

**OPERATING PRINCIPLES OF THE
DATA BUOY COOPERATION PANEL (DBCP)**

(as submitted to DBCP-33)

1. INTRODUCTION

- 1.1 The Data Buoy Cooperation Panel (DBCP) is a subsidiary body of the Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM). The World Meteorological Organization (WMO) and Intergovernmental Oceanographic Commission of UNESCO (IOC) jointly sponsor the JCOMM, in order to undertake international/intergovernmental coordination of marine observational networks for which both organizations are mandated.
- 1.2 The DBCP was established in 1985 by WMO Resolution 10 (EC-XXXVII) and IOC Resolution EC-XIX.7. In 1993, the governing bodies of IOC and WMO agreed to change the name of the Panel to the Data Buoy Cooperation Panel (DBCP) with extended terms of reference, so that the Panel may provide international coordination required for both drifters and moored buoy programmes, which support major WMO and IOC programmes (IOC Resolution XVII-6 and WMO Resolution 9 (EC-XLV)). As the JCOMM was established in 1999, the Panel became a part of the JCOMM Observations Programme Area (Resolution 4 (EC-LII)). The Terms of Reference of the DBCP are reproduced in [Appendix I](#).
- 1.3 The DBCP addresses the requirements and needs for real-time or archival data from buoys, both drifting and moored, coordinates buoy deployments worldwide, maintenance and collection of data from instrumented oceanographic and meteorological drifting buoys and moored buoys on the high seas. The Panel provides a forum for the exchange of technical and related information on buoy technology, communications systems and the management of buoy data, for both the operational and research communities.
- 1.4 The Panel coordinates its activities with related regional and global programmes of WMO and IOC, such as the World Weather Watch (WWW), the Global Ocean Observing Systems (GOOS), the Global Climate Observing System (GCOS) and the World Climate Research Programme (WCRP), and serves their needs for the data buoy technology and the implementation of data buoy networks.
- 1.5 The Panel adheres to a data policy approved by itself at DBCP Sessions. The DBCP Data Policy is reproduced in [Appendix II](#).

2. PANEL MEMBERS AND PARTICIPANTS

- 2.1 The Terms of Reference for the DBCP are approved by the WMO and IOC Executive Bodies through proposition by JCOMM; the Panel reports to JCOMM and serves the needs of WMO and IOC Programmes. In this context, WMO Members and IOC Member States designate National Focal Points for buoy programmes who become full Panel members. This is done by means of a letter from the Permanent Representative of a country with WMO to the WMO Secretary-General or by the IOC Action Addressee to the Executive Secretary of IOC. The lists of National Focal Points for

buoy programmes are maintained by the WMO and IOC Secretariats, and are published on the JCOMM website.

- 2.2 Participants in the DBCP activities can be operational agencies, meteorological and oceanographic institutes, research agencies, data centres, governmental and non-governmental organizations, and commercial organizations interested in the global oceans who actively contribute to the aims of the Panel. Individuals with an interest in data buoy activities are also welcome to attend as observers.
- 2.3 A number of ongoing tasks and activities have been identified by the Panel for its members to undertake. They should:
 1. submit their national reports to the Secretariat before the end of the year (inputs submitted before 30 November to be published in the Panel's Annual Report;
 2. take relevant recommendations from IOC Assembly and the WMO Congress and Executive Committee into account when developing their activities;
 3. address user requirements and particular observing systems deficiencies as expressed in the JCOMM Statement of Guidance for Ocean Applications;
 4. review the DBCP Implementation Strategy document at http://www.jcommops.org/dbcp/doc/DBCP_Impl_Strategy.pdf and to forward any comments to the Chairperson by the end of November each year;
 5. continue their voluntary budgetary contributions to the Trust Fund in a timely manner;
 6. comply with the WMO Quality Management Framework (QMF) and quality management principles;
 7. make use of the barometer drifter upgrade scheme (see <http://www.jcommops.org/dbcp/platforms/barometer.html>) by purchasing barometers for GDP-funded SVP drifters and negotiating their deployment positions with AOML;
 8. provide GDP/AOML with manufacture dates for all drifting buoys built within the last 5 years;
 9. provide instrument/platform metadata regarding the buoys (both drifting and moored) they deploy, using the agreed JCOMMOPS metadata collection schemes;
 10. notify all new drifter and moored buoy deployments to DBCP TC through the JCOMMOPS web-site;
 11. provide information on deployment opportunities to JCOMMOPS (preferably through a national website similar to AOML, NDBC and Canada) for all buoys, as well as to continue e-mail notifications as necessary. Panel members also subscribe to and systematically post their deployment opportunities on the ships@jcommops.org mailing list;
 12. provide info/materials for DBCP/JCOMMOPS websites (news, brochures etc.);
 13. maintain systems for record keeping for instrument calibration, replacement and validation that conform to ISO recommended specifications;

14. review best practices prior to drifter purchase for safety, and GTS data processing purposes;
 15. follow the best practices and standards eventually proposed under WIGOS, and in particular, to provide the buoy platform/instrument metadata to WIGOS through JCOMMOPS;
 16. use the WMO-IOC Regional Marine Instrument Centres (RMIC) facilities as appropriate, and participate at future workshops;
 17. contribute to feeding the JCOMM database on extreme wave events when such events are observed by data buoys and are recorded by Panel Members.
- 2.4 Similarly, the buoy and equipment manufacturers are invited to participate on an ongoing basis to DBCP activities as following:
1. to collaborate with buoy operators and JCOMMOPS
 2. investigate participating in the Association of Hydro-Meteorological Equipment Industry (HMEI - <http://www.hydrometeoindustry.org/>) as a way to be represented at JCOMM meetings;
 3. enhance buoy safety through improved design and keep the Panel informed about related changes.

Specifically, the drifter manufacturers will:

4. submit through JCOMMOPS their instrument/platform metadata, including description of drifter models, using the agreed JCOMMOPS drifting buoy metadata collection scheme;
5. provide Service Argos with a list of the most used drifting buoy models and for drifters that transmit through Argos the formats they use.

