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

9th Steering Group Meeting
BMKG, Jakarta, Indonesia
26th November 2014

FINAL REPORT

Members
Mr. Rick Bailey, Chair of ICG/IOTWS
Dr. Srinivasa Kumar, Vice-Chair of ICG/IOTWS and TSP India
Prof. Sam Hettiarachchi, Chair of WG1
Dr. Sultan Al-Yahya, Vice-Chair of WG1
Dr. Mark Leonard, Vice-Chair of WG2
Mr Daniel Jaksa, TSP Australia
Karyono, TSP Indonesia
Mr Mochammad Riyadi, TSP Indonesia

Apologies
Dr Satheesh Shenoi, Chair of WG2
Dr Harkunti P. Rahayu, Chair of WG3

Secretariat:
Mr Tony Elliott, Head of ICG/IOTWS Secretariat
Ms Nora Gale, ICG/IOTWS Secretariat
Dr Fauzi, UNESCO IOC Oman
Mr Ardito Kodijat, IOTIC, UNESCO Jakarta

Observers
Mr Daryono
Mr M. Tarifik
Ms Titi Handayani
Dr Wandono
Ms Weniza
Opening of Meeting

Mr Rick Bailey, chair of the ICG/IOTWS, opened the meeting and invited the participants to introduce themselves. The full list of participants is provided in Annex 2. Mr Bailey presented the meeting agenda for consideration (Annex 1) and asked for comments. Dr Mark Leonard requested to provide an update on the United Nations Global Assessment of Risk (UNGAR) biennial report and Dr Srinivasa Kumar suggested discussing an update to the review of IOTWS performance for submission to the next session of the ICG/IOTWS. The chair agreed to take both items as part of the Working Group 2 report under agenda item 3. The Steering Group adopted the agenda with the inclusion of these items.

1 Review of Action Items from previous Steering Group Meetings

Mr Tony Elliott reported on the outstanding action items from the previous Steering Group meetings including the 6th Steering Group meeting (Jakarta, December 2011), the 7th Steering Group meeting (Perth, October 2012), and the 8th Steering Group meeting (Perth, December 2013). The Steering Group put considerable effort into reviewing and updating the status of the actions from these meetings. The full list of actions and their status and progress is provided in Annex 3. The Secretariat will keep a running overall log of open and closed actions, with only he open actions from all previous meetings being brought forward to the Steering Group meetings for review.

2 Symposium Outcomes

The outcomes of the International Conference to Commemorate the 10th Anniversary of the Indian Ocean Tsunami held in Jakarta, Indonesia, 23-25 November 2014 were discussed. Mr Bailey commented that overall the symposium went well. The conference highlighted the considerable achievements to date and identified gaps in the system that can be addressed in follow-up activities.

Mr Elliott reminded the Steering Group that the outcomes of the symposium will be conveyed to the 3rd World Conference on Disaster Risk Reduction (WCDRR) in Sendai, Japan in March 2015. Mr Elliott informed the group that a public forum on tsunamis has been proposed by JMA and IOC and Mr Bailey noted that there will also be a working session on early warning systems at which it has been proposed that he be a panel member, representing the intergovernmental global tsunami community. Mr Elliott stated that the mechanisms for conveying the outcomes of the symposium at the WCDRR would be discussed by the IOC-UNESCO Tsunami Unit and that the country statements of support given at the 10th Anniversary Conference should be conveyed at the conference.

Mr Bailey acknowledged that last mile issues including tsunami awareness, response, and preparedness need more traction. A lot of good work has been done through projects (e.g. UNESCAP-funded) or in-country (e.g. Indonesia), but there is still a lot of further work required due to the sheer size of the effort required to educate all the coastal communities surrounding the Indian ocean at risk. Mr Ardito Kodijat commented that the UNESCAP trainings highlighted that much still needs to be done on awareness. Dr Sultan Al-Yahya commented that public outreach and awareness is country-specific and that the experience in one country cannot be taken directly into another country. Mr Kodijat reiterated that the local context needs to be considered so that residents are not misinformed. Mr Bailey commented that the TOWS-WG is a good way of getting the key people in each basin together to develop guidelines.
Mr Elliott commented that he was struck by two statements from the symposium: firstly, Harald Spahn’s comment that the IOTWS should focus on the last mile for the next ten years, and secondly, Harkunti Rahayu’s comment that there should be disaster focal points in each Member State. Mr Bailey mentioned that multi-hazard is a sustainable pathway and that at the community level we need to ensure that tsunami forms part of community awareness campaigns. Dr Al-Yahya suggested that countries be recommended to exercise every year to account for turnover in staff. Dr Kumar supported making materials available for countries to develop their own SOPs.

Mr Elliott informed the group that the Secretariat would prepare a summary statement based on the reports provided by the session moderators for conveyance to the 3rd World Conference on Disaster Risk Reduction.

3 Updates from Working Groups

Mr Bailey asked the Working Group chairs and representatives to comment on the key issues of the Working Groups in terms of both outstanding and new work as well as any recommendations to the ICG.

Working Group 1

Prof Hettiarachchi, the chair of Working Group 1 on Tsunami Risk Assessment and Reduction, reported that the guidelines for tsunami risk assessment are being revised under a UNESCAP-funded project with the aim to finalise them before the next ICG meeting. Other areas of ongoing work include risk assessment studies, training, and capacity building. Prof Hettiarachchi noted that risk assessment capabilities are lacking on the western side of the Indian Ocean. Mr Elliott commented that RIMES is supporting risk assessment in Bangladesh and Myanmar.

Prof Hettiarachchi commented that a capacity survey that includes both hazard and vulnerability is desirable. Mr Bailey suggested that the Member State reports to the ICG should include undertakings in risk assessment studies.

**Action 1:** Working Group Chairs to suggest specific information to be requested in National Reports and Secretariat to revise the template accordingly.

Mr Bailey enquired about the status of ComMIT training in Member States. Prof Hettiarachchi replied that a case study in Sri Lanka is being conducted based on the ComMIT guidelines. Dr Sultan noted that Oman has developed an internal guide on ComMIT for assessment and inundation modelling. Mr Kumar expressed the view that ComMIT has utility as an educational tool. Mr Bailey reminded the Steering Group that historically, in addition to being an education tool, ComMIT was used as an enabler to encourage countries to utilise their restricted bathymetry data for best national use.

Working Group 2

Dr Srinivasa Kumar provided a report on the status of Working Group 2 on behalf of the chair, Dr Satheesh Shenoi. Dr Kumar commented that the Working Group 2 Terms of Reference remain current. The work done during the last year includes an inter-sessional meeting in Hyderabad, 27 June 2014. Dr Kumar gave a summary of this meeting including the current seismic and sea level networks, TSP events and performance, TOWS-WG recommendations, communication test results, TSP service definition document improvements, the TSP User Guide for NTWCs, and the outcomes of the IOWave14 Task
Team meeting. Ms Nora Gale reported that information on the seismic and sea level monitoring stations is now available via a link on the Indian Ocean IOTWS webpage under the Working Group 2 menu item.

