



2.b. SOP-TEWS: DMO Utilizing NTWC Product in DMO SOP

Ardito M Kodijat
IOTIC UNESCO-IOC

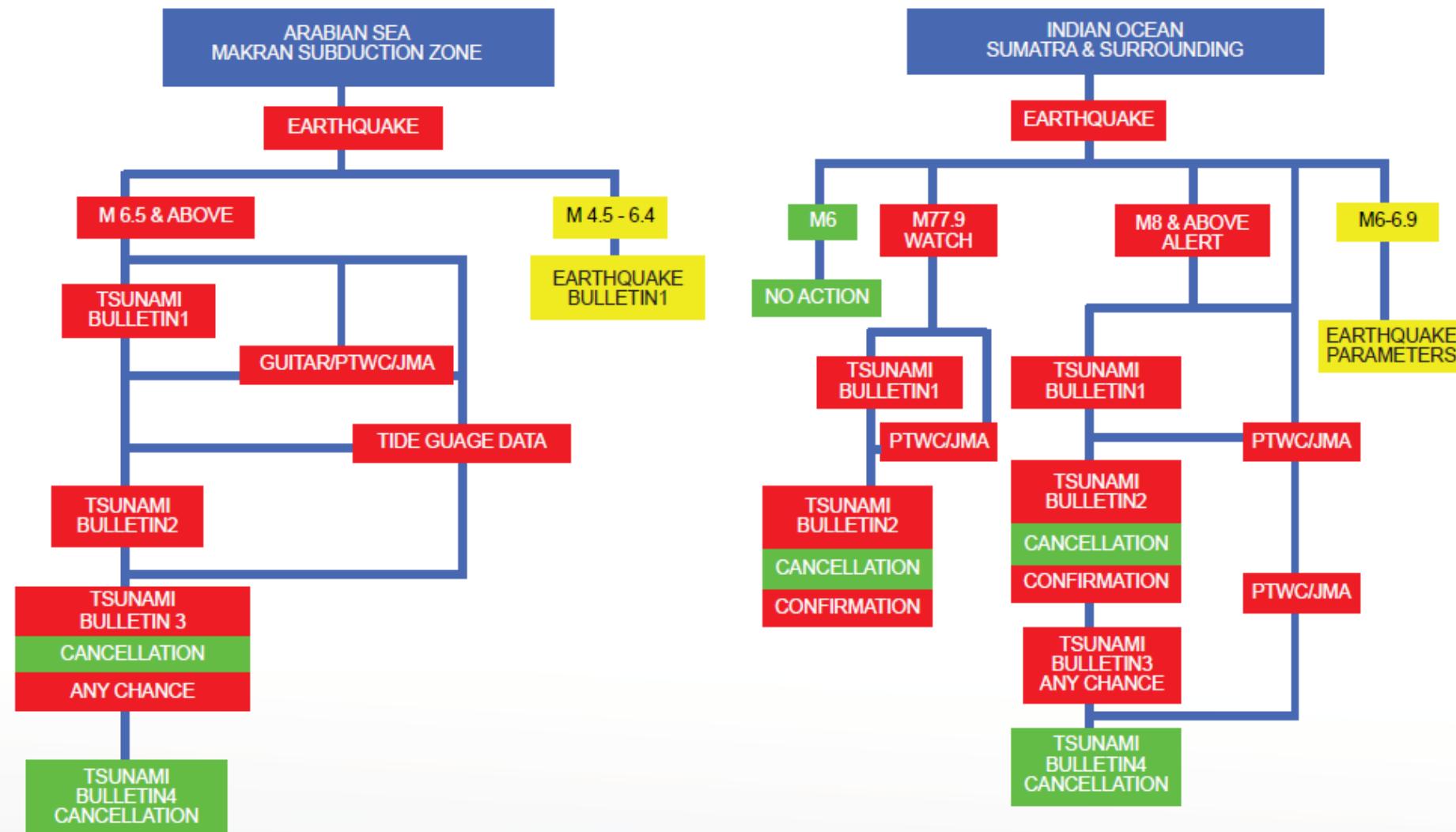
Suci Dewi Anugrah
Chair of Working Group 3

Manneela Vijaya Sunanda
Chair of RW NWIO

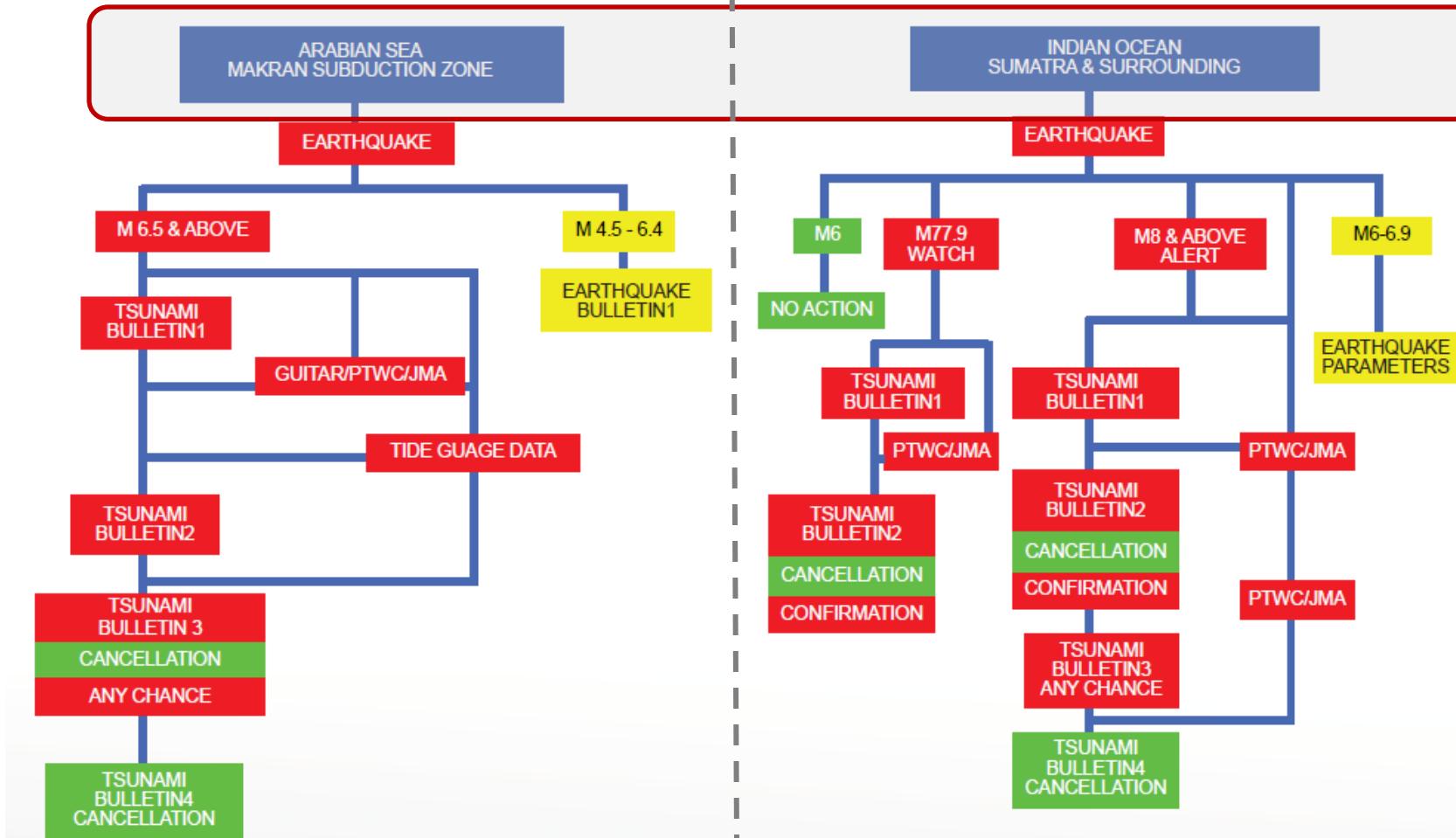
Understanding the NTWC product

- **What communication means NTWC-DMO**
 - Multi mode of communication: Email, WRS, Text Message, interagency networks, VHF, Vsat, fix-line phone, cell phone,
- **What kind of information**
 - Technical parameter:
 - Warning Level information
 - ETA,
 - Tsunami Height,
 - Affected Areas
 - Guidance for action
 - Maps: travel time, inundation
- **Time-line for warning bulletin**
Bulletins 1 – 2 – 3 (3.1-3.n) – 4

