# STATUS OF ARGO AND RELATED MATTERS

1. The status of funding for the Argo project can be summarized as follows: (*the figures refer to the number of floats*)

Country	Already funded	Proposed over next 3 years
Australia	20	90
Canada	10	150
European Community		80
France	20	150
Germany		150
Japan	20	300
Republic of Korea		75
United Kingdom	15	150
USA	195	1125
Total	280	2270

(Some other countries have expressed interest in being able to provide floats).

2. An Argo implementation meeting for the Pacific region took place in Tokyo in April 2000. The meeting initiated a coordinated implementation process for Argo floats in the Pacific and parts of the Indian Oceans, and adopted a formal statement emphasising the importance of Argo and pledging the support of all participating countries to this implementation. Other such meetings for Argo implementation in the Atlantic (Paris, July 2000) and in the Indian (to be determined) Oceans are expected to increase Argo visibility and interest amongst concerned Member States. Since the first proposal for an Argo project dates back less than two years and a half, the meeting recognized that progress in developing and implementing the project had been very good.

3. As a follow up of IOC Resolution XX-6 on Argo (attached) the Secretariats issued a Joint IOC-WMO Circular Letter, a key purpose of which was to ask for the nomination in each interested country of a national focal point for the Argo programme. This person would be responsible for the exchange of all relevant information between the country and the intergovernmental or international concerned bodies (e.g. the Secretariats, the Argo Science Team, etc.). Up to now, 24 countries had designated an Argo national focal point.

4. Argo floats deployed on the high seas may drift into EEZs, as is presently the case with the surface drifters deployed by many Member States. Recognizing this, IOC Resolution XX-6 requires that *"the concerned coastal states must be informed in advance, through appropriate channels, of all deployments of profiling floats which might drift into waters under their jurisdiction, indicating the exact location of such deployments."* 

5. To meet this requirement, IOC, with external funding provided by Argo operators and other interested agencies, is establishing an international Argo Information Centre

Annex X, p. 2

staffed by a Co-ordinator (half-time position). This coordinator will work directly under the supervision of Mr Etienne Charpentier, the Technical Co-ordinator of the DBCP and SOOP Programmes, in Toulouse, France. The centre will inform designated contact points in Member States about planned float deployments, how to track float positions, and how to access float data, in compliance with the IOC Resolution. Letters were sent to potentially interested agencies in various countries to request financial contributions to support the Centre. Positive answers have so far been received from a few of them.

6. As an interim measure, an Argo Internet forum has been set up by the Technical Co-ordinator of the DBCP. The forum will be used for float deployment notification purposes (and other purposes if desired - e.g. documents sharing, discussion on technical issues, etc.). Its URL is:

## http://argo-forum.jcommops.org/

The functioning of the forum is simple: whenever a Member State deploys floats, the float operator who deployed the instruments will place relevant information on the forum, under the heading "Float deployment notification". Information will therefore become public and automatic notification will be sent to all the known Argo national focal points, whose E-mail addresses have also been added in the forum.

## **Resolution XX-6**

## THE Argo PROJECT

The Intergovernmental Oceanographic Commission,

#### Considering that:

- the Global Ocean Data Assimilation Experiment (GODAE) is being planned as a pilot project in the context of the UN-sponsored programmes of GOOS, GCOS and CLIVAR, to contribute to short-term ocean forecasting, to provide boundary conditions for forecasting in coastal seas, and to contribute to seasonal to interannual atmospheric forecasts,
- (ii) GODAE will meet the pressing need for: (a) a vastly improved co-operation and integration of remote and *in situ* data streams, and (b) improved ocean models and data assimilation techniques to exploit this information, to meet various kinds of user's requirements, such as the stated requirements of the Conference of Parties to the Framework Convention on Climate Change for observational data to support its needs for monitoring and assessing climate change and its impacts,
- (iii) a major focus of the International GODAE Steering Team has been the development of a proposal for a global array of about 3,000 profiling floats, now known as the *Argo* project, which will be deployed in open ocean waters to cover the global ocean, and will measure temperature and salinity profiles in the upper 2,000 metres of the water column,
- (iv) the data and data products derived from those floats will be freely available in realtime and delayed mode through IOC and WMO data exchange systems, as well as other appropriate international mechanisms, and will support operational oceanography and marine meteorology,
- (v) those profiling floats are measuring instruments using modern technology; they drift freely at depths as great as 2,000 metres, rising to the surface every week or two to transmit data to shore *via* satellite,

Considering further that the Argo project shall be fully consistent with UNCLOS,

**Noting** the absence of a specific international legal instrument regulating profiling floats, drifting buoys, and other similar objects deployed in the oceans,

#### Recognizing that:

- (i) just as with existing surface drifting buoys, some of these new instruments may drift into waters under national jurisdiction,
- (ii) the Argo project is operational, is now being implemented, but is not yet global,

**Strongly supporting** the objectives and activities of GODAE which, as part of GOOS and GCOS, enjoys co-sponsorship by IOC, WMO, UNEP and ICSU,

**Noting** that the *Argo* project presents an excellent opportunity to improve ocean and climate forecasting, with consequent benefits for the protection of life and property and effective planning for the effects of seasonal to inter-annual climate variability,

**Acknowledging** paragraph 3.4.4.26 of the general summary of the Thirteenth World Meteorological Congress, which specifically addresses and endorses the *Argo* project,

Annex X, p. 4

**Recognizing** the need to ensure that Member States gain maximum benefit from the data of the *Argo* project in real-time and at longer time scales, and that they have the possibility to participate in and contribute to the project,

**Accepts** the *Argo* project as an important contribution to the operational ocean observing system of GOOS and GCOS, as well as a major contribution to CLIVAR and other scientific research programmes;

**Concludes** that concerned coastal states must be informed in advance, through appropriate channels, of all deployments of profiling floats which might drift into waters under their jurisdiction, indicating the exact locations of such deployments;

**Instructs** the Executive Secretary IOC, in close collaboration with the Secretary-General of WMO and in consultation with the Executive Director of UNEP:

- (i) to inform all Member States, the IHO, and appropriate UN agencies, including IMO and FAO, of the acceptance of the *Argo* project by IOC and WMO;
- (ii) to inform all Member States how to determine float locations and access float data;
- (iii) to consider how all Member States might participate in and benefit from the *Argo* project, as well as propose options to that end; and
- (iv) to appeal for international co-operation in making the Argo project a success;

**Further instructs** the Executive Secretary IOC to consult with the ABE-LOS and J-COMM on the legal and technical implications respectively of the deployment of profiling floats, drifting buoys, and other similar objects in the ocean, including the feasibility of drafting a legal instrument.

Financial implications: none