

## Action Items from SOOPII-II

### 1. SOOP Coordinator and Secretariats

- 1.1 Coordinator to work with France in developing web page, especially to make use of existing French expertise in data linkage to web servers.

➤ Coordinator discussed the issue with Jean Paul Rebert. Web server was implemented for test at IRD, Brest, in June 1999. Web site was formally advertised on 1 October 1999. Coordinator and Jean-Paul Rebert met in Paris in December 1999 to refine requirements regarding web data base and products. Resources might be available from MEDIAS-France to further develop the web site.

- 1.2 GOOS Project office to make every effort to initiate implementation phase of GOOS, in view of the need for several countries to make formal commitments to such implementation.

➤ Initial GOOS commitments meeting was held in Paris, 5-6 July 1999. Meeting noted the following commitments: Operationalise SOOP network, and/or maintain involvement in SOOP and/or VOS lines [Australia, France, Germany, Japan, Netherlands, Russia, USA]; Antarctic observation programme (XBTs, buoys, tide-gauges sea ice measurements) [Australia]; Repeat hydrographic sections (i) on Line P in the Pacific, and on the Labrador section in the Atlantic [Canada]; (ii) of waters around Scotland [UK]; (iii) of the Ireland to Greenland section [Netherlands]; (iv) across the North Atlantic to monitor heat transport by N. Atlantic Current [Germany]; and (v) along 137E and 165E in the western North Pacific [Japan]

- 1.3 WMO and coordinator to continue SOOP monitoring reports, but review and redevelop in the light of operator and user requirements.

➤ Ongoing. Proposals made by Coordinator during intersessional period.

- 1.4 Coordinator to assume responsibility for monthly XBT report currently prepared by NOAA.

➤ Effective since Jan. 1999.

- 1.5 WMO to update SOOP line summary map and distribute to operators and users.

➤ Actually made by Coordinator and available via SOOP web site.

- 1.6 Coordinator to make resources survey and line status maps available on web page.

➤ Effective since Jan-July 1999 survey.

- 1.7 WMO to approach potential new SOOP participants with proposals concerning specific lines and contributions.
- WMO made some overtures to the UK, but without any specific positive responses. Otherwise no action.
- 1.8 Coordinator to make latest versions of all relevant GTS codes available through SOOP web page.
- MEDS is keeping such web pages up to date. Links to MEDS pages added on SOOP web site.
- 1.9 Coordinator and chairman to develop design for web page, for consideration by SOOPIP. Coordinator to propose a site for web page.
- Done
- 1.10 Coordinator, chairman, OOPC and Météo France to investigate development of data availability index maps for sub-surface ocean data.
- Météo France was contacted in this regard. Products not available yet.

## **2 SOOPIP Chairman**

- 2.1 Keep SOOPIP members informed of developments in GOOS/GCOS implementation.
- Ongoing.
- 2.2 Participate in WMO/VOS group meeting and take action to develop coordination between SOOP and VOS.
- Chairman was unable to participate at the meeting at the last minute due to other commitments. However, a written report on SOOP was prepared and forwarded to the meeting by the Chairman. The SOOP secretariats were represented at the meeting. Ongoing discussions on SOOP/VOS coordination are at hand under JCOMM.
- 2.3 Coordinate scientific and technical presentations for SOOPIP-III.
- Done.
- 2.4 Develop a detailed work plan for the coordinator for the present intersessional period, and present an updated version of this to SOOPIP-III (with coordinator and Secretariats).
- Email communication throughout intersessional period on work objectives, including semestrial reports, web site, etc. Future work plan was discussed by Chairman and Coordinator in Melbourne, Nov. 1999. It includes: MK 21 issue; preparatory documents for SOOPIP-III. Proposal on monitoring reports; SOOP

