



Atmosphere and Ocean Research Institute
The University of Tokyo

日本海洋政策学会第11回年次大会，笹川平和財団，2019/12/6

国連海洋科学の10年に向けた海洋政策に係る課題

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日本ユネスコ国内委員会自然科学小委員会IOC分科会主査

2017国連総会決議(A/RES/72/73)

An Omnibus Resolution for Oceans and the Law of the Sea (A/RES/72/73) of Dec. 6, 2017

1. Proclaimed the UN Decade of Ocean Science for Sustainable Development 2021-2030, within existing structures and available resources, and called upon the IOC to prepare an implementation plan for the Decade in consultation with
2. Requested the IOC provide information on the development of the implementation plan and regularly consult with, and report ...
3. Invited the UN SG to inform the UNGA about the implementation of the Decade through his report on oceans and the law of the sea based on information provided by IOC...
4. Invited UN-Oceans and its participants to collaborate



国連決議(A/RES/72/73)以前

- 2016 第49回IOC執行理事会の会議文書 IOC/EC-XLIX/2 Annex 9 Rev.
“Contribution to the Future IOC Executive Roadmap” に
Concept note: A second International Decade of Ocean Exploration, 2021-2030
- 2017 第29回IOC総会決議 Resolution XXIX-1
“International (UN) Decade of Ocean Science for Sustainable Development”

1971-1980 International Decade of Ocean Exploration (IDOE)
1966 米国の発案
1968.3 米国リンドン・ジョンソン大統領による宣言
1968.6 IOC執行理事会が国際プロジェクトとして勧告
1968.12 国連総会でエンドース

1968年国連決議の一節：

“the concept of an IDOE to be undertaken within the framework of a long-term programme of research and exploration designed to assist in a better understanding of the marine environment through science”

UN Decade of Ocean Science for Sustainable Development



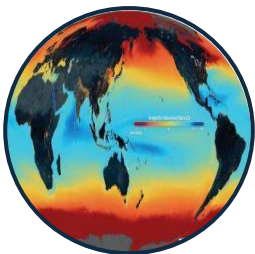
TARGETS – SCIENCE SUPPORT



14.1 Prevent and Reduce marine pollution



14.2 Manage and Protect marine & coastal ecosystems



14.3 Minimize impacts of Ocean Acidification



14.4 Implement science-based management Plans



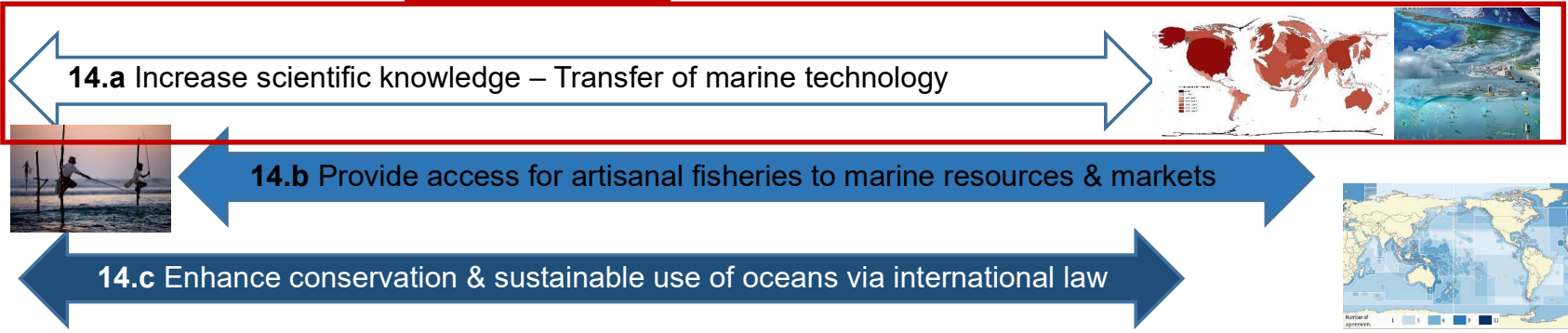
14.5 Conserve coastal and marine areas



14.6 Prohibit certain forms of fisheries subsidies



14.7 Increase socioeconomic benefit of SIDS



UN Decade of Ocean Science for Sustainable Development, 2021-2030

6 areas of societal outcomes of the Decade

Societal outcomes



A Clean Ocean

Sources of pollution are identified, quantified and reduced, and pollutants removed from the Ocean.



