



Oman

Country Status Report



Regional Working Group for the North-West Indian Ocean (RWG-NWIO) 22 July 2024

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Sultanate of Oman



United Nations
Educational Scientific and
Cultural Organization



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Indian Ocean
Tsunami Information
Centre

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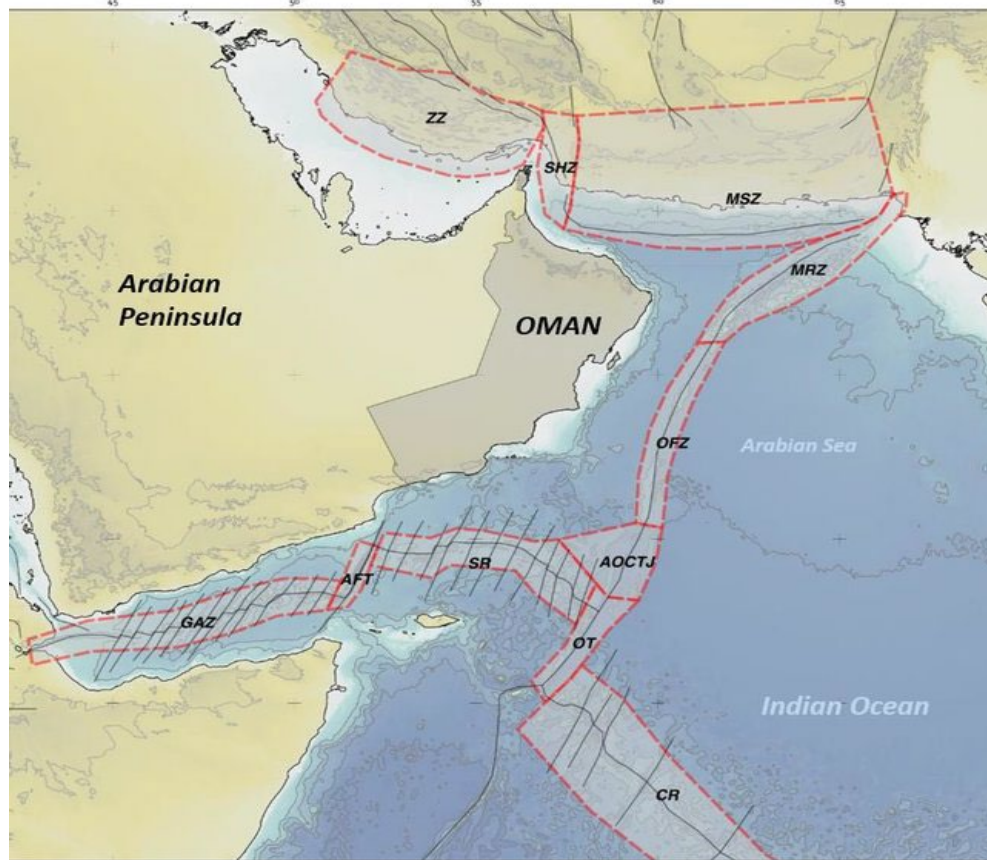


- 1** | **Overview**
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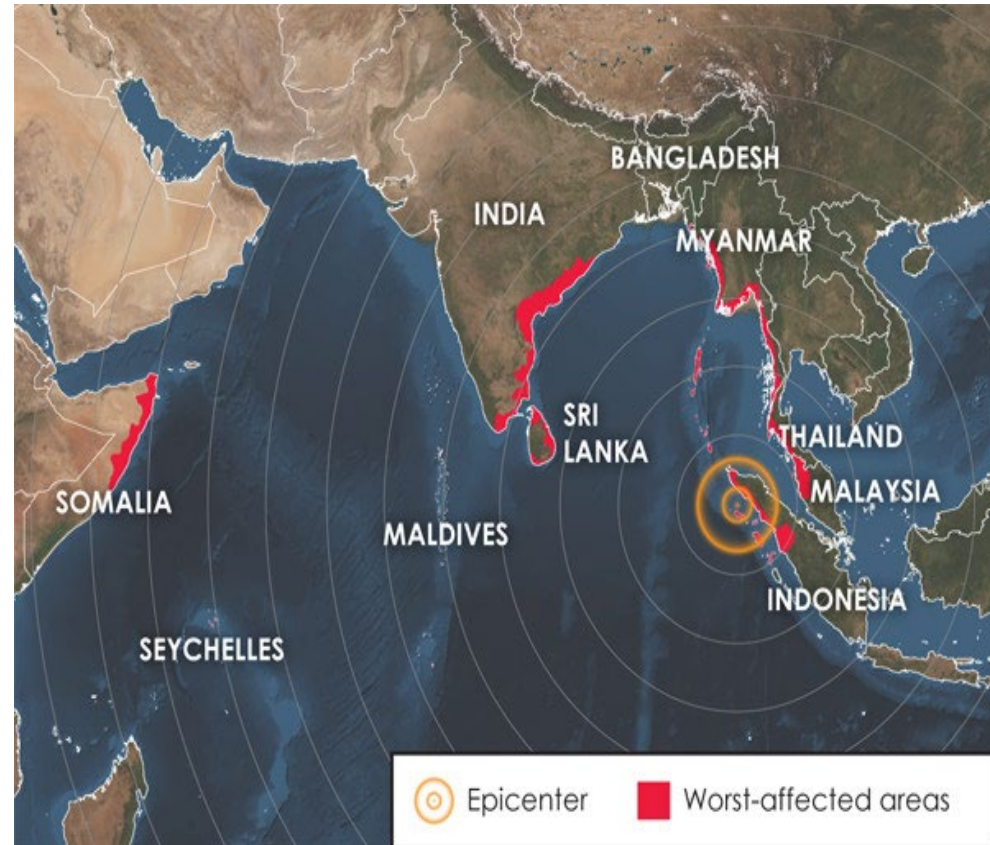


