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INTERGOVERNMENTAL OCEANOGRAPHIC
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DATA BUOY COOPERATION PANEL

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ITEM: 8.2

GENEVA, SWITZERLAND
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ENGLISH ONLY

**PROGRESS REPORT ON PILOT PROJECT FOR THE EVALUATION OF ARGOS-3
TECHNOLOGY**

(Submitted by Luca Centurioni, USA)

Summary and purpose of the document

This document provides information on the development and current status of the Argos-3 pilot project implementation.

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.

Appendix: None

-A- DRAFT TEXT FOR INCLUSION IN THE FINAL REPORT

Technology development and deployments

8.2.1 Dr Luca Centurioni reported on the development and current status of the Argos-3 pilot project implementation. Developments are being conducted in collaboration with the manufacturers (Pacific Gyre, Clearwater, Metocean, and Marlin-Yug). The Panel noted that Michel Guigue (CLS) kept in contact with, and visited, most of the manufacturers of Argos 3 drifters during 2011. He also visited SIO twice to support the implementation of the Argos 3 PMT in a new drifter's microcomputer developed at SIO by the Drifters Lab. Regarding the manufacturers involved in the making of Argos-3 drifters:

Pacific Gyre: The Argos 3 drifters were built in the phase 1 of the project. Ten more units were built for phase 2, 7 of which have been deployed

Clearwater: All Argos 3 drifters built in phase 1 were deployed. Ten additional units were built for phase 2 and 9 of them were deployed. The failure rate is high.

Metocean: No more Argos-3 drifters were made.

Marlin-Yug: all the remaining buoys made in phase 1 were deployed.

Data analysis and evaluation

8.2.2 Similarly to the previous years, some PPT/system evaluations were done at CLS. A nearly final statistics are in the process of being completed at AOML (Mayra Pazos).

Miscellaneous

8.2.3 A careful evaluation of the new filtering method offered by CLS earlier this year (a Kalman filter, based on location fixes history, a velocity model and the actual Doppler frequency measurements) was performed by Dr. Luca Centurioni and Dr. Rick Lumpkin and other scientists that work with drifter data. The Global Drifter Program has decided to switch the whole drifter array from the least square location algorithm to the one that uses the Kalman filter. The new location technique should slightly increase the number of fixes of Argos 3 PMTs.

Appendix: None