentation on evaluating the socioeconomic impacts of commodity mining activities; and
- Mr. David Johnson (Resource Speaker)'s presentation on case-studies and lessons learned on addressing the impacts of mining on marine and coastal biodiversity.

31. Summaries of the above presentations are provided in annex III.

32. Following the presentations, workshop participants, in break-out session, discussed various issues related to addressing potential impacts of commodity mining in the context of long-term vision for the sustainable development of marine resources in Namibia, focusing on the following questions:

- What are the potential impacts of commodity mining on the identified values of the ocean and coast in Namibia? How do they affect the long-term vision for sustainable ocean development and related goals?
- What are the options to create a collectively owned vision across the different sectors and stakeholders so that the identified values are utilized in a sustainable way, thereby contributing to achieving the long-term sustainable development goals?
- How can this contribute to addressing the potential impacts of commodity mining?

33. The summary of group discussion is provided in annex IV.

ITEM 5. TOOLS, AND POLICY RESPONSES TO INTEGRATE IDENTIFIED VALUES AND IMPACTS IN CROSS-SECTORAL AND INTEGRATED PLANNING AND MANAGEMENT

Item 5.1. Review of existing policy response, including the application of EIA, lessons learned and opportunities for further development

34. Under this agenda item, selected resource speakers and participants were invited to provide presentations on different topics related to tools and policy responses in cross-sectoral and integrated planning and management, including:

- Ms. Saima Angula from (Ministry of Environment and Tourism)'s presentation on the experience and lessons learned in the application of EIA regarding marine mining activities in Namibia;
- Ms. Helen Rouse (Resource Speaker)'s presentation on the experience and lessons learned in the application of EIA regarding marine mining activities in New Zealand; and
- Ms. Kerry Sink (Resource Speaker)'s presentation on the science-policy advice in South Africa; and
- Ms. Aleke Stöfen-O'Brien (Resource Speaker)'s presentation on the CBD's voluntary guidelines on biodiversity-inclusive EIAs.

35. Summaries of the above presentations are provided in annex III.

36. Following the presentations, workshop participants discussed, in break-out session, on ways to identify existing policy responses to address the potential impacts of commodity mining activities and enabling factors for successful EIA application in assessing and addressing the impacts of commodity mining in marine and coastal areas, focusing on the following questions:

- What are the existing policy responses to address the potential impacts of commodity mining activities?
- What are the strengths, weaknesses, opportunities and barriers of existing policy responses?
- How was EIA applied in Namibia as well as other countries to promote specific national marine sustainability goals? What are the lessons learned from the application in Namibia as well as other countries?
- What are the enabling factors for successful EIA application in assessing and addressing the impacts of commodity mining activities?
- What are the existing constraints and barriers in effective application of EIA
- Means and ways to address existing constraints and barriers

37. The summary of group discussion is provided in annex IV.

Item 5.2. Strategic Environmental Assessment (SEA) as a set of tools to understand the social, economic, and environmental consequences of a plan or policy

38. Under this agenda item, selected resource speakers were invited to provide presentations on the SEA, in particular, its concept, applications, and lessons-learned, including:

- Ms. Maria Partidario (Resource Speaker)'s presentation on the concept and application of a SEA; and
- Ms. Aleke Stöfen-O'Brien (Resource Speaker)'s presentation on the CBD's voluntary guidelines on biodiversity-inclusive SEAs.

39. Summaries of the above presentations are provided in annex III.

40. Following the presentations, workshop participants discussed, in break-out session, ways on how SEA can be used to promote a path to marine sustainability through integrative and multi-stakeholders partnerships as well as identifying enabling factors for successful SEA application, focusing on the following questions:

- How can SEA be used to promote specific national marine sustainability goals?
- What are the enabling factors for successful SEA application?
- What are the existing constraints and barriers in effective application of SEA?
- Ways and means to address existing constraints and barriers

41. The summary of group discussion is provided in annex IV.

Item 5.3 Marine spatial planning (MSP) as an integrated planning process for the sustainable use of marine resources

42. Under this agenda item, selected resource speakers and CBD Secretariat were invited to provide presentations on marine spatial planning (MSP) as an integrated planning process for the sustainable use of marine resources, including:

- Mr. David Johnson (Resource Speaker)'s presentation on MSP experiences and lessons learned;
- Ms. Jihyun Lee (CBD Secretariat)'s presentation on the CBD's work on MSP;
- Mr. Gunnar Finke (Resource Speaker)'s presentation on the MSP initiative in the Benguela Current Large Marine Ecosystem (BCLME); and
- Ms. Kerry Sink (Resource Speaker)'s presentation on practical approaches to collaborative cross-sectoral management in South Africa.

43. Summaries of the above presentations are provided in annex III.

44. Following these presentations, workshop participants, in break-out session, discussed specific ways on how MSP can be used to promote specific national marine sustainability goals, facilitate multi-stakeholder engagement, address multiple-use conflicts, support a strategic and anticipatory planning approach, and facilitate the application of EIA and SEA, focusing on the following questions:

- What are the enabling factors for successful MSP in addressing the potential impacts of various human activities, including mining, on marine and coastal biodiversity?
- What are the existing constraints and barriers in realizing MSP?
- Ways and means to address existing constraints and barriers?

45. The summary of group discussion is provided in annex IV.

ITEM 6. APPLICATION OF VARIOUS TOOLS IN DEVELOPING AND APPLYING A STRATEGIC AND INTEGRATED PLANNING AND MANAGEMENT APPROACHES

46. Under this agenda item, selected resource speakers and CBD Secretariat were invited to provide presentations including:

- Mr. David Johnson (Resource Speaker)'s presentation on scientific foundation for integrated planning and management: Description of areas meeting the CBD scientific criteria for ecologically or biologically significant marine areas through the South-East Atlantic regional workshop for EBSAs, held in Namibia in April 2013;
- Ms. Jihyun Lee (CBD Secretariat)'s presentation on sharing experiences on integrated planning and management in marine and coastal areas: CBD practical guidance document on integrated coastal management for achievement of the Aichi Biodiversity Targets based on experience in the Seas of East Asia;
- Ms. Hannah Lily (Resource Speaker)'s presentation on the legal mandate for integrated planning and management for marine commodity mining; and
- Ms. Kaatri Brumfitt (Ministry of Environment and Tourism)'s presentation on *Integrated Coastal Zone Management (ICZM) Bill* of Namibia.

47. Summaries of the above presentations are provided in annex III.

48. Following this presentation, workshop participants, in a break-out session, discussed specific ways and means for enhancing the current policy responses to address the potential impacts of commodity mining activities by applying various tools, including: national level inter-agency and cross-sectoral

coordination mechanism; institutional or legislative strengthening and financing; public awareness and participation; scientific support and enforcement, compliance, and monitoring.

