INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (of UNESCO)

Fourteenth Session of the Intergovernmental Coordination Group
for the Indian Ocean Tsunami Warning and Mitigation System
(ICG/IOTWMS-XIV)

Jakarta, Indonesia, 17-19 November 2024

**National Report of Kenya**

Page 1: Overview

**Q1**

Consent: I have read the above information and wish
to proceed.

**Confirm by clicking the checkbox**

**Q2**

Please select your country from the list below:

**Kenya**

Page 2: PART I: Basic Information

**Q3**

TNC Name:

Phillip Okello OCHIENG

**Q4**

Position:

METEOROLOGIST

**Q5**

Organisation:

KENYA METEOROLOGICAL DEPARTMENT

**Q6**

Telephone Number:

**Q7**

E-mail Address:

koderaphillips@yahoo.com

**Q8**                                                    **Respondent skipped this question**

Fax Number:

**Q9**

Postal Address:

P.O Box 30259-00100
GPO, NAIROBI KENYA

Page 3: PART I: Basic Information

**Q10**

NTWC Agency Name:

KENYA METEOROLOGICAL DEPARTMENT

**Q11**

NTWC URL (web link) for tsunami warnings:

https://meteo.go.ke/

**Q12**

NTWC Agency Contact or Officer in Charge (person):

Dr. David GIKUNGU

**Q13**

Position:

Director

**Q14**

Telephone Number:

**Q15**

E-mail Address:

director@meteo.go.ke

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**Q16**

Postal Address:

P.O Box 30259-00100
GPO Nairobi, KENYA

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**Q17**

3a) Is your Tsunami Warning Focal Point (TWFP) the same as your National Tsunami Warning Centre (NTWC) agency?The TWFP is the 24 x 7 point of contact (office, operational unit or position, not a person) officially designated by the NTWC or the government to receive and disseminate tsunami information from an ICG Tsunami Service Provider according to established national Standard Operating Procedures. The TWFP may or not be the NTWC.

**Yes**

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Page 4: PART I: Basic Information

**Q18**

TWFP Agency Name (if different from the NTWC Agency):

**Respondent skipped this question**

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**Q19**

Name:

**Respondent skipped this question**

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**Q20**

Position:

**Respondent skipped this question**

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**Q21**

Telephone Number:

**Respondent skipped this question**

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**Q22**

E-mail Address:

**Respondent skipped this question**

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**Q23**

Postal Address:

**Respondent skipped this question**

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Page 5: PART I: Basic Information

**Q24**

TWFP 24x7 point of contact (office, operational unit or position, not a person):

KENYA METEOROLOGICAL DEPARTMENT

**Q25**

E-mail Address:

**Q26**

Telephone Number:

**Q27**

Cellular Telephone Number:

**Q28**

Fax:

Page 6: PART I: Basic Information

**Q29**                                                    **Yes**

3d) Has your country appointed a Tsunami Ready Focal
Point (TRFP)?The TRFP is a person from the Disaster
Management (DMO) or similar institution that:- Acts as a
national advocate for national implementation of the
Tsunami Ready Recognition Programme (TRRP) or a
recognised similar initiative to help make at-risk
communities prepared and resilient to any tsunami threat
within their Member State.- Actively contributes to the
national implementation of TRRP or a recognised similar
initiative.- Routinely update UNESCO-IOC
ICG/IOTWMS on the status of the national
implementation of the TRRP or a recognised similar
initiative. - Informs relevant national authorities and
orgaisations involved in the implementation of TRRP or a
recongised similar initiative on any information and/or
updates provided by UNESCO-IOC on activities related
to making at risk communities Tsunami Ready.

**Q30**

If yes, please provide their details below:Name of the TRFP:

Phillip Okello OCHIENG

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**Q31**

Position:

Meteorologist

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**Q32**

Agency:

Kenya Meteorological Department

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**Q33**

Telephone Number:

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**Q34**

E-mail Address:

koderaphillips@yahoo.com

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**Q35**

Postal Address:

P.O Box 30259-00100
GPO Nairobi KENYA

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Page 7: PART II: Hazard Assessment

**Q36**                                          **Yes**

4a) Has your country undertaken a hazard assessment?

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Page 8: PART II: Hazard Assessment

**Q37**                          **Multi-hazard assessment including tsunami**

4b) What type of hazard assessment has been carried
out?