There was discussion about inviting (or accepting requests from) the Red Sea and Arabian/PersianGulf countries to become members of the ICG/IOTWS. Mr Bailey commented that this is an Area of Service issue. Prof Hettiarchchachi commented that PERSGA, a United Nations environmental programme for Red Sea and Gulf of Aden countries with funding provided by Saudi Arabia, has interest in this area. Dr Leonard and Dr Kumar suggested running tsunami propagation models to assess the affects in the impact in these areas. Mr Bailey commented that even marine level threat is significant in these areas, given the volume and global economic importance of the offshore industries and international trade handled by commercial shipping in the area. Mr Elliott replied that it would be very useful to do this for the upcoming ICG in Muscat, Oman as these Member States are presumed to be attending.

Dr Al-Yahya commented that there is a low threat from tsunami in the Arabian/Persian Gulf and informed the group that Gulf Cooperation Council (GCC) countries have approached Oman to provide an early warning service. Oman is collecting data from them and will conduct a gap analysis. Dr Al-Yahya further commented that the Institute of Hydraulics Cantabria (IHC) has conducted modelling for events in the Gulf but only the Omani results have been presented.

There was a discussion on actions associated with the new Coastal Forecast Zones proposed by TSP India (version 5.2). Working Group 2 members present decided to meet following the Steering Group meeting to discuss changes to the Tsunami Service Provider (TSP) Service Definition Document as proposed by TSP Australia.

Dr Leonard summarised the United Nations Global Assessment of Risk report, a probabilistic hazard assessment based on ~30,000 tsunami scenarios run to the shore. The outputs are global probabilistic tsunami hazard and risk maps. These are based on deep ocean propagation, coastal amplification, and inundation convolved against a property and population database to compute loss. This assessment will be released at the WCDRR in March 2015. Mr Bailey noted it appeared the entrances to the Red Sea and Persian Gulf were closed to the tsunami propagation models, so no energy could propagate into the area of concern.

Working Group 3
Dr Harkunti Rahayu, the Chair of Working Group 3, was not able to attend the Steering Group meeting. In her absence she circulated an email outlining the current issues of the Working Group including outstanding works and future proposals. The outstanding works that are to be completed before the next ICG meeting include the Working Group 3 book on best practice on tsunami awareness and response; the UNESCAP activities in Myanmar, Bangladesh, and Timor Leste; production of a book based on lessons learned from this UNESCAP project; and circulating the policy and SOP for tsunami to all Member States in the Indian Ocean. The Working Group will make new proposals to potential donors such as EU or ASEAN and/or other UN institutions such as UNESCAP, UNCRD, etc for further activities to a) strengthen regional to national cooperation for tsunami awareness and response, b) strengthen national up to local and people cooperation for tsunami awareness and response, and c) to include the media and universities networks for increasing the capacity building for tsunami awareness and response at the regional and national levels.
An update on the Indian Ocean Tsunami Information Centre (IOTIC) was given by Mr Ardito Kodijat. The IOTIC Terms of Reference have been circulated to the Steering Group members and Mr Kodijat is awaiting feedback. A Tsunami Information Centre (TIC) meeting was held in Paris, France in February 2014. The roles of the TICs now include conducting post-event assessment surveys. Mr Elliott noted that the Terms of Reference of IOTIC were updated at the TOWS-WG meeting held in Paris, France in February 2014 to include this new role.

Mr Kodijat commented that country educational material needs to be collected for the website. The preferred mechanism for the collection of country materials needs to be decided upon. Mr Bailey commented that correspondence through the Tsunami National Contacts (TNCs) is preferable. Mr Elliott informed the group that the formal pathway is through the TNCs; however, the anticipated response rate is low. Prof Hettiarachchi suggested that the National Tsunami Warning Centres (NTWCs) should be notified of the launch of IOTIC. Mr Bailey responded that the TNCs are the appropriate contacts. Mr Elliott suggested a formal introduction from the Secretariat to the TNCs noting Mr Kodijat as the primary contact. Following the introduction, Mr Kodijat and the Secretariat can pursue the collection of information.

Prof Hettiarachchi queried IOTIC’s affiliation and Mr Elliott clarified that IOTIC is part of UNESCO.

Mr Kodijat commented that IOTIC is supporting the IOTWS in the implementation of two UNESCAP projects. As part of the Communicating the effects of the 1945 Makran project, an educational booklet and website materials are being developed. The Capacity building on tsunami exercise and training project is being conducted in Myanmar, Bangladesh and Timor Leste with the production of a guidebook from each country on tsunami exercise. To date, the Myanmar and Timor Leste guidebooks have been completed and the Bangladesh guidebook remaining outstanding. As part of the capacity development project, a lessons learned workshop will be conducted during the first quarter of 2015 in Jakarta. Mr Elliott commented that in addition to pilot countries other Member States would be invited to attend the regional workshop.

Mr Bailey enquired about the status of the exercise manuals. Mr Kodijat responded that they are based on the IOC UNESCO guidelines on how to conduct and plan an exercise and then extrapolated into the country context. Furthermore, as part of training the countries conduct a tsunami exercise independently. Mr Kodijat commented that a training manual based on the experience of the six training session is being compiled and will be published as a stand-alone document.

In regard to the Communicating the effects of the 1945 Makran UNESCAP project, Mr Kodijat explained that the materials, including eye witness interviews and documents, will be available on the IOTIC website. He gave a preview of the associated webpages. Mr Elliott
clarified that the Makran project is not explicitly on the IOTWS workplan, but links strongly with the activities of WG3.

Mr Kodijat informed the group that an IOTIC proposal to the Malaysian Funds in Trust has been successful. This activity will be conducted in two countries and consultations are currently underway with Mozambique. The project, which will be conducted between January and December 2015, will use the training materials developed in the ESCAP project.

Mr Bailey commented that ICG/IOTWS-IX supported the establishment of IOTIC, subject to agreement of Terms of Reference and governance by the Steering Group. Mr Bailey requested that the Working Group and IOTIC reports to the ICG include a summary of required resources, so that countries can formulate a position on funding prior to the meeting.

**Action 4:** IOTIC report to ICG/IOTWS-X should include information on required resources for proposed activities, so that countries can formulate a position on funding prior to the meeting.

Mr Elliott thanked Mr Kodijat and his office for supporting the ICG/IOTWS.

5 **TOWS-WG update**

Mr Bailey provided a brief update on the activities of the TOWS-WG. The global definitions on Areas of Service have now been approved by the IOC Executive Council. The TOWS-WG Task Team on Tsunami Watch Operations (TTTWO), which is chaired by Dr Kumar, is working on a global service definitions document. TOWS-WG will extend its scope to include the high seas. The TTTWO is working with the Intergovernmental Maritime Organisation on mechanisms to provide better information to ocean vessels. A new definition for Tsunami Watch Focal Points (TWFPs) has been adopted by TOWS-WG and approved by the IOC Executive Council at its last meeting.

