



GO-SHIP Science Committee and Executive Group- Terms of Reference

Version 23 January 2019

Purpose: The GO-SHIP Science Committee (GO-SHIP SC) provides scientific leadership and oversight for the development and implementation of the decadal global survey of hydrographic sections (known as GO-SHIP) operated by national research institutions.

- The GO-SHIP SC shall oversee the coordination and completion of GO-SHIP reference sections with the primary objective of obtaining sustained decadal observations of level 1 data, and level 2 data when feasible (see, <http://www.go-ship.org/DatReq.html> for level 1, 2 and 3 parameters)
- The GO-SHIP SC shall periodically review the GO-SHIP reference section plan with respect to the objectives of GO-SHIP. The GO-SHIP SC shall encourage, facilitate and coordinate the recruitment of greater international participation in GO-SHIP.
- The GO-SHIP SC will recommend and justify changes in level 1 and 2 parameters when needed.
- The GO-SHIP SC will facilitate collection and timely submission of data from GO-SHIP reference and affiliated cruises to designated central depositories.
- The GO-SHIP SC shall provide advice on the contents, quality and timeliness of the GO-SHIP data streams to ensure that guidelines regarding measurements and data submission are met.
- The GO-SHIP SC will liaise with other global observing systems, including those concerned with satellite observing; and deep, biogeochemical, and core Argo.
- The GO-SHIP SC will interact with JCOMM through the JCOMM observations coordination group (OCG), GOOS, WRCP, IOCCP and relevant CLIVAR panels and working groups.
- The GO-SHIP SC will facilitate interactions between nations to ensure that all level 1 observations are made on GO-SHIP reference sections.
- The GO-SHIP SC will solicit funding from national agencies and multi-national entities for a part-time JCOMMOPS ship coordinator
- To address specific questions the SC will convene working groups (WG). These WG will be comprised of at least two GO-SHIP SC members and can include relevant experts that are not part of the GO-SHIP SC. The WG will report back to the GO-SHIP SC and be disbanded following its fixed-term.

Membership: The GO-SHIP SC shall be made up of scientists and technical experts from groups contributing to GO-SHIP. Normally there will be one representative of a national project but more members could be entrained in the case of large national contributors or specific expertise.

- There shall be no rigid time limits of membership, although a typical term is expected to be 5 years.
- A departing member with responsibility for national representation will suggest their replacement.
- New members will be nominated to and require the endorsement of the GO-SHIP SC.
- Membership will represent a diversity of seniority to ensure the future of a vibrant GO-SHIP.
- Membership will comprise representation from each contributing nation, and experts in each level 1 parameter. Members will represent at least one, but preferably more of these criteria.

Ex officio Members

Ex officio members can include data management experts, stakeholders and representatives of parent organizations. In addition, consultants will attend the GO-SHIP SC meetings when required and by invitation. They can include representatives of GO-SHIP co-sponsoring bodies (WCRP/CLIVAR, JCOMM/OCG, IOCCP, and GOOS), representatives of organizations with whom GO-SHIP interacts and other representatives whose expertise is of value to a specific question or working group.

Leadership

The GO-SHIP SC shall be co-chaired by two GO-SHIP SC members.

Co-chairs should represent the diversity of the panel, including expertise and geographical representation. The typical term of a co-chair will be 4 years and preferably they will have previously served on the GO-SHIP SC. The co-chairs are nominated by the GO-SHIP executive group and elected by endorsement of the GO-SHIP SC.

The GO-SHIP SC shall form an **Executive Group** consisting of

- The GO-SHIP SC co-chairs
- The GO-SHIP Technical Coordinator
- Up to six GO-SHIP members selected in order to provide an appropriate regional distribution, expertise and to reflect major contributions to the GO-SHIP Program

The Executive Group will take care of the day-to-day operations of GO-SHIP including reporting to parent agencies (JCOMM, IOC, GOOS), providing recommendations and endorsements for national cruises and coordination with other programs. Current members of the Executive group are listed in table 1.

Meeting schedule The GO-SHIP SC is scheduled to meet 3 times a year via teleconference, and every 2 years in person. While biannual meetings are strongly recommended few travel resources are available in GO-SHIP such that attendance is self-supported. A formal and informal meeting of the GO-SHIP SC, in conjunction with international scientific conferences, is encouraged. The GO-SHIP Executive Group interacts via email and teleconference.

