WORLD METEOROLOGICAL ORGANIZATION

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (OF UNESCO)

JOINT WMO/IOC TECHNICAL COMMISSION FOR OCEANOGRAPHY AND MARINE METEOROLOGY (JCOMM)
SHIP OBSERVATIONS TEAM (SOT)

SOT-8 / Doc. 4 (16.04.2015)

ITEM: 4

EIGHTH SESSION

CAPE TOWN, SOUTH AFRICA, 20-24 APRIL 2015 Original: ENGLISH

REVIEW OF ACTION ITEMS FROM SOT-7

(Submitted by Martin Kramp (SOT Technical Coordinator, JCOMMOPS))

Summary and purpose of the document

This document provides for a review of the action items that arose from the seventh Session of the SOT (Victoria, Canada, 22-26 April 2013).

ACTION PROPOSED

The Team will review the information contained in this report, and comment and make decisions or recommendations as appropriate. See part A for the details of recommended actions.

Appendices: **A.** Action items and recommendations from the previous SOT session, which still required the team's attention at the time of SOT-7

B. Status of action items from SOT-7

References: A. JCOMM MR No. 97¹, Final report, seventh Session of the SOT, Victoria, Canada, 22-26 April 2013.

^{1:} http://www.jcomm.info/index.php?option=com_oe&task=viewDocumentRecord&docID=12222

- A - DRAFT TEXT FOR INCLUSION IN THE FINAL REPORT

4.1 The SOT Technical Coordinator, Mr Martin Kramp (JCOMMOPS) provided an overview of the list of action items from the seventh Session of the SOT, Victoria, Canada, 22-26 April 2013 (annotated with completion status in Appendix A). All action item leaders had been provided with a personalized list on 5 February 2015 with a request to provide feedback before SOT-8. The meeting noted that about XXX% of the actions had been successfully completed, or addressed. A number of the open or ongoing action items are being addressed during this Session (SOT, VOSP, SOOPIP chairpersons' reports, reports by the Task Teams).

Appendix: 2

Appendix A

ACTION ITEMS AND RECOMMENDATIONS FROM THE PREVIOUS SOT SESSION, WHICH STILL REQUIRED THE TEAM'S ATTENTION AT THE TIME OF SOT-7

Part 1 – Action items undertaken by individuals or the Task Teams

	No	Ref	Action item	Ву	Lead	Deadline	Status	%
								completed
Appendix A Part One							Average Percentage of actions completed:	
	1	2.2(6-3)	The Team agreed that the roles of JCOMM and OceanScope with regard to the WOC had to be clarified relatively quickly		G. Ball	June 2011	Done. Completed in preparation for WOC sponsored meeting attended by Sarah North for SOT.	
	2	10.1	The TTIC to complete the modulation of	TT IC	H. Kleta	end 2011	A succed to produce a such page listing	90
		3.1.4.3(c)	The TT-IS to complete the production of a JCOMM Technical Report to include guidelines on standards for instruments (including a list of related WMO, UNESCO/IOC, and national publications for each of the SOT programme components) and high quality best practices for the Voluntary Observing Fleet (VOF) and the Ship Of Opportunity Programme (SOOP)				Agreed to produce a webpage listing relevant existing documentation, and to keep it updated as needed. Ongoing -> final decision of actual website pending.	
	3	3.1.4.3(e)	The TT-Satcom to consider the technical implications related to the compatibility between AIS equipments and observation stations	·		end 2014	No progress during the intersessional period. See also action 77. Proposed realistic way is to assure communication between S-AWS and AIS. S. North suggested to change deadline to end 2014 (instead of end 2013)	
	4	3.1.4.4(b)	Continued review of relevant chapters of the WMO Publications No. 8, No. 471, and No. 488		H. Kleta	SOT-7	Review of WMO No. 8 underway per action item No. 118 Ongoing, but no discussion since last SOT, so maybe to be closed.	

5	3.1.4.4(e)	The Team also strongly supported the DBCP/SOT drifter donation programme in support of the VOS Scheme for developing countries (VOS-DP) and requested the Programme Evaluation Committee (PEC) of the VOS-DP to act proactively in this context		S. North		Included in SOT Implementation Strategy. However, while the programme is well defined, documented, and the PEC ready to act, it has not lead to effective use of the offered resources	
6	3.4.13	the SOT TC to assist in making Research Vessel marine meteorological and oceanographic data available on GTS		M. Kramp	ongoing	vet. Discussion scheduled in April 2013	50
7	5.1.1.7	to work with the JCOMM OPA Coordinator develop metrics of intensity of effort in maintenance of the observing networks - on the PMO network, on VOSClim class growth, or on SOOP line maintenance, recalling the need to keep the metrics simple to calculate	SOT, VOSP, SOOPIP chairs, and SOT TC	M. Kramp	ahead of JCOMM-4	Not done. To be addressed at SOT-7	0
8	5.2.2.3	Mr. Smith will coordinate this activity (SAMOS ship data on GTS) with the U.S. VOS program		S. Smith		Initiated conversation with U.S. VOS coordinator (Wasserman). Compared data transmitted via GTS by vessels participating in SAMOS that are also recruited to VOS. Noted vessels that need to be contacted by U.S.VOS to determine why data are not being transmitted. Funding cuts have not allowed SAMOS data centre to pursue placing subset of SAMOS observations on GTS to date. Update SOT-8: Continued conversation with Paula Rychtar (U.S. VOS) and determined that all RVs contributing to SAMOS are already submitting VOS reports. We decided that it was not beneficial or cost effective to place SAMOS reports on the GTS. Instead we plan to evaluate GTS reports against quality controlled SAMOS reports as time and funding allow.	

