

Ship Observations Team

~ integrating & coordinating international ship-based observing programmes for JCOMM ~



I-1.1, Opening of the Session

Introduction & Meeting Goals

SOT-V
18-22 May 2009, Geneva

Graeme Ball
Chairman, SOT



Outline

- The Global Framework
- Overview of the SOT
- Achievements of the SOT
- SOT-V Meeting Structure
- Goals of SOT-V



The Global Framework

International Coordination

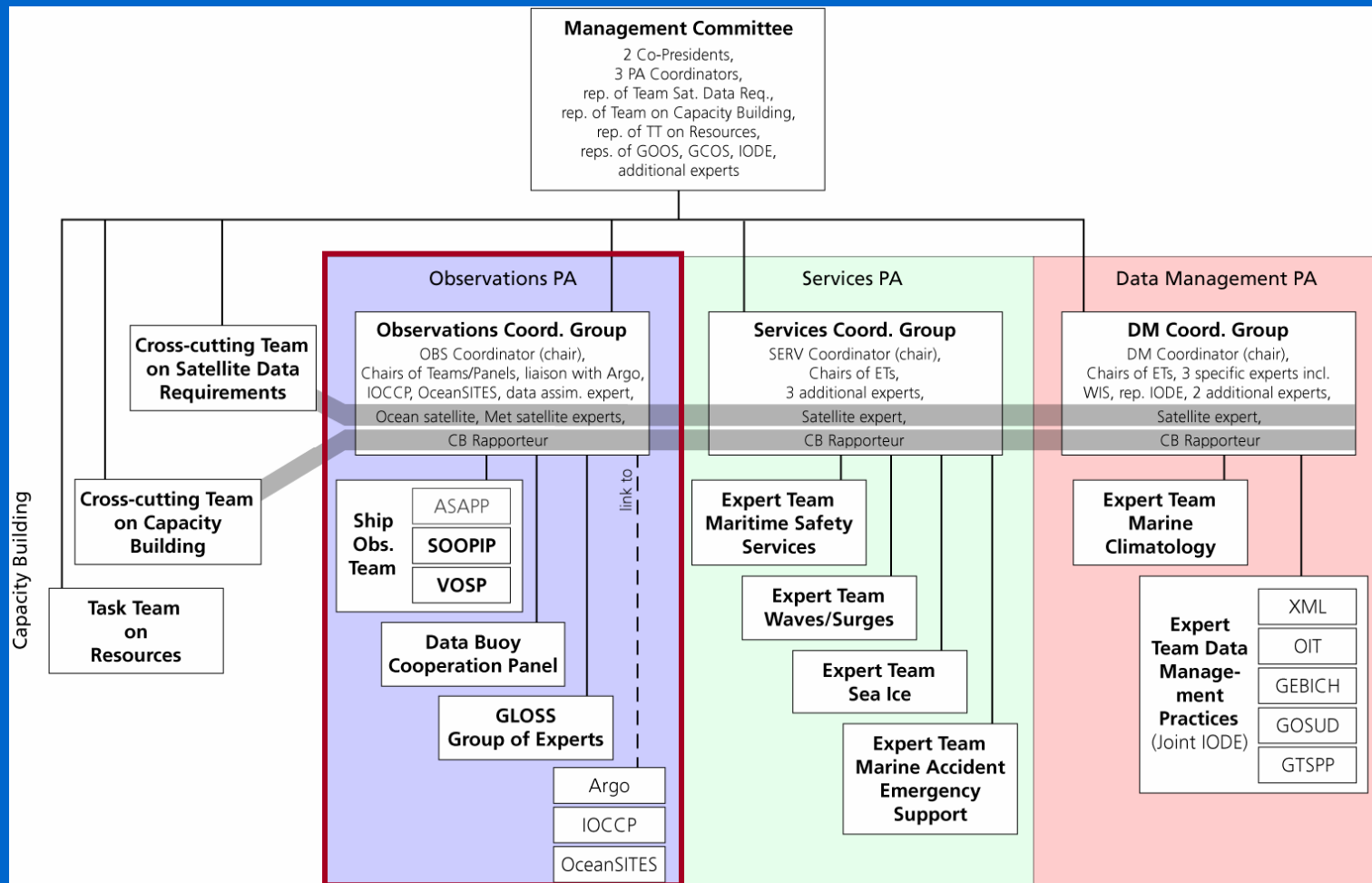
- The Ship Observations Team (SOT) coordinates three enduring global ship-based observing programmes:
 - » The Voluntary Observing Ship (VOS) Scheme.
 - » The Ship-of-Opportunity Programme (SOOP).
 - » The Automated Shipboard Aerological Programme (ASAP).
- The SOT is co-sponsored by the:
 - » World Meteorological Organization (WMO).
 - » Intergovernmental Oceanographic Commission (IOC) of UNESCO.



