Intergovernmental Oceanographic Commission *Reports of Meetings of Experts and Equivalent Bodies*



IOC Group of Experts on Capacity Development

Second Meeting

26 October 2020 (Online meeting, 11:30–14:00 CET)

UNESCO

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Image: 40 of the 63 participants of the meeting

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1. OPENING OF THE MEETING

1.1 ADDRESS BY THE CO-CHAIRS OF THE GROUP OF EXPERTS

The meeting was opened by Mr Ariel Troisi, IOC Chair and co-Chair of the IOC Group of Experts on Capacity Development ("the Group").

He welcomed the participants. He noted that, in addition to the members of the Group, this meeting also invited the new IOC CD national focal points. He explained that due to Covid-19 it was not possible to organize the meeting in the traditional face-to-face format but had to be organized as an online meeting. In this regard he apologized for the difficult or impossible timing for some of the participants who for this reason are not able to participate live.

The meeting was then addressed by Mr Alan Evans, co-Chair of the Group. He explained that, due to the short time available, the agenda has to be limited to essential agenda items. Participants were invited to send questions through the online chat room.

1.2 ADOPTION OF AGENDA AND TIMETABLE

This agenda item was introduced by Mr Peter Pissierssens, IOC CD coordinator. He referred to the web page <u>https://ioc-</u>

<u>cd.org/index.php?option=com_oe&task=viewEventRecord&eventID=2694</u> which includes the Agenda, List of Documents and List of Participants. Regarding the List of Participants, Mr Pissierssens invited all participants to check their information and to make any corrections online through the OceanExpert web site prior to the end of the meeting so a corrected version of the List can be included in the summary report of the meeting.

The Group adopted the agenda for the meeting.

Mr Pissierssens informed the Group that all PowerPoint presentations would be available from the webpage https://ioc-

cd.org/index.php?option=com_oe&task=viewEventAgenda&eventID=2694

Regarding the **membership of the Group**, Mr Pissierssens informed the Group that the full list of members is available from <u>https://ioc-</u>

<u>cd.org/index.php?option=com_oe&task=viewGroupRecord&groupID=372</u> and counted 32 members on 19 October 2020. The list of IOC CD national focal points is available on <u>https://ioc-cd.org/index.php?option=com_oe&task=viewGroupRecord&groupID=424</u> and

counted 36 members on 19 October 2020. In this regard, Mr Pissierssens noted that the majority of IOC Member States (even the 110 developing country Member States) had not designated an IOC CD national focal point yet.

2. STATUS OF THE WORK OF THE 1ST MEETING AND INSTRUCTIONS BY IOC ASSEMBLY XXX

2.1 ESTABLISHMENT OF THE IOC GE-CD

This agenda item was introduced by Mr Alan Evans, co-Chair of the Group (Presentation).

He recalled the 6 outputs and 13 activities of the IOC CD Strategy (See Table 1) adopted in 2015:

Output		Activity					
1.	Human resources	1.1.	Academic (higher) education				
	developed	1.2.	Continuous professional development				
		1.3.	Sharing of knowledge and expertise/ community building				
		1.4.	Gender balance				
2.	Access to physical infrastructure established or improved	2.1.	. Facilitating access to infrastructure (facilities, instruments, vessels)				
3.	Global, regional and sub- regional mechanisms	3.1.	Further strengthening and supporting secretariats of regional commissions				
	strengthened	3.2.	Enhance effective communication between regional sub-commission secretariats and global programmes as well as other communities of practice (incl. other organisations)				
4.	Development of ocean research policies in support	4.1.	Sharing of information on ocean research priorities				
	of sustainable development objectives promoted	4.2.	Developing national marine science management procedures and national policies				
5.	Visibility and awareness increased	5.1.	Public Information				
	IIICIEASEU	5.2.	Ocean Literacy				
6.	Sustained (long-term) resource mobilization	6.1.	In-kind opportunities				
	reinforced	6.2.	Financial support by Member States to IOC activities				

Table 1. IOC CD strategy outputs and activities

It was noted that the outputs are all inter-related and essential. The IOC already has a very extensive range of CD activities responding to most of the outputs. It was recalled that a gap analysis had been prepared for the 29th IOC Assembly in 2017 (<u>IOC-XXIX/2 Annex 17</u>). Reference was also made to the publication of the *IOC Criteria and Guidelines for the Transfer of Marine Technology* (<u>IOC/INF-1203</u>) in 2005. In that context Marine Technology was defined as "*Instruments, equipment, vessels, processes and methodologies required to produce and use knowledge to improve the study and understanding of the nature and resources of the ocean and coastal areas"*.

It was further recalled that <u>IOC-XXIX/2 Annex 17</u>: <u>IOC Capacity Development Strategy</u>, <u>2015–2021 and its Implementation Plan</u>: <u>Status Report</u> included also a comprehensive overview and mapping of how each IOC programme (global and regional) was addressing the IOC CD strategy outputs and activities at that time. This analysis revealed a number of gaps that needed to be addressed. The document also compared the IOC CD Strategy outputs with the IOC Criteria and Guidelines on the Transfer of Marine Technology defined in 2005 noting that a number of required tools had already been developed.

IOC-XXIX had established the IOC Group of Experts on Capacity Development assigning it the following tasks:

- (i) Assist global and regional programmes with the implementation of capacity development needs assessments in a consistent manner;
- Assist global and regional programmes with the development of programmatic and regionally relevant capacity development work plans based on the IOC CD strategy and related needs assessments, building on ongoing activities and making use of existing training and education facilities;
- (iii) Assist with the mobilization of financial and in-kind resources to enable the implementation of global and regional capacity development work plans;
- (iv) Provide advice to global and regional programmes on relevant methods and tools to improve the quality and impact of CD efforts;
- (v) Advise the Assembly on, and start implementation of, the Transfer of Marine Technology Clearing House Mechanism (CHM) as requested by the *IOC Criteria and Guidelines on the Transfer of Marine Technology* making use, to the largest extent possible, of existing data and information systems already available at IOC;

IOC-XXIX had instructed the Group to submit its work to the 30th Session of the Assembly (2019). Membership for the Group was invited through <u>IOC Circular Letter 2680</u> (13 July 2017).

During its <u>First Meeting (21–23 March 2018)</u> the Group had re-assessed the contributions of all IOC global and regional programmes to the CD strategy (based upon more detailed reporting than the above-mentioned report to IOC-XXIX). The meeting also mapped the Clearinghouse mechanism elements, versus the CD strategy (Table 2) noting that the Clearinghouse mechanism was proposed as a principal tool for implementing the "Criteria and Guidelines on the Transfer of Marine Technology)"by enabling access to expertise and sharing information, and by facilitating cooperation.

