



*Training/Workshop on
Tsunami Evacuation Maps, Plans, and Procedures and
the UNESCO-IOC Tsunami Ready Recognition Programme for the Indian Ocean Member States
Hyderabad - India, 15-23 April 2025*

Tsunami Evacuation Maps, Plans, and Procedures

TEMPP 10: Introduction to Tsunami Warning Chain

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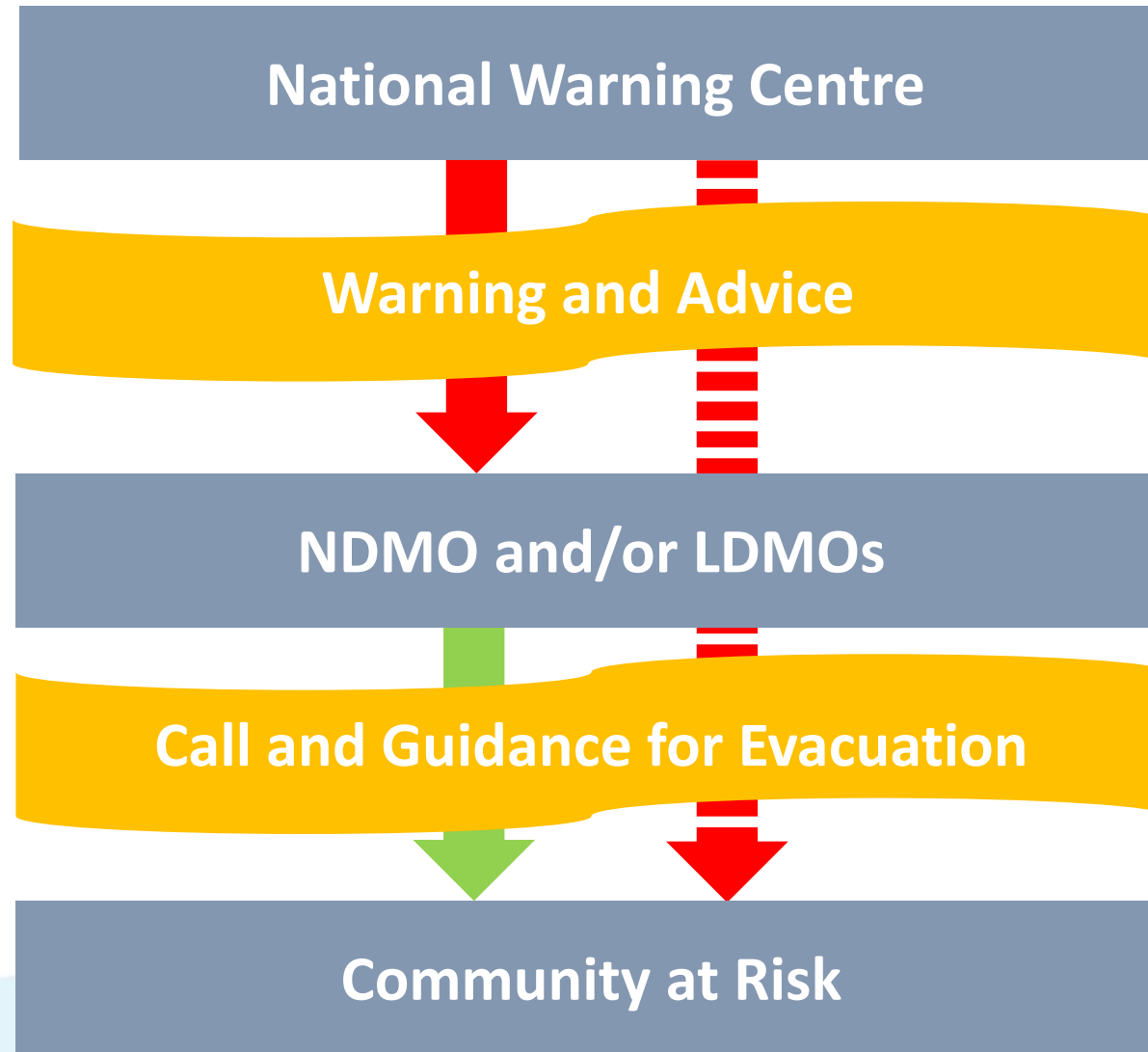
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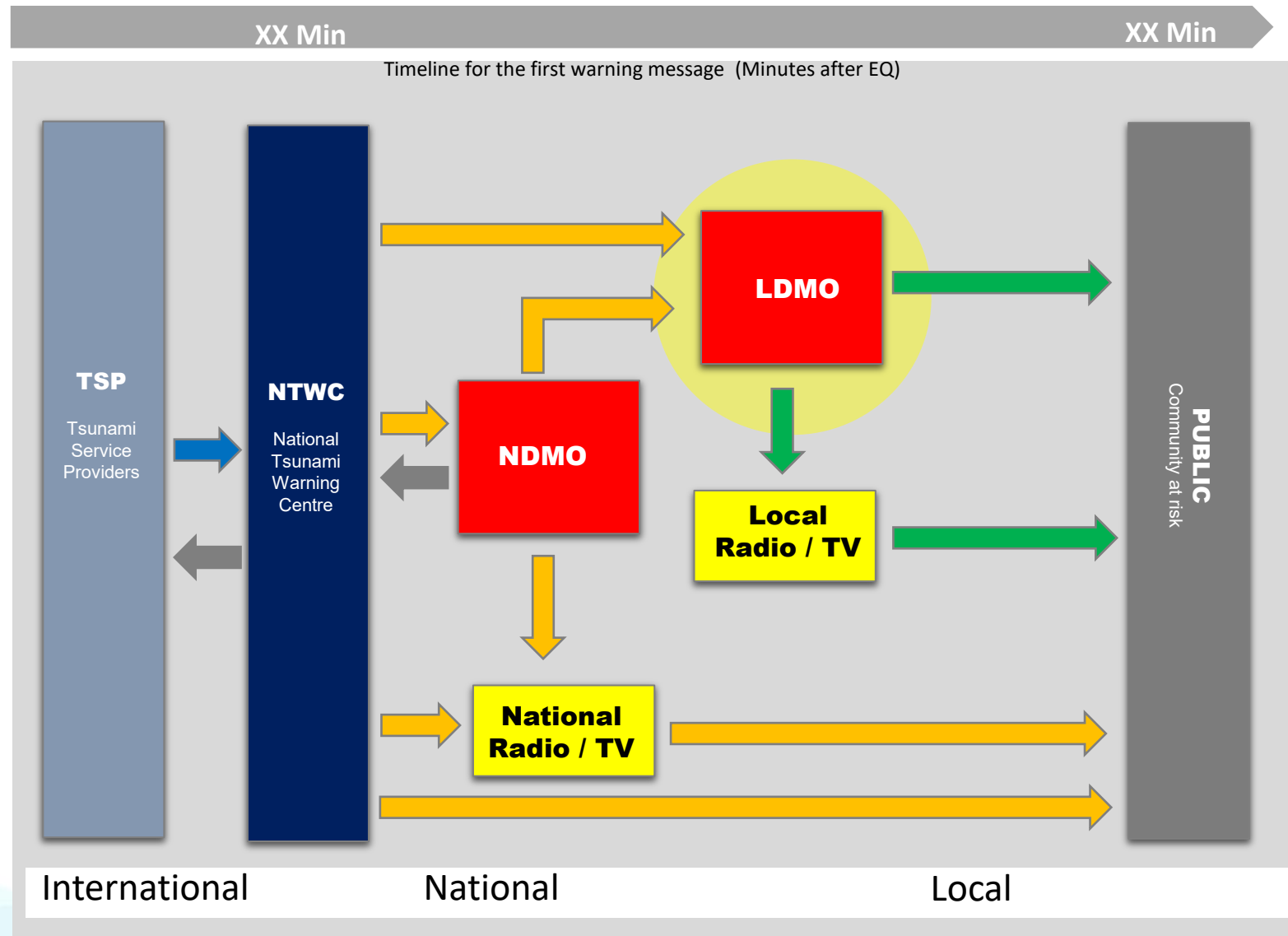
Tsunami Early Warning Chain







Refers to the structured process by which tsunami warnings are disseminated, starting from the detection of a potential tsunami event at the National Tsunami Warning Center (NTWC) and ending with the communication of the warning to local communities and relevant stakeholders. This chain involves multiple levels of communication and coordination, ensuring that timely and accurate tsunami warnings reach the people who need them most, enabling them to take protective actions.