49. Different groups were invited to present the results of their group discussion to the plenary.

50. The summary of group discussion is provided in annex IV.

ITEM 7. CONCLUSION AND FUTURE STEPS

51. Workshop co-chairs presented key concluding message of the workshop discussion.

52. Workshop participants were invited to share their views on future collaboration

53. The summary of concluding messages is provided in annex IV.

ITEM 8. CLOSURE OF THE WORKSHOP

54. Closing statements were provided by the workshop Co-Chairs, Mr. Moses Maurihungirire (Permanent Secretary of the Ministry of Fisheries and Marine Resources) and Mr. David Johnson (Coordinator of the Global Ocean Biodiversity Initiative), and Ms. Jihyun Lee (CBD Secretariat). Workshop participants expressed their appreciation to workshop Co-Chairs for their effective steering of the workshop discussion, all the resource speakers for their excellent scientific and technical inputs, and CBD Secretariat for the efficient servicing of the workshop.

55. The workshop was closed at 12.30 p.m. on Friday, 16 October 2015.

Annex I

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*Annex II***ORGANIZATION OF THE WORK****Day 1: Tuesday, 13 October 2015**

8.30 a.m. to 9 a.m.	<p>Agenda item 1. Opening of the workshop</p> <ul style="list-style-type: none"> ▪ Representative of the Namibian Government <ul style="list-style-type: none"> ○ Ministry of Environment and Tourism (MET) ○ Ministry of Fisheries and Marine Resources (MFMR) ○ Ministry of Mines and Energy (MME) ○ Ministry of Works and Transport (MWT) ▪ Representative of the Executive Secretary of the CBD
9.00 a.m. to 10 a.m.	<p>Agenda item 2. Workshop background, objectives, scope and expected outputs</p> <p>2.1. Workshop background and national context</p> <ul style="list-style-type: none"> • Theme presentation by a Ms. Bronwen Currie from MFMR <p>2.2. Workshop objective and scope (by CBD Secretariat)</p> <p>2.3. Tour de table on the participants' needs and expectation for the workshop</p>
10 a.m. to 10.20a.m.	<i>Coffee/tea break</i>
10.20 a.m. to 12 p.m.	<p>Agenda item 3. Values of and vision for Namibia's marine biodiversity and resources</p> <p>3.1. Environmental and socioeconomic values of Namibia's marine biodiversity and resources</p> <ul style="list-style-type: none"> • Theme presentations by various national experts from Namibia <ul style="list-style-type: none"> ○ Expert from MET ○ Expert from MFMR ○ Expert from MME <p>3.2. Identifying a long-term vision for Namibia's sustainable development of Namibia's marine resources</p> <p><i>Break-out session and plenary discussion, focusing on:</i></p> <ul style="list-style-type: none"> • <i>What is the long-term vision and what are the goals for the sustainable development of Namibia's marine resources?</i> • <i>What are the values of Namibia's marine biodiversity and resources in support of a long-term sustainable ocean development vision and related goals?</i> • <i>How will the long-term vision and related goals as well as values be collectively owned by different sectors and stakeholder?</i>
12 p.m. to 1 p.m.	<i>Lunch</i>

1 p.m. to 2 p.m.	<p>Agenda Item 4. Identifying the potential impacts of commodity mining activities in the context of environmental and socioeconomic values of Namibia's marine biodiversity and resources</p> <p>4.1. Identifying the potential impacts of commodity mining activities Theme presentations on:</p> <ul style="list-style-type: none"> • Ecological or biological impacts • Impacts on marine resources, including fisheries • Socioeconomic impacts • Case-studies and lessons learned on addressing the impacts of mining on marine and coastal biodiversity <p>4.2. Addressing potential impacts in the context of the long-term vision for the sustainable development of Namibia's marine resources</p> <p><i>Break-out session and plenary discussion, focusing on:</i></p> <ul style="list-style-type: none"> • <i>What are the potential impacts of commodity mining affecting the identified values of Namibia's ocean and coast? How do they affect the long-term sustainable ocean development vision and related goals?</i> • <i>What are options to create a collectively owned vision across the different sectors and stakeholders so that the identified values are utilized in a sustainable way thereby contributing to achieving the long-term sustainable development goals? How can this contribute to addressing the potential impacts of commodity mining?</i>
2 p.m. to 2.30 p.m.	<i>Coffee/tea break</i>
2.30 p.m. to 5 p.m.	<i>(continuation of Agenda item 4.2)</i>

Day 2: Wednesday, 14 October 2015

8.30 a.m. to 10 a.m.	<p>Agenda Item 5. Tools and policy responses to integrate identified values and impacts in cross-sectoral and integrated planning and management</p> <p><i>Theme presentation on:</i></p> <ul style="list-style-type: none"> • Science-based policy advice in South Africa <p>5.1. Review of existing policy responses, including the application of EIA, lessons-learned and opportunities for further development</p> <p><i>Theme presentations</i></p> <ul style="list-style-type: none"> • CBD's voluntary guidelines on biodiversity-inclusive EIAs • EIA application and lessons learned in Namibia • EIA application and lessons learned in New Zealand
10 a.m. to 10.30 a.m.	<i>Coffee/tea break</i>
10.30 a.m. to 12 p.m.	<p><i>(continuation of Agenda item 5.1)</i></p> <p><i>Plenary/break-out session discussion, focusing on:</i></p>

	<ul style="list-style-type: none"> • What are the existing policy responses to address the potential impacts of commodity mining activities? • What are the strengths, weaknesses, opportunities and barriers of existing policy responses? • How was EIA applied in Namibia as well as other countries to promote specific national marine sustainability goals? What are the lessons-learned from the application in Namibia as well as other countries? • What are the enabling factors for successful EIA application in assessing and addressing the impacts of commodity mining activities? • What are the existing constraints and barriers in effective application of EIA • Means and ways to address existing constraints and barriers
12 p.m. to 1 p.m.	<i>Lunch</i>
1 p.m. to 2.30 p.m.	<p>5.2. Strategic Environmental Assessment (SEA) as a set of tools to understand the social, economic and environmental consequences of a plan or policy</p> <p><i>Theme presentations</i></p> <ul style="list-style-type: none"> • CBD's voluntary guidance on biodiversity-inclusive SEA • SEA application and lessons learned (SEA expert) <p><i>Plenary discussion, focusing on:</i></p> <ul style="list-style-type: none"> • How can SEA be used to promote specific national marine sustainability goals? • What are the enabling factors for successful SEA application in assessing and addressing the impacts of commodity mining activities? • What are the existing constraints and barriers in effective application of SEA, in particular the assessment of cumulative, long-term effects? • Means and ways to address existing constraints and barriers
2.30 p.m. to 3 p.m.	<i>Coffee/tea break</i>
3 p.m. to 5 p.m.	<i>(continuation of Agenda item 5.2)</i>

