Reviewd at agenda item, by	No	Item	Action	Ву	Secr	Deadline	Asked	Status
I-2.4, General Review, Secretariat	4	III-3	To publish the national reports provided by the Members as well as the PowerPoint presentations made at SOT-IV on CD-Rom within the SOT annual report for 2006	, ,	WMO	End 2007	Y	Done
I-2.4, General Review, Secretariat	7	I-3.2.4.3	Ferrybox to cooperate with the GOSUD project for dissemination and archiving of the temperature and salinity underway data collected. To make the data available to GOSUD	GOSUD (Loic Petit de la Villeon) ; r Ferrybox (Colijn)	IOC	SOT-V	Y	Contacts made with FerryBox colleagues at NOCS; agreed on setting up a data transfer from the line Portmouth-Spain but for the moment no effective data transfer has been done. Contacts made with Norvegian colleagues from NIVA and they also agreed on providind data to GOSUD. Data transfer must be also set up. GOSUD held its meeting in June. Mr Colijn has been informed through mailing list list about the meeting.
I-2.4, General Review, Secretariat	8	I-4.1.4	To approach the Maritime Safety Committee with a joint document from JCOMM (WMO-IOC) and the International Chamber of Shipping (ICS).	TT/VRPP; Secretariat	WMO	Aug-07	Y	Rolling review of Requirements and Statements of Guidance for global NWP, regional NWP, and Synoptic Meteorology express the need for surface pressure observations (Surface pressure observations are important to anchor the model surface pressure). AOPC-14 (April 2008) acknowledged the detailed reports from the WMO Secretariat and Dr ELizabeth Kent and colleagues on VOS and VOSClim issues. AOPC reaffirmed the great value of the VOS datasets for climate studies. This type of observation remains a key component of the climate observing system. The Panel stressed the need to maintain the operations of the VOS programme and adequate delivery of VOS data to international data centres.
I-2.4, General Review, Secretariat	15	IV-2.1.1.10	To liaise with Russia during the next intersessional period and to seek its participation at the next SOT meeting	Secretariat (WMO)	WMO	SOT-V	Υ	Letter sent to Russian Federation together with request for input for SOT annual report for 2008
I-2.4, General Review, Secretariat	16	IV-2.1.1.11	To help for having the SOT requirements considered by the manufacturing industry	HMEI (Bruce Sumner)	WMO	SOT-V	Υ	Any requirements received from SOT are immediately passed to to all the manufacturers who are members of HMEI. Also passed on are reports of SOT and other JCOMM meeting, and reports and requests from members of SOT. For instances, Robert Luke has contacted HMEI on several occasions with requests for assistance. Also, HMEI cooperating with the WIGOS Pilot Project for JCOMM and solutions being explored in this context.
I-2.4, General Review, Secretariat	17	IV-2.1.2.6	To clearly document software versions on the web sites where the e-logbook software can be downloaded and to provide on-line as well as off-line (onboard, electronic or paper) training tools	providing e- logbooks	WMO	SOT-V	Y	USA: done (increasing training materials)
I-2.4, General Review, Secretariat	18	IV-2.1.2.8	To always record the call sign and/or the VOS ID as assigned by the national meteorological service in the electronic logbooks	VOSP Members operating e- logbooks	WMO	Ongoing	Υ	USA: Done
I-2.4, General Review, Secretariat	19	IV-2.1.2.10	To enhance coordination amongst the Task Teams and cross cutting activities for addressing all the new requirements for IMMT, BUFR, satellite data communications, VOS ID	All relevant TT	WMO	SOT-V	Υ	DMCG created Task Team on Table driven codes including with representation from SOT, ETMC.

I-2.4, General Review, Secretariat	20 IV-2.2.3 and IV-3.6.6	To use the web based Pub47 database system provided by E-SURFMAR for submitting the Pub. 47 metadata to the WMO	VOSP Members who don't already have their own databases and tools	WMO	Ongoing	Y	Australia and New Zealand are using it. Contrary to European NMHSs, they have asked that non-active vessels do not appear in the database and, of course, they keep full control over the submission of quarterly data to WMO.
I-2.4, General Review, Secretariat	22 IV-2.3.2.5	To liaise with USA regarding organization of the Fourth International PMO Workshop in 2009	Secretariat	WMO	Early 2009	Υ	Postponed to 2010 due to lack of funding in 2009
I-2.4, General Review, Secretariat	23 IV-2.3.31	To take steps to enhance their PMO activities	VOSP Members from regions where gaps appear in the PMO network	9	SOT-V	Y	USA: concur
I-2.4, General Review, Secretariat	24 IV-2.3.3.3	To engage with the IMO to ensure that the training syllabus for ship officers (e.g. the Standard of Training and Certification for Watchkeepers (STCW) convention) ensures adequate training in the modern observational practices	SOT Members	WMO	SOT-V	Y	
I-2.4, General Review, Secretariat	25 IV-2.4.1.6	To routinely use the JCOMMOPS QC relation for reporting on systematic errors	y RSMC, Exeter; Quality monitoring centres	WMO	Ongoing	Y	Done. RSMC now routinely (usually weekly) use the JCOMMOPS QC relay tool to report ships with systematic and other errors. Some feedback has been received at the Met Office when errors have been corrected by PMOs on inspection of the ships concerned
I-2.4, General Review, Secretariat	30 IV-2.4.2.6	To continue the developments of the Dirkzwager vessel tracking tools and report on their effectiveness at the next SOT Session	E-SURFMAR. t	WMO	SOT-V	Υ	
I-2.4, General Review, Secretariat	31 IV-3.1.5	To keep the lists of VOS National Focal Points as well as the list of PMOs contact Points up to date based on the submissions from the Members for the SOT annual Report or as advised	Secretariat (WMO)	WMO	Ongoing	Υ	Done
I-2.4, General Review, Secretariat	33 IV-3.2.5	To use a slightly higher limit of 12% for the bias limit criteria for the real time monitoring for relative humidity	VOSCIim RTMC	WMO	ASAP	Y	This was instigated with the 'suspect' list for May 2007
I-2.4, General Review, Secretariat	35 IV-3.3.8	To avoid masking the delayed mode data using SHIP	VOS Operators	WMO	Ongoing	Y	USA: US VOS masked ships delayed mode data is being sent to NCDC & ICOADS in their "REAL" form. NCDC should contiue to provide archive data as GCC. JMA observations (even if originating into GTS as SHIP from NWSTG - are responsibility of JMA for inclusion into climate archives.
