

## Template for Annual SCOR Working Group Reports to SCOR

### 1. Name of group

WG 159 DeepSeaDecade: Roadmap for a Standardised Global Approach to Deep-Sea Biology for the Decade of Ocean Science for Sustainable Development.

### 2. Activities since previous report to SCOR (e.g., virtual or in-person meetings, email discussions, special sessions). Limit 1000 words

On World Oceans Day June 2021 the UN Ocean Decade was officially launched and with it the Challenger 150 Programme for which the SCOR working group 159 is the steering committee. In its first year the programme has:

1. Established partnerships with research ship providers REV Ocean and Schmidt Ocean Institute.
2. Obtained commitments of dedicated ship time for capacity building every year for 10 years from REV Ocean.
3. Established 12 regional scientific working groups to manage activities locally to help build geographic science capacity.
4. Placed 10 early career researchers in co-chairing roles with a mentor to help build generational science capacity.
5. Established 2 cross cutting technical working groups: deep sea litter (James Taylor & Jaime Davies), imagery data standards group (Kerry Howell), with a further two in discussion: deep sea animal traits (Lissette Victorero), Ecosystem modelling group (Jessie Van Der Grient)
6. Grown our partnership through actively seeking new members from developing nations to help build deep sea science capacity globally, so no-one is left behind.
7. Carried out 15 research cruises in 4 ocean basins (Arctic, North Atlantic, South-West Pacific, North East Pacific) providing a strong start to the Ocean Decade.
8. Hosted events under the Ocean Decade's laboratory events (predicted ocean and clean ocean)
9. Welcomed 4 formally endorsed projects – Deep-Ocean Genomes Program, One Ocean Hub Research Programme 4, Seabed Mining & Resilience To EXperimental impact, Cobra, plus two in application stage, Aleutian Trench Biodiversity Studies (AleutBio), IceDivA.

This has been achieved through multiple on-line meetings of various sub groups including regional scientific working groups, technical working groups, town halls, and steering committee meetings.

### 3. Documents published since previous report to SCOR (e.g., peer-reviewed journal articles, reports, Web pages) and should be limited to publications that resulted directly from WG activities and which acknowledge SCOR support

None

4. Progress toward achieving group's terms of reference. List each term of reference separately and describe progress on each one. Limit 1000 words

1. To develop a global plan for survey / sampling deep-sea ecosystems to underpin deep-sea research for the UN Decade of Ocean Science. – Plan has been discussed and published; a global programme has been endorsed by the IOC as an Ocean Decade action.
2. To agree on methods and standards for the acquisition of biological data, including the role of existing and novel technologies. – Established 2 technical working groups to deal with standards in image-based data and litter recording. Both groups have met twice this year. Image group has produced a vision statement and a series of actions required to achieve that vision. The group are now taking the first steps toward standardization.
3. To develop habitat-specific approaches for survey / sampling the deep-sea ecosystem, that integrate the global approaches developed under ToRS 1 and 2, but allow greater specialisation. – included within TOR 1 paper output.
4. To integrate ToRs 1-3 with wider efforts under the Global Ocean Observing System (GOOS) via the Deep Ocean Observing Strategy (DOOS). – Outline provided in Howell et al. (2020), we continue to engage with DOOS on all activities.
5. To actively facilitate efforts to build capacity in developing nations for deep-sea science – In addition to our achievements listed above that pertain to capacity development (2, 3, 4, 6) our members have participated in a global survey of capacity development needs for deep-sea science undertaken by the Ocean Discovery League (ODL) and we await their report before we begin to develop our plans further. The establishment of regional working groups is critical to our capacity building activities and so for this year we have focused on getting those groups operational. In September we plan to hold a meeting of the SCOR working group to discuss the ODL report findings and to task our regional working group leads with development of a plan of action for regionally focused capacity building.

5. WG activities planned for the coming year. Limit 500 words

- Sep/Oct SCOR WG meeting to discuss capacity building plans
- Seek funding to support a core programme team (programme manager, programme support officer, comms and fund-raising officer, data standards and management support officer, capacity building officer, support for the 10 ERCs who co-ordinate the regional scientific working groups).
- Regional working group meetings every 3 months
- Support the development of further technical working groups dealing with standardisation

6. Is the group having difficulties expected in achieving terms of reference or meeting original time schedule? If so, why, and what is being done to address the difficulties Limit 200 words

The operationalization of the Ocean Decade Programme Challenger 150 has taken time but is essential to achieving TORs 2 and 5 as well as aspects of the other TORs. We are confident we can deliver to the original time schedule plus covid extension. However see below for our proposal.

7. Any special comments or requests to SCOR. Limit 100 words.

We would like to approach SCOR to continue support for the working group which directs the Challenger 150 programme and recognize Challenger 150 as a SCOR endorsed programme (like Geotraces). This will enable the working group to continue to direct the programme and make further gains around TORs 2 and 5.

Additional information can be submitted and will be included in the background book for the SCOR meeting at the discretion of the SCOR Executive Committee Reporter for the WG and the SCOR Secretariat.