Day 3: Thursday, 15 October 2015

8.30 a.m. to 10 a.m.	<p>5.3 Marine spatial planning (MSP) as an integrated planning process to achieve ocean development planning for the sustainable use of marine resources</p> <p><i>Theme presentations</i></p> <ul style="list-style-type: none"> • CBD's work on MSP • MSP initiative in the Benguela Current Large Marine Ecosystem (BCLME) • MSP experiences and lessons learned <p><i>Plenary discussion, focusing on:</i></p> <ul style="list-style-type: none"> • How can MSP be used to promote specific national marine sustainability goals, facilitate multi-stakeholder engagement, address multiple-use conflicts, support a strategic and anticipatory planning approach, and facilitate the application of EIA and SEA? • What are the enabling factors for successful MSP in addressing the potential impacts of various human activities, including mining, on marine and coastal biodiversity? • Conclusions from the South African national MSP workshop • What are the existing constraints and barriers in realizing MSP? • Means and ways to address existing constraints and barriers
10 a.m. to 10.30 a.m.	<i>Coffee/tea break</i>
10.30 a.m. to 12 p.m.	<i>(Continuation of Agenda Item 5.3)</i>
12 p.m. to 1 p.m.	<i>Lunch</i>
1 p.m. to 2.30 p.m.	<p>Agenda Item 6. Application of various tools in developing and applying strategic and integrated planning and management approaches</p> <p><i>Break-out session and plenary discussion, focusing on:</i></p> <ul style="list-style-type: none"> • How can the existing policy responses and management approaches be strengthened to effectively support the long-term sustainable ocean development vision and related goals for Namibia's marine resources? • Specific ways and means for enhancing the current policy responses to address the potential impacts of commodity mining activities by applying various tools, including: <ul style="list-style-type: none"> ○ national level inter-agency and cross-sectoral coordination mechanism; ○ institutional or legislative strengthening and financing ○ public awareness and participation; ○ scientific support; ○ enforcement, compliance, and monitoring

2.30 p.m. to 3 p.m.	<i>Coffee/tea break</i>
3 p.m. to 5p.m.	<i>(continuation of Agenda item 6)</i>

Day 4: Friday, 16 October 2015

8.30a.m. to 10 a.m.	<i>(continuation of Agenda item 6)</i> Presentation of the results of the Break-out session discussion Plenary discussion
10 a.m. to 10.15a.m.	<i>Coffee/tea break</i>
10.15 a.m. to 11 a.m.	<i>(continuation of Agenda item 6)</i>
11 a.m. to 12 p.m.	Agenda item 7. Conclusion and future steps
12 p.m. to 12.30 p.m.	Agenda Item 8. Closure of the workshop
12.30 to 1.30 p.m.	<i>Lunch</i>

*Annex III***SUMMARY OF PRESENTATIONS****Workshop objectives, approaches, and expected outputs/outcomes
by Jihyun Lee (CBD Secretariat)**

Ms. Lee briefed the participants on the main objectives of the Convention on Biological Diversity, the Strategic Plan for Biodiversity for 2011-2020 and its 20 Aichi Biodiversity Targets, and CBD's work on marine and coastal biodiversity, including on identification of marine areas meeting the scientific criteria of ecologically or biologically significant marine areas (EBSAs) and marine spatial planning, among others. She highlighted the ecosystem approach and the precautionary approach as two pillars of CBD's programme of work on marine and coastal biodiversity for management, which requires engaging different sectors and multi-stakeholders for marine biodiversity conservation and sustainable use, in particular the urgent need to enhance collaboration with the fishing, marine industries, and other relevant sectors to ensure sustainable management of oceans and coasts. She explained that the workshop would focus on enhancing the national capacity to apply integrated assessment and planning tools to strengthen existing national efforts toward the long-term sustainable development of Namibian marine resources, with particular focus on addressing the potential impacts of mining on marine and coastal biodiversity. The workshop would achieve such purpose through facilitating discussion among participants in an informal setting, engaging diverse expertise and experiences through inter-ministries, cross-sectoral and inter-disciplinary approaches, and sharing knowledge, experiences, and lessons-learned. She concluded that the workshop aimed at achieving in the long-term: (i) value of marine and coastal biodiversity and ecosystems, their contributions to our life, and their relevance to different economic sectors understood; (ii) various tools for addressing potential human impacts on marine biodiversity identified; (iii) implementation of Aichi Biodiversity Targets facilitated; and (iv) ways and means to integrated, cross-sectoral planning and management framework for sustainable ocean development identified.

**Marine commodity mining, biodiversity and ecosystem functions and services in Namibia
By Lisa Levin (Resource Speaker)****Ecosystem Services**

Understanding of the deep ocean has come a long way in the last 150 years of ocean exploration. New tools reveal heterogeneous ecosystems that support a wealth of biodiversity. These include seamounts, canyons, seeps, vents, oxygen minimum zones and abyssal plains. Many of these deep ecosystems support living (fish and invertebrates) and non-living resources (oil, gas, minerals) of growing interest to humans. Managing these systems in the deep ocean poses a challenge, and demands a new framework that recognizes, quantifies and integrates ecosystem services. Those resources we harvest, extract or exploit are considered provisioning services and have a market value. But many other key services go unvalued. We are still discovering new support functions involving habitat, substrate, refugia and nursery grounds provided to species we do harvest. The deep ocean provides key regulatory services involving heat absorption, carbon sequestration and nutrient cycling. Other services range from scientific research and communications to tourism and the arts. Every major disturbance has the potential to cause loss of ecosystem services or even create new disservices that should be considered when making decisions about industrialization.

Distinctive Features

Several features of the proposed Namibian mining area are distinctive. The large area means that sampling will never characterize all of the biodiversity, the benthic communities are rather poorly known, the system is dynamic with variable low oxygen and periodic sulphide eruptions, and overall the productivity is very high. The coastline is distinctive in that many terrestrial animals rely on ocean productivity. Some of the unknown features include the longevity of the organisms and the time scales of

recovery. Low oxygen is known from studies elsewhere (e.g. on the Indian margin) to slow faunal recolonization.

Mining Impacts

Direct mining impacts include removal of 3-Dimensional structures that support other organisms, alteration of substrate, particle sizes, fluidity and aggregation, modification of geochemistry and alteration of patch structure and connectivity. Other direct impacts would result from plume resuspension, noise, light, and changes in water quality, seabed structure, deposition and circulation. Far-field demersal and water column effects may involve plumes, contamination, effects on larval supply, migratory fish and mammals. On land additional mining-related impacts can occur from invasive species, spills, interference from fisheries or even altered income distributions. Few of these reflect the alterations of ecosystem services such as carbon sequestration, genetic resource loss including potential for pharmaceuticals or biomaterials. Microbes and invertebrates that live in the low oxygen sediments that would be lost to mining might have enzymes or metabolites with unusual adaptations to conditions of extreme anoxia and sulphide that could be adopted for medical or industrial applications.

Environmental Impact Assessment

A review of impact assessments for phosphorites from 3 countries generate the following recommendations for EIAs.