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Page 9: PART II: Hazard Assessment

**Q38**

4c) What type of multi-hazard assessment has been carried out? (select all that apply)

**Drought,**

**Tsunami,**

**Earthquakes,**

**Epidemics,**

**Flooding,**

**Landslide**

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Page 10: PART II: Hazard Assessment

**Q39**

4d) Who did the tsunami hazard assessment in your country? (select all that apply)

**National Agency**

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**Q40**

4e) At what level was the tsunami hazard assessment carried out? (select all that apply)

**Regional Level**

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**Q41**

4f) Which coastal areas have been mapped for tsunami hazard? Please include the names of the Region / City and an approximation of the percentage mapped.

Coastal Counties of Mombasa, Kilifi, Kwale and Lamu

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**Q42**

4g) For each of the data types listed below (in rows), answer the two questions (in columns). Select Yes / No / Don't know from the drop-down menu.

|  | Was this data used for tsunami hazard assessment? | Is this data publicly available? |
| --- | --- | --- |
| Bathymetry | Yes | Yes |
| Seismo-tectonic model |  |  |
| Topography | Yes | Yes |
| Land Cover |  |  |
| Infrastructure details | Yes | Yes |

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**Q43**

4h) What products do you have from the tsunami hazard assessment? (select all that apply)

**Hazard map,**

**Inundation map,**

**Evacuation map**

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Page 11: PART II: Hazard Assessment

**Q44**

4i) On a scale of 1 (Very poor) to 5 (Very good), please rate your country's capability to undertake tsunami hazard assessment

Capacity to undertake tsunami hazard assessment          **Fair**

**Q45**

4j) On a scale of 1 (Not a priority) to 5 (Essential), what is the priority level in your country to improve capacity in the following areas of tsunami hazard assessment?

| | |
|---|---|
| Probabilistic Tsunami Hazard Assessment (PTHA) | **High priority** |
| Deterministic Tsunami Hazard Analysis | **High priority** |
| Field Studies on Tsunami Impacts | **High priority** |
| Hazard map | **Medium priority** |
| Inundation map | **High priority** |
| Evacuation map | **Medium priority** |

**Q46**                                                    **Respondent skipped this question**

4k) On a scale of 1 (No capacity) to 5 (Very good), what capacity does your country have to give training and/or consultancy on tsunami hazard assessment to other countries?

Page 12: PART II: Risk Assessment

**Q47**                                                    **Yes**

5a) Has your country undertaken a tsunami risk assessment?

Page 13: PART II: Risk Assessment

**Q48**                                                    **Multi-hazard risk assessment including tsunami**

5b) What type of risk assessment?

Page 14: PART II: Risk Assessment

**Q49**

5c) What hazards have been considered in your multi-hazard risk assessment? (select all that apply)

**Epidemics,**

**Tsunami,**

**Drought,**

**Earthquakes,**

**Flooding,**

**Landslide**

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Page 15: PART II: Risk Assessment

**Q50**

5d) Who did the tsunami risk assessment in your country? (select all that apply)

**National Agency**

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**Q51**

5e) At what level was the tsunami risk assessment carried out? (select all that apply)

**Regional Level**

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**Q52**

5f) Which coastal areas have been tsunami risk mapped? Please include the names of the Region / City and an approximation of the overall national percentage of risk prone areas mapped.

Coastal counties of Kwale, Mombasa, Kilifi and Lamu

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**Q53**

5g) How many Cities / Municipalities / Regencies are at risk from tsunami?

Four coastal counties

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**Q54**

5h) What products do you have from the tsunami risk assessment? (select all that apply)

**Risk map,**

**Evacuation map**

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Page 16: PART II: Risk Assessment

**Q55**

5i) On a scale of 1 (Very poor) to 5 (Very good), please rate your country's capability to undertake tsunami risk assessment

Capability to undertake tsunami risk assessment

**Fair**

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**Q56**

5j) On a scale of 1 (Not a priority) to 5 (Essential), what is the priority level of your country to improve capacity in the following areas of tsunami risk assessment?

| | |
|---|---|
| Tsunami risk assessment at national level | **High priority** |
| Tsunami risk assessment at regional level | **Essential** |
| Tsunami risk assessment at city level | **Essential** |
| Tsunami risk assessment at village level | **High priority** |
| Tsunami risk assessment at community / neighbourhood level | **High priority** |

