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## **DMO SOPs**

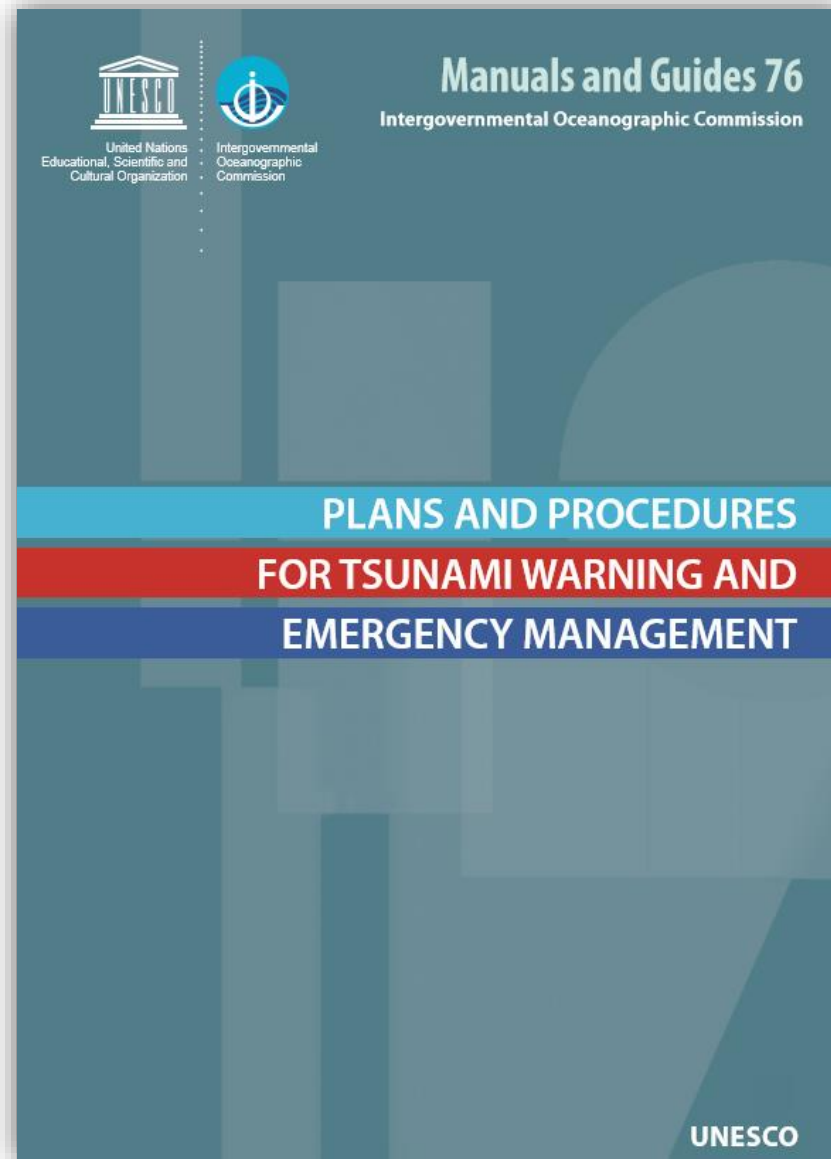
- **Concept of Operations & Requirements**
- **Different Types of SOPs**
- **Working with SOPs**

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ICG Indian Ocean Tsunami Warning & Mitigation System SOP Workshops July 2023:  
*Standard Operating Procedures (SOPs) for  
National Tsunami Warning Centres (NTWCs) and  
Disaster Management Organisations (DMOs)*