Overview: Tsunami

Source



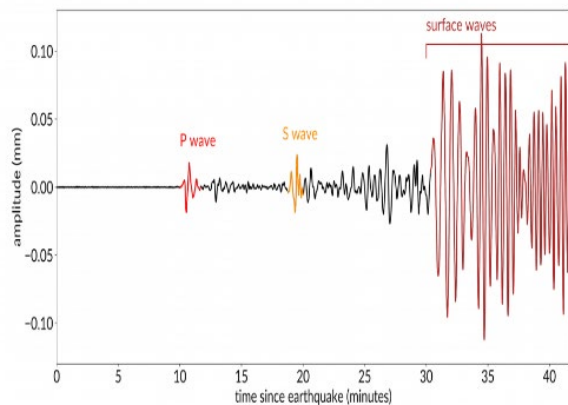
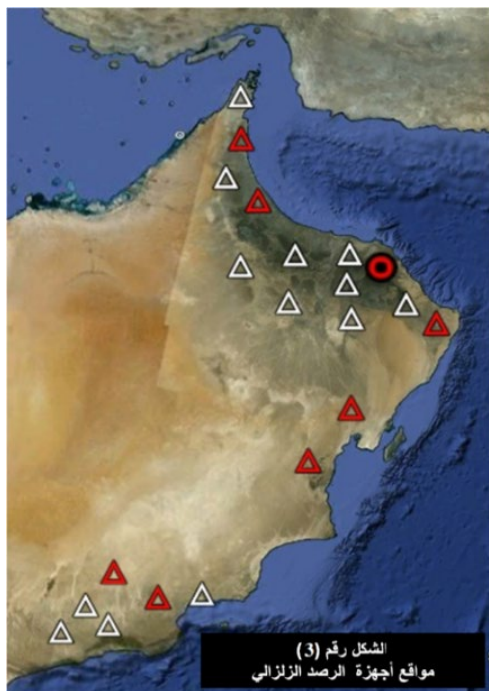
Tsunami near source Wave arrival time is less than 30 minutes



Distant tsunami source Wave arrival time is 7-8 hours

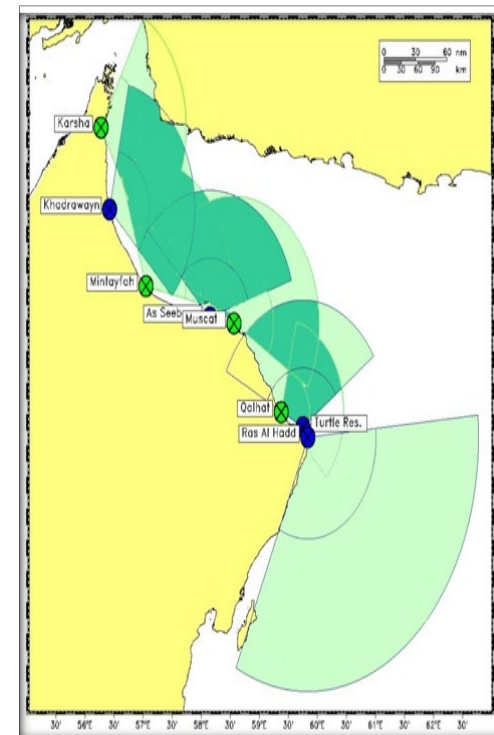
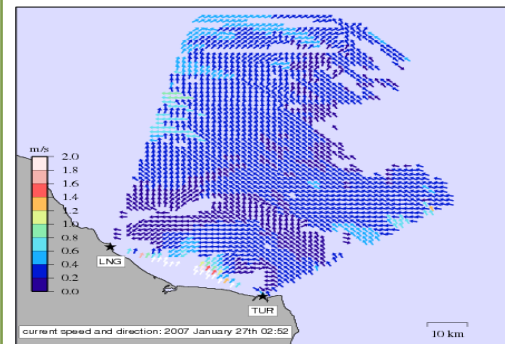
Tsunami Warning System: System & Stations

Seismic Station



21- Stations

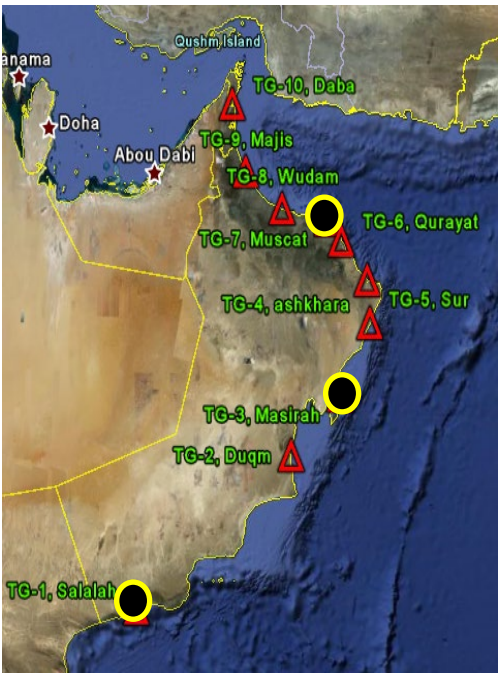
Wave radars



6- Radars

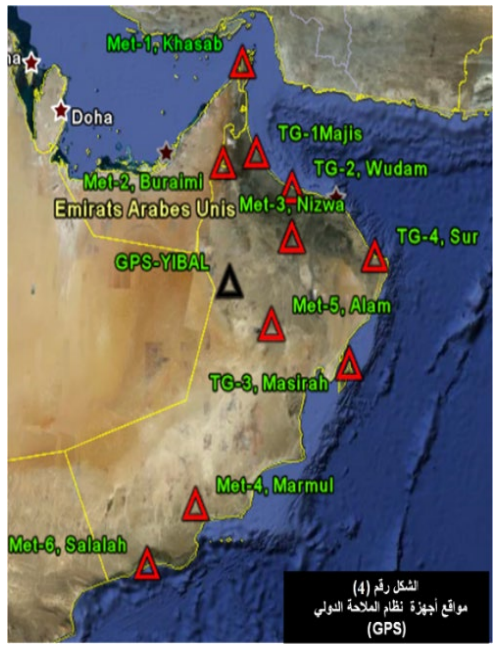
Tsunami Warning System: System & Stations

