GOOS Steering Committee Meeting Report
Wednesday 1 June to Friday 3 June 2016, Sopot Poland

Introduction

This was the fifth meeting of the GOOS Steering Committee (and my first as GRA Council Chair, *ex officio*). The agenda and papers can be found on the GOOS website, here. The meeting was well attended, and it was very positive in terms of both current progress and future opportunities for GOOS.

Eric Lindstrom (NASA) announced that this would be his last meeting at GOOS SC Co-Chair. He is stepping down from the Committee and intends to focus his energy on preparing for the 'Ocean Obs '19 conference' (further information provided below). John Gunn (AIMS) will continue as the other co-chair and discussions are underway to find a replacement for Eric.

GRA business

In summary, the three GRA priorities that we took to the meeting were well received and supported.

1. HF Radar

- Consideration of HF Radar as a new observing element of GOOS was discussed at length. It is accepted that under the Framework for Ocean Observing the inclusion of expanded EOVs and need to integrate GOOS from open ocean to coast will require new networks to meet these observing requirements.
- The Steering Committee supported the draft HF Radar proposal, requesting that it be finalised in consultation with
    - the Physics Panel/OOPC regarding surface current (and wave) requirements/EOVs, and
    - JCOMM OCG regarding network coordination (noting that this discussion has already started).
- **ACTION: I will communicate this to the proponents [Hugh Roarty and Liza Hazard (IOOS), Simone Cosoli (IMOS) and Enrique Fanjul (MONGOOS)] and ask them to work with Katy Hill (OOPC) and David Legler (JCOMM OCG) to finalise the proposal. It was agreed that we can bring this back to the GOOS Steering Committee out of session i.e. we don't need to wait a year until the next GOOS SC meeting.**
- The discussion highlighted the need for the for GRAs, Expert Panels and JCOMM OCG to interact more effectively.
    - One opportunity is the 'Workshop on Implementation of Cross Disciplinary Ocean Observations' to be held in Miami, United States on 8 - 10 February 2017.
    - Other means of cross fertilisation are to be encouraged e.g. Panel co-chairs presenting at GRA teleconferences etc. Sam Simmons (Bio-Eco Panel) is keen to meet with the GRA Council to discuss their work with us, and we have already discussed the opportunity to talk with the Global Ocean Acidification Observing Network (GOA-ON) which has links to the BGC Panel.

2. **<u>EOVs</u>**

- The GOOS SC noted the comparison of EOVs being developed by the three panels with EOV views from GRAs (where available). Further development was supported as an integrating activity.
- I asked the GOOS Office to ensure that all of the up to date EOV specification sheets from all three panels are made available from a single point on the GOOS website. I hope that this will be done some time soon.

3. **<u>Pilot Projects (including MESCAT)</u>**

- The third GRA priority (MESCAT pilot project) was considered under a separate agenda item (agenda item 10).
- I briefly introduced the proposed project - MEditerranean Sea-level Change And Tsunamis (MESCAT). It was noted that the project is small scale compared to TPOS and ATLANTOS, but considered to be a valuable addition by the GRAs. I requested comments and feedback on the pilot project concept in general, and MESCAT specifically.
- The meeting discussed that projects are an important way to develop GOOS in line with the Framework for Ocean Observing, and can increase visibility and impact for both GOOS and IOC. Projects should be seen as a way to bring additional resources to GOOS. They should be focused on sustained observing, including being seen as a catalyst for innovation, moving the system forward while addressing the existing gaps.
- The MESCAT project clearly met these requirements and was endorsed by the GOOS Steering Committee.
- **ACTION - Enrique Fanjul and colleagues to finalise the MESCAT project specification, noting that it is now endorsed by the GOOS SC. Toste Tahuna (BGC/IOCCP Panel Co-Chair) noted that a MEDOS project is being developed, as a companion to ATLANTOS, and that the relationship between MESCAT and MEDOS should be considered. Enrique to follow up with Toste Tahuna, Glenn Nolan (EuroGOOS) and others involved with MEDOS.**
- With respect to future GRA projects, some constructive suggestions were made:
    - Engaging with selected Large Marine Ecosystem (LME) programs, and
    - Engaging with the boundary current/coastal ocean emphasis being pursued by the Physics Panel/OOPC. John Wilkin gave a nice talk on this at the meeting.
- In summary, I believe we now have a process by which to specify GRA pilot projects and have them endorsed by the GOOS SC, which will hopefully help in securing resources for our projects. Thanks to Zdenka Willis (US-IOOS, previous GRA Council Chair) for her persistence on this issue. We can now begin to think about developing a small number of GRA priority projects. Suggest we discuss this at the August intercessional teleconference.