- Need appropriate baseline data & time series to identify natural variability, and disturbance regime *Lack of information ≠ lack of impact; Sublethal ≠ minor impact*
- Avoid outdated paradigms, or assumptions based on other regions or ecosystems
- Identify and value key ecosystem functions and services and measurement proxies for these
- Use state of the art sampling tools, mesh size, terminology
- Evaluate options from technical and environmental perspective
- Place mining sites in broader context of margin ecosystems, pay attention to ontogenetic migrations as seen with the hake.
- Consider cumulative impacts within sectors, across sectors, across jurisdictions and including climate change
- Adopt reference sites, no-mine and protected areas (APEI, MPA, VMEs, unmined areas etc.). Leave source biota for recolonization
- Obtain direct information about the dynamics of the project area ecosystem. Do not infer or translate from studies done in completely different environments and settings.
- Recognize that marine organisms (e.g. fish) don't respect political, jurisdictional or other boundaries and migrate extensively.
- Evaluate potential conflict with fishing, ecosystem support for fish and migratory marine mammals

The mitigation hierarchy based on the precautionary principle recommends the following:

Avoidance which can include a decision not to mine, the formation of marine protected areas, and the definition of unmined areas for reference, broodstock or corridors. When avoidance is not possible, impact can be **minimized** through staggered activities in space and time or the formation of temporary refugia, mined only after other sites recover. **Finally remediation** should not count on restoration in deep waters, but rather on the development of biodiversity and ecosystem service offsets, which may include environmental damage compensation and acquisition of scientific knowledge.

Key actions that should precede decision making on phosphate mining might include:

- Strategic environmental assessment within and across jurisdictions and sectors including planning of protected areas.

- Quantification of ecosystem services at the outset & incorporation into the regulatory and compensation schemes.
- Identification of appropriate indicators for ecosystem services and use in cost-benefit analysis, baseline data collection and monitoring.
- Definition of *significant harm* and the baseline data needed to detect it should impact occur.
- Addressing cumulative impacts in decision making (e.g., fishing, mining, pollution, climate change and more)
- Acquisition of scientific knowledge as part of governance framework and financial plans.
- Schemes to allow compensation of environmental damage via fees, offsets, taxes or levies.

Benguela Phosphate Mining. Economic issues and debates

By Anthony Leiman (Resource Speaker)

Informed decision making is an ideal, the real world often requires rational decision making in the presence of incomplete information. Knight's distinction between risk and uncertainty is useful: when probabilities can be attached to each of the feasible outcomes, that is risk, when they cannot, the situation involves uncertainty. While risk is easily addressed, uncertainty is not.

When outcomes are uncertain one approach is to be ultra-prudent: the precautionary principle requires that one focus on the worst case scenario. This can be costly, and another approach is to compute the value of the missing information: the amount that decision makers would be willing to pay for fuller information. This leads to 'quasi-option value'.

There are many aspects of phosphate mining about which information is incomplete. On the benefit side these include prices, exchange rates, job creation and stimulatory effects on the local economy. On the cost side they include physical risks such as those posed by the sand plume, by the risk of increased sulphur eruptions and by rising levels of toxic metals, and on the economic side by potential implications for output and employment in the fishing industry. The presentation attempts to inform these issues on both sides.

Science-based policy advice in South Africa

by Kerry Sink (Resource Speaker)

This presentation shared South Africa's experience in science based policy advice with a focus on marine mining. Marine mining in South Africa began with diamond mining in 1961 and the first petroleum well in 1969. Present day marine mining has diversified to include mining for gold, sapphire, garnet, heavy metals, rare earth minerals, building material and gas. The most recent and controversial marine mining has been the issuing of three phosphate mining exploration leases. The diversification of mining activities has been accompanied by a spatial expansion of mining area with increasing overlap with fisheries, growth in the number of overlapping leases and applications, and advances in mining technology. In South Africa, marine mining management is governed through the Environmental Impact Assessment framework and new approaches are being used to simply biodiversity information for consideration in Environmental Impact Assessment Reports and associated Environmental Management Plans.

Several case studies were presented to demonstrate progress in the science-policy interface. The National Biodiversity Assessment is one of the most important products in South Africa's science to policy work and is a cornerstone in marine mainstreaming efforts. The Assessment relies on a National Ecosystem Classification and Map, Maps of Ecosystem Condition (based on multiple pressure maps) and reports on Ecosystem Threat status, Ecosystem Protection level and priorities for marine biodiversity management in multiple sectors. The maps from the assessment are available on a Biodiversity GIS website for download and have been used in impacts assessments, planning and in one case, an offshore mine Biodiversity Action Plan. Other maps that have had traction include maps of Potential Vulnerable Marine Ecosystems and the focus areas for Offshore Protection with some mining sector plans reflecting Ecologically and Biologically Significant Areas. Outputs from systematic biodiversity assessments and marine spatial

plans have had limited uptake but feedback from EIA practitioners helped identify key limitations in their application. These include inaccessible products; inconsistent habitat classifications, maps, biodiversity targets and terminology; multiple planning methodologies and iterations, inconsistent results from different plans at multiple scales and poor co-ordination within the marine environmental sector. Key areas for improvement were identified to address these shortcomings including better maps to reflect sensitive areas and the need for a national critical biodiversity map for South Africa's marine environment.

Current work to support mining decision making is focused on ecological infrastructure. Ecological infrastructure refers to naturally functioning ecosystems that deliver valuable services to people, such as food, fresh water, climate regulation and disaster risk reduction. It is the nature-based equivalent of built or hard infrastructure, and is just as important for providing services and underpinning socioeconomic development. In the offshore environment, we are exploring different approaches to map and assess the value of food production and fisheries resource areas using data from multiple fisheries sectors. It is estimated that 90% of marine food production is delivered from less than 15% of South Africa's marine territory. This 15% of the ocean should be considered as a strategic fisheries resource area and the maintenance of this important and valuable ecosystem services should be maintained.

Experience and lessons learned in the application of EIA regarding marine mining activities in New Zealand

by Helen Rouse (Resource Speaker)

Ms. Helen Rouse from New Zealand's National Institute of Water and Atmospheric Research (NIWA) then shared lessons learned in New Zealand, in particular from two recent case studies of proposed mining activities in New Zealand's EEZ. Helen first outlined the mineral resources available in New Zealand waters and reminded participants that each resource has different substrates, faunal communities, methods of extraction and therefore very different potential ecological effects. She outlined the three key parts of New Zealand's legislative framework for managing offshore mining: the Crown Minerals Act, which manages efficient use of mineral resources; the Resource Management Act, which promotes sustainable management of natural resources on land and out to 12 nm offshore; and the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (the EEZ Act), which manages the environmental effects of activities from 12 nm out to the EEZ and continental shelf edge. The EEZ Act promotes the sustainable management of the natural resources of the EEZ & CS; is administered by the (national) Environmental Protection Authority; requires an impact assessment (IA) to be provided with applications for marine consents; and provides information management principles for decision makers, including direction to favour precaution and consider adaptive management approaches when deciding consent applications.