JCOMM

- JCOMM is the reporting & coordinating mechanism for the operational marine activities of WMO & IOC, and includes:
 - » Integrated **marine observing**, services systems & data management.
 - » Extensive outreach programme (a cross-cutting activity).
- The SOT is an implementation panel in the **OPA** of JCOMM & is responsible for coordinating the ship-based observing programmes of JCOMM at the international level.
- National agencies & institutions, initiate, manage & operate the observing programmes for JCOMM at the national level.

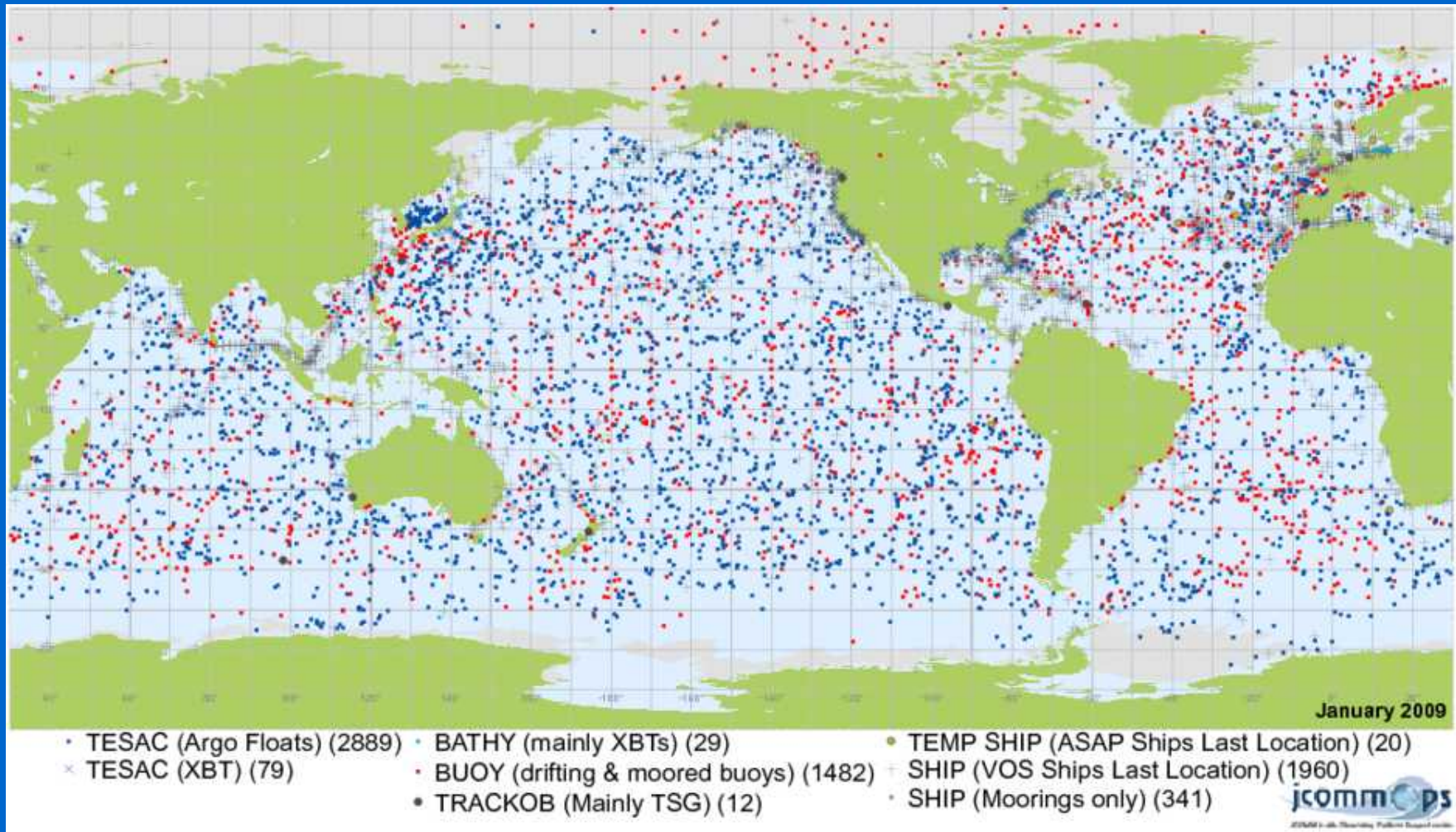
JCOMM Organisation & Structure



Relationships With Other Programmes

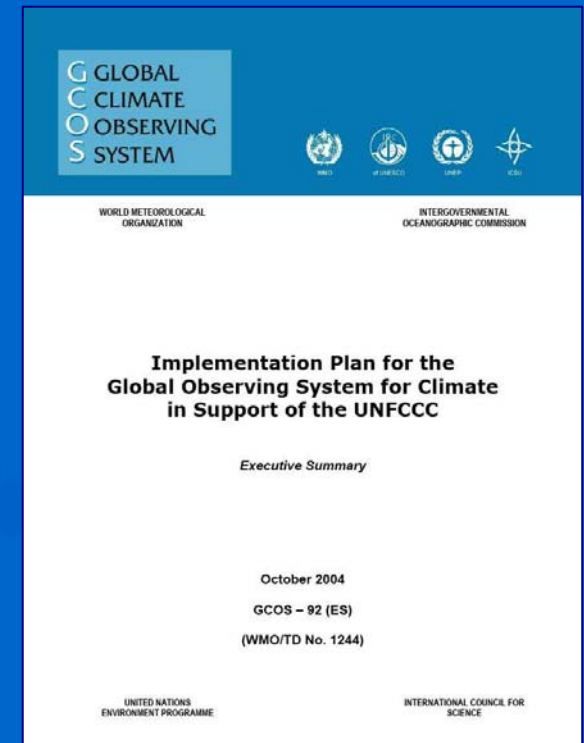
- JCOMM is the implementation mechanism for the Global Ocean Observing System (GOOS).
- JCOMM provides support for the Global Climate Observing System (GCOS).
- JCOMM provides support to the marine component of the:
 - » WMO World Weather Watch Programme.
 - » WMO Global Observing System (GOS).