3. KEY DBCP PERSONNEL, THE EXECUTIVE BOARD AND TECHNICAL COORDINATOR

- 3.1 The Panel elects a Chairperson and Vice-chairpersons at the end of its regular sessions with geographical representation from: (i) Asia; (ii) Europe; (iii) North America; and (iv) the Southern Hemisphere. Elections will be decided by a simple majority if a quorum of Panel members is present. A quorum will consist of six Panel members. If a quorum is not present at the regular meeting, elections will be by unanimous vote.
- 3.2 The elected Chairperson leads the DBCP during the next inter-sessional period within principles and financial limits defined by the Panel, and chairs the next Panel Session. The Chairperson is supported by the WMO-IOC Joint Secretariat and the DBCP Executive Board, which is responsible for the day-to-day management of the Programme within the guidelines set at the regular meeting of Panel members. The Terms of Reference of the Executive Board are provided in [Appendix III](#) to this document.
- 3.3 The Panel has a full-time Technical Coordinator who is employed by WMO and whose

position is fully financed by voluntary contributions from Panel members or other contributors. The Technical Coordinator acts as the focal point for the Programme and carries out the directives of the Panel, as appropriate, during the inter-sessional period. Upon the Panel's decision, the Technical Coordinator may work for other related programmes to assist their implementation. Tasks and duties of the Technical Coordinator are detailed under section 4 of this document, and the Terms of Reference of the Technical Coordinator are given in [Appendix IV](#).

- 3.4 By a decision at the 24th session, the Technical Coordinator works a third of his/her time on the OceanSITES Project Office support.
- 3.5 The Technical Coordinator is requested to inform the Chairperson and the Secretariat of his/her wish, or otherwise, to continue to work as Technical Coordinator of the Panel for the period 1 June "Y+1" to 31 May "Y+2". Should that be a wish to continue, the Panel in turn would agree to retain him/her as Technical Coordinator, subject to the availability of funds, and subject to specific contract limitations with WMO.
- 3.6 In case the Technical Coordinator wishes to quit the position, he/she would be required to inform the Panel as soon as possible, and preferably at least six months in advance, to assist in the recruitment and training of his/her successor, in order to ensure as full continuity as possible in the work of the Panel's Technical Coordinator.
- 3.7 Within one month of the conclusion of the annual session, the Chair reviews the, programme of work for the Technical Coordinator, prioritises tasks and discusses execution details with the Technical Coordinator as agreed at the previous Session.
- 3.8 The Technical Coordinator shall then undertake the tasks as proposed by the Chair and report to the next Panel Session.
- 3.9 The Chair will also finalise updates to the DBCP Implementation Strategy including reference to the Capacity Building efforts being undertaken by the Panel after seeking feedback from Panel members.
- 3.10 The Technical Coordinator will maintain close links with the Ship Observations Team (SOT) Coordinator so that support on deployment opportunities can be obtained from the Ship of Opportunity Programme (SOOP) Implementation Panel (SOOPIP) and the Voluntary Observing Ship (VOS) Panel (VOSP) of the SOT.
- 3.11 The Secretariat will maintain a list of national contact points for the DBCP and within other relevant bodies with potential for involvement in DBCP activities.
- 3.12 The current membership and contact details for the DBCP Executive are listed at http://www.jcomm.info/index.php?option=com_oe&task=viewGroupRecord&groupID=146.

4. ROUTINE TASKS OF THE TECHNICAL COORDINATOR

- 4.1 The following routine tasks of the Technical Coordinator (TC) comply with his/her Terms of Reference ([Appendix IV](#)).
- 4.2 The Technical Coordinator acts as a clearing house for information on all aspects of buoy data use; he/she maintains DBCP and JCOMMOPS websites as appropriate.
- 4.3 The Technical Coordinator monitors the status of the global drifting and moored buoy

networks in terms of: (i) spatial density; (ii) accuracy of the measurements; (iii) real-time data distribution and data timeliness; and (iv) drifting buoy lifetimes. The TC identifies gaps in the system, and makes recommendations to the Panel as appropriate. He/she also regularly provides information on instrument performances to the WMO Database as part of the CBS Rolling Review of Requirements (RRR).

- 4.4 Through direct contacts with programme managers, Principal Investigators, and buoy operators, the Technical Coordinator promotes the DBCP Programme, encourages use of buoy data, and active participation of new participants. The TC identifies sources of buoy data not currently reported on the GTS and determines the reason for non-availability (particularly for the Arctic Buoys IABP). The TC regularly contacts managers of existing and new buoy programmes in order to: (i) promote data exchange and GTS distribution of the data in real-time, (ii) invite them, and possibly convince them, if useful, to authorise GTS distribution of their buoy data; (iii) offer technical assistance for that purpose if needed; (iv) collect information on buoy programmes, and the deployed buoys, including metadata; and (v) collect information on buoy deployment opportunities for use by other buoy operators. Programme Managers may also directly contact the Technical Coordinator for receiving assistance with regard to the GTS distribution of their buoy data.
- 4.5 The Technical Coordinator provides information and assists as appropriate buoy data users for accessing data and platform/instrument metadata.
- 4.6 The Technical Coordinator also participates actively in buoy quality monitoring as defined in the DBCP Quality Control Guidelines (details on the DBCP website¹). In particular, The TC monitors the mailing lists, and information posted on the dedicated web page, reviews the buoy monitoring statistics, and provides feedback to buoy operators regarding the quality of their buoy data as appropriate and recommends action for those buoys reporting erroneous data. He/she assists in the resolution of specific technical problems regarding the GTS distribution of the data as appropriate (obtaining WMO (and WIGOS) numbers, looking at technical files, calibration curves, data losses, etc.).
- 4.7 The Technical Coordinator works closely with centres responsible for the collection, location, data processing, and real-time GTS distribution of the buoy data for: (i) monitoring the system and identifying possible problems; (ii) making sure these problems are corrected; and (ii) providing technical assistance as appropriate. .
- 4.8 Upon request, the Technical Coordinator also provides the WMO and IOC Secretariats with status maps, statistical information and graphs, and documentation.
- 4.9 The Technical Coordinator maintains the DBCP list of buoy manufacturers and provides it on the DBCP website.
- 4.10 The Technical Coordinator liaises with the DBCP Action Group coordinators and prepares reports on DBCP activities for the regular meetings of the Action Groups. The TC may represent the Panel or the Action Groups at relevant technical meetings, both inside and outside WMO and IOC, as required.
- 4.11 The Technical Coordinator assists the Chairperson and the Secretariats in the preparation for the DBCP Session, including the preparation of specific technical documents and presentations.

