



COMISIÓN OCEANOGRÁFICA INTERGUBERNAMENTAL
(de la UNESCO)

QUINTA REUNIÓN
DEL GRUPO INTERGUBERNAMENTAL DE COORDINACIÓN
DEL SISTEMA DE ALERTA CONTRA LOS TSUNAMIS Y
ATENUACIÓN DE SUS EFECTOS EN EL OCÉANO ÍNDICO

Putrajaya (Malasia)
8-10 de abril de 2008

RESUMEN DISPOSITIVO

El Grupo Intergubernamental de Coordinación del Sistema de Alerta contra los Tsunamis y Atenuación de sus Efectos en el Océano Índico (ICG/IOTWS), en su calidad de órgano subsidiario principal de la COI, debe presentar informes de sus reuniones a un órgano rector en cumplimiento de lo establecido en el Artículo 48.3 del Reglamento.

Se invitará al Consejo Ejecutivo, en su 41ª reunión, a examinar el presente Resumen dispositivo.

- 1 La quinta reunión del Grupo Intergubernamental de Coordinación del Sistema de Alerta contra los Tsunamis y Atenuación de sus Efectos en el Océano Índico (ICG/IOTWS) tuvo lugar en Putrajaya (Malasia) del 8 al 10 de abril de 2008. Asistieron más de 140 delegados de 16 países de la cuenca del Océano Índico, cinco Estados en calidad de observadores y nueve organismos de las Naciones Unidas y organizaciones no gubernamentales.
- 2 **El ICG examinó los avances** logrados en el periodo entre reuniones, tomó nota de los informes y recomendaciones de sus Grupos de Trabajo y aprobó el Plan de Implantación de los proveedores regionales de avisos de tsunami (RTWP). El ICG recibió información actualizada sobre la designación de puntos focales de alerta contra los tsunamis (TWFP) y contactos nacionales sobre tsunamis (TNC): hasta la fecha, de un total de 28 países, 25 ya habían efectuado designaciones oficiales completas (13) o parciales (12).
- 3 **El ICG decidió** constituir un equipo especial de tareas para considerar y presentar un plan detallado del ejercicio propuesto Indian Ocean 2009, con el encargo de comunicar los resultados por escrito al presidente del ICG en un plazo de tres meses. **El ICG acordó** que dicho equipo estuviera integrado por Kenia, Indonesia, Tailandia, Australia, Malasia, Sri Lanka, India,

¹ Los anexos se adjuntan en inglés en todas las versiones lingüísticas.

Francia y otros Estados Miembros interesados, y **convino** en encomendar la presidencia a Indonesia, con Australia, Kenia y Tailandia en calidad de vicepresidentes.

- 4 **El ICG recomendó** la celebración de un simposio sobre modelización de tsunamis en el Océano Índico a fines de 2009 o comienzos de 2010. Australia y la India manifestaron interés en acoger el evento. Se requerirá financiación para sufragar los gastos de participación de los países del IOTWS.
- 5 **El ICG apreció** que Australia, India, Indonesia, Irán, Malasia, Tailandia y el Centro Asiático de Preparación para Casos de Desastre (ADPC) estuvieran dispuestos a comenzar el proceso de transición a los RTWP; la India anunció que iniciaría el proceso en junio, mientras que Australia lo haría en julio e Indonesia en noviembre del año en curso. Los demás RTWP se establecerán de conformidad con el Plan de Implantación.
- 6 **El ICG encomendó** a los Grupos de Trabajo 1, 2, 3, 4 y 5 que trataran con carácter prioritario los aspectos técnicos pendientes a fin de facilitar la realización de los objetivos del calendario de ejecución de los RTWP.
- 7 **Encargó también** al Grupo de Trabajo 5 que estableciera un Grupo de Coordinación sobre los RTWP (RCG), con inclusión en principio de los RTWP actuales y futuros, los actuales proveedores provisionales de avisos de tsunami, el Organismo Meteorológico del Japón (JMA) y el Centro de Alerta contra los Tsunamis en el Pacífico (PTWC), y representantes de dos centros nacionales de alerta contra tsunamis. Dicho Grupo de Coordinación deberá informar y asesorar al Grupo de Trabajo 5 sobre el funcionamiento de los sistemas y las fases de transición, elegir su presidente y vicepresidente y organizar el acopio y clasificación de estadísticas de rendimiento de los RTWP.
- 8 **El ICG decidió** celebrar su sexta reunión en marzo o abril de 2009 y **aceptó** el amable ofrecimiento de Tailandia de acogerla en su territorio. **El ICG expresó su profundo agradecimiento** al Gobierno de Malasia, al Director y al personal del Departamento de Meteorología de Malasia, por las excelentes condiciones puestas a disposición de los participantes en la quinta reunión.