Clearinghouse mechanism (IOC CGTMT, 2005)	Potential capacity development outputs under IOC CD Strategy 2015-2021			
List of possible donors	6 (Sustained resource mobilisation reinforced)			
Opportunities for projects or initiatives	 Human resources developed) (Global, regional and sub-regional mechanisms strengthened) (Visibility and awareness increased) 			
Sources, availability and cost of marine scientific and technological information and data	3 (Global, regional and sub-regional mechanisms strengthened)			
Directory of marine research institutes	2 (Access to physical infrastructure established or improved)1 (Human resources developed)			
Offers of cruise studies	1 (Human resources developed)			
List of experts/specialists	1 (Human resources developed)			
Universities and other organisations	1 (Human resources developed)			
Workshops, seminars and training courses	1 (Human resources developed)			
Studies on rules and regulations concerning technology transfer and marine scientific research	4 (Development of ocean research policies in support of sustainable development objectives)			
Links with national, sub-regional and/or regional agreements, institutions	3 (Global, regional and sub-regional mechanisms strengthened)6 (Sustained resources mobilisation reinforced)			

Table 2. Mapping CHM vs CD strategy elements

Ms Ann-Katrien Lescrauwaet and Ms Pauhla McGrane then introduced the decisions of the GE-CD at its first meeting:

The Group, had decided to take the following actions:

1. Establishment of the inter-sessional Task Team on the implementation of a TMT/CHM "portal" and related activities to further seek answers on the questions and issues formulated by the sessional working group on TMT/CHM and taking into account the Decade preparations.

<u>Terms of reference</u>: based on the recommendations of the GE-CD, to develop the scoping and needs assessment of the CHM (which should be developed, as much as possible, using existing information systems and sources), and (if possible) develop a proof of concept to be demonstrated at IOC-XXX.

Deadline: November 2018

<u>Membership</u>: GOSR representative, IOC Secretariat, Ms Xuan Zhu, Ms Arame Keita, Ms Allison Reed, Mr Viktor Komorin, Mr Ariel Troisi, Ms Paula McGrane, Harriet Harden-Davies, Mr Tatsuya Watanabe, Werner Ekau

The task team will identify a Chair (Chair elected: Ms Ann-Katrien Lescrauwaet)

2. Establishment of the inter-sessional Task Team to start work to identify CD requirements of Member States in relation to the IOC CD strategy (taking into account the work already done and focusing on SIDS, LDCs and the Member States that are currently not member of any of the 3 sub-commissions and IOCINDIO and Black Sea regional committees) and taking into account the Decade preparations.

Deadline: November 2018

<u>Membership</u>: IOC Secretariat, Ms McGrane, Mr Nic Bax, Mr Alan Evans, Mr Andi Sakya, Ms Ann-Katrien Lescrauwaet, Ms Lorraine Barrow.

The task team will identify a Chair. (Chair elected: Ms Pauhla McGrane)

"The Group instructed the two task teams to liaise closely through the respective Chairs.

The Group requested the Secretariat to make the report of the IOC GE-CD-I available to the members of the GOSR Editorial Board.

The Group requested to report to the GOSR-2 Editorial Board on the proceedings of the GE-CD-I related to TMT/CHM and to seek collaboration

The Group listed actions required between April 2018 and the 30th Session of the IOC Assembly that will be held in June/July 2019:

- Report of findings and preliminary results from the first IOC GE-CD Meeting to be presented at the IOC EC-LI (July 2018)
- IOC GE-CD work to continue via electronic means
- IOC GE-CD Draft report to IOC Assembly-XXX by December 2018
- Report to IOC Assembly-XXX (26 June–4 July 2019), including CHM concept

The Group elected Mr Ariel Troisi as its Chair for the next inter-sessional period."

2.2 REPORT ON ACTIONS TAKEN DURING THE INTER-SESSIONAL PERIOD OF THE GROUP

This agenda item was introduced by Ms Ann-Katrien Lescrauwaet and Ms Pauhla McGrane (<u>Presentation</u>).

- Report of findings and preliminary results from the first IOC GE-CD Meeting to be presented at the IOC EC-LI (July 2018): She reported this item as completed.
- IOC GE-CD work to continue via electronic means: She reported this item as completed.
- IOC GE-CD Draft report to IOC Assembly-XXX by December 2018: She reported this item as completed.
- Report to IOC Assembly-XXX (26 June–4 July 2019), including CHM concept: She reported this item as completed.

The first activity implemented between GE-CD-I and the Joint meeting of the Task Teams was to jointly develop, an online survey. The survey was open to all stakeholders including IOC National Focal Points (NFPs), representatives of institutes and regional programmes. She also recalled that Capacity Development is relevant for other IOC internal processes such as the Global Ocean Science Report (GOSR). She also stressed that while GOSR analyses Member States capabilities on ocean science, the work of the TT is to assess their needs, and these, of course, have to be combined to develop the CD work plans. She also mentioned that CD is an essential element of the UN Decade of Ocean Science for Sustainable Development, as well as central to other international processes such as the Intergovernmental Conference on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ), and the World Ocean Assessment (Regular Process).

The survey was open between 5th October 2018 and 14th February 2019. 49 IOC Member States had responded to the Survey (12 from IOCAFRICA, 12 from IOCARIBE, 12 from WESTPAC and 11 from other Member States not included in IOC regional bodies). Only two responses were received from IOCINDIO Member States, so these were not considered representative of the region in the framework of the analysis. Considering the relatively small sample size, results need to be interpreted with some caution. IOC Member States were invited to contribute to the survey via Circular Letter 2738. The CL also invited Member States to designate an IOC National Focal Point in Capacity Development.

Ms McGrane reported that the <u>First Joint Meeting of the Task Teams of the IOC Group of</u> <u>Experts Capacity Development on Capacity Development requirements of Member States</u> <u>and implementation of a Clearing House Mechanism for the Transfer of Marine Technology</u> was held at UNESCO/IOC Headquarters, 13-14 March 2019. That meeting analysed the results of the survey in detail.

Due to the low number of responses drawing conclusions was somewhat difficult. When asked to select the five most important capacity development needs the results were as shown in Figure 1.



Figure 1. Five most important CD needs

Regarding the development of a CHM, all regions reported that such a mechanism would be instrumental to the further development of ocean science capacity in the countries. All regions expressed preference for an online central portal integrating the data and information harvested from regional/sectoral CHM portals. The respondents identified the need for a series of nodes rather than one global central node but using technology that allows interoperability between the nodes. The majority of respondents had recommended a "A hybrid model: online central portal with deep-links to regional/sectoral CHM portals".