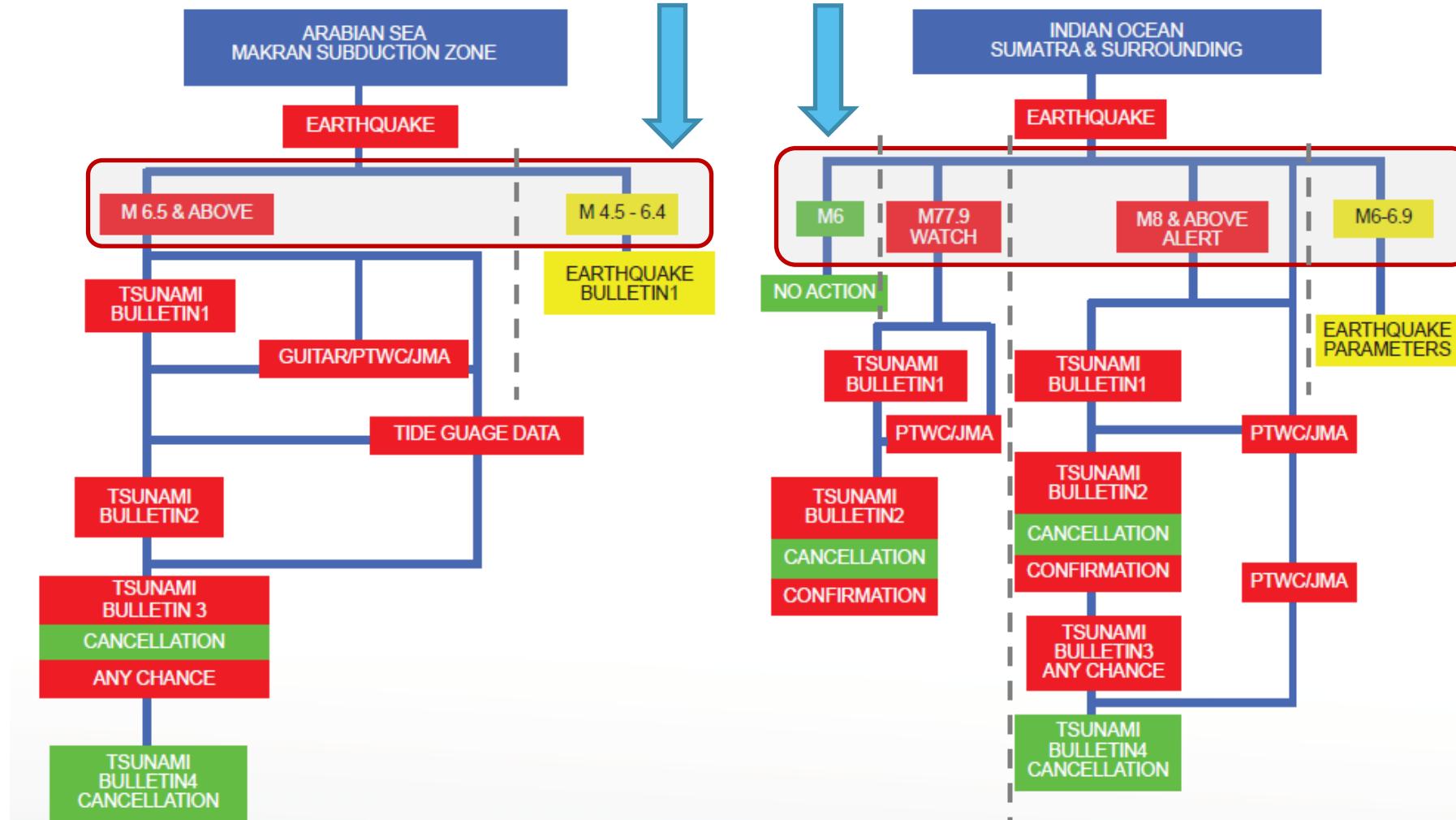
NTWC SOP- Pakistan

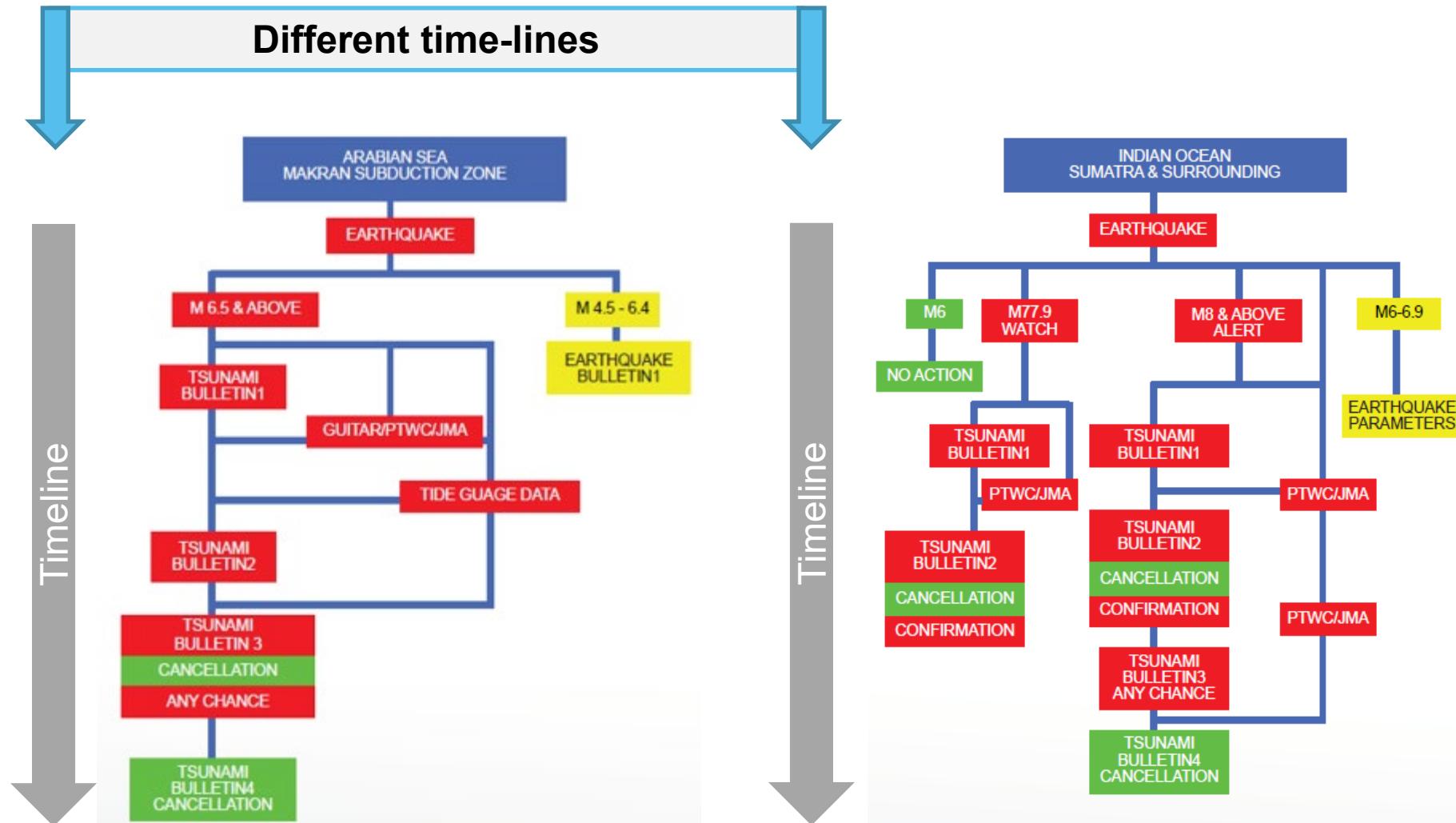


2 main process flows
 in accordance with
 near-field and far-field
 scenarios

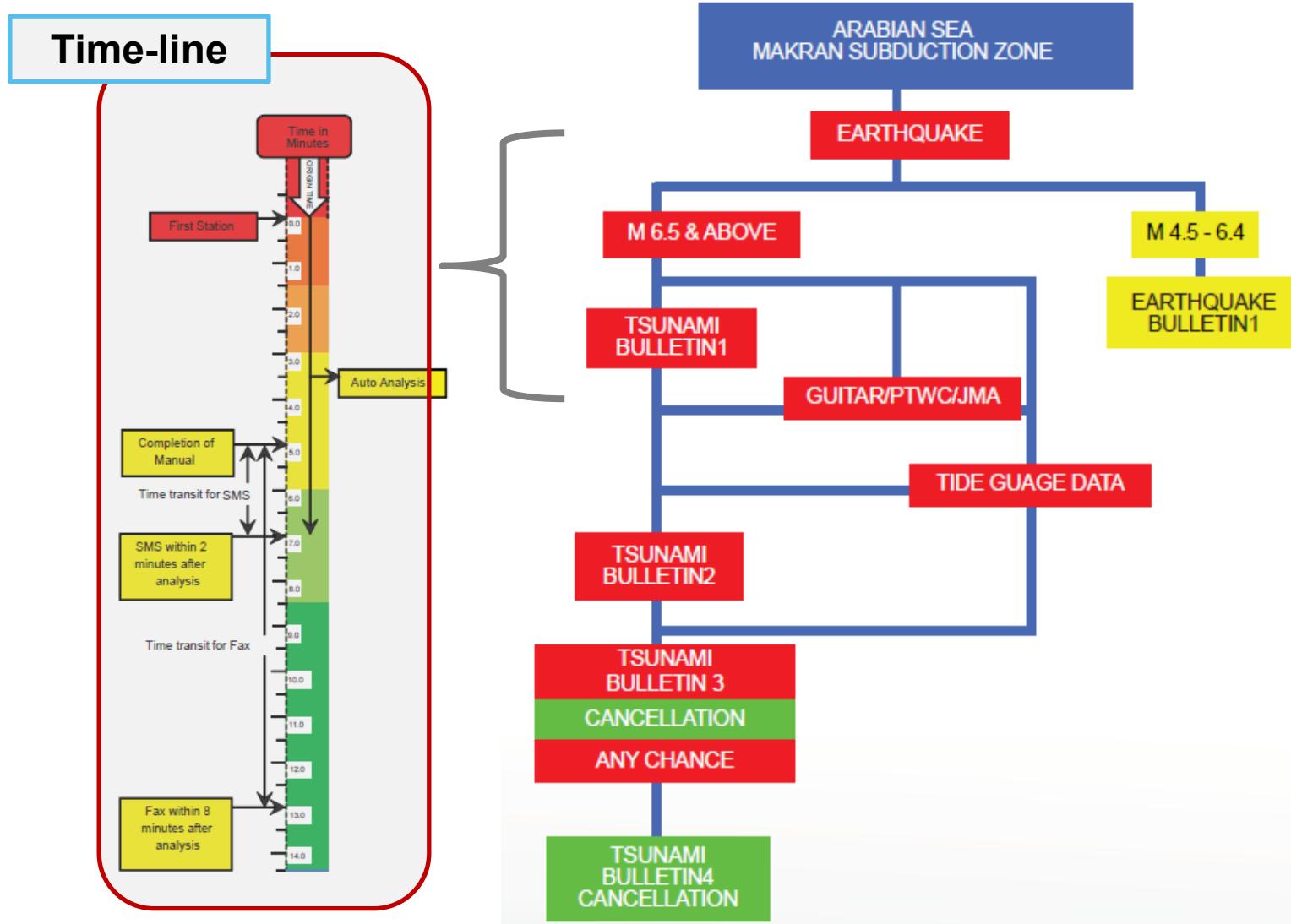


Secondary process flows depending on threat levels





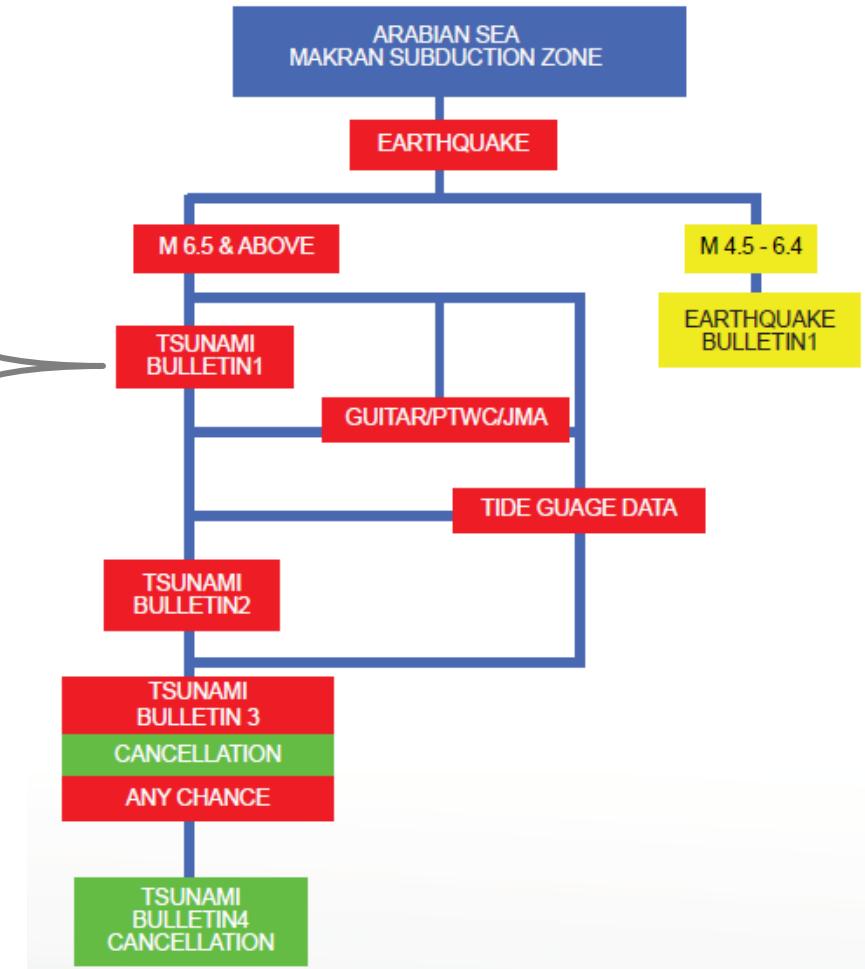
NTWC SOP- Pakistan for Near-Field threats



NTWC SOP- Pakistan Output: Bulletin 1

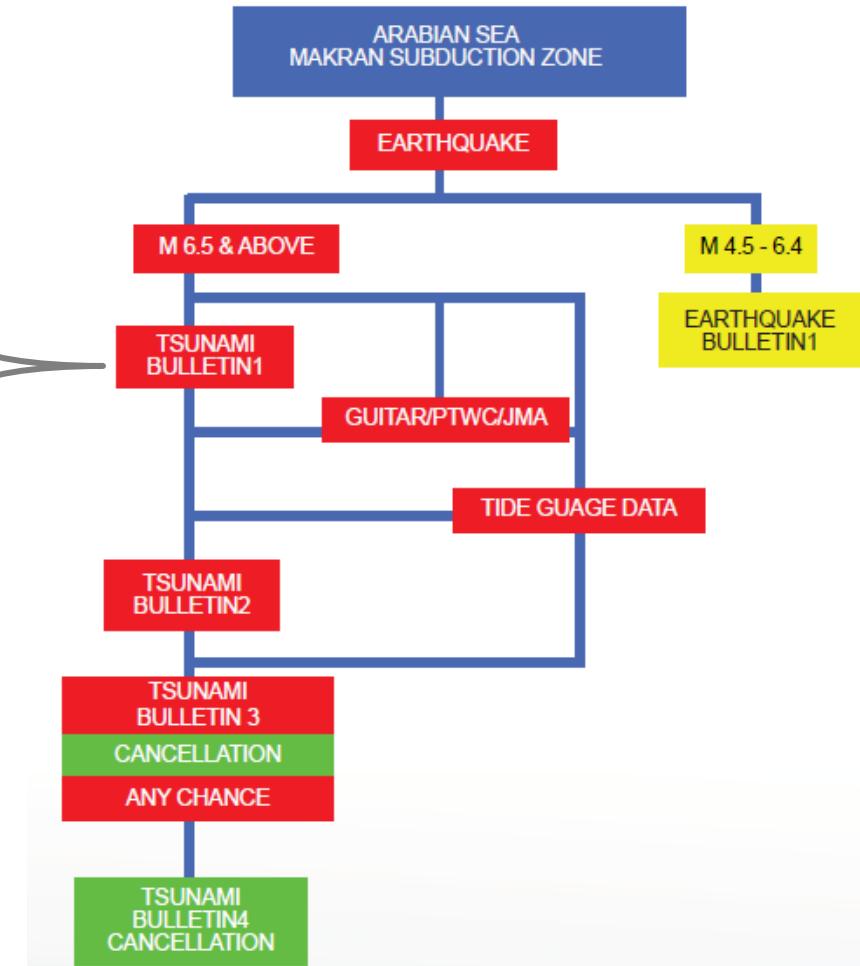
People in coastal areas of Balochistan especially Jiwani, Gwadar, Pasni, Ormara and neighbourhood are **STRONGLY ADVISED TO EVACUATE IMMEDIATELY** to higher grounds or go far inland.

People in coastal areas of Sindh are advised to **standby for evacuation**. Boats and Ships at sea are advised to stay in the deeper parts of the sea until the threat is over. If there is sufficient time, boats and ships in harbours and bays are advised to go to the deeper parts of the sea until the threat is over.

