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**Intergovernmental
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Decision to call for evacuation

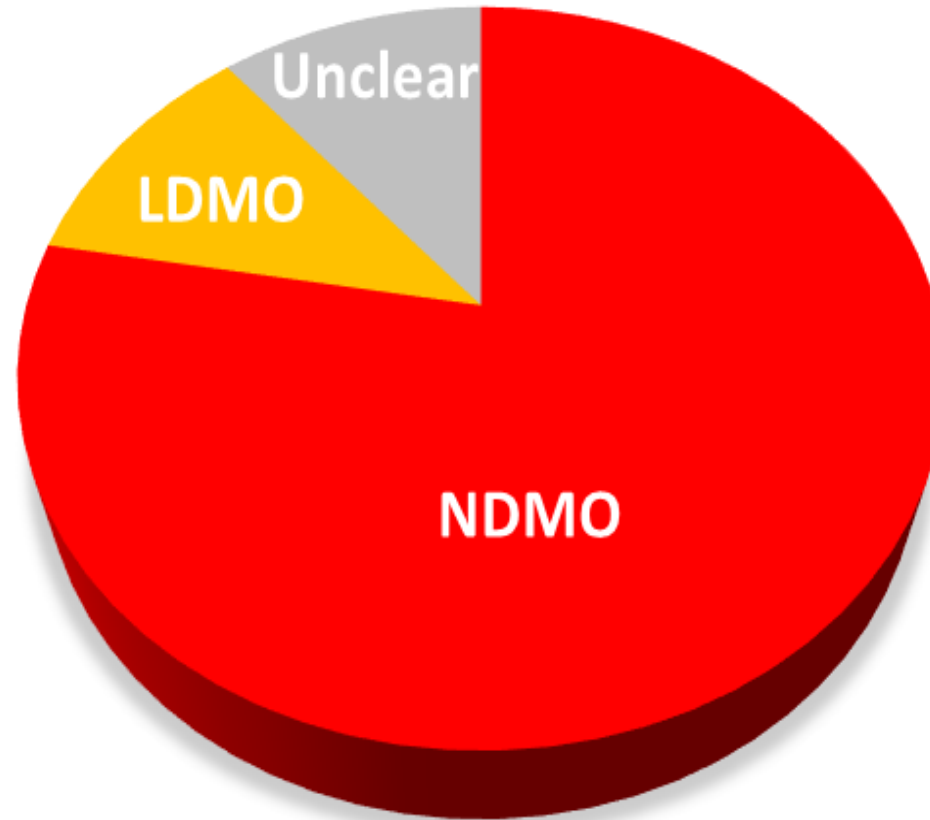
Harald Spahn