1 : <http://www.icommops.org/dbcp/2qgd.html>

- 4.12 The Technical Coordinator undertakes the tasks as proposed by the Chair during the inter-sessional period as prioritised and reports at the next Panel Session.
- 4.13 The Technical Coordinator supports, as required, existing DBCP Action Groups, and provides assistance on request to other internationally coordinated buoy programme developments.
- 4.14 The Technical Coordinator coordinates with the Indian Ocean Panel (IOP) implementing strategy for the Indian Ocean Observing System as far as data buoys are concerned.
- 4.15 The Technical Coordinator produces on a yearly basis prior to Panel sessions, a table of national commitments in the Southern Ocean, and seeks additional commitments for barometer upgrades, and deployment opportunities in the Southern Ocean to achieve a level of 300 buoys south of 40S.
- 4.16 The Technical Coordinator maintains a catalogue of existing ongoing ocean data buoy programmes, and provides information to Panel members or on its website, about where inventories of buoys are held, to aid in deployment planning.
- 4.17 The Technical Coordinator contributes to the implementation of the JCOMMOPS workplan – particularly with respect to deployment opportunities.
- 4.18 The Technical Coordinator maintains a summary of requirements for buoy data to meet expressed needs of the international meteorological and oceanographic communities.
- 4.19 The Technical Coordinator coordinates the operations of DBCP Quality Control guidelines.
- 4.20 The Technical Coordinator collects statistics and information on buoy vandalism occurrences, and maintains relevant information on the DBCP website.

5. ACTION GROUPS

- 5.1 The implementation of buoy deployments is coordinated at the regional level through global, regional, or specialized Action Groups. The definition of an Action Group is given in [Appendix V](#).

6. TASK TEAMS

- 6.1 Task Teams can be established to work proactively on key issues identified by the Panel, in order to ensure that the Workplan is duly implemented during the inter-sessional period. The Chairperson(s) of (a) Task Team(s) is/are appointed by the Panel. The Team(s) will report to the Panel on their activities at its regular sessions. The Chairs and Co-Chairs of the Task Teams should not be in a situation of conflict of interest. The list of current Task Team, their Terms of Reference and Membership are given at <http://www.jcommops.org/dbcp/overview/taskteams.html>.
- 6.2 From time to time, the Panel may decide to establish and fund Pilot Projects of limited duration to evaluate new technologies or procedures that might enhance its capabilities. The present list of Pilot Projects and background information is given at

<http://www.icommops.org/dbcp/overview/pilots.html>.

7. IMPLEMENTATION STRATEGY

- 7.1 The Panel defines its Implementation Strategy (http://www.icommops.org/doc/DBCP/DBCP_Impl_Strategy.pdf) and reviews it at its regular meetings. The Implementation Strategy is defined in such a way that it is consistent with the WMO and IOC Strategic plans.

8. WORKPLAN

- 8.1 The Panel establishes and reviews the overall Workplan for itself and the Technical Coordinator at its regular sessions, for the following inter-sessional period.
- 8.2 The DBCP Chairperson and the Executive Board may update the Technical Coordinator's Workplan during the inter-sessional period, as appropriate, and report on such changes at the next Panel Session.

9. FUNDING

- 9.1 The DBCP is self-sustaining, by contributions of equipment, services (such as communications, deployment, archiving, and scientific or technical advice), and coordination. The contributions include monetary contributions to secure employment and activities of the Technical Coordinator, through IOC and WMO.
- 9.2 Monetary contributions - on a voluntary basis - are made by Panel members to the DBCP Trust Fund at WMO and/or IOC, as appropriate. The Terms of Reference of the DBCP Trust Fund at WMO are given in [Appendix VI](#). The Trust Fund at IOC follows the Financial Regulations of the IOC Special Account that are reproduced in [Appendix VII](#) (Decisions in 157th Executive Board of UNESCO). The IOC Regulations follow the General rules and regulations of UNESCO on Trust Funds, which correspond to those of WMO, in principle.
- 9.3 The Panel can establish budget lines to implement the DBCP activities, based on its agreed Workplan. The current DBCP budget line items are provided in [Appendix VIII](#).
- 9.4 Through the present arrangement, the Technical Coordinator is recruited by WMO, and the employment, activities and logistical support of the Technical Coordinator depend on the dedicated Trust Funds in IOC and in WMO.
- 9.5 Timely contributions from Panel members are critical to secure the TC employment contract, considering the yearly cycle of the administration within WMO and IOC. Panel members are encouraged to ensure that their contributions are made in good time.
- 9.6 The arrangements for logistical support of the DBCP Technical Coordinator and JCOMMOPS will be organized according to JCOMM Recommendation on JCOMMOPS Management, existing agreements with host and donors, and agreement between the WMO and IOC Secretariats.
- 9.7 The WMO and IOC Secretariats provide finalized financial statements of account on an annual basis to the Panel in early Year+1 as soon as the organizations' fiscal year

accounting is finalized. The Panel also reviews its financial situation at regular Panel sessions, with interim statements of the budget provided by the WMO and IOC Secretariats.

- 9.8 The WMO and IOC Secretariats shall facilitate the transfer of sufficient funds from the JCOMM OPA related funds at the WMO or IOC to the other Organization funds as necessary.
- 9.9 The Panel may appoint a Panel Member as finance advisor to act on its behalf of and to work with the WMO-IOC Joint Secretariat to produce a consistent, comprehensive and comprehensible set of annualized accounting reports to be presented to the Panel and its Executive Board at their regular meetings.
- 9.10 The joint Secretariats and the DBCP financial advisor will work together to prepare and distribute the final statement of the DBCP/SOT Trust Fund for the previous year to the Panel members as soon as the IOC and WMO Final Statement of Accounts for that year are finalized. On the basis of the IOC and WMO Final Statements and the advice of the DBCP Executive Board, the financial advisor will also prepare a revised budget estimate for the following 2 years. The IOC and WMO Final Statements and the final statement for the DBCP/SOT Trust Fund are then included in the DBCP Annual report.
- 9.11 The DBCP financial advisor will request IOC and WMO to provide an Interim Statement of Accounts over the period 1 January - 31 July for the preparation by the Secretariat and the Financial Advisor of an interim statement of the DBCP/SOT Trust Fund, to be presented to the DBCP members at the following DBCP Session.

