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Large Marine Ecosystems Approach: An Essential Management and Partnership Tool for Achieving SDG14 and Supporting the Decade of Ocean Science for Sustainable Development

A Side Event for the 30th Session of the IOC Assembly

**Monday, 1 July 2019, 1300-1500
Room IV, Fontenoy Building, UNESCO**

Name of Side Event Organizer

Vladimir Mamaev, *United Nations Development Programme (UNDP) - lead organizer*
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Sub-theme

Large Marine Ecosystems

Aim of the Side Event

To raise awareness among IOC Member States on the opportunities that Large Marine Ecosystem (LME) partnerships offer for helping countries to achieve SDG14 Targets and for supporting the United Nations Decade of Ocean Science for Sustainable Development

Speakers, Presenters, Discussants

Vladimir Ryabinin, *Intergovernmental Oceanographic Commission (IOC) of UNESCO, Executive Secretary*
Craig McLean, *United States National Oceanic and Atmospheric Administration (NOAA)*
Vladimir Mamaev, *UNDP*
Julian Barbieri, *IOC - UNESCO*

Ken Sherman, *United States National Oceanic and Atmospheric Administration (NOAA)*
Peter Haugan, *Programme Director at Institute of Marine Research, Norway*
Captain Juan Forero, *Executive Secretary, Colombian Ocean Commission, Head of delegation, Colombia*
Monde Mayekiso, *Technical Advisor, Department of Environment, Forestry and Fisheries, South Africa*
Aimee Gonzales, *PEMSEA*
Patrick Debels, *CLME+*
Lorenzo Galbiati, *UN Environment/MAP*
Natalie Degger, *GEF IW/LME:LEARN*
Ivica Trumbic, *GEF LME:LEARN*

Detailed Description

On 1 January 2016, the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development — adopted by world leaders in September 2015 at an historic UN Summit — officially came into force. SDG 14 addresses a wide breadth of issues confronting oceans worldwide — unsustainable fisheries, habitat degradation, pollution and impacts of climate change. Soon after, the United Nations also proclaimed a Decade of Ocean Science for Sustainable Development (2021-2030) to support efforts to reverse the cycle of decline in ocean health and gather ocean stakeholders worldwide behind a common framework that will ensure ocean science can fully support countries in creating improved conditions for sustainable development of the Ocean. To achieve SDG targets, adaptation strategies and science-informed policy responses to global change are urgently needed.

Already at the forefront of supporting a science-based understanding of the oceans, as well as their regional governances, are Large Marine Ecosystems (LMEs), which bring together multiple countries at the ministerial level to work together toward shared ocean governance. Most of the world's 66 LMEs are typically multi-national and often individually cover over 200,000 km². These LMEs include near-shore coastal waters from river basins and estuaries, and reach the seaward boundaries of continental shelves and outer margins of major ocean current systems. LMEs encompass areas with unique undersea topography and seabed characteristics, high productivity, important fisheries resources and a range of food chain interactions. LMEs harbor significant biodiversity and provide important ecosystem services, including food security, shoreline protection, and recreational opportunities. Taken together, LMEs contribute about \$12 trillion in goods and services to the global economy. Governing LMEs is important because the institutional mechanisms that allow it could be considered as a unique “platform” that brings countries together, at a high level, to work toward shared regional ocean governance.

In 1984, natural scientists and social scientists gathered together to address various coastal ocean issues at the annual meeting of the American Association for the Advancement of Science (AAAS). The results were published by the AAAS in the seminal LME volume entitled, “Variability and Management of Large Marine Ecosystems”, thus introducing the concept which now celebrates its 35th anniversary. In 1995, the Global Environment Facility, a major fund supporting countries to address environmental problems, adopted Large Marine Ecosystems concept — the majority of which are transboundary — as a conceptual and biogeographic framework for promoting sustainable, ecosystem-based management of the world's oceans and coasts. The LME approach promotes the creation of new and/or reformed institutions, the reform and implementation of marine resource and environmental management policies and legislation, and the leveraging of public and private sector investment for LME restoration and protection. At a regional scale, the GEF has supported 23 of the 66 recognized Large Marine

Ecosystems in which multiple countries collaborate on strategic, long-term ocean governance of transboundary resources.

LME projects apply an integrated, cross-sectoral, ecosystem-based and transboundary approach implemented through strategic partnerships engaging countries, the private sector, general public, non-governmental organizations and multilateral institutions. They help solidify powerful approaches of working from ridge to reef and from village chiefs to cabinet ministers. In doing so, these projects are taking innovative approaches showing how regionally agreed frameworks may produce global environmental and sustainable economic benefits. The transboundary approach is unique in bringing together countries to identify threats, problems and issues related to overfishing, habitat degradation and loss, marine pollution, coastal overcrowding, etc. through a structured, common fact-finding and process dialogue between governments, academia, civil society and the private sector.