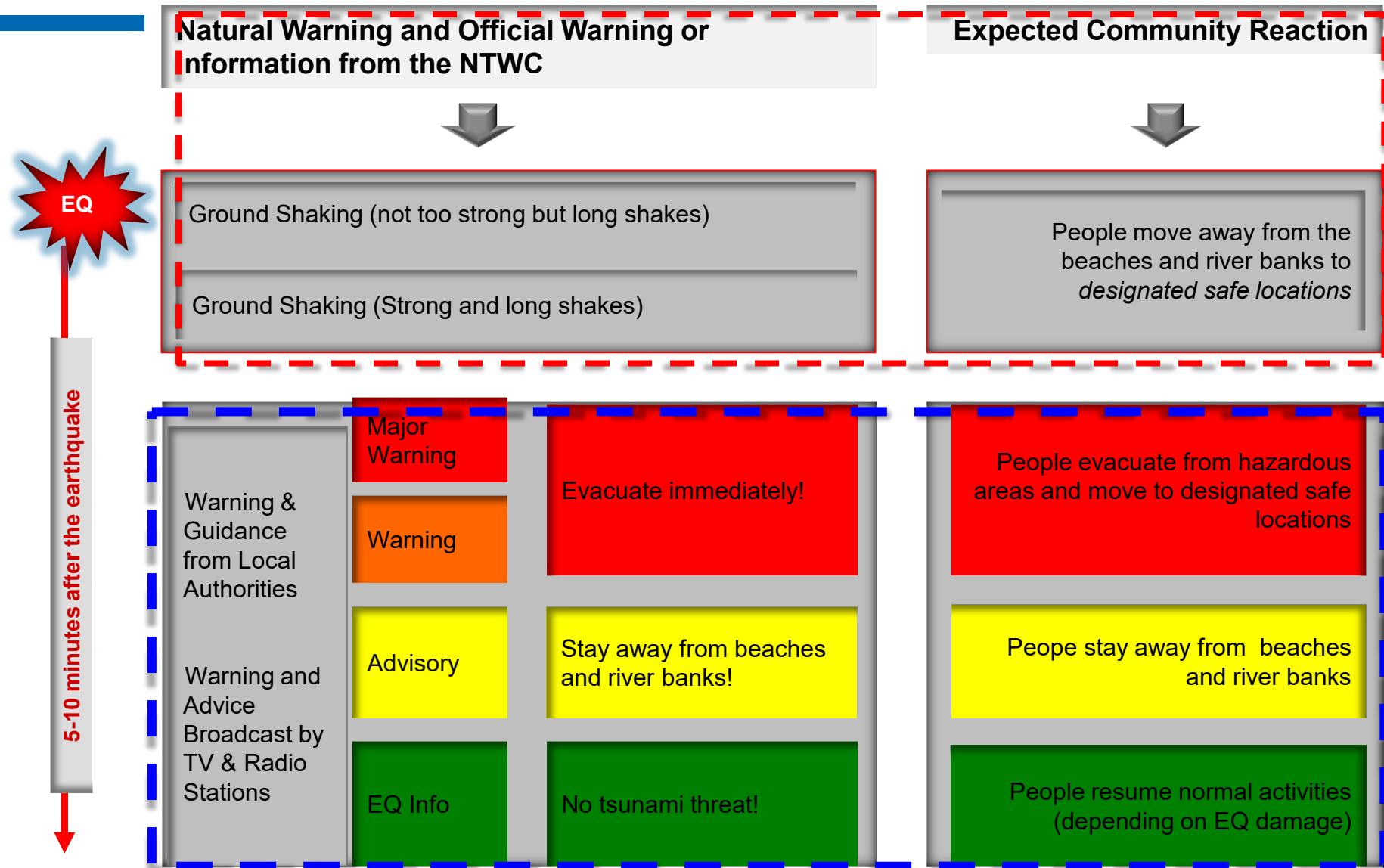


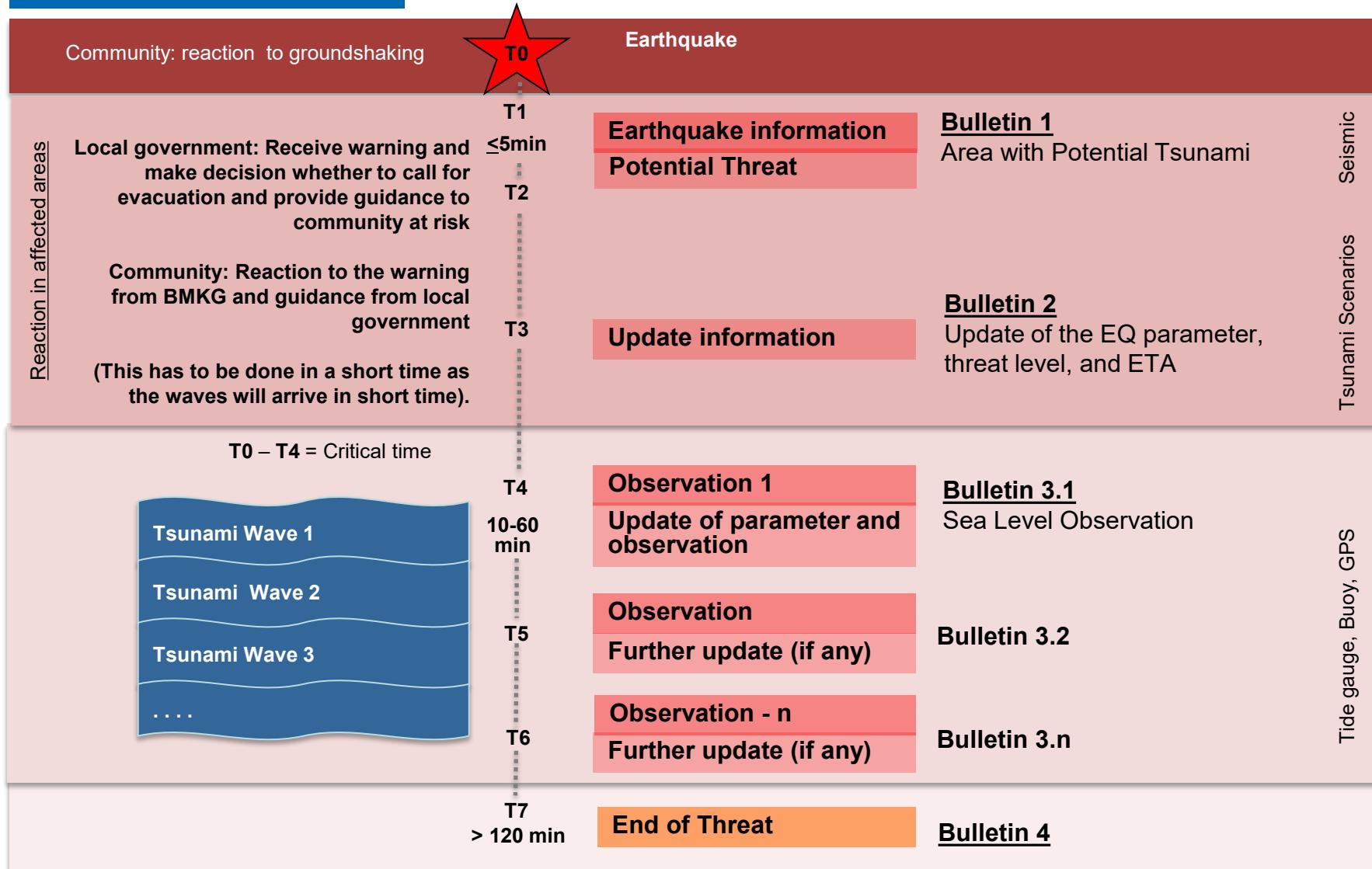
NTWC SOP- Pakistan Output: Bulletin 1

People in coastal areas of Balochistan especially Jiwani, Gwadar, Pasni, Ormara and neighbourhood are **STRONGLY ADVISED TO EVACUATE IMMEDIATELY** to higher grounds or go far inland.
People in coastal areas of Sindh are advised to **standby for evacuation**. Boats and Ships at sea are advised to stay in the deeper parts of the sea until the threat is over. If there is sufficient time, boats and ships in harbours and bays are advised to go to the deeper parts of the sea until the threat is over.



Input for DMO & Media





Example of NTWC Product in 3 Modes of Communications

1. Warning Receiver System

- DMO - Dedicated
- Media-Broadcast
- Community-web based
- Public-Mobile Phone.