10. ORGANIZATION AND CONDUCT OF THE DBCP SESSIONS

- 10.1 In odd years, the regular session of the DBCP will normally be held at either the WMO or IOC Headquarters, based on the agreement and decision by the Panel and the WMO-IOC Joint Secretariat, in order to lessen travel duties of the Secretariats and to provide opportunities for extended participation of other WMO or IOC officers in the session for a wider range of information exchange and cooperation.
- 10.2 In even years, the regular session of the DBCP will be held at an external location, upon a suitable offer for hosting sessions. This is to advocate and support the Panel's activities in regional and national levels, and to encourage regional/national staff at all levels to actively participate in the work of the Panel, in particular through presentations to the Scientific and Technical Workshop and other networking opportunities.
- 10.3 The agenda and timetable of the regular session will be drawn up by the Panel Chairperson, in consultation with the Executive Board, other Panel members and the Joint WMO-IOC Secretariat. In principle, the Panel discussion at the regular session is to be completed within 3 days. In order to ensure efficiency of the session as well as the comprehensive review and exchange of information, some parallel or side sessions and focused discussion may be introduced, as required. The Panel will strive to reach decisions by consensus only; no voting should in principle take place. All decisions and relevant discussion will be recorded in the session report, which will be approved by the Panel before it disperses.

11. INFORMATION EXCHANGE AND REPORTING

- 11.1 The Technical Coordinator maintains a website on behalf of the Panel. The URL for the website is: <http://dbcp.jcommops.org/> .
- 11.2 The Technical Coordinator also maintains mailing lists for the Panel. The names of the mailing lists, their objectives, and membership are detailed on the DBCP website.
- 11.3 The Panel may produce and update the DBCP brochure. The contents, means of publication and distribution, and funding mechanisms for related activities are to be agreed by the Panel at its regular sessions.
- 11.4 The Panel members who represent DBCP at various events should use a standard Powerpoint presentation template. The template is developed and maintained by the Technical Coordinator, and available from the DBCP website.
- 11.5 The Technical Coordinator also maintains a document describing the Panel's achievements since its establishment.
- 11.6 The Panel maintains series of DBCP Technical Publications that are issued by the WMO Secretariat. These publications can be in the form of paper copy, CD-ROM, DVD-ROM, or be web-based only. The list of current DBCP Publications is available at the DBCP website (see <http://www.jcommops.org/dbcp/community/documents.html>). The actual costs of editing, publishing, and distributing the DBCP Publications are recovered from the DBCP Trust Fund.
- 11.7 At its regular sessions, the Panel receives annual reports on activities during the inter-sessional period, from:
- the Executive Board;
 - the Technical Coordinator;
 - the Action Groups,
 - the Pilot Projects, and
 - the Member Countries.
- 11.8 The annual reports by Action Groups and the Member Countries are also to be included in the DBCP Annual Report. Members who had not submitted written National Reports for the year YYYY at the regular Panel Sessions shall submit their input to the Secretariat before the end of the year YYYY. The Annual Report shall be provided by the Secretariat during the year following the year of the report.
- 11.9 The Panel's regular session report shall be provided by the Secretariat within 3 months after the last day of the session and will be consolidated into a single mailing, structured as follows:
- a. A 2-page covering letter containing important information for decision makers, including:
 - executive summary of the Panel's achievements, activities and aspirations for the current year.
 - b. A hard copy report containing information that needs to be referenced (and possibly annotated) rather frequently and quickly. This would essentially replace the existing session final report. The material in this report would include the following:
 - Executive summary of the Panel's achievements, activities and aspirations for the current year;

- The final report of the regular session (i.e., the usual final report without the annexes);
 - Agenda;
 - List of participants;
 - Summaries of the Action Group reports;
 - Executive Board report;
 - Finalised annual financial accounts, including the table of national contributions and budget for the following year;
 - If necessary, selected buoy and GTS statistics (showing trends in numbers, quality, delays, plus a few maps);
 - List of Actions and Workplan, and;
 - List of Acronyms.
- c. Other web-based electronic material containing the entire above, plus a complete set of meetings, and all other annexes generally attached to the two reports includes:
- A full report by the Technical Coordinator;
 - National reports;
 - Full reports by the Action Groups;
 - Data Management Centre reports;
 - The current status and development of satellite communications (CLS/Argos, Iridium, etc);
 - GTS report;
 - National Focal Point list;
 - Contracts;
 - Other financial and administrative papers; and
 - Technical Document list, including available electronic versions.
- d. All of the above information will be available on-line via the DBCP website.

11.10 During the inter-sessional period, the Technical Coordinator provides quarterly reports on his/her activities and the status of his/her Workplan's implementation to the DBCP Executive Board.

11.11 The Technical Coordinator produces monthly maps and statistical graphics on a monthly basis regarding the status of buoy programmes. This information is posted on the JCOMMOPS website and issued through the appropriate mailing lists.

11.12 Written reports to the Panel session will adhere to a format that will make clear to the Panel, by means of an Executive Summary, those issues that require discussion and decision. Similarly, presentations to the session will presume that written reports have been read by the Panel, and will concentrate solely on those issues, which require an action or decision by the Panel. Report presenters will submit a summary of their report and the ensuing discussion and actions to the secretariat for inclusion in the final report of the session.

11.13 The National Focal Point shall annually check the DBCP list of National Focal Points for correctness and report discrepancies, changes, or additions to the WMO Secretariat.

12. REVIEW OF THE MANAGEMENT STRUCTURE AND OPERATING PRINCIPLES

12.1 The Panel reviews and updates its management structure, and operating principles at

its regular sessions. This includes, in particular, the appropriate appendices of the DBCP operating principles, i.e. definition of an Action Group, Terms of Reference of the Executive Board, budget lines, and Terms of Reference of the DBCP Trust Fund at WMO and IOC.

