

## Refresher DMO SOPs and related documents

- Concept of Operations & Requirements
- Different Types of SOPs
- Working with SOPs

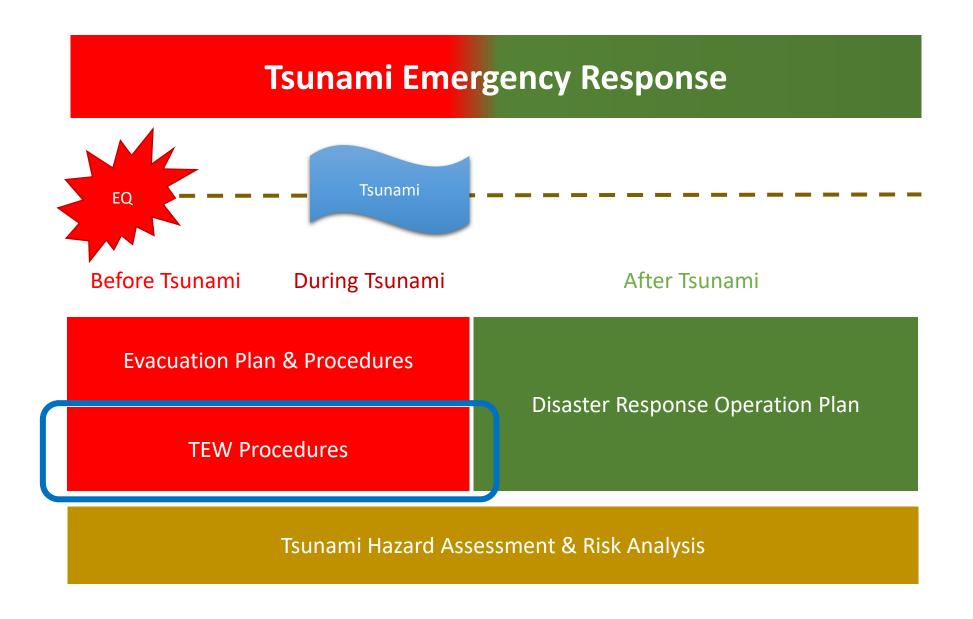
Harald Spahn
UNSECO Consultant

ICG Indian Ocean Tsunami Warning & Mitigation System SOP Workshop August 2023:

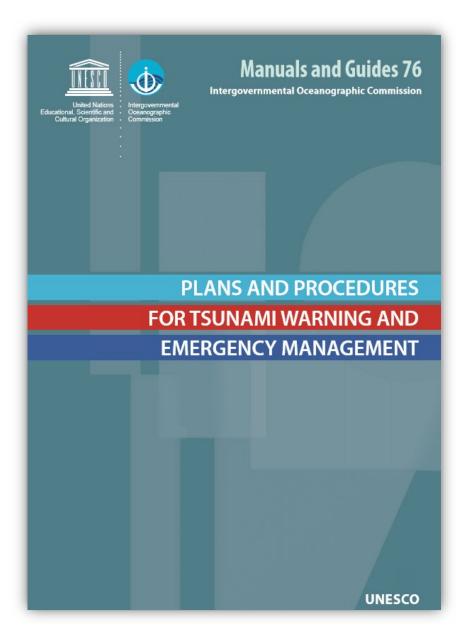
Standard Operating Procedures (SOPs) for

National Tsunami Warning Centres (NTWCs) and

Disaster Management Organisations (DMOs)



#### Reference





www.ioc-tsunami.org

#### **Types of SOP related documents**



- 1. High-level documents to establish policy guidelines (CONOPS, Warning Chain)
- 2. Comprehensive emergency operations SOP document with details for study and reference during non-crisis
- 3. Quick-Reference SOP documents for reference during crisis
- 4. User Guides so recipients understand SOPs and what to expect