Many LME projects have followed the Transboundary Diagnostic Analysis-Strategic Action Programme(TDA-SAP) Process. Participating countries first prepare a TDA through a consultative process in which they determine the root causes of the transboundary problems affecting their shared water body. This formal and inclusive process analyzes all pertinent factual and scientific information to set priorities for action. Once the TDA is complete the focus shifts from gathering scientific evidence to developing a country-driven SAP. During implementation of the SAPs, the countries implement agreed governance reforms and work towards long-term institutional and financial sustainability. The SAP includes a regional policy framework and the legal/institutional arrangements needed to address the priority actions identified in the TDA. Countries then agree upon National Action Programs (NAPs); a set of country actions necessary to implement the SAP at the national level. To date TDAs and SAPs have been developed and signed at the ministerial level in 13 LMEs.

It is the uniqueness of this transboundary and science-based approach that well positions the LMEs, and more particularly the regional multi-stakeholder partnerships established to manage them, as an essential partner in the achievement of the SDG14 targets. A significant percentage of the existing LME project portfolio has facilitated countries to reach regional agreements (the afore-mentioned SAPs), which contain specific country-commitments to policy, regulatory and other governance reforms. For example, in the Benguela Current LME, South Africa, Angola and Namibia, following the TDA/SAP process, the three nations established the Benguela Current Commission and adopted the Benguela Current Convention.

The existing relationships established through project implementation, including the coordination provided by various types of regional entities to continue dialogue, enable the various LME partnerships to help countries incorporate the various SDG14 targets into existing dialogue and policy. LME partnerships can provide a forum not just for dialogue, but also a focus for the exchange of experience and results with the achievement of SDG14 targets. The GEF supported, UNDP implemented and IOC-UNESCO executed IW/LME:LEARN project has been highly instrumental in achieving that objective.

Importantly as well, cooperation for management at the LME level also provides a focus to scale-up existing investments and catalyze resources towards the achievement of SDG14 targets. In addition, the LME Partnerships also provide a mechanism for the sharing of science and data at a regional scale. Thus, they are well positioned to support IOC member states to achieve SDG14 targets and also help contribute to the Decade of Ocean Science.

Agenda

This interactive side event will first, offer an introduction to the LME portfolio in the context of SDG14 (and other associated SDGs), highlighting such proven approaches that have succeeded in reversing large scale dead zones, moved global tuna stocks towards sustainability, reduced the impacts of shipping on the marine environment, and introduced integrated, ecosystem-based approaches to sustainable ocean and coastal management at both local and multi-country scales. It will explain the science of Large Marine Ecosystems and the types of science they can contribute to member states. The introduction will also celebrate the 35 years of science developed by LME projects and stakeholders.

The second, technical, segment of the session will focus on the SDG14 targets themselves, and how they can be achieved in the respective LME partnerships across the globe. The dialogue will feature representatives of IOC Member States in an interview-format, with questions about specific targets being posed by a moderator.

Finally, the session will close with an audience interaction and question/answer with LME project practitioners from various regions, countries and agencies. These discussants will include representatives from the Caribbean Sea, Canary Current, Benguela Current and Mediterranean Sea Large Marine Ecosystems. Each discussant will focus on the science their project has helped develop and how it might contribute to the Decade of Ocean Science for Sustainable Development.

Opening (15'):

Facilitator: Julian Barbieri, IOC of UNESCO

- Welcome by Vladimir Ryabinin, *Intergovernmental Oceanographic Commission (IOC) of UNESCO, Executive Secretary (5')*
- Welcome by Craig McLean, *United States National Oceanic and Atmospheric Administration (5')*
- Welcome by Vladimir Mamaev, *UNDP (5')*

National experience in transboundary cooperation through LMEs (40'):

Facilitator: Vladimir Mamaev, UNDP

- The LME Concept at 35 by Ken Sherman, *United States National Oceanic and Atmospheric Administration (15')*

Panel members :

- Peter Haugan, *Programme Director at Institute of Marine Research, Norway*
- Captain Juan Forero, *Executive Secretary, Colombian Ocean Commission, Head of delegation, Colombia*
- Monde Mayekiso, *Technical Advisor, Department of Environment, Forestry and Fisheries, South Africa*

Audience Question and Answer with LME Project Managers on Contributions to the Decade of Ocean Science (30')

Facilitator: Natalie Degger, GEF IW/LME: LEARN

Panel members:

- Aimee Gonzales, *PEMSEA*
- Lorenzo Galbiati, *UN Environment/MAP*
- Patrick Debels, *CLME+*

Closing Summary (5')

Ivica Trumbic, GEF LME:LEARN PCU

Lunch

Lunch will be offered by organisers from 13:00 to 13:30 in front of the Room IV (exact location to be determined).

