

WORLD METEOROLOGICAL ORGANIZATION

INTERGOVERNMENTAL OCEANOGRAPHIC
COMMISSION (OF UNESCO)

DATA BUOY COOPERATION PANEL

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ITEM: 8.4

GENEVA, SWITZERLAND
26-30 SEPTEMBER 2011

ENGLISH ONLY

**PROGRESS REPORT ON THE JOINT DBCP-ETWS PILOT PROJECT ON WAVE
MEASUREMENT EVALUATION AND TEST FROM MOORED BUOYS**

(Submitted by Val Swail, Co-chair PP-WET Steering Committee)

Summary and purpose of the document

This document provides information on the development and current status of the joint DBCP-ETWS Pilot Project on wave measurement evaluation and test from moored buoys, and the Pilot Project workplan.

ACTION PROPOSED

The Panel 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. PP-WET WORKPLAN

-A- DRAFT TEXT FOR INCLUSION IN THE FINAL REPORT

8.4.1 Mr Val Swail (Canada) reported on the development and current status of the joint DBCP¹-ETWS² Pilot Project on wave measurement evaluation and test from moored buoys. The full report is included as a presentation in the CD-ROM for the DBCP-27 meeting report.

8.4.2 Mr Swail reported on two very important initiatives during the year relating to wave measurement and evaluation. The first of these was a workshop hosted by the US Alliance for Coastal Technologies in St. Petersburg, Florida, 22-24 February 2011, which sought to integrate US wave evaluation activities with the Pilot Project and proposed a US contribution. A presentation was made on the Pilot Project at the third International workshop on the Use of Historical Marine Climate Data (MARCDAT-III, Frascati, Italy, 2-6 May 2011). Also, the JCOMM Marine Instrumentation Workshop for the Asia Pacific Region was held in Tianjin, China, from 11-13 July 2011 hosted by the State Oceanic Administration (SOA) and the National Centre for Ocean Standards and Metrology (NCOSM) of China. The Tianjin workshop encouraged its participants to participate in the DBCP-ETWS Pilot Project on Wave measurement Evaluation and Test from moored buoys (PP-WET). The workshop also noted that the RMIC can play a role in the Pilot Project by (i) calibrating instruments, (ii) providing technical advice, (iii) do data analysis on behalf of the Pilot Project participants. The workshop supported the long-term need for instrument evaluations.

8.4.3 Mr Swail also noted that a special session on wave measurement and a side meeting have been organized as part of the 12th International Workshop on Wave Hindcasting and Forecasting (November 2011, Kona, Hawaii) to present preliminary results to the scientific community and further develop guidelines and participation in the Pilot Project (<http://www.waveworkshop.org>).

8.4.4 The Panel expressed its appreciation to several national agencies (Canada, US, Korea, India, Norway, United Kingdom, ESURFMAR) and international programmes for their participation in the intercomparison projects; the European Centre for Medium Range Weather Forecasts has also provided complementary evaluations against wave model output. In particular, the Panel welcomed the continued contribution from Canada in providing financial support for the Coastal Data Information Program (CDIP) at the Scripps Institution of Oceanography, in setting up the intercomparison methodology, web site and metadata criteria, and in carrying out individual intercomparisons. The Panel encouraged its member countries to participate in the intercomparison activities that were led by this pilot project (**recommendation**).

8.4.5 The Panel noted that evaluation results continue to be routinely added to the intercomparison web site <http://www.jcomm.info/wet> where data are transmitted in near real time. Additional intercomparisons will be added to the web site once the information has been retrieved from the data storage systems on the buoys.

8.4.6 The Panel recognized that the pilot project would contribute to JCOMM in developing standards and best practice, as well as to the relevant WIGOS exercise, and encouraged the co-chairs and SC members to actively outreach these relevant activities with the progress in the intercomparison exercise (**recommendation**).

8.4.7 The Panel agreed that this pilot project was progressing well, and decided to retain its financial support from the trust fund for another year (see agenda Items 11.6 and 12.4). The revised work plan for the project is given in Appendix A and is available at the pilot project website. The Panel thanked the PP-WET SC co-chairs, Mr Val Swail and Dr. Robert Jensen, and SC members for their work to make progress.

8.4.8 The meeting made the following recommendations:

1: DBCP: Data Buoy Cooperation Panel

2: ETWS: JCOMM Expert Team on Wind Waves and Storm Surges

- (i.) Continue to support the Pilot Project for the next year;
- (ii.) Encourage the co-chairs and SC members to contribute the results of the intercomparison exercise to JCOMM and WIGOS in developing standards and best practice;
- (iii.) Encourage its member countries to participate in the Pilot Project intercomparison activities;

8.4.9 The meeting decided on the following action items:

- (i.) A meeting of the Steering Committee will be organized in late 2011 (***action; PP-WET co-chairs & Secretariat; ASAP***).
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Appendices: 1

APPENDIX A

WORKPLAN OF THE PILOT PROJECT ON WAVE MEASUREMENT EVALUATION AND TEST FROM MOORED BUOYS (PP-WET)

1. Coordinate intercomparisons of wave measurements from different platforms, on an opportunistic basis;
 2. Publish intercomparison results and updated status reports on Pilot Project web site;
 3. Develop a plan for a continuous testing and evaluation program;
 4. Investigate the possibility of an alternative testing site if an ocean platform, were to be available through an industry partnership agreement; the evaluation framework would remain the same irrespective of the actual site;
 5. Contribute to training material to educate users about how to deploy and operate wave sensors appropriately;
 6. Contribute, as appropriate, to the JCOMM Standards and Best Practice Guides;
 7. Decide if a case can be made to continue the pilot project for a further year and investigate follow-on mechanisms;
 8. Present results to DBCP-XXVIII and other scientific fora.
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