6 **SOP Training Workshop**

In the interest of time, it was agreed to omit this agenda item. Mr Elliott noted that a written report on the SOP workshop would be finalised following input from Dr Harkunti.

**Action 5:** Dr Harkunti and the Secretariat to finalise report on SOP workshop and circulate to Steering Group and the ICG.

7 **IOWave14**

Ms Nora Gale presented the preliminary results of the IOWave14 exercise evaluation. Member States have provided feedback via SurveyMonkey, which is an online tool that is also utilised by ICG/PTWS. Her update included a summary of the two scenarios exercised (south of Java and the Makran trench), Member State participation (24 countries), key activities, and evacuation drills (Seychelles and India). Mr Elliott commented that the receipt of TSP messages was lower than in the ongoing communication tests and this should be investigated. The Steering Group agreed. Ms Gale commented that a table of message receipts for the four types of delivery methods has been compiled for the exercise and past communication tests that will be shared with the TSPs. Mr Elliott explained that the draft report still needs to be reviewed by the IOWave14 Task Team. Following input from the
Task Team, the report will be circulated as a draft for the ICG/IOTWS-X meeting and Member States will be invited to provide further feedback.

**Action 6:** Secretariat to investigate why TSP receipt of TSP messages dropping in recent Communications Test and report back to the Steering Group.

**Action 7:** Draft report for IOWave14 to be reviewed by the Task Team before submitting as a draft report for ICG approval at ICG/IOTWS-X.

### 8 Tsunami Service Provider Service Definition Document

A discussion on amendments to the Tsunami Service Providers (TSP) Service Definition document was scheduled to be held following the close of the Steering Group meeting. In particular, TSP Australia has proposed amendments to the draft document for consideration by TSP Indonesia and TSP India. The meeting will be led by Dr Srinivasa Kumar and attended by Working Group 2 members and the ICG/IOTWS Secretariat. The outcomes of the meeting, including feedback on the proposed changes, will be circulated to Working Group 2 members.

### 9 Implementation Plan

Mr Bailey noted that the Implementation Plan was last reviewed for ICG-XIII in Melbourne, Australia in 2011. At this time the Steering Group was tasked with reviewing the document, however, there have not been any subsequent revisions. There was much discussion on the best way forward in light of the little progress that has been made on the plan over the last four years. Mr Bailey questioned whether the Implementation Plan was even required, given it had not be used or updated for some time. National Reports should provide the details of implementation, if the right information is requested in the National Report Template and provided by the Member States.

Dr Leonard remarked that the IOTWS is now in a steady state with the TSPs assuming full responsibility, so it is an ideal time to complete the document. Mr Elliott suggested that a consultant could be hired to finish drafting it. However, the group felt that those who have direct involvement with the system are best placed to finalise the document.

Mr Bailey suggested that a scientific study of the ideal station locations should be conducted and included in the plan. The ideal network configuration could influence future station locations and encourage new stations to be shared.

**Action 8:** Working Group 2 to undertake a study to recommend optimal seismic and sea level networks required for tsunami threat decisions made by the TSPs.

Mr Bailey commented that more focus in the Implementation Plan should be on the longer term activities of the IOTWS. The costs of sustaining the system and performance indicators with minimum acceptable levels need to be identified.

Mr Daniel Jaksa commented that the implementation plan includes unnecessary information such as details of the current status of tsunami warning and mitigation in each Member State.
Mr Elliott asked if it would be most appropriate to summarise only the key aspects of the system and Mr Bailey replied that the document should describe the system at a high level.

Mr Jaksa volunteered to draft a structural template for the implementation plan’s contents. The revised implementation plan will be stripped down and capture the ideas, gaps and needs of each nation as a high-level document.

*Action 9:* Steering Group to revise the Implementation Plan layout as a high level document that addresses gaps and needs. Daniel Jaksa to oversee *(Refer to Action 21 from SG8 in Annex 3).*

Dr Al-Yayha commented that the Member State reports to the ICG contain country-specific information and suggested updating the national report format to be more prescriptive. The Steering Group agreed that the Secretariat should revise the national report template (as discussed in Agenda item 3). Dr Al-Yayha suggested conducting an analysis of perceived needs of Member States.

### 10 Next ICG Meeting Preparations

The ICG/IOTWS-X meeting will be held in Muscat, Oman, 24-26 March 2015. It will be held back-to-back with a science symposium (22-23 March) and the inauguration of the National Multi-Hazard Early Warning System (23 March). Dr Al-Yahya showed photographs of the building and fit out, which is nearly complete. He noted that the auditorium can accommodate up to 600 people. The Steering Group was impressed with the work undertaken and expressed confidence that the venue was appropriate for the ICG/IOTWS-X meeting.

### 11 Close of Meeting

The Steering Group meeting closed at 6:00 p.m.

### 12 Summary of Recommendations and Actions

*Action 1:* Working Group Chairs to suggest specific information to be requested in National Reports and Secretariat to revise the template accordingly.

*Action 2:* Secretariat to circulate the draft IOTIC Terms of Reference to the Steering Group and comments from the Steering Group to be provided to Rick Bailey. IOTIC Terms of Reference to be submitted at the ICG/IOTWS-X Muscat meeting for endorsement.

*Action 3:* Secretariat to write a letter to the TNCs introducing IOTIC and Ardito Kodijat as the primary contact for the collection of tsunami educational material.

*Action 4:* IOTIC report to ICG/IOTWS-X should include information on required resources for proposed activities, so that countries can formulate a position on funding prior to the meeting.

*Action 5:* Dr Harkunti and the Secretariat to finalise report on SOP workshop and circulate to Steering Group and the ICG.

*Action 6:* Secretariat to investigate why TSP receipt of TSP messages dropping in recent Communications Test and report back to the Steering Group.
**Action 7:** Draft report for IOWave14 to be reviewed by the Task Team before submitting as a draft report for ICG approval at ICG/IOTWS-X.