JCOMM Support For GOOS

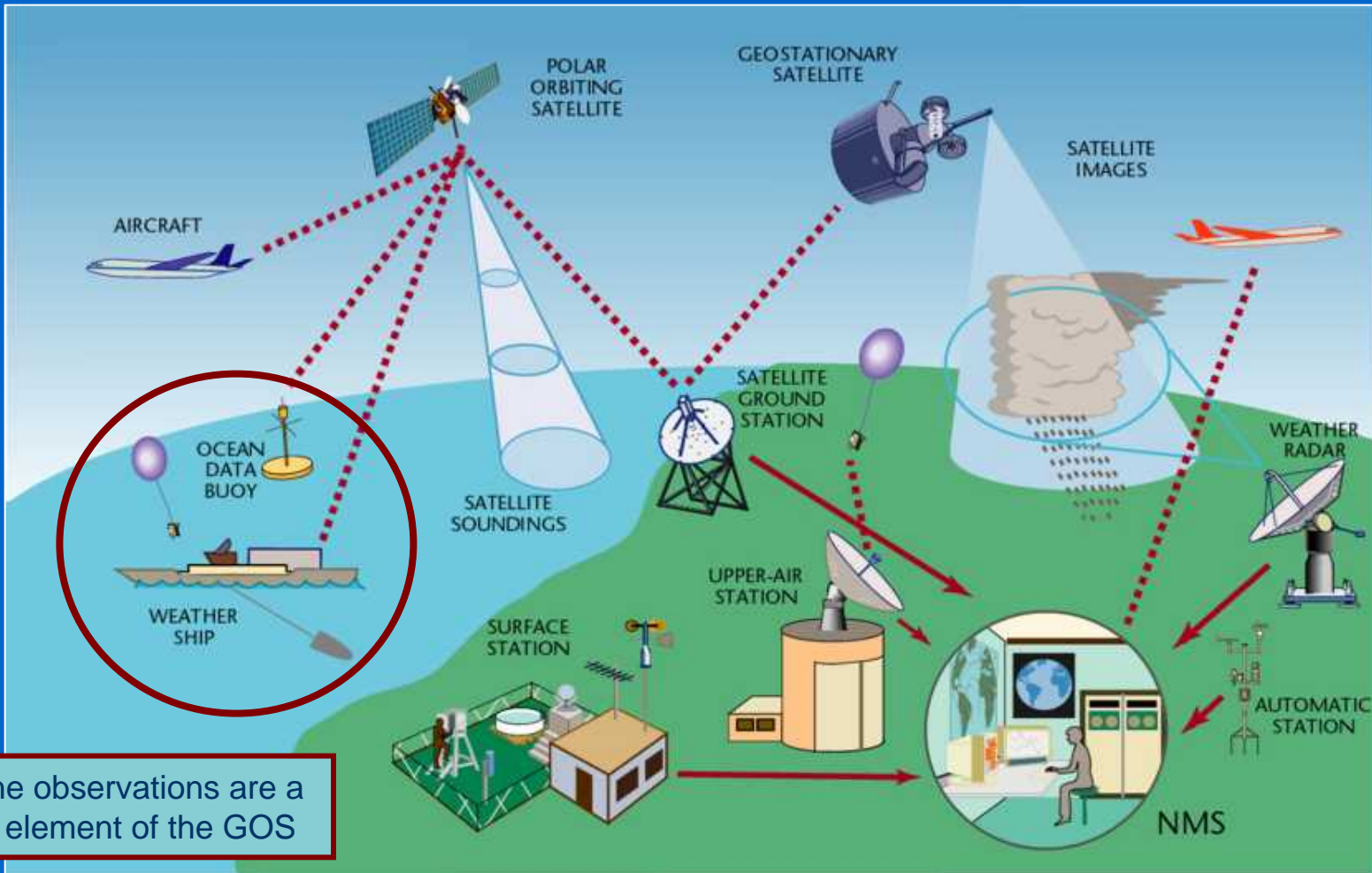


JCOMM Support For GCOS

- GCOS Implementation Plan described 15 essential ocean climate variables:
 - » **Surface:** SST, SSS, sea level, sea state, currents, sea ice, partial pressure of CO₂ & ocean color.
 - » **Sub-surface:** temperature, salinity, currents, nutrients, ocean tracers, phytoplankton & carbon.
- The component programmes of the SOT routinely measure many of the essential climate variables (ECV).