Speaker Bios

Craig McLean is responsible for NOAA's research enterprise as the Assistant Administrator for Oceanic and Atmospheric Research. He also serves as the U.S. Representative to the Intergovernmental Oceanographic Commission (IOC), and as the Co-chair of the U.S. European Union Marine Working Group, and in the US-Canada-EU North Atlantic Ocean Research Alliance under the Galway Statement. Mr. McLean previously served in NOAA as Deputy Assistant Administrator of the National Ocean Service, the founding Director of NOAA's Ocean Exploration program, and served in uniform for nearly 25 years in NOAA's Commissioned Corps. Craig is also an attorney and has practiced marine resource law for NOAA.

Dr Vladimir Mamaev has more than 34 years of experience in environmental management, including 25 years at international level in both the public and private sectors and UN agencies. Vladimir has extensive experience with the Global Environment Facility through the development, implementation and oversight, of numerous GEF International Water projects in several regions of the world. Since 2005, Vladimir is a UNDP/GEF Regional Technical Advisor for International Waters for Europe, CIS and Arab States. Since 2016 he is also leading the UNDP/GEF Team in UNDP Istanbul Regional Hub. Vladimir holds a Master of Science degree in Physical Geography from Moscow State University and a Ph.D. in Marine Biology from the Russian Academy of Sciences.

Peter Haugan is programme director at Institute of Marine Research in Norway since 2019 and professor of oceanography at Geophysical Institute, University of Bergen since 1999. He started his ocean science career with coastal oceanography at the Nansen Environmental and Remote Sensing Center in 1988, later moved to polar oceanography at the University Centre in Svalbard, climate research at the Bjerknes Centre for Climate Research and finally ocean renewable energy research at the Geophysical Institute. In his present position he has responsibility for a portfolio of activities within development cooperation and global sustainability research. He has been the elected and then re-elected Chair of the Intergovernmental Oceanographic Commission (IOC of UNESCO) soon for 4 years. At the moment he also serves as co-chair of the Expert Group serving the High Level Panel for a Sustainable Ocean Economy initiated by the Prime Minister of Norway and comprising 14 heads of state. He has a

wide ranging expertise from coordinating and furthering marine science collaboration and infrastructure development and has also served as a vice chair of the European Marine Board.

Dr Monde Mayekiso earned his PhD degree at the University of Maryland in 1994. He is the Specialist Advisor, Ocean & Coasts, Department of Environmental Affairs, Government of South Africa. He has also been the South African Representative to BCLME & the BCC from 2009 to 2015, Commissioner of South Africa to CCAMLR from 2008 to 2016, Chair of IOC Sub-commission for Africa from 2012 to 2017, and Chair of CCAMLR 2017 & 2018.

Natalie Degger, GEF International Waters Learning Exchange and Resources Network (Training Specialist). Natalie has facilitated capacity development activities in Africa, Asia-Pacific, Latin America and the Caribbean. She is passionate about strengthening transboundary water management around the globe by sharing best practices, lessons learned, and finding innovative solutions to common problems.

Aimee T. Gonzales is currently the Executive Director of the Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) whose mission is to foster and sustain healthy and resilient coasts and oceans, communities and economies across the seas of East Asia through integrated management solutions and partnerships. East Asia encompasses six large marine ecosystems (LME): the South China Sea, the Gulf of Thailand, the East China Sea, the Yellow Sea, the Sulu-Celebes Sea, and the Indonesian Sea. Prior to that, Aimee worked at WWF International in various analytical and advocacy posts on marine and fisheries policy reform issues.

Patrick Debels is a Belgian national. He initiated his career in Academia, and as a natural resources governance and management specialist, has subsequently worked globally and especially in Latin America and the Caribbean on EU-funded projects and as an independent consultant for the World Bank and several UN Agencies. Since 2010, he has been engaged with the UNDP/GEF International Waters Portfolio, initially as a project development specialist, after which he took on the positions of Regional Coordinator for the CLME and CLME+ Projects, developing and catalyzing the implementation of a 10-year Strategic Action Programme for the Caribbean and North Brazil Shelf Large Marine Ecosystems. He is based in Cartagena, Colombia.

Lorenzo Galbiati, a national of Italy, graduated in environmental sciences and specialized in environmental and water resources management at the University of Milan. He started his career at the European Commission working at the early stage implementation of the Water Framework Directive in Europe. After this experience, he worked at the Catalan Water Agency as responsible persons for the implementation of the EC water directives in Catalonia. Since 2013, Lorenzo is Project Pool manager of the Barcelona Convention Secretariat. He coordinates the development and execution of several GEF and EC regional programmes and projects aiming to support the operation of the Convention and enhance the technical and institutional capacities of the Mediterranean Countries.

Ivica Trumbic is an architect-planner whose professional interests include, among others, Marine Spatial Planning. Prior to becoming the Chief Technical Advisor of the UNDP-IOC UNESCO-GEF LME LEARN project, he has been working as a senior consultant for UNESCO, World Bank, UNDP, UNEP, UNOPS and other UN organisations.