



IOC/INF-1374
Paris, 23 June 2019
English only

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

INFORMATION DOCUMENT

UPDATE OF THE IOC CONTRIBUTION TO THE UNFCC

Summary

This document presents recent developments related to cooperation between IOC and the United Nations Convention on Climate Change and its Subsidiary Body for Scientific and Technological Advice.

The document recalls the coherence and convergence of IOC's mandate and work with the provisions and work programme of the Convention, including its Paris Agreement.

The document also presents the plans of the IOC Secretariat related to the IOC contribution to COP 25.

Introduction

IOC has a history of collaborating with the United Nations Convention on Climate Change (UNFCCC) and its Subsidiary Body for Scientific and Technological Advice of the UN Framework Convention on Climate Change (SBSTA). The Commission contributes to the work of the Conference of the Parties (COP) to the UNFCCC, which is held every year, including to the preparatory work for COP meetings. The 25th session of the COP (COP 25) will take place in Santiago, Chile from 2 to 13 December 2019.

The Commission engages with the UNFCCC SBSTA on research-related issues at the first yearly working session of the Body, and on issues related to observations at its second working session of the year. This relates to Article 5 (a) and (b) of the Convention: 'Research and Systematic Observation'; the complementarity of IOC's work vis-à-vis the UNFCCC is to be seen also in relation to the provisions on science capacity under Article 5 (c).

IOC also contributes to the SBSTA Research Dialogue. Recently, IOC was represented at the 11th Research Dialogue (RD 11) and also participated in an informal session with the science organizations convened by the SBSTA Chair (Bonn, Germany, 20 and 21 June 2019, respectively). At RD 11, IOC brought scientific evidence on multiple ocean stressors, ecosystem-based management; and blue carbon ecosystems. These issues will be discussed in the content of one of the four main themes of the Research Dialogue: "The role of the oceans in the climate system". IOC was also invited to facilitate a breakout group of RD 11 in relation to priority topics or questions on which there is a need to develop further research to succeed in transformative adaptation and climate resilient development.

IOC is a science driven, knowledge and application orientated organization. The aim of the Commission's portfolio of programmes and activities in the area of ocean science is to elucidate questions that need to be addressed in order to achieve ocean sustainability; and to promote international scientific cooperation in the area of oceanography and develop capacity, including through the transfer of marine technology. Cooperation with UNFCCC and its SBSTA, including in relation to the Paris Agreement, is driven by how the needs of Parties can be match-made with relevant scientific knowledge provided by the IOC in the area of climate and climate change.

Areas of actual and potential work and synergies between IOC and UNFCCC

These areas of work are described in this document as they are reported to UNFCCC.

The programmes and activities of the Commission span from ocean science and observations to early warning systems for ocean hazards, ocean data and information systems, and marine spatial planning. All of them are relevant to the objectives of UNFCCC and its Paris Agreement.

Of specific reference to Article 5 of the Convention on research and systematic observation, in the area of ocean observations, the IOC coordinates the Global Ocean Observing System, which contributes to identifying requirements for sustained observations as far as the ocean component of the climate system.

In relation to research on climate and climate change, the work of IOC in the area of climate change encompasses co-sponsoring, together with the World Meteorological Organization and the International Science Council, of the World Climate Research Programme (WCRP). WCRP is responsible inter alia for the work underpinning the IPCC Assessment Report scenarios.

IOC coordinates the design and operations of early warning systems; the Commission also carries out expert work on cumulative effects of multiple ocean stressors, such as ocean acidification, de-oxygenation and warming. These endeavors are relevant to the Nairobi Work Programme on impacts, vulnerability and adaptation of the UNFCCC.

The Commission also coordinates a working group on integrated ocean carbon research, to which the Global Carbon Project, IMBeR, SOLAS, IOCCP and CLIVAR all contribute. In October this year in Paris, IOC will host a major expert workshop on the next generation of integrated ocean carbon research. One of the intended outcomes of the workshop is to bring onboard ocean carbon research questions from the UNFCCC constituency that are formulated through SBSTA and its Research Dialogue.