Based on the preliminary results of the survey regarding the CHM, INVEMAR (Colombia) had developed a pilot CHM for the Latin America and Caribbean region, in the context of the Caribbean Marine Atlas (CMA-II) project. The pilot "Clearing-House Mechanism LAC" (<u>http://portete.invemar.org.co/chm</u>) is a hybrid model, with a centralized portal that provides access to information sources identified by the users as most relevant (Databases on Training and Education resources, List of experts, Research vessels,...) and integrated from a number of existing web sources developed and maintained under IOC (OceanExpert, Ocean Teacher Global Academy, ODISCat,...) (See Figure 2).



Figure 2. Screenshot homepage of CHM-LAC

The First Joint Meeting of the Task Teams of the IOC Group of Experts Capacity Development on Capacity Development requirements of Member States and implementation

of a Clearing House Mechanism for the Transfer of Marine Technology had concluded with the following decisions and recommendations:

- IOCARIBE can continue the work on the pilot, but there is a need to have a clear plan on how to move from the pilot to the actual CHM. INVEMAR will produce a set of guidelines on how to develop the CHM from their lessons learned.
- IOCARIBE should be requested to adopt the pilot CHM as its own project. Although there are some LAC that are not part of IOCARIBE, they should be invited to participate in this pilot project.
- Regarding the next steps for the TTs the GE-CD can adjust the role and tasks of the TTs based on the work already done. One specific task could be to support the regional subsidiary bodies in their work of implementing the recommendations formulated in this meeting. A decision will also have to be taken on the next cycle of the survey, on its format and content.

And, in preparation for IOC-XXX (2019):

- 1. The discussion held during this meeting led to the formulation of a set of recommendations to be submitted to the next session of the IOC Assembly in the form of a draft decision to be included in the Action Paper
- 2. Ensure coordination of the work of the GE and its TTs with GOSR and CD aspects of the UN Decade of Ocean Science
- 3. Repeat the CD survey biannually, possibly including CD implementation impact monitoring/metrics, also taking into account other methods such as regional reviews, science conferences etc.
- 4. Identify CD efforts of other organizations and seek complementary cooperation
- 5. Link with other global, regional and national processes and strengthen the relationships with philanthropic, private partnerships and other regional organizations
- 6. Urge Member States to nominate IOC National Focal Points for Capacity Development who will be responsible for the coordination of their country's participation in IOC's CD activities
- 7. Encourage the regional subsidiary bodies as well as regional components of global programmes to promote contributions to the biannual survey
- 8. Organize a regional conference on CD requirements of Pacific SIDS involving IOC Member States as well as other stakeholders active in the region
- 9. Present the report of the survey to IOC regional subsidiary bodies as well as global programmes inviting them to consider the results when drafting their CD work plans and activities
- 10. Match CD activities of global and regional bodies with needs of MS and summarize high level results using infographics.
- 11. Survey results suggest MS preference for hybrid model with central portal linking to regional and thematic web resources on the basis of interoperability-human brokerage element to be further investigated.
- 12. Recommend continued development of regional prototypes using the LAC prototype as an example, as well as establish a global secretariat.

2.3 INSTRUCTIONS FROM THE IOC ASSEMBLY AT ITS 30TH SESSION (2019) AND THEIR FOLLOW-UP ACTIONS

This agenda item was introduced by Mr Ariel Troisi. He recalled that he had reported on the work of the GE-CD and its Task Teams under agenda item 11 of the 30th Session of the IOC Assembly. He then also presented the recommendations made by the meeting of the Task Teams (described above).

The assembly adopted Decision IOC-XXX/11.1, which includes:

Invites the IOC Group of Experts on Capacity Development to:

- (i) repeat the CD survey at regular intervals (biannually), possibly including CD implementation impact monitoring/metrics, also taking into account other methods such as regional reviews, science conferences, etc.;
- ensure coordination of the work of the Group of Experts and its task teams with GOSR and CD aspects of the UN Decade of Ocean Science for Sustainable Development;
- (iii) organize a regional conference on capacity development requirements of Pacific SIDS, alongside other meetings occurring within the region involving IOC Member States as well as other stakeholders active in the region and taking into account existing programmes and activities;
- (iv) prepare a detailed and costed proposal for the development of an IOC Clearing-House Mechanism for the Transfer of Marine Technology using a hybrid model of interoperable nodes as well as a central access point, to be developed in a step-wise modular approach, in collaboration with IODE and its Project Office, and taking into account the regional prototype developed as well as evolving requirements, for submission to the IOC Executive Council at its 53rd session in 2020; such analysis should include the possibility of expanding the IOC CHM functionalities to serve other requirements such as those emerging from the BBNJ ongoing negotiations.

Follow-up actions:

(v) repeat the CD survey at regular intervals (biannually), possibly including CD implementation impact monitoring/metrics, also taking into account other methods such as regional reviews, science conferences, etc.;

This was reported on under agenda item 4.

 ensure coordination of the work of the Group of Experts and its task teams with GOSR and CD aspects of the UN Decade of Ocean Science for Sustainable Development;

The report of the GE-CD-I and Report of the Joint meeting of the Task Teams was made available to the GOSR Secretariat.

The IOC CD Secretariat actively participated in the EPG meetings of the Decade and provided all available documentation. As a result, the IOC CD strategy outputs are included in the CD chapter of the Decade implementation plan (illustrated in Table 2.1 of the implementation plan) (see Figure 3 below).

Table 2.1. Strategic framework for capacity development initiatives during the Decade

Desired Result	Priority Activities				
 Human resources developed at individual and institutional levels 	Academic and higher education opportunities including through online and distance learning Continuous professional development Sharing of knowledge and expertise including through community building Training, including training of trainers Integration of ocean science in curricula in primary and secondary schools including information on ocean science careers Actively improving gender, generational and geographic diversity				
 Access to technology and physical infrastructure established or improved 	 Facilitating access to technology and infrastructure (e.g. research facilities, instruments, research vessels, high power computing, digital telecommunications) Developing skills to lead and participate in technology and infrastructure development Promoting technical and technological cooperation and peer to peer exchange between stakeholders 				
 Global, regional, and sub-regional mechanisms strengthened 	 Identifying specific national and regional capacity development needs through needs assessments Strengthening existing national and regional resources and networks for capacity development Supporting regional and sub-regional organisations to be leaders in, and amplifiers of, capacity development 				
 Development of ocean research policies in support of sustainable development promoted 	 Supporting identification of ocean research priorities Supporting development of national marine science management procedures and national policies 				
 Awareness and understanding increased, and exchanges facilitated on role and values of ocean 	Ocean literacy initiatives (refer below for more detail) Informal education including through museums, zoos or aquariums Public information and communication (refer <u>Section 2.6</u> for more detail)				
 Sustained, long-term resource mobilisation reinforced 	 Mobilising in-kind and financial support for capacity development initiatives as part of the Decade (refer Section 3.2 for more detail) 				

Figure 3. Strategic framework for Decade CD activities

 (vii) organize a regional conference on capacity development requirements of Pacific SIDS, alongside other meetings occurring within the region involving IOC Member States as well as other stakeholders active in the region and taking into account existing programmes and activities;

While such an event was planned for early 2020 the Covid pandemic made this event impossible. However, some of the required actions were taken as part of the Ocean InfoHub project (see viii).