Warning Chain to the Community



Tsunami warning chain template

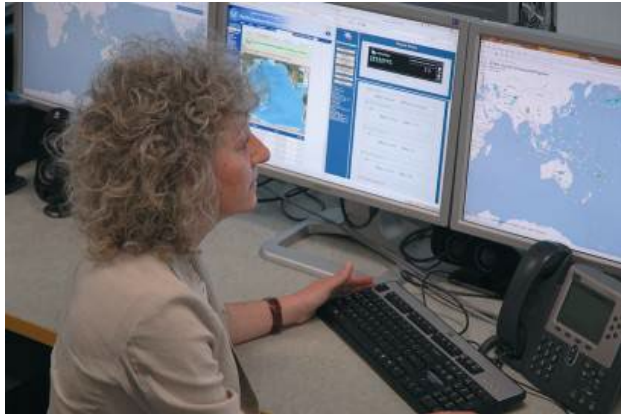


-  **Information**
-  **Warning** (without advice attached)
-  **Warning** message that include an **Advice**
-  **Warning** messages that include an **Official Call for Evacuation**
-  **Feedback** information
-  Agency responsible to decide on **official call for evacuation**

Tsunami Service Providers

(Australia, India, Indonesia)

- ❑ Regional Monitoring & Detection (24/7)
- ❑ International collation/sharing of data
- ❑ Issue Regional Threat Advisories to National Tsunami Warning Centres



National Tsunami Warning Centres (NTWC)

- ❑ Local (country-specific) Monitoring & Detection (24/7) using regional or national data streams
- ❑ Receive TSP Advisory
- ❑ Assess information to determine local threat
- ❑ Issue Warnings to EMAs/DMOs, media & agencies
- ❑ Cancel National Warnings
- ❑ Research & Public Education (with stakeholders)



Emergency Management Agencies

(National and Local Disaster Management Offices)

- ❑ Receive Warnings from NTWC
- ❑ Activate local public alert systems as needed
- ❑ Decide on and Manage Evacuations
- ❑ Communicate 'All Clear' (safe to return)
- ❑ Signage
- ❑ Public Education (with other stakeholders)



Emergency Services

- Support DMO/Local Authorities with
 - ☐ Public alerting
 - ☐ Evacuation
 - ☐ Law & Order
 - ☐ Response after tsunami has struck
(Search and Rescue, etc)



Media (radio, television)

- Convey Official Warnings (National & Local)

But also:

- Convey Unofficial Warnings

Therefore:

- Can cause or counter public response

International media can mis-report warning regions/countries causing public confusion