I-2.4, General Review, Secretariat	36 IV-3.4.4	To consider the following recommendations by the meeting regarding the display and availability of VOSClim project data on the website: (i) there is a need for maintaining the list of VOSClim ships up to date, (ii) the notification of the recruitment to the DAC must be the date of notification, (iii) a link to VOS web site should be added on the VOSClim web site, (iv) the DAC should keep track of call sign changes (e.g. beginning/ending dates for call signs)	VOSClim DAC	WMO	Ongoing	Y	The project ship list has been consistently maintained and updated as the DAC is notified of new recruits/withdrawals/call sign,name changes/etc. Links have also been added to many VOS sites. I encourage all to check the links page at: http://www.ncdc.noaa.gov/oa/climate/vosclim/links.html and let me know if you have a website for your national VOS activities that you would like added to the VOSClim links. It will only take me a few minutes to add.
I-2.4, General Review, Secretariat	37 IV-3.5.6	To produce the TT-DMVOS project plan	TT/DMVOS	WMO	Aug-07	Υ	Done

I-2.4, General Review, Secretariat	38 IV-3.5.9	Not to mask the delayed mode data	VOS Operators	WMO	Ongoing	Y	USA: Only possible delayed mode data would be from ships who have requested that their observations are NEVER released publicaly. Of course, in this case, that data would not be shared with NCDC or ICOADS anyway so. See also IV-3.3.8 above.
I-2.4, General Review, Secretariat	39 IV-3.5.11	To consider attending the CLIMAR-III workshop, Gdansk/Sopot/Gdynia, Poland, 6-9 May 2008	SOT Members	WMO	May-08	Υ	Some SOT Members attended the meeting (e.g. Brazil, Canada, Croatia, Germany, Israel, Poland, USA, UK)
I-2.4, General Review, Secretariat	42 IV-3.7.1	To investigate whether the VOSClim photographs could be stored with Pub47 Metadata	Secretariat (WMO)) WMO	End 2007	Υ	No resources available at this point for making required developments
I-2.4, General Review, Secretariat	44 IV-3.7.1	To investigate the possibility of including a metadata module in SEAS possibly based on the stand alone TurboWin input module		WMO	SOT-V	Υ	USA: still being discussed with AOML (Derrick) on feasibility & costs)
I-2.4, General Review, Secretariat	46 IV-3.7.1	To consider a way to discriminate between VOSClim and non-VOSClim ships for ships not listed in the VOSClim in case of extending the Principle of all VOSClim data going to one central repository (DAC) to be used for all VOS data.	a	WMO	Mid 2008	Y	NCDC has considered and is prepared to make changes to processing in the event that an agreement is made to differentiate between VOSClim and non-VOSClim ships reporting VOSClim elements. This is currently taking place for the GCC delayed-mode observations, based on the project ship list
I-2.4, General Review, Secretariat	47 IV-4.1.2.7	To negotiate with some of the web sites making ship positions and identification available on their web sites to delay the availability of the data in certain regions to be defined	VOSClim USA	WMO	End 2007	Y	
I-2.4, General Review, Secretariat	48 IV-4.1.2.8	To investigate releasing the delayed mode data using REAL after a period to be defined	VOSP Members implementing SHIP	WMO	End 2007	Υ	USA: Done
I-2.4, General Review, Secretariat	52 IV-4.4.9	To act as a liaison with the manufacturing industry regarding the use of electronic devices meeting SOT requirements	HMEI (Bruce Sumner)	WMO	SOT-V	Y	No information on electronic devices, in particular devices to replace mercury temperature measurement instruments, has been received from SOT. However when such information is received, HMEI has a very effective dissemination mechanism to ensure such information is passed to all members in a very timely manner, and that member responses are collected/collated and passed back to SOT very quickly. Also, HMEI cooperating with the WIGOS Pilot Project for JCOMM and solutions being explored in this context.