# Reference

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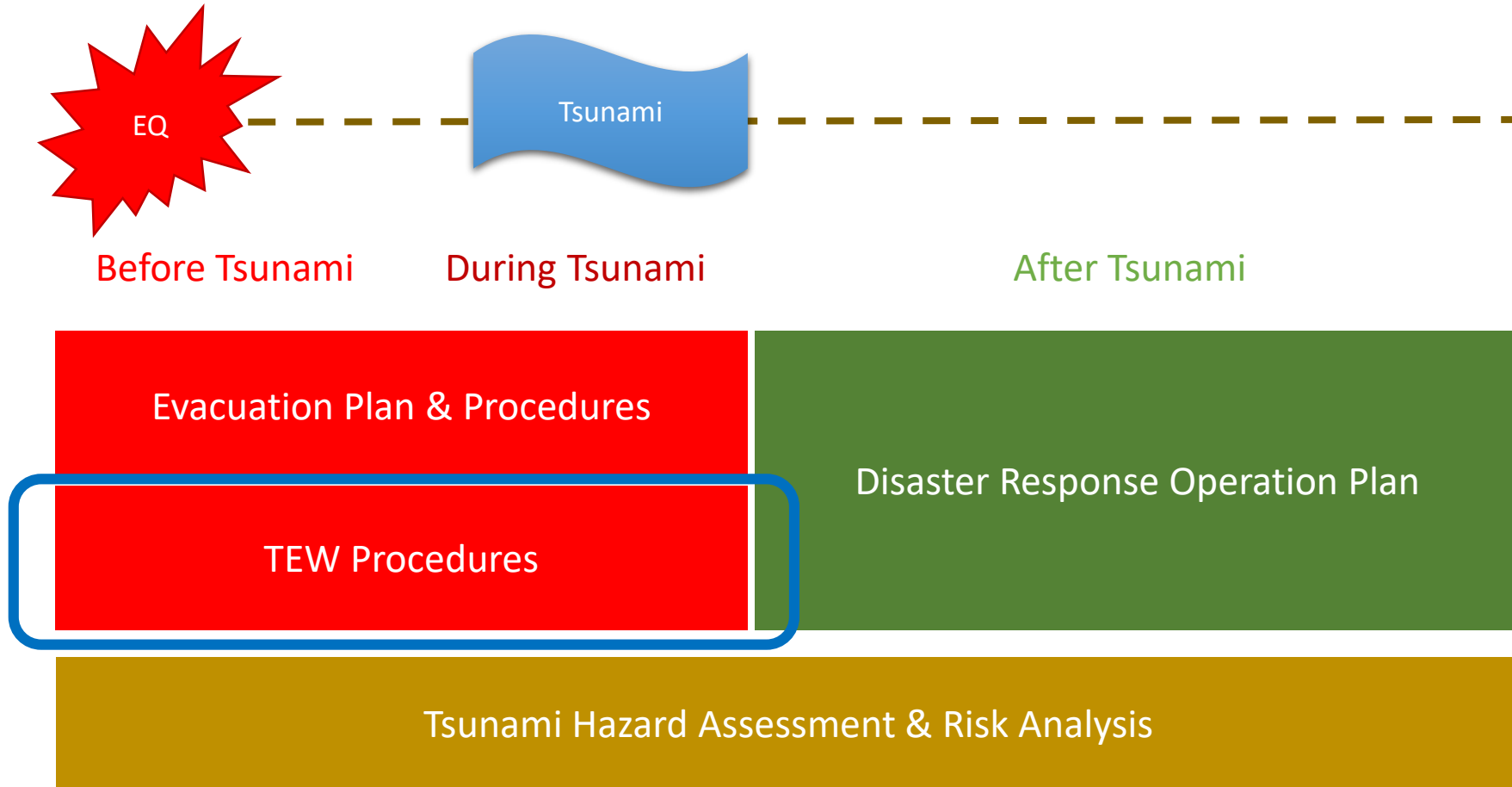