**Action 8:** Working Group 2 to undertake a study to recommend optimal seismic and sea level networks required for tsunami threat decisions made by the TSPs

**Action 9:** Steering Group to revise the Implementation Plan layout as a high level document that addresses gaps and needs. Dan Jaksa to oversee *(Refer to Action SG8.21 from SG8 in Annex 3)*
Annex 1

UNESCO IOC
Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System

9th Steering Group Meeting
BMKG, Jakarta, Indonesia
26th November 2014

AGENDA

1. Review of Action Items from last and previous Steering Group Meetings (Tony Elliott)
2. Symposium Outcomes (All)
3. Updates from Working Groups (Sam Hettiarachchi, Srinivasa Kumar, Harkunti Rahayu)
4. Indian Ocean Tsunami Information Centre Update (Ardito Kodijat)
5. TOWS-WG update (Rick Bailey)
6. SOP Training Workshop (Srinivas Kumar/Tony Elliott)
7. IOWave14 (Nora Gale)
8. TSP Service Definition (Srinivas Kumar)
9. Implementation Plan (Rick Bailey)
10. Next ICG Meeting Preparations (Tony Elliott/Sultan Al-Yahya)
Annex 2

UNESCO IOC
Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System

9th Steering Group Meeting
BMKG, Jakarta, Indonesia
26th November 2014

MEETING PARTICIPANTS

Officers

Mr Rick BAILEY
Head of Tsunami Warning & Ocean Services
Bureau of Meteorology, Melbourne
700 Collins Street
Docklands
GPO Box 1289
Melbourne VIC 3001
Australia
Tel: 61 3 9669 4103
Fax: 61 3 9669 4495
Email: R.Bailey@bom.gov.au

Mr Srinivas Kumar TUMMALA
Head, ASG & In-charge, National Tsunami Warning Centre
Indian National Centre for Ocean Information Services
"Ocean Valley"
P.B No.21
IDA Jeedimetla P.O
Hyderabad 500 055
India
Tel: +91 40 23895006
Fax: +91 40 23895001
Email: srinivas@incois.gov.in

WG Chairs

Dr Sam HETTIARACHCHI
Professor
University of Moratuwa, Department of Civil Engineering
Moratuwa
WG Vice Chairs

Dr Sultan AL-YAHYA
Chief of Numerical Weather Prediction Section
Public Authority for Civil Aviation
National Meteorological Service
Directorate General of Civil Aviation and Meteorology
Muscat
Oman
Tel: +968-24519998
Fax: +968-24519363

Dr Mark LEONARD
Research Scientist
Geoscience Australia
Cnr Jerrabomberra Ave and Hindmarsh Drive
Symonston
Canberra ACT 2609
Australia
Tel: +61 2 6249 9111
Email: mark.leonard@ga.gov.au

IOTWS-TSP Representatives

Mr Daniel JAKSA
Co-Director, Joint Australian Tsunami Warning Centre
Geoscience Australia
Cnr Jerrabomberra Ave and Hindmarsh Drive
Symonston
Canberra ACT 2609
Australia
Tel: +61 (0)2 6249 9685
Fax: +61 (0)2 6249 9984
Email: Daniel.Jaksa@ga.gov.au

Karyono -
Head of Earthquake Management Operation Subdivision, BMKG
Badan Meteorologi Klimatologi dan Geofisika
Jl. Angkasa I No. 2 Kemayoran Jakarta 10720
Indonesia
Mr Mochammad RIYADI  
Director of Earthquake and Tsunami Center  
Indonesian Meteorogical Climatological and Geophysical Agency  
Head Office  
Jl. Angkasa 1 No.2  
Kemayoran  
Jakarta Pusat 10720  
Jakarta  
Indonesia  
Email: mochammad.riyadi@bmkg.go.id

Observers

Daryono -  
Indonesian Meteorogical Climatological and Geophysical Agency  
Head Office  
Jl. Angkasa 1 No.2  
Kemayoran  
Jakarta Pusat 10720  
Jakarta  
Indonesia  
Email: daryono@bmkg.go.id

Mr M. TARIFIK  
Indonesian Meteorogical Climatological and Geophysical Agency  
Head Office  
Jl. Angkasa 1 No.2  
Kemayoran  
Jakarta Pusat 10720  
Jakarta  
Indonesia

Ms Titi HANDAYANI  
Indonesian Meteorogical Climatological and Geophysical Agency  
Head Office  
Jl. Angkasa 1 No.2  
Kemayoran  
Jakarta Pusat 10720  
Jakarta  
Indonesia  
Tel: +62-216546316, +62-21-65867045  
Fax: +62-21-6546316  
Email: titihandayani_82@yahoo.com
Dr Wandono -
Head of Earthquake and Tsunami Warning Division
Meteorological Climatological and Geophysical Agency
JAKARTA 10720
Indonesia
Tel: +62 21 6546316
Fax: +62 21 6546316
Email: wandono@bmkg.go.id

Ms Weniza
Meteorological Climatological and Geophysical Agency
JAKARTA 10720
Indonesia

UNESCO IOC

Mr Tony ELLIOTT
Head of ICG/IOTWS Secretariat, Senior Programme Specialist
Intergovernmental Oceanographic Commission of UNESCO
IOC/UNESCO Perth Programme Office
c/o Bureau of Meteorology
PO Box 1370, West Perth
Level 3, 1 Ord Street
Perth WA 6872
Australia
Tel: +61 8 9226 0191
Fax: +61 8 9263 2261
Email: t.elliott@unesco.org

Dr FAUZI
Programme Specialist
UNESCO IOC Oman
Directorate General of Meteorology and Air Navigation
Muscat
Oman
Email: f.fauzi@unesco.org

Ms Nora GALE
Assistant Programme Specialist
Intergovernmental Oceanographic Commission of UNESCO
IOC/UNESCO Perth Regional Programme Office
c/o Bureau of Meteorology
PO Box 1370, West Perth
Level 3, 1 Ord Street
Perth WA 6872
Australia
Tel: +61-8-9321 9976
Fax: +61-8-9263 2261  
Email: n.gale@unesco.org

Mr Ardito KODIJAT  
Head of the Indian Ocean Tsunami Information Centre  
UNESCO Office Jakarta  
Jl. Galuh II no S  
Kebayoran Baru  
Jakarta Selatan 12110  
DKI  
Indonesia  
Tel: +62-21-7399818 Ext 878  
Fax: +62-21-72796489  
Email: a.kodijat@unesco.org
Annex 3