Additionally, IOC is responsible for the systematic assessment of ocean science capacities in relation to SDG indicator 14.a.1, the operationalization of provisions related to the transfer of marine technology under the UN Convention on the Law of the Sea, and the setting up a clearing-house mechanism to promote scientific and technical cooperation in the area of ocean science and technology. These efforts are directly relevant to SBSTA's role in promoting the development and transfer of environmentally-sound technologies in support of the UNFCCC programme of work, as stated by the Chair of SBSTA in his Reflections Note for SBSTA 50: *"(...) work on climate change under the Convention, the Kyoto Protocol and the Paris Agreement cannot be seen in isolation from wider multilateral action on sustainable development."*

It is in this spirit that the UN Decade of Ocean Science for Sustainable Development 2021–2030 is unfolding, that is, to provide a platform for synergistic action based on science and knowledge in order to ensure a clean, healthy and resilient, safe and predicted, sustainably harvested and productive, and transparent ocean by 2030. These are the societal goals embraced by the Decade, which also reflect relevant provisions of the UNFCCC and its Paris Agreement.

The Annex of this document contains a summary of provisions under the UNFCCC and its Paris Agreement of relevance to IOC's mandate and the contribution of IOC to meeting the policy needs of the Convention.

The 30th session of the IOC Assembly provides an opportunity to acknowledge the excellent cooperation between IOC and the UNFCCC and its SBSTA and to present plans related to the IOC contribution to COP 25.

Upcoming developments related to the COP 25 and related IOC plans

IOC will attend and contribute to COP 25 (Santiago, Chile, 2 to 13 December 2019) as well as to the PreCOP 25 (San José, Costa Rica, 8 to 10 October 2019). IOC will liaise closely with the UNESCO Offices in Santiago and San José as to the coordination with UNESCO in relation to COP 25.

IOC is taking part in the design of Ocean Action Day as well as several other ocean science events (focusing on ocean acidification, de-oxygenation and blue carbon) that will take place at COP 25.

IOC is actively contributing to informing scientific and technical issues related to the formal negotiations (through SBSTA and preparatory expert events to the COP) as well as informal talks on ocean and climate in preparation of COP 25 that are facilitated by various informal groups (Friends of the Ocean, Because the Ocean, and the Global Ocean Forum).

The UNFCCC Secretariat has joined the UN Decade of Ocean Science via its participation in UN-Oceans.

At its 48th session held in Bonn, Germany, in April–May 2018, the SBSTA (...) *encouraged Parties and relevant organizations to address gaps and needs with regard to the role of the ocean in the global climate system, including for the global energy balance and carbon cycle, and impacts related to, inter alia, ocean acidification, sea level rise and ecosystem services, noting the proclamation by the United Nations of the United Nations Decade of Ocean Science for Sustainable Development (2021–2030), which is to be coordinated by IOC-UNESCO; (...).*

In noting the importance of the work of the scientific community and the IPCC under the themes of the Research Dialogue, SBSTA 48 also encouraged Parties and relevant organizations to address gaps and needs with regard to: increasing open access to climate-relevant data; the vulnerabilities of terrestrial, marine, coastal and urban ecosystems to climate change and the value of ecosystem-based approaches, particularly synergies of mitigation and adaptation action and related co-benefits; the recent and ongoing rapid changes in the Arctic region; and the analysis of the global carbon cycle.

The conclusions of the work of SBSTA 50 on Research and Systematic Observation (SBSTA 49 in the fall of 2018 did not reach conclusions on this item) are not yet known at the time of issue of the present document, as SBSTA 50 is scheduled to complete its work on 27 June 2019.