UNSECO Consultant

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)*



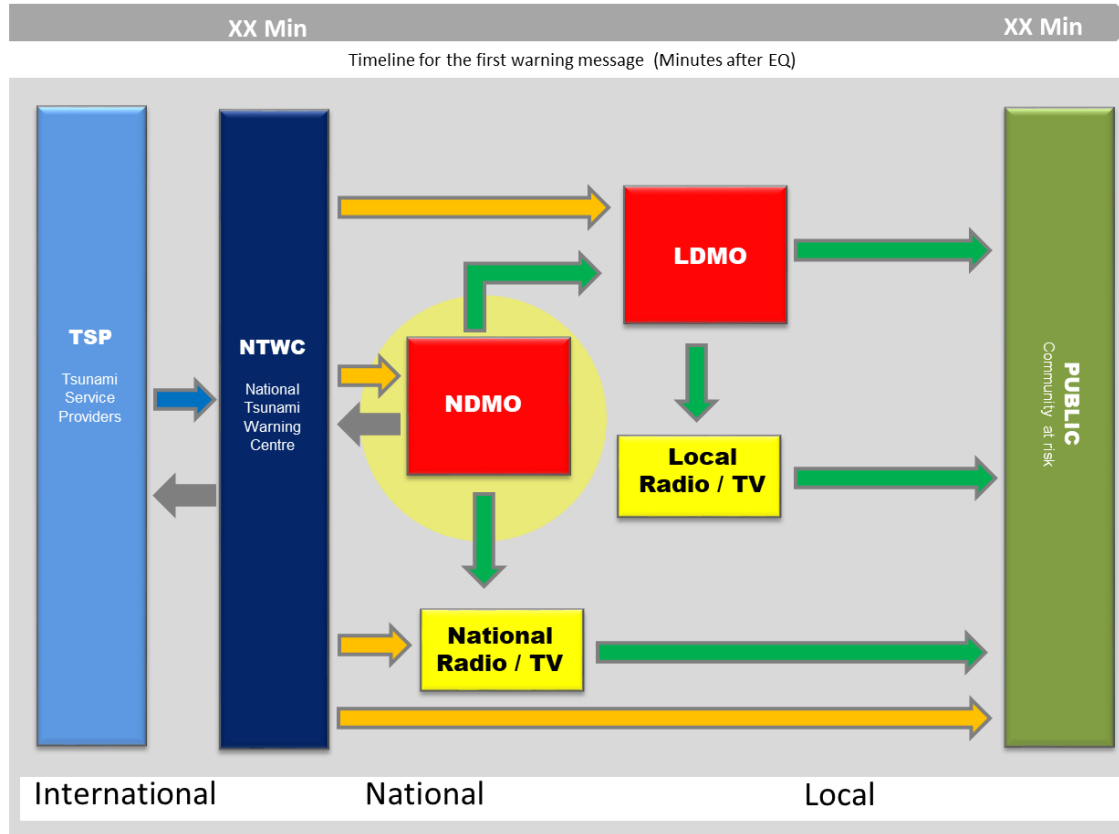
"Surviving a tsunami is a matter of getting out of the reach of tsunami waves and inundating waters in time"