UNESCO IOC
Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System

9th Steering Group Meeting
BMKG, Jakarta, Indonesia
26th November 2014

ACTIONS OUTSTANDING FROM PREVIOUS STEERING GROUP MEETINGS

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Number</th>
<th>Status</th>
<th>Progress</th>
<th>Action</th>
<th>Updates</th>
<th>Assigned</th>
<th>Due Date</th>
<th>Cross Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG6 Jakarta</td>
<td>SG 6.01</td>
<td>closed</td>
<td>completed</td>
<td>Chair of WG1 to send information on the next DAVOS Risk Forum Meeting to the Chair and Secretariat and to prepare a document outlining benefits of IOC becoming a partner to the DAVOS Risk Forum, which will be forwarded to IOC to consider.</td>
<td>SG7: Sam Hettiuarachchi attended this meeting in August</td>
<td>Chair WG1</td>
<td>01/04/2012</td>
<td></td>
</tr>
<tr>
<td>Dec 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG6 Jakarta</td>
<td>SG 6.02</td>
<td>closed</td>
<td>completed</td>
<td>WG 1 and WG3 to prepare UNESCAP funding proposal, in consultation with WG2 and ICG Chair, as soon as possible to update Risk Assessment Guidelines to include case studies and risks associated with threats only affecting the marine environment, and for delivering a “Train-the-Trainer Regional Workshop on Developing National Risk Assessments”</td>
<td>SG7: Proposals were submitted and accepted by the UNESCAP Trust Fund Advisory Council. They are now being implemented as projects by IOC</td>
<td>Chair WG1</td>
<td>31/01/2012</td>
<td></td>
</tr>
<tr>
<td>Dec 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chair WG2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG6 Jakarta</td>
<td>SG 6.03</td>
<td>closed</td>
<td>completed</td>
<td>Secretariat to investigate potential issues for IOC in providing project management support for UNESCAP proposals only providing 4% overheads. WGs should have a backup</td>
<td>SG7: Done</td>
<td>Secretariat</td>
<td>31/01/2012</td>
<td></td>
</tr>
<tr>
<td>Dec 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG6</td>
<td>Jakarta Dec 2011</td>
<td>SG 6.04</td>
<td>closed</td>
<td>superseded</td>
<td>National stock-take survey form, based on previous surveys, to be prepared by WG3 and distributed to all IOTWS Member States by the Secretariat through the TNC with copy to relevant contacts. The results will be posted on the IOTWS website by the Secretariat.</td>
<td>SG9: Action closed and combined with SG 8.6</td>
<td>Secretariat</td>
<td>01/04/2013</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>SG6</td>
<td>Jakarta Dec 2011</td>
<td>SG 6.05</td>
<td>open</td>
<td>revised</td>
<td>WG3 to prepare the compilation document of Good Practices in Warning Dissemination in consultation with WG1 and WG2 before next ICG meeting. Consultation with WG2 is needed to finalise outstanding chapters.</td>
<td>SG9: WG1 to adapt some chapters for Risk Assessment guidelines. IOTIC and WG1 to work with WG3 to make a final push. Final draft by 26 December 2014. SG8: Consultation with WG2 is needed to finalise outstanding chapters. SG7: In progress. Will be discussed further during WG3 report.</td>
<td>IOTIC, WG1, WG3</td>
<td>26/12/2014</td>
</tr>
<tr>
<td>SG6</td>
<td>Jakarta Dec 2011</td>
<td>SG 6.06</td>
<td>open</td>
<td>revised</td>
<td>Mr Rick Bailey and Ms Irina Rafliana to work together on an information poster (1-2 pages) on RTSP and NTWC contacts for mail out to media, to be coordinated with the release of the public RTSP website (mid 2012).</td>
<td>SG9: IOTIC + Rick Bailey to complete information sheet for media and public by end of February 2015. Secretariat to send letter out introducing, IOTIC to follow up. SG8: It was noted that Ms Irina Rafliana is not currently available due to her studies. SG7: No action yet. To be discussed later in the agenda and addressed as a product under the IOTWS Outreach Strategy.</td>
<td>IOTIC, Rick Bailey</td>
<td>28/02/2015</td>
</tr>
<tr>
<td>SG6</td>
<td>Jakarta Dec 2011</td>
<td>SG 6.07</td>
<td>closed</td>
<td>superseded</td>
<td>Chairs WG2 and WG3 to draft guidelines to help NTWCs deal with media</td>
<td>SG7: No action yet but important to follow up on as a product under the IOTWS Outreach Strategy.</td>
<td>WG2 Chair, WG3 Chair</td>
<td>---</td>
</tr>
<tr>
<td>SG6</td>
<td>SG 6.08</td>
<td>open</td>
<td>revised</td>
<td>WG2 to complete RTSP User Guide.</td>
<td>SG9: This document should be restricted circulation, so not on UNESDOC. Srinivasa Kumar and Secretariat to liaise to update and complete the draft by end of January 2015. SG8: Draft complete - RTSPs to finalise. SG7: No action yet. To be discussed later in the agenda.</td>
<td>Srinivas Kumar, Secretariat</td>
<td>31/01/2015</td>
<td>-</td>
</tr>
<tr>
<td>SG6</td>
<td>SG 6.09</td>
<td>closed</td>
<td>completed</td>
<td>Secretariat to contact WMO regarding the GTS issues and refer WMO to Australia to discuss follow up.</td>
<td>SG7: Done. Big improvement noticed in Communications Tests following contact with WMO.</td>
<td>Secretariat</td>
<td>31/01/2011</td>
<td></td>
</tr>
<tr>
<td>SG6</td>
<td>SG 6.10</td>
<td>closed</td>
<td>completed</td>
<td>WG2 and each RTSP to utilise the results of the communication tests and actions arising from the IOWave11 exercise to attempt to correct issues before the first communications test of 2012</td>
<td>SG7: Done. Noted that communications have improved.</td>
<td>WG2, TSPs</td>
<td>31/01/2011</td>
<td></td>
</tr>
<tr>
<td>SG6</td>
<td>SG 6.11</td>
<td>closed</td>
<td>completed</td>
<td>Secretariat to write to the Interim Advisory Service (IAS) regarding the change to GTS transmission of bulletins, and will ask the IAS to contact the NTWCs regarding the change and ask for feedback. At least 90 days formal notification to be provided to NTWCs before any changes made.</td>
<td>SG7: IAS has stopped sending messages to GTS for Indian Ocean but still needs to be managed at and after ICG/IOTWS-1X.</td>
<td>Secretariat</td>
<td>28/02/2012</td>
<td></td>
</tr>
<tr>
<td>SG6</td>
<td>SG 6.12</td>
<td>closed</td>
<td>completed</td>
<td>WG2 and WG3 to organise annual joint NTWC/DMO/Media training workshops, subject to availability of funding</td>
<td>SG7: Indonesia may be able to host a training workshop in 2013.</td>
<td>WG2, WG3</td>
<td>30/06/2012</td>
<td></td>
</tr>
<tr>
<td>SG6 Jakarta Dec 2011</td>
<td>SG 6.13</td>
<td>open</td>
<td>revised</td>
<td>RTT to prepare an RTSP Chapter for the IOTWS Implementation Plan by incorporating revised criteria for being RTSPs, Performance Indicators and Performance Monitoring procedures.</td>
<td>SG9: Discussed under agenda item 9; refer to SG9 Action 4. SG8: Needed – RTT has been discontinued so action to be undertaken by WG2. SG7: No action.</td>
<td>WG2</td>
<td>28/02/2015</td>
<td>SG 9.4</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------</td>
<td>------</td>
<td>---------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>------</td>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>SG6 Jakarta Dec 2011</td>
<td>SG 6.14</td>
<td>closed</td>