Roles of and responsibilities of GO-SHIP SC members

GO-SHIP SC members shall be actively engaged in activities described in the TOR, including working groups addressing specific topics related to GO-SHIP; outreach; and tracking cruise progress and data submission. SC Members are considered national representatives and will track cruise under auspices of their nation, assuring cruises are run to GO-SHIP specifications, and data flow and disposition to the GO-SHIP data centers. They will act as a liaison with the chief scientists of the cruises and their national GO-SHIP community. Specifically they shall

- Report at GO-SHIP teleconferences and in writing to the GO-SHIP Executive Group and SC the views, challenges and successes of their national project.
- Ensure that the decisions of the GO-SHIP Executive Group and SC are relayed to the relevant national committees and agencies of their respective countries and that appropriate actions are taken.
- Take necessary steps to ensure that their nation's project contributes appropriately to the GO-SHIP program and the GO-SHIP data policy requirements are met.
- Advise the GO-SHIP Technical Coordinator, and GO-SHIP SC in a timely manner of proposed occupations of reference section.
- Apprise the GO-SHIP Technical Coordinator and GO-SHIP SC in a timely manner if there are specific needs to complete their reference section, including lack of level 1 measurements or data submission issues.
- Assure that data from reference sections are documented and submitted according to specified time frames.
- Encourage scientific use of GO-SHIP data and publicize GO-SHIP achievements.
- Contribute as experts in the particular GO-SHIP level 1 and level 2 measurement, and provide guidance in execution and Best Practices of these measurements on all cruises.

Role and responsibilities of the part time (PT) JCOMMOPS Technical Coordinator for GO-SHIP

The Technical Coordinator fills an essential function in effective operation of the GO-SHIP SC and GO-SHIP operations. They will:

- Fulfill the responsibilities of tracking metadata, including cruises, measurements, and status of data, through JCOMMOPS.
- Work with GO-SHIP data centers to assure data is received in a timely manner.
- Work closely with the co-chairs and Executive Group to facilitate information transfer to the SC and community at large.
- Maintain visibility of GO-SHIP through the web site, bibliography and other fora,
- Liaise with other JCOMMOPS activities, including cross-linking of metadata ensuring GO-SHIP is an integral part of the JCOMM and GOOS vision.
- Provide an annual workplan of their duties to JCOMMOPS produced in consultation with the exec.

Table 1: GO-SHIP Science Committee, 23 January 2019

Martin Kramp (JCOMMOPS, IOC/WMO)	Technical coordinator (P/T) ship-tc@jcommops.org
Elaine McDonagh (NOCS, UK)	Co-Chair
Rik Wanninkhof (NOAA, USA)	Co-Chair
Masao Ishii (MRI-JMA, Japan)	Executive Group
Gregory Johnson (NOAA, USA)	Executive Group
Katsuro Katsumata (JAMSTEC, Japan)	Executive Group
Bernadette Sloyan (CSIRO, Australia)	Executive Group
Lynne Talley (SIO, USA)	Executive Group
Toste Tanhua (GEOMAR, Germany)	Executive Group (outgoing Obs19)
Mario Hoppema (AWI, Germany)	Executive Group (incoming Obs19)
Leif Anderson (U. Gothenburg, Sweden)	Committee Member (outgoing)
Isabelle Ansorge (UCT, South Africa)	Committee Member
Kumiko Azetsu-Scott (BIO, Canada)	Committee Member
Edmo Campos (USP, Brazil)	Committee Member
Emil Jeansson (BCCR, Norway)	Committee Member
Anil Kumar (NCAOR, India)	Committee Member
Jae Hak Lee (KIOST, Korea)	Committee Member
Herle Mercier (IFREMER, France)	Committee Member
Caroline Cusack (MI, Ireland)	Committee Member
Fiz Perez (CSIC, Spain)	Committee Member
Mike Williams (NIWA, New Zealand)	Committee Member
Steve Diggs (SIO, USA) CCHDO (Hydrographic data management)	Ex officio sdiggs@ucsd.edu
Maciej Telszewski (IOCCP)	Ex officio m.teleszowski@ioccp.org