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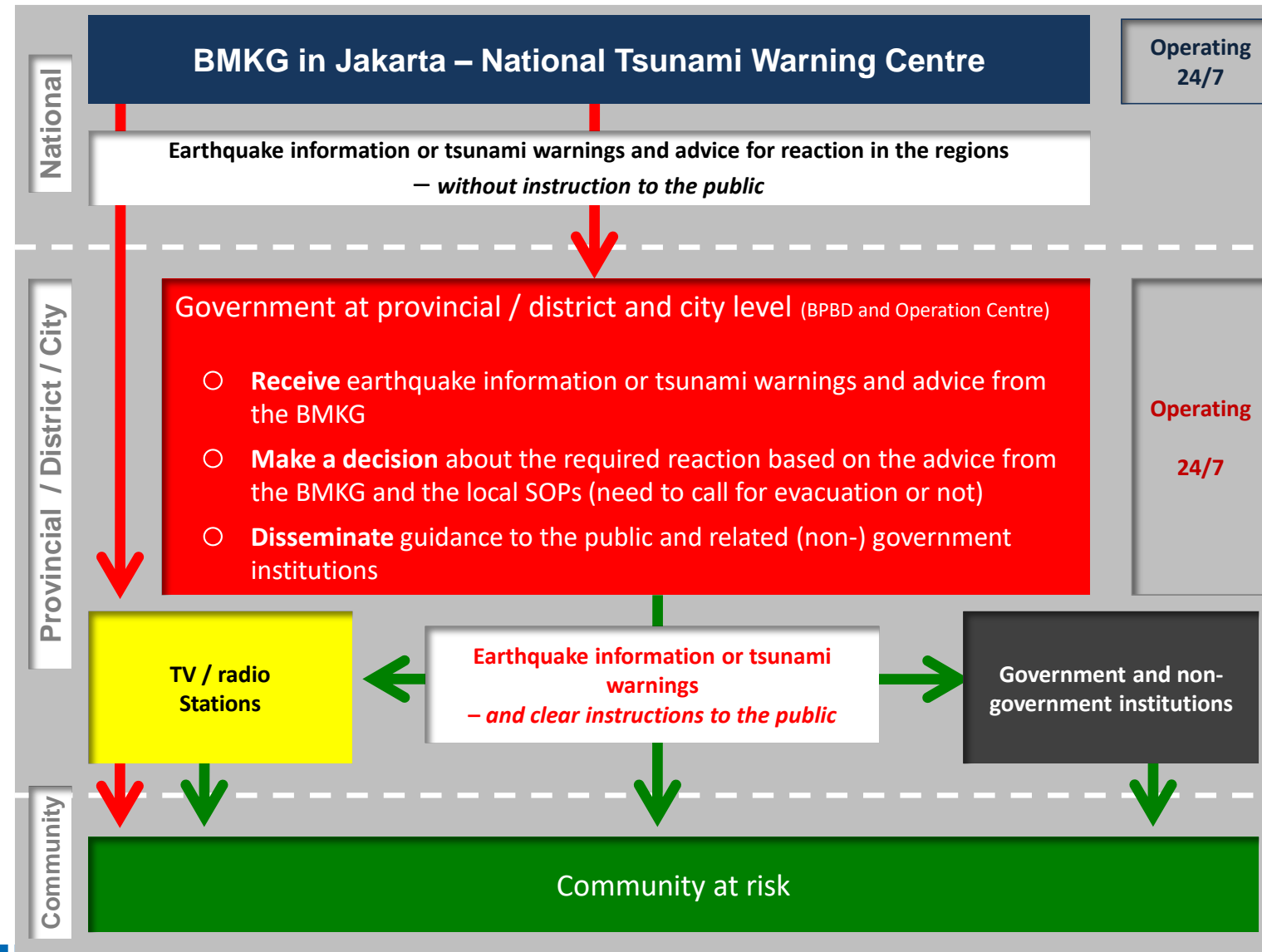
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[www.ioc-tsunami.org](http://www.ioc-tsunami.org)