JCOMM Support For The GOS



Marine observations are a core element of the GOS

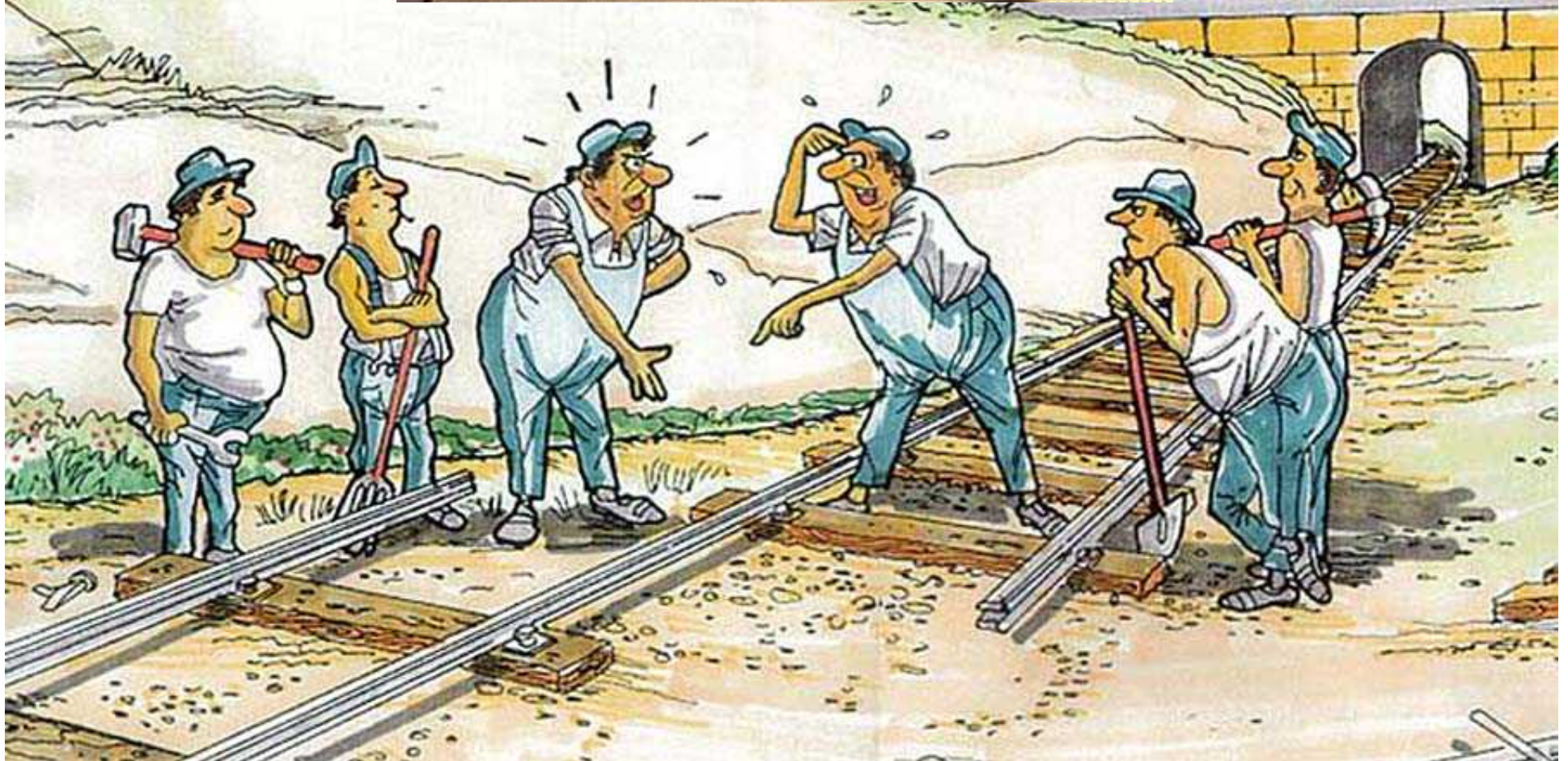


Overview of the SOT

Objectives of the SOT

- To manage, coordinate & wherever possible integrate the VOS Scheme (inc. the PMO network), SOOP & ASAP to support a range of well defined operational & research applications.
- To liaise & coordinate with other groups involved in using volunteer ships as environmental observing platforms, with a view to their participation in the SOT.
- To improve national coordination between institutions involved in similar or related programs.