I-2.4, General Review, Secretariat	53 IV-4.4.11	To conduct Intercomparisons between the old mercury thermometers and proposed new technology and to pass the results to the TT on Instrument Standards for documentation purposes	VOSP Members; TT/Instr	WMO	SOT-V	Y	USA: none received to date
I-2.4, General Review, Secretariat	57 IV-4.5.6	To make efforts to provide via JCOMMOPS and the mailing lists information on errors found by the Members and the monitoring centres	RSMC, Exeter	WMO	Ongoing	Y	Done. RSMC now routinely (usually weekly) use the JCOMMOPS QC relay tool to report ships with systematic and other errors. Some feedback has been received at the Met Office when errors have been corrected by PMOs on inspection of the ships concerned
I-2.4, General Review, Secretariat	60 IV-5.1.3	To investigate whether SAMOS could become a participant of the US VOS	R. Luke; SAMOS	WMO	SOT-V	Υ	Have been coordinating efforts with Shawn Smith for SAMOS reports. Some ships already providing information in real time. Others are awaiting test & evaluation of NOAA SHIP AutoImet ship observations before we expand to assume a more complete real time data process. The SAMOS data is already available for climate studies.

I-2.4, General Review, Secretariat	68 V-2.3.3	PX-81, Honolulu - Coronel (Chile). The Secretariat agreed to contact the Chilean IOC focal point to identify a correspondant in the shipping industry, to also help in the search for an appropriate ship (report back to SOOPIP Chairperson)		IOC	ASAP	Y	
I-2.4, General Review, Secretariat	69 V-2.3.4	To contact the German research vessel the <i>Polar Stern</i> , to see if they would be willing to perform complementary high-resolution XBT sampling in the Southern Ocean on their CTD sections between Antarctica and Cape Town (report back to SOOPIP Chairperson)	Birgit Klein;	IOC	ASAP	Υ	Birgit Klein - 14/1/2009 : She talked to Eberhard Fahrbach and he saw no problem in finding people to carry out the work but had no resources in the AWI to supply the XBTs.
I-2.4, General Review, Secretariat	70 V-2.3.4	Feedback on the actions decided regarding Polar Stern making high- resolution XBT sampling would be brought to the CLIVAR basin panels by the OOPC Secretariat	Albert Fischer	IOC	End 2007	Y	
I-2.4, General Review, Secretariat	71 V-2.4.1.3	To approach institutions for appropriate representatives, for appropriate members of the group in the intersession to perform their two tasks	Secretariat (IOC)	IOC	SOT-V	Υ	
I-2.4, General Review, Secretariat	77 V-2.6.5	To host documentation once the real-time QC standards are defined for XBT profiles	JCOMMOPS	IOC	End 2007	Y	Done. (i) Added 3 new links on the front page to direct users to the relevant materials, being prepared within NODC; and (ii) Updated the Best Practices and Publications page. http://www.jcommops.org/soopip/publications.html
I-2.4, General Review, Secretariat	84 V-5.2.3	To coordinate procedures for near-real-time insertion of salinity data on GTS	IOCCP; AOML	IOC	End 2007	Y	M Hood, 14/1/2009: IOCCP is a coordination project and does not have any authority over how or whether Pls contribute their data. Depending on Rik Wanninkhof's response (AOML), this may be an issue to bring up with the group writing a VOS carbon white paper for OceanObs09. Rik Wanninkhof (AOML) 14/1/2009: We are excited about the possibility of providing an extra product from our pCO2 measurement campaigns on SOOPs. Off hand I have the following comments: (i) placing SST, and SSS on GTS - Since NOAA OCO is sponsoring the largest SOOP-pCO2 effort, and since Gustavo and I are in the same lab, I suggest that we work out a strategy, and possibly a pilot study that could eventually be expanded to cover all (willing) SOOP-CO2 participants. The logistic details are not trivial; and (ii) Speedy Delayed mode provision of SSS and SST - For the NOAA sponsored program we should be able to work something out to provide data right after we receive the data at the end of cruise (although we will have accommodate the extra [personnel) costs involved). I expect that internationally we could make a plea through IOI
I-2.4, General Review, Secretariat	86 V-5.2.4	To work with the Ferrybox project to allow for near real-time insertion of data onto the GTS		IOC	ASAP	Υ	
I-2.4, General Review, Secretariat	87 V-6.2.1	To seek the representation of Brazil (contact Dr Maricio Mata, FURG) and South Africa (contact Dr Isabelle Ansorge, UCT) at future meetings of the panel	Secretariat (IOC)	IOC	SOT-V	Y	

I-2.4, General Review, Secretariat	89	VI-1.1.14	To provide guidance and to suggest specific areas that should be targeted in order to improve the quality of the global NWP model forecasts	ECMWF (Antonio Garcia-Mendez)	WMO	End 2007	Y	Fourth WMO Workshop on the Impact of Various Observing Systems on NWP, Geneva, Switzerland, 19-21 May 2008 addressed radion-sondes impact. Global wind profiles remain the more important information to observe, at least relatively to the current GOS where the temperature profiles can be indirectly observed by satellite sounders or GPS radio-occultation. Radiosondes in general contribute to the large-scale forecast skill at short and medium-range at a level of 6 hours to 12 hours in the NH and tropical regions, and a few hours to 6 hours in the SH. Radiosondes are relatively more important for regional models than for global models; isolated profiles of wind and temperature (from radiosondes, AMDAR) are crucial for NWP
I-2.4, General Review, Secretariat	90	VI-3.1.1.3	To investigate availability of materials showing the need for radio sonde data in the Southern Hesmisphere and in the North Pacific for satellite calibration	ECMWF (Antonio Garcia-Mendez)	WMO	End 2007	Υ	
I-2.4, General Review, Secretariat	91	VI-3.1.1.4	To notify E-ASAP position errors to Rudolf Krockauer for investigation and tentative correction of the problems	ECMWF (Antonio Garcia-Mendez)	WMO	Ongoing	Υ	
I-2.4, General Review, Secretariat	92	VI-3.1.2.7	To investigate feasibility and to produce the proposed special study special studies on the dissemination of the TEMPSHIPS	Météo France (Gérard Rey)	WMO	ASAP	Y	Because of the recent problems with Goonhilly LES and the route via the station of Aussaguel LES of some messages, some transmission procedures between Aussaguel and Météo-France had to be changed (provider proposing to switch from Telex to e-mail). Meteo France will investigate the results of the backup procedure and propose feedback. Switched to e-mail mode, but no lost messages were noticed and this became lower priority. Asked France-Telecom to send a proposal for a ftp backup (still outstanding).