#### **CONOPS & SOPs**



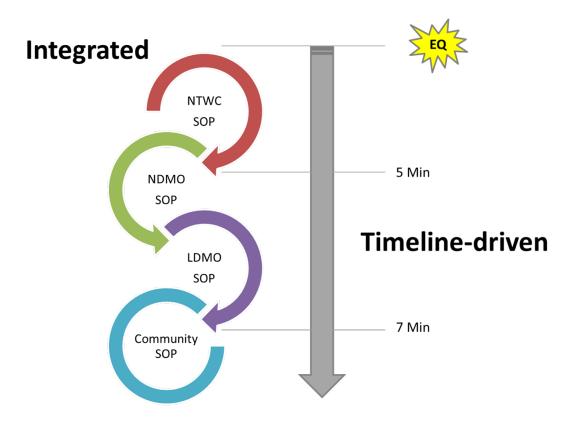
#### **Concept of Operations (CONOPS)**

- High level document
- Describes system components
- Assigns responsibilities

#### **Standard Operating Procedures (SOPs)**

- Each system component and responsibility requires an (institutional) SOP
- Each SOP separate but timeline-driven and synchronised

Without CONOPS, SOPs may be unaligned or lead to uncoordinated activities and actions



## **CONOPS** – Typical contents



- 1. Purpose of Concept of Operations
- 2. Roles and Responsibilities for

Tsunami risk assessment

Receipt and assessment of TSP bulletins and monitoring data

Threat assessment

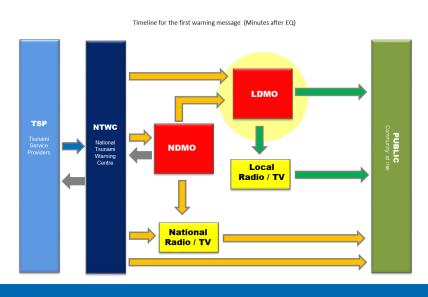
Creation and dissemination of warnings (to public, DMOs, and other response agencies)

Call for evacuations

Media management

Public education

- 3. Tsunami Warning Chain
- 4. Warning Concept (thresholds, threat levels, etc.)
- 5. Types of Warnings (including when each will be used)
- 6. Glossary