- on-line data base and web site; operators to provide the Coordinator with actual data for monitoring purposes; meta-data issue.
- 2.5 Maintain a close watch on developments with Argo, and develop draft coordination proposals as necessary (with coordinator and Secretariats).
- Action continues.
- 2.6 Finalise SOOP Implementation Strategy and present to GOOS/GCOS IAG session, Paris, November 1998.
- Strategy was presented at the GOOS/GCOS IAG session. Present SOOP Implementation strategy is basically the one which was presented at the CMM/VOS meeting in Athens, March 1999. Plan is available via the SOOP web site at [http://www.ifremer.fr/ird/soopip/general\\_info.html](http://www.ifremer.fr/ird/soopip/general_info.html). Plan should be discussed and reviewed at SOOPIP-III.

### **3 SOOP Operators and SOOPIP members**

- 3.1 Collect information on national sampling activities for non-standard atmospheric variables from VOS, and submit to WMO Secretariat by end December 1998.
- Nothing received at WMO.
- 3.2 UK to resume monthly XBT reports to coordinator.
- Technically difficult for UKHO.
- 3.3 European operators to investigate status of existing XBT sampling in Mediterranean and report to coordinator.
- MFSPP is now participating in SOOP.
- 3.4 France to arrange for GTS distribution of salinity data from existing Atlantic cruises.
- BATOS system installed onboard Antea in Oct. 1999. Transmission in TRACKOB to begin after April 2000 for Antea and Toucan along AX20. Three other ships later.
- 3.5 MEDS to continue existing SOOP monitoring reports.
- Continues to produce monthly monitoring (QC) and JJYY reports.
- 3.6 Operators to check observations made against reports received, on the basis of the monthly monitoring reports, and take remedial action as necessary.
- Ongoing action. Operators contacted by Coordinator.

- 3.7 Operators to update SOOP Resources Survey and return to WMO Secretariat by end November 1998.

➤ Done.

- 3.8 SOOPIP-II participants to urgently investigate possible contributions to the WMO trust fund for the support of the SOOP coordinator, and inform WMO accordingly.

➤ Done. Contributions received from Japan, Germany, USA, and Manufacturers.

- 3.9 MEDS and AOML to develop a system for management of TRACKOB data.

➤ Discussed at meeting and plan agreed.

- 3.10 S. Cook (with R. Bailey, A Sy, J. Gilson) to finalize *Best Practices Guide* and submit to Secretariats for publication before SOOPIP-III.

➤ Guide being finalized by Steve Cook. Draft should be available at SOOPIP-III meeting.

- 3.11 R. Keeley to finalise MG 3 and submit to IOC for publication.

➤ Guide finalised. Guide now being published by IOC. Guide also available via SOOP web site.

- 3.12 C. Henin to finalize *TSG Guide* and provide to coordinator for publication on the SOOP web page.

➤ Done.

- 3.13 Develop contacts with other national sources of XBT data and operational activities and inform coordinator and chairman.

➤ Ongoing.

- 3.14 STT/IQC chairman to prepare analysis and outline proposal for a *SOOP Operations Guide*, for consideration of TT (end 1998), and TT to prepare draft guide by SOOPIP-III.

➤ STT/IQC Chairman is working on it. However, no draft available for SOOPIP-III.

#### **4 SOOP Operators - line management**

- 4.1 US and UK to implement a global line encompassing AX-12, IX-2 and the Pacific route New Zealand to Cape Horn. France and Germany to coordinate coverage on AX-11.

➤ UK: not implemented.

➤ USA: Work in progress. Lines needed for drifter deployments as well.