I-2.4, General Review, Secretariat		VI-3.1.2.9	To go ahead with the required developments and routine production of the ASAP monitoring report	Météo France (Gérard Rey)		ASAP	Y	Done
I-2.4, General Review, Secretariat	98	VI-6.6.4	To discuss the details and practicalities of the Australian reimbursement from the ASAP Trust fund	Secretariat (WMO); Australia	WMO	ASAP	Y	Done
I-2.4, General Review, Secretariat	99	I-5.1.2.8	To make sure that the JCOMMOPS database will remain consistent with the formal version of the WMO Publication No. 47 which resides at WMO	JCOMMOPS	WMO	ASAP	Y	Partly done; awaiting next update of WMO Publication 47
I-2.4, General Review, Secretariat	100	I-5.1.2.10	To investigate providing additional on-line tools to query the Pub47 database and to investigate whether it would be possible and under what condition to restricting access to the Publication	Secretariat (WMO)	WMO	end of 2007	Υ	No resources available at this point for making required developments
I-2.4, General Review, Secretariat	101	I-5.1.2.10	To make every effort to make the compiled submissions routinely available within one month of the due date for the quarterly national submissions	Secretariat (WMO)	WMO	Ongoing	Y	WMO doing its best but there are resources issues preventing this to be effective
I-2.4, General Review, Secretariat	103	I-5.2.1.3	To provide the Secretariat with additional questions to ask Inmarsat if needed	SOT Members	WMO	SOT-V	Y	

I-2.4, General Review, Secretariat	105 I-5.2.1.6	To keep the SOT informed regarding the AIS systems evaluation on moored buoys in order to extend the effective range and for transmitting meteorological data	Robert Luke	WMO	SOT-V	Y	Sarah North representing WMO Ship Observations Team (SOT) in the work of the IMO Correspondence Group on AIS binary messages. United States Coast Guard recently approved phase two of this project to have selected buoys the capability of transmitting warning messages. This phase has not yet been initiated at this time. Phase three is still to contain the two- way communications aspect and there is not any word on funding allocation or even extended discussions at this time.
I-2.4, General Review, Secretariat	107 I-6.2.1.3	To investigate and recommend data transmission codes and content, storage and distribution of data, for META-T Pilot Project data streams specific to ship observations	SOT Members; TT/Codes	WMO	ASAP	Υ	Addressed at the META-T meeting, Sept 2008
I-2.4, General Review, Secretariat	108 I-6.2.1.4	To work with the TT-DMVOS to update the delayed mode exchange format	META-T	WMO	ASAP	Υ	In progress; addressed by META-T (Geneva, 16-17 Sept 2008) and TT-DMVOS meetings (Gdynia, Poland, 10 May 2008)
I-2.4, General Review, Secretariat	114 I-6.3.5	To review the list of JCOMM Publications for those of interest to the SOT or its sub- Panels	SOT Chairperson; VOSP Chairperson; SOOPIP Chairperson; TT/ASAP Chairperson	WMO & IOC	Mid 2008	Υ	
I-2.4, General Review, Secretariat	115 I-6.3.7	To change the Terms of references of the specific Task Teams to include the reviewing the relevant documentation	Secretariat; Task Teams	WMO & IOC	ASAP	Υ	Done
I-2.4, General Review, Secretariat	118 I-8.5.1	To consider contributing to the Ship Consumables Trust Fund administered by the WMO	SOT Members	WMO	Ongoing	Y	No contribution made to the trust fund
I-2.4, General Review, Secretariat	119 I-8.6.1	To submit the proposed revised version of the SOT Terms Of Reference to JCOMM- III for consideration and approval	Secretariat	WMO & IOC	JCOMM- III	Y	Included in JCOMM-III preparatory documentation
I-2.5, SOT TC	1 II-4.1	to provide the results of the XBT Recorder Inter-comparisons study on the SOOPIP web site	SOT TC	IOC	Aug-07	Y	Done, awaiting input from AOML. NOAA is still finalising the Paper for publication, but some information is referenced under XBT Fall Rate equations on the front page, from NODC. This paper should be ready by May and will appear on the NODC bibliography as referenced on the SOOPIP website: http://www.nodc.noaa.gov/OC5/XBT_BIAS/xbt_bias.html
I-2.5, SOT TC	29 IV-2.4.1.9	To provide for a web page summarizing the quality monitoring tools now available and providing appropriate links	SOT TC	WMO	Sep-07	Υ	Partly done. VOS Several links added to http://wo.jcommops.org/cgi-bin/WebObjects/JCOMMOPS.woa/wa/monitoring >> Quality >> Ship Based Observations. SOOPIP Information updated on http://www.jcommops.org/soopip/publications.html for CSIRO and AOML
I-2.5, SOT TC	32 IV-3.1.5	To make sure that the mailing lists maintained at JCOMMOPS are consistent with the lists provided on the WMO web site	SOTTC	WMO	Ongoing	Υ	Done 2/2009. Comparison between www.jcomm.info and sot@jcommops.org, pmo@jcommops.org etc completed. Should be done again in May
I-2.5, SOT TC	73 V-2.4.2.4	To put on the SOOPIP web site's publication section the SIO and AOML manuals for high density XBT equipment set up and operation	SOTTC	IOC	Mid 2007	Υ	Partly done. References added to the SOOPIP Publications page: For SIO (updated 2006) http://www.jcommops.org/soopip/publications.html#IMPL

I-2.5, SOT TC	78 V-3.1.5	To investigate the possibility of streamlining the SOOP survey report with increasing web links	SOT TC	IOC	SOT-V	Υ	Done . Direct links added to the SOOP Indicators application instead of including all of the HTML content in the report.