Team Work



Terms of Reference

1. Review and analyze requirements for ship-based observational data expressed by relevant existing international programmes and/or systems in support of marine services, and coordinate actions to implement and maintain the networks to satisfy these requirements;
2. Provide continuing assessment of the extent to which those requirements are being met;
3. Develop methodology for constantly controlling and improving the quality of data;
4. Review marine telecommunication facilities and procedures for observational data collection, as well as technology and techniques for data processing and transmission, and propose actions as necessary for improvements and enhanced application;

Terms of Reference (cont)

5. Coordinate PMO/ship greeting operations globally, propose actions to enhance PMO standards and operations, and contribute as required to PMO and observers training;
6. Review, maintain and update as necessary technical guidance material relating to ship observations and PMOs;
7. Liaise and coordinate as necessary with other JCOMM Programme Areas and expert teams, as well as with other interested parties;
8. Participate in planning activities of appropriate observing system experiments and major international research programmes as the specialist group on observations based onboard ships, including Voluntary Observing Ships (VOS), Ships-Of-Opportunity (SOO), ships from the Automated Shipboard Aerological Programme (ASAP), and research ships;

Terms of Reference (cont)

9. Seek for opportunities for deploying various kinds of measuring devices as recommended by the relevant panels and widely publicize those opportunities;
10. Develop as necessary new pilot projects and/or operational activities and establish new specialized panels as required;
11. Carry out other activities as agreed by participating members to implement and operate the SOT programme and to promote and expand it internationally;

SOT Meeting History



SOT-IV, 16-21 April 2007, Geneva, Switzerland



Achievements of the SOT

Some Milestones

- Integrating the VOSCLim & ASAP Panels into the VOSP.
- Greater cross-programme & inter-programme coordination.
- Improved coordination of global PMO activities:
 - » PMO Conferences – greater involvement by the VOSP.
 - » Development of ship recruitment & inspection resources.
 - » Collated national observing practices – initially barometer/barograph.
- Defining metadata requirements for the VOS (WMO No. 47) is the responsibility of the SOT.

More Milestones ...

- Liaison with other international groups using volunteer ships as observing platforms:
 - » SAMOS / IOCCP / FerryBox Project / SeaKeepers.
- Inter-comparison of e-logbook software:
 - » Recommendations to manufacturers – consistency in QM & coding.
- Development of design specifications for scientific sampling facilities on new ships.
- Reached both the initial & revised targets for VOSCLim.



Meeting Structure

Structure of SOT-V

I	Common Sessions 1, 2, 3 & 4	Graeme Ball	(AU)	g.ball@bom.gov.au
II	Technical Workshop	Michail Myrsilidis	(GR)	mmirsi@hnms.gr
III	VOSP-VI	Julie Fletcher	(NZ)	fletcher@metSERVICE.com
IV	SOOPIP-VIII	Gustavo Goni	(US)	gustavo.goni@noaa.gov
V	National Reports	Gerie Lynn Lavigne	(CA)	gerielynn.lavigne@ec.gc.ca



Goals of SOT-V

Goals of SOT-V

- Review the reports & recommendations from:
 - » WMO, IOC, OOPC & other expert groups.
 - » VOSP, SOOPIP & SOT Task Teams.
 - » Related & cross-cutting JCOMM Task Teams.
- Identify issues requiring:
 - » Consideration & support from JCOMM.
 - » Consideration by an existing or a new SOT Task Team.
 - » Consideration & support from JCOMMOPS.
- Explore the possible integration of other groups using ships as observing platforms into the SOT.

Goals of SOT-V (cont)

- Acquire a knowledge of new or updated systems, improved methods & new technologies.
- Continue to standardise methods & practices:
 - » Observing systems & methods of observation.
 - » Data processing, data management & quality monitoring.
 - » Inspection procedures.
- Continue to promote & enhance communication within & between observing programmes.



Weather or not