ANNEX I

AGENDA

- 1. WELCOME AND OPENING OF FIFTH SESSION**
- 2. ORGANISATION OF THE SESSION**
 - 2.1 ADOPTION OF THE AGENDA
 - 2.2 DESIGNATION OF THE RAPPORTEUR
 - 2.3 CONDUCT OF THE SESSION, TIMETABLE AND DOCUMENTATION
- 3. REPORT ON INTERSESSIONAL ACTIVITIES**
 - 3.1 IOC EXECUTIVE SECRETARY'S REPORT
 - 3.2 CHAIRMAN'S REPORT
 - 3.3 IOTWS SECRETARIAT REPORT
 - 3.4 STEERING GROUP REPORT
 - 3.5 PROPOSAL FROM STEERING GROUP FOR INDIAN OCEAN WAVE 09 EXERCISE
 - 3.6 REPORT FROM THE INTERIM ADVISORY SERVICE
 - 3.7 REPORTS ON TSUNAMI OUTREACH AND CAPACITY BUILDING
 - 3.8 NATIONAL PROGRESS REPORTS
 - 3.9 REPORTS FROM UN AGENCIES
 - 3.10 REPORTS FROM OTHER ORGANISATIONS
 - 3.11 REPORT FROM THE WG5 TASK TEAM ON RTWPS
 - 3.12 PROPOSAL FROM INDIA FOR "INDIAN OCEAN WARNING CENTRE IOWC"
- 4. WORKING GROUP SESSIONAL MEETINGS**
- 5. WORKING GROUP PROGRESS REPORTS**
 - 5.1 WORKING GROUP 1 PROGRESS REPORT: SEISMIC MEASUREMENTS, DATA COLLECTION, AND EXCHANGE
 - 5.2 WORKING GROUP 2 PROGRESS REPORT: SEA LEVEL DATA COLLECTION AND EXCHANGE, INCLUDING DEEP-OCEAN TSUNAMI DETECTION INSTRUMENTS
 - 5.3 WORKING GROUP 3 PROGRESS REPORT: RISK ASSESSMENT
 - 5.4 WORKING GROUP 4 PROGRESS REPORT: MODELLING, FORECASTING AND SCENARIO DEVELOPMENT
 - 5.5 WORKING GROUP 5 PROGRESS REPORT: THE ESTABLISHMENT OF A SYSTEM OF INTEROPERABLE ADVISORY AND WARNING CENTRES
 - 5.6 WORKING GROUP 6 PROGRESS REPORT: MITIGATION, PREPAREDNESS AND RESPONSE
- 6. REPORT AND DISCUSSION OF IOTWS IMPLEMENTATION PLAN**
- 7. PROGRAMME AND BUDGET**
- 8. NEXT MEETING**
- 9. OTHER BUSINESS**
- 10. ADOPTION OF THE REPORT AND RECOMMENDATIONS**
- 11. CLOSE OF THE MEETING**

ANNEX II

ADOPTED RECOMMENDATIONS

Recommendation ICG/IOTWS-V.1

The Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS),

Having met for its 5th Session in Putrajaya, Malaysia,

Recalling Resolution XXIII-12 that established the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System,

Recognizing the progress towards establishing national tsunami warning centres in all countries around the Indian Ocean since the Indian Ocean Tsunami of 26 December 2004;

Reaffirming that the Indian Ocean Tsunami Warning and Mitigation System (IOTWS) will be a coordinated network of national systems and capacities, and will be part of a global network of early-warning systems for all ocean-related hazards,

Reaffirming further that each Member State has the responsibility to issue warnings within its respective territories,

Recalling the Mauritius Declaration adopted at the intergovernmental coordination meeting held at Grand Baie, 14–16 April 2005 to openly share and exchange tsunami-relevant real-time observational data in accordance with the UNESCO/IOC Oceanographic Data Exchange Policy,

Inviting partners of the Indian Ocean Consortium to consider expanding and extending their assistance to all countries of the Indian Ocean,

Acknowledging the continuing support of the GTS of the WMO World Weather Watch programme and its NMHSs to assist the ICG/IOTWS and its Member States in dissemination of tsunami warnings and exchange of data,

Having reviewed the progress made in the implementation of the IOTWS,

Concludes that:

- (i) the countries of the Indian Ocean rim have taken positive steps towards establishing and developing national tsunami warning centres
- (ii) continued efforts and investments by Member States and donors are required to achieve the objectives of the IOTWS;