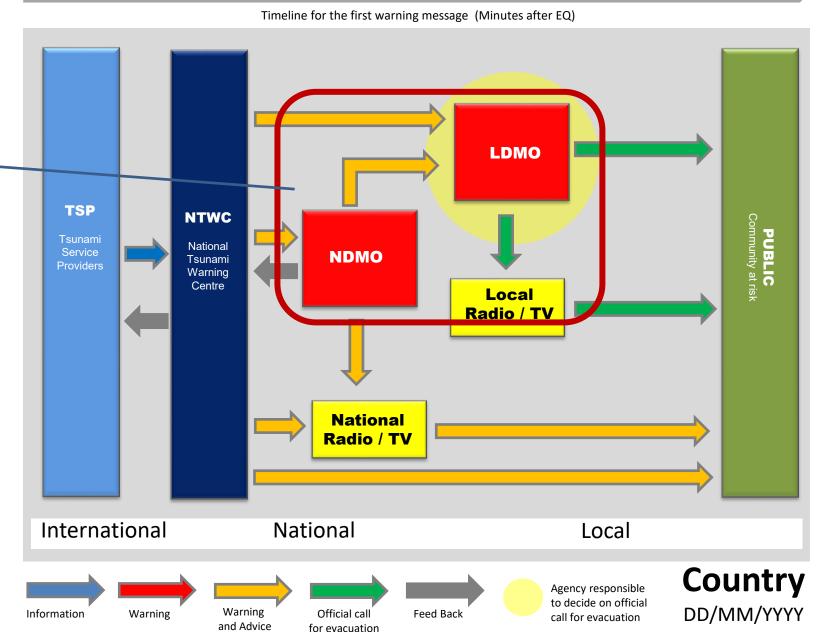


## **Roles & Responsibilities**

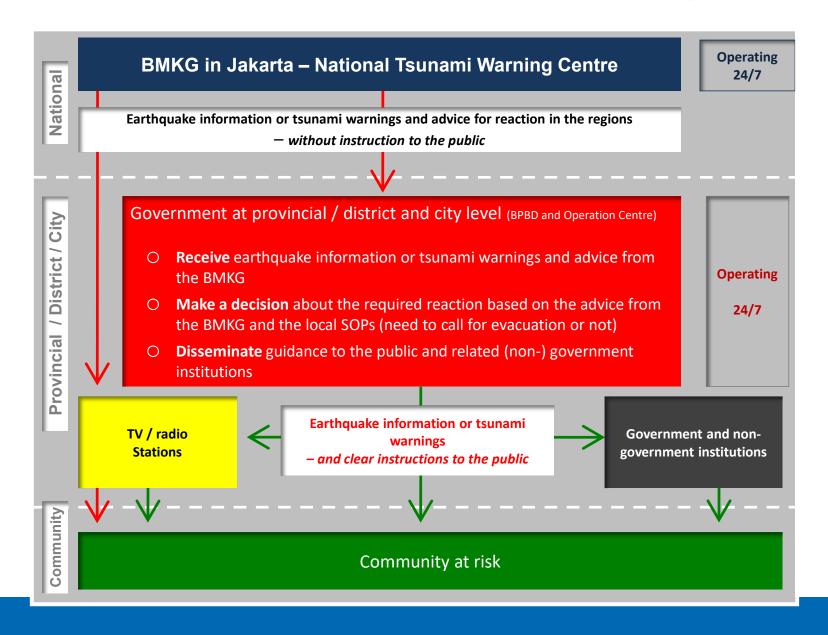
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#### **N/LDMO**

- Receive warnings from NTWC
- Decide on appropriate action and evacuations
- Communicate the warnings, with instructions, via public alerting systems (incl. sirens) and the Broadcast Media
- Communicate 'All Clear' once the threat is over and safe to return to any impacted areas



#### **Concept of Operation for DMO tsunami warning services**



## **Legal & Institutional Requirements for DMO or NTWC Tsunami Warning Services**

### Tsunami early warning services

- must operate 24/7
- need to use SOPs
- requires official delegation of authority
- need synchronization of SOPs at the national, provincial, district and municipal levels
- need cooperation between national, provinces, districts and municipalities in delivery of tsunami early warning services and guidance

## **Definition: Standard Operating Procedure (SOP)**

A SOP is a written document that describes the actions to be taken in a system or process. A SOP describes each individual activity in a sequence of activities, documenting who does what, when, where, and how for each activity.