9	5.2.2.4	Investigating using the PMO to collect the R/V Smith metadata, including identifying challenges and Wass benefits of a potential joint activity		SOT-7	Initiated conversation with U.S. VOS coordinator, but no action has been taken. May be topic of conversation during SOT-7. Update SOT-8: Some additional conversation with Paula Rychtar over the past 2 years, but looks like this is not the best mechanism. Paula has collected additonal metadata for several NOAA RVs and is working to improve metadata collection for U.S. RVs. Suggest closing this action and revisiting topic in future.	100
10	5.2.5.2	The Team noted the positive energy of the SOO OceanScope Working Group, but stressed VOS that it was important to build a future program also based on existing infrastructure and institutions, including the work of the Team. It was desirable to present a unified voice of all actors in ocean observations from commercial ships to the shipping industry. The Team decided to comment along these lines when the OceanScope report was made public for comment	SP, and	by OceanScope comment deadline presumed mid-2011	No action. No recollection of the Oceanscope report being provided.	0
11	6.4.7	TT-Pub47, the ETMC, and the DBCP TT on TT-P Moored Buoys to coordinate between themselves in liaison with the DMCG and make sure that the requirements for Rigs and Platforms metadata, and for automated systems installed on offshore platforms in particular are well considered	Pub47 G. Ball	SOT-7	No action. No request from DBCP for assistance.	0
12		TT-IS to continue to collect information from TT-IS AWS systems used by SOT members in the view to have sufficient materials to eventually perform the intercomparison and be able draw significant conclusions from the available information		SOT-7	Closed; not realistic, can be deleted.	0
13	7.2.1.7	available dedicated monitoring tools for the VOSClim status	M. Kramp	SOT-7	Done	90
14	7.3.2.3			SOT-7	Some limited progress See also actions 42 and 43.	30

			Session				S. North made presentations to the ICS in 2010 and WOC in 2011 but these unfortunately haven't borne any fruit. SOT-7 invited to formally agree to make a WMO submission to IMO requesting that they pursue this issue in the interests of ensuring continued observations and safety of life at sea.	
-	15	8.2.5.3(5)	creating and maintaining a bibliography of publications using TSG data	Chair to negotiate with IRD and/or Coriolis to host		SOT-7	In Progress See IRD website. Loïc to provide URL	50
7	16	9.1.1.15	the VOSClim Focal Point to consider whether the VOSClim website should be closed, related information included in the VOS web site, including monitoring information, and list of ships	VOSClim FP	J. Wasserman	SOT-7	Keep the website. More information to come through new NFP.	0
7	17	9.1.6.6 (2).	continue the production of metrics in support of the JCOMM Observations Programme Area (OPA) and the SOT		C. Sun	ongoing	The GTSPP partner in Canada performs this task Ongoing.	50
	18	9.2.5.7	The Team invited E-SURFMAR to make its database of VOS metadata available in real-time to all VOS operators for the benefit of the WMO and IOC Applications, and requested the WMO Secretariat to write to E-SURFMAR in this regard	WMO	E. Charpentier	asap	Done. Secretariat wrote to E-SURFMAR in February 2013 requesting to make DB available in real-time, and to report at SOT-7. In addition, it is planned to integrate Pub47 into OSCAR, and SOT-8 will be invited to advise in this regard. ftp://esurfmar.meteo.fr/pub/Pub47/PUB 47 export esurfmar database active vos v3a.csv	100
,	19	10.2.1(1)	to legacy recommendation 2, the Team agreed to contribute to the review of WMO and IOC Publications through its Task Team on Instrument Standards, and other Task Teams as appropriate	TT-IS	H. Kleta	SOT-7	David Meldrum working on the Publications and consulting with OPA Panels. Should be done, more information will follow.	50

20	10.2.7	The SOT requested the TT-IS, in liaison with other Task Teams as appropriate, and in a way consistent with the strategy proposed by the JCOMM Pilot Project for WIGOS, to participate in the efforts to further update the above publications as well as IOC M&G No. 4 & 26, WMO No. 544 & 488	H. Kleta		Ongoing, but no discussion since last SOT.	0
21	11.1.5.2	Pending receipt of information, Candyce Clark (USA) to follow up the situation regarding whether artificial delays of 48h delay is introduced for making the GTS VOS data available via the Sailwx and others, and provide feedback if needed	C. Clark		Keep action. New OCG chairs require more background information. NDBC to identify the source of GTS data for Sailwx	25
22	section)	TC to discuss with SOOPIP Chair the content of the SOOP semestrial yearly survey, and how the work for its production can be shared	M. Kramp	asap	Discussion took place in April 2013 between SOT TC and AOML. Tools in preparation in cooperation between JCOMMOPS and AOML.	0

Part 2 – Action items undertaken by SOT, VOS, SOOPIP members, PMOs, and manufacturers

		No	Ref	Action item	Ву	Lead	Deadline	Status	%
									completed
ĺ	Appendix A Part Two							Average Percentage of actions completed:	18.75
		1			SOT members	SOT NFP	SOT-7	Update at SOT-8	0

2 7.1.2.4	Members to consider providing financial resources through the VCP in support of PMO workshops	SOT members	SOT NFP	2014	No feedback as of January 2013	0
3 9.2.1.3(4) End of 2012: Migration to BUFR completed, and stopping of GTS distribution of VOS data in FM13 SHIP format	SOT members	SOT NFP	end 2012	Update at SOT-8	0
4 9.3.4	The meeting invited its members to provide feedback to the WMO Secretariat, E-SURFMAR, and JCOMMOPS regarding any remaining timeliness or residual WMO resource issues to ensure continuing satisfactory metadata availability for marine climatology in the future	SOT members	SOT NFP	ongoing	Update at SOT-8	75