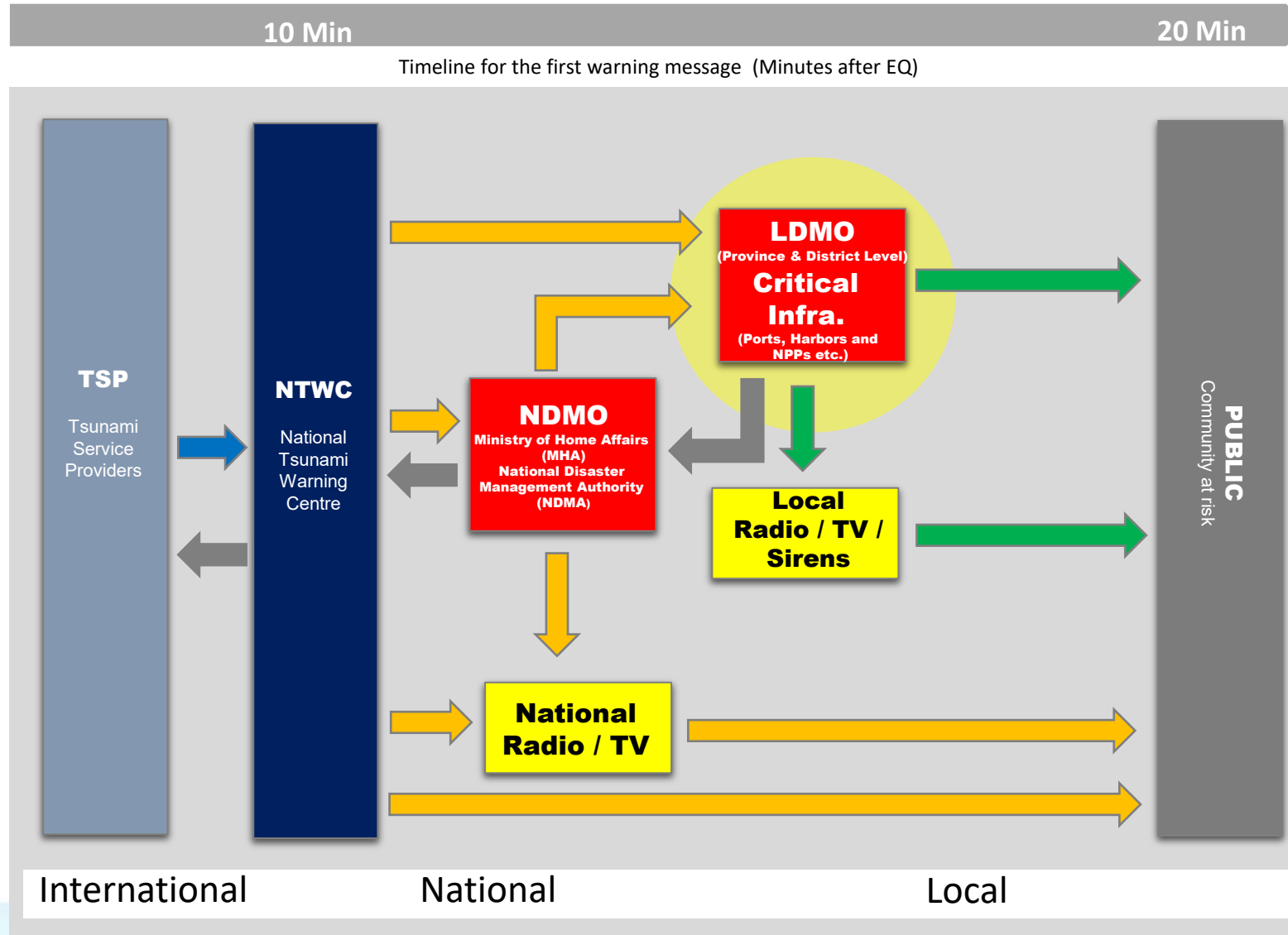


Public

- End Receiver of Warnings
- Convey Official and Unofficial Warnings
- To minimize confusion, they must be educated to understand:
 - Official Warnings (how will they be warned)
 - Natural Warnings (what to look out for)
 - Where and What to do
 - Evacuation zones
 - Routes & Safe zones
 - How to respond if evacuation zones are not defined