She then outlined two recent decisions under the EEZ Act, one for mining of iron-sands off the west coast of the North Island, and one for mining of phosphate nodules off the east coast of the South Island of New Zealand. Both of these applications were refused marine consent. In both cases the Decision Making Committees (DMCs) who considered the application provided reasons for their decisions, which in summary included a variety of uncertainties regarding baseline information on the existing environment, uncertainty regarding predictions of ecological and economic impacts, the impacts on existing interests such as fisheries, and impacts on New Zealand's interests. In both cases the applicants had proposed adaptive management approaches, monitoring and mitigation activities but the DMCs were still not confident enough that adverse effects could be avoided, remedied or mitigated to allow the activities to proceed.

She reflected on what these decisions mean for other decision makers. The EEZ Act is still relatively new and all parties involved are learning about how it might be applied, but we can see it provides a basis for sufficient precaution in managing potential environmental effects. The decisions show there are gaps in our scientific understanding of the marine environment, and in the absence of a marine research strategy, gaps in scientific knowledge must be filled on a case-by-case basis by industry as part of their project

application. The decisions illustrated the importance of communication and consultation with iwi, communities and affected parties from scoping stage. Communities, who are able to participate in these processes, need to understand the potential risks and be confident that they are being well managed in order to give ‘social licence’ for marine activities to go ahead. In terms of decision-making under uncertainty, the DMCs used risk management, adaptive management and precautionary approaches to consider this, and the decisions also demonstrated the importance of the monitoring conditions proposed with the application. Finally the decisions hint at a potential gap at a strategic (beyond individual projects) level for the marine environment, such as mapping and management of areas of particular interest such as rare and vulnerable ecosystems. All these lessons are part of the overall decision-making context, that there are multiple (and conflicting) uses and values of our marine space, and the decisions being made are normative, with biophysical science being only one strand of the information used to help decision makers, alongside economic, social, and cultural information.

The CBD Voluntary Guidelines for the Consideration of Biodiversity in Environmental Impact Assessments (EIA) in Marine and Coastal Areas
by Aleke Stöfen-O’Brien (Resource Speaker)

Ms. Stöfen-O’Brien presented the CBD voluntary guidelines for the consideration of biodiversity in Environmental Impact Assessments (EIAs) and Strategic Environmental Assessments (SEAs) in marine and coastal areas. The CBD biodiversity-inclusive voluntary guidelines on EIA and SEA were endorsed during the eight meeting of the Conference of the Parties (COP) (annex to decision VIII/28). The tenth meeting of the COP requested the development of voluntary guidelines for the consideration of biodiversity in EIAs and SEAs in marine and coastal areas. These guidelines are based on the CBD Voluntary Guidelines on biodiversity-inclusive EIA and SEA and were further developed through input from an expert workshop and technical peer review by Parties, other Governments and organizations.

The CBD biodiversity-inclusive voluntary guidelines on EIAs in marine and coastal areas are structured in accordance with good practice for EIA and are intended to facilitate better integration of biodiversity-related considerations into the EIA process. The guidelines focus on how to promote and facilitate a biodiversity-inclusive EIA process for projects in marine and coastal areas. They do not, however, provide a technical manual on how to conduct a biodiversity-inclusive assessment study.

The CBD biodiversity-inclusive voluntary guidelines on EIAs in marine and coastal areas acknowledge the ecological, governance and practical differences in conducting an EIA for projects in ocean areas beyond national jurisdiction. The guidelines focus primarily on the first two steps of an EIA: the screening and scoping phase. In the screening phase, the guidelines address the question whether the intended activity surpasses the maximum sustainable yield or the carrying capacity of a habitat and/or ecosystem and whether this would change the access to and/or rights over biological resources. In this regard, the limited knowledge regarding the assessment of the impacts of activities affecting marine areas beyond national jurisdiction is a challenge. In addressing these challenges, the guidelines present an indicative lists of screening criteria for activities for which an EIA should be made mandatory or for which the need for, or the level of an EIA, is to be determined.

The eleventh meeting of the COP, encouraged Parties, other Governments and competent organizations to apply the voluntary guidelines and invited Parties and other Governments to share information on their progress in applying these. The COP also requested the Executive Secretary on this occasion to provide further assistance to promote capacity-building on the application of the CBD biodiversity-inclusive voluntary guidelines.

The Application of SEA regarding cumulative impacts on marine and coastal biodiversity
by Maria Partidario (Resource Speaker)

Her presentation addressed Strategic Environmental Assessment (SEA) as one key instrument in support of strategic decision-making, and how in particular it can be fit to ensure inclusion of ecosystem services. She addressed four key aspects, including (i) what is SEA and what role can be expected of SEA

in addressing sea-bed mining; (ii) what are differences between SEA and EIA (Environmental Impact Assessment); (iii) strategic thinking SEA, sustainability and how to be inclusive of ecosystem services; and (iv) examples of application and lessons learned. The overall purpose of the presentation was to help clarify the differences between EIA and SEA and the importance of using a strategic concept in SEA. While less tangible when compared to EIA, SEA has the merit of ensuring a big picture in the overall analysis, engaging not only large time and space boundaries but also, and most importantly, a wider range of values reflecting multiple stakeholders and policy interests.

The CBD Voluntary Guidelines for the Consideration of Biodiversity in Strategic Environmental Assessments (SEA) in Marine and Coastal Areas

by Aleke Stöfen-O'Brien (Resource Speaker)

Ms. Stöfen-O'Brien presented the CBD voluntary guidelines for the consideration of biodiversity in Environmental Impact Assessments (EIAs) and Strategic Environmental Assessments (SEAs) in marine and coastal areas. The CBD biodiversity-inclusive voluntary guidelines on EIA and SEA were endorsed during the eight meeting of the Conference of the Parties (COP) (annex to decision VIII/28). The tenth meeting of COP requested the development of voluntary guidelines for the consideration of biodiversity in EIAs and SEAs in marine and coastal areas. These guidelines are based on the CBD voluntary guidelines on biodiversity-inclusive SEA and were further developed through input from an expert workshop and technical peer review by Parties, other Governments and organizations.

The CBD biodiversity-inclusive voluntary guidelines for SEA intend to provide guidance on how to integrate biodiversity issues into SEAs. The guidelines are fully consistent with the ecosystem approach and focus on people-nature interactions and the role of stakeholders in identifying and valuing potential impacts of plans, policies or programs on biodiversity. The application of a SEA allows the management of multi-users activities of the ocean space and could therefore help to facilitate integration of inter-sectoral objectives and coordination. It could also be used for the management of resources, individual and cumulative impacts and natural environmental change from different ocean uses.

