



United Nations  
Educational, Scientific and  
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Intergovernmental  
Oceanographic  
Commission

# Update on work plans and activities of the Task Team on Documentation

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# Introduction

## Summary from last ICG related to the TT-Doc

- The TT-Doc had started the revision of the Interim Operational Users Guide (IOUG, 2011) to be drafted before the Steering Committee in spring 2022. The session noted that experts directly affiliated with TSPs would be better technical expertise to take on this task.
- Mr Öcal Necmioğlu proposed partial updates to the ICG/NEAMTWS Operational Users Guide. For example, WGs and TTs (e.g. TT-OP) can provide updates on the guidance on sea level measurements, or improvement on the ongoing messages. He highlighted that improvements can be done partially and be approved by the ICG/NEAMTWS once every year.

## Progress since last ICG

- The new TT-Doc co-chairs collected the available information on the existing IOUG.
- A new IOUG structure (table of contents) was drafted between the co-chairs.
- The TT-Doc co-chairs arranged a meeting with the past TT-Doc and present TT-OP co-chairs to discuss the proposed restructuring of the IOUG and received their feedback.

# Table of contents of current IOUG

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4.4.1 Earthquake Parameters .....		
4.4.2 Initial Estimated Tsunami Arrival Times .....		
4.4.3 Area of Watches and Advisories .....		
4.5 TYPES OF NEAM-TWP MESSAGES .....		

# Table of contents of current IOUG

Background text on NEAMTWS which can be moved to annexes

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# Proposed structure of updated IOUG

## **TITLE PAGE**

## **TABLE OF CONTENTS**

## **EXECUTIVE SUMMARY**

## **LIST OF FIGURES AND TABLES**

## **INTRODUCTION**

- Purpose of the IOUG
- Organization of the IOUG
- Tsunami Warning System Components and Procedures

## **Earthquake Observations and Analysis**

- Seismic network
- Geodetic network
- Data acquisition
- Data transmission
- Real-time data processing
- Earthquake parameters determination

## **Sea level Observations and Analysis**

- Tide gauge network
- Other types of sensors (cabled, open sea, etc.)
- Data acquisition
- Data transmission
- Real-time data processing
- Sea level parameters determination

## **Tsunami Forecasting**

- Principles of Tsunami Forecasting and Decision Matrix
- Basins, competence zones and Forecast Points
- Roles and responsibilities of TSPs and NTWCs
- ETA forecasting
- Tsunami height forecasting
- Potential for data assimilation
- Alert Levels determination

## **Tsunami Alert Messages**

- Message sequence and message types
- Message formats (plain text, CAP, etc.)
- Message dissemination means and infrastructure

## **Interoperability among TSPs/NTWCs**

## **Daily Procedures**

## **Routine Tests**

## **Contingency Planning**

# Proposed structure of updated IOUG

Straight to the point

Topics which have not been discussed in current manual, with the exception of the earthquake and sea-level parameters determination.

The main part of the manual organized more efficiently, also reflecting new ideas currently discussed.

## **INTRODUCTION**

- Purpose of the Users Guide
- Organization of the Users Guide
- Tsunami Warning System Components and Procedures

## **Earthquake Observations and Analysis**

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- Geodetic network
- Data acquisition
- Data transmission
- Real-time data processing
- Earthquake parameters determination

## **Sea level Observations and Analysis**

- Tide gauge network
- Other types of sensors (cabled, open sea, etc.)
- Data acquisition
- Data transmission
- Real-time data processing
- Sea level parameters determination

## **Tsunami Forecasting**

- Principles of Tsunami Forecasting and Decision Matrix
- Basins, competence zones and Forecast Points
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- ETA forecasting
- Tsunami height forecasting
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## **Tsunami Alert Messages**

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NEAMTWS Steering Committee meeting, April 8<sup>th</sup>, 2022

# Proposed Annexes of updated IOUG

## ANNEX I TECHNICAL PROCEDURES

- Sample Alert Messages
- Communication Tests and Exercises
- Checklists (Daily and Periodic)
- Failures and exceptions (communication to subscribers)
- KPIs monitoring
  - Acquisition
  - Connectivity
  - Communication
  - Performance
  - Robustness and redundancy
- Recommendations for Documentation of Procedures - Internal SOPs
- Transmission of Forecast Points
- Transmission of Sensor Lists (Seismic, GNSS, Sea Level)
- Transmission of Bathymetry data

## ANNEX III LEGAL FRAMEWORK

- International agreements and mandate
- Responsibility, Accountability and Liability
- Limitations and disclaimers
- Non-seismic sources

## ANNEX II ICG/NEAMTWS ORGANIZATIONAL STRUCTURE AND GOVERNANCE

- COORDINATION, FACILITATION AND CAPACITY STRENGTHENING ENTITIES OF THE NEAMTWS
  - Intergovernmental Oceanographic Commission of UNESCO (IOC) 5
  - IOC Tsunami Co-ordination Unit (TSU)
  - Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-eastern Atlantic, Mediterranean and Connected Seas (ICG/NEAMTWS)
  - NEAMTIC

### STRUCTURAL ELEMENTS OF THE NEAMTWS (Functions and Responsibilities)

- Tsunami National Contact (TNC)
- Tsunami Warning Focal Point (TWFP)
- Tsunami Service Providers (TSPs)
- National Tsunami Warning Centres (NTWCs)

## ANNEX IV ADMINISTRATIVE PROCEDURES

- TSP Accreditation (with updates)
- TWFP AND TNC FORMS
- Subscription to TSP Services

# Proposed contributions for drafting the updated IOUG

## Possible contributors for main document:

- Seismic + Sea level sections: WG 2-3
- Forecasting: WG 1
- Messages: TT-OP
- Day-by-day and following: TT-DOC + TT-OP

## Possible contributors for annexes:

- I: TT-OP + TT-DOC
- II: TT-DOC + WG4
- III: Secretariat + WG4
- IV: Secretariat + TT-DOC



# TT-Doc progress summary

- The current IOUG drafted in 2011 needs updating and restructuring to become more efficient and i) reflect current NEAMTWS TSP/NTWC operations, and ii) provide clarifications for key TSP/NTWC operational topics not currently described.
- A new (ambitious) IOUG structure was drafted.
- The proposed restructuring of IOUG was discussed with the TT-OP co-chairs co-chairs (and one of the past TT-Doc co-chairs).
- The existing IOUG, the ICG/NEAMTWS Implementation and Strategy documents, as well as the IOC/TOWS-WG GSDD shall be taken into account when drafting the updated IOUG.

## Next steps

- Compile a list of open issues currently discussed in the TT-OP, and identify which issues need to be resolved before finalizing the updated IOUG (e.g., the use of threat levels);
- Discuss this list at the next ICG and keep addressing them in the intersessional period;
- Search for volunteers within the ICG to contribute to start drafting- before 2022 ICG already - sections of the updated IOUG;
- First draft of updated IOUG at ICG in 2023.