## SUMMARY OF RESULTS OF THE MEETING (BY IOC)

Perth (Western Australia) August 5 – Progress on the implementation of an Indian Tsunami Warning and Mitigation System was reviewed by Indian Ocean nations at a three-day meeting of the System's Intergovernmental Coordination Group (ICG) which ended here today.

An assessment by experts of state-of-the-art technology concluded that a reliable system requires the combination of three elements: an improved seismographic network; a real-time sea-level observing network covering all of the Indian Ocean basin; and the deployment of deep-sea pressure sensors capable of detecting the tsunami signal as it travels over the deep ocean.

The ICG endorsed a plan of action establishing four technical working groups, which have been given the task of studying the optimal deployment of these instrumental networks.

It is expected that before December 31 this year, 23 real-time sea-level stations will be established in countries of the Indian Ocean, completing the upgrading of the sea-level network. Six stations are already operational in the region.

Experiments will be conducted in the coming months to test communication links for the transmission of seismic information in real-time. At the same time, improvements in the Global Telecommunications System (GTS) will continue to enable it to carry tsunami relevant information.

The architecture of the Indian Ocean Tsunami Warning and Mitigation System is based on the establishment of national tsunami centres capable of issuing warnings in each of the participating countries.

At present 25 countries have established communication centres to receive interim advisory information, based only on seismological information, from the operational centres serving the Pacific in Hawaii and Tokyo. Since only a small minority of strong earthquakes generate tsunamis, this interim system is prone to a high rate of false alarms.

In an address presented on his behalf by Patricio Bernal, Executive Secretary of UNESCO's Intergovernmental Oceanographic Commission, the Organization's Director-General Koïchiro Matsuura said that "national centres must try to move away from their present minimal configuration to develop their own national detection networks, their own risk-assessment and preparedness plans and their own national educational or awareness plans."

As the Indian Ocean Tsunami Warning and Mitigation System is built, and information from the new networks starts flowing, it will become possible to obtain confirmation of the presence or absence of a tsunami in order to issue or cancel a tsunami warning. It is expected that a limited number of regional advisory nodes using information from the region will provide the service presently only offered by the centres in the Pacific.

Another initiative endorsed at the meeting will work for the establishment of an international partnership, under the auspices of UNESCO's IOC, to accelerate the open transfer of technology to build deep ocean pressure sensors. Several countries expressed interest in joining this partnership.

Other aspects of the action plan cover tsunami modelling and training for more accurate risk assessment and management to improve national capacities and facilitate the transfer of knowledge and expertise for the development of basic emergency preparedness tools such as precise inundation maps of sensitive coastal areas including cities.

The Intergovernmental Coordination Group was created last June in Paris as a subsidiary body of the IOC Assembly to provide guidance and oversight to the Indian Ocean Tsunami Warning and Mitigation System. It is chaired by Dr. P. S. Goel, Secretary of the Department of Ocean Development of India, seconded by S.C Seeballuck, Secretary of Home Affairs of Mauritius, and Jan Sopaheluwakan, Deputy Chairman for Earth Sciences at the Indonesian Institute of Sciences.

The ICG's next meeting will be held in Hyderabad (India) from December 14 to 16, 2005 (a pre-Session workshop will be held between 12 and 13 December). That Session will focus on

the development of a comprehensive capcity building plan. The Session will utlize the outcome of the national assessment missions that have been undertaken jointly by IOC, WMO and ISDR (with additional expertise provided by ADRC, the Japan Cabinet Office and the United States).

The ICG agreed that it would require strong leadership in the coming years, as well as strong support from Member States, and that it should proceed with the election of its officers on the basis of these procedures. It further agreed that it would require a chair and two vice-chairs, to ensure a good geographical balance of officers covering the whole Indian Ocean Region, and that initially these officers would be elected on a country basis. The ICG stressed, however, that the individuals selected by these countries to fill the positions should be made known to, and accepted by, the ICG, at the earliest possible opportunity. Finally, the ICG agreed that its officers should be elected for initial terms of two years, with the possibility of renewal for a further two-year term each. On this basis the ICG elected by consensus, as its officers, to act in this capacity from the end of the present meeting:

## Chair: India

Vice-chairs: Indonesia and Mauritius.

Finally under this agenda item, the ICG stressed the importance of all Indian Ocean Member States designating both their representatives to the ICG, and also their national focal points for receipt of tsunami information and advisories, noting that these should be experts and/or agencies directly involved nationally in the tsunami warning process.