(viii) prepare a detailed and costed proposal for the development of an IOC Clearing-House Mechanism for the Transfer of Marine Technology using a hybrid model of interoperable nodes as well as a central access point, to be developed in a step-wise modular approach, in collaboration with IODE and its Project Office, and taking into account the regional prototype developed as well as evolving requirements, for submission to the IOC Executive Council at its 53rd session in 2020; such analysis should include the possibility of expanding the IOC CHM functionalities to serve other requirements such as those emerging from the BBNJ ongoing negotiations.

As an immediate follow-up to the instructions the IOC Assembly, an <u>ODIS-CHM/TMT</u> <u>Proposal Drafting Workshop</u> was organized at UNESCO/IOC Headquarters on 5–8 August 2019. There was a sense of urgency as proposals could be submitted to the Government of Flanders (Belgium) not later than September 2019. The meeting resulted in a detailed proposal that was submitted in September 2019. It was subsequently approved and the project started in April 2020 (see more under agenda item 3.2). Similarly a proposal was drafted and submitted for the OceanTeacher Global Academy Phase 2 (see more under agenda item 3.1)

2.4 FUTURE OF THE TASK TEAMS

This agenda item was introduced by Mr Alan Evans (<u>Presentation</u>). He noted that both Task Teams had been established as inter-sessional Task Teams and had now ended their term.

He invited the Group to consider whether the Teams should be closed or should be continued. In the latter case new Terms of Reference would be advisable unless one or both Teams had not completed their tasks.

Inter-sessional Task Team on the implementation of a TMT/CHM "portal" and related activities

The Group noted that a mechanism will be needed to monitor the progress of the Ocean InfoHub project (OIH) as it is in a very early stage of development and will require guidance and adjustment. In addition, it will be desirable for the OIH to align its activities with UN Ocean Decade activities.

The Group decided to abolish the Inter-sessional Task Team on the implementation of a TMT/CHM "portal" and related activities and requested the Ocean InfoHub project to regularly report to the GE-CD on its work plans, activities and results;

Inter-sessional Task Team to start work to identify CD requirements of Member States in relation to the IOC CD strategy (taking into account the work already done and focusing on SIDS, LDCs and the Member States that are currently not member of any of the 3 sub-commissions and IOCINDIO and Black Sea regional committees)

The Group, taking into account the instruction by IOC-XXX (Decision IOC-XXX/11.1) to *"repeat the CD survey at regular intervals (biannually),"* **decided** to continue the Intersessional Task Team to start work to identify CD requirements of Member States in relation to the IOC CD strategy but with updated terms of reference.

The Group decided to undertake online consultations (by email) to agree on the revised terms of reference (deadline: 31 December 2020).

3. CONTRIBUTION OF IOC TO THE CD CHAPTER OF THE UN DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT

This agenda item was introduced briefly by Mr Ariel Troisi (<u>Presentation</u>). He introduced the <u>Decade Implementation Plan</u>, referring specifically to chapter 2.5 "Capacity development". He referred to para 61 that states:

"To meet the challenge presented by the Decade, capacity development carried out as part of the Decade needs to:

- Be an integral part of each Decade Action. In this sense, the endorsement criteria of the Decade include a consideration of contributions toward capacity development, including in SIDS, LDCs and LLDCs.
- Be needs driven with investment in tools that can match the demand for capacity development to different opportunities.
- Optimise opportunities for exchange of knowledge, information and learning through the adoption of a capacity development exchange approach, where relevant.
- Be developed to respond to regional and national priorities including, where relevant, through the use of capacity needs assessments for specific groups or geographies.
- Respect cultural and geographical diversity, for example in terms of language, technology adopted including digital technologies and remote learning, and methods of learning.
- Privilege long-term partnerships that build on existing resources and networks, and avoid ad-hoc, short-term efforts that are not part of a coordinated approach.

- Include a focus on mechanisms to accelerate the use of knowledge for societal wellbeing.
- Target both knowledge generators and knowledge users including scientists, industry, managers (for example protected area or fisheries managers), policy makers, decision makers, innovators and society.
- Address all facets of ocean science i.e. all relevant natural and social science disciplines including a focus on inter- and transdisciplinary approaches, the infrastructure and technology that supports ocean science, the application of science for societal benefit, and the science-policy and science-innovation interfaces.
- Recognise, respect and engage local and indigenous knowledge holders as both beneficiaries and providers of capacity development.
- Build on and strengthen existing national and regional networks and resources.
- Identify and overcome barriers to gender, geographical, and generational balance and mainstream accessibility to foster a full and effective participation by persons with disabilities."

He recalled that the strategic framework (shown in <u>Figure 3</u> above) follows the IOC CD strategy output very closely.

Mr Troisi then invited Ms Claudia Delgado and Ms Lucy Scott to provide brief presentations on the OceanTeacher Global Academy Phase 2 and IOC Ocean InfoHub projects respectively.

3.1 OCEANTEACHER GLOBAL ACADEMY – PHASE 2

This agenda item was introduced by Ms Claudia Delgado (Presentation).

Ms Claudia Delgado explained that first OceanTeacher Global Academy (OTGA) project (2015–2019) built on the legacy of decades of training delivered by the IODE of IOC and its predecessor project, the OceanTeacher Academy, both projects being funded the Government of Flanders, Belgium.

In 2015, the OTGA model changed from a single Training Centre in Ostend, Belgium, to a network of Regional Training Centres, including Colombia, China, India, Islamic Republic of Iran, Kenya, Malaysia, Mozambique and Senegal.

The main rationale of the OTGA was to:

- 1. use the already existing technical capacity from the regions;
- 2. increase in the number of courses organized and people trained in the regions; and
- 3. use ICTs to enable invited experts to contribute to courses remotely and linking two or more Training Centres using videoconference

Over the years, OceanTeacher has trained over 3,000 learners from around the world and the OTGA strategy implemented since 2015 has resulted in a significant increase of the number of courses and people trained. Additionally, several courses are now taught in languages other than English, such as Spanish, Portuguese and French. In 2018 the IODE Project Office achieved ISO-29990 certification as Learning Services Provider.