APPENDIX B

STATUS OF ACTION ITEMS FROM SOT-7

	No.	Ref.	Action item	Ву	Deadline	Status	% completed
Appendix B						Average Percentage of actions completed:	
	1	2.3(3)	To organize Webex training for PMOs on the use of the E-SURFMAR database	P. Blouch	end 2013	No WebEx training could be organized during the intersessional period. It is propose to postpone this action	0
	2	3.1.3.2(f)	To lead the SOT Pilot Project for the Indian Ocean, set up a Steering Team tasked to develop a workplan for the Pilot Project, and to report at the next SOT Session on the outcome	A. Mafimbo	SOT-8	No feedback by 16 April	
	3	3.1.34	To include SOT perspectives detailed in paragraph 3.1.3 regarding the JCOMM Observations (OPA) and Data Management (DMPA) Programme Area priority activities for this JCOMM intersessional period (2012-2016) into the SOT Implementation Strategy	SOT Chair	asap	Done. SOT Implementation Strategy updated in conjunction with WMO.	100
	4	3.1.4.1	To collaborate as needed to the identified WIGOS implementation activities	Team members	2016	Update at SOT-8	
	5	3.2.3	To report an appropriate metric that demonstrates how well they are meeting the GCOS performance indicator	SOOPIP & VOSP Chairs	Aug. 2013	Plan to propose a new metric for VOCLim activity at SOT 8	30
	6	3.2.7	To reply to Bob Keeley's queries regarding assessment of the current data system	SOT members	SOT-8	Done	100

7	5.1.2.4	To provide feedback to the Contact Point for Ocean Applications regarding the difficulty to make precipitation measurements from ships, and the need to update the SOG for ocean applications accordingly	Secretariat	asap	Done	100
8	5.1.2.4	To discuss the need for precipitation measurements over the ocean, and to make recommendations on how to possibly address them	C. Clark	Aug. 2013	WMO recommendation to have a discussion at OCG-6 regarding the non climate (or additional) requirements, which are essentially addressed through the WMO Rolling Review of Requirements (RRR) and the 12 WMO Applications Areas	
9	5.2.2.3	To contact NOAA and U.S. university research vessels not presently transmitting via GTS to recruit them as VOS (or VOSClim as appropriate)	US VOS	asap	All NOAA ships are participating in VOS. 16 vessels in all. 4 VOSClim. Currently we have 22 research vessels operated by universities, National Science Foundations and the like. NOAA ships sending observations using 95% SAMOS data over the GTS.	
10	5.2.2.7	To identify and define a set of standard quality control procedures for underway thermosalinograph (and additional flow through sensor) data	TT-IS & SOOPIP	SOT-8		25
11	5.2.4.8	To forward Dr. Reynolds contact details to the SOT chair	S. Smith	May 2013	Done	100
12	5.2.4.8	To contact Dr. Reynolds as needed to obtain information relevant to GHRSST activities	SOT- GHRSST WG	TBD	No feedback by 16 April	
13	5.2.5.7(i)	To consider nominating themselves to GOOS as prospective members of the WOC joint industry/science SO/SI Steering Committee in order to ensure that there is adequate participation from governments and international agencies in this committee		asap	Update at SOT-8	
14	5.2.5.7(ii)	To work with the WOC to develop a list of key companies involved in voluntary observations	TT-VRPP	Jul. 2013	No contact with WOC yet but their shipowner members are listed on WOC website	

15	5.2.5.7(iv)	To assist the Task Team on Instrument Standards (TT-IS) in order to facilitate the design of ships, other vessels and other offshore facilities (e.g. aquaculture, wind farms) that would make the installation of marine meteorological and oceanographic instrumentation easier it invited the WOC to facilitate acceptance of generic ship design by shipping companies so that they can assist in this regard through classification societies and	Woc	SOT-8	Update at SOT-8	
16	5.2.5.7(v)	To assist the Task Team on Satellite Telecommunications Systems (TT-Satcom) to explore how to best achieve cost effectiveness and cost efficiencies for voluntary observation and data telecommunication costs	WOC	SOT-8	Update at SOT-8	
17	5.2.5.8	To assist the WOC by providing input through the SOT TC for the preparation of inventories of observation programmes and instrument types	SOT TC	SOT-8	Ongoing	50
18	6.1.7(i)	To closely work with Inmarsat Safety Services team and IMSO to propose a new method for conventional VOS to report their observations ashore using the GMDSS FleetBroadband terminals	TT-SatCom	SOT-8	No progress during the intersessional period. TT-SatCom informed that FB is not GMDSS approved yet and that Inmarsat intends to keep Inmarsat-C up and running for at least another 7-8 years.	0
19	6.1.7(ii)	To closely work with DMPA/ETMC to define a binary ship-to-shore dataformat (#101) to be used by conventional VOS in the future	E-SURFMAR		Done. Implementation in TurboWin is ongoing. Action closed.	100
20	6.1.7(iii)	To continue to monitor the ways used by VOS and SOOP ships to report their observations ashore and to report the results during SOT sessions		SOT-8	Done. Routine action. Results to be presented at SOT-8	ongoing
21	6.3.3(i)	To liaise with the ETMSS Secretariat and keep the Task Team informed of relevant developments concerning the 2013 MMM Survey	TT-VRPP Chair and WMO/ETMS S Secretariat		MMM survey issued but no liaison with ETMSS - As we are developing our own VOS questionnaire there will be little of relevance in the MMM survey	
	6.3.3(ii)	To draft a new survey/questionnaire directed at the VOS observers and shipowners with a view to assessing the performance of VOS Scheme for	Chair	SOT-8	Draft questionnaire will be sent to TT with a view to finalising for approval at SOT8	25
23	6.3.3(iii)	To include a link to the E-SURFMAR articles on the VOS website	SOT Chair	asap	Not done. The link provided was to a password protected page and it wasn't considered appropriate therefore to link to these documents.	0

