WORLD METEOROLOGICAL ORGANIZATION

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (OF UNESCO)

DATA BUOY COOPERATION PANEL DBCP-XXVII/Doc. 8.3

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TWENTY-SEVENTH SESSION ITEM: 8.3

GENEVA, SWITZERLAND 26-30 SEPTEMBER 2011

ENGLISH ONLY

PROGRESS REPORT ON THE PILOT PROJECT ON WAVE MEASUREMENT FROM DRIFTERS (PP-WMD)

(Submitted by David Meldrum, United Kingdom)

Summary and purpose of the document

This document provides information on the development and current status of the Pilot Project on wave measurement from drifters (PP-WMD).

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.

-A- DRAFT TEXT FOR INCLUSION IN THE FINAL REPORT

8.3.1 Mr David Meldrum reported on the Pilot Project on wave measurement from drifters (PP-WMD). Little tangible progress had been made with this project during the intersessional period owing to the pressure of other work on project participants. However the Panel noted that a number of relevant papers had recently appeared in the scientific literature, and that this work by other parties would better inform the PP-WMD as to how best to proceed with a practical implementation of wave-spectral measurements from drifters. In noting that this was a rapidly developing field of research, it urged the project chair to conduct a full desk study of the new literature, to review the steering team workplan and membership, to contact the main players in the field and to propose an action plan for consideration by the Executive Board and by the Panel at its next session.

8.3.7 The meeting decided on the following action items:

(i.) PP-WMD chair to conduct a full desk study of the new literature, to review the steering team workplan and membership, to contact the main players in the field and to propose an action plan for consideration by the Executive Board and by the Panel at its next session (*action; D. Meldrum; DBCP-28*).

-B- BACKGROUND INFORMATION

- 1. The PP-WMD chair (D Meldrum) reported that pressure of other activities had prevented him from progressing with this duty in the way that had been hoped. Nonetheless, he had kept abreast of developments in the field, particularly in the area of using suitably filtered GPS observables to derive 2D wave spectra. Fortunately, major GPS error terms lie outside the time domain important for wave observations, so the technique has a significant potential which is being pursued by a number of researchers, including some presenting at the workshop preceding this session.
- 2. Little progress seems to have been made in translating the technology already developed to a free-drifting platform, although this remains the goal of the PP-WMD and a number of researchers, including L Centurioni.
- 3. The Panel was advised that, in view of the number of research activities in this field and the lack of convergence to date towards a best approach, that the initial aspirations of the PP-WMD, although worthy, were premature. Nonetheless, it is recommended that the PP-WMD be kept alive, and that its membership and workplan be reviewed in accordance with current developments in the research arena, with a view to the eventual translation of these research activities to a pilot drifter fleet rollout.