I-2.5, SOT TC	80 V-3.1.5	To seek advice from the OOPC and the CLIVAR basin panels on the usefulness of the SOOP reports	SOT TC	IOC	ASAP	Υ	Not done. This will be assessed in lead up to OceanObs09.
I-2.5, SOT TC	88 VI-1.1.9	To investigate the issue of JCOMMOPS hosting and maintaining an online ASAP metadata database	SOT TC	WMO	SOT-V	Υ	In progress. http://www.jcommops.org/sot/asapmonitoring.html
I-2.5, SOT TC	95 VI-4.1.3	To include the list of basic factors that need to be taken into consideration when recruiting a new ASAP ship in the ASAP web pages at JCOMMOPS	SOT TC	WMO	Sep-07	Υ	In progress. Contacted Sarah North to receive the list
I-4.1, Chair TT-Satellites	102 I-5.2.1.3	To relay additional questions from the Members of the Task Team on Satellite Communication Systems to Inmarsat and to provide the SOT Chairperson with the answers	TT/Sat; Secretariat (WMO)	WMO	SOT-V	Υ	No other questions have been forthcoming from the TT (yet)
I-4.1, Chair TT-Satellites	104 I-5.2.1.5	To write to the Inmarsat LES operators on a regular basis to check that the list of LES is correct and to provide the information to the WMO for inclusion in the dedicated WMO web page		WMO	Ongoing	Υ	Done. Progress to be reported at SOT-V
I-4.3, Chair TT-ASAP	94 VI-3.1.2.10	To investigate the issue of issue of standardizing TEST ASAP reports and to make proposals	TT/ASAP	WMO	End 2007	Y	Rudolf Krockauer - 15/1/2009: It is assumed that test soundings should only be transmitted to the GTS if they are real data and worth of beeing distributed. Generally there are rather few soundings which are not operational. Most of the TEST soundings were created by the E-ASAP test station at DWD in Hamburg (see also the End-to-end report of the ASAP data dissemination performance 2008, Meteo France) to check and/or configure the system. This station was renamed to ASDE09, following the E-ASAP naming scheme, which is: "AS" for fixed 'ASAP' prefix, + "DE" for 2 char country code, + "09" for number. According to the naming scheme ASDE09 can be identified as German station. All test soundings provided valuable data and were transmitted to the GTS. The proposal for test soundings is: -1-Only real data of good quality shall be transmitted to the GTS2- A fixed station name shall be used for test stations (preferably according to the E-ASAP naming scheme to avoid name conflicts)

I-4.3, Chair TT-ASAP	96 VI-4.1.8	To contact POGO and investigate the issue of having Research Vessels taking part in the activities of the ASAP	TT/ASAP	WMO	Mid 2008	Y	Rudolf Krockauer - 15/1/2009: No ASAP container launcher was reported to be free for research campaigns. Nonetheless, there are some comments: (i) The Shelfbasin exchange campaign of the Research Vessel R/V KNORR (Woods Hole Oceanographic Institution) in October 2008 was supported by E-ASAP by providing radiosondes, balloons, and helium. 32 soundings were received around Iceland; and (ii) In March/April 2009 the German Research Vessel MARIA S. MERIAN will conduct a 3-week research campaign around the Cape Verde Islands in the Atlantic. The vessel will be equipped with an fully functional ASAP container (station ASDE03) which had to be removed from board the Sealand Motivator due to changes in the line service. But the efforts to install and de-install ASAP containers on board should not be underestimated. In case of the MARIA S. MERIAN all costs for transportation of the container to Dakar (Senegal), installation on board of the ship, de-installation after 3 weeks and return to Germany are paid by the Research Institute MARUM in Bremerhaven, not by E-ASAP. Both res
I-4.3, Chair TT-ASAP	97 VI-4.6.1	To carefully check the liability insurances and to avoid launching radiosondes when the ship is sailing closer to 75 nm from the coasts	VOS Members	WMO	Ongoing	Y	USA: N/A as US does not support ASAP at this time.