24	6.3.3(iv)	To consider the potential for widening the scope of the Mariners Weather Log to encompass international VOS activities	US Focal Point	SOT-8	This has been put into action. I send out a call for articles/submissions/photosto all internations VOS and SOT. It is up to them to actively support this issue and send submissions.	100
25	6.3.3(vi)	To provide the SOT Chair with updated JCOMMOPS global network maps for inclusion in the SOT recruitment presentations	SOT TC	asap	Done	100
26	6.3.3(vii)	To update the SOT recruitment presentation on the VOS website when a list of the required changes is available.	SOT Chair	asap	No action. No requests for changes.	0
27	6.3.3(viii)	To propose amendments to the SOT recruitment presentation and to supply suitable new digital images for inclusion in the presentation.	TT -VRPP members	asap	Not done	0
28	6.3.3(ix)	To undertake the final editorial review of the VOS Brochure in liaison with the Task Team	SOT TC	end 2013	Done, but to be reviewed again	99
29	6.3.3(x)	To circulate the final revised brochure to the PMO, VOS and SOT mailing lists (in pdf format) and to KNMI with a view to inclusion in the TurboWin program.	TT -VRPP Chair	janv-14	After brochure approval at SOT-8	0
30	6.3.3(xi)	To consider whether funding could be made available to publish hardcopies of the VOS Brochure	WMO Secretariat & SOT Chair	end 2013	Not done	0
31	6.3.3(xii)	To investigate the possibility of recording the issue of SOT Certificates in the E-SURFMAR database	E-SURFMAR	end 2013	Done. Action closed.	100
32	6.3.3(xiii)	To review the content of the Quick Reference Guides and to send copies of the revised text to the Task Team for approval	VRPP Chair & SOT Chair	end 2013	Not done yet	0
33	6.3.3(xiv)	To prepare an initial draft of a VOS Poster for circulation to the Task Team		end 2013	Not done yet (draft available at SOT-8)	
34	6.3.3(xv)	To investigate the potential of using social media sites to promote the VOS with a view to making future recommendations to SOT	VRPP Task Team	SOT-8	May set up a linked in group prior to SOT	20
35	6.3.3(xvi)	To investigate the potential for using video for promoting the VOS and for training observers	VRPP Task Team	SOT-8	Sarah North has disusse with Paula Rychtar who has a NOAA video that could help. Need to investigate the potential for including short video clips within the TurboWin program. New footage and draft TW clip available at JCOMMOPS	20

36	6.3.3(xvii)	To assist on how to progress the Generic Design Recommendations in the light of recent developments e.g. discussions with ICS and WOC initiatives (see agenda item 5.2.5)	TT-VRPP & WMO Secretariat	SOT-7	Some progress through Sarah North discussions with ICS. No progress on the WOC side.	30
37	6.3.3(xviii)	To keep the Task Team informed of any discussions they might have with ICS or the marine industries that impact on the design requirements	SCOR	SOT-8	No feedback by 16 April	
38	6.3.3(xix)	To make the delayed mode VOSClim data and call sign fully available in ICOADS.	VOCClim DAC & ICOADS	asap	Ongoing in preparation for ICOADS Release 3.0 (~end of 2015)	100
39	6.3.3(xx)	To forward the approved VOSClim certificate to the SOT Chair for posting on the VOS website and subsequent advice to the SOT, PMO and VOS mailing lists	WMO Secretariat	asap	Done	100
40	6.3.3(xxi)	To review the content of the DAC website in view of decisions taken by the Task Team	VOSCIim DAC	end 2013	Complete	100
41	6.3.3(xxii)	To remove the VOSClim mailing list from the JCOMMOPS website	SOT TC	asap	Done	100
42	6.3.3(xxiii)	To undertake minor revision to the VOS Framework Document so that it includes links to latest JCOMMOPS global maps and information on VOS numbers	SOT Chair	end 2013	Done	100
43	6.3.3(xxiv)	To add links to the WMO Publications listed in this report to the VOS Website	SOT Chair	end 2013	No action. A concise list of the documents needs to be provided, rather than scouring the Final Report looking for such documents.	
44	6.3.3(xxv)	To remove the project Ship List from the DAC website	VOSClim DAC	April 2014	Complete	100
45	6.3.3(xxvi)	To send email to PMO and VOS mailing lists to advise that in future any changes to their VOSClim fleets should be made to their WMO Pub 47 lists (by submission to WMO or by updating E-SURFMAR Metadata database). VOSClim Ship operators to continue to separately notify the DAC of such changes until April 2014		Apr. 2014	Done	100
46	6.3.3(xxvii)	To investigate feasibility and possibly to take steps for organizing the Fifth PMO workshop in Chile in 2014	WMO Secretariat & SOT Chair		Done. PMO workshop postponed to 2015	100
47	6.3.3(xxvii)	To take steps to assure that financial assistance for the participation of their PMOs at the PMO-5 workshop will be provided from national sources	SOT members	2014	Update at SOT-8	