Tide gauge sensor



10- Stations

GPS stations



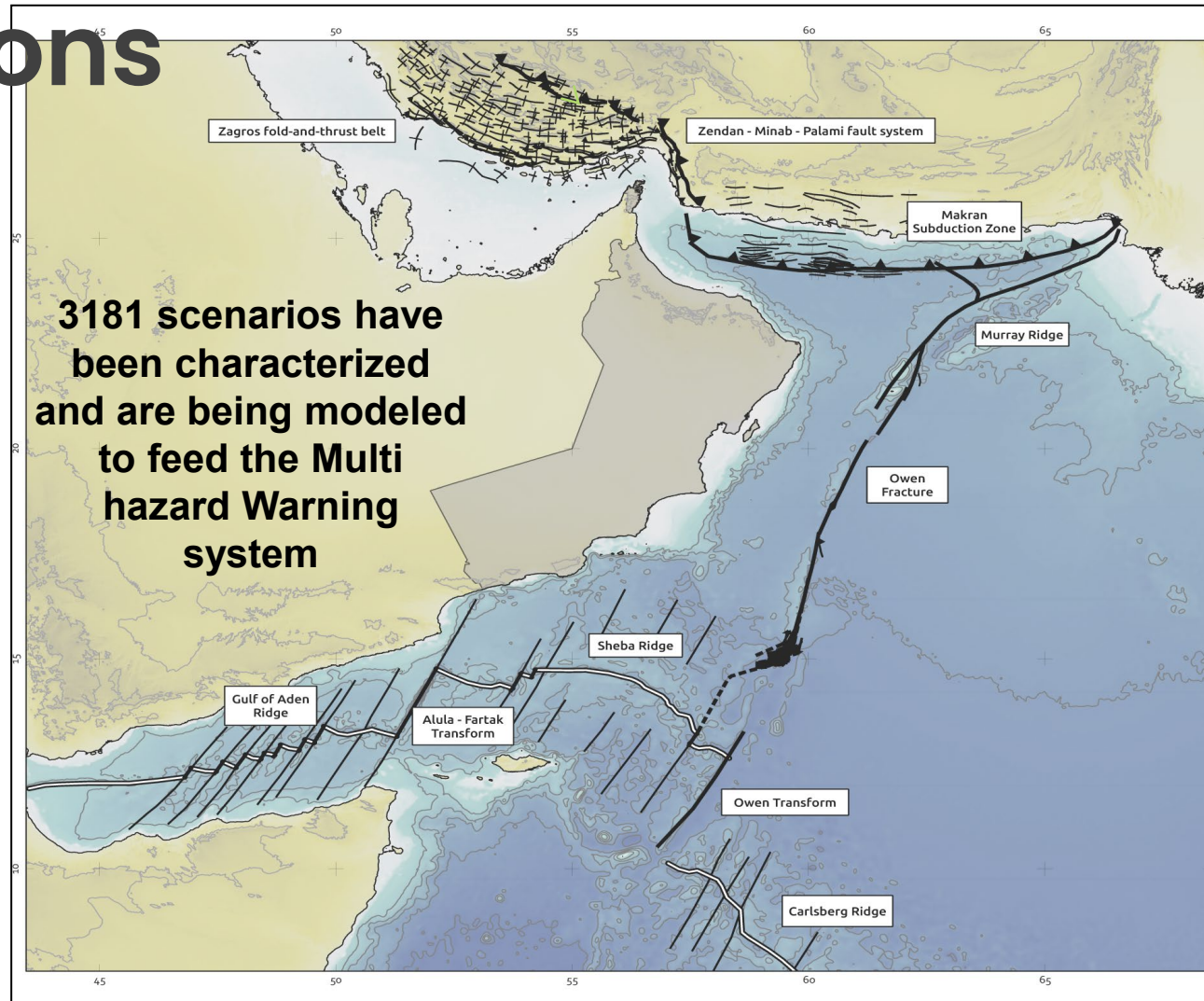
10- Stations

الشكل رقم (4)
مواقع أجهزة نظام الملاحة الدولي
(GPS)