I-4.4, Chair TT-VRPP	9 l-4.1.5	To consider producing a VOS training video	TT/VRPP	WMO	SOT-V	Υ	No progress
I-4.4, Chair TT-VRPP	58 IV-4.5.6	To consider the editing of training materials such as CD-Roms as well as the organization of training workshops	TT/VRPP	WMO	SOT-V	Υ	PMO-IV possibly organized in 2010 in RA-III or RA-IV
I-4.4, Chair TT-VRPP	59 IV-4.6.3	To investigate the conduction of an impact assessment study of the VOF in liaison with other appropriate bodies and to report at the next SOT Session.		WMO	SOT-V	Υ	Document submitted to AOPC
I-4.6, Chair TT-Codes	6 l-2.1.14	To provide guidance to the ETMC regarding GTS distribution in BUFR code, in particular: (i) whether BUFR is going to be assembled on board or at the local receiving NMSs before being inserted into the GTS, and (ii) if on board, which BUFR template should be used.	TT/Codes	WMO	Sep-07	Υ	Issue being adressed by the DMCG Task Team on Table Driven Codes
I-4.6, Chair TT-Codes	106 I-6.2.1.2	To liaise with the META-T in order to take the META-T requirements for category 1 metadata into account when defining BUFR templates for ship data	TT/Codes; TT/Instr; META-T	WMO	ASAP	Υ	Considered at the META-T meeting in Sept 2008. Derrick Snowden (META-T Chair) & Robert Luke discussed this in March 2009
I-4.6, Chair TT-Codes	109 I-6.2.2.3	To submit any required changes to BUFR tables and templates to the JCOMM DMPA Table Driven Codes Task Team (TT/TDC) for consideration by the CBS Expert Team on Data Representation and Codes		WMO	End 2007	Υ	Issue being adressed by the DMCG Task Team on Table Driven Codes
I-4.6, Chair TT-Codes	112 I-6.2.2.4	To make recommendations to the DMPA TT on TDC regarding improving consistency between the Argo and XBT templates	TT/Codes	WMO	End 2007	Υ	Issue being adressed by the DMCG Task Team on Table Driven Codes

I-4.7, Chair TT-Instruments	5 I-2.1.13 and IV-3.5	5.7 To conduct a comparison study of electronic logbooks (including algorithms, and documenting the calculation methods of dew point for historical purposes), with participation from both SOT and ETMC	TT/Instr	WMO	SOT-V	Υ	Done. Electronic Log book comparison is complete and will be included i TT - Inst report. The dew point calculation information has been forwarded to ETMC for their review
I-4.7, Chair TT-Instruments	113 I-6.3.2 and I-6.3.6	To continue the efforts of developing high quality best practices for the VOF with the goal of publishing them as a JCOMM Technical Report during the next intersessional period			SOT-V	Υ	Still under review.
I-4.7, Chair TT-Instruments	116 I-6.3.7	To investigate how the different publications or technical documents dealing with best practices could be better integrated into fewer number of documents or into existing ones	TT/Instr	WMO & IOC	SOT-V	Υ	Inadvertently overlooked. Will begin collating information asap.
I-4.9, Chair TT-VOSClim	2 II-4.5	to provide VOSClim uncertainty maps and time series of uncertainty	TT/VOSClim	WMO	End 2007	Υ	Not yet done, but should be available for SOT-V
I-4.9, Chair TT-VOSClim	41 IV-3.7.1	To consider how many observations are needed from the VOSClim yearly	TT/VOSClim	WMO	End 2007	Υ	Not yet done, but should be available for SOT-V
I-4.9, Chair TT-VOSCIim	45 IV-3.7.1	To revise the VOSClim brochure	TT/VOSClim	WMO	Mid 2008	Υ	Decision whether to revise the brochure should be delayed until consideration of VOSClim best practices at SOT-V
I-4.9, Chair TT-VOSClim	117 I-6.3.7	To consider adopting VOSClim best practices more generally under the VOS scheme	TT/VOSClim	WMO	SOT-V	Υ	Will outline this issued in the VOSClim Task-Team report, with reference to the proposed changes to GCC data flows and ET-DMVOS plans. To be discussed at SOT-V.
III-1.2, Chair VOSP	3 II-4.5	To include VOS ships providing good quality data in the VOSClim provided that appropriate metadata are made available	VOS Operators	WMO	Ongoing	Υ	USA: US VOS still continuing to increase its VOSCLIM recruitment (albeit slowly)
III-1.2, Chair VOSP	10 I-4.4.2	To check the VOSClim project website (recently updated) to verify ships and call sign changes to make sure that none are missing	VOSClim operators	WMO	Ongoing	Υ	
III-1.2, Chair VOSP	11 IV-1.1.12	To work with WMO in order to identify active ships and remove the historical records from WMO Pub. 47 for ships which are not active anymore	VOSP Chairperson; Secretariat (WMO)		Mid 2008	Υ	Done
III-1.2, Chair VOSP	12 IV-2.1.1.6	To fill in the VOS automation fields in their submissions of WMO Publication 47 metadata as of 1 July 2007 as the new format that will come into force by then will permit the inclusion of such information	VOSP Members	WMO	01-Jul-07	Υ	USA: Done
III-1.2, Chair VOSP	13 IV-2.1.1.7	To increasingly implement automated systems on the fleet while at the same time recognizing the requirements expressed by the ETMC that traditional variables that can only be observed manually should continue to be submitted	VOSP Members	WMO	Ongoing	Υ	USA: Done
III-1.2, Chair VOSP	14 IV-2.1.1.8	To review and correct the data in the document presented by the Chairperson and to provide the Chairperson with details of any automated VOS systems that are not included in this report	VOSP Members	WMO	SOT-V	Υ	USA: Done
III-1.2, Chair VOSP	21 IV-2.2.4	Interested Members to contact Pierre Blouch to obtain copies of the half compressed data transmission software	VOSP Members	WMO	Ongoing	Υ	Only Météo-France is using the software but they have very few conventional vessels as almost 100% of the French fleet is automated.