APPENDIX I

Terms of Reference of the Data Buoy Cooperation Panel

(as approved by the JCOMM Co-Presidents on behalf of the Commission, 24 July 2012, per Resolution 3 (JCOMM-4) and updated for DBCP-33)

The Data Buoy Co-operation Panel shall:

Consider the expressed needs of the international meteorological and oceanographic communities for real-time or archived data from ocean data buoys (both drifting and moored) and also from rigs and platforms reporting surface marine meteorological and oceanographic data; and to request action from its members, the Technical Coordinator or its subsidiary groups (Task Teams, Action Groups, Pilot Projects) to meet these needs;

1. Coordinate activity on existing programmes so as to optimize the provision and timely receipt of good quality data and metadata from them;
2. Propose, organize and implement, through the coordination of national contributions, the expansion of existing programmes or the creation of new ones to supply such data;
3. Support and organize as appropriate through regional Action Groups as necessary to implement the deployment of data gathering buoys to meet the expressed needs of oceanographic and meteorological programmes such as WWW, WCRP, GOOS, GCOS, GFCS, WIS, and WIGOS;
4. Encourage the initiation of national contributions to data buoy programmes from countries which do not presently make them;
5. Promote data exchange, including the insertion of all available and relevant real-time platform data and metadata into the WMO Global Telecommunications System, and the submission of data and metadata to the appropriate centres for archiving;
6. Promote the exchange of information on data buoy activities and encourage the development and transfer of appropriate technology;
7. Ensure that other bodies actively involved in buoy use are informed of the workings of the Panel and encourage, as appropriate, their participation in the Panel;
8. Make and regularly review arrangements to secure the services of a Technical Coordinator with the terms of reference given in Part B;
9. Report formally to the Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM), and participate in and contribute to an integrated global operational ocean observing system implemented through the JCOMM Observations Coordination Group (OCG); and
10. Submit annually to the Executive Councils of the WMO and the IOC, to JCOMM and to other appropriate bodies of WMO and IOC, a report that shall include summaries of the existing and planned buoy deployments and data flow.

APPENDIX II

DBCP DATA POLICY

(as adopted at DBCP-25 and revised at DBCP-30)

Data access policy

1. The DBCP encourages timely, free and unrestricted access to data. Real time data sharing is achieved via the Global Telecommunications System² of WMO. DBCP also cooperate with data contributors to ensure that data can be accepted into and be used through the NODC and WDC network of the IOC/IODE as long-term repositories for oceanographic data and associated metadata.

2. At present, all of the archiving agencies and many of the operational and research bodies make provision for the release of drifter data to scientific and other customers. In particular, many data are available via the web, either in the form of track plots or as datasets. In many cases, the policies relating to the release and use of these data are not immediately clear. The Panel is seeking clarification from these agencies, and from its action groups, with a view to developing a coordinated data access policy for drifter data within the letter and the spirit of the WMO data exchange policy defined in WMO Congress Resolution 40 (Cg-XII) and the IOC oceanographic data exchange policy defined in IOC Assembly Resolution XXII-6.

Data archiving

3. Drifter data inserted on the GTS are routinely archived by Marine Climate Data System (MCDS) Global Data Assembly Centres (GDACs) (Canada, and France). The AOML Data Assembly Centre (DAC) archives all data from the GDP, and any other drifter data that are made available to it. The Panel and its action groups will actively encourage all buoy operators to forward their data to one or other of these responsible global archives. . For moored buoy data there is no dedicated GDAC, as there is for drifter data. All drifter and moored buoy data should ultimately be incorporated into ICOADS (the International Comprehensive Ocean- Atmosphere Data Set) which is the primary dataset used for marine climate research.

Instrumental Metadata

4. There has been an increasing demand for instrumental metadata in recent years to serve a number of applications - and climate studies in particular. The DBCP has established its own metadata collection system at JCOMMOPS for both drifting and moored buoys and is a contribution to the Marine Climate Data System (MCDS).

Quality control

5. Quality control procedures are in place to ensure the usefulness of real time data and also of data archives. A well-defined feedback mechanism is required to control real time data (see the DBCP QC Guidelines³).

More information :

- WMO data policy Resolution 40⁴

2 : <http://www.jcommops.org/DBCP/1gtsinfo.html>

3 : <http://www.jcommops.org/dbcp/2qgd.html>

4 : http://www.wmo.int/pages/prog/www/ois/Operational_Information/AdditionalDataProducts/02_Resolution%2040.pdf

- IOC Oceanographic Data Exchange Policy⁵
- CLIVAR data policy⁶

5 : http://www.ioc-unesco.org/index.php?option=com_oe&task=viewDocumentRecord&docID=338

6 : http://www.clivar.org/data/data_policy.php

APPENDIX III

Terms of Reference of the DBCP Executive Board (as approved at DBCP-28)

The DBCP Executive Board shall:

1. Seek guidance from the Panel at its regular sessions regarding specific issues to be addressed by the Executive Board and the Tasks Teams during the inter-sessional period;
2. Act promptly to deal with any administrative, financial and planning issues and opportunities that might arise, within the guidelines established and reviewed regularly by the Panel;
3. Authorise the Chairperson to advise WMO and IOC on any expenditure necessary for the resolution of these issues and the promotion of the Panel's aims and objectives, up to the maximum amounts that might be agreed in advance by the Panel at its regular session;
4. Review the DBCP Implementation Strategy to ensure that it is kept up-to-date and complies with ongoing activities and users' requirements;
5. Considering the dynamic nature of the DBCP Operating Principles, in consultation with Panel members, assist the Chairperson in proposing updates to these principles on an annual basis;
6. Assist the Chairperson with regard to continuing the arrangements (including finance) to secure the services of a technical coordinator;
7. Set working priorities for the Technical Coordinator according to the DBCP recommendations at its regular sessions, and provide further guidance during the DBCP inter-sessional period;
8. Assist the Chairperson, and liaise with the Financial Advisor for updating the interim financial report with the most accurate and current information by end of each year;
9. Confer primarily regularly by e-mail, and exploit opportunities afforded by attendance at other meetings (e.g., the JCOMM OCG meeting) for face-to-face meetings;
10. Conduct meetings annually, following an agenda drawn up by the DBCP Chairperson;
11. Consult with Panel members and the Chairpersons of the DBCP Task Teams during the inter-sessional period if required;
12. Report its activities to the DBCP at its regular Session, and throughout the inter-sessional period as appropriate.