48	6.3.3(xxviii)	To investigate feasibility and possibly proceed in arranging a shipping industry forum to be held in conjunction with the next SOT-8 session	SOT Chair & Secretariat	SOT-8	Not done	0
49	6.3.3(xxix)	To present a poster at the next Oceanscience meeting in 2014	S. Smith	2014	Did present on the ICOADS release 3.0 plans at OceanSciences 2014. This presentation included new features of ICOADS and the ICOADS value-added database project.	
50	6.4.3(i)	To submit a proposal to JCOMM-5 (later than SOT-8) of recommended changes affecting the structure of WMO No. 47	TT-Pub47	2016	After SOT-8	50
51	6.4.3(ii)	To update the Pub47 XML Generator Tool to Pub47 version 04 specifications	TT-Pub47		Done. A further update was made ahead of SOT-8 in anticipation of the relocation of the VOS website to JCOMMOPS	
52	6.4.3(iii)	To provide VOS Program Managers with the list of ships that regularly report on the GTS but are not members of a national VOS Fleet or self-recruited as an Ancillary VOS vessel	E-SURFMAR	1 June 2013	Done through a link to this list on E- SURFMAR database homepage and the pseudo national VOS fleet ZY. Action closed.	
53	6.4.3(iv)	To maintain the non-mandatory list of descriptors for logE, awsP and awsC, and to make the location of these list available to VOS Focal Points and VOS Program Managers	E-SURFMAR	1 June 2013	Done. Routine action.	Routine
54	6.5.6(i)	To update the templates for national reports for the SOT annual report to allow the reporting of instrumentation	SOT Chair	end 2013	Done	100
55	6.5.6(ii)	To complete the new JCOMM TR No. 63, Recommended Algorithms for the computation of marine meteorological variables	TT-IS	end 2013	Nearly done	95
56	6.5.6(iii)	To complete the review of relevant sections of the WMO No. 8 Guide, and to submit those changes to CIMO as needed	TT-IS & SOT Chair	asap	Done	100
57	6.6.3	Members implementing SHIP masking schemes to review the proposed governance for the management of encryption keys, and provide feedback to the TT-Masking	Japan, USA, Canada	15 May 2013	Not done. No feedback received from members	0
58	6.6.3	To submit part of the ENCODE proposal to the CBS Inter-Programme Expert Team on Data Representation Maintenance and Monitoring (IPET-DRMM) through the Task Team on Table Driven Codes (TT-TDC)	TT-Masking	asap	Done. Refer to TT-Masking Report.	100

5.	9 6		To provide guidance regarding the masking of delayed mode data with the view to archive the data with the real callsign	ETMC		Complete/Ongoing - We replace masked callsigns in ICOADS with data from e.g. delayed mode exhanges with the GCCs.	
60	60 6	5.6.7	To take stock of the current situation with regard to the increasing amount of ship data now available publicly, and report this situation back to CBS, via the OCG, for a review of its decisions in this regard		Sep. 2013	Not done. No recollection of this action.	0
6	1 6		To contact the International Chamber of Shipping and check whether the reporting of un-masked VOS observations via the GTS (with some of those positions ending-up on public websites) was still an issue	Secretariat	SOT-8	Not done	
63	62	5.6.8(ii)	To investigate (i) whether the positions of their recruited VOS are also publicly available through AIS or LRIT reporting; and (ii) with the shipping companies whether the reporting of un-masked VOS observations via the GTS continues to be an issue	Japan		(i) The inormation of Japanese VOSs is publicly available; (ii) the shipping companies require to continue the masking scheme.	100
6:	3 6	5.6.8(iii)	To investigate whether there are additional issues from their perspective	USA		no additional issues. In response to masking and ship ID concerns, surface analysis charts created by the Ocean Prediction Center removed all ships call signs from their products.	100
6-	54 7		To make information on air pressure quality available to future SOT sessions in order to help determine the most appropriate instruments to be used and the best practices to follow	RSMC	SOT 8	Not done	0
6:	55 7	7.1.1.7.	To revise the VOS annual report in readiness for the 2013 SOT annual Report	VOSP & SOT Chairs, SOT TC	Nov. 2013	Done	100
61	6 7		Noting that JCOMMOPS is already developing improved tools for the VOS community, to make them available on a permanent JCOMMOPS web page		·	Dedicated Maps and Statistics on www.jcommops.org/sot/maps, but more to come after SOT-8	75
6	7		To endeavour assigning time to complete the 2013 SOT national reports to the best of their ability, including information that could be of interest to their VOS colleagues in other countries	VOS Focal Points	Mar. 2014	Update at SOT-8	

68	7.1.1.13.	To consider how the JCOMMOPS Quality Information Relay (QIR) feedback mechanism, and its interface, could be improved as a feedback service to report systematic coding or transmission problems	SOT TC	end 2013	Ongoing cross-programme effort within JCOMMOPS	50
69	7.1.1.15(i)	To revise the template for VOS national annual reports to include PMO activity information and other metrics that will be helpful in monitoring VOS performance and formulating future SOT decisions	VOSP & SOT Chairs, SOT TC	Nov. 2013	template was revised to include PMO inspections but a spreadsheet version of the template remains to be done (SN). Done (GB)	70-100
70	7.1.1.15(ii)	To oversee the performance of the Ancillary VOS (e.g. checking that metadata is being collected and that the companies concerned are providing feedback on data quality) so that a decision can be made on the need for a new Ancillary Class at SOT-8	SOT TC	end 2013	Self QC by ship operators does not happen. Mandatory metadata are collected and at E-Surfmar. More in dedicated report.	90
71	7.1.1.16	To check that email systems are not rejecting observations un-necessarily	VOS operators	asap	Update at SOT-8	
72	7.1.2.4	To check the GHRSST requirements for SST measurements, investigate feasibility and costs, and inform the SOT-GHRSST working group accordingly		SOT-8	Update at SOT-8	
73	7.2.1.3	With a view to ensuring that the E-SURFMAR and WMO metadata records are maintained as accurate as possible, the Team agreed that such discrepancies should be raised with the VOS operating countries concerned	SOT TC	SOT-8	Ongoing	100
74	7.2.1.6	To make the JCOMMOPS products (maps & graphs showing VOS status, coverage and parameters reported) more readily available via the JCOMMOPS website rather than via ftp links at present, and to ensure that they are routinely updated.	SOT TC	SOT-8	Done	100
75	7.2.1.7	To compile metrics in liaison with the Panel Chair and the TT on VRPP, and made available on the JCOMMOPS website	VOSP Chair & SOT TC	SOT-8	Still to be done (would be helped by changes to the SOT report format)	
76	7.2.2.3	To continue to measure the existing KPI for 25% of the global active VOS to be upgraded to VOSClim class until SOT-8	VOSClim FP & RTMC		see 79, done	100
77	7.2.2.4	In view of the decisions taken at this session to tighten the VOSClim monitoring criteria the Panel agreed that the KPI for less than 3% of VOSClim class ships being flagged on the suspect list for air pressure should continue to be measured until SOT-8	RTMC	SOT-8	partially done	50

