Indian Ocean Tsunami Warning and Mitigation System: managing the transition to 2011

Dr. Jan Sopaheluwakan, Chairman, Indonesia
Rick Bailey, Vice Chairman, Australia
Dr. Shailesh Nayak, Vice Chairman, India

Chairman’s Report
43rd Executive Council IOC-UNESCO
Paris, June 11, 2010

Document: ICG/IOTWS-VII/3s
1. Activities since 25th IOC-UNESCO Assembly (2009)

2. Milestones and achievements

3. Important outcomes of ICG/IOTWS-VII in Banda Aceh

4. Requests to Executive Council

Managing the transition to 2011
Intersessional activities

(between 25th Assembly and 43rd EC)

Aug 2009
- WG6, RTWP Task Team and IOWave09 meetings, Jakarta

Sep 2009
- ITP intersessional meeting, Paris

Oct 2009
- IOWave09 Exercise,
- Risk Assessment Guidelines Seminar and Workshop, Bangkok,

Nov 2009
- WG5 intersessional meeting, Perth,

Dec 2009
- Steering Group meeting, Perth,

Jan 2010
- WG1 intersessional meeting, Citeko, Indonesia,
- GFZ/BMKG observational seismology workshop, Citeko, Indonesia,

May 2010
- Makran assessment and awareness tsunami hazards workshop

June 11, 2010
Significant achievements

End-to-end system

- Continued installation of the earthquake and tsunami detection core networks
- About 60 operational seismic stations installed
- Over 60 coastal sea level stations operating with data available on the WMO Global Telecommunication System (GTS)
- A total of about 20 deep ocean tsunameters had also been installed by Australia, India, Indonesia, Malaysia, Germany and USA (in association with Indonesia and Thailand)
- Development of SOPs and Public Education and Community Preparedness in several countries
significant achievements

RTWP

- Emulate the IAS by 2010
- Service level 1: India and Australia in 2008, Indonesia in early 2009
- Enhanced capacity by 2011
- Develop RTWP statistics

Risk assessment guidelines

IOWave09 (October 14, 2009) → IOC Technical Series 88

- 1st of its kind in IO
- More than 18 countries participated in an ocean-wide tsunami exercise
- 5 countries taking the exercise down to community level
- To evaluate and improve the effectiveness of the IOTWS, its operational Regional Tsunami Watch Providers (RTWP), National Tsunami Warning Centres (NTWC), and National Disaster Management Organisations (NDMO) in responding to a potentially destructive tsunami.
Critical IOTWS Issues

Good practices to prepare “the last mile”

Integration and Coordination

- Risk Assessment
- Community Resilience
- Complete Implementation
- RTWP Implementation Plan
- Data Access and Interoperability

Sustainability
ICG/IOTWS VII Outcomes
(Banda Aceh, Indonesia, 14 – 16 April, 2010)

**The ICG adopted**
- Terms of Reference for the Working Groups and
- encouraged the new Working Groups to also consider coastal inundation caused by storm surges and tropical cyclones within multi-hazard approaches and frameworks.

**The ICG decided**
- to organise an Indian Ocean Wave 10 Exercise between Regional Tsunami Watch Providers (RTWP) and National Tsunami Warning Centres (NTWC) in the 4th quarter of 2010 and
- requested the RTWP Task Team to coordinate the exercise.

**The ICG adopted**
- the 2010–2011 RTWP implementation work plan for the newly formed Working Group 2,
- targets the completion of transition from the Interim Advisory Service provided by JMA and PTWC to the Indian Ocean RTWP service by the 2nd quarter of 2011.
**ICG/IOTWS Working Groups**

**WG1**  Seismic measurements, data collection and exchange.  
- Chair, Dr Fauzi, Indonesia

**WG2**  Sea Level Data Collection and Exchange.  
- Co-Chairs, Ken Jarrott, Australia and Dr Parluhutan, Indonesia

**WG3**  Risk Assessment.  
- Chair, Prof Sam Hettiarachchi, Sri Lanka

**WG4**  Modelling, Forecasting and Scenario Development.  
- Chair, Prof Chari Pattiaratchi, Sri Lanka

**WG5**  System for Interoperable Advisory and Warning Centres.  
- Chair, Geoff Crane, Australia

**WG6**  Mitigation, Preparedness and Response.  
- Chair, Irina Rafiana, Indonesia
Prudent and timely Working Group Refinement

Past WGs:
- WG1
- WG2
- WG3
- WG4
- WG5
- WG6

Present:
- WG1
- WG2
- WG3

Continuity of teamwork
Sustainability
Global integration
Past WG interaction and on-going transformation

WG 1

WG 2

WG 3

WG 4

WG 5

WG 6

WG2
Detection, Warning and Dissemination
Chair: Dr Satheesh Shenoi (India)

WG1
Risk Assessment and Reduction
Chair: Dr Sam Hettiarachchi (Sri Lanka)

WG3
Awareness and Response
Chair: Ms Irina Rafliana (Indonesia)

coastal inundation caused by storm surges and tropical cyclones within multi-hazard approaches and frameworks
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<tr>
<th>Action</th>
<th>Q2 2010</th>
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Jakarta Tsunami Information Center (J-TIC)

- J-TIC has achieved an impressive performance and visibility
- It has been well recognised in the region at training workshops and assessment missions
- The material and experience J-TIC has collected is well worth being made available to other IOTWS Member States
- Suggest Its expansion to other natural hazards and possibly extend the region of responsibility
Assistance and advice from the Executive Council is invited...

**Safe guarding the transition**
- 1st rapid delivery of IOC guided Regional TWS
- Professional secondment support to Tsunami Unit
- Implication of training NTWCs trainings in India and Kenya
- Inclusion of ocean related multihazards platform

**Replication, expansion of the ownership of the achievement**
- Intra- and inter-basinal sharing of the good practices, experiences and knowledge obtained during the development of end-to-end IOTWS
- Expansion to other hazards and extension of region of responsibility of J-TIC