A healthy and resilient Ocean

Marine ecosystems are mapped and protected, multiple impacts, including climate change, are measured and reduced, and the provision of Ocean ecosystem services is maintained.



A predicted Ocean

Society has the capacity to understand current and future Ocean conditions, forecast their change and impact on human wellbeing and livelihoods.



The Decade will be mission-oriented



A safe Ocean

Human communities are protected from ocean hazards and the safety of operations at sea and on the coast is guaranteed.



A Sustainable Productive Ocean

The provision of food supply and alternative livelihoods are secured.



A transparent and accessible Ocean

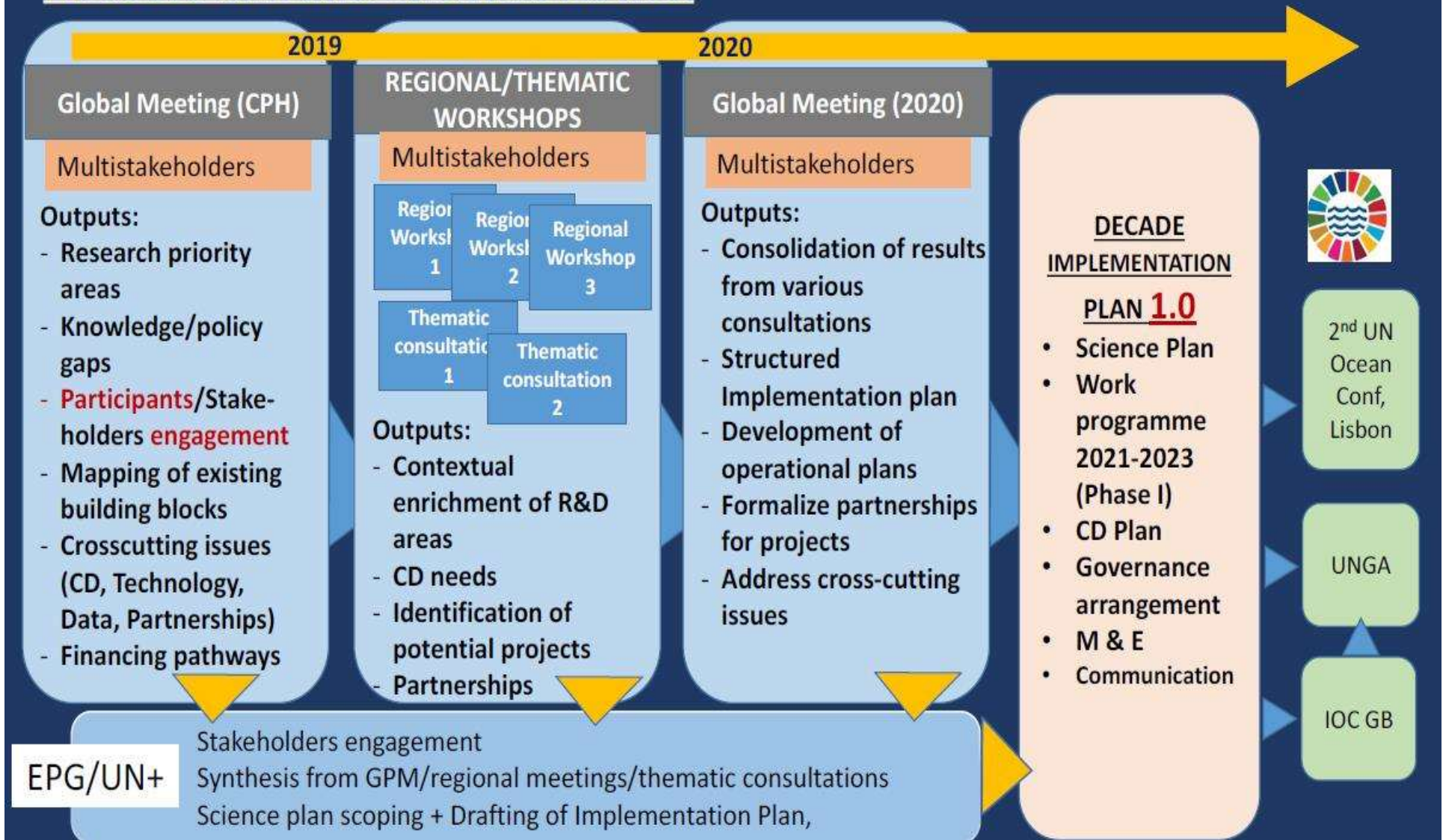
All nations, stakeholders and citizens have access to ocean data and information, technologies, and are capable of making informed decisions.