2. Emails

3. Text Message

Warning level and advice to local government by the BMKG

| Warning Level | Saran dari BMKG pada PEMDA |
|---------------------------------------|--|
| AWAS (Major Warning) | Provincial/District/City governments that are at “Major Warning” level are expected to pay attention to this warning and immediately guide their communities for full evacuation. |
| SIAGA (Warning) | Provincial/District/City governments that are at “Warning” level are expected to pay attention to this warning and immediately guide their communities for evacuation. |
| WASPADA (Advisory) | Provincial/District/City governments that are at “Advisory” level are expected to pay attention to this warning and immediately guide their communities to move away from beaches and river banks. |

Warning Message Via Warning Receiver System for Stakeholder Organizations



Warning Message Via Warning Receiver System for Stakeholder Organizations

4



NTWC Indonesia to Broadcasting Media

Warning Message Via Warning Receiver System for Broadcasting Media (MCR)



HOW TO READ THE MESSAGE

TSUNAMI WARNING FROM BMKG.

AN EARTHQUAKE WITH A MAGNITUDE OF 8.9 ON THE RICHTER SCALE WITH A DEPTH OF 10 KILOMETRES OCCURRED ON 11 APRIL 2012 AT 15:38:29 WESTERN INDONESIA TIME (WIB), EPICENTER IN THE REGION OF SOUTHWEST SIMEULUE REGENCY ACEH PROVINCE AND HAS THE POTENTIAL TO CAUSE A TSUNAMI. THE COMMUNITY IS URGED TO FOLLOW DIRECTIONS FROM THE AUTHORITIES OR THE LOCAL GOVERNMENT.

EARTHQUAKE PARAMETERS ARE TEMPORARY AND WILL CONTINUE TO BE UPDATED BY THE BMKG.

COMMUNITIES HAVING WARNING OR MAJOR WARNING STATUS, INDICATED IN THE MAP BY ORANGE OR RED COLORS, ARE ADVISED TO IMMEDIATELY EVACUATE TO A SAFE PLACE OR HIGHER GROUND. COMMUNITIES WITH ADVISORY LEVEL INDICATED BY YELLOW COLOR ARE ADVISED TO STAY AWAY FROM BEACHES AND WATERWAYS INCLUDING RIVERS.



Look out for the word "Update"; if this word appears, it means that the message contains updated information and replaces the information sent previously.

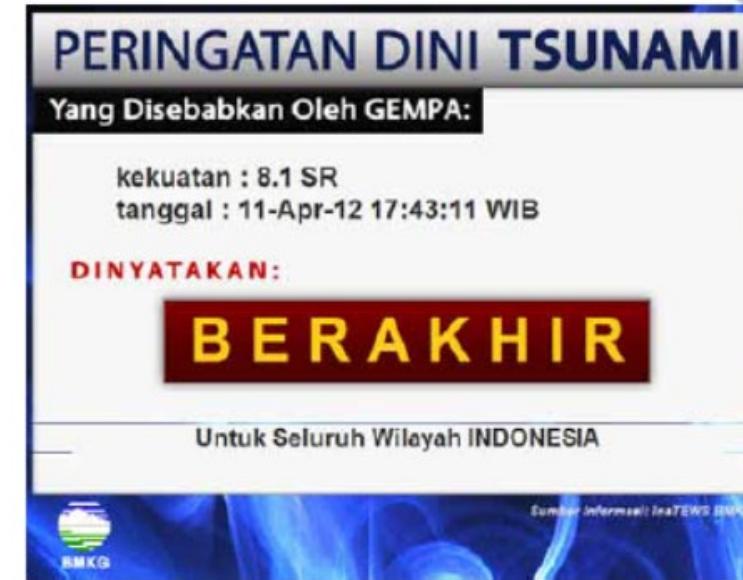
HOW TO READ THE MESSAGE

TSUNAMI WARNING FROM BMKG.

UPDATED INFORMATION ON THE EARTHQUAKE, WHICH OCCURRED ON 11 APRIL 2012 AT 15:38:33 WIB, WITH A MAGNITUDE OF 8.5 ON THE RICHTER SCALE AND A DEPTH OF 10 KILOMETRES, EPICENTER IN THE SOUTHWEST REGION SIMEULUE REGENCY ACEH PROVINCE AND WITH THE POTENTIAL TO CAUSE A TSUNAMI. FOLLOW INSTRUCTIONS FROM AUTHORITIES:

COMMUNITIES HAVING MAJOR WARNING OR WARNING STATUS, INDICATED IN THE MAP BY ORANGE OR RED COLORS, ARE ADVISED TO IMMEDIATELY EVACUATE TO A SAFE PLACE OR HIGHER GROUND. COMMUNITIES WITH ADVISORY LEVEL INDICATED BY YELLOW COLOR ARE ADVISED TO STAY AWAY FROM BEACHES AND WATERWAYS INCLUDING RIVERS.

Warning Message Via Warning Receiver System for Broadcasting Media (MCR)



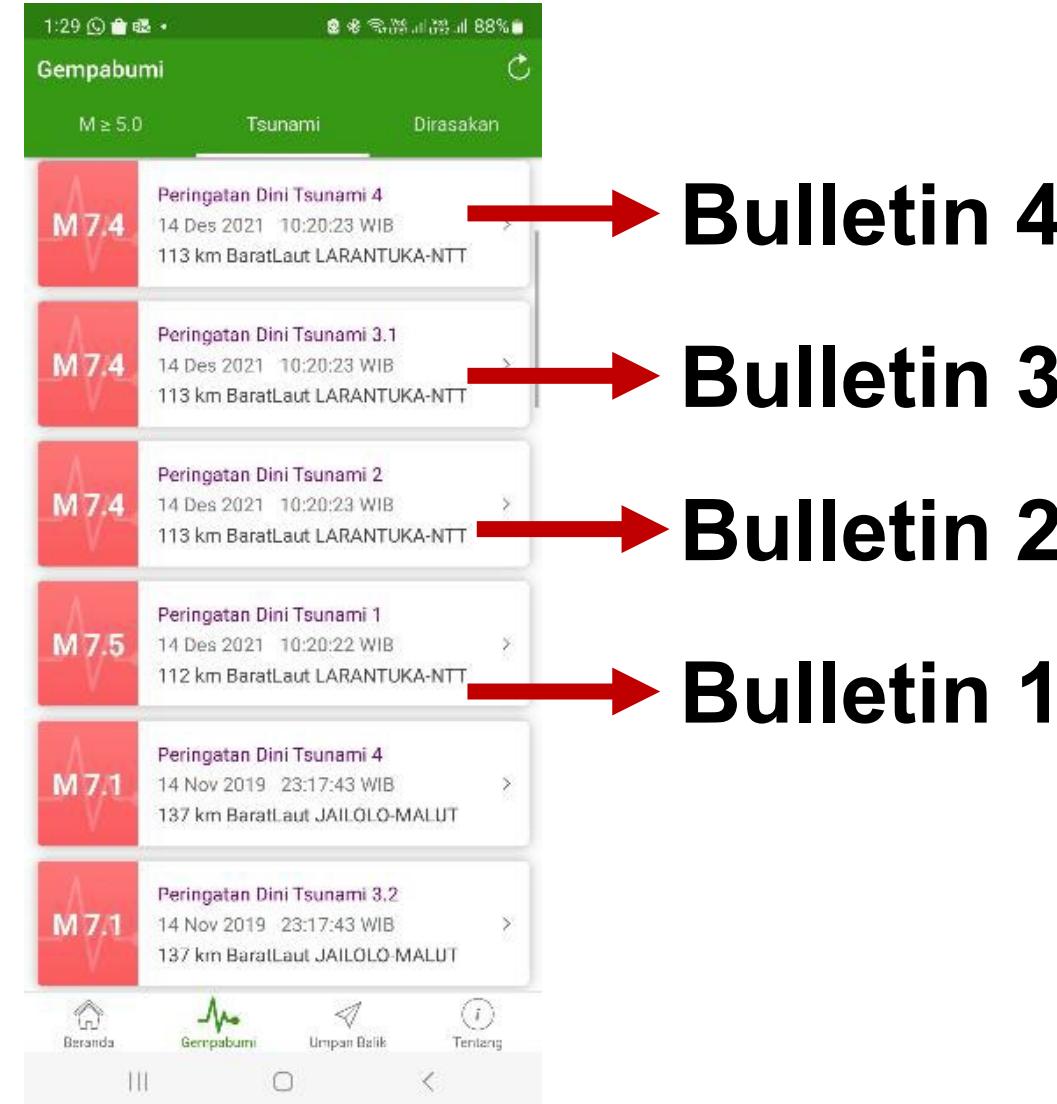
HOW TO READ THE MESSAGE

TSUNAMI WARNING FROM BMKG.
TSUNAMI EARLY WARNING DUE TO THE EARTHQUAKE ON DATE 11-APR-12 TIME 15:38:33WIB, IN ACEH, NORTH SUMATRA, WEST SUMATRA, BENGKULU, LAMPUNG WITH A MAGNITUDE 8.1SR, HAS ENDED. THE END OF THIS WARNING APPLIES TO ALL AREAS IN INDONESIA.