The second phase of the OceanTeacher Global Academy Project (OTGA-2) was designed in 2019 and started on the 1st of April 2020. It is a 3-year project, funded by the Government of Flanders, Belgium. Its main goals are to:

- Develop a portfolio of packaged courses (related to the needs of IOC and other partners)
- Deliver courses online and/or blended learning, on demand

The specific objectives of OTGA are to:

- 1. Develop courses related to needs of IOC and other partners
- 2. Deliver courses F2F and/or online and/or blended learning
- 3. Designate STCs (Specialized Training Centres which are topic focus) and RTCs (Regional Training Centres which have regional focus)
- 4. Focus on training needs of the 2030 Agenda and its SDGs
- 5. Facilitate CD within framework of UN Decade of Ocean Science
- 6. Develop and implement quality procedures and maintain ISO certification as a learning services provider
- 7. Increase number of self-funded participants attending courses
- 8. Contract development of course content

OceanTeacher is an important component of the IOC Capacity Development Strategy, and supports its implementation in several aspects, but very specifically:

- 1. Human resources developed
 - Continuous professional development
 - Promoting and assisting with the organisation of training courses, workshops and summer schools relevant to the IOC mandate;
 - Promoting and assisting with the establishment of training and research centres relevant to the IOC Mandate;
 - Promoting and facilitating the sharing of training resources.
 - Sharing of knowledge and expertise and promoting community building
 - Gender balance

OTGA2 will continue supporting training activities of IOC programmes, contributing to the sustainable management of oceans and coastal areas, including:

- Tsunami Unit
- Ocean Literacy
- IOC Harmful Algal Bloom programme
- Ocean Science section
- IODE incl. OBIS
- Ocean Decade

There will be an increased involvement with the IOC Regional Sub-Commissions and Regional Committees to ensure the CD needs of the regions are being supported by the RTCs and STCs.

Since its official start in April 2020, the OTGA organised a new call for applications for Regional and Specialised Training Centres (RTCs and STCs respectively). In total 26 applications were received, of which 16 were selected to join the OTGA network of Training

Centres. The list includes several training centres from the previous phase, but also new ones, including one for the Pacific SIDS.

The OTGA organized its "kick off" <u>First Session of the Steering Group for the OceanTeacher</u> <u>Global Academy 2 project</u> meeting during the first week of October (online). The <u>report is</u> <u>available</u>.

The main decisions of the OTGA SG included agreeing on the Project's Terms of Reference as well as its Steering Group (SG) Terms of Reference, and the designation of the Project's Work Packages leaders.

Concerning training courses workplans, nearly 60 training course topics were proposed for 2021. The OTGA Secretariat will follow up by consulting the IOC programmes and regions to discuss training priorities (stemming from the proposed list of courses) and to agree on the portfolio of courses for 2021. Given the current pandemic limitations to traveling, it is assumed that courses will be organised online only, at least in the first semester of 2021.

The e-Learning Platform is an essential component of OTGA. As a fully-fledged Learning Management System (LMS), it facilitates face-to-face (F2F) classroom learning, blended learning and online learning. All training course content is hosted on the OT e-Learning Platform. It also allows the use of different languages for training: currently OTGA has courses in four different languages (English, Spanish, French, Portuguese). Content is freely available during and after courses (Creative Commons Attribution 4.0 license), although registration on the OT platform is mandatory.

The OTGA aims at positioning itself to become the 'training hub' for ocean sciences¹, including topics related to the management of the impact and interactions with human activities².

Some of the direct benefits expected from the OTGA-2 Project include:

- Increased training opportunities;
- Increased cooperation between Regional and Specialized Training Centres;
- Increased quality of training programmes and resources offered;
- Increased interaction with IOC Programmes, Sub-Commissions, Regional Committees;
- Reduced overall cost of training allowing more learners to receive training;
- Reduced environmental impact of training due to reduced travel.

IOC enables its Member States to build the scientific and institutional capacity needed to achieve the UN Sustainable Development Goals. OTGA will contribute to the UN SDGs by facilitating relevant training activities focusing on the conservation and sustainable management of ocean and marine resources.

The OceanTeacher global academy will be able to contribute to the UN Ocean Decade by addressing and facilitating training activities and other capacity development activities within

¹ Ocean sciences span the physics, chemistry, and biology of marine systems. The field encompasses ocean circulation, energy dissipation, marine biology, ecology, biogeochemical cycles, water mass formation and movement, ocean temperature and salinity, and marine carbon and carbonate chemistry. Source <u>https://www.nature.com/subjects/ocean-sciences</u>

²Topics include tsunami warning and preparedness, marine spatial planning, ocean data management, ocean governance, transfer of marine technology and marine scientific research.

the Decade, including the ones focusing on developing human resources developed at individual and institutional levels.

The Group noted that in addition to the CD initiatives conducted by IOC, the Decade may benefit from a better/wider articulation of already existing initiatives through a kind of "mentoring" of graduate and undergraduate courses in a way to incorporate the decade objectives, challenges and outputs.

In addition, **the Group considered** that if the IOC should mobilise its capabilities and resources to support the Decade this would require the IOC to capture a holistic understanding of all/as many as possible CD initiatives (beyond IOC programmes) and to make these visible.

In this regard Ms Agnes Kijazi, Chair of CD panel of WMO noted that many issues are common between IOC and WMO and she welcomed the opportunity to work together in the area of capacity development.

The Group called on the Ocean InfoHub project (see 3.2) to ensure that CD activities shared through OIH should be as inclusive as possible (possibly through the <u>www.marinetraining.org</u> system).

The Group expressed its appreciation of the OceanTeacher Global Academy as a considerable contribution to developing human capacity (IOC CD strategy activities 1.2, 1.3, 1.4) and will be a valuable contribution to the UN Ocean Decade.

The Group decided to take the above into account when drafting the new Terms of Reference of the Inter-sessional Task Team to start work to identify CD requirements of Member States in relation to the IOC CD strategy.

The Group noted with regret the absence of RTCs and STCs using French as working language and **requested** the OTGA project to ensure that the French speaking community is not forgotten.

3.2 IOC OCEAN INFOHUB

This agenda item was introduced by Ms Lucy Scott (Presentation).

Ms Scott recalled that, as mentioned in 2.1 and 2.2 presented previously:

IOC Assembly XXIX had established the IOC Group of Experts on Capacity Development assigning it the following tasks(among others)... "advise the Assembly on, and start implementation of, the Transfer of Marine Technology Clearing House Mechanism (CHM) as requested by the IOC Criteria and Guidelines on the Transfer of Marine Technology making use, to the largest extent possible, of existing data and information systems already available at IOC".

An inter-sessional Task Team on the implementation of a TMT/CHM "portal" was established to "develop the scoping and needs assessment of the CHM (which should be developed, as much as possible, using existing information systems and sources), and (if possible) develop a proof of concept to be demonstrated at IOC-XXX."