# Tsunami Emergency Response



# 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

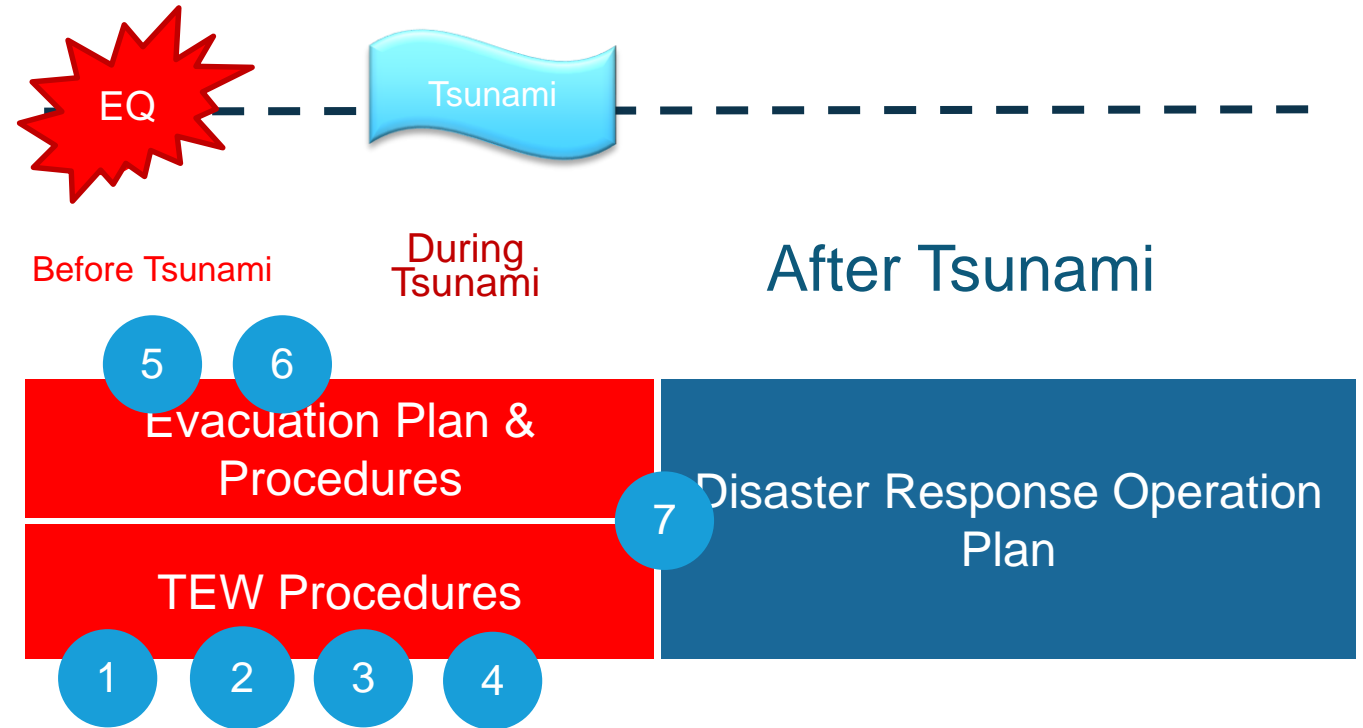
# Importance of SOPs

## 