Warning Message Via Warning Receiver System of Mobile Phone



Warning Message Via Warning Receiver System of Mobile Phone



Bulletin 4

Bulletin 3

Bulletin 2

Bulletin 1

NTWC Indonesia to Public



14 Des 2021
10:20:22 WIB (2 tahun yang lalu)

P.D. Tsunami 1

7.5
Magnitudo

12 km
Kedalaman

7.59 LS
122.26 BT

Peringatan Dini Tsunami untuk wilayah: MALUKU, NTB, NTT, SULSEL, SULTRA, Gempa Mag:7.5, 14-Des-21 10:20:22 WIB, Lok:7.59 LS, 122.26 BT (112 km BaratLaut LARANTUKA-NTT), Kedlmn:12 Km ::BMKG

Lokasi Gempa
112 km BaratLaut LARANTUKA-NTT

Potensi TSUNAMI untuk diteruskan pada masyarakat

Arahan BMKG
Ikuti arahan peringatan dini TSUNAMI dari BPBD, BNPB dan BMKG

Peta Perkiraan Tinggi Muka Laut Maksimum

Tinggi Muka Laut Maksimum [m]
0 - 0.5
0.5 - 3
> 3

120 E
105 S

Indonesia

Copyright InaNEWS BMKG, 2021

Beranda Gempabumi Umpam Baik Tentang



14 Des 2021
10:20:22 WIB (2 tahun yang lalu)

P.D. Tsunami 1

7.5
Magnitudo

12 km
Kedalaman

7.59 LS
122.26 BT

Peta Perkiraan Tinggi Muka Laut Maksimum

Tinggi Muka Laut Maksimum [m]
0 - 0.5
0.5 - 3
> 3

120 E
105 S

Indonesia

Copyright InaNEWS BMKG, 2021

Peta Waktu Datang & Zona Warning

Daerah yang berpotensi tsunami berdasarkan pemodelan

| Kota/ Kabupaten (Provinsi) | Status Peringatan |
|----------------------------|-------------------|
| Selayar (SULSEL) | SIAGA |
| Pulau Ende (NTT) | SIAGA |

| Kota/ Kabupaten (Provinsi) | Status Peringatan |
|------------------------------------|-------------------|
| Selayar (SULSEL) | SIAGA |
| Pulau Ende (NTT) | SIAGA |
| Flores-Timur Bagian Utara (NTT) | SIAGA |
| Pulau Sikka (NTT) | SIAGA |
| Sikka Bagian Utara (NTT) | SIAGA |
| Ende Bagian Utara (NTT) | SIAGA |
| Pulau Lembata (NTT) | SIAGA |
| Flores-Timur Pulau Adonara (NTT) | SIAGA |
| Manggarai Bagian Utara (NTT) | SIAGA |
| Ngada Bagian Utara (NTT) | SIAGA |
| Lembata Bagian Utara (NTT) | SIAGA |
| Buton (SULTRA) | SIAGA |
| Alor Bagian Utara (NTT) | SIAGA |
| Bombana (SULTRA) | SIAGA |
| Manggarai-Barat Bagian Utara (NTT) | WASPADA |
| Wakatobi (SULTRA) | WASPADA |
| Bima Pulau Gili (NTB) | WASPADA |

Beranda Gempabumi Umpam Baik Tentang



14 Des 2021
10:20:22 WIB (2 tahun yang lalu)

P.D. Tsunami 1

7.5
Magnitudo

12 km
Kedalaman

7.59 LS
122.26 BT

BLUELINK [Alarm] Pintu tidak terkunci

| Kota/ Kabupaten (Provinsi) | Status Peringatan |
|------------------------------------|-------------------|
| Selayar (SULSEL) | SIAGA |
| Pulau Ende (NTT) | SIAGA |
| Flores-Timur Bagian Utara (NTT) | SIAGA |
| Pulau Sikka (NTT) | SIAGA |
| Sikka Bagian Utara (NTT) | SIAGA |
| Ende Bagian Utara (NTT) | SIAGA |
| Pulau Lembata (NTT) | SIAGA |
| Flores-Timur Pulau Adonara (NTT) | SIAGA |
| Manggarai Bagian Utara (NTT) | SIAGA |
| Ngada Bagian Utara (NTT) | SIAGA |
| Lembata Bagian Utara (NTT) | SIAGA |
| Buton (SULTRA) | SIAGA |
| Alor Bagian Utara (NTT) | SIAGA |
| Bombana (SULTRA) | SIAGA |
| Manggarai-Barat Bagian Utara (NTT) | WASPADA |
| Wakatobi (SULTRA) | WASPADA |
| Bima Pulau Gili (NTB) | WASPADA |

Beranda Gempabumi Umpam Baik Tentang

NTWC Indonesia to Public

14 Des 2021
10:20:23 WIB (2 tahun yang lalu)

7.4 Magnitudo
10 km Kedalaman
7.59 LS 122.24 BT

P.D. Tsunami 2

Copyright InaTEN 5 BMKG, 2021

Peta Waktu Datang & Zona Warning

Daerah yang berpotensi tsunami berdasarkan pemodelan

| Kota/ Kabupaten (Provinsi) | Status Peringatan | Estimasi Tiba |
|---------------------------------|-------------------|----------------------------|
| Flores-Timur Bagian Utara (NTT) | WASPADA | 14-12-2021 10:20:22 WIB |
| Pulau Sikka (NTT) | WASPADA | 14-12-2021 10:20:22 WIB |
| Sikka Bagian Utara (NTT) | WASPADA | 14-12-2021 10:20:22 WIB |
| Pulau Lembata (NTT) | WASPADA | 14-12-2021 10:36:37 WIB |

Saran dan Arahan Status Peringatan

Status Awas
Pemerintah Propinsi/Kab/Kota yang berada pada status 'Awas' diharap memperhatikan dan segera

Beranda Gempabumi Umpam Balik Tentang

NTWC Indonesia to Public



1:59 86% ← Gempa Berpotensi Tsunami

14 Des 2021 10:20:23 WIB (2 tahun yang lalu)

P.D. Tsunami 3.1

7.4 Magnitudo 10 km Kedalaman 7.59 LS 122.24 BT

Peta Waktu Datang & Zona Warning

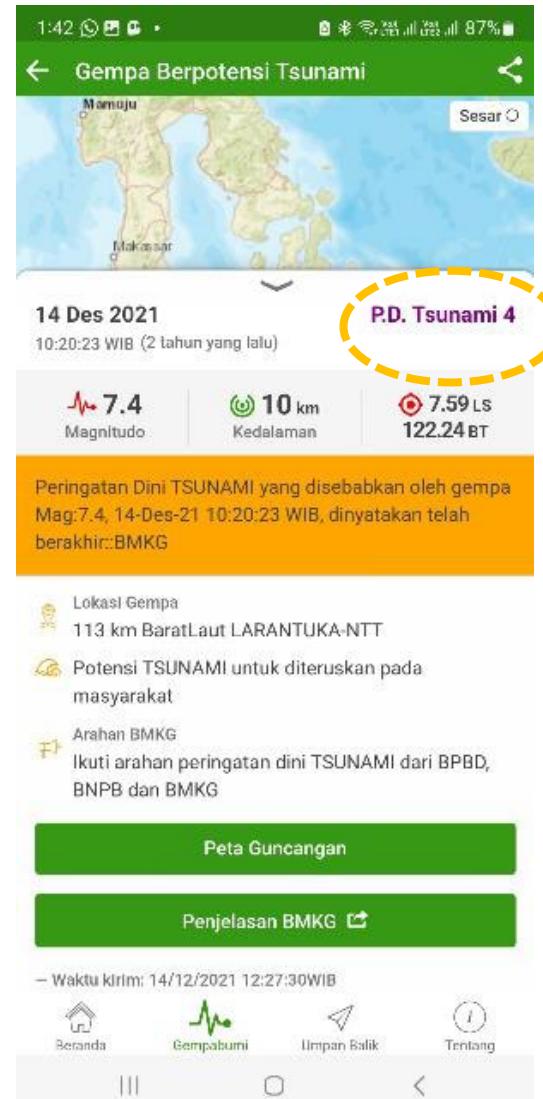
Berdasarkan pengamatan muka air laut, tsunami telah terdeteksi

| Lokasi (Koordinat) | Waktu | Ketinggian (m) |
|---------------------------|----------------------|----------------|
| Marapokot (-8.51, 121.32) | 14-12-2021 10:36 WIB | 0.07 |
| Reo (-8.28, 120.45) | 14-12-2021 10:39 WIB | 0.07 |