The First Joint Meeting of the Task Teams of the IOC Group of Experts Capacity Development on Capacity Development requirements of Member States and implementation of a Clearing House Mechanism for the Transfer of Marine Technology was held at UNESCO/IOC Headquarters, 13–14 March 2019.

- All regions reported that such a mechanism would be instrumental to the further development of ocean science capacity in the countries. All regions expressed preference for an online central portal integrating the data and information harvested from regional/sectoral CHM portals. The respondents identified the need for a **series of nodes** rather than one global central node but using technology that allows **interoperability** between the nodes. The majority of respondents had recommended a "A hybrid model: online central portal with deep-links to regional/sectoral CHM portals".
- Based on this, INVEMAR (Colombia) developed a pilot CHM for the Latin America and Caribbean region, in the context of the Caribbean Marine Atlas (CMA-II) project. The pilot "Clearing-House Mechanism LAC) (<u>http://portete.invemar.org.co/chm</u>) is a hybrid model, with a centralized portal that provides access to information sources identified by the users as most relevant (Databases on Training and Education resources, List of experts, Research vessels,..) and integrated from a number of existing web sources developed and maintained under IOC (OceanExpert, Ocean Teacher Global Academy, ODISCat,...)

An <u>ODIS-CHM/TMT Proposal Drafting Workshop</u> was organized at UNESCO/IOC Headquarters on 5–8 August 2019, a detailed proposal was submitted in September 2019 and subsequently approved.

The IOC Ocean InfoHub Project (OIH) is the result: a new, global initiative, to improve access to marine and coastal data and information. It is a three-year project, commencing April 2020, funded by the Government of Flanders, Belgium.

The OIH will support communities of practice and a network of hubs that will be early implementers of the Ocean Data and Information System (ODIS). The OIH will support the ongoing co-design of the ODIS architecture together with partners. The Project will also promote and foster awareness and collaboration with new and established partners, connecting contributors and users with the resources to support their efforts.

The OIH project will first work with global IOC-associated online resources – including:

- OceanExpert;
- OceanDocs soon to be incorporated into Aquadocs;
- the Ocean Best Practices System;
- the Ocean Biodiversity Information System (OBIS);
- the World Ocean Database (WOD);
- the IODE Ocean Data Portal (ODP);
- extended by partnerships with EurOcean, Marinetraining.eu and EMODnet as well as other sources in the IOC ODIS Catalogue of Sources (ODIScat).

Because of this wealth of resources and partners, the initial focus will be on six data types:

- 1. People and institutions/organizations;
- 2. Documents;
- 3. Spatial data/maps;
- 4. Training opportunities;
- 5. Vessels (research opportunities);
- 6. Projects.

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Regionally, three regions have expressed formal requests to participate in the development of the OIH: the African region, the Latin America and Carribbean region and the Pacific Small Island Developing States. These requests were the result of presentatons on the planned OIH during meetings of the 4 IOC regional subsidiary bodies (IOCARIBE, IOCAFRICA, IOCINDIO, WESTPAC) in 2019, while expression of interest for the P-SIDS was received from SPC and SPREP.

These three regions have participated in the development of the proposal for the project and will take a lead on pilots to test interoperability between existing information hubs, and the OIH global information resources. The initial priorities for the Project will be to develop communities of practice for the three pilot regions, as well as to formalize partnerships with other UN agencies and key international partners. The OIH Project will also support the IOC's Capacity Development Strategy and assist countries in their global reporting requirements.

A global ODIS (Ocean Data and Information System) architecture will be developed to enable interoperability with local, regional and thematic infrastructures. The project will support interlinkages and interoperability between these **existing distributed resources**. Through these actions, the OIH project will enable a digital ecosystem where users, from any entry point, can discover content and services that they require, while also having opportunities to become content creators themselves.

The Ocean InfoHub Project will therefore provide an opportunity for partners and users to contribute to, and access the UN Ocean Decade global data ecosystem while also offering capacity development opportunities to all to participate equitably. Specifically with regard to the CD chapter of the Decade:

- The OIH is needs driven, with investment in tools that have been requested by regions;
- The OIH will optimise the exchange of knowledge, information and learning;
- It responds to national and regional priorities;
- It will respect cultural and geographic diversity (regional identity of hubs, including language);
- Targets knowledge generators and users;
- Builds on and strengthens existing resources;
- focuses on the transfer of local knowledge;
- on supporting early career scientists;
- and on remedying gender disparity by increasing access to information, technologies and opportunities.

In conclusion, the Ocean InfoHub Project will facilitate better access to global databases, but also better visibility of national and regional data holdings. Users can more easily discover what they need. Regions and countries can learn from each other; Africa, Pacific and LAC regions all have success stories that will be useful to share. The OIH development and implementation principles will be fully based on co-design: the project seeks the participation of a wide range of partners and end user communities that are involved in the sustainable use and management of marine areas.

The Group welcomed the development of the Ocean InfoHub project as a substantive contribution to facilitating access to global databases, but also improving visibility of national and regional data holdings and resources.

4. SECOND CD NEEDS ASSESSMENT

This agenda item was introduced by Ms Johanna Diwa. She referred to <u>Document IOC/GE-CD-II/Doc4</u>. (<u>Presentation</u>)

She recalled that as mentioned under 2.3 above, the IOC Assembly at its 30th Session adopted Decision IOC-XXX/11.1 which

Invites the IOC Group of Experts on Capacity Development to:

(ix) repeat the CD survey at regular intervals (biannually), possibly including CD implementation impact monitoring/metrics, also taking into account other methods such as regional reviews, science conferences, etc.;

A revised version of the first CD Needs Assessment Survey was developed and adopted by correspondence in August 2020. It was launched on 1st September 2020 at <u>https://www.surveymonkey.com/r/KN885MK</u> and remains open until 1 February 2021.

Ms Diwa shared that the IOC Member States were invited to contribute to the survey via IOC <u>Circular Letter No 2803</u> issued on 1 September 2020. Invitations were also sent to more than 9,000 email addresses from the Ocean Expert database and circulated to various networks. The survey is open to all stakeholders including IOC NFPs, representatives of institutes and regional programmes, and all national stakeholders in ocean research, observation, data/information management, coastal area-based management and policy. It can be filled either as an individual reflecting own views, or as a representative of one's institution/organization/company. PDF versions were made available in English and Spanish to enable to respondents who need to consolidate inputs by consulting with colleagues or one's institution.