Western Indian Ocean Countries Decision making to call for evacuation

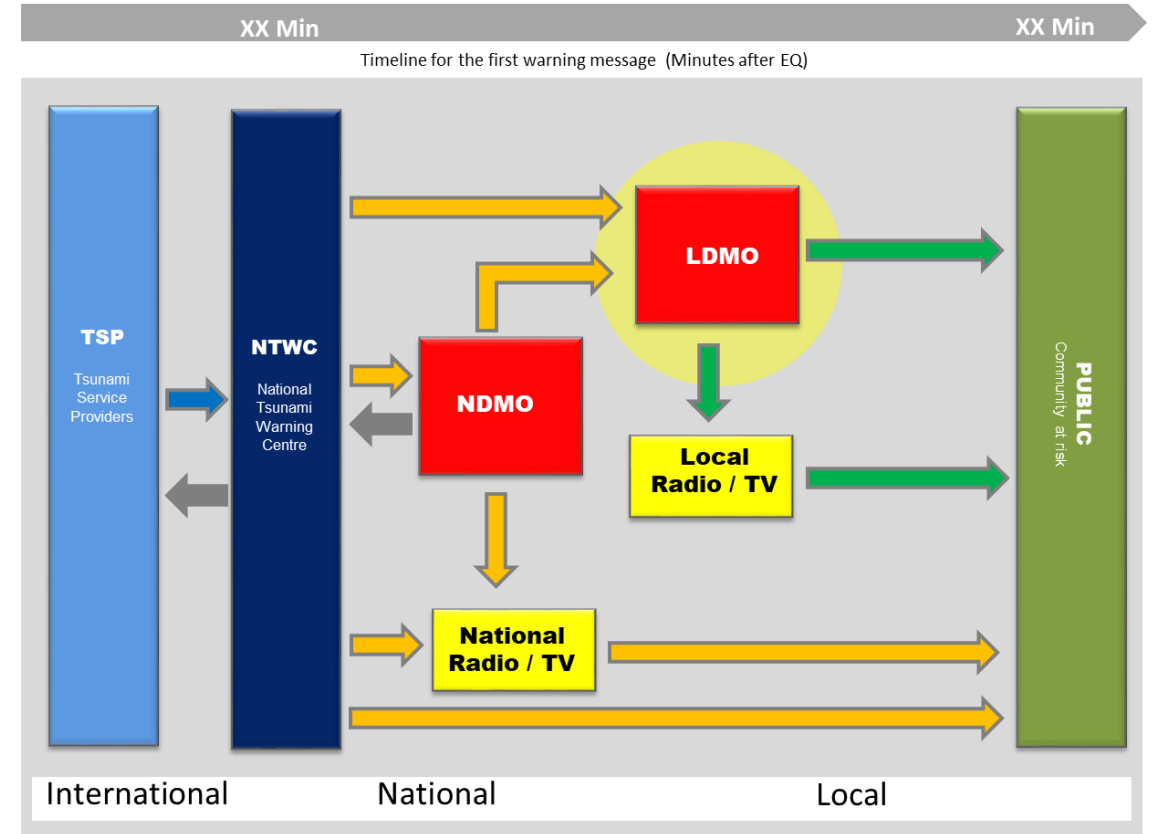


Decision making to call for evacuation

by National Level



by Local Level







Challenges

Decision-making for evacuation

- **Decision making under uncertainty:** mainly an issue for near-field tsunamis
- **Consequences:** in general, a far-reaching decision with significant consequences for public life
- **Authorization:** often decision has to be taken by highest authority (Mayor, Chief of agency, Minister). If delegated to lower levels, clear rules must be in place.
- **Timing:** must work 24/7 and within short time (minutes to hours, depending on tsunami travel time)
- **Communicate call for evacuation:** must reach communities, also in remote areas and at night times

Example of India

Decision making based on NTWC warning levels and advice

Threat Status	Action to be taken	Dissemination to		
WARNING	Public should be advised to move inland towards higher grounds. Vessels should move into deep Ocean	MoES, MHA, NDMA, NCMC, NDRF Battalions, SEOC, DEOC, Public, Media	WARNING	
ALERT	Public should be advised to avoid beaches and low-lying coastal areas. Vessels should move into deep Ocean	MoES, MHA, NDMA, NCMC, NDRF Battalions, SEOC, DEOC, Public, Media	ALERT	
WATCH	No immediate action is required	MoES, MHA, NDMA, NCMC, NDRF Battalions, SEOC, DEOC, Media	WATCH	
THREAT PASSED	All clear determination to be made by the local authorities	MoES, MHA, NDMA, NCMC, NDRF Battalions, SEOC, DEOC, Public, Media	THREAT PASSED	