Daerah yang berpotensi tsunami berdasarkan pemodelan

| Kota/ Kabupaten (Provinsi) | Status Peringatan | Estimasi Tiba |
|---------------------------------|-------------------|-------------------------|
| Flores-Timur Bagian Utara (NTT) | WASPADA | 14-12-2021 10:20:22 WIB |
| Pulau Sikka (NTT) | WASPADA | 14-12-2021 10:20:22 WIB |
| Sikka Bagian Utara (NTT) | WASPADA | 14-12-2021 10:20:22 WIB |

Beranda Gempabumi Umpam Balik Tentang



1:42 87% ← Gempa Berpotensi Tsunami

14 Des 2021 10:20:23 WIB (2 tahun yang lalu)

Sesar

P.D. Tsunami 4

7.4 Magnitudo 10 km Kedalaman 7.59 LS 122.24 BT

Peringatan Dini TSUNAMI yang disebabkan oleh gempa Mag:7.4, 14-Des-21 10:20:23 WIB, dinyatakan telah berakhir: BMKG

Lokasi Gempa 113 km BaratLaut LARANTUKA-NTT

Potensi TSUNAMI untuk diteruskan pada masyarakat

Arahan BMKG Ikuti arahan peringatan dini TSUNAMI dari BPBD, BNPB dan BMKG

Peta Guncangan

Penjelasan BMKG

– Waktu kirim: 14/12/2021 12:27:30WIB

Beranda Gempabumi Umpam Balik Tentang

Warning Message Via Email Bulletin 1

BMKG BMKG BMKG BMKG BMKG

Indonesian Tsunami Early Warning System (InaTEWS)
 METEOROLOGICAL CLIMATOLOGICAL AND GEOPHYSICAL AGENCY
 Address: Jl. Angkasa I no.2 Kemayoran, Jakarta, Indonesia, 10720
 Tel.: (+62-21) 4246321/6546316 , Fax: (+62-21) 6546316/4246703
 P.O. Box 3540 Jkt, Website : <http://www.bmkg.go.id>

Issued date: 11 April 2012, 15:43:05 WIB (UTC=WIB-7)
 Bulletin-1
 No.:103/warning/InaTEWS/IV/2012

AN EARTHQUAKE HAS OCCURRED WITH THESE PRELIMINARY PARAMETERS:

Magnitude : 8.9 RS
 Date : 11-Apr-2012
 Waktu Origin Time: 08:38:29 UTC
 Latitude : 2.31 N
 Longitude : 92.67 E
 Depth : 10 Km

 Location : Off West Coast of Northern Sumatra
 Remarks : 434 km SOUTHWEST of Meulaboh
 463 km SOUTHWEST of Banda Aceh
 493 km SOUTHWEST of Sabang
 497 km SOUTHWEST of Sigli
 550 km SOUTHWEST of Bireun

Evaluation:

THERE IS THE POSSIBILITY OF A TSUNAMI IN THE FOLLOWING AREAS:

| Province | Location | Warning Level |
|----------|------------------------------|---------------|
| BENGKULU | Bengkulu-Selatan | MAJOR WARNING |
| BENGKULU | Bengkulu-Utara Bagian Utara | MAJOR WARNING |
| BENGKULU | Bengkulu-Utara Pulau Enggano | MAJOR WARNING |
| BENGKULU | Kaur | MAJOR WARNING |
| BENGKULU | Kota-Bengkulu Pantai-Panjang | MAJOR WARNING |
| BENGKULU | Mukomuko | MAJOR WARNING |

Warning Level for Affected Areas

(Warning segments are usually equal to district borders, although there are exceptions)

| | | |
|---------|--------------------------------|----------|
| LAMPUNG | Tanggamus Pulau Tabuan | WARNING |
| SUMBAR | Agam | WARNING |
| SUMBAR | Kota-Padang | WARNING |
| SUMBAR | Kota-Padang Bagian Selatan | WARNING |
| SUMBAR | Kota-Padang Bagian Utara | WARNING |
| SUMBAR | Padang-Pariaman Bagian Selatan | WARNING |
| SUMBAR | Padang-Pariaman Bagian Utara | WARNING |
| SUMBAR | Pasaman-Barat | WARNING |
| SUMBAR | Pesisir-Selatan Bagian Selatan | WARNING |
| SUMBAR | Pesisir-Selatan Bagian Utara | WARNING |
| BANTEN | Lebak | ADVISORY |
| JABAR | Cianjur Sindangbarang | ADVISORY |
| LAMPUNG | Lampung-Selatan Kep. Krakatau | ADVISORY |
| LAMPUNG | Lampung-Selatan Kep. Sebuku | ADVISORY |

Advice:

Province/District/City governments that are at "Major Warning" level are expected to pay attention to this warning and immediately guide their communities for full evacuation.

Province/District/City governments that are at "Warning" level are expected to pay attention to this warning and immediately guide their communities for evacuation.

Province/District/City governments 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.

Guidance for local government

BMKG BMKG BMKG BMKG BMKG

Warning Message Via Email Bulletin 2







 Indonesian Tsunami Early Warning System (InaTEWS)
 METEOROLOGICAL CLIMATOLOGICAL AND GEOPHYSICAL AGENCY
 Address: Jl. Angkasa I no.2 Kemayoran, Jakarta, Indonesia, 10720
 Telp.: (+62-21) 4246312/6546316, Fax: (+62-21) 6546316/4246703
 P.O. Box 3540 Jkt, Website : <http://www.bmkg.go.id>

Issued date: 11 April 2012, 15:47:45 WIB (UTC=WIB-7)
 Bulletin-2
 No.:104/warning/InaTEWS/IV/2012

AN EARTHQUAKE HAS OCCURRED WITH THESE PRELIMINARY PARAMETERS:

Magnitude : 8.5 RS
 Date : 11-Apr-2012
 Origin Time : 08:38:33 UTC
 Latitude : 2.40 N
 Longitude : 92.99 E
 Depth : 10 Km

 Location : Off West Coast of Northern Sumatra
 Remarks : 398 km SOUTHWEST Meulaboh
 433 km SOUTHWEST Banda Aceh
 464 km SOUTHWEST Sabang
 465 km SOUTHWEST Sigli
 515 km SOUTHWEST Bireun


 Pay attention
 for the
 possibility of
 updates to
 the earthquake's
 parameters

Evaluation:

THERE IS THE POSSIBILITY OF A TSUNAMI IN THE FOLLOWING AREAS:

| Province | Warning Segment | Warning Level | ETA [UTC] | Date [YYYY-MM-DD] |
|----------|-------------------------|---------------|--------------|----------------------|
| NAD | Simeulue Pulau Simeulue | MAJOR WARNING | 09:00:13 | 2012-04-11 |
| SUMUT | Nias Bagian Barat | MAJOR WARNING | 09:16:58 | 2012-04-11 |
| SUMUT | Nias-Selatan Pulau Nias | MAJOR WARNING | 09:22:03 | 2012-04-11 |


 Be aware of the possibility that the status levels in each area may change from Advisory to Warning or Major Warning, or vice-versa

| | | | | |
|----------|---------------------------------|-----------|----------|------------|
| BENGKULU | Bengkulu-Utara Bagian Utara | WARNING | 10:48:22 | 2012-04-11 |
| BENGKULU | Kaur | WARNING | 10:48:43 | 2012-04-11 |
| BENGKULU | Seluma | WARNING | 10:49:43 | 2012-04-11 |
| SUMUT | Mandailing-Natal Bagian Selatan | WARNING | 10:51:43 | 2012-04-11 |
| BENGKULU | Bengkulu-Selatan | WARNING | 10:51:52 | 2012-04-11 |
| LAMPUNG | Lampung-Barat Pesisir-Selatan | WARNING | 10:54:28 | 2012-04-11 |
| LAMPUNG | Lampung-Barat Pesisir-Tengah | WARNING | 10:54:28 | 2012-04-11 |
| LAMPUNG | Lampung-Barat Pesisir-Utara | WARNING | 10:55:37 | 2012-04-11 |
| BENGKULU | Kota-Bengkulu Pantai-Panjang | WASPADA | 10:58:18 | 2012-04-11 |
| BANTEN | Pandeglang Pulau Panakan | WARNING | 11:01:43 | 2012-04-11 |
| BENGKULU | Bengkulu-Utara Bagian Selatan | ADVISORY | 11:03:13 | 2012-04-11 |
| BANTEN | Pandeglang Bagian Selatan | NO THREAT | 11:03:52 | 2012-04-11 |
| JABAR | Sukabumi Pelabuhan-Ratu | NO THREAT | 11:05:18 | 2012-04-11 |
| JABAR | Sukabumi Ujung-Genteng | NO THREAT | 11:05:18 | 2012-04-11 |
| LAMPUNG | Lampung-Selatan Kep. Krakatau | NO THREAT | 11:05:22 | 2012-04-11 |
| LAMPUNG | Lampung-Selatan Kep. Sebuku | NO THREAT | 11:05:22 | 2012-04-11 |
| LAMPUNG | Tanggamus Bagian Barat | ADVISORY | 11:05:48 | 2012-04-11 |
| LAMPUNG | Tanggamus Pulau Tabuan | ADVISORY | 11:05:48 | 2012-04-11 |
| LAMPUNG | Lampung-Selatan Bagian Barat | NO THREAT | 11:06:22 | 2012-04-11 |
| LAMPUNG | Tanggamus Bagian Timur | NO THREAT | 11:06:22 | 2012-04-11 |
| JABAR | Cianjur Sindangbarang | NO THREAT | 11:06:33 | 2012-04-11 |
| BANTEN | Lebak | NO THREAT | 11:06:52 | 2012-04-11 |

(ETA: estimated time of arrival)

ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST.

