This document contains some of the highlights of the JCOMM activities since JCOMM-I.

The Assembly will be invited to:

(i) Note the activities of and progress made by JCOMM;
(ii) Recognizing that the success of JCOMM and IODE will depend on how well data are managed and shared, support the national and international data centres and data management activities;
(iii) Support the development of closer collaboration among JCOMM, GOOS and IODE.

1. Background

The Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM) was formally established in 1999 by Thirteenth Congress and the Twentieth Session of the IOC Assembly, through a merger of the Commission for Marine Meteorology (CMM) and the Joint IOC/WMO Committee for IGOSS. JCOMM is the reporting and coordinating mechanism for all operational marine activities in both WMO and IOC. As such, it is charged with the international coordination, regulation and management of an integrated, operational, oceanographic observing, data management and services system which will eventually become the ocean equivalent of the World Weather Watch. Thus JCOMM is the implementation arm of GOOS.

The first session of JCOMM took place in Akureyri, Iceland, in 2001, and the next session will be in the fall of 2005, in Halifax, Canada. In the intersessional period, JCOMM through its four program areas (observations, services, data management and capacity building), and its subsidiary expert and task teams is expected to deliver on the mandate established at its inception.

A major JCOMM priority for the intersessional period is the implementation and maintenance of an operational ocean observing system, according to the requirements established by the Ocean Observations Panel for Climate (OOPC), and by the Coastal Ocean Observations Panel (COOP) when it develops its requirements. Thus these two bodies become primary scientific advisory bodies for...
JCOMM. Consequently, JCOMM has in its management committee, the chairs of GOOS Steering Committee and GCOS Steering Committee, and works very closely with OOPC and COOP by participating in their meetings and activities, and by inviting the chairs of these two groups to JCOMM meetings, as appropriate.

In order to achieve the goals established for JCOMM, in the last two years, JCOMM focussed on for major areas: building the JCOMM Team with sufficient expertise to implement it as required; carrying out the tasks in all program areas according to the work-plan; bringing integration within each of its program areas, as well as with other international and intergovernmental bodies involved in activities similar to those of JCOMM; and promoting JCOMM.

Some of the major achievements in these areas are given in this report.

2. Progress in each Program Area

Observations

A major step forward in this program area was the integration of VOS, SOOP and ASAP elements of the ship-observations into a single group under the Ship Observations Team (SOT). The first meeting of the combined team took place in 2002 in Goa, India. A number of issues were discussed including the need for trained Port Meteorological Officers (PMOs) to support the SOT activities, and the issue of standards. For the former, an international PMO workshop will be run in 2003 back-to-back with the SOT meeting. For the latter, an intersessional Task Team on Instrument Testing and Intercalibration was set up to support the ongoing activities of its three component panels. In addition, in response to a request from IOC, the management Committee discussed steps pertaining to the establishment and use of standards, for the provision of reference materials in marine science, and to coordinate related activities and projects at the international level. JCOMM will coordinate the compilation of all available information, starting with the outputs from WOCE and JGOFS, and including what had been produced by JCOMM panels and other international bodies such as ICES, into a list accessible via web.

Other elements of this program area continued its activities as expected. However, it should be noted that the observational network for each of the observational elements (Argo, GLOSS, DBCP, SOOP, VOS, and ASAP) is considerably under-prescribed compared to the requirements established by the scientific panels.

Services

The services program area continued its activities: providing technical and scientific guidance and support for sea ice services, waves and storm surge activities, and Marine Pollution Emergency Response Service (MPERSS) and dissemination of information via the JCOMM Electronic Bulletin (JEB). In addition, to identify and develop oceanographic services, a task team on development of Ocean services was established. As the current pilot projects mature and are transformed into operational projects, these will be incorporated as appropriate into ocean services.

Data Management

JCOMM has initiated a task to define its data management strategy. In this process, JCOMM will take into account the substantial efforts made in the recent past to develop GCOS and GOOS data and information management plans. It will also participate in the development of an IOC strategy for the
data and information management and in the review of IODE, to ensure that all these activities will be complimentary and the resulting strategies will be consistent.

The JCOMM Data Management Programme Area encompasses a variety of activities to address the requirement of a fully integrated and mutually supportive approach to ocean data management, which was a major driving force for the creation of JCOMM. Specific tasks within the Data Management Programme Area were undertaken by its Coordination Group (DMCG) and two Expert Teams, the Expert Team on Data Management Practices (ETDMP) and the Expert Team on Marine Climatology, and in close collaboration with the IODE. The DMCG at its first meeting on 22-25 May 2002 in Paris discussed its work plan and agreed among other things that one of its priorities is to consider the overall question of end-to-end, integrated data management for oceanographic and meteorological measurements (E2EDM), and asked ETDMP to develop this concept. Subsequently, ETDMP informally met and agreed to undertake the following tasks:

- develop the requirements to E2EDM, E2EDM strategy and the E2EDM implementation plan;
- review existing and planned DM practices and make recommendations on the best practices;
- prepare recommendations on the use of modern information technologies as well as the E2EDM integration technology;
- participate in the Ocean Information technology (OIT) pilot project.