78	7.2.2.5	The KPI for 95% of VOSClim class observations to be received within 120 minutes should continue to be measured and reported to SOT-8	RTMC	SOT-8	done	100
79	7.2.2.9	To introduce new KPI for at least 25% of the active international VOS Fleet registered on the E-SURFMAR metadata database to be VOSClim Class by SOT-8	VOS Operators	SOT-8	see 76	done
80	7.2.2.11	To consider removing the option to select "VOSClim" in Turbowin as a means to increase the availability of VOSClim elements (so that all ship report VOSClim data)	KNMI	asap	there are two maintained versions of Turbowin: TurboWin (classic type of program), and TurboWin+ (java based). For: . TurboWin: The availability of the option VOSClim differs per country. Depending on the wishes of a VOS recruiting country all ships are standard VOSClim (for example this is the case for the Dutch fleet), other countries still are able to select / not select the VOSClim class . TurboWin+: All ships are standard VOSClim	
81	7.2.2.12	To prepare a proposal on how remote vetting should be conducted and to circulate this to VOS focal points for consideration and with a view to possible approval at the next session	VOSP Chair	SOT-8	to do	10
82	7.2.2.15	E-SURFMAR metadata database should be the main listing for ships recruited to VOSClim class and that the existing Excel VOSClim ship list on the VOSClim DAC should be deleted	DAC	asap	Done	100
83	7.2.2.16	To harmonise the two VOSClim listings and to advise the SOT Chair when this work is completed so that the information can be disseminated to VOS focal points and PMOs via the JCOMMOPs mailing lists		end 2013	Done	100
84	7.2.2.18	The Panel noted that call signs were registered with the International Telecommunications Union (ITU) and suggested that an approach might be made to the ITU to obtain more accurate information on call sign changes.	VOS Panel Chair	SOT-8		0
85	7.2.2.20	To assess the value of the delayed mode VOS data, and propose related metrics	ETMC	SOT-7	Update at SOT-8 (Eric did not know)	0

8	36	7.2.3.8	To monitor initiatives for the development of "mobile-based" applications for Android hand- held and tablet platforms, and keep the VOS Focal Points informed of developments	VOSP Chair	SOT-8	JCOMMOPS application under development, comprising i) network status tools/maps, ii) deployment/recovery notifying and iii) weather obs	
8	37	7.2.4.5	To consult with Canada, the Netherlands, Japan, the Netherlands, and the USA and propose a classification of AWS systems according to the type of measurements they are making	SOT TC	end 2013	Discussion with all operators of AWS came to the conclusion that atm and vsslm fields are sufficient. To be discussed if AWS options in vsslm are needed if atm is providing this information already. action to be closed	
8	38	7.2.4.5	To take the proposed classification of AWS systems into account when preparing the templates for national reports		end 2013		100
8	39	7.2.5.4	To make a proposal to be submitted to the next SOT Session for common guidelines on the criteria to be used regarding when to block data from Iridium transmission	ETMC Chair	SOT-8	Not an expert on Iridium transmissions, but could offer some advice as part of the TT-VRPP	-
g	90	7.2.6.6	To invite shipowners and AWS manufacturers to a possible international Shipborne AWS Workshop during the next intersessional period	SOT Chair, WMO Secretariat	SOT-8	Not done	0
g	91	7.2.6.7	To give consideration to developing new 'Shipborne AWS – VOS' inspection, and site inspection forms	TT-VRPP & SOT Chair	SOT-8	To do (not likely to be achieved before SOT8)	10
ū	92	7.2.8(i)	To introduce a new KPI target should be introduced to aim for least 25% of the active international VOS Fleet registered on the E-SURFMAR metadata database being recorded as VOSClim Class by SOT-8	VOS Operators	SOT-8	Duplicate 79	