Transparent oceanの道田の仮訳:「万人に開かれ誰もが平等に利用できる海」



Process: timeline and milestones



Executive Planning Group

19 global experts, 3 from WESTPAC, Mitsuo Uematsu (JPN), Youn-Ho Lee (ROK), and Fangli Qiao (PRC)



Executive planning Group (EPG)

Coordinated by IOC ES



19 Members from **6 UN Regional groups**
Selected by IOC Officers through a broadly disseminated Call for nominations



Representing relevant and varied field of expertise:



- International programmes in ocean science and its numerous applications;
- sustainable development of oceans;
- science-policy interface and;
- capacity development.



1st EPG Meeting
17-19 December 2018, Paris

EPG Main tasks:

- Provide advice on the **form and structure of the Decade** including governance arrangements;
- Support the **drafting of Implementation Plan** for the Decade, to be finalised for UNGA consideration;
- **Engage and consult relevant communities** – advise on the engagement process and actively participate (Decade’s ambassadors).



Regional Consultative Workshops



Regional Consultative Workshop in Tokyo, Jul. 31- Aug. 2, 2019

Jointly organized by IOC/WESTPAC and PICES with financial supports by MEXT, Japan, and convened by IOC/WESTPAC, PICES, Japanese Nat. Comm. for IOC, JAMSTEC and AORI/U Tokyo
Approx. 150 participants from 15 countries joined the discussion.



持続可能な開発のための国連海洋科学の10年(2021-2030)

北太平洋地域計画会合の開催について

Regional Planning Workshop for the North Pacific and Western Pacific Marginal Seas towards the UN Decade of Ocean Science for Sustainable Development

- 2021年から開始する「国連海洋科学の10年」の実施計画策定に向けて、実施期間中に、北太平洋地域において、重点的に推進・活動していくべき事柄について意見交換を実施。
- 北太平洋・西太平洋縁域国の海洋科学関係者、NGO、企業、省庁関係者等 18か国160名以上が参加

基本情報

1. 日程 令和元年7月31日(水)～8月2日(金)
2. 場所 イノホール(東京都千代田区)
3. 主催 ユネスコIOC(WESTPAC:西太平洋地域小委員会)
北太平洋海洋科学機構(PICES)
4. 協力 海洋研究開発機構(JAMSTEC)
東京大学大気海洋研究所(AORI)

議論のポイント

●「国連海洋科学の10年」の達成目標となっている6つの社会的成果<①きれいな海、②健康的で回復力を持つ海、③予測可能な海、④安全な海、⑤持続的な収穫と生産力のある海、⑥透明性がありアクセス可能な海>に即して、各成果を達成するために今後必要となる事柄を議論。

(主な意見)

- ・ 域内の知識格差の解消、科学的優先事項の順位付けのための国際的イニシアチブやパートナーシップ強化が必要。
- ・ 能力開発、海洋科学技術移転やデータ共有の促進は「10年」成功の鍵となる事項。
- ・ 「10年」の実施期間を担う若手研究者の巻き込みは特に重要