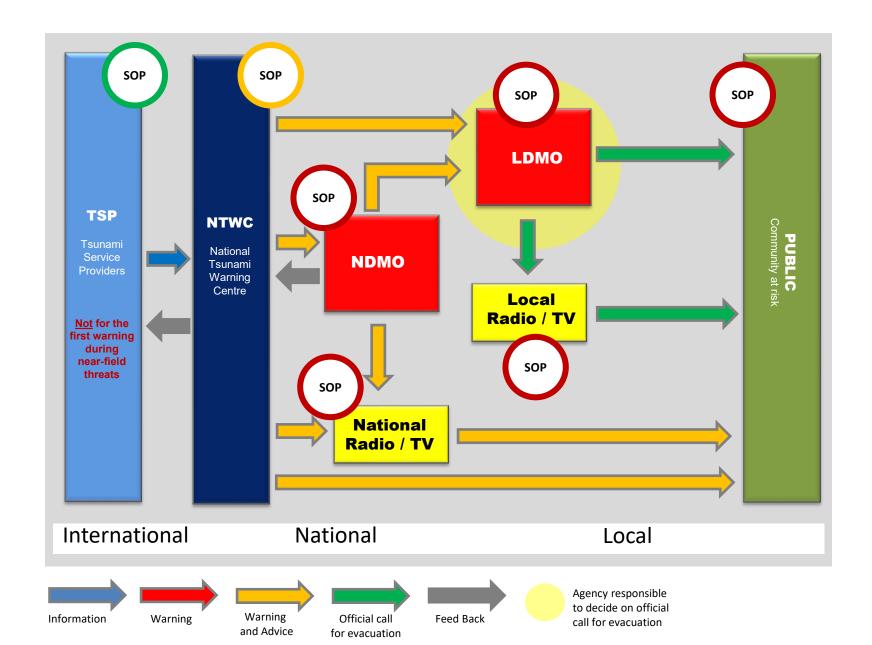
Source: IOC Manuals and Guides, 76

## **Importance of SOPs**

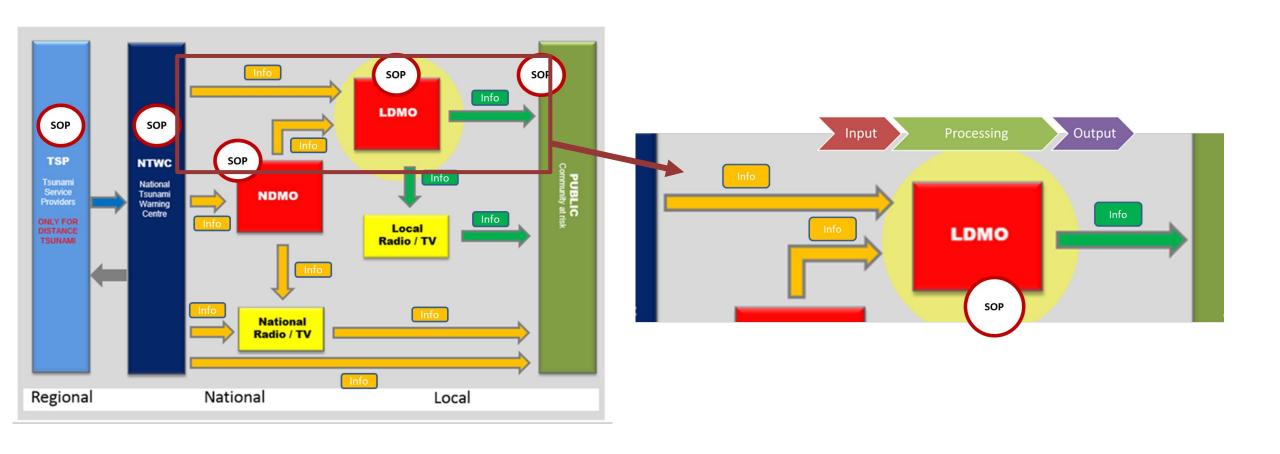
#### SOPs are

- the foundation of effective, reliable warning systems
- essential for rapid evaluation, warning and response in order to save lives
- linking communications between stakeholder in an end-to-end system. Linkages must be strong and robust or warning chain will be broken
- a "living document". SOPs should be developed, practiced and modified as necessary.

## Tsunami warning chain is operated by institutional SOPs

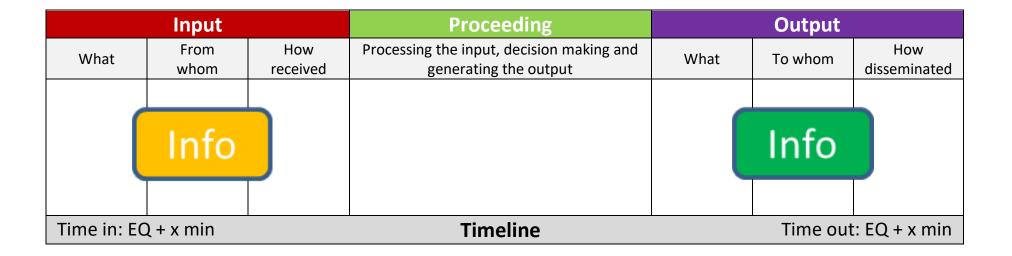


# The logic of DMO SOPs Information products are distributed and processed along the warning chain



## The logic of DMO SOPs in the warning chain





#### **Issues to consider**

### **Decision-making**

- High level of uncertainty in the case of near-field tsunamis
- Based on warning/threat information provided by the NTWC
- Tsunami arrival times, determine critical decision point for each source / source region
- How long will it take for a community to evacuate?
- Use a Map & Table for easy reference
- Use Message template for easy fill-in
- Decide when authorization is required and who will authorize
- Essential to delegate authority for quick response

#### **Issues to consider**

### **Public Alert System Activation**

- What system for what type of message?
- Step-by-step activation guide
- Support arrangement for duty officer to inform stakeholders when activating public alert system: Emergency Services, Local Authority, Media, activate EOC, take calls

#### **Issues to consider**

#### Safe return

- When to give 'safe to return' (all clear) to the public
- Who authorises?
- What are the criteria for "safe to return" how is it determined?
- How will this be issued?

## **Working with SOPs**

#### SOPs need to be

- strictly followed to ensure a complete and effective performance
- regularly reviewed
- approved

Staff must be trained. Their competence to perform the activities according to the SOPs should be regularly assessed.



## **THANK YOU**