IOC Circular Letter No. 2768
(Available in English only)

To :  ICG/IOTWMS¹ Tsunami National Contacts
ICG/IOTWMS Chair and Vice-Chairs
ICG/IOTWMS Working Group Chairs and Vice-Chairs

Cc :  Official National Coordinating Bodies for liaison with the IOC, and
Permanent Delegates/Observer Missions to UNESCO and National Commissions for
UNESCO in ICG/IOTWMS Member States
UNESCO Offices in Doha, Islamabad, New Delhi and Tehran

Subject :  Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS): Call for nomination of experts to the ICG/IOTWMS Working Groups

At its 12th session, held in Kish Island, Islamic Republic of Iran, 9–12 March 2019, the Intergovernmental Coordination Group (ICG) for the Indian Ocean Tsunami Warning and Mitigation System (IOTWMS) decided to:

- Continue Working Group 1 on Tsunami Risk Community Awareness and Preparedness and nominated Dr Harkunti Pertwi Rahayu (Indonesia) as its chair, and Dr Mahmood Reza Akbarpour Jannat (Iran) and Dr Gareth Davies (Australia) as vice-chairs. The following Member States expressed interest in joining the working group: Australia, India, Indonesia, Malaysia, Oman and Pakistan.

- Continue Working Group 2 on Tsunami Detection, Warning and Dissemination and nominated Dr Yuelong Miao (Australia) as its chair, and Mr Patanjali Kumar Chodavarapu (India) and Dr Karyono (Indonesia) as vice-chairs. The following Member States expressed interest in joining the working group: Australia, India, Indonesia, Malaysia, Oman, Pakistan and Thailand.

- Continue Sub-Regional Working Group for the North West Indian Ocean (WG-NWIO) and nominated Dr Mohammad Mokhtari (Iran) as its chair and Ms Vijaya Sunanda Manneela (India) as vice-chair. The following Member States expressed interest in joining the working group: India, Iran, Oman and Pakistan. Indonesia expressed interest in participating as an Observer. Further, the ICG decided to invite United Arab Emirates as a Member and UNESCAP as an Observer to the WG-NWIO.

¹ ICG/IOTWMS Member States include Australia, Bangladesh, Comoros, Djibouti, France, India, Indonesia, Islamic Republic of Iran, Kenya, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Myanmar, Oman, Pakistan, Seychelles, Singapore, Somalia, South Africa, Sri Lanka, Tanzania, Thailand, Timor Leste, United Arab Emirates, United Kingdom and Yemen.

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Through this circular letter, I have the pleasure to invite Member States who already expressed an interest, as well as all other IOTWMS Member States to nominate experts as members or observers of the above working groups, according to the expertise required to contribute to the Terms of Reference as described in attachment.

In addition to a good working knowledge of the operation of the IOTWMS, specific criteria for membership include significant experience in one or more criteria listed below for each of the Working Group.

**Working Group 1:**
- Intra/inter-disciplinary, multidisciplinary and multi-sectoral interactions to ensure tsunami risk knowledge is streamlined to risk reduction strategies.

**Working Group 2:**
- Seismology, oceanography, sea-level monitoring or wave modelling, in relation to tsunami generation and propagation;
- The operations of a National Tsunami Warning Centre (NTWC) and the generation of tsunami warnings;
- The dissemination of tsunami warnings, via multiple communications media.

**Working Group NWIO:**
- One representative from the NTWC and one representative from the Disaster Management Organisation (DMO) of each WG-NWIO Member State (India, Iran, Pakistan, Oman, United Arab Emirates and Yemen).

The following rules and conditions apply to all working groups of the ICG/IOTWMS:
- Working language: English
- Frequency of meetings: inter-sessionally
- Coordination and elections: Following the rules of procedures applying to IOC subsidiary bodies, unless nominated by the ICG/IOTWMS, a chair and at least one vice-chair will be elected by the members of the working group for two years with possible re-election of one term in the same position
- Members and appointment: Nominated by Member States in accordance with the rules of procedures applying to IOC subsidiary bodies. Technical experts and observers can be invited at the discretion of the chair
- Duration of the working group: Two years, renewable subject to review by the ICG
- Programme of intersessional work should be determined by the working group at its meeting and included in the report to the ICG to which it reports
- Intersessional work is generally conducted by email and teleconference, in addition to at least one integrated meeting of the working groups subject to availability of budget
- Reports: A progress report should be submitted two months before each ICG session and within two months of each working group meeting.
- Financial resources: Participation in the working groups and attendance at meetings will be at national expense.

Nominations, addressed to Dr Srinivasa Kumar Tummala (sk.tummala@unesco.org), should reach the Secretariat not later than **26 May 2019** accompanied by a CV for each nominated expert.