Tsunami Warning System: System & Stations

Software &

- Eq. Analysis: **Seiscomp**
- Decision support system: **TOAST**



10 seismic areas considered

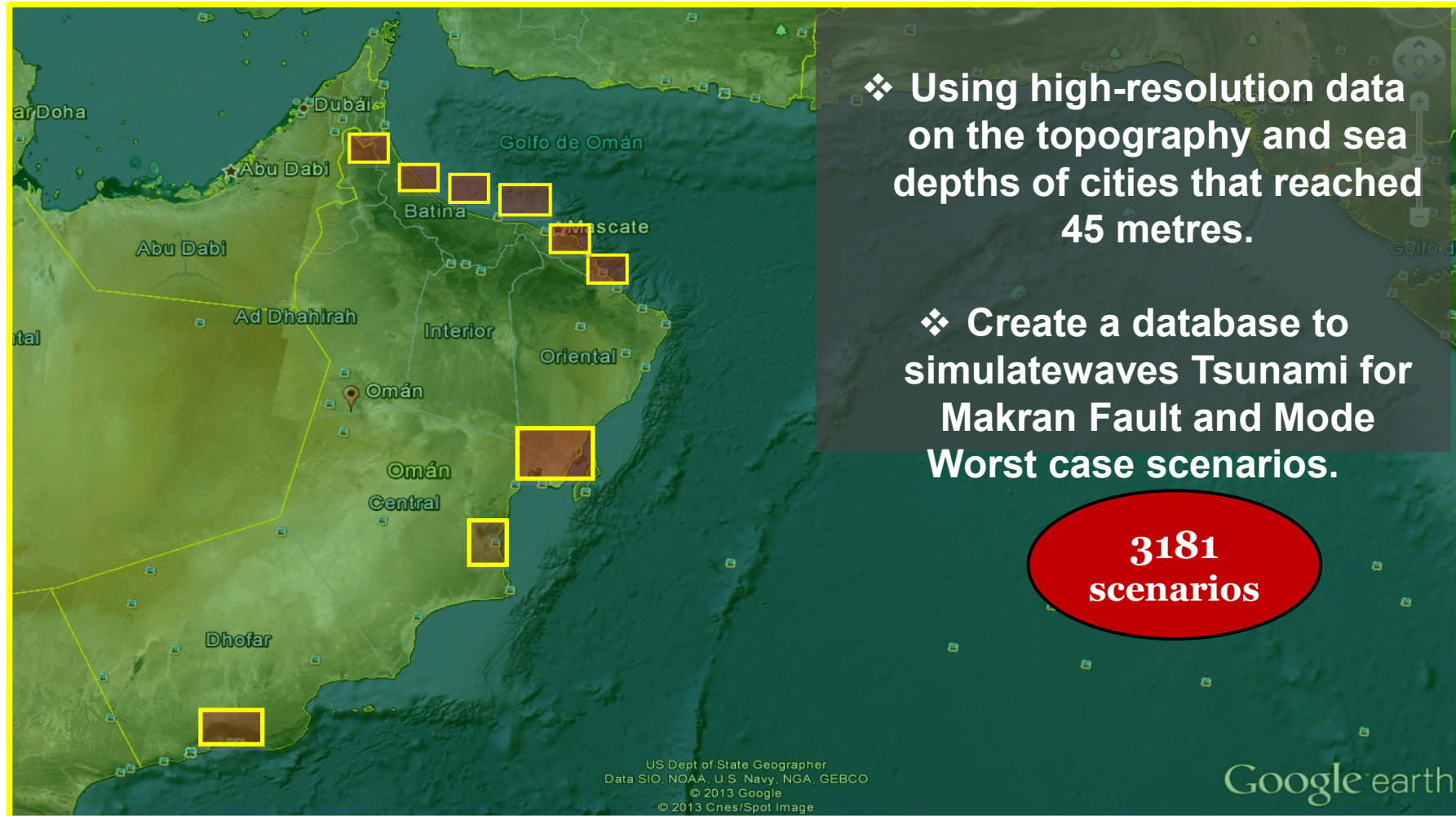
Zone	Number
Aden Gulf	44
Alula Fartak	1
AOCT	14
Sheba Ridge	65
Owen Transform	3
Carlsberg Ridge	74
Owen Fracture	16
Murray Ridge	33
Hormuz	48
Zagros	148
Makran	2735
TOTAL	3181

10 magnitudes considered

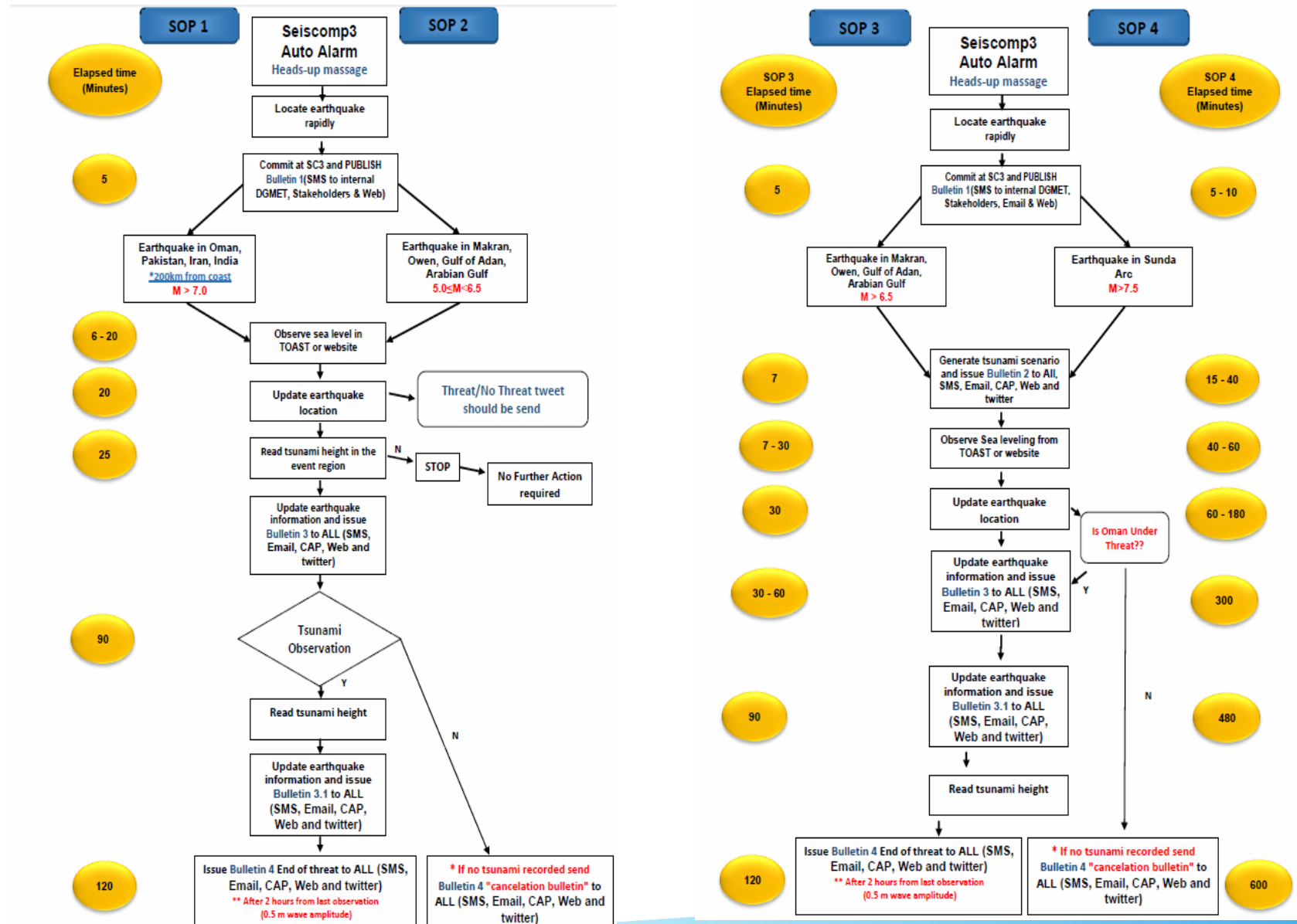
6.5, 7.25,
7.5, 7.75,
8.0, 8.25,
8.5, 8.75,
9.0, 9.25