India Tsunami Warning Chain



INDIA
07/08/2023



Agency responsible
to decide on official
call for evacuation



ESCAP
Economic and Social Commission
for Asia and the Pacific



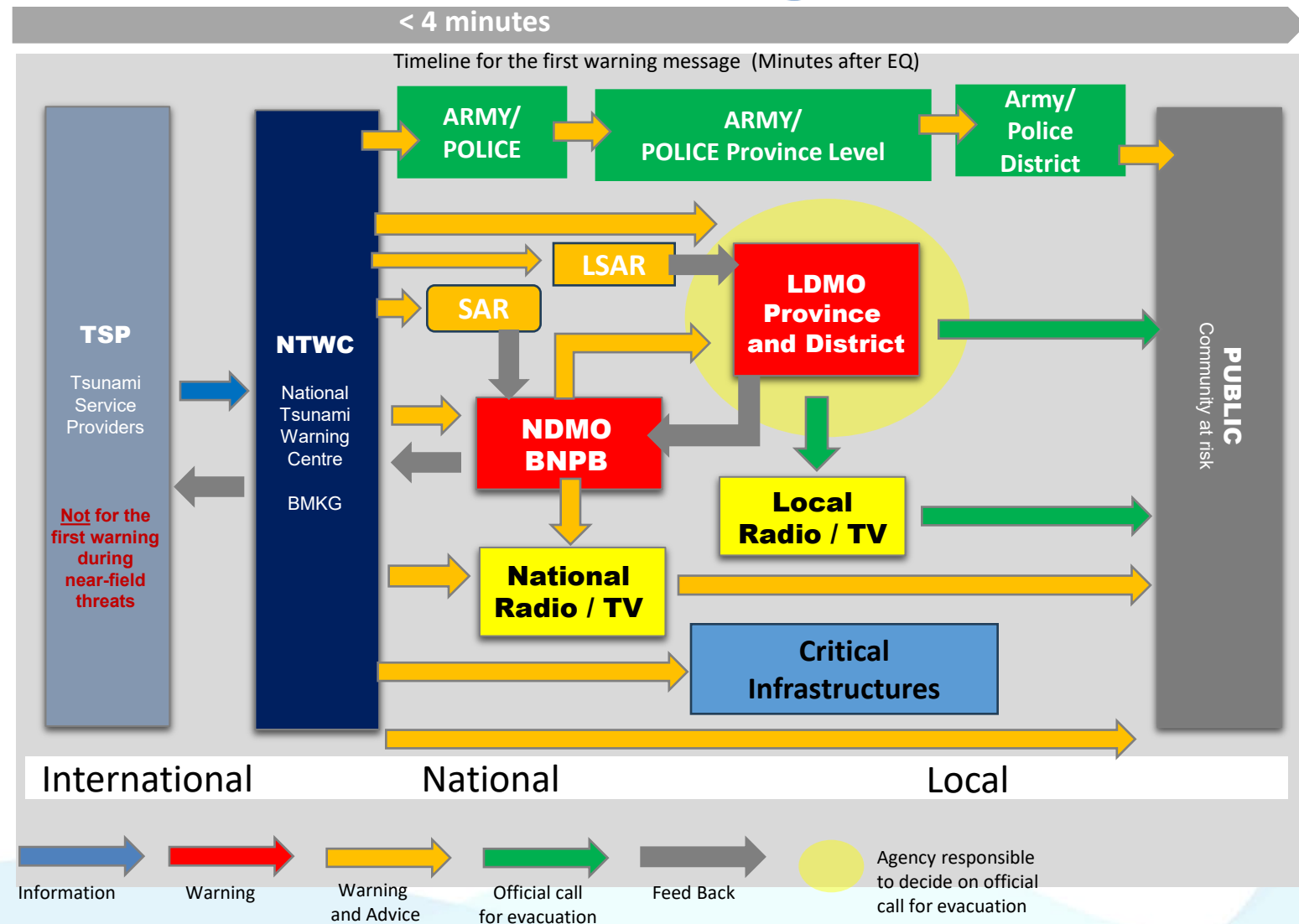
Indonesian Tsunami Warning Chain

a) The Warning Chain involves:

1. TSP (BMKG)
2. NTWC (BMKG)
3. NDMO (BNPB)
4. SAR (BASARNAS)
5. LDMO (BPBD Province and District)
6. LSAR
7. ARMY and POLICE
8. Media (National and Local)
9. Critical Infrastructure (Airport, Port, industrial zone)

b) Dissemination modes:

Warning Receiver System (WRS), SMS, Email, Mobile Apps, Social media (Twitter, IG, FB), Telegram, Whatsapp



Thank you



***IOC/UNESCO Indian Ocean Tsunami Information Centre
IOTIC-BMKG Programme Office***

***Disaster Risk Reduction and Tsunami Information Unit
UNESCO Jakarta Office***

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