III-1.2, Chair VOSP	26	IV-2.4.1.6	To make use of the available tools to monitor the quality of the VOS data and to provide feedback to ships on how to improve bad data, and to use the monthly VOS status maps to identify data sparse areas where more ship observations are required	VOS Programme Managers; PMOs	WMO	Ongoing	Y	USA: done
III-1.2, Chair VOSP	27	IV-2.4.1.6	To advise the RTMC (email to obsmon@metoffice.gov.uk) of investigations undertaken into the causes of bad data identified on the VOSClim Suspect List and to report on the corrective actions taken	VOS Programme Managers	WMO	Ongoing	Y	Done
III-1.2, Chair VOSP	28	IV-2.4.1.6	To provide a summary of corrective actions by email to the VOSClim RTMC	PMOs; VOS Focal Points	WMO	Ongoing	Υ	To be reported at SOT-V
III-1.2, Chair VOSP	34	IV-3.2.6	To provide details of remedial actions taken to the DAC by email	PMOs	WMO	Ongoing	Υ	To be reported at SOT-V
III-1.2, Chair VOSP	40	IV-3.7.1	To make efforts to increase the number of observations and the number of VOS ships recording the additional parameters		WMO	Ongoing	Υ	USA: Done
III-1.2, Chair VOSP	43	IV-3.7.1	To directly submit metadata to the RSMC, Exeter on a monthly basis in addition to the quarterly submissions to WMO		WMO	Ongoing	Υ	E-SURFMAR (50% of the VOS fleet) ready for submitting metadata for European VOS or providing access rights to RSMC for the E-SURFMAR metadata database. USA: Need to research this a bit longer
III-1.2, Chair VOSP	49	IV-4.3.4	To routinely check the multiple recruited ship list available from the URL http://www.meteo.shom.fr/vos-monitoring/multi-recruit.html and to attempt to reach an agreement to determine which country should be assigned future responsibility for the indicated ships on the 'multiple recruitment' list	VOSP Members	WMO	Ongoing	Y	Météo-France does not recommend using this application anymore and it is about to be removed because it is based on WMO Pub47 which is not always up to date. However, E-SURFMAR database can be used to that end at least for the European, Australian, and New Zealand vessels (recorded in this database). An SQL query can easily be written for listing all multiple recruited ships. There are none on 16/1/2009. PMOs are invited to check the database if a vessel they are planning to recruit is not already recorded in the database and recruited by another country. All NMHSs, including non-European are encouraged to use this application in read/write mode to optimize the query of multiple recruited ships. USA: Done
III-1.2, Chair VOSP	51	IV-4.4.8	To consider providing mercury spillage kits on ships where mercury remains in use in order to mitigate risks associated to health and safety for the ships, the observing officers and ship's staff, and for the PMOs	VOSP Members	WMO	Ongoing	Υ	USA: concur - all mercury is/being removed form US VOS vessels
III-1.2, Chair VOSP	54	IV-4.5.4	To advise the extent of data rejections in the countries hosting Inmarsat LES in order that a clearer assessment of the extent of the problem can be determined, and to report to the VOSP Chairperson	VOSP Members	WMO	SOT-V	Υ	USA: in queue to be completed
III-1.2, Chair VOSP	55	IV-4.5.5	To make use of the JCOMMOPS quality information relay web page or mailing lists to inform the VOS operators about persistent e-logbook problems and to set up the data processing software routines to automatically relay rejected messages back to the VOS recruiting country focal points	VOSP Members	WMO	Ongoing	Y	USA: concur

W 4.0. Ob -:- VOOD	50 11/450	To involve and a constitute available of	VOOD Marsh	14/14/0	COTV	V	LICA: David
III-1.2, Chair VOSP	56 IV-4.5.6	To implement appropriate quality control checks in e-logbooks	VOSP Members		SOT-V	Υ	USA: Done
III-1.2, Chair VOSP	61 IV-5.1.3	To provide comments on the Guide to making climate quality meteorological and flux measurements at sea to Shawn Smith	VOSP Members	IOC	End 2007	Y	USA: concur
III-1.2, Chair VOSP	62 IV-5.1.4	To consider making more SST observations in support of GHRSST while recording appropriate metadata including measurement type and the depth of the instrument	VOS Operators	WMO	Ongoing	Y	USA: okay - will comly as much as feasible
III-1.2, Chair VOSP	63 IV-5.2.2	To liaise with the WMO Secretariat regarding updating the MSC circular 1017 to include ship owners and masters concerns regarding VOS data exchange.	VOSP Chairperson; WMO	WMO	MSC-83	Υ	Done
III-4.4, Chair VOSP	50 IV-4.4.7	To aim at phasing out the future supply of mercury thermometers to observing ships	VOS operators	WMO	Ongoing	Υ	USA: Ended that process in 2002.