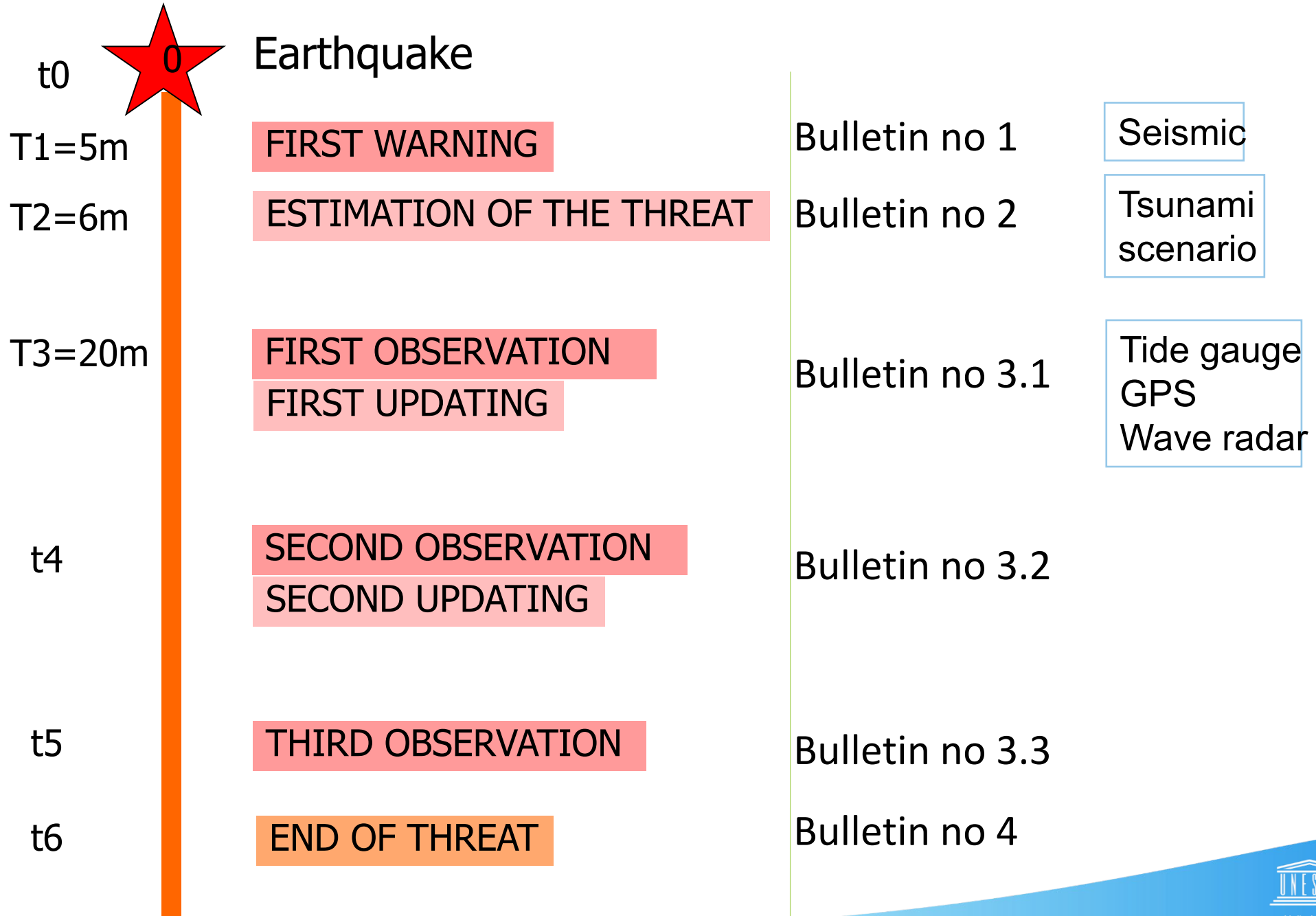


Tsunami Warning System: Risk Assessment



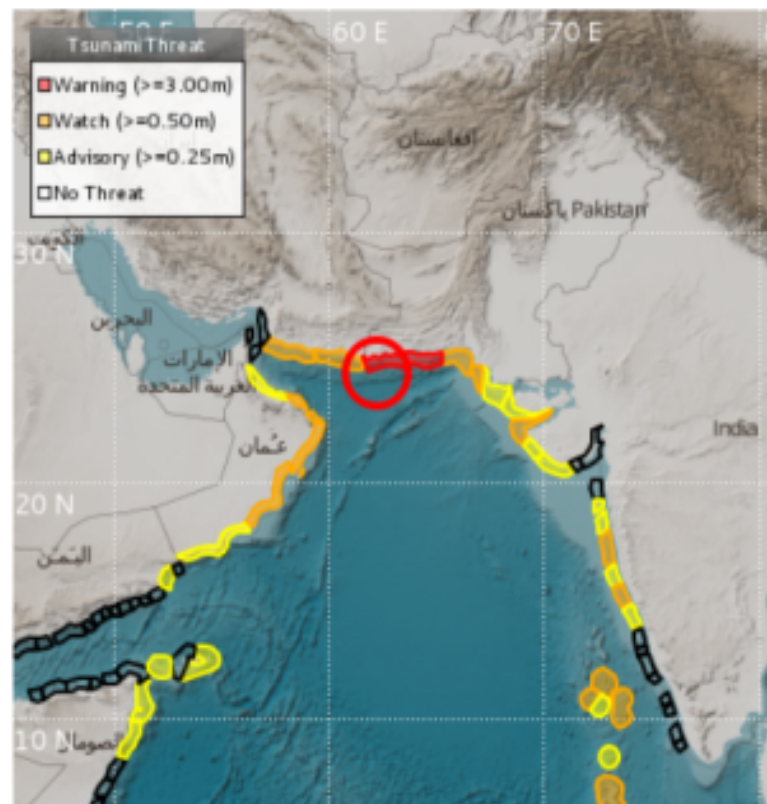
Standard Operating Procedure





زلزال مع احتمالية تأثير أمواج تسونامي على سواحل السلطنة