93	, ,	To amend the next version of TurboWin software to include 'Ancillary Pilot Project' as an option under 'Projects', until such time as a decision is made on the need to formally introduce the new class. (Selecting this option will disable the standard VOS class options)	Netherlands		The problem with this action item is? that all items under Projects do not really mean anything: The only thing that is done with this information is that it is stored in a logfile on the computer TurboWin is running on. There is no link with the class options. Next to that we think that the existing classes needs to be reviewed: Auxilary, ancillary, selected with, selected without Sometimes things from the past and hard to explain. And differences are in the details which might not be relevant any more at this time. In TurboWin+ the special projects are (until now) not implemented. Within the SURFMAR program KNMI is setting up a "TurboWin functionality advisory board", in which SURFMAR participants who are using TurboWin are represented. This advisory board has never met each other until now, but hopefully they will meet each other before the upcoming SOT. All functionality wishes (not only from SURFMAR participants, but from all TurboWin users) are discussed there and prioritized.
94	, ,	To advise if they wish to additionally receive delayed mode data from Ancillary (Ancillary AWS) ships	GCCs	asap	It was agreed that the GCC would like 80 to receive Ancillary data on a trial basis. Data would be submitted with Element 41 (Observation Platform) set to 9 for 'Other' and a blank country code. (FC)
95	, ,	To continue the collaboration with Sippican in the development of an improved XBT prototype with upgraded temperature sensor and pressure switches	SOOPIP members		No feedback by 16 April
96		(a) to continue the tests for a full implementation of XBT data transmission to the GTS in BUFR format; and (b) to provide support as requested by other institutions for the implementation of BUFR transmissions operationally	AOML	SOT-8	No feedback by 16 April

97	8.2.1.12	The SOOPIP Chair and the SOT TC work together to produce SOOP semestrial surveys	SOT TC 8 SOOPIP Chair	& end 2013	Dedicated report on metadata 20 collection issues	
98	8.2.2.3(i)	To draft a plan for distributing corrected XBT data to the science and modeling community once the FRE coefficients have been finalized	G. Goni	ASAP	No feedback by 16 April	
99	8.2.2.3(ii)	To support and organize a Science Team meeting to be hosted approximately every two years, perhaps linked to SOOPIP or Argo science meetings	G. Goni	SOT-8	No feedback by 16 April, but a science meeting took place in Nov 2014 in China	
100	8.2.2.3(iv)	To assess the importance to carry out transects on marginal seas (Mediterranean, Gulf of Mexico) that could be critical because of lack of other type of sustained hydrographic observations	XST	SOT-8	Update at SOT-8	
101	8.2.2.3(v)	To represent science goals to a broader community investigating boundary currents, eddies and fronts, including developing technologies, such as glider surveys.	XST	SOT-8	Update at SOT-8	
102	8.3.2.5(i)	To increase the number of bottle samples for direct comparison and calibration	SOOP members	SOT-8	Update at SOT-8	
103	8.3.2.5(ii)	If budget allows, to increase the number of ship collecting TSG data	SOOP members	SOT-8	Update at SOT-8	
104	8.3.2.5(iii)	To support scientific programs and projects that require TSG observations, such as satellite missions and observational projects (e.g. SPURS[1], pCO2,)	SOOP members	SOT-8	Update at SOT-8	
105	9.1.1.8 (i)	To contact other monitoring centres regarding new monitoring criteria	RSMC	August 2013	Done	100
106	9.1.1.8 (ii)	To start using the new monitoring criteria	RSMC & other monitoring centres	deadline to be agreed – possibly January 2014	Partially done	60
107	9.1.1.8 (iv)	To separate timeliness information for manual and automatic ships	RSMC	April 2014	Partially done	50
108	9.1.2.5(i)	To start using the new monitoring criteria	RTMC	January 2014	Duplicate 106	50
109	9.1.3.6(i)	Electronic logbook programmers to upgrade logbook software to allow coding in IMMT-5 format	e-logbook developers	asap	Update at SOT-8	

110	9.1.3.6(ii)	All CMs that did not submit data during 2012 should do so in 2013 or alternatively contact GCC for advice	CMs	2013	GCC advised CMs who did not submit data in 2012 to contact GCCs if they needed any assistance making contribution. Help was provided and 3 of the 7 CMs did contribute data in 2013. Further assistance should be offered to remaining CM (FC)	100
111	9.1.3.6(iii)	To provide maps about the availability of delayed mode VOS observations by variable	GCCs	asap	First time I've come across this action, no work has been done to my knowledge (FC)	_
112	9.1.4.10	For data processing purposes, to stop maintaining the list at NCDC, and instead begin using the ESURFMAR list [2], which is based on Pub 47 metadata	VOSClim DAC	Apr. 2014	Duplicate	
113	9.1.5.6(ii)	ASAP operators should try to update their transmission systems in order to be able to transmit high resolution data messages	ASAP members	asap	- E-ASAP: 13 out of 18 ships of the European E-ASAP fleet transmit HiRes BUFR data operationally for several years. It is planned that all 18 ships transmit HiRes BUFR by end of June 2015 RV Polarstern: The German Research Vessel Polarstern provides	
114	9.1.7.5(ii)	To make the delayed mode data (science quality) more visible and advertise them	GOSUD	asap	The GOSUD web site has been remodeled and the delayed mode datasets visisibility has been enhanced. In addition for some datasets a DOI -Digital Object Identifier- has been attached	
115	9.1.7.5(iii)	Considering the status of the Project and the need to adapt its governance, GOSUD must identify an advisory group and a steering committee; SOT members are invited to consider applying for becoming member of the advisory group	GOSUD	SOT-8	The GOSUD Steering commitee is still been renewing. Australia, Canada, China, France, Japan, Russia, USA have been approached. 3 positive answers. A new co-chair (Fabienne Gaillard, scientist, has been nominated)	
116	9.1.7.5(iv)	To enhance the relationship with science satellite community (SMOS and AQUARIUS)	GOSUD	SOT-8	Not really done. Some presentations have been done within some projects attached to SMOS. It is studied to have a GOSUD meeting attached to one of the satellite science meetings	
117	9.1.7.6(i)	To assist the IODE in identifying a second co- Chair of the GOSUD Steering Group Chair	SOT Chair	June 2013	No action. No contact with IODE after SOT-7.	0
118	9.1.7.6(ii)	To invite GOSUD to evaluate the quality of the whole GOSUD data set available	GOSUD	September 2013	Partially done especially for delayed mode data	50

