

TOWS-TWO

Online Meeting
24 October 2024
11:00-13:00 UTC

Chair: Yuji Nishimae (YN)
Members (present): Alessio Piatanesi (AP), Elizabeth Vanacore (EV), Helene Hebert (HH), Jijavarapu Padmanabham (JP)
Members (absent): Charles McCreey (CM), Dakui Wang (DW), Nasser Al Ismaili (NAI)
Observers: Bruce Howe (BH)
Technical Secretary: Ocal Necmioglu (ON)

1. Review of Global Service Definition Document (GSDD)

YN distributed the updated version of the GSDD to the Members of the TT-TWO on 6 September and requested feedback by 30 September. So far, no feedback was received, but ICG/CARIBE-EWS representative CM requested an extension of this deadline to 15 January 2025. Accordingly, YN proposed the extension of this deadline to this date. ON reminded the members on the upcoming ICG/IOTWMS and ICG/NEAMTWS Sessions both in November which would allow these ICGs review and provide their feedback accordingly. HH confirmed that this also the thinking of both ICG/NEAMTWS representatives and the review process already ongoing. ON added that the GSDD would be then reviewed and approved by the TOWS-WG in 2025/02 and published as an IOC-TS in 2025/04, upon which it will be also considered as final by the ICG/PTWS-XXXI (2025/04) and ICG/CARIBE-EWS (2025/05), finally to be approved by the 33rd Assembly of the IOC (2025/06).

TT-TWO decided to extend the deadline for collecting feedback on the revised GSDD as 15 January 2024.

2. TOWS-WG TT-TWO Action Status

YN presented TT-TWO Action Monitor prepared by the Secretariat. The purpose of this Excel file is to enable the Chair, Members and Technical Secretary track the status of the tasks as decided by the TT-TWO. It includes only actions that are reflected in the TOWS-WG Decisions and Recommendations. As of 24 October 2024, 0 actions have been completed, 8 actions are in progress, 1 action is delayed, 0 actions have failed, 11 actions did not start yet, and 9 actions were cancelled. Comments on each action are reflected in the pdf version of the file presented in Annex-1 of this report.

TT-TWO Action Monitor was distributed to the TT-TWO members after the meeting by ON and feedback was requested.

3. Agenda for the next TOWS-WG TT-TWO

YN presented the draft agendas of both Joint TT-DMP and TT-TWO and separate TT-TWO meeting scheduled for 2025/02 (Annex-2) and emphasized the need to add an agenda on “Tsunami Service Provision Considerations for Events Outside ICG Earthquake Source Zones”. LV

reminded the group that there is a need to agree on global criteria and methodology to report on the tsunami exercise participations. ON thanked for that reminder and recalled that such reporting should not be limited to registrations (such as in the case of CARIBE WAVE Exercises) but further granularity is needed for the reporting of the participation (actual number of person vs type of activity they are enrolled) to ensure the results are comparable for each ICG.

YN requested feedback from the TT-TWO Members on the draft agenda presented.

4. Definition of meteotsunami (Report of the WMO-IOC JCB)

The presentation of YN is available in Annex-3. YN highlighted that

- “Meteotsunami” is not an official term recognized and/or used by WMO;
- There is concern among some WMO Members regarding the unclear stance of roles and responsibilities, and terminology, associated with the non-WMO term “meteotsunami”;
- WMO requests to raise in discussion the use of the term “meteotsunami” and its implications, to ensure common vocabulary is agreed between UN agencies.

In issuing alerts for these long waves, the WMO insists that meteorological services focus on their coastal impacts and in general do not use the term “meteotsunami” to avoid confusion with tsunami events generated by disturbances such as undersea earthquakes, volcanic eruptions, or landslides, which occasionally lead to devastation. Standing Committee on Marine Meteorological and Oceanographic Services (SC-MMO) is working towards finalizing WMO’s draft definition in consultation with the IOC through the JCB and to develop guidance on this phenomenon for NMHSs, to support early warnings and forecasts.

YN reported also on some communication received from WMO representatives to classify tsunami only above a certain wave amplitude threshold. ON added that this request was not brought forward to the JCB forum, and necessary clarifications were made with an analogy to the earthquake phenomena, stating the fact that regardless of its amplitude (magnitude), if certain physical conditions to apply as scientifically defined, that the phenomena is defined as tsunami (earthquake). During the JCB, it was made clear that none of the UN agencies should be entitled to introduce changes in the scientific terminology, but agencies with warning responsibilities may very well use any terminology it fits their operational requirements. Through the constructive exchange in the JCB necessary clarifications were expressed to develop a better understanding of our partners in the WMO on the physics and the definitions related to tsunami phenomena. ON also informed the members that during the JCB meetings it became clear that the main source of the concern was public reaction mainly driven by the HTHH event which was called erroneously as a meteotsunami and the WMO was not prepared for such an event that had a global implication on its operational setting. In this regard, WMO seems to assign tsunami to “bigwave” phenomena, and it was made clear at the JCB that this is exactly the opposite of what IOC tsunami program focuses on its awareness activities. ON also highlighted the unfortunate fact that the term of meteotsunami still being erroneously used by the tsunami scientific community which adds further complications to the matter. LV highlighted the need for public education on what meteotsunami is. ON seconded and added that similar education may be necessary for the scientific community, maybe through the IUGG-JTC. HH inquired whether there are many meteorological agencies which must deal with this phenomenon and the group agreed that there are few agencies, and the majority of these events are being observed in the Mediterranean.

The draft report of the TT-TWO Ad Hoc Team on Meteotsunamis is expected to be made available by the end of November and will be considered by the JCB in its meeting in 2024/11 or 2024/12 (exact date TBD) and TOWS-WG 2025/02.

YN will inform the TT-TWO members on the outcome of the next online JCB meeting 2024/11 or 2024/12 after it took place.

5. WMO Rolling Review of Requirements

YN presented WMO Rolling Review of Requirements (Annex-4), which requires a submission of tsunami variables (parameters) to be defined in WMOs Observing Systems Capability Analysis and Review Tool [OSCAR](#). YN requested feedback from the members by 15 November on the parameters defined in Annex-4. ON pointed out that this effort is also closely connected to the Implementation of a Coastal Inundation Forecasting–Early Warning Systems ([WMO-No.1293](#)) within a MHEWS context under the EW4All framework. BH inquired on the source of the physics parameters listed in the GAP analysis and pointed out the need to include the Ocean Bottom Pressure (OBP) parameter as one of the ocean related variables in the OSCAR. GOOS and WMO representatives were contacted by ON after the meeting, stating that OBP measurements are "*crucial for understanding ocean circulation patterns and changes in sea level and monitoring this pressure helps scientists track phenomena like ocean tides, water mass variations, and even global climate change impacts*" ([reference](#)), and are also used in the determination of the tsunami wave amplitude, but the measurement itself is not a direct measurement of the tsunami wave amplitude and therefore not included among the tsunami variables.

TT-TWO Members are requested to provide their feedback on the tsunami variables to be included in WMO's WMOs Observing Systems Capability Analysis and Review Tool OSCAR.