4. **Other GRA business**

- Glenn Nolan (EuroGOOS) gave a well-received presentation on Capacity Development. He will brief the GRA Council at our next intercessional teleconference being scheduled for August 2016. Peter Pissierssens (IOC Capacity Development Coordinator) also gave a presentation, and the POGO talk (by Karen Wiltshire of AWI, by video) had a strong emphasis on training.
- I had a few discussions about where we should hold GRA VIII in 2017. There is enthusiasm for holding it in Latin America in line with our desire to help improve coordination within and across GRAs. The idea of doing something on the back of the February meeting in Miami Florida won't work (too soon, not a good time of the year), but May in Brazil could be a possibility. To be discussed further, and suggestions welcome.
- Note that Denis Chang Seng (IOC Paris) is now providing support to the GRAs from the GOOS Office. We thank Tom Gross (who is retiring) for his support over the years.

Other business of interest to the GRAs

- An update from David Legler (NOAA/JCOMM OCG) was provided early in the meeting to give the SC a sense of the current state of GOOS. OCG is still largely concerned with coordination of physics observations, and additional updates were provided by the BGC and Bio-Eco 'networks', and by me on behalf of the GRAs. It would be good for us to think about how we could present the state of the GRA network at future meetings. Continuing to work with the data portal set up by EuroGOOS/EmodNET (Patrick Gorringe) would seem like a very good place to start.
    - On a related issue, the BGC Panel have identified a need to 'map' BGC observing assets. I think we need to get away from drawing maps and start to use our geospatial information systems to do this, working to international standards. I expressed the same view at the recent GOA-ON Meeting. I offered to work with Maciej Telszewski using IMOS as a pilot because I believe we can already do this.
- A number of excellent updates/presentations were given and are worth looking at on the GOOS website. Particularly, from the three Panels and the GOOS pilot projects, TPOS 2020, DOOS and ATLANTOS.
- One point to note is that the BGC Panel is going to take on Ocean Colour as an EOV. This is important as it was 'falling through the cracks' between BGC and Bio-Eco. The BGC community is better placed to engage on this front, and has an historical relationship with IOCCG (the International Ocean Colour Coordination Group).
- A feature of this meeting was that a number of GOOS sponsors and partners were invited to attend and present – WMO, UNEP, ICSU, GEO/Blue Planet, CEOS, GCOS, GODAE Ocean View, and POGO. Their presentations (also on the website) provide a lot of information.
- A significant item of business was the GOOS Strategic Plan, and Five Year Implementation Plan.
- The Strategic Plan is still under development, and a major issue is whether or not the ocean community wants to get behind GEO Blue Planet. Paul Di Giacomo (NOAA) was in attendance representing GEO Blue Planet, and Barb Ryan from GEO was also in attendance on Day 1. It is recognised that the ocean community needs a coordinating mechanism to better integrate GOOS as the *in situ* ocean observing system with
    - the satellite community (CEOS),
    - the meteorological community (WMO),
    - the climate observing community (GCOS),
    - the ocean modelling/forecasting community (GODAE Ocean View),
    - the scientific institutions (POGO) and science coordinating mechanisms (ICSU) that will drive future innovation, and
    - the assessment community (UNEP/World Ocean Assessment).
- There was a lot of discussion and debate as to whether or not GEO Blue Planet is the right mechanism for this. I had to leave before the meeting ended and will be interested to see how it is written up in the Meeting Report. I think the GOOS SC was leaning towards increased engagement with GEO Blue Planet to make it more representative, to help it set some clear objectives aligned with the GOOS Strategy, and run it as a 'pilot project' over the next few years to explore whether or not this is the best way to pursue the integration that we all seem to agree is required.
- The Draft Five Year Implementation Plan was discussed. I worked with Albert Fischer to develop this during a recent visit to Paris. Again I had to leave before the discussion was wrapped up, but the overall impression seemed to be that it is heading in the right direction. Obviously it will be difficult to finalise the Five Year Implementation Plan until the Strategic Plan is more clearly developed.

- As mentioned previously, Eric Lindstrom is going to lead the charge of organising the third, decadal 'Ocean Obs' conference - Ocean Obs '19. He hopes to secure NASA as the cornerstone sponsor (ESA played that role for Ocean Obs '09 in Venice). While no location has been selected, Hawaii was being openly discussed as a possibility. Given that it is only two years away, a number of projects and programs are beginning to talk about using OO'19 as a key milestone event. The GRA Council will no doubt want to consider how it wants to engage with Ocean Obs '19.

Prepared by: **Tim Moltmann (IMOS Director)**
as Chair of the GRA Council, on behalf of all GRAs
6 June 2016