⇒今後、検討結果を第2回グローバルレベルの計画会合で報告し、実施計画の全体的な方向性をとりまとめ。(2020年)



▲開会式(IOC,WESTPAC,バンコク事務所、国内委事務局、内閣府海洋本部、PICESから登壇)



▲6つのWGIに分かれて議論



▲ポスターセッションで日本の海洋教育に関する取組を紹介。



▲プラスチックを使わない会議運営(紙のネームカードと組紐の首かけ)





Regional WSで認識された共通課題

Capacity Development

Enhancement and promotion of RTRC network in the Region
Cooperation with Ocean Literacy Project
Implementation of TMT based on the assessment of regional requirements

Open Data and Information Sharing

IOC Oceanographic Data Exchange Policy adopted in 2003
IOC needs to explore pragmatic ways to implement the policy
Development of Regional capacity

Cooperation with Partners and wider engagement of stakeholders

Youth, Gender balance, private sectors . . .

Enhancement of inter-regional cooperation



“A United Nations Decade of Ocean Science could help to build a shared information system, based on trustworthy, scientific data, from all parts of the world’s ocean.”

PETER HAUGAN

Chair, IOC



Photo by IISD/ENB | Francis Dejon



Oceanographic Data Exchange Policy of IOC (2003)

Preamble

The **timely, free and unrestricted** international exchange of oceanographic data is essential for the efficient acquisition, integration and use of ocean observations gathered by the countries of the world for a wide variety of purposes including the prediction of weather and climate, the operational forecasting of the marine environment, the preservation of life, the mitigation of human-induced changes in the marine and coastal environment, as well as for the advancement of scientific understanding that makes this possible.

Recognising the vital importance of these purposes to all humankind and the role of IOC and its programmes in this regard, the Member States of the Intergovernmental Oceanographic Commission **agree** that the following clauses shall frame the IOC policy for the international exchange of oceanographic data and its associated metadata.



Clause 1 (Data under the auspices of IOC)

Member States shall provide timely, free and unrestricted access to all data, associated metadata and products generated under the auspices of IOC programmes.

Clause 2 (Data from non-IOC programme)

Member States are encouraged to provide timely, free and unrestricted access to relevant data and associated metadata from non-IOC programmes that are essential for application to the preservation of life, beneficial public use and protection of the ocean environment, the forecasting of weather, the operational forecasting of the marine environment, the monitoring and modelling of climate and sustainable development in the marine environment.

Clause 3 (Non-commercial use)

Member States are encouraged to provide timely, free and unrestricted access to oceanographic data and associated metadata, as referred to in Clauses 1 and 2 above, for non-commercial use by the research and education communities, provided that any products or results of such use shall be published in the open literature without delay or restriction.



Clause 4 (right of MS)

With the objective of encouraging the participation of governmental and non-governmental marine data gathering bodies in international oceanographic data exchange and maximizing the contribution of oceanographic data from all sources, this Policy acknowledges the right of Member States and data originators to determine the terms of such exchange, in a manner consistent with international conventions, where applicable.

Clause 5 (Use of IODE system)

Member States shall, to the best practicable degree, use data centres linked to the World Data System (WDS) and IODE's NODCs, such as the World Ocean Database (WOD) and the Ocean Biogeographic Information System (OBIS), as long-term repositories for oceanographic data and associated metadata.

Clause 6 (Capacity development)

Member States shall enhance the capacity in developing countries to obtain and manage oceanographic data and information and assist them to benefit fully from the exchange of oceanographic data, associated metadata and products. This shall be achieved through the non-discriminatory transfer of technology and knowledge using appropriate means, including IOC's Training Education and Mutual Assistance (TEMA) programme and through other relevant IOC programmes.