As a SEA is situation-specific, there are no typical sequences of procedural steps. However, some common elements among SEAs are that a SEA aims to create transparency in decision-making, includes a technical assessment, makes use of information in decision-making and includes post-decision monitoring and evaluation. The guidelines understand biodiversity as ecosystem services and three levels of biodiversity are considered: genetics, species and ecosystem diversity. The question whether biodiversity has been affected is to be addressed through the (i) terms of changes in composition (*what is there*), (ii) changes in structure (*how is it organized in time and space*) and (iii) changes in key processes (*what physical, biological or human processes govern creation and/or maintenance of ecosystems*).

The guidelines outline biodiversity triggers when special attention has to be paid to biodiversity while conducting a SEA for a policy, plan or program. To be able to make a judgement whether a policy, plan or programme has potential biodiversity impacts, two elements are of overriding importance: first, the affected area and ecosystem services linked to the area and second, types of planned activities that can act as driver of change in ecosystem services. Appendix 1 of the guidelines contains a list of activities that could act as direct and indirect drivers of applying a SEA in marine and coastal areas.

The eleventh meeting of COP encouraged Parties, other Governments and competent organizations to apply the voluntary guidelines and invited Parties and other Governments to share information on their progress in applying these voluntary guidelines. COP also requested the Executive Secretary on this occasion to provide further assistance to promote capacity-building on the application of the CBD biodiversity-inclusive voluntary guidelines.

Marine Spatial Planning as a tool for achieving the Aichi Biodiversity Targets

Ms. Jihyun Lee (CBD Secretariat)

Ms. Lee began her presentation by emphasizing the importance of Marine Spatial Planning as a tool for achieving the Aichi Biodiversity Targets. MSP is a framework which provides means for improving decision making as it relates to the use of marine resources and space. The key success factors include identifying clear definition of issues, setting in place goals and measurable objectives, ensuring

supportive legal framework to enable MSP to drive obligatory objective-setting and prioritisation, and securing effective governance system allowing participatory planning and adaptive management. She explained how CBD's other work on marine biodiversity can help and facilitate regional and national implementation of MSP, for example through the identification of ecologically or biologically significant marine areas (EBSAs), addressing impacts from various pressures/threats, the use of tools and guidelines to address impacts on marine biodiversity, delivering capacity building and strengthening partnerships through the Sustainable Ocean Initiative and through an information-sharing mechanism.

Practical approaches to collaborative cross-sectoral engagement in South Africa

by Kerry Sink (Resource Speaker)

South Africa is in the early stages of implementing Marine Spatial Planning. This was preceded by ten years of systematic biodiversity planning with a primary focus on developing a representative offshore Marine Protected Area networks. The planning process included multi-sector stakeholder participation from the project outset in order to include industry input in terms of objectives and approaches, to contribute to environmental data bases; to facilitate accurate mapping of stakeholder activity, to develop co-operative research, monitoring and management initiatives and to resolve conflicts. The process and methods used to engage multiple sectors in systematic planning were explained with a view to supporting broader planning for multiple objectives in the ocean space. The new Presidential Initiative to unlock South Africa's Ocean Economy drew upon this work and fast tracked further in depth consultations about ocean governance, Marine Protected Areas and Marine Spatial Planning.

This presentation distilled key lessons in working with the fishing, mining, petroleum and other offshore sectors in South Africa during the systematic planning and assessment process. The importance of early and consistent engagement was explained and key elements in terms of attitude to stakeholders are shared. Methods that helped secure participation and cultivate mutual understanding of constraints, challenges and opportunities between multiple sectors were presented. These include the development of offshore user profiles, maps to reflect biodiversity and human use patterns, the establishment of multi-sector stakeholder fora and systematic biodiversity planning with optimization algorithms to support spatial decision making. We experienced different responses between sectors, different role payers within sectors or companies and found that participation must be secured at different scales ranging from one on one consultation to broad cross-sectoral engagements. Ecosystem classification and maps and a synthesis of knowledge of ecosystem can also help support work to determine compatible and incompatible activities in the ocean environment, an important step in the Marine Spatial Planning process. Industry engagement is not without challenges and it is important to minimise risks, manage stakeholder expectations, ensure meaningful participation of industry, seek win-win solutions and maintain scientific independence and integrity. A dynamic and flexible process is advocated to advance marine spatial planning and offshore environmental decision making.

The Law and Seabed Mining, by Hanna Lily (Resource Speaker)

National laws for offshore mining are essential: to set operational rules for mining companies, and to give Government appropriate powers as the industry regulator. Namibia has signed up to international treaties that cover offshore mining activities, and which include obligations to protect and preserve the marine environment and conserve biodiversity. Failure to enact and enforce national laws that reflect these international obligations exposes the Namibian Government to risk. Namibia's old mining laws, which include the seabed in their scope, are currently under review. This presents an ideal opportunity to put in place an amended modern and stringent offshore regulatory regime that best protects Namibia's interests. The Commonwealth Secretariat's Oceans and Natural Resources Division is available to provide expert legal and technical assistance with this and related work, at Namibia Government's request.

*Annex IV***SUMMARY OF GROUP DISCUSSION AND CONCLUDING MESSAGE****Context of Namibia's Marine Resources and Biodiversity**

The Benguela current with unique coastal upwelling provides an oceanographic setting for exceptional productivity, enabling productive fishery industries. Various sectors supporting Namibia's economy are heavily reliant on ecosystem services provided by marine and coastal biodiversity.

As a Party to the Convention on Biological Diversity, the Government and people of Namibia are committed to the goals of conservation of marine biodiversity, sustainable use of its components, and fair and equitable sharing of benefits arising from the utilization of marine genetic resources. Their commitments are also extended to achieving Aichi Biodiversity Targets, through the implementation of the Strategic Plan for Biodiversity 2011-2020.

Different Ministries are in charge of different aspects of marine industries/resources management and marine environment protection, including shipping, fisheries, environment/tourism, mineral resources. The relative simplicity such as low population pressure in the coastal areas can increase the chance of success within short-term period when proper management efforts are applied, despite the overall challenges related to poverty eradication and socioeconomic development.