<td>completed</td>
<td>Review of RTSP Performance Indicators to continue with revised ones to be presented for consideration at the next SG meeting</td>
<td>SG7: Ongoing. Performance Indicators need to be presented to the ICG as part of the WG2 report.</td>
<td>WG2</td>
<td>30/06/2012</td>
<td></td>
</tr>
<tr>
<td>SG6 Jakarta Dec 2011</td>
<td>SG 6.15</td>
<td>closed</td>
<td>completed</td>
<td>Working Group Chairs to provide feedback on the IOWave 11 evaluation form to the IOWave 11 Task Team by end January 2012. Feedback will be ready for the inter-ICG meeting in February 2012.</td>
<td>SG7: Draft report now available for comment by the WG chairs.</td>
<td>WG Chairs</td>
<td>31/01/2012</td>
<td></td>
</tr>
<tr>
<td>SG6 Jakarta Dec 2011</td>
<td>SG 6.16</td>
<td>closed</td>
<td>completed</td>
<td>Secretariat to complete the IOWave 11 data compilation and send it to the IOWave Task Team to finish and finalise the report, in consultation with the WG Chairs. The report to be completed by May 2012</td>
<td>SG7: Done. Draft report now available for review.</td>
<td>Secretariat, IOWave 11 TT, WG Chairs</td>
<td>31/05/2012</td>
<td></td>
</tr>
<tr>
<td>SG6 Jakarta Dec 2011</td>
<td>SG 6.17</td>
<td>closed</td>
<td>completed</td>
<td>Secretariat to arrange the necessary changes to IOC website regarding removing PTWC, NWPTAC and JMA bulletins for Indian Ocean and replacing with RTSP public bulletins.</td>
<td>SG7: Done. Changeover will take place on 13th October 2012.</td>
<td>Secretariat</td>
<td>31/01/2012</td>
<td></td>
</tr>
<tr>
<td>SG6 Jakarta Dec 2011</td>
<td>SG 6.18</td>
<td>closed</td>
<td>completed</td>
<td>WG Chairs to revisit the Medium Term Strategy and make available to members. Secretariat to put a final copy on the IOTWS website.</td>
<td>SG7: No action.</td>
<td>WG Chairs, Secretariat</td>
<td>28/02/2012</td>
<td></td>
</tr>
<tr>
<td>SG6 Jakarta Dec 2011</td>
<td>SG 6.19</td>
<td>closed</td>
<td>completed</td>
<td>ICG/IOTWS Secretariat to put all relevant IOTWS documents on the IOTWS website. The IOTWS Documents will be sorted by three pillars (WGs) plus key planning documents.</td>
<td>SG7: Secretariat has made progress and has prepared a structure for ICG documentation. As well as sorting information on web site by pillars to provide useful reference site for ICGMS and Working Groups, further action also</td>
<td>Secretariat</td>
<td>30/06/2012</td>
<td></td>
</tr>
<tr>
<td>SG6</td>
<td>SG 6.20</td>
<td>open</td>
<td>revised</td>
<td>Mr Rick Bailey to draft a communications plan and circulate to the Steering Group.</td>
<td>SG9: Discussed under SG9 Agenda item 4. Needs to include 10th anniversary of the Indian Ocean Tsunami. SG8: In progress, needs to include IOWave14. Key Messages presented SG7: In progress.</td>
<td>Rick Bailey</td>
<td>28/02/2015</td>
<td>SG 9.4</td>
</tr>
<tr>
<td>-----</td>
<td>---------</td>
<td>------</td>
<td>---------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>------------</td>
<td>--------</td>
</tr>
<tr>
<td>SG6</td>
<td>SG 6.21</td>
<td>closed</td>
<td>superseded</td>
<td>Mr Rick Bailey to draft an IOTWS status document (to be part of the Outreach Plan).</td>
<td>SG9: Closed and combined with SG6 Action 5. SG8: Outstanding. SG7: No action.</td>
<td>Rick Bailey</td>
<td>31/05/2014</td>
<td>SG 6.5</td>
</tr>
<tr>
<td>SG6</td>
<td>SG 6.22</td>
<td>open</td>
<td>in progress</td>
<td>SG to review Implementation Plan.</td>
<td>SG9: Discussed under agenda item 9; refer to SG9 Action 9. SG8: Ongoing. Should be finalised for submission to next ICG session. SG7: No action. To be discussed later in the agenda.</td>
<td>All</td>
<td>04/03/2015</td>
<td>SG 9.4</td>
</tr>
<tr>
<td>SG6</td>
<td>SG 6.23</td>
<td>open</td>
<td>in progress</td>
<td>Steering Group to work on a plan for IOTIC with proposals that can be viewed by donors, with the Secretariat to work with Ardito Kodijat and the UNESCO Jakarta office to see how it can be implemented.</td>
<td>SG9: IOTIC website is operational, but needs formalization. Terms of Reference for IOTIC need to be finalised and approved by the ICG. Refer to SG9 Action 6. SG8: IOTIC website is operational, but needs formalization. SG7: In progress. Ardito Kodijat now confirmed as a National Programme Officer at UNESCO Jakarta.</td>
<td>All IOTIC Secretariat</td>
<td>31/05/2015</td>
<td>SG 9.3</td>
</tr>
<tr>
<td>SG6</td>
<td>SG 6.24</td>
<td>closed</td>
<td>completed</td>
<td>Secretariat to write to Oman regarding the date of the next ICG.</td>
<td>SG7: Done.</td>
<td>Secretariat</td>
<td>28/02/2012</td>
<td></td>
</tr>
<tr>
<td>SG7 Perth Oct 2012</td>
<td>SG 7.01</td>
<td>closed</td>
<td>completed</td>
<td>Secretariat to request Ardito Kodijat of UNESCO Jakarta to provide costed options for establishment of the Indian Ocean Tsunami Information Centre (IOTIC) for ICG-IX to consider</td>
<td>SG8: Done.</td>
<td>Secretariat IOTIC</td>
<td>31/10/2012</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>SG7 Perth Oct 2012</td>
<td>SG 7.02</td>
<td>closed</td>
<td>completed</td>
<td>Rick Bailey to request the TOWS-WG to invite the IMO to attend the next TOWS WG meeting to discuss the issue of dissemination of tsunami threat information to mariners on the high seas.</td>
<td>SG9: Done and closed. SG8: Mr Bailey to follow up with TOWS chair.</td>
<td>Rick Bailey</td>
<td>31/10/2012</td>
<td></td>
</tr>
<tr>
<td>SG7 Perth Oct 2012</td>
<td>SG 7.03</td>
<td>closed</td>
<td>completed</td>
<td>IOC Secretariat to advise subscribers of changes to IOC public bulletin service associated with implementation of RTSP system for IOTWS.</td>
<td>SG8: Done.</td>
<td>Secretariat</td>
<td>31/12/2012</td>
<td></td>
</tr>
<tr>
<td>SG7 Perth Oct 2012</td>
<td>SG 7.04</td>
<td>closed</td>
<td>completed</td>
<td>WG2’s report to the ICG to contain summary of the RTSP performance and the key issues so that they can be brought forward for discussion and facilitate a decision of the status and future of the RTSP service.</td>
<td>SG8: Done.</td>
<td>Chair WG2</td>
<td>31/10/2012</td>
<td></td>
</tr>
<tr>
<td>SG7 Perth Oct 2012</td>
<td>SG 7.05</td>
<td>open</td>
<td>in progress</td>
<td>Secretariat and RTSPs to review NTWC contact database and compare to the results of the communications test to identify where the problems are and approach the relevant NTWCs directly.</td>
<td>SG9: Secretariat to work with TSPs and NTWCs before the next Comms Test. Need an action log. SG8: Ongoing. Underpinning action log required – Secretariat.</td>
<td>Secretariat</td>
<td>28/02/2015</td>
<td></td>
</tr>
<tr>
<td>SG7 Perth Oct 2012</td>
<td>SG 7.06</td>
<td>closed</td>
<td>completed</td>
<td>Secretariat to re-issue request and template for National Reports for next ICG, highlighting the need for specific information on seismic and sea level network and technical national points of contact for each type of network.</td>
<td>SG8: Underpinning action log required – Secretariat.</td>
<td>Secretariat</td>
<td>31/10/2014</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>---------</td>
<td>--------</td>