Membership:

The following individuals are members of the DBCP Executive Board (current members are listed in the Annual Session Reports, and the on-line web site):

- DBCP Chairperson, or his / her appointed deputy (Executive Board Chairperson)
- DBCP Vice-chairpersons
- DBCP member (appointed by the Chairperson)
- DBCP Technical Coordinator (*ex officio*)
- Representative of the IOC Secretariat (*ex officio*)
- Representative of the WMO Secretariat (*ex officio*)
- Representative of the Manufacturers (*ex officio*)

Note 1: A quorum of the Board should consist of at least three members, and must include the Chairperson or his / her appointed deputy.

Note 2: Any Panel Member may attend DBCP annual Executive Board meetings as an observer, subject to the availability of adequate meeting room space. If required, the Chairperson of the DBCP Executive Board will make a final decision as to which observers may attend, and may also invite other persons to attend at his/her discretion.

Note 3: The term for the members of the Executive Board is for one year during the inter-sessional period. They shall be eligible for re-election in their respective capacities, but would serve in principle for no more than 4 terms.

APPENDIX IV

Terms of Reference for the Technical Coordinator of the DBCP

(as approved by the JCOMM Co-Presidents on behalf of the Commission, 24 July 2012, per Resolution 3 (JCOMM-4))

The Technical Coordinator of the Data Buoy Cooperation Panel shall:

1. Under the direction of the Data Buoy Cooperation Panel take all possible steps within the competence of the Panel to assist in the successful achievement of its aims;
2. Assist in the development, implementation, and management of quality control procedures for relevant observing platforms;
3. Assist in setting up suitable arrangements for notifying the appropriate user communities of changes in the functional status of relevant operational observing platforms;
4. Assist in the standardization of relevant observing platform formats, sensor accuracy, etc.;
5. Assist when requested with the development of cooperative arrangements for buoy deployment;
6. Assist in the clarification and resolution of issues between Service Argos and buoy relevant observing platforms operators;
7. Assist in promoting the insertion of all available and relevant observing platform data into the Global Telecommunications System;
8. Supply information about buoy developments and applications to the WMO and IOC Secretariats and assist the Data Buoy Cooperation Panel to promote an international dialogue between oceanographers and meteorologists;
9. Coordinate and monitor the flow of relevant observing platform data into appropriate permanent archives.

APPENDIX V

Definition of a DBCP Action Group (as approved at DBCP-X)

1. A DBCP Action Group is an independent self-funded body that maintains, as a significant element of its responsibilities, an observational buoy programme providing meteorological and oceanographic data for real-time and / or research purposes in support of the World Weather Watch (WWW), the World Climate Research Programme (WCRP), the Global Climate Observing System (GCOS), and the Global Ocean Observing System (GOOS), and other relevant WMO and IOC programmes.
2. Action Groups of the DBCP shall support the aims and objectives of the DBCP - as set out in the Terms of Reference of the DBCP - particularly with respect to:
 - Provision of good quality and timely data to users;
 - Insertion of real-time (or near real-time) data into the GTS;
 - Exchange of information on data buoy activities and development and transfer of appropriate technology.
3. An Action Group may be regional or national in nature provided that its programme benefits a regional or international community.
4. To be adopted as an Action Group of the DBCP, the Terms of Reference or operating principles of the body or programme shall be submitted to a session of the DBCP for formal approval. Once approved these shall be lodged with the Secretariats of WMO and IOC.
5. The DBCP shall support the activities of its adopted action groups especially through the assistance of its key personnel (technical coordinator and the Secretariats of WMO and IOC) as far as resources allow.
6. Action Groups of the DBCP shall submit annual reports of their activities to the sessions of the DBCP.

APPENDIX VI

Draft Terms of Reference for the DBCP Trust Fund at WMO

(as adopted at DBCP-33 and further agreed by way of exchange of letters between the WMO Secretary General⁷ and the DBCP Chairperson⁸)

1. The purpose of the DBCP Fund is to support the activities of the Observations Programme Area (OPA) of the Joint WMO/IOC Commission for Oceanography and Marine Meteorology (JCOMM), in line with direction given by donors;
2. The DBCP Fund is a Trust Fund within the provisions of Articles 9.7⁹, 9.8¹⁰ and 9.9¹¹ of the WMO Financial Regulations (Resolution 37, Cg-XV);
3. The Fund shall be managed by WMO under its applicable rules and procedures, according to an annual budget adopted by the Observations Coordination Group (OCG) and the contributing Panels at its regular Sessions and any other directions provided by the DBCP;
4. The budget will be constructed according to a format, in which all income and expenditures will be identified in general articles and specific chapters. The format of the budget may be revised as necessary. The budget may take note of other monies and resources made available for support of the OPA activities, but which are not included as part of the Fund. Only those monies placed in the Fund, however, shall be subject to these terms of reference. The contributors will provide WMO with details of the projects under which expenditures shall be made for invoicing purposes;
5. The Chairpersons of the appropriate panel as listed in Table 1 may request the WMO Secretariat to commit any expenditure necessary for the resolution of these issues and the promotion of the Panel's aims and objectives, up to the maximum amounts that might be agreed in advance by the OCG and contributing Panels, as long as these are consistent with the Operating Principles of each panel and available resources. The Chairpersons may also request to commit any expenditure exceeding these maximum amounts, or unplanned expenditures with the approval from the respective Panel Executive Board, under its Terms of Reference;
6. The unit of account shall be the United States dollar. When commitments are made, the appropriate funds will be converted, as necessary, to the currency of commitment in at least the amount of the commitment;
7. The income of the Fund will include:
 - (i) Annual contributions from participating Members / Member States;
 - (ii) Funds deposited for specific purposes, hereafter referred to as deposits;

7: Letter from Secretary General

8: Letter from DBCP Chairperson John Turton

9: 9.7: Trust funds, reserve and special accounts may be established by the Secretary-General and shall be reported to the Executive Council.

10: 9.8: The purpose and limits of each trust fund, reserve and special account shall be clearly defined by the Executive Council. Unless otherwise provided by the Congress, such funds and accounts shall be administered in accordance with the present Financial Regulations.