Example of Indonesia

From Warning and Advice to Guidance for Communities

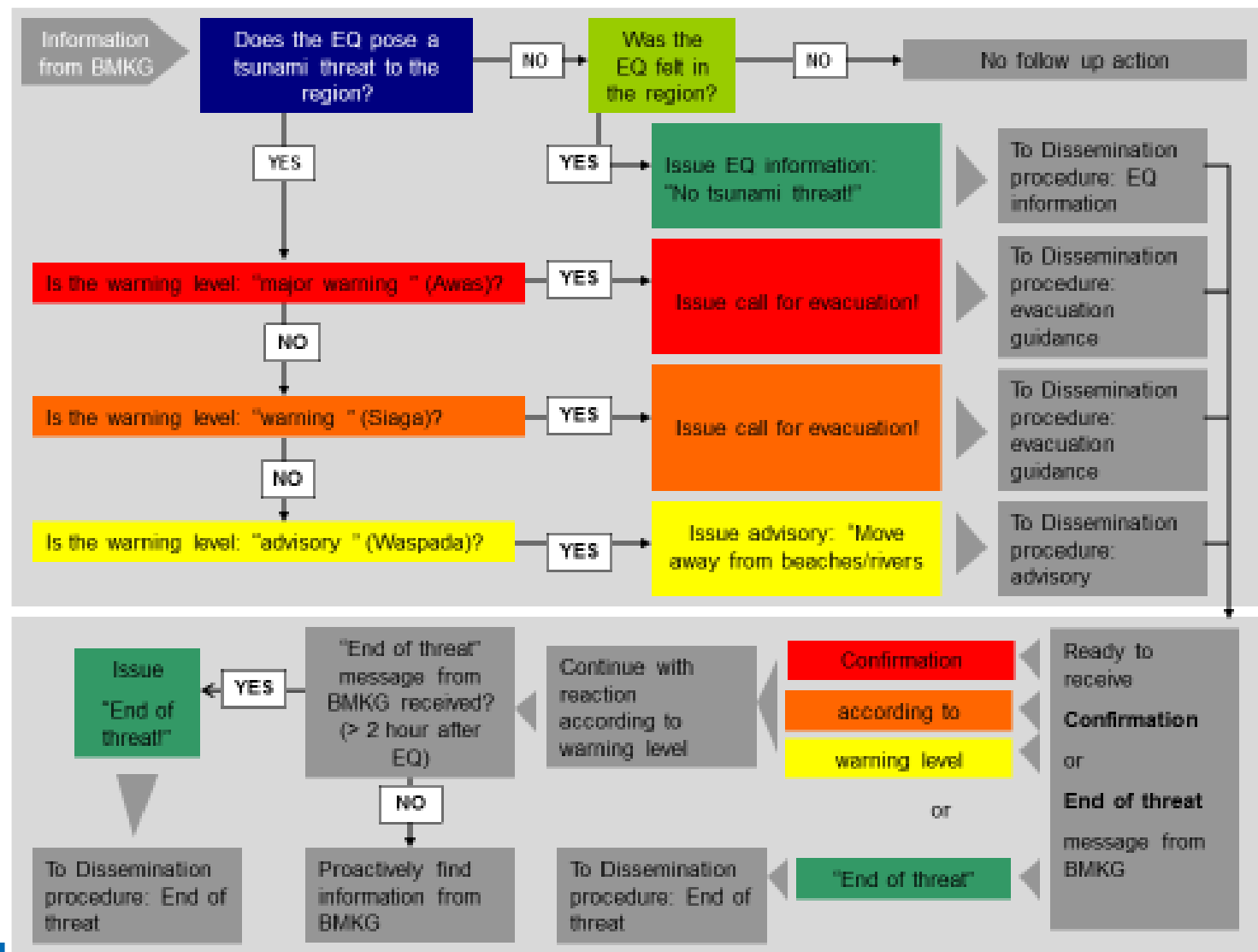
Warning Level	Advice from BMKG to Local Government	Guidance from Local Government to Community
MAJOR WARNING (AWAS)	Province/District/City government that are at "Major Warning" level are expected to pay attention to this warning and immediately guide their communities for full evacuation.	Call for immediate evacuation!
WARNING (SIAGA)	Province/District/City government that are at "Warning" level are expected to pay attention to this warning and immediately guide their communities for evacuation.	
ADVISORY (WASPADA)	Province/District/City government that are at "Advisory" level are expected to pay attention to this warning and immediately guide their communities to move away from the beach and river banks.	Advice to move away from beaches and rivers!
EARTHQUAKE INFORMATION	Earthquake on land, earthquake with minor magnitude or too deep – no tsunami threat	No action!

Warning & Advice from National Warning Centre at BMKG, Jakarta

Source: Tsunami Early Warning Service Guidebook for InaTEWS, 2012

<https://www.gitews.de/tsunami-kit/en/E3/tool/Tsunami%20Early%20Warning%20Service%20Guidebook%20for%20InaTEWS.pdf>

Example of Indonesia Decision Making SOP



Source: Tsunami Early Warning Service Guidebook for InaTEWS, 2012

Issues to consider

Decision-making for evacuation

- **Information base:** warning information / warning levels provided by the NTWC
- **Timing:** Understand tsunami arrival times, determine critical decision point for each source / source region. How long will it take for a community to evacuate?
- **Authorization:** Decide when authorization is required and who will authorize? Essential to delegate authority for quick response
- **SOP:** use a Map, Table or Chart for easy reference
- **Communicate call for evacuation:** use message template for easy fill-in, trigger sirens, Media press-stop

DISCUSSION



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THANK YOU