Urges Member States through the Tsunami National Contact point to ensure operational links between the National Weather Service and the TWFP;

Further urges Member States to ensure continuing emphasis on Mitigation, Preparedness and Response as essential components of the IOTWS and requesting active engagement and commitment to continue progress in this area;

Requests:

- (i) the IOC Secretariat to communicate with the WMO Secretariat to follow up with the Permanent Representatives on matters concerning transmission of sea level data and tsunami warning information over the GTS;
- (ii) the ICG Chair to work with the Steering Group members to refine their Terms of Reference where required and put these forward to the next ICG session for approval;
- (iii) the Member States to keep the IOC Secretariat informed of Tsunami National Contacts and Tsunami Warning Focal Points information;
- (iv) the IOC Secretariat to formally request ICG/IOTWS Member States to nominate and confirm Working Group members;
- (v) Working Group 5, interacting with the other Working Groups, to develop procedures for standardised post-tsunami system performance reports and to submit draft procedures for consideration by the Member States at the next ICG session;
- (vi) the ICG Chair to raise the issues concerning options and possibilities on TWS sustainability at the next TOWS Working group meeting and then report back, and further requests the IOC Secretariat to assist and facilitate by close collaboration with the appropriate UN agencies and bodies;
- (vii) the IOC Secretariat to update the present IOTWS Implementation Plan (IOC Technical Series 71) using the materials which have been provided by the Working Groups for this purpose and that the recommendations of the sessional committee be noted in the development of a Strategic Plan;

Decides to establish an ad-hoc Task Team to consider and provide a detailed plan of the proposed Indian Ocean 2009 Exercise and to report back to the ICG Chair by written communication within three months. **The ICG agreed** that membership of the Task Team would be Kenya, Indonesia, Thailand, Australia, Malaysia, Sri Lanka, India and France and other interested Member States and **agreed further** that Indonesia would be Chair, with Australia, Kenya and Thailand as Vice-Chairs;

Thanking Malaysia for kindly hosting the ICG/IOTWS-V Session,

Accepts with appreciation the kind offer of Thailand to host the next ICG/IOTWS session in April 2009.

Financial implications: None

Recommendation ICG/IOTWS-V.2

SEISMIC MEASUREMENTS, DATA COLLECTION AND EXCHANGE

The Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System,

Having considered the intersessional meeting report of Working Group 1 on Seismic Measurements, Data Collection and Exchange,

Recalling the ICG/IOTWS-IV report and IOC Resolution XXIV-13 as well as the IOC oceanographic data exchange policy (IOC-XXII-6),

Urges Member States to freely exchange real-time seismic waveform data;

Noting the requirement for training of Warning Centre staff in observational seismology for warning purposes, and that RTWPs are well placed as focal points to identify the most appropriate sources of the training,

Requests potential RTWPs to assist in designing the training material required by NTWCs and if appropriate conduct the training to correctly apply observational seismology.

Financial implications: None

Recommendation ICG/IOTWS-V.3

SEA LEVEL DATA COLLECTION AND EXCHANGE

The Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System,

Having considered the intersessional meeting report of Working Group 2 on Sea Level Data Collection and Exchange, Including Deep Ocean Tsunami Detection,

Recalling the ICG/IOTWS-IV report and IOC Resolution XXIV-13 as well as the IOC oceanographic data exchange policy (IOC-XXII-6),

Urges Member States to

- (i) freely exchange sea-level data among Member States as an essential component of the Warning system;
- (ii) promote awareness and explore possible means to reduce the intensive and ongoing vandalism on tsunameter buoys and to report to ICG sessions,

Requests Member States to consider long-term financial and in-kind support to ensure sustainability of sea-level instrumentation networks and their maintenance.

Financial implications: none

Recommendation ICG/IOTWS-V.4

MODELLING, FORECASTING AND SCENARIO DEVELOPMENT

The Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System,

Having considered the report of Working Group 4 on Modelling, Forecasting and Scenario Development,

Recalling the ICG/IOTWS-IV Report and IOC Resolution XXIV-13,

Acknowledging the ongoing collaboration between interested international modelling efforts and regional stakeholder institutions,

Recommends conducting an Indian Ocean tsunami modelling symposium at the end of 2009 or early 2010. Hosting offers have been received from Australia and India. Funding will be required for participants from IOTWS countries.