11: 9.9: Income derived from investments of trust funds, reserve and special accounts shall be credited as provided in the provisions applicable to such funds or accounts or at the request of the donors at any time. In other circumstances, Regulation 10.1 shall apply.

- (iii) Other contributions from third parties;
- (iv) Interest on investments as may be made by the Secretary-General in accordance with the provisions of Financial Regulation 12.2¹² (Resolution 37, Cg-XV); and
- (v) Miscellaneous income.

8. The Fund will be used as agreed by the OCG and contributing Panels to:

- (i) Finance technical and operational support services for the OPA, including in particular for supporting JCOMMOPS Technical Coordinators salary, benefits, logistical support, and missions; capacity-building activities; Technical Evaluation and Pilot Projects; consultancy and missions of experts; practical arrangements for the deployment or servicing of instruments; promotion and exchange of information about the OPA activities;
- (ii) Finance the share of contributing panels and others in supporting the activities of JCOMMOPS and the Observing Programme Support Centre (OPSC) as agreed by the OCG and the contributing Panels at their regular sessions;
- (iii) Provide support to the Argos Joint Tariff Agreement within the resources set aside by the JTA under these activities;
- (iv) Assist in the establishment and operation of ocean observing programmes, including coordination and capacity development activities;
- (v) Meet appropriate administrative costs incurred by WMO in providing support to OPA activities;
- (vi) Meet other administrative costs including such items as meetings and consultants;
- (vii) Purchase specified goods or services; and
- (viii) Support other activities required to meet the basic goal of the OPA;

9. Authority for the disbursement of funds, in respect of contracts and agreements properly concluded, is delegated to the WMO¹³ in consultation with OCG Chairperson and Panel Chairpersons as applicable. The Chairpersons as applicable may also request the Secretary-General of WMO, or his representative, to disburse the funds;

10. Where required by their internal regulations, individual contributors to the DBCP Fund may wish to negotiate additional conditions governing the application, conditions of deposit and disbursement of funds. Such additional conditions shall not inhibit the efficient

12: 12.2: The Secretary-General may make long-term investments of moneys standing to the credit of trust funds, reserve and special accounts, except as may be otherwise provided by the appropriate authority in respect of each such fund or account and having regard to the particular requirements as to the liquidity of funds in each case.

13 DBCP Fund administration is currently the responsibility of the Chief of the Observing Systems Division of the Observing and Information Systems Department of WMO

and proper use of the Fund nor modify the intent of the Fund. They shall require the acceptance in writing by the Chairperson of the OCG and the Secretary-General of WMO or his representative;

11. The Fund shall be maintained on a continuous basis and amounts standing to the credit of the Fund at the end of any WMO biennial period shall remain in the Fund for use in the subsequent period;

12. Upon liquidation of the Fund for any reason, the OCG and contributing Panels shall make provision for the payment of unliquidated obligations and estimated expenses of winding-up business. It shall then arrange for repayment - to the extent that funds are available and according to the depositors instructions - of deposits for which no equipment or services have been received;

13. At the closure of the Fund:

- (i) Any remaining surplus after (12) above, shall be distributed among the donors in proportion to their total contributions and deposits paid by them to the DBCP Fund; and
- (ii) Any remaining deficit, including provision for the payment of unliquidated obligations and estimated expenses of winding-up business, shall be met by the donors in an equitable way, to be decided upon by the OCG.

14. The Fund will be terminated not later than one year after the formal termination of the OCG;

15. All funds credited to the DBCP Fund shall be subject to these terms of reference and to the Terms of Reference of the OCG and contributing Panels and

16. Any revision or amendment to the present Terms of Reference is subject to a decision of the chairs of OCG and contributing Panels and the agreement of WMO.

#	Item description	Decision on expenditure	JCOMMOPS related
	JCOMMOPS		
1.	Contract (salary) for DBCP & SOT Technical Coordinators	WMO ¹⁴¹³	Y
2.	Provision for termination / transition of the Technical Coordinators	WMO ¹³	Y
3.	JCOMMOPS Logistical Support	WMO ¹³	Y
4.	DBCP-TC Travel	WMO ¹³	Y
5.	SOT-TC Travel	WMO ¹³	Y
6.	Other JCOMMOPS expenses	WMO ¹³	N
7.	Bank Charges and support cost	WMO ¹³	Y
	JTA		
8.	JTA , including Chairperson's contract, Executive Board	JTA chair	N
	DBCP		

14 DBCP Fund administration is the responsibility of the Chief of the Observing Systems Division of the Observing and Information Systems Department of WMO

9.	DBCP chair and other travel	DBCP chair	N
10.	DBCP Capacity Building	DBCP chair	N
11.	Other DBCP expenses	DBCP chair	N
	SOT		
12.	SOT chair and other travel	SOT chair	N
13.	Other SOT expenses	SOT chair	N
.	WMO		
14.	WMO activities ¹⁵	WMO ¹³	N

Table 1 : Panel responsibilities on DBCP Fund expenditure approval

¹⁵ Using funds made available by contributors (e.g. JTA) for WMO Secretariat

APPENDIX VII

Financial Regulations applicable to the Intergovernmental Oceanographic Commission (IOC)

(Excerpt from the Decisions by 157th Executive Board of the UNESCO)

Article 1 - Creation of a Special Account of UNESCO

- 1.1 In accordance with Article 6, paragraph 6, of the Financial Regulations of UNESCO, there is hereby created a Special Account for the Intergovernmental Oceanographic Commission, hereinafter referred to as IOC.
- 1.2 The following Regulations shall govern the operation of this Special Account.

Article 2 - Financial period

The financial period shall correspond to that of UNESCO.

Article 3 - Income

- 3.1 As provided in its Statutes, the income of IOC shall consist of:
 - (a) funds appropriated for this purpose by the General Conference of UNESCO;
 - (b) voluntary contributions from States, international agencies and organizations, as well as other entities allocated to it for purposes consistent with the policies, programmes and activities of UNESCO and IOC;
 - (c) such subventions, endowments, gifts and bequests as are allocated to it for purposes consistent with the policies, programmes and activities of UNESCO and IOC;
 - (d) fees collected in respect of the execution of projects entrusted to IOC, from the sale of publications, or from other particular activities; and
 - (e) miscellaneous income.
- 3.2 The Executive Secretary of IOC, hereinafter referred to as the Secretary, may accept income as set forth in Article 3.1 on behalf of IOC, provided that, in any case which would involve IOC in an additional financial liability, the Secretary shall obtain the prior approval of the IOC Executive Council and the consent of the Executive Board of UNESCO.
- 3.3 The Secretary shall report to the IOC Assembly and the IOC Executive Council on any subventions, contributions, grants, gifts or bequests accepted.