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.

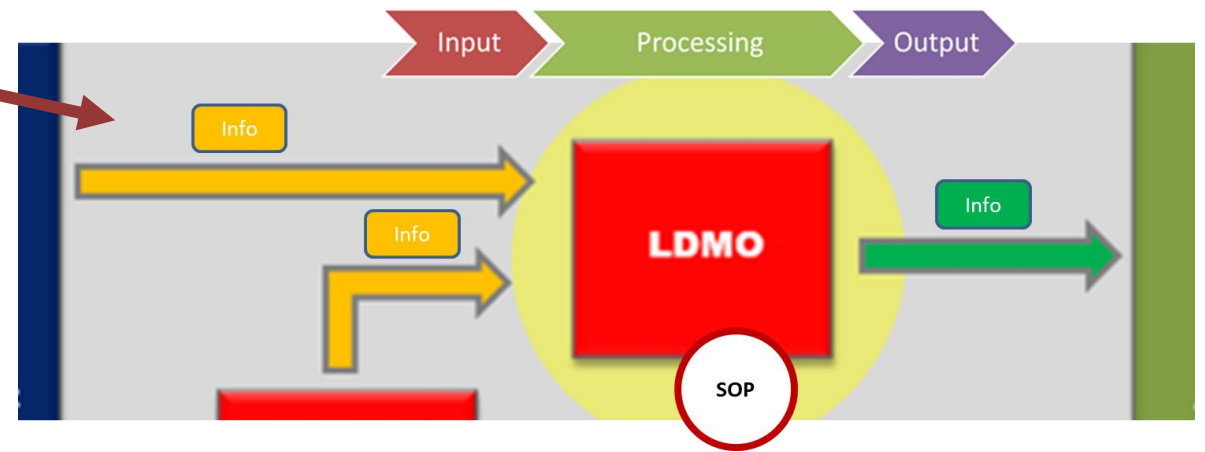
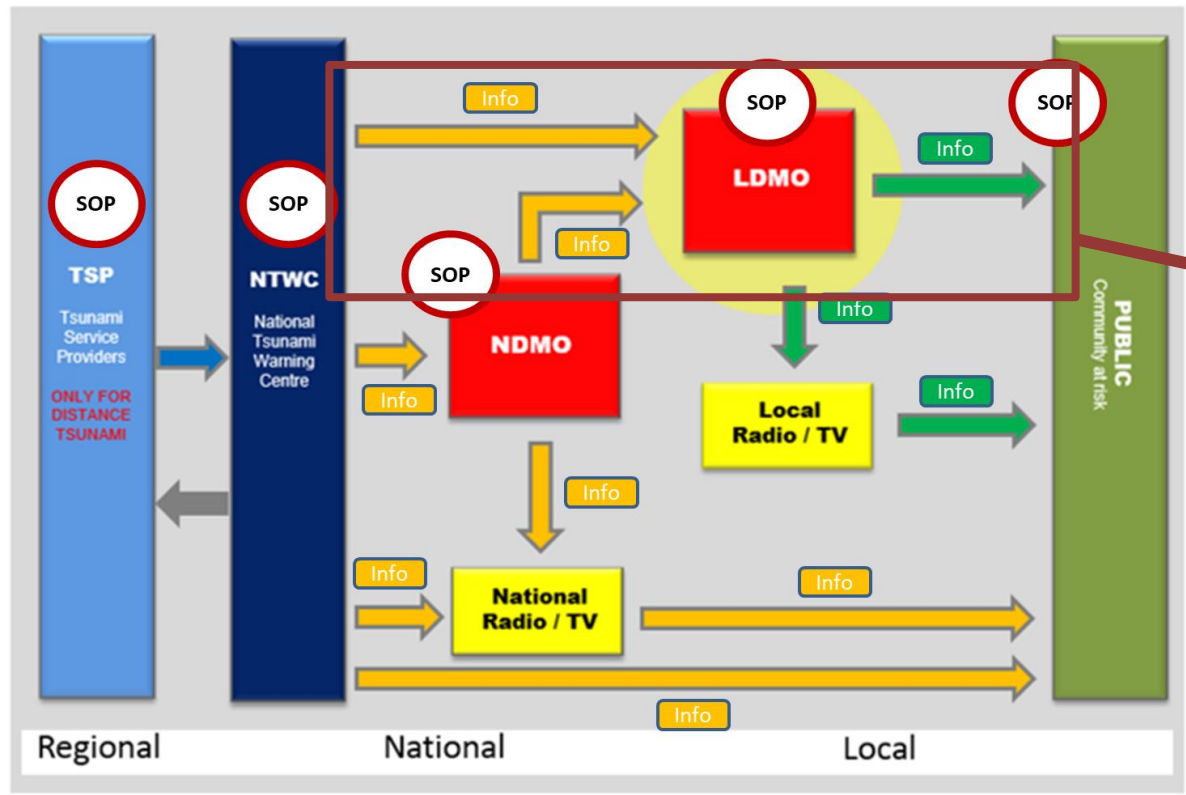
# Different types of SOPs related to Tsunami Emergency Response