<td>-----------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>------------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>SG7 Perth Oct 2012</td>
<td>SG 7.07</td>
<td>closed</td>
<td>completed</td>
<td>Mr Ryan and Mr Bailey to provide a draft IOTWS Users Guide for tabling at ICGIX.</td>
<td>SG8: Done.</td>
<td>Chair V/C WG2</td>
<td>31/10/2012</td>
<td></td>
</tr>
<tr>
<td>SG7 Perth Oct 2012</td>
<td>SG 7.08</td>
<td>closed</td>
<td>completed</td>
<td>RTT to make a list of the events since 2011 including the 3 major events and demonstrating the performance of the RTSPs. A report will be prepared for submission to WG2 and ICG-IX.</td>
<td>SG8: Done.</td>
<td>Chair RTT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG7 Perth Oct 2012</td>
<td>SG 7.09</td>
<td>closed</td>
<td>superseded</td>
<td>Steering Group to review and propose outreach material for the Annual NTWC User Workshops.</td>
<td>SG9: Closed and combined with the communications plan. SG8: Open.</td>
<td>All</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG7 Perth Oct 2012</td>
<td>SG 7.10</td>
<td>closed</td>
<td>completed</td>
<td>WG2 to review the number of bulletins issued by the RTSPs, IAS and RIMES during future Communications Tests and IOWave exercises as this has been a source of confusion for some countries.</td>
<td>SG8: Done.</td>
<td>Chair WG2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG7 Perth Oct 2012</td>
<td>SG 7.11</td>
<td>closed</td>
<td>completed</td>
<td>Secretariat to circulate IOWave11 Task Team draft report as a working document to ICG/IOTWS-IX for review and Member States requested to provide their feedback by the end of 2012.</td>
<td>SG8: Done.</td>
<td>Secretariat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG7</td>
<td>Perth Oct 2012</td>
<td>SG 7.12</td>
<td>closed</td>
<td>superseded</td>
<td>WG2 and RTT develop procedures for cancelling or revising tsunami bulletins if observations of the tsunami generated are less than forecast as a matter of priority.</td>
<td>SG9: Closed and combined with Service Definition Document. SG8: Ongoing</td>
<td>Chair WG2 Chair RTT</td>
<td></td>
</tr>
<tr>
<td>SG7</td>
<td>Perth Oct 2012</td>
<td>SG 7.13</td>
<td>open</td>
<td>in progress</td>
<td>Chair ICG/IOTWS to write to Chair of the RIMES Council, Dr Shailesh Nayak, to request RIMES actively demonstrate conformity to RTSP guidelines.</td>
<td>SG9: Rick Bailey will still write to Shailesh Nayak about this. SG8: RIMES informed that it is was not intending to become an RTSP at the last session of the ICG and would be concentrating on Service Level 3 activities. Rick Bailey to follow up with a letter to establish how RIMES is getting information for its bulletins.</td>
<td>Rick Bailey</td>
<td></td>
</tr>
<tr>
<td>SG7</td>
<td>Perth Oct 2012</td>
<td>SG 7.14</td>
<td>closed</td>
<td>completed</td>
<td>Working Group reports should include the following sections: 1. Executive summary 2. Introduction, including ToRs and relevance to pillar objectives in MTS 3. Progress: Against actions Activities undertaken in the intersessional period (ref to ToRs and MTS objectives) Current Status 4. Gaps and deficiencies 5. Action plan for the next intersessional period</td>
<td>SG8: Done.</td>
<td>WG Chairs</td>
<td></td>
</tr>
<tr>
<td>SG7</td>
<td>Perth Oct 2012</td>
<td>SG 7.15</td>
<td>closed</td>
<td>completed</td>
<td>WG activities requiring financial support should be detailed in the WG reports and forwarded to the Secretariat by the end of October.</td>
<td>SG8: Done.</td>
<td>WG Chairs</td>
<td></td>
</tr>
<tr>
<td>SG7</td>
<td>Perth Oct 2012</td>
<td>SG 7.16</td>
<td>closed</td>
<td>completed</td>
<td>Programme and Budget paper to be submitted by the ICG/IOTWS Secretariat to the ICG/IOTWS-IX as a draft working document to be reviewed by the Member States. A sessional committee to be formed to work on the</td>
<td>SG8: Done.</td>
<td>Secretariat</td>
<td></td>
</tr>
<tr>
<td>Item No.</td>
<td>Status</td>
<td>Action Item</td>
<td>Details</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
<td>-------------</td>
<td>---------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG 7.17</td>
<td>closed</td>
<td>completed</td>
<td>WG chairs to prepare their reports prior to 7th November, 2012.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8</td>
<td>done</td>
<td></td>
<td>SG8: Done.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WG Chairs 7/11/2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG 8.01</td>
<td>open</td>
<td>revised</td>
<td>Mr Bailey and Dr Sam Hettiarachchi to work on risk assessment ToRs to present at the next TOWS meeting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8</td>
<td>open</td>
<td></td>
<td>SG9: Open. Rick Bailey and Sam Hettiarachchi to review the ToR of TT on Disaster Management and Preparedness with respect to DRR.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>revised</td>
<td></td>
<td>Chair Chair WG1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG 8.02</td>
<td>open</td>
<td>in progress</td>
<td>Secretariat to develop running log of SG action items.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8</td>
<td>open</td>
<td></td>
<td>SG9: Open. Log should include new, open and closed items.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Secretariat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG 8.03</td>
<td>open</td>
<td>in progress</td>
<td>Dr Hettiarachchi to work with WG2 and WG3 chairs to develop material on tsunami risk assessment, preparedness and management relating to ‘Disaster Resilience in the Built Environment’.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8</td>
<td>open</td>
<td></td>
<td>SG9: In progress. Agreed in principle. Dedicated journal issue on IOTWS and related activities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WG1 Chair</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG 8.04</td>
<td>closed</td>
<td>completed</td>
<td>Mr Bailey to send Dr Sultan of Oman an invitation to become Vice-Chair of WG1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8</td>
<td>done</td>
<td></td>
<td>SG9: Done and closed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chair</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG 8.05</td>
<td>open</td>
<td>revised</td>
<td>Secretariat to organise a coastal hazards workshop in Colombo in 2014 in conjunction with intersessional WG1 meeting, subject to availability of funding.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8</td>
<td>open</td>
<td></td>
<td>SG9: Open. To be conducted in Q1 2015 combined with ESCAP project workshop.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Secretariat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG 8.06</td>
<td>open</td>
<td>in progress</td>
<td>WG3 to extend the stock taking to other countries and redraft questionnaire in light of feedback from three pilot countries.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8</td>
<td>open</td>
<td></td>
<td>SG9: Open</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chair WG3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG 8.07</td>