Advice:

Province/District/City governments that are at "Major Warning" level are expected to pay attention to this warning and immediately guide their communities for full evacuation.

Province/District/City governments that are at "Warning" level are expected to pay attention to this warning and immediately guide their communities for evacuation.

Province/District/City governments 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.







NTWC Indonesia by Email

BMKG BMKG BMKG BMKG BMKG

Indonesian Tsunami Early Warning System (InaTEWS)
METEOROLOGICAL CLIMATOLOGICAL AND GEOPHYSICAL AGENCY
Address: Jl. Angkasa I no.2 Kemayoran, Jakarta, Indonesia, 10720
Telp.: (+62-21) 4246321/6546316 , Fax: (+62-21) 6546316/4246703
P.O. Box 3540 Jkt, Website : <http://www.bmkg.go.id>

=====
Issued date: 11 April 2012, 18:15:03 WIB (UTC=WIB-7)
Bulletin-3
No.:113/warning/InaTEWS/IV/2012

UPDATING OF EARTHQUAKE PARAMETERS:

| | |
|--------------|----------------|
| Magnitude | : 8.3 RS |
| Date | : 11-Apr-2012 |
| Origin Time: | : 08:38:35 WIB |
| Latitude | : 2.33 N |
| Longitude | : 93.05 E |
| Depth | : 10 Km |

Location : Off West Coast of Northern Sumatra
Remarks : 396 km SOUTHWEST Meulaboh
435 km SOUTHWEST Banda Aceh
465 km SOUTHWEST Sigli
467 km SOUTHWEST Sabang
514 km SOUTHWEST Bireun

Evaluation:

Based on sea level observations, tsunami has detected in the following areas:

| Location | Latitude | Longitude | Time[UTC] [HH:NN] | Date [YYYY-MM-DD] | Height |
|----------|----------|-----------|----------------------|----------------------|------------|
| SABANG | 05.80 | 95.00 | 10:00 | 2012-04-11 | 0.06 meter |
| MEULABOH | 04.32 | 96.22 | 10:04 | 2012-04-11 | 0.8 meter |

Information that tsunami waves had been observed indicating location, wave height and arrival time

BERPOTENSI TERJADI TSUNAMI DI WILAYAH:

| Province | Warning Segment | Warning Level | ETA [WIB] | Date [YYYY-MM-DD] |
|----------|-------------------------|---------------|--------------|----------------------|
| NAD | Simeulue Pulau Simeulue | MAJOR WARNING | 16:00:20 | 2012-04-11 |
| SUMUT | Nias Bagian Barat | MAJOR WARNING | 16:16:50 | 2012-04-11 |
| SUMUT | Nias-Selatan Pulau Nias | MAJOR WARNING | 16:21:54 | 2012-04-11 |

Be aware of the possibility that the status levels in each area may change from Advisory to Warning or Major Warning, or vice-versa

=====
SUMBAR Kota-Padang ADVISORY 17:31:20 2012-04-11
SUMBAR Kota-Padang Bagian Selatan ADVISORY 17:31:20 2012-04-11
SUMBAR Padang-Pariaman Bagian Selatan ADVISORY 17:31:20 2012-04-11
BENGKULU Bengkulu-Utara Pulau Enggano WARNING 17:32:20 2012-04-11
SUMUT Kota-Sibolga WARNING 17:34:05 2012-04-11
SUMUT Tapanuli-Tengah Bagian Selatan WARNING 17:34:05 2012-04-11
BENGKULU Mukomuko WARNING 17:35:00 2012-04-11
NAD Aceh-Timur WARNING 17:39:30 2012-04-11
SUMUT Mandailing-Natal Bagian Utara WARNING 17:41:54 2012-04-11
SUMUT Tapanuli-Selatan WARNING 17:41:54 2012-04-11
SUMBAR Pasaman-Barat ADVISORY 17:42:09 2012-04-11
BENGKULU Bengkulu-Utara Bagian Utara WARNING 17:48:20 2012-04-11
BENGKULU Kaur WARNING 17:48:39 2012-04-11
BENGKULU Seluma WARNING 17:49:39 2012-04-11
SUMUT Mandailing-Natal Bagian Selatan WARNING 17:51:45 2012-04-11
BENGKULU Bengkulu-Selatan WARNING 17:51:50 2012-04-11
LAMPUNG Lampung-Barat Pesisir-Selatan WARNING 17:54:20 2012-04-11
LAMPUNG Lampung-Barat Pesisir-Tengah WARNING 17:54:20 2012-04-11
LAMPUNG Lampung-Barat Pesisir-Utara WARNING 17:55:30 2012-04-11
BENGKULU Kota-Bengkulu Pantai-Panjang ADVISORY 17:58:15 2012-04-11
BANTEN Pandeglang Pulau Panaitan WARNING 18:01:35 2012-04-11
BENGKULU Bengkulu-Utara Bagian Selatan ADVISORY 18:03:09 2012-04-11
LAMPUNG Tanggamus Bagian Barat ADVISORY 18:05:39 2012-04-11
LAMPUNG Tanggamus Pulau Tabuan ADVISORY 18:05:39 2012-04-11

(ETA: estimated time of arrival)

ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST.

Advice:

Province/District/City governments that are at "Major Warning" level are expected to pay attention to this warning and immediately guide their communities for full evacuation.

Province/District/City governments that are at "Warning" level are expected to pay attention to this warning and immediately guide their communities for evacuation.

Province/District/City governments 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.

BMKG BMKG BMKG BMKG BMKG

Warning Message Via Email Bulletin 4

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BMKG BMKG BMKG BMKG BMKG
Indonesian Tsunami Early Warning System (InaTEWS)
METEOROLOGICAL CLIMATOLOGICAL AND GEOPHYSICAL AGENCY
Address: Jl. Angkasa I no.2 Kemayoran, Jakarta, Indonesia, 10720
Telp.: (+62-21) 4246321/6546316 , Fax: (+62-21) 6546316/4246703
P.O. Box 3540 Jkt, Website : <http://www.bmg.go.id>
=====

Issued date : 04-Apr-2011, 05:10:45 WIB (UTC=WIB-7)
Bulletin - 4
No.:120/warning/InaTEWS/IV/2012

The Tsunami threat caused by the earthquake :
Magnitude : 7.1 RS
Date : 03-April-2011 20:06:39 UTC
is over.

This is the final message issued by the Indonesia Tsunami Early Warning System, unless new information becomes available.

Do not reply to this email, please address any inquiry to : info_inatews@bmg.go.id

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BMKG BMKG BMKG BMKG BMKG

HOW TO READ THE MESSAGE

TSUNAMI WARNING FROM BMKG.
TSUNAMI EARLY WARNING DUE TO THE EARTHQUAKE ON DATE 11-APR-12
TIME 15:38:33WIB, IN ACEH, NORTH SUMATRA, WEST SUMATRA, BENGKULU,
LAMPUNG: WITH A MAGNITUDE: 8.1SR, HAS ENDED. THE END OF THIS WARNING
APPLIES TO ALL AREAS IN INDONESIA.

Warning Message Via Text Message and Website



HOW TO READ THE MESSAGE

TSUNAMI WARNING FROM BMKG.
TSUNAMI EARLY WARNING FOR THE AREAS OF BENGKULU, LAMPUNG, ACEH, WEST SUMATRA, AND NORTH SUMATRA AS A RESULT OF AN 8.9-MAGNITUDE EARTHQUAKE AT A DEPTH OF 10 KILOMETRES OCCURRING ON 11 APRIL 2012 AT 15:38:33 WIB.

NOTES:

SMS MESSAGES ONLY LIST UP TO 5 PROVINCES WITH TSUNAMI WARNING STATUS BUT NO WARNING LEVELS. THIS IS NOT SUFFICIENT FOR PUBLIC INFORMATION PURPOSES. THEREFORE MEDIA NEED TO IMMEDIATELY CONSULT LONG VERSION MESSAGES (AS DISTRIBUTED BY E-MAIL OR FAX).



THANK YOU