1. SOPs for receipt of warnings and cancellation messages from the NTWC
2. SOPs for decision making on evacuations
3. SOPs for public alerting
4. SOPs for media arrangements
5. SOPs for support evacuations
6. SOP for traffic management
7. SOP for all clear and safe return



# The logic of DMO SOPs

Information products are distributed and processed along the warning chain





# The logic of DMO SOPs in the warning chain



Input			Proceeding	Output		
What	From whom	How received	Processing the input, decision making and generating the output	What	To whom	How disseminated
<div style="border: 1px solid blue; border-radius: 15px; background-color: yellow; padding: 10px; display: inline-block;">Info</div>				<div style="border: 1px solid blue; border-radius: 15px; background-color: green; padding: 10px; display: inline-block;">Info</div>		
Time in: EQ + x min			<b>Timeline</b>	Time out: EQ + x min		

# Issues to consider

## Decision-making

- Based on warning 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

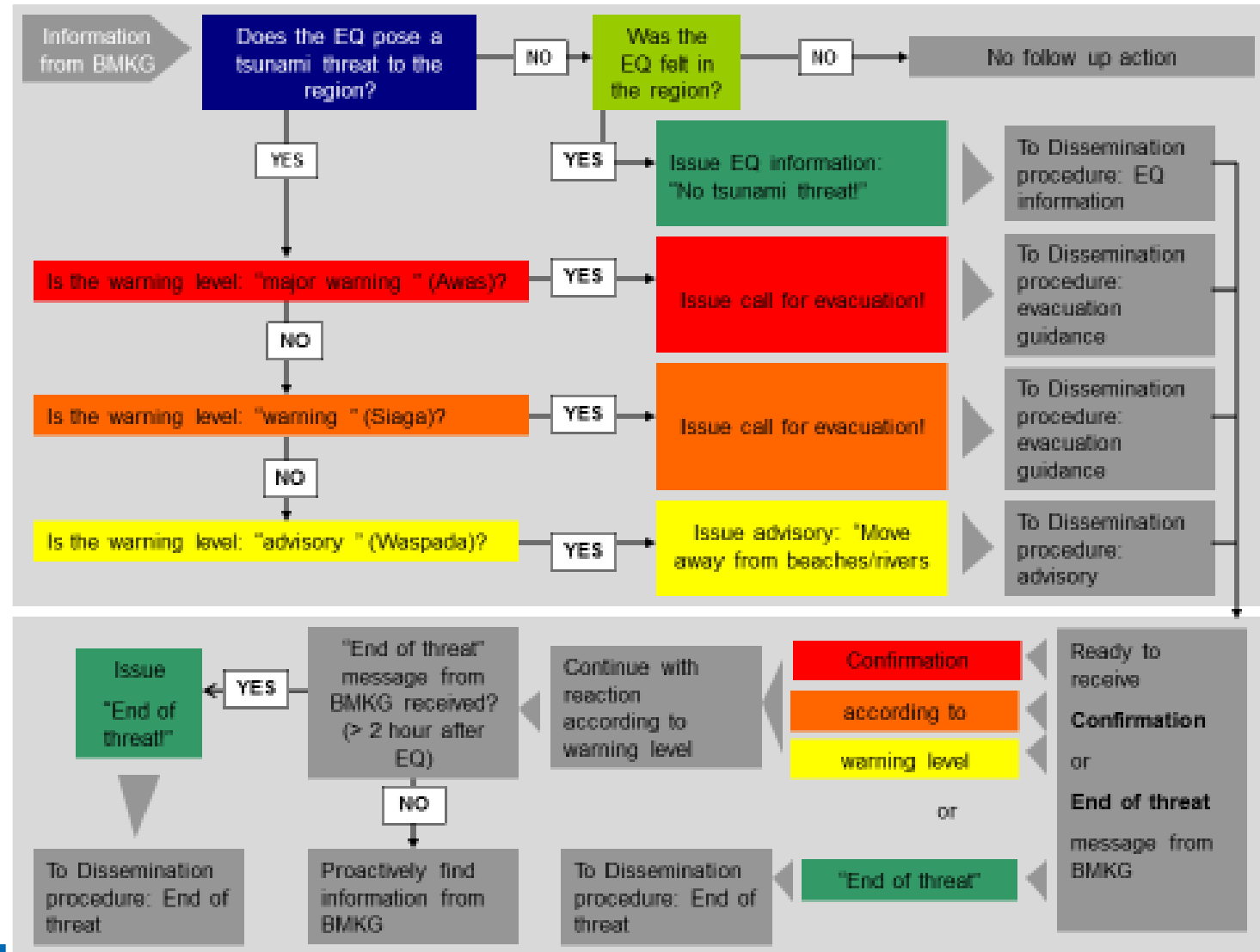
- When to give 'safe to return' to the public
- Who authorises?
- What are the criteria for “safe to return” – how is it determined?
- How will this be issued?