Earthquake with potential tsunami along Oman coasts

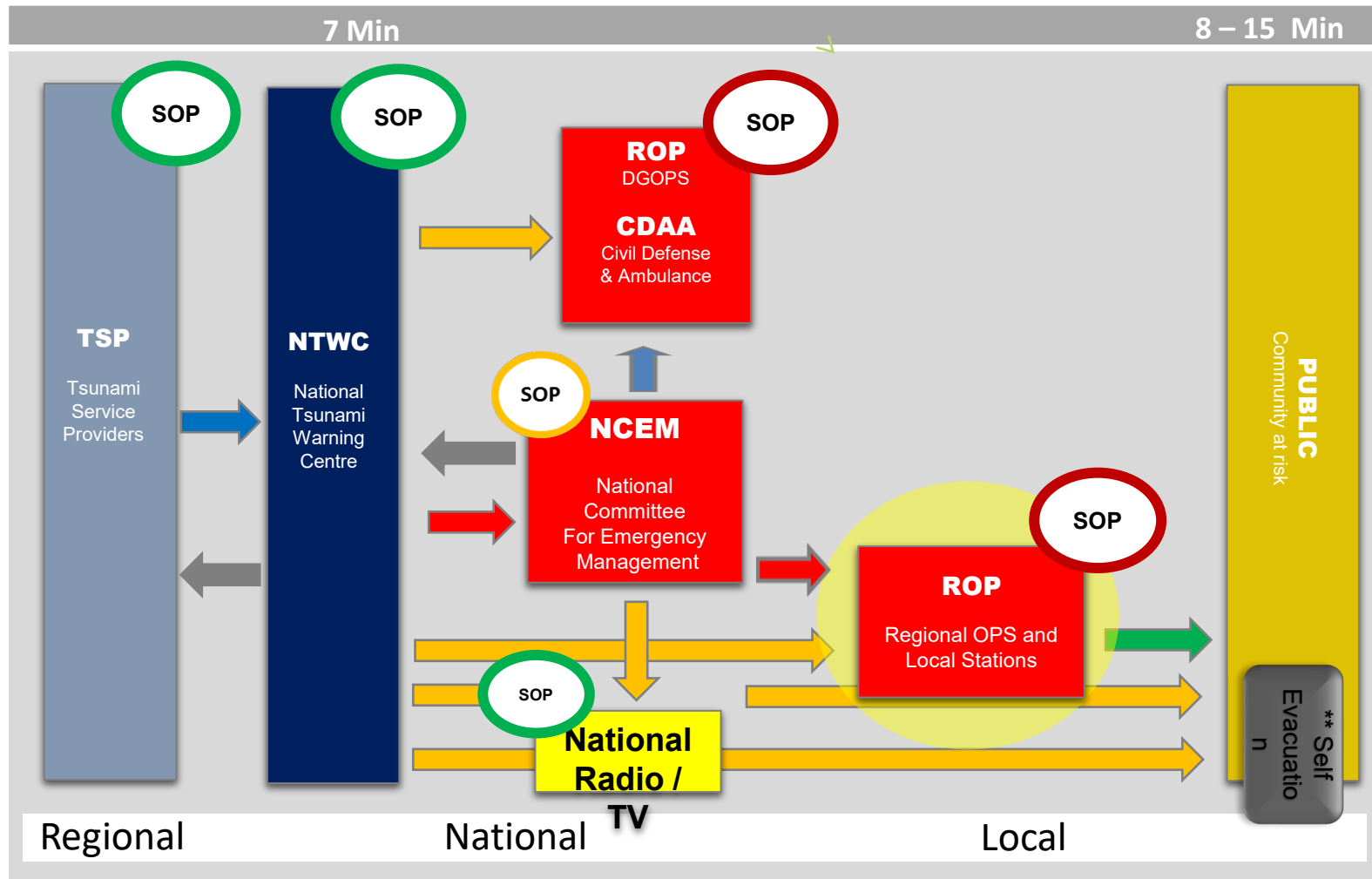


Magnitude	8.0	قوة الزلزال
Region	Off Coast of Pakistan	المنطقة
Depth	20 km	العمق
Date	05/03/2016	التاريخ
Time (MCT)	17:09:43	التوقيت المحلي