Financial implications: None

Recommendation ICG/IOTWS-V.5

REGIONAL TSUNAMI WATCH PROVIDERS IMPLEMENTATION PLAN

The Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS),

Having considered the intersessional meeting report of Working Group 5, The Establishment of a System of Interoperable Advisory and Warning Centres, and the report of the Working Group 5 intersessional Task Team on an “Implementation Plan for Regional Tsunami Watch Providers (RTWP)”

Recalling

- (i) Recommendation ICG/IOTWS-IV.1;
- (ii) The establishment at ICG/IOTWS-IV of the Working Group Task Team “To develop an Implementation Plan for an Interoperable System of Regional Tsunami Watch Providers (RTWPs)”,

Noting:

- (i) with appreciation the extensive consultation undertaken by the Task Team, involving potential RTWPs, the Interim Advisory Service (IAS) and the National Tsunami Warning Centres (NTWCs) of Member States and the fulfillment of its responsibilities during the intersessional period
- (ii) the review of the draft RTWP Implementation Plan undertaken by the ICG/IOTWS Steering Group
- (iii) with appreciation the extensive progress made by India in the establishment of a fully operational Indian Tsunami Warning Centre and its readiness to commence its role as an RTWP,

Acknowledging with appreciation the Interim Advisory Service (IAS) provided by the United States of America Pacific Tsunami Warning Center (PTWC) and the Government of Japan through the Japan Meteorological Agency (JMA),

Considering the need to fully establish a tsunami warning system for the Indian Ocean as a “System-of-Systems”,

Endorses the need for the definition and capability requirements, concept of operations, Standard Operating Procedures and performance indicators of a Regional Tsunami Watch Provider as detailed in the RTWP Implementation Plan;

Agrees with the implementation schedule determined by the Task Team and accepted by Working Group 5;

Recognises the willingness of Australia, India, Indonesia, Iran, Malaysia, Thailand, and ADPC to commence the transition process for RTWPs, with India ready to commence in June, Australia in July, and Indonesia in November this year; and the other RTWPs according to the RTWP Implementation Plan;

Instructs Working Groups 1, 2, 3, 4 and 5 to address the outstanding technical issues to facilitate implementation according to the implementation schedule as a matter of priority;

Further instructs Working Group 5 to:

- (i) establish a RTWP Coordination Group (RCG), initially comprising current and potential RTWPs, the Interim Advisory Service providers, JMA and PTWC, and representatives of two NTWCs to report to and advise Working Group 5 on the operation of the System of Systems and the transition phases and to appoint a chair and vice chair
- (ii) organize the collection and archive the performance statistics of the RTWPs;

Decides to adopt the RTWP Implementation Plan of Working Group 5;

Urges RTWPs in their roles as National Warning Centres adhere to the IOC data sharing policy and for Member States to support the RTWPs by providing their seismic and sea level data;

Requests the IOC Executive Secretary to publish the RTWP Implementation Plan.

Financial implications: None

Recommendation ICG/IOTWS-V.6

BUDGET FOR THE BIENNIUM (2008–2009) FOR THE INDIAN OCEAN TSUNAMI WARNING AND MITIGATION SYSTEM (IOTWS).

The Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System,

Noting the need for continuous funding for building and maintaining the IOTWS,

Recalling the decisions and results of the World Conference on Disaster Reduction, Kobe, Japan in January 2005 and IOC Resolution XXIII-12,

Emphasizing the need for a multi-hazard approach in order to optimize the use of other available systems and financial sources,

Acknowledging that Member States and other UN bodies and organizations are willing to assist in the establishment of the IOTWS,

Bearing in mind that establishing the IOTWS as an end-to-end system of systems, based on national Tsunami Warning Systems,

Calls on the recommendations of the fifth Session of the ICG in Putrajaya, Malaysia, along with its action plan;

Invites Member States to indicate the funding they make available to their own national TWSs, and provide details of the initial funding they made available, to the IOC Executive Secretary, and to financially contribute to the operation of the entire system;

Requests the IOC Executive Secretary to open an IOC “IOTWS” Special Account to allow Member States and international and other organizations to provide funds in order to assist the ICG in the effective provision of secretariat services for the assessment, planning and implementation of the regional early warning and mitigation system;

Urges the IOC Executive Secretary to look for additional financial resources to assist the ICG in implementing the IOTWS, noting that IOC has allocated \$18K to ICG/IOTWS to support the Secretariat and its activities.

Financial implications in US\$ from extrabudgetary funds only

Item	Extra Budgetary		
	Not available	Available	Needed Estimate
Capacity Building	25,000	40,000	65,000
Comm. & Equipment	1,550,000	0	1,550,000
Data collection & Mapping	20,000	0	20,000
Outreach Education	110,000	0	110,000
Permanent Secretariat	0	680,000	680,000
Administration@10%			242,500
TOTAL			2,667,500