## Example timeline for DMO SOP (distant source)

EMA TIMELINE: DISTANT SOURCE TSUNAMI WARNING			
STEP	TIME since EQ*	ACTIVITY	ACTION AND PROCEDURES
1	15-30 min	Receive 1 <sup>st</sup> Warning from NTWC	Consult with NTWC Assess threat Decide response
2	35 min	Public alerting	Prepare applicable alert/message Sign-off Send alert
3	35-50 min	Evacuation	(If applicable): Activate Evacuation Plan
4	35-50 min	Public Info Mgmt	Activate Media arrangement Info on website Info on social media
5	35-50 min	Activate NEOC	Request agency representatives Connect with Local EMAs Prepare communication
6	50 min>	Manage evacuations	(If applicable): Provide shelter/welfare support On-going communication
7	60-80 min	2 <sup>nd</sup> message from NTWC	Consult with NTWC Re-assess Communicate update
etc.	etc.	etc.	etc.

# Example from Indonesia

## Flow chart DMO SOP



Source: Tsunami Early Warning Service Guidebook for InaTEWS, 2012

# Example DMO Checklist for Warning

DMO Checklist – Tsunami Warning	
Duty Team notified .....	<input checked="" type="checkbox"/>
NTWC consulted .....	<input type="checkbox"/>
Response decided .....	<input type="checkbox"/>
Alert sent.....	<input type="checkbox"/>
Evacuation Plan activated.....	<input type="checkbox"/>
Media arrangement activated .....	<input type="checkbox"/>
Website updated .....	<input type="checkbox"/>
Social media updated .....	<input type="checkbox"/>
NEOC activated .....	<input type="checkbox"/>
Local EMAs informed .....	<input type="checkbox"/>
etc.	

# Example DMO Checklist for Evacuation

<b>Evacuation Checklist</b>		
This is a simple checklist to use when doing an evacuation. Make sure to include the date, who filled out the checklist, and the time each task was completed by.	Date: _____	
	By: _____	Time: _____
Tsunami message received	_____	_____
Call in staff	_____	_____
Activate emergency centers / Notify public safety agencies	_____	_____
Sound public sirens and alarm notifications	_____	_____
Initiate media notifications and evacuation announcements	_____	_____
Initiate evacuation of people away from coast (Tsunami Evacuation Maps)	_____	_____
Put boats/ships out to sea if wave impact time permits	_____	_____
Setup road-blocks and evacuation routes	_____	_____



# Working with SOPs

## SOPs need to be

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

Staff must be trained and their competency at performing the activities as per the SOP should preferably be assessed



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**THANK YOU**