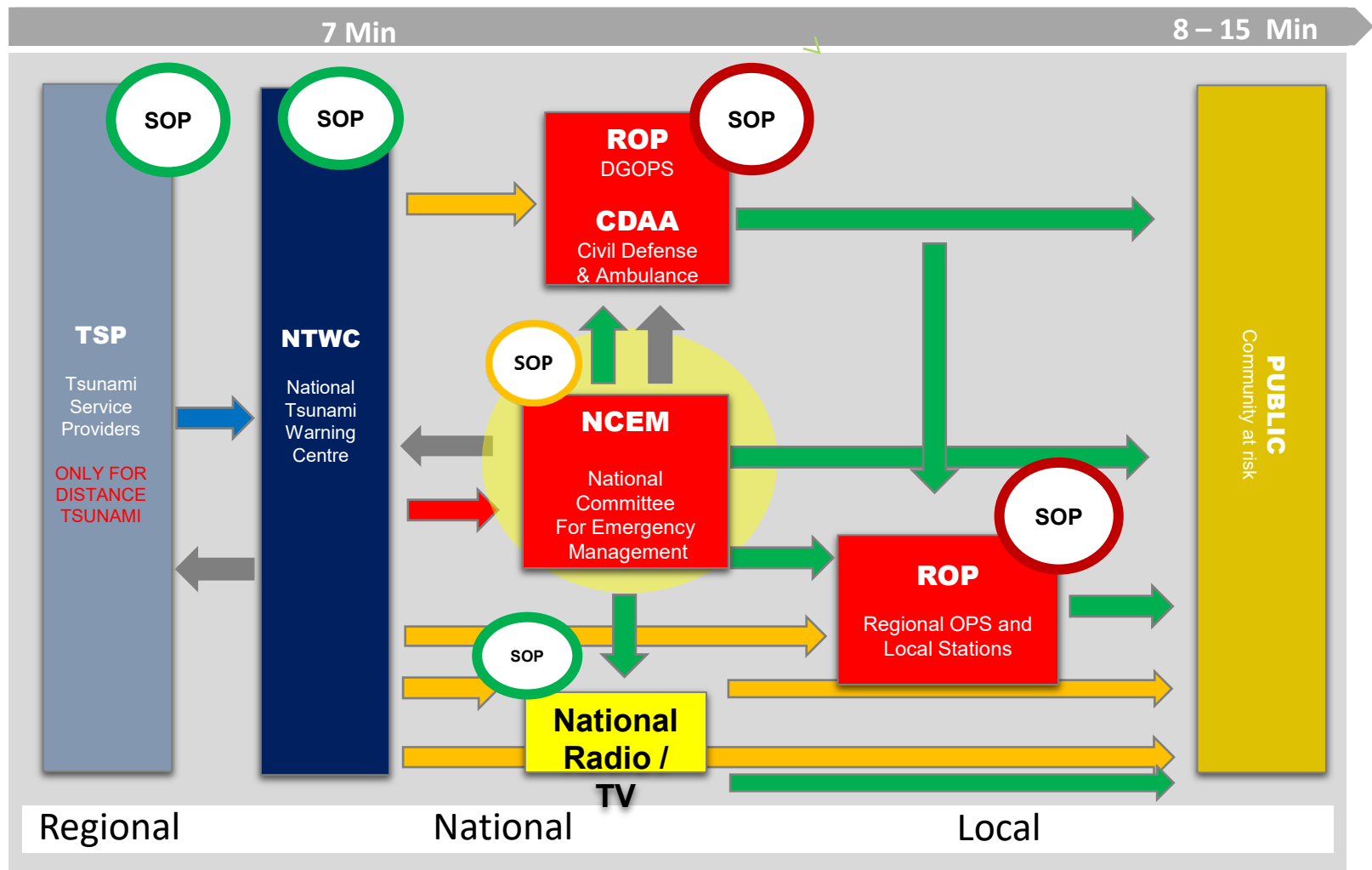
SOUTH AL SHARQIYAH (ARABIAN SEA)	Watch	تنبيه	الشرقية جنوب - بحر العرب
SOUTH AL SHARQIYAH (OMAN SEA)	Watch	تنبيه	الشرقية جنوب - بحر عمان
MUSCAT	Watch	تنبيه	محافظة مسقط
AL WUSTA	Watch	تنبيه	المنطقة الوسطى
NORTH AL BATINAH	Advisory	إشعار	الباطنة شمال
DHOFAR	Advisory	إشعار	محافظة ظفار
SOUTH AL BATINAH	Advisory	إشعار	الباطنة جنوب
MUSANDAM	Advisory	إشعار	محافظة مسندم

الهيئة العامة للطيران المدني، المديرية العامة للأرصاد الجوية

Oman National Warning Chain- Near Tsunami



Oman National Warning Chain- Distant Tsunami

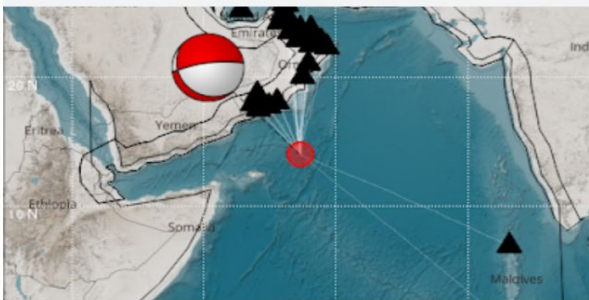


Standard Operating Procedure: Dissemination

SMS

Social Media – X
platform

Potential tsunami. Earthquake: magnitude 5.5, Owen Fracture Zone R, depth 8km, 2021-04-24 22:00:34 GST, met.gov.om/e/dgmet2021hzvm



CAA - DSS Earthquake Catalog
met.gov.om

B1



B2



لا توجد احتمالية تسونامي. انظر:
<https://dss.met.gov.om/b2/21hzv>

NO POTENTIAL tsunami due to an earthquake in Owen Fracture Zone Region, Arabian Sea at 2021-07-03 21:04:33 MCT with magnitude 5.7.