Article 4 - Budget

- 4.1 The Secretary shall prepare, in a form to be determined by the IOC Assembly, a biennial programme and budget and shall submit it to the IOC Assembly for approval.

- 4.2 The appropriations voted in the budget shall constitute an authorization to the Secretary to incur obligations and to make expenditures for the purposes for which the appropriations are voted and up to the amounts so voted.
- 4.3 The Secretary is authorized to transfer funds between activities under the same appropriation line. The Secretary may be authorized by the IOC Assembly to transfer funds, when necessary, between appropriation lines within the limits established by the Appropriation Resolution voted by the IOC Assembly and shall report to the IOC Executive Council on all such transfers.
- 4.4 The Secretary is required to maintain obligations and expenditures within the level of the actual resources that become available to the General Account mentioned in Article 5.1 below.
- 4.5 Appropriations shall remain available for obligation during the financial period to which they relate.
- 4.6 The Secretary shall make allotments and any modifications thereon, within the limits of the Appropriation Resolution, which shall be communicated, in writing, to the officials authorized to incur obligations and make payments.
- 4.7 Appropriations shall remain available for 12 months following the end of the financial period to which they relate to the extent that they are required to discharge obligations for goods supplied and services rendered in the financial period and to liquidate any other outstanding legal obligations of the financial period.
- 4.8 At the end of the 12-month period provided for in Article 4.7 above, the then remaining unspent balance of obligations retained shall revert to the General Account mentioned in Article 5.1 below.

Article 5 - The General Account

- 5.1 There shall be established a General Account, to which shall be credited the income of IOC as described in Article 3 above and which shall be used to finance the approved budget of IOC.
- 5.2 The balance remaining in this General Account shall be carried forward from one financial period to the next.
- 5.3 The uses to which this balance may be put shall be determined by the IOC Assembly.

Article 6 - Trust Funds, Reserve and Subsidiary Special Accounts

- 6.1 In addition to a Working Capital Fund, the Secretary shall establish a Reserve Fund to cover end-of-service indemnities and other related liabilities; the Fund shall be reported to the IOC Assembly at the time of the budget approval.
- 6.2 Trust Funds, Subsidiary Special Accounts and any other Reserve Accounts may be established by the Secretary, who shall report to the IOC Assembly and the IOC Executive Council.
- 6.3 The Secretary may, when necessary, in connection with the purpose of a Trust Fund, Reserve or Subsidiary Special Account, prepare special financial regulations

to govern the operations of these funds or accounts and shall report thereon to the IOC Assembly and the IOC Executive Council. Unless otherwise provided these funds and accounts shall be administered in accordance with these Financial Regulations.

Article 7 - Accounts

- 7.1 The UNESCO Comptroller shall maintain such accounting records as are necessary and shall prepare, for submission to the IOC Assembly and the IOC Executive Council, the biennial accounts showing, for the financial period to which they relate:
- (a) the income and expenditure of all funds;
 - (b) the budgetary situation including:
 - (i) original appropriations;
 - (ii) the appropriations as modified by any transfers;
 - (iii) the amounts charged against these appropriations;
 - (c) the assets and liabilities of IOC.
- 7.2 The Secretary shall also give such other information as may be appropriate to indicate the current financial position of IOC.
- 7.3 The biennial accounts of IOC shall be presented in dollars of the United States of America. Accounting records, may, however, be kept in such currency or currencies as the Secretary may deem necessary.
- 7.4 Appropriate separate accounts shall be maintained for all Trust Funds, Reserve and Subsidiary Special Accounts.

Article 8 - External audit

The audited accounts of IOC, which constitute an integral part of the statement of the financial position of UNESCO, and the report of the External Auditor of UNESCO on IOC, shall be submitted to the IOC Assembly for approval.

Article 9 - General provision

Unless otherwise provided in these Regulations this Special Account shall be administered in accordance with the Financial Regulations of UNESCO.

APPENDIX VIII

Current DBCP budget line items (as approved at DBCP-29)

The DBCP budget includes the following line items:

1. Contract (salary) for DBCP & SOT Technical Coordinators¹⁶
2. Provision for termination / transition of the Technical Coordinators;
3. JTA17, including Chairperson's contract, Executive Board;
4. JCOMMOPS logistical support¹⁸;
5. SOT Chairperson and other travel¹⁹;
6. DBCP Chairperson and other travel²⁰;
7. Travel for the DBCP Technical Coordinator²¹**Error! Bookmark not defined.;;**
8. Travel for the ship coordinator's position²¹; Other DBCP expenses²²;
9. Outreach and publication activities²³;
10. DBCP Capacity-Building²⁴;
11. Other SOT expenses²⁵;
12. WMO/JTA activities²⁶
13. Other JCOMMOPS expenses²⁷
14. Bank charge and support cost²⁸;
15. Contingency.

16 Includes the salary and benefits

17: This expenditure is balanced by an equivalent contribution of the JTA to the DBCP Trust Fund.

18: Hardware and software, and host IT support for developing, running, and maintaining the JCOMMOPS Information System;

19: Expenditure in support of the JCOMM Ship Observations Team (SOT) SOT Chairperson and other members travel;

20: Expenditure in support of the DBCP chair and other members travel ;

21: Expenses to be decided by the DBCP Chair in consultation with the WMO

22: For example, the DBCP Iridium Pilot Project;

23: DBCP and JCOMMOPS brochures and DBCP Publications;

24: Support for DBCP-related training courses: travel of trainers and / or trainees; training materials;

25: Expenses to be decided by the SOT Chair in consultation with the WMO

26 Funds from JTA to WMO secretariat to spend on activities as appropriate

27 Any other expenses of JCOMMOPS i.e. publications material, contracts, IT/web development etc.

28: Bank charges and service charges from the WMO and IOC for supporting the DBCP Trust Fund;