<td>open</td>
<td>in progress</td>
<td>Secretariat to assess logs after communication tests and follow up on an individual Member State basis.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8</td>
<td>ongoing</td>
<td></td>
<td>SG9: Ongoing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Secretariat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.08</td>
<td>open</td>
<td>revised</td>
<td>Secretariat to request MS to share SOPs, if there is a url for tsunami warnings, examples of warning products within a formal letter.</td>
<td>SG9: Secretariat to initiate. Steering Group to review and comment on draft letter.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.09</td>
<td>open</td>
<td>revised</td>
<td>Dr Hettiarachchi and Mr Elliott to work with support of SG on the 10th anniversary educational booklet.</td>
<td>SG9: Combine with IOTWS status document by Rick Bailey. By 12 December 2014. Rick Bailey to take lead.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.10</td>
<td>open</td>
<td>revised</td>
<td>Secretariat to evaluate available online resource repositories for information sharing. The repository should include current procedures (NTWC users guide, SOP development), outreach information (BoM 101 Tsunami brochures), FAQs, reports (communication tests, RTSP reports).</td>
<td>SG9: New UNESCO site (UNESTEAMS) for restricted information and IOTIC website for public information. Secretariat to advise SG when site will be available.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.11</td>
<td>closed</td>
<td></td>
<td>Biannual RTSP updates on new developments to be distributed in conjunction with communication tests by Secretariat.</td>
<td>SG9: Closed. Include the process for informing NTWCs of updates in the Service Definition Document.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.12</td>
<td>closed</td>
<td>completed</td>
<td>RTSPs to work off-line on new wording for the public bulletins and then send to PTWS for feedback and broader harmonization.</td>
<td>SG9: Done and closed, through TOWS Task Team on Tsunami Watch Operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.13</td>
<td>closed</td>
<td>completed</td>
<td>RTSPs to work off-line on formats of bulletins. It is suggested to use a similar format to the Exchange Bulletins (i.e. Type 1-4), but to avoid confusion between the two.</td>
<td>SG9: Done and closed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.14</td>
<td>closed</td>
<td>completed</td>
<td>Secretariat to organise SOP workshop in Hyderabad for northern and western Indian Ocean countries. Tentative workshop dates are 16th-20th June 2014.</td>
<td>SG9: Done and closed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.15</td>
<td>open</td>
<td>revised</td>
<td>RTSPs to check that PTWC is using the same coastal forecast zones as IOTWS in areas of joint responsibility.</td>
<td>SG9: Indonesia no longer requires this cover. Secretariat to write formally to Indonesia TNC to formally confirm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.16 open revised</td>
<td>Mr Jaksa to update the map of IOTWS earthquake source regions to include seismicity north of Timor.</td>
<td>SG9: D. Jaksa to send information to Srinivasa Kumar --&gt; IOC draftsman.</td>
<td>Dan Jaksa, Srinivasa Kumar</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.17 closed superseded</td>
<td>RTSP to implement the naming convention for tsunamigenic earthquakes / tsunamis decided on by TOWS (i.e. Flinn Engdahl + year with sequentially numbered events in the same year and region).</td>
<td>SG9: Closed. Address in Service Definition Document. Will be implemented when Service Definition Document is approved by ICG.</td>
<td>TSPs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.18 open in progress</td>
<td>Steering Group members to send comments on IOTIC website to Mr Bailey.</td>
<td>SG9: Open. SG members to send comments to Rick Bailey by 15 December 2014</td>
<td>Rick Bailey</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.19 open in progress</td>
<td>Mr Bailey to compile IOTIC website feedback and circulate amongst SG members and Mr Kodijat.</td>
<td>SG9: Open. By 22 December 2014</td>
<td>Rick Bailey 22/12/2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.20 closed cancelled</td>
<td>Mr Bailey to develop words around the key outreach messages and circulate to the SG for consideration.</td>
<td>SG9: Mr Bailey to develop words around the key outreach messages and circulate to the SG for consideration.</td>
<td>Rick Bailey 6/12/2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.21 open revised</td>
<td>WG Chairs to submit Implementation Plan input for their strategic pillars to Mr Bailey by March 2014.</td>
<td>SG9: Dan Jaksa to prepare a draft structure for a new implementation plan. Update national report forms to obtain more information on national implementation, including seismic and sea level stations, awareness and preparedness etc. Include gaps in national warning system. Steering Group to take an overview of requirements.</td>
<td>Dan Jaksa</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.22 open in progress</td>
<td>RTSPs to update the NTWC Users Guide with a view to finalizing by the end of March 2014.</td>
<td>SG9: See SG6 meeting Action 8.</td>
<td>TSPs 31/03/2014 SG 6.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.23</td>
<td>open</td>
<td>in progress</td>
<td>RTSPs to display maps of the utilised real-time seismic and sea level stations on their websites.</td>
<td>SG9: INCOIS already do this for sea level, JATWC and InaRTSP will follow up on this. Display is for NTWC only. Stations available to the TSP updated in real time. May need a link to external website.</td>
<td>TSPs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>---------</td>
<td>------</td>
<td>-------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.24</td>
<td>closed</td>
<td>completed</td>
<td>Secretariat to implement the new referencing system for ICG/IOTWS non-statutory documents.</td>
<td>SG9: Done and closed.</td>
<td>Secretariat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.25</td>
<td>closed</td>
<td>completed</td>
<td>Mr Elliott and Mr Bailey to develop a proposal on TNC and TWFP definitions, expectations and formalisation process to present to the TOWS-WG.</td>
<td>SG9: Done. TOWS-WG defined new definition for TWFP. --&gt; Secretariat to send out CL requesting nominations.</td>
<td>Secretariat Chair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.26</td>
<td>closed</td>
<td>completed</td>
<td>Mr Bailey to refer the issuing of tsunami threat information by GDACs to TOWS-WG.</td>
<td>SG9: Done.</td>
<td>Chair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG8 Perth Dec 2013</td>
<td>SG 8.27</td>
<td>open</td>
<td>in progress</td>
<td>Secretariat to follow up with Oman on hosting of ICG/IOTWS-X back to back with the Oman Tsunami Symposium.</td>
<td>SG9: In progress.</td>
<td>Secretariat</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>