Yours sincerely,

[signed]

Vladimir Ryabinin
Executive Secretary

Enclosure: Terms of Reference of the ICG/IOTWMS Working Groups
Terms of Reference of the ICG/IOTWMS Working Groups

ICG/IOTWMS Working Group 1
Tsunami Risk, Community Awareness and Preparedness

Terms of Reference

Liaise with other Working Group(s) and Task Team(s) within the ICG/IOTWMS and with Working Groups from the other ocean basins through the Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS-WG) to:

1. Assist, develop and strengthen the overall capacity and capability of Member States in tsunami risk assessment and mitigation, community awareness and preparedness.
2. Encourage Member States to mainstream tsunami Disaster Risk Reduction into sustainable development to help achieve resilient communities in the region.
3. Identify areas of priority for action following assessments, exercises and real tsunami events.
4. Provide advice on user requirements and utility of tsunami warning products and services.
5. Provide advice to the Indian Ocean Tsunami Information Centre (IOTIC) on educational, awareness and preparedness materials.
6. Promote collaboration among academia, research institutions and disaster management offices to encourage multidisciplinary and multi-sectoral interaction in ensuring tsunami risk knowledge are streamlined to risk reduction strategies.

Activities may include:

1. Monitor, assess and routinely report to the Steering Group and ICG on the status of Tsunami Risk Assessments, Community Awareness and Preparedness in each Member State.
2. Seek resources and coordinate projects to build capacity in Member States.
3. Organise workshops and symposiums for training and capability development.
4. Contribute to the conduct of regular exercises of the IOTWMS.
5. Encourage Member States to integrate tsunami risk assessment, community awareness and preparedness within national disaster risk reduction programmes for multi-hazards.
6. Stimulate and share information on best practices between Member States.
7. Assist with development and application of guidelines on hazard, vulnerability and risk assessment and mitigation, exercises, and post-event surveys.
8. Work with Working Group 2 "Tsunami Detection, Warning and Dissemination" to develop effective warning products, services, Standing Operating Procedures and warning chains.
9. Under the direction of the Steering Group, assist with national assessments of the IOTWMS performance after each exercise and real tsunami event.

The Working Group will be composed of members nominated by Member States, an invited IOTIC representative and other invited observers as required, with a chairperson and two vice-chairpersons to be elected by the ICG.

ICG/IOTWMS Working Group 2
Tsunami Detection, Warning and Dissemination

Terms of Reference

Liaise with other Working Group(s) and Task Team(s) within the ICG/IOTWMS and with Working Groups from the other ocean basins through the TOWS-WG to:

1. Coordinate and strengthen the operational implementation of a "System-of-Systems" providing interoperable tsunami threat information products and services for Member States.
2. Monitor the performance of key observational, warning and communication system components.
3. Identify areas of priority for action following assessments, communications tests, exercises and real tsunami events.
4. Provide advice to the Indian Ocean Tsunami Information Centre (IOTIC) on educational materials about the warning systems and services.
5. Help strengthen the capacity and capability of Member States in relation to tsunami detection, warning and dissemination.

Activities may include:

1. Help coordinate and facilitate the development and operational implementation of tsunami detection, warning and dissemination systems and procedures within Multi-Hazard Early Warning System (MHEWS) frameworks and systems.
2. Monitor, assess and routinely report to the Steering Group and ICG on the performance of Tsunami Service Providers (TSPs), observational seismic and sea level monitoring networks, communication systems and procedures.
3. Consult with Working Group 1 Community Awareness and Preparedness on the requirements and suitability of threat information and warning products.
4. Monitor existing international and national arrangements and provision of real-time data required for tsunami monitoring and warning with regard to seismic, GNSS, sea level and other kinds of measurements and data exchange.
5. Undertake studies to determine warning requirements for seismic and sea level data.
6. Facilitate the ongoing development and benchmarking of tsunami modelling, forecast and verification systems.
7. Contribute to the conduct of regular exercises and communication tests of the IOTWMS.
8. Develop, coordinate and help implement training and capacity building programmes for NTWCs, DMOs and Media in the Tsunami Warning Services.
9. Develop and maintain relevant documentation, such as the IOTWMS Service Definition and IOTWMS NTWC Users Guide.

The Working Group will be composed of members nominated by Member States, Member State representatives for each ICG-designated TSP and invited observers, with a chairperson and one or two vice-chairpersons to be elected by the ICG.

Subregional Working Group for the North West Indian Ocean

Terms of Reference

1. To evaluate capabilities and ascertain requirements of countries in the North West Indian Ocean region for providing end-to-end tsunami warning and mitigation services within a multi-hazard framework and within the framework of the ICG/IOTWMS.
2. To promote and facilitate tsunami hazard and risk studies and research in the region.
3. To facilitate cooperation in the establishment and upgrading of seismic, sea level and GNSS stations and networks and communication systems in the region.
4. To facilitate improvement of the education programmes on tsunami mitigation in the region.
5. To facilitate capacity building and the sharing of tsunami-related data and information in the region.

The Working Group will be composed of members representing NTWC and DMO from each of the Member States: India, Iran, Oman, Pakistan, United Arab Emirates, Yemen, other Member States in the North West Indian Ocean region and invited observers, with a chairperson and vice-chairperson to be elected by the ICG.