- France: One vessel on AX11. Sampling reduced to 1 transect per trip according to SOOPIP recommendations.
  - Germany: Germany continues operation of line AX-11 as before
- 4.2 France to rebalance sampling on AX15 and increase sampling on AX05.
- Maintain an adequate sampling on AX15 during the PIRATA pilot phase. Concerning line AX05 contacts are being taken with the company CGM which operates banana carriers between Europe and Antillas.
- 4.3 France to address oversampling on AX-20.
- After deselecting the CARRYMAR, one only vessel (TOUCAN) is operating on this line.
- 4.4 US to attempt to increase sampling on AX-29
- NOAA has identified 3 vessels willing to participate. Awaiting new or recycled equipment.
- 4.5 US to contact South Africa concerning AX-25.
- NOAA has established seasonal coverage with South Africa research vessels for XBTs and drifter deployments.
- 4.6 Shipping is available on IX-9, but resources are presently lacking; Australia and US to address.
- The BOM is keen to proceed. However, (i) BOM technicians are not trained on the maintenance of the non-BoM supplied equipment, and (ii) the BoM is not in a position to supply the XBT probes to cover ships operating on this line.
  - US is in the process of providing Australia with MK-9's that could support that line.
- 4.7 France to try to reactivate line IX-3 as soon as possible.
- All ships operated from Nouméa essentially sail in the Western Pacific Ocean. IRD does not operate ships in the Indian Ocean and this does not seem practicable. It is not envisioned to reactivate the line.
- 4.8 NOAA to continue discussions with NIO (India) with a view to strengthening lines IX-8 and IX-18.
- No progress so far but this can be discussed between USA and India at SOOPIP-III.

- 4.9 France to address question of sampling on IX-19.
- All ships operated from Nouméa essentially sail in the Western Pacific Ocean. IRD does not operate ships in the Indian Ocean and this does not seem practicable. It is not envisioned to reactivate the line.
- 4.10 Australia and Japan to discuss possibilities for enhanced sampling on IX-22.
- Resources were not available from either Australia or Japan to proceed with sampling between Fremantle and Japan by the Japanese Research Vessel - Shirase. Unfortunately Japan has no plan to start new sampling on IX22 nor to provide XBT probes to existing ship(s)-of-opportunity on IX22.
- 4.11 Australia and France to coordinate sampling on IX-1.
- Ongoing. 3 new round the world ships equipped in 1998 with XBT and TSG. Ships are also sampling IX01 and IX10. However, it is likely that Nouméa will no longer drop probes in the Indian Ocean section after January 2000 (probes no longer provided by NOAA). System can, however, be used by other SOOP operators.
- 4.12 US to endeavour to enhance sampling on PX-36.
- NOAA has established seasonal coverage with US icebreakers.
- 4.13 Japan and US to expand PX-26 (Transpac) coverage.
- Two ships-of-opportunity have newly recruited on August 1999 and February 2000, respectively. A total of 4 ships are now in operation under the JMA-NOAA cooperative sampling programme. Furthermore additional two or more ships are under consideration by JMA and NOAA. Some recurring equipment problems mentioned by USA.
- 4.14 Australia, France and US to expand surface salinity networks and ensure data are distributed on GTS.
- Ongoing. Nouméa equipped 3 new ships with TSG, including GOES transmission system. NOAA has expanded about as far as it can. US has no formal TSG programme and in house resources have been severely reduced.
- 4.15 All operators to liaise with relevant national institutions to try to enhance coverage in the Southern Ocean by irregular shipping in these waters.
- Australia: Ongoing.

- France: Possibilities of using the vessel Marion Dufresne of IFRTTP (French polar Institute) on line IX 19 between La Réunion and Kerguelen are investigated. Training and equipment could be provided by IRD. No formal agreement has yet been reached. Test phase planned in 2000 depending on IRD involvement in scientific programmes in La Reunion.
- Germany: From areas not covered by shipping lines BSH arranged to get some data in 1999 from Polarstern (AX-99) and Walther Herwig (AX-98). A second data set which BSH received from Walther Herwig in fall 1999 proved to be erroneous due to serious probe (wire) quality problems and thus was rejected.
- India:
- Japan: no possible ship-of-opportunity in the Southern Ocean.
- MFSP: Not relevant
- UK:
- USA: Has contacted South Africa, Australia, Antarctic Research Group and US Coast Guards.