Vision, goals and approaches for Namibia's sustainable ocean development

Vision: A healthy and safe marine ecosystem that is sustainably and cooperatively utilized by all sectors for the maximum benefit of the Namibian people (an example suggested during break-out session)

This vision can be supported by the following specific goals (an example suggested during break-out session):

- All marine resources contribute to the eradication of poverty
- All marine resources support the sustainable growth of the Namibian economy
- The health of the marine environment is safeguarded without compromise
- Best practices and the ecosystem approach are applied in the cooperative governance and management of the marine environment

Following approaches need to be considered in achieving the vision and goals (an example suggested during break-out session):

- Impacts of human activities from different sectors need to be monitored in an integrated and holistic manner through cooperation by different Ministries
- Ecosystem services provided by marine diversity needs to be evaluated and communicated among different sectors and stakeholders
- Institutional mechanism for effective communication, collaboration, cooperation and coordination among different Ministries/agencies and different sectors needs to be in place
- Existing laws and regulations needs to be enforced effectively
- SEA needs to be done through involving all relevant sectors
- Need to develop effective measures for compliance and compensation
- Decision making on natural resources management and biodiversity conservation should be supported by adequate scientific capacities and expertise
- Inter-disciplinary cooperative and joint research activities as well as joint monitoring and enforcement activities among different Ministries need to be promoted
- Integrated ocean and coastal policy, management framework and processes need to be in place

- Public consultation and sharing of information among different Ministries and stakeholders need to be strengthened
- Awareness building and education of wide spectrum of stakeholders on the value of marine biodiversity and its ecosystem services need to be in place

Application of different management tools

EIA and SEA

Workshop addressed, through break-out session, following issues related to EIA and SEA, including:

- Inter-Ministerial Committee on phosphate mining
- Procedural gaps
- Data repository, protocol, information system
- Trust among different stakeholders/ministries
- Non-participation issues
- Need for reference areas
- Sharing of information and government reports

Details of group discussions are provided below (with some points overlapping):

Weaknesses/Barriers/Constraints	Solutions Suggested
EIA	
Lack of data	Synthesis of data <ul style="list-style-type: none"> • Data repository and meta data • Data policies and management plans (available) • New research deep water (non-fisheries) international
Lack of capacity <ul style="list-style-type: none"> • Skills/Human • Infrastructure • Public 	Training and accreditation collaboration exchange programs, mentorship, best practice guidelines, templates, public education
Transparency with authorities and consultants (trust issues)	Documents and decisions to be publicly available and easy to understand. Consultation process
Fragmented department and non-participation	Marine Spatial Planning and law reform
Inconsistent decision making and due influence	Clear principles and guidelines
Objectivity, complexity and uncertainty	Independent experts and/or review. Improve knowledge (synthesis of data above)
Lack of reference areas/poor protection	Spatial planning and representative areas.
Poor quality/copy and paste/volume of documents	
EMA 2007 is inadequate	Needs to be strengthened and loop-holes addressed
Environmental practitioners are not controlled	Environmental Assessment Practitioners Association of Namibia (EAPAN) recognized
Inter-ministerial committee limited during EIA process	Improved!
Lack of transparency during EIA process	Proponents should be obliged to make reports available

(company to affected parties, no access to final report to check if concerns are addressed)	through out
Public participations is inadequate	
Lack of scientific studies	
Political influence in EIA Process	
Cumulative Environmental Impact of similar projects	SEA,
Lack of alternative sites	EIA to consider alternative sites
Moving difficult issues from EIA - EMP	
Enforce/monitor EIA	Employ and train GRN inspectors (environmental management committee to do monitoring (stakeholders)
Defragmented EIA's for different aspects of project	SEA Decision making council to decide on Environmental clearance
Giving clearance – decision by one person/one ministry	
Practitioner hired and paid by company	Independent appointment of practitioners that are not paid by the company and independent review process
Lack of accountability for poor EIAs: <ul style="list-style-type: none"> • businesses • threat to integrity 	Essential for liability for time and exposed mistakes
Work-well on land but not in the sea	Lack of accurate information, they have to be public and open to scrutiny
Seen as obstacles to development if unduly restricted	
No standards for Environmental Assessment Practitioners, low quality work	Establish a professional body for EAPs with areas of specialization
EIA/SEA	
Evaluation capacity	Marine specific training both of EAPs (environmental assessment practitioners) and evaluators
Too much bureaucracy	Direct technical links within ministries
Compliance monitoring	Inter-ministerial agreements and review and alignment of existing duties
Interested and affected parties (I&APs) fatigue	
Ineffective communication modes	Case specific communication modes (wider communication options stipulated in legislation)
Lack on inter-ministerial coordination	Inter-ministerial decision making committee
Interested and affected parties (I&APs) consultation timing uncertain	Amend existing legislation
Lack of Strategic Environmental Assessment (SEA) regulation	Gazette SEA regulation
Limited capacity of I&APs to respond	
Lack of capacity to conduct a cost-benefit analysis	Amend law and include with EIA report
SEA	

It is not legally binding	Gazette SEA regulations
Additional uncertainty regarding cumulative impacts	
Environmental Management Plans	
Same challenges	
No compliance and enforcement, quality	Monitoring and auditing, traceable and in line with requirements. Guidance on relevant content, two-sided and small font, executive summary
Insufficient staff	Staff attraction and retention
Inaccessible deep sea environment (ships and R.O.V.s)	Cooperation with industry
Environmental Management Act (2007)	
Not fully implemented	More people with the right expertise
Role and definition of competent authority not clear	Ensure involvement of ministries with the right competencies
Lack of transparency in decision making	Establish systems and structures for transparent and participative decision-making
Does not include monitoring of environmental impact causes by trawling and seismic surveys	Update regulations
Lack of feedback to relevant government institutions	
Inter-Ministerial Committee on Phosphate Mining	
The committee is ad-hoc	Formalise the committee with approved TOR
The committee has unclear mandate	
Legal Gaps	
No law to regulate dumping at sea	<ul style="list-style-type: none"> • Sign up to the London Convention • Create new legislation to cover London Convention issues and discharge off industrial and mining effluents
Policy/Tools	
Environmental Management Act 2007 <ul style="list-style-type: none"> • Lack of expertise, inadequate human, infrastructure and financial capacity 	Training, broader involvement of expertise and financial support
Environmental regulations <ul style="list-style-type: none"> • Lack of inspectorates 	Recruitment of environmental inspectors, appointment of honorary inspectors
EIA Policy <ul style="list-style-type: none"> • Lack of involvement of expertise • Lack of public awareness 	<ul style="list-style-type: none"> • Conduct public surveys • Conduct awareness campaigns
Environmental Compliance Certificate <ul style="list-style-type: none"> • Lack of broader coordination 	Involvement of all broader stakeholders
Lack of legislative connectivity	Harmonize legislation
Legal gaps for new concepts	Awareness and capacity building Legislation e.g. ICZM Bill
Non-context specific legislation	Namibianise
SEA regulations needed	Gazette

Marine Spatial Planning (MSP)

Workshop addressed, through break-out session, following issues related to MSP, including:

- Enabling factors
- Barriers
- How to apply through integrative way among different stakeholders

Details of group discussions are provided below (with some points overlapping):