She then presented some updates on the current status of the survey and the preliminary results. As of 12 October 2020, a total of 874 responses were received, 73% of which completed their respective sets of questions (638). The gender breakdown is 62% male, 36% women, 1% prefer not to say. Almost half of the respondents were Early Career Ocean Professionals (ECOPs). 74% of the respondents answered on personal capacity, while 24% were official representatives; 4% IOC focal point (34), 1% CD Focal Points (11) and 19% on behalf of organization/company (164).

In total, responses were received from 111 countries. 87 out of 115 IOC Member States, which are developing countries, targeted for this survey, or about 76% has responded, although the number of IOC focal points who submitted their official response merely amounted to 39 countries in total.

As for the breakdown of responses, it was not surprising to have more than half of the respondents from ocean researchers and research service providers (27%), HEIs, academic staff (24%) and students (10%) since most of the ocean expert members were from these institutions. About 18% were government officials and policy makers. There was a pretty low turn out for environmental NGOs (6%) and private sector (only 2%).

Ms Diwa presented the highlights of outcome from Section 2, for the purpose of the meeting while the survey is still ongoing. In Section 2, there were 22 questions on capacity development needs and requirements, including questions that relate to the Decade of Ocean Science and SDG 14. Two subsets of 23 questions (2a) and 12 questions (2b) were included for IOC focal points and IOC CD focal points, respectively. For the purpose of this meeting, the presentation will focus on the preliminary results of Section 2 for the time being.

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The overall responses in Section 2 was N=368. The official responses from IOC focal points were then presented in regional breakdowns (Africa, N=5; LAC, N=8; Southern Asia, N=2; Rest, N=1) The discrepancies in the number seem to arise from issues such as multiple responses and filling in incorrect relevant question sets. A number of IOC focal points selected other question set that belong to other stakeholder groups, instead of Section 2 and respective subsets. This can be corrected later on by identifying and asking them to answer the correct question set for IOC focal points.

Ms Diwa referred to <u>Document IOC/GE-CD-II/Doc2.4</u> including a summary of preliminary findings (as on 12 October 2020), in particular relating to capacity development needs and requirements. The top results were based on the responses 'very important' and 'essential'. The top results were highlighted in the summary table heavy green as top 1, and the lighter it gets for succeeding choices. It also includes questions relating to the UN Decade of Ocean Science for Sustainable Development, as for which Ocean Decade Challenges and Objectives are capacity development needs greatest. Questions relating to SDG 14 involved rating the capacity available as well as which capacity are lacking in their countries.

She concluded her presentation with a discussion of the issues arising from the preliminary analysis including the small number of responses to allow meaningful analysis with regional breakdown. Another issue was the multiple responses received from some countries, as well as IOC focal points who answered different question sets. It is worth highlighting that more efforts are needed to reach out to countries that have not responded yet and IOC focal points can help in reaching out to more stakeholders from their countries.

She called on participants to promote the survey within their country, region and community contacts.

While the survey language is English a PDF copy of Spanish version is available upon request.

It was recalled that an email announcing the survey had been sent to over 10,000 individuals included in the OceanExpert database, IOC national focal points (action addresses) and IOC CD national focal points.

It was noted that the number of experts from each country included in OceanExpert is far from comprehensive or complete. An overview of the current number of records for each IOC developing country Member State is attached as <u>Annex III</u>.

The Group requested its Members as well as IOC CD focal points to promote OceanExpert within their country, region and other community contacts to obtain better coverage.

The Group requested the Secretariat of the IOC regional Offices to promote OceanExpert in their region (including amongst non-IOC partners) and to call on experts and organizations in their region to regularly update their OceanExpert records.

The Group requested the Secretariat to send a reminder to developing country Member States (as listed in Annex III) through their IOC contacts, IOC CD national focal points as well as IOC national coordinating bodies for liaison with the IOC.

The Group recommended to organize (during November 2020–January 2021) a series of webinars (regional, sectoral, thematic) to introduce the survey. The webinars could also be used to introduce the audiences to the IOC CD strategy, IOC programmes and the Decade (taking into account the limited knowledge as indicated by survey responses so far).

5. REVISION OF THE IOC CD STRATEGY 2015–2021

This agenda item was introduced by Mr Ariel Troisi. He noted that the current IOC CD strategy was developed for the period 2015–2021 and accordingly, it will "expire" in December 2021. While the strategy may still be valid and the Group could recommend its extension for a number of years, the Group may wish to consider elements that would justify a revision. Such elements could include the UN Decade, outcomes of the 2nd CD survey or others.

Noting that revision of the current CD strategy should be considered through wide consultation of Member States, **the Group recommended** to request to the IOC Assembly, at its 31st Session (2021) to extend the CD Strategy 2015–2021 until end of 2023.

The Group decided to establish a GE-CD Task Team to identify what changes may be needed in the current IOC CD strategy (2015–2021) and submit a report for consideration by the 31st Session of the IOC Assembly (2021).

The Assembly could then consider instructing the GE-CD to prepare a revised CD strategy or it can establish another body to do so.

5.1 ESTABLISHMENT OF THE GE-CD TASK TEAM RELATED TO THE REVISION OF THE IOC CD STRATEGY (2015–2021)

This agenda item was introduced by Mr Ariel Troisi. Referring to discussions under agenda item 5, he requested the Secretariat to prepare <u>draft terms of reference</u> of the proposed "GE-CD Task Team related to the revision of the IOC Capacity Development Strategy" which are listed below (and already edited according to the discussions under 5):

GE-CD Task Team related to the revision of the IOC Capacity Development Strategy

The IOC Group of Experts on Capacity Development,

<u>Recognizing</u> the importance of Capacity Development as one of the six functions of the IOC Medium-Term Strategy (2014–2021), enabling all Member States to participate in, and benefit from, ocean research and services that are vital to sustainable development and human welfare on the planet,

<u>Recalling</u> the adoption, at its 28th Session, of the IOC Capacity Development Strategy (2015–2021) published as IOC/INF-1332,

<u>Welcoming</u> the contributions of its Member States towards capacity development at the global and regional level through financial and in-kind contributions,

<u>Stressing</u> the need to share, across programmes and regions, experience and expertise in capacity development, and to coordinate efforts to increase efficiency and maximize impact,

Noting that the IOC Capacity Development Strategy (2015–2021) published as IOC/INF-1332 will expire on 31 December 2021,

<u>Noting further</u> the Capacity Development Chapter of the Implementation Plan of the UN Decade of Ocean Science for Sustainable Development (2021–2030),

<u>Establishes</u> the GE-CD Task Team related to the revision of the IOC Capacity Development Strategy with Terms of Reference as detailed in Annex I below.