ANNEX

**COMPARISON OF PROVISIONS UNDER THE UNFCCC
AND ITS PARIS AGREEMENT WITH IOC'S MANDATE AND RESPONSE**

		IOC response
Tex of Convention	<p>Article 4 ('Commitments')</p> <p>[All Parties shall:]</p> <p>(d) Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems</p> <p>(g) Promote and cooperate in scientific, technological, technical, socio-economic and other research, systematic observation and development of data archives related to the climate system and intended to further the understanding and to reduce or eliminate the remaining uncertainties regarding the causes, effects, magnitude and timing of climate change and the economic and social consequences of various response strategies</p>	<p>IOC's uniquely singled out mandate on ocean science (research and observation) and promotion of international cooperation in ocean science</p>
	<p>Article 5 ('Research and Systematic Observation')</p> <p>[Parties shall:]</p> <p>(a) Support and further develop, as appropriate, international and intergovernmental programmes and networks or organizations aimed at defining, conducting, assessing and financing research, data collection and systematic observation, taking into account the need to minimize duplication of effort;</p> <p>(b) Support international and intergovernmental efforts to strengthen systematic observation and national scientific and technical research capacities and capabilities, particularly in developing countries, and to promote access to, and the exchange of, data and analyses thereof obtained from areas beyond national jurisdiction; and</p> <p>(c) Take into account the particular concerns and needs of developing countries and cooperate in improving their endogenous capacities and capabilities to participate in the efforts referred to in subparagraphs (a) and (b) above.</p>	<ul style="list-style-type: none"> • IOC's co-sponsoring of the World Climate Research Programme • IOC's research and systematic work in the areas of ocean acidification and de-oxygenation • IOC's lead in the design and running of the Global Ocean Observing System • IOC's capacity development programme in ocean science

		IOC response
	<p>Article 9 ('Subsidiary Body for Scientific and Technological Advice')</p> <p>[SBSTA shall:] (d) Provide advice on scientific programmes, international cooperation in research and development related to climate change, as well as on ways and means of supporting endogenous capacity-building in developing countries</p>	<p>IOC's collaboration with SBSTA and the UNFCCC as a whole and the Commission's contribution to the Research Dialogue under the SBSTA and to the operationalization of specific provisions of the Convention that related to the work of SBSTA</p>
Paris Agreement	<p>Preamble</p> <p>Noting the importance of ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity, recognized by some cultures as Mother Earth, and noting the importance for some of the concept of "climate justice", when taking action to address climate change</p>	<p>The relevance of IOC's mandate and work to this end</p>
	<p>Articles 4 (nationally determined contributions – NDCs) and 6 (cooperation in the implementation of NDCs)</p>	<p>IOC's lead role, in cooperation with CI and IUCN, in the area of blue carbon and the application and promotion of the IPCC Wetlands Supplement</p>
	<p>Article 7 (cooperation for adaptation)</p> <p>Para. 7: Parties should strengthen their cooperation on enhancing action on adaptation, taking into account the Cancun Adaptation Framework, including with regard to:</p> <p>(c) Strengthening scientific knowledge on climate, including research, systematic observation of the climate system and early warning systems, in a manner that informs climate services and supports decision-making</p>	<ul style="list-style-type: none"> • IOC's scientific and technical work in the area of research and systematic observations of multiple ocean stressors, marine spatial planning and ecosystem-based management • IOC's research and systematic work in the areas of ocean acidification and de-oxygenation • IOC's lead in the design and running of the Global Ocean Observing System • IOC's programme on early warning of tsunami events and other ocean hazards
	<p>Article 10 (technology)</p> <p>Para 5: Accelerating, encouraging and enabling innovation is critical for an effective, long- term global response to climate change and promoting economic growth and sustainable development. Such effort shall be, as appropriate, supported, including by the</p>	<ul style="list-style-type: none"> • IOC's capacity development programme in ocean science • The IOC Guidelines for the Transfer of Marine Technology

		IOC response
	Technology Mechanism and, through financial means, by the Financial Mechanism of the Convention, for collaborative approaches to research and development, and facilitating access to technology , in particular for early stages of the technology cycle, to developing country Parties.	