ENABLING FACTORS	CONSTRAINTS/BARRIERS	SOLUTIONS
Group 1		
Political will	Lack of awareness and political level	Inform politicians
Legislation and policy	Fragmented legislation, mandates, departments	Engage cabinet, show need and benefits
Established cross-sectoral relationships	Fears regarding mandates, uncertain future developments, losing in the process	Work with and build on MARISMA and BCC mapping work
Governance system for participatory planning	Funding	Collate data/info and knowledge
Collated data and knowledge	Coordination challenges between departments: Data, sensitive data, data sharing/management	Training on SEA (commissioner of oceans)
Technical skills and dedication	Lack of trust	Ocean policy: need to learn from this in MSP
Software		
Independent facilitation		
Group 2		
A need to resolve conflicts between rapidly growing marine industries with overlapping areas	Lack of political will at the highest levels	Work through the Inter-ministerial committee and the BCC to elevate the idea of a Namibian Phakisa
The country's National Development Plan for sustainable growth.	Lack of commitment from some government ministries.	Renewed commitment to apply a strategic ocean development planning approach.
Political will with fiscal commitment	Limited understanding of what is an ocean economy, and how the ocean can contribute to GDP.	Develop a short consensus document on strategic ocean development (Inter-ministerial Oceans Committee with the support of MARISMA) following from this meeting.
Existence of Inter-ministerial structures on Ocean governance	Lack of awareness of the rationale, lost opportunities	Screen existing legislation and identify gaps on ocean development, leading to need

		for an national ocean policy
	Lack of Funding	Consider joining efforts between Inter-ministerial Committee with MARISMA for strategic ocean planning (including stakeholders – industry, civil society).
	Lack of skills and knowledge (planning and implementing the plans) Lack of access to information	Develop a National Ocean Policy to provide a legal basis (that is binding) for planning. Work towards an Oceans Act of Parliament.
		Raise awareness - using resources and initiatives from other countries, and build on sustainable development goal momentum
		Identify leadership to carry these ideas forward
Group 3		
Political will (support at high level)	Conflicting legislation or mandate (no clear lead, poor dissemination or information)	Harmonise legislation and mandate
Lead agency/driver or champion	Awaiting mandate for working group	Accessible central data hub for ocean information
Legal framework (NBSAP 2 – Strategy National Policy or Coastal Management)	Confusion between and within ministries	Set up the working group to guide MSP
Harmonized mandates (Ministries)	Not the right people at the table	Need people with relevant knowledge and skills
Communication between ministries	Industry (how to get them involved)	What is the benefit for industry? Save costs, save legal fees, tangible benefits, shared vision)
Group 4		
Seed funding	National fund	Paradigm shift
Skills and capacity	Will power (all)	Political will/buy-in
Identification of a champion implementation agency	Misconception of the concept	Budget
Broad stakeholders identification to guide vision and framework	Lack of inter-ministerial coordination/cooperation	
Convene working group	Silo thinking	
Nominate technical tem	Lack of skills	
Collect and collate data	Pre-determined time frames	
Visioning framework	Existing marine resources space	

(development): NBSAP, NPCM, ICZM BILL	use	
	Power dynamics	
Group 5		
Awareness of need for MSP	Each ministry focuses on own mandate and sector	A unified ocean policy that sits above individual sectors
Each stakeholder interested to see own marine use mapped	Conflicts between those mandates	An objective lead agency within the government
Commitment to EBM (Fisheries)	Grey areas for responsibility for oceans	Objective facilitation (mediation)
Env. Man. Act = legal framework under which MSP can be run	No clear lead agency for MSP	Take time and bring people together to build trust and understanding
	Issues have become personalised	Clear information-sharing/transparency policy or directive at high level
	Lack of transparency and information sharing between ministries and beyond	

Integration of policies and tools

Workshop addressed, through break-out session, following issues related to how to strengthen and enhance current policy responses, including:

- Integrative application of various policy approaches and tools
- Data policy / meta database
- Transparency – inter-ministry information exchange / Ocean Forum
- Ecosystem services assessment
- Mini Phakisa (SEA/MSP)/ Inter-ministerial Oceans Committee
- ICZM Act / Ocean Policy / Ocean Act
- Political will – driven by Office of the Prime Minister / President

Details of group discussions are provided below (with some points overlapping):

Strengthening legal arrangements and securing sustainable financing mechanisms

- Mechanisms to improve legal and institutional framework as well as sustainable financing to be in place;
- Carry out a government-wide strategic oceans management review, focusing on the mandates, institutional capacity, legal framework of the role players with a view to harmonizing both issues and develop sustainable funding models or mechanisms;
- Achieve regulatory clarity and alignment, and develop a framework for an oceans audit and an ocean policy and legislation; and
- Need a high level initiative that will be driven by the office of the President or the Office for the Prime Minister

Promoting public awareness and participation

AUDIENCES	MESSAGES	METHODS
Not 'general' public – despite vision of 'benefit for current and future Namibians', not all of them will have an interest or perhaps the education to understand the issues (cf. small rural small-holders, nomadic communities)	How will a sustainable ocean benefit them? Use analogies e.g. for recreational fishing talk about catch and size limits for sustainable fish populations	• Information dissemination – posters, media
Target some communities <ul style="list-style-type: none"> • Coastal towns • Local authorities (to use bottom up pathways through to National Council) • Recreational fishers • Schools • Church groups 	For inland/coastal hinterland communities – link to govt message to fish for nutrition	More interactive methods – cartoons, conceptual diagrams, maps, use stories of people to make it real/personal. Can be useful to use maps to help people understand how their day-to-day lives and things they value are supported by marine resources and industry
Target specific stakeholder groups and have distinct messages for them	Wider benefits of sectors – fisheries, mining, maritime transport for jobs and income for people and their families	Public meetings – choose a topic. Hold an open day with experts at hand to answer questions. Use 'show and tell' of marine object/creature eg rock-lobsters so people can see or hold (make a connection).

Linking Science and Policy

- Create a scientific mandate (broaden existing mandate) to include monitoring and mapping of non-commercial living and non-living resources. This is needed to provide environmental management guidance.
- Generate National Ocean Data Policy that creates a National Ocean Meta Data Base –and requires collating of data across ministries, plus non –confidential industry data, international scientific data, EIAs for coastal programmes, satellite data etc.
- Generate funding to create capacity to conduct needed scientific ocean monitoring for all ministries.
- Forge collaborations to conduct scientific activities across ministries.
- National Commission for Research Science and Technology – strengthen basic and applied marine research funding. And increase representation on panels to better represent marine interests
- Recognize the need and value of science and scientific research for addressing ocean problems.

Specific ways and means for enhancing the current policy responses to address the potential impacts of commodity mining activities by applying various tools.

- Create ocean expertise in MET or expand capabilities in ocean going ministries or create a scientific research independent body.

- Create capacity by creating career paths for scientists in government and agencies taking into account the quality of scientific output, and value scientific credentials at high government levels.
 - Facilitate collaborative work with others to increase scientific capacity; strengthen two-way nature of collaboration by involving Namibian scientists in all phases of the work (especially analytical, interpretation, publication phases and eventually the full project cycle from proposal to output (publication)).
 - Improve mentoring of young scientists to promote scientific research.
 - Recognize the paucity of available scientific skills in the country and create incentives to address this (by supporting promising students to further studies, forging training and research collaborations with regional and international research institutions etc.).
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