زلزال مع عدم احتمالية حدوث أمواج تسونامي
Earthquake with NO potential tsunami



Magnitude	5.7	قوة الزلزال
Region	منطقة صدع أوين في بحر العرب	المنطقة
Region	Owen Fracture Zone Region, Arabian Sea	المنطقة
Depth		العمق
Date	07/03/2021	التاريخ
Time (MCT)	21:04:33	التوقيت المحلي

هيئة الطيران المدني، المديرية العامة للأرصاد الجوية



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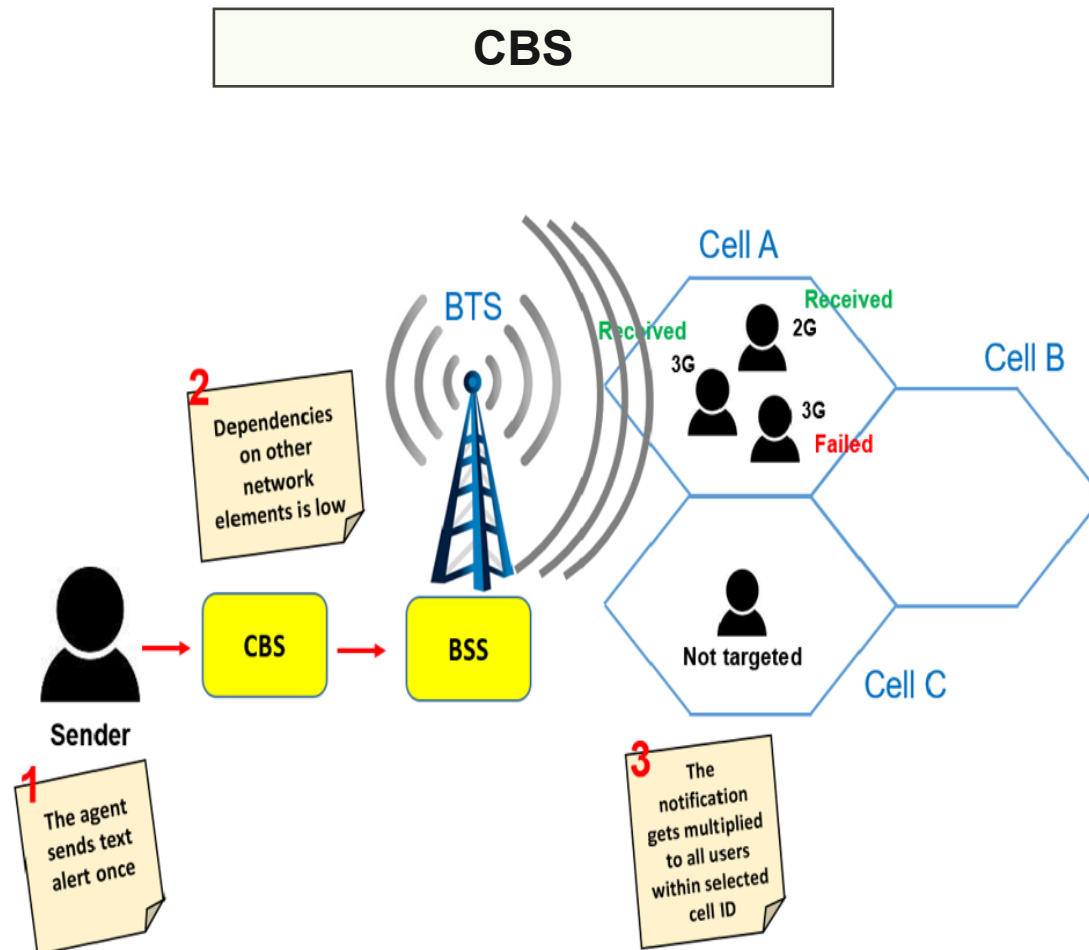


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Standard Operating Procedure: Dissemination



Using (CB) technology, it is possible to send Millions of text messages (alarms) To areas that are pre-determined It is characterized by not causing pressure Network compared to SMS technology

Awareness, Training & Competency

National Awareness campaign: lectures, exhibition, Tsunami vertical evacuation drills
12th -15th May 2024 North Al Batinah



Awareness, Training & Competency

- Hosting the NWIO Regional Workshop on Tsunami Inundation Mapping and Tsunami Evacuation planning (April 2024).
- Severe weather & Tsunami preparation Workshop was conducted for subcommittees in South Al Batinah governorate by NCEM (June 2024).



Awareness, Training & Competency

- Training for System Operators
 - Sultan Qaboos University (Earthquake Monitoring Center), Muscat
 - BMKG, Jakarta
 - INCOIS, Hyderabad
 - OJT, Muscat
- Participation in ITIC Training Programme on Tsunami Early Warning Systems and the PTWC Enhanced Products, Tsunami Evacuation Planning and Tsunami Ready Programme (ITP-TEWS-Chile), Valparaiso, Chile

Future Plans

- Updating Risk Assessment Maps
- Evacuation maps for pilot areas.
- Workstation upgrade
- Software upgrade
- Tide gauge upgrade
- GPS data Acquisition
- Training
- Continue the national awareness campaign





Thank You



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