The vision of E2EDM is based on following principles:

- it should be robust and built on the existing national and international systems;
- it should be consistent with the objectives, needs and priorities of the JCOMM activities;
- it should be "operational" in terms of handling real-time data and product flows and access to delay-mode data and products;
- it may be a distributed system of marine meteorological and oceanographic data and information;
- it should make use of appropriate technologies such as client-server Web-technologies, XML and others.

ETDMP will formally meet in September 2003 to review the progress on these tasks.

JCOMM recognises that effective data management is an area which needs considerable attention on many fronts: data access, quality control, data integration, standards, etc. This is also an area where considerable integration is required. JCOMM has been successful in establishing strong collaborations with IOC/IODE, and participated in discussions on biological data management, global ocean surface underway data, marine XML, Ocean Information Technology, and others. Subsequently, at the management Committee meeting in February 2003, it was recommended that the JCOMM’s expert team on Data management Practices and the IODE’s GE/TADE, two expert teams with very similar terms of reference, be merged, and that other relevant data management expert teams of both organizations be jointly sponsored. In addition, the Committee recommended that the IODE Secretariat become part of the Joint JCOMM Secretariat and provide the secretariat support to the data management activities of JCOMM. If IODE Assembly approves this proposal, considerable integration will be achieved in the area of data management.

**Capacity Building (CB)**

Through a survey in each of the WMO Regions, the JCOMM CB group has compiled a list of CB requirements for consideration. As this survey covered oceanography as well as marine meteorology
requirements, the results will be applicable for GOOS as well. As CB would require considerable effort to link regional projects to funding agencies, JCOMM has established a task Team on Resources (TTR) under the CB Program Area. It is worth noting that the members of this team (Dr Tom Spence, USA; Dr Len Hinds, Canada; Dr Jan Stel, Netherlands; Dr Gunnar Kullenberg, Sweden; and Dr Iouri Oliounine, Russia) have considerable experience in CB and is well-connected to many donor agencies and regional developments.

Just prior to MAN-II, the first meeting of TTR-I was held and developed a work plan, and later approved by MAN-II. This included:

- Preparing a guide for step by step development of CB projects, project evaluation criteria and selection process; and
- the development of a key-word searchable data base of key funding agencies, their priorities and criteria for the selection of aid programs, to easily link JCOMM CB projects to potential funding sources;

Recognizing that GOOS has a panel on CB and it will be more efficient that JCOMM and GOOS CB panels worked in close collaboration, the two Panels met concurrently and partly in joint sessions in 2002. The Management Committee noted the very positive results achieved by the concurrent meetings of the two Panels. Furthermore, it recognized the largely overlapping functions of the two groups, the synergy generated through the meetings, as well as the potential resource savings which might be generated through their eventual merging. The Committee therefore supported the idea of such a merger. On approval by GSC and I-GOOS, the Committee suggested that the CBPA Coordinator should work with the chair of the GOOS CB Panel to prepare a plan for the eventual integration of the two groups, for consideration by MAN-III and GSC-VI.

It was also recognized that IODE has its own regional programs such as ODINAfrica, and training tools such as Oceanteacher, and that both JCOMM and IODE would benefit significantly by collaborating in these areas as well.

3. Other Partnerships

The underlying theme for JCOMM is integration: integration as appropriate within the UN system and outside. JCOMM members constantly strive to establish and maintain such partnerships. These included participating in joint projects (example: with POGO on data management), or participating in each other’s meetings. Such efforts will be continued.

4. Promoting JCOMM

JCOMM is a new organisation, and as such needs to be promoted nationally and internationally. Such efforts included making presentations at conferences and workshops, publishing articles on JCOMM in national and international scientific magazines, and creating and maintaining websites. In addition, a booklet on JCOMM’s vision, mandate, and activities was produced and translated into four languages. These will be printed and distributed as soon as funding is available.

5. JCOMM-II and Science Conference

JCOMM-II is scheduled to take place in Halifax, Canada in September/October 2005. A scientific conference is also being scheduled for the week prior to the JCOMM-II. An organizing committee has been established, which is in the process of fixing the dates of the two meetings, and deciding on the requirements in consultation with the joint JCOMM Secretariat. [end]