IV-1.2, Chair SOOPIP	64 V-2.2.1	To contribute to the trust fund and to set priorities and a workplan for the XBTs that could be purchased by the Trust Fund, should donations be received	SOOPIP Members	IOC	SOT-V	Υ	No contribution made to the trust fund
IV-1.2, Chair SOOPIP	65 V-2.3.3	AX-15, Europe - Cape of Good Hope. Gustavo Goni noted that a Spanish university was running a TSG on a ship on this route, and that he would contact them to see if XBT sampling was possible (report back to SOOPIP Chairperson)	Gustavo Goni;	IOC	ASAP	Υ	
IV-1.2, Chair SOOPIP	66 V-2.3.3	PX-36, Christchurch – McMurdo. The Panel noted that the <i>Palmer</i> plied this route occasionally, and Pezzoli agreed to contact the Palmer to see if they were willing to perform XBT sampling in the Southern Ocean (report back to SOOPIP Chairperson)	Glenn Pezzoli;	IOC	ASAP	Y	The Palmer seems to be relegated to the South American side for the foreseeable future, with the demise of the Gould - NSF has decided not to renew the Gould's contract past May. Glenn Pezzoli has just returned from upgrading the Palmer's XBT computer while in Punta Arenas for the Revelle (Argo), and she isn't intending to cross the Pacific back to NZ anytime soon (thru 2010). SIO hopes that changes. Glenn has heard rumors that NSF might be reconsidering its decision to cut the Gould loose. If they reverse this decision that may free up the Palmer to resume support transects to McMurdo. Glenn is beginning to look into what vessels might be calling McMurdo and other stations that side, for Argo deployments there (not XBT). Glenn will inform SOT-V if any of these look like good candidates for XBTs. If anyone knows of any such ships good for Argo, he'd really like to hear from them.
IV-1.2, Chair SOOPIP	67 V-2.3.3	PX-81, Honolulu - Coronel (Chile). Pezzoli noted that the ships on this line had ceased calling in Hawaii. Pezzoli and Fujimoto agreed to search for a ship that did the Japan to western coast of S. America route nonstop (report back to SOOPIP Chairperson).	Glenn Pezzoli; Toshifumi Fujimoto	IOC	ASAP	Y	There may be a few wood chip carriers calling HNL onward to Chile on occasion, but this is at the bottom of our list. Must check with the HNL agents. There was the odd ship calling for bunkers but it seemed a one-off. Replacing our ships going off trade, consolidating our work in the Indian ocean, and restoring p50 is our highest priority. Once SIO gets that sorted then SIO will look to re-starting p05. P81 HNL-Chile might follow that if SIO still has the resources.

IV-1.2, Chair SOOPIP	72 V-2.4.1.4	To record the launch system type, the probe type, the serial number, and the date of manufacture of the XBT in the metadata, to help if a future determination of the fall rate equation is found to depend on one of these variables	SOOP operators	IOC	Ongoing	Y	
IV-1.2, Chair SOOPIP	74 V-2.5.5	To send a certificate of appreciation to the		IOC	ASAP	Υ	
IV-1.2, Chair SOOPIP	75 V-2.5.5	ship of IX08 To insert the data from IX08 into the GTS	chairperson Gopalakrishna;	IOC	ASAP	Υ	
			Gustavo Goni				Despiter efforts, IX-8 line (Bombay - Mauritius) could not be resumed (cabin accommodation not provided due to intense Piracy Problem in the East African Coastal region). Hence NIO could not put the XBT data on GTS. However, the XBT data collected in the Bay of Bengal IX-14 is being sent to AOML with in 30 days after collection for GTS insertion. NIO is constantly in touch with various shipping companies and requesting for placement to resume IX08. More detail to be provided at SOT-V.
IV-1.2, Chair SOOPIP	76 V-2.6.5	To consider adopting and improving Argo QC procedures to achieve an homogeneous standard for automated real time QC of XBT profiles before insertion on GTS	-	IOC	End 2007	Υ	Ann Gronell Thresher (15/1/2009): The Argo QC procedures aren't directly applicable in many cases to the XBT data (impossible speed, digit rollover, stuck value, density inversion, grey list, temperature sensor drift) but some are (impossible date/time/location tests, gradient tests, spike test) so I'll work on a manual that incorporates these tests as well as any more I can think of and send it for review.
IV-1.2, Chair SOOPIP	79 V-3.1.5	To provide ongoing feedback to the TC on the usefulness of the SOOP survey report	SOOPIP Members	IOC	ASAP	Υ	
IV-1.2, Chair SOOPIP	81 V-3.3.1.11	To work on a unified definition of scientific QC for the delayed-mode data stream	SOOPIP members involved in GTSPP		End 2007	Y	
IV-1.2, Chair SOOPIP	82 V-3.3.1.11	To investigate submitting a proposal to NOAA's Data Stewardship Program to restart the GTSPP based at NOAA/NODC	Gustavo Goni; Charles Sun	IOC	ASAP	Y	
IV-1.2, Chair SOOPIP	83 V-4.1.7	to serve on the organizing committee for an Upper Ocean Review	Gustavo Goni	IOC	2009	Υ	Liaising with organizing committee
IV-1.2, Chair SOOPIP	85 V-5.2.3	To urge IOCCP to release salinity data to data archives in a timely manner	SOOPIP Chairperson	IOC	ASAP	Υ	See action V-5.2.3
IV-1.2, Chair SOOPIP	110 I-6.2.2.4	To develop and test the encoding of XBT and TSG data and associated metadata in BUFR using trial BUFR templates	AOML	WMO	End 2007	Y	New template discussed at the XBT fall rate workshop; AOML has been encoding/decoding XBT and TSG BUFR bulletins using ad-hoc templates. Some preliminary tests made with NCEP and AOML files could be decoded successfully. AOML's work is now focusing on integrating the BUFR encoding tasks within their operational framework. AOML will provide additional details about this work at SOT-V
IV-1.2, Chair SOOPIP	111 I-6.2.2.4	To initiate work for eventually transmitting XBT data on GTS in BUFR format and to liaise with AOML in order to benefit from its experience in this regard		WMO	SOT-V	Υ	