Annex I: Terms of reference of the GE-CD Task Team related to the revision of the IOC Capacity Development Strategy

Objectives

The Task Team will identify reasons that justify the revision of the IOC Capacity Development Strategy (2015–2021), published as IOC/INF-1332 and taking into account:

- (i) Outcomes of the 2nd IOC Capacity Development Survey (September 2020–January 2021);
- (ii) Capacity Development Chapter of the Implementation Plan of the UN Decade of Ocean Science for Sustainable Development (2021–2030);
- (iii) Input of consultations with IOC global and regional programmes related to Capacity Development;
- (iv) Input of consultations with UN specialized agencies, non-UN IGOs, global and regional organizations, programmes and projects, NGOs and private sector partners.

The Task Team will work by correspondence.

The Task team will submit a report to the GE-CD not later than 1 March 2021 for its approval and subsequent submission to the IOC Assembly at its 31st Session.

Membership

The Task Team will be composed of members of:

- (i) the following members of the IOC Group of Experts on Capacity Development: *to be identified*
- (ii) the following IOC CD national focal points: to be identified
- (iii) the following additional experts: to be identified

The Group decided to review the above draft terms of reference and agree on a final version by correspondence, not later than <u>15 November 2020</u>, and called on its Members as well as IOC CD national focal points, as well as other interested experts wishing to join the Task Team to contact the Secretariat (<u>p.pissierssens@unesco.org</u>) not later than <u>15 November 2020</u>.

The Group instructed the new Task Team, when established, to start its work as from 15 November 2020 and to submit its work to the co-Chairs of the GE-CD (who will distribute it to the GE-CD members) not later than <u>1 March 2021</u> for its approval and subsequent submission to the IOC Assembly at its 31^{st} Session.

6. ELECTION OF THE CHAIRS

This agenda item was introduced by Mr Peter Pissierssens, IOC CD coordinator. He noted that Mr Ariel Troisi had been elected Chair during the First Session of the Group in March 2018. In 2019, Mr Troisi was elected Chair of the IOC. As this additional responsibility would make it difficult to carry out full Chairmanship responsibilities of the IOC GE-CD, he requested the designation of a Co-Chair. After a brief online consultation of Group members, Mr Alan Evans had been elected Co-Chair. According to IOC Rules of Procedure (Document IOC/INF-1166), and more particularly to Rule 25, para 3, Chairs of subsidiary bodies (such as Groups of Experts) are elected by the body itself. They can be re-elected once.

The Group decided to re-elect Mr Ariel Troisi and Mr Alan Evans as co-Chairs of the IOC Group of Experts on Capacity Development.

7. REPORT OF THE MEETING AND CLOSING

This agenda item was introduced by Mr Peter Pissierssens. He noted that in view of the short duration of the meeting it was not possible to adopt the report of the meeting during the meeting as was custom. He therefore requested the agreement of the Group to prepare the report after the meeting and for the Group to adopt the report by email (after giving the opportunity to the Members to comment on the report).

The Group instructed the Secretariat to finalize the report of the meeting and to circulate it to the members for adoption by email.

The Group decided to organize its 3rd meeting during the 2nd semester of 2021.

The Group requested its Chairs to report on the proceedings of the 2nd meeting of the IOC GE-CD at the next session of the IOC Assembly in 2021.

ANNEX I

AGENDA

1. OPENING OF THE MEETING

- 1.1 ADDRESS BY THE CO-CHAIRS OF THE GROUP OF EXPERTS
- 1.2 ADOPTION OF AGENDA AND TIMETABLE

2. STATUS OF THE WORK OF THE 1ST SESSION AND INSTRUCTIONS BY IOC-XXX

- 2.1 ESTABLISHMENT OF THE IOC GE-CD
- 2.2 REPORT ON ACTIONS TAKEN DURING THE INTER-SESSIONAL PERIOD OF THE GROUP
- 2.3 INSTRUCTIONS FROM THE 30TH SESSION OF THE IOC ASSEMBLY (2019) AND THEIR FOLLOW-UP ACTIONS
- 2.4 FUTURE OF THE TASK TEAMS

3. CONTRIBUTION OF IOC TO THE CD CHAPTER OF THE UN DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT

- 3.1 OCEANTEACHER GLOBAL ACADEMY PHASE 2
- 3.2 IOC OCEAN INFOHUB

4. SECOND CD NEEDS ASSESSMENT

5. REVISION OF THE IOC CD STRATEGY 2015-2021

5.1 ESTABLISHMENT OF THE GE-CD TASK TEAM RELATED TO THE REVISION OF THE IOC CAPACITY DEVELOPMENT STRATEGY

6. ELECTION OF THE CHAIRS

7. REPORT OF THE MEETING AND CLOSING

ANNEX II

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ANNEX III

NUMBER OF EXPERTS INCLUDED IN THE OCEAN EXPERT DATABASE FOR IOC DEVELOPING COUNTRY MEMBER STATES

(definition of developing country as listed in <u>http://hdr.undp.org/en/content/developing-regions</u>)

COUNTRIES	AFR	LAC	P-SIDS	OTHER
		LAC	1-5105	UTILK
Afghanistan				3
Albania				5
Algeria	48			
Angola	30			
Argentina		157		
Azerbaijan				6
Bahamas		8		
Bangladesh				184
Barbados		58		
Belize		21		
Benin	38			
Brazil		268		
Cabo Verde	15			
Cameroon	53			
Chile		288		
China				361
Colombia		616		
Comoros	39			
Congo	11			
Cook Islands (new)			18	
Costa Rica		78		
Côte d'Ivoire	40			
Cuba		50		
Djibouti	1			
Dominica		14		
Dominican Republic		149		
Ecuador		216		
Egypt	175			
El Salvador		39		
Equatorial Guinea	0			
Eritrea	6			
Ethiopia	17			
Fiji			62	
Gabon	11			

Combin Donublic of The	16			
Gambia, Republic of The	16			16
Georgia				16
Ghana	53			
Grenada		9		
Guatemala		56		
Guinea	22			
Guinea-Bissau	4			
Guyana		9		
Haiti		37		
Honduras		45		
India				947
Indonesia				561
Iran				170
Iraq				13
Jamaica		30		
Jordan				2
Kazakhstan				9
Kenya	291			
Korea, Democratic Republic of (North Korea)				0
Kiribati			5	
Kuwait				26
Lebanon				10
Libya	4			
Madagascar	83			
Malaysia				251
Maldives				31
Mali	0			
Mauritania	62			
Mauritius	63			
Mexico		263		
Montenegro				2
Morocco	112			
Mozambique	111			
Myanmar/Burma				36
Namibia	97			
Nauru			2	
Hudru		l	2	L

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United Republic of Tanzania 118					26
	United Republic of	118			
	Uruguay		51		

Vanuatu		6	
Venezuela	89		
Vietnam			104
Yemen			14

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TOTAL ALL 9096