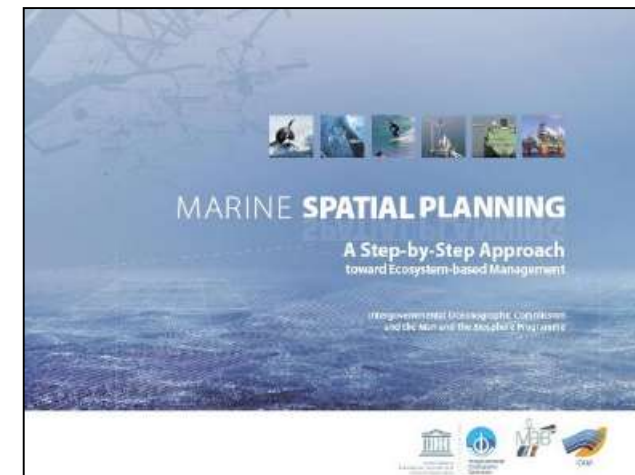
海洋空間計画 (Marine Spatial Planning) – Outcomeの具体例として

海洋における社会経済的な種々の利用活動の相互調整を行い, これらを海洋生態系を保全しつつ持続的に展開するため, 科学的知見や解析に基づいて適切に(時)空間配置する等の公共施策

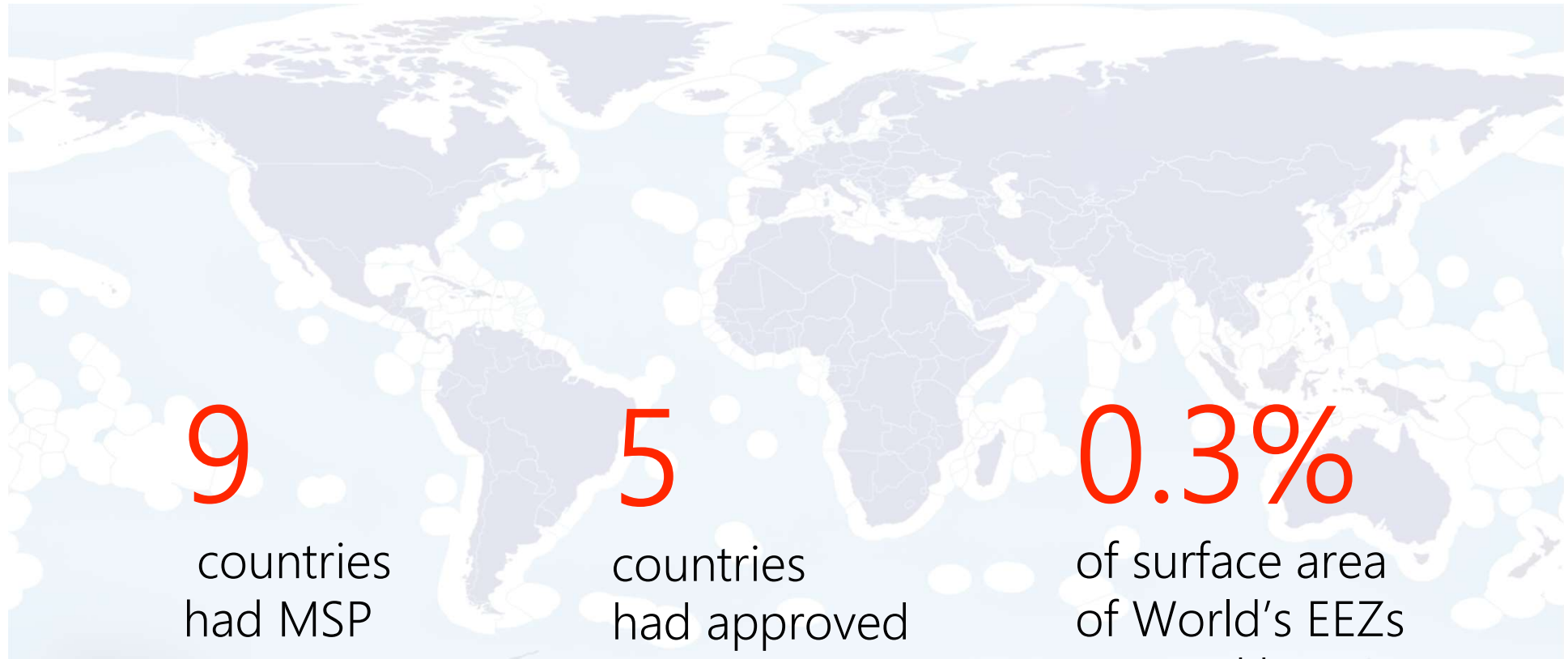
【キーワード】

- Ecosystem-based : 生態系, 経済, 社会的ゴールのバランス
(特定の生物の保護, 特定のサービスの発展ということではない)
- Integrated : 組織横断的アプローチ
- Place-based or area-based : 海域特性に配慮
- Adaptive : 経験に基づく適用
- Strategic and anticipatory : 長期展望
- Participatory : 関係者の参画

MSP推進に関するガイドライン文書
(Unesco/IOC, MAB, 2009)



Marine Spatial Planning 2005



9

countries
had MSP
Initiatives

5

countries
had approved
marine spatial
plans

0.3%

of surface area
of World's EEZs
covered by
government-
approved
MSP plans

2017 Status of Marine Spatial Planning



≈ 65

countries
have MSP
Initiatives

≈ 90

plans in various
stages of
planning and
implementation

≈ 10%

of surface area
of World's EEZs
covered by
government-
approved
MSP plans today

国内関連の動向

- 2018.5 第3期海洋基本計画にUN Decade関連記述*
- 2018.7 IOC執行理事会の決定を受けてExecutive Planning Group結成
- 2018.10 植松光夫・東大名誉教授がEPGメンバーに選出
- 2018.10 IOC分科会にUN Decade準備WG設置
- 2018.12 第1回EPG(パリのユネスコ本部)に植松名誉教授出席