119	9.1.7.6(iii)	To organize a joint GTSPP/ GOSUD		SOT,	April 2014	Done 17-21 june 2014	100
-		workshop in April 2014 in Ostende, Belgium		•	3		
120	9.1.7.6(iv)	To liaise on the issue of putting the GOSUD metadata into the E-SURFMAR database		P. Blouch, L Petit de la	a R	Ongoing study (PB)	10
121	9.1.7.6(v)	To address the issue of improving the content the BUFR template for underway data		TT-TDC	SOT-8	No progress.	
	9.1.7.6(vi)	To discuss the issue and make proposals to allow best-copy data-sets to be easily identified, and become accessible via ODP and WIS, while avoiding duplication		DMCG	JCOMM-5	After SOT-8	
123	9.2.1.2	To speed the submission of SOT related BUFR template proposals to the CBS taking SOT requirements into account		TT-TDC	asap	Dr Berry has been representing JCOMM on the WMO Inter- Programme Expert Team on Data Representation Maintenance and Monitoring, submitting marine related proposals and helping coordinate the validation of approved changes.	100
124	9.2.1.2	To investigate for the nomination of a new chair in consultation with the Chair of DMCG		Secretariat	asap	Underway (almost completed)	80
125	9.2.1.9	To finalize the proposed new data format for non AWS VOS, and liaise with the ETMC <i>ad</i> <i>hoc</i> group in this regard. The goal is to have the new format eventually approved by the VOSP Chair		P. Blouch	end 2013	More or less the same action than action 19. VOSP Chair to approve the new format ?	
126	9.2.1.11	To look at the issue of preserving AWS data, and to make recommendations in this regard at the next SOT Session		TT-IS/SG- AWS	SOT-8	Ongoing long discussion	25
126b	9.2.1.10	The Team noted that ETMC-4 has requested David Berry (UK) to coordinate with Joaquin Trinanes in the view to submit a CTD BUFR template to the DMPA Task Team on Table Driven Codes (TT-TDC) for their review, and further submission to the CBS.				BUFR Template for CTD data submitted to the IPET-DRMM and subsequently validated.	
127	9.2.2.2	To alert the users of XBT data about the migration to Table Driven Codes, and provide them with information on how to decode the data. Training materials should also be made available to data providers for supporting the migration		DMCG	asap		

128	9.3.3	To make a proposal on the list of XBT specific ship metadata to be collected (e.g. height of the drop, speed of ship at the time of the drop, etc.) and to provide the information to the SOT TC	G. Goni	asap	Not done	0
129	9.3.10	To initiate development of the ASAP metadata collection scheme in the view to have it fully operational by the end of 2014	JCOMMOPS & Secretariat		To be developed as part of OSCAR, and integration of Pub47 & Vol-A in OSCAR	
130		To send comments on the implementation strategy to the SOT Chair and the Secretariat by 31 May	SOT members	31 May 2013		
131	10.6	To finalize the Strategy on behalf of the Team in consultation with the VOSP and SOOPIP chairs, the OPA Coordinator, the Task Team Chair, and the Secretariat. The goal is to post the first version of the strategy on the SOT and JCOMM websites by mid-2013	G. Ball	31 July 2013	Done	100
132	11.1.17(ii)	To document the list of deliverables (tools, products, services) for SOT/SOOP/GOSHIP	SOT TC	mid 2013	Done, workplan to be discussed	100
133	11.1.17(iii)	To develop new and integrated specification for a QC feedback mechanism, from data user to data producer	JCOMMOPS TCs	end 2013	duplicate	
134	11.1.21	To liaise with the Panel Chairs to make sure that the JCOMMOPS maps for VOS, SOOP, and ASAP are properly addressing the SOT requirements	SOT TC	asap	duplicate	
135	12.1.3	To comment and provide feedback to the SOT Chairperson regarding the format of the National Report	VOSP, SOOPIP, ASAP TT chairs	asap	Done	100
136	12.1.4	To provide the SOT TC as soon as possible with the required SOOP metadata permitting the compilation of the SOOP survey	SOOP operators	asap	Update at SOT-8	
137	12.1.5	To provide input on the annual status of the SOOP programme for the years 2010 to 2012 for producing revisions of the 2010 and 2011 annual reports, and for inclusion in the new 2012 annual report	G. Goni	asap	No feedback by 16 April	
138	12.2.3	To include an action item in the SOT Implementation Strategy to reflect that the VOS National Focal Points should provide the VOS website webmaster with links of national VOS or PMO web sites for their inclusion in the VOS website	Secretariat	asap	Done	100

139	12.2.4	To revamp the SOT website on the model of the DBCP website	SOT TC		Not done, see dedicated SOT-8 report (Migration to new and integrated JCOMMOPS site, and future of VOS pages)	
140	13.2.6	To bring the proposed SOT vice-chairs positions to the attention of the JCOMM Co-Presidents, and invite them to make a decision on behalf of the Commission	Secretariat	asap	Done although delayed.	100
141	13.2.7	To consider revising the JCOMMOPS ToR to better take into account recent evolutions and support being provided to GO-SHIP	OCG	J	JCOMMOPS TOR to be revised at upcoming OCG to reflect this change.	25
142	14.3	To publish the national reports provided by the Members to the WMO Secretariat as well as the PowerPoint presentations made at this meeting on CD-Rom within the SOT annual report for 2012	Secretariat	asap	Done	100