- 2019.2 東京で第25回国際海洋データ情報交換会議(IODE-25)
2/18-19にUN Decadeを主題とする科学コンファレンス
MEXTからUN Decadeの準備に関するIOCへの支援表明
- 2019.5 第1回全球会合(GPM)@コペンハーゲンにJAMSTEC安藤博士出席
- 2019.7 東京で北太平洋地域ワークショップ開催(IOC/WESTPACとPICESの共催)
- 2019.9 OceanObs'19のBreakoutセッションで道田がパネリスト
2019年度日本海洋学会秋季大会(富山)でナイトセッション
- 2019.11 日本学術会議シンポジウム「国連の持続可能な海洋科学の10年」



日本がUN Decadeに対する支援を行う旨
表明したことを伝える記事の写真。左から
道田(IOC分科会主査), 大山真未(文科省
国際統括官, V. Ryabinin (IOC事務局長)。
2019年2月IODE-25の機に撮影

第3期海洋基本計画におけるUN Decade

第1部 海洋政策のあり方

2 海洋に関する施策についての基本的な方針

2-2 海洋の主要施策の基本的な方針

(5) 国際連携・国際協力

「国連持続可能な開発のための海洋科学の10年」(2021～2030)の宣言を踏まえ、当該10年の実行計画策定及びその実施に積極的に関与し、SDGsの達成に向けて我が国として貢献する。



今後の動き

- 2019/12/6 日本海洋政策学会年次大会@笹川平和財団ビル
- 2020/1/15-17 第2回EPG
- 2020/1/27 海洋政策学会シンポジウム「国連海洋科学の10年に向けた課題」
@笹川平和財団ビル (予定)
- 2020/3/18-20 第2回Global Planning Meeting @ Paris
- 2020/5/24-28 JpGU-2020
- 2020/6/2-6 第2回UN Ocean Conference @ Lisbon
- 2020/6/29-7/3 第53回IOC執行理事会
- 2020/11 UNGA



Global Planning Meeting 2, Mar. 2020, Paris



IOC EC-53
Jun 2020



UNGA

NEXT MEETING: January 2020, UNESCO HQ - PARIS

ご清聴ありがとうございました



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