**Q57**

5k) On a scale of 1 (No capacity) to 5 (Very good) what capacity does your country have to give training and/or consultancy on tsunami risk assessment to other countries?

| | |
|---|---|
| Tsunami risk assessment at national level | **Poor** |
| Tsunami risk assessment at regional level | **Poor** |
| Tsunami risk assessment at city level | **Poor** |
| Tsunami risk assessment at village level | **Poor** |
| Tsunami risk assessment at community / neighbourhood level | **Poor** |
| Other (specify below) | **Poor** |

Page 17: PART II: Policies

**Q58**

6a) Does your country have a national tsunami policy? For each of the four disaster management phases listed below, select standalone policy / multi hazard policy / policy not available. Use the comments box to detail the specific name of the policy (if available).

| | In what form is the policy? |
|---|---|
| Prevention and mitigation | **Policy is not available** |
| Preparedness | **Multi hazard including tsunami** |
| Emergency response | **Multi hazard including tsunami** |
| Rehabilitation and reconstruction | **Policy is not available** |

What is the name of policy? (if available):
National Disaster response strategy

**Q59**

6b) Does your country have local tsunami policies? For each of the disaster management phases listed below, select standalone policy / multi hazard policy / policy not available. Use the comments box to detail the specific name(s) of the policy (if available).

| | In what form is the policy? |
|---|---|
| Prevention and mitigation | **Policy is not available** |
| Preparedness | **Policy is not available** |
| Emergency response | **Policy is not available** |
| Rehabilitation and reconstruction | **Policy is not available** |

Page 18: PART II: Plans

**Q60**

7a) Does your country have national, local and community level tsunami disaster risk reduction plans? For each of the four disaster management phases listed below, select standalone plan / multi hazard plan / plan not available. Use the comments box to detail the specific name(s) of the plan(s) (if available). Please use the scroll bar to view the entire table.

| | National level | Local level | Community level |
|---|---|---|---|
| Prevention and mitigation | **National plan is not available** | **Local plan is not available** | **Community plan is not available** |
| Preparedness | **Multi hazard including tsunami** | **Local plan is not available** | **Community plan is not available** |
| Emergency response | **Multi hazard including tsunami** | **Local plan is not available** | **Community plan is not available** |
| Rehabilitation and reconstruction | **National plan is not available** | **Local plan is not available** | **Community plan is not available** |

**Q61**                                            **Yes**

7b) Are your country's tsunami disaster risk reduction plans based on hazards and risk assessments?

Page 19: PART II: Guidelines

**Q62**

8a) Does your country have national tsunami DRR guidelines? For each of the four lifecycle phases, select standalone guidelines / multi hazard guidelines / guidelines not available. Use the comments box to detail the specific name of the guidelines (if available).

|  | In what form are the guidelines? |
|---|---|
| Prevention and mitigation | **Guidelines not available** |
| Preparedness | **Multi hazard guidelines including tsunami** |
| Emergency response | **Multi hazard guidelines including tsunami** |
| Rehabilitation and reconstruction | **Guidelines not available** |

**Q63**

8b) Does your country have local tsunami DRR guidelines? For each of the four lifecycle phases, select standalone guidelines / multi-hazard guidelines / guidelines not available. Use the comments box to detail the specific name of the guidelines (if available).

|  | In what form are the guidelines? |
|---|---|
| Prevention and mitigation | **Guidelines not available** |
| Preparedness | **Guidelines not available** |
| Emergency response | **Guidelines not available** |
| Rehabilitation and reconstruction | **Guidelines not available** |

Page 20: PART III: Detection and Warning

**Q64**                                              **Yes**

9a) Does your country have a national capability to assess and/or receive potential tsunami threat information and advise/warn its coastal communities?

Page 21: PART III: Detection and Warning

**Q65**                                              **Use TSP data,**

9b) Does your country utilise the data provided by the IOTWMS Tsunami Service Providers (TSPs) for the Coastal Forecast Zones (CFZ) of your country's coastline to determine national threats or does it undertake its own threat assessments? (select all that apply)          **Use own threat assessments**

**Q66**

9c) Which organisation in your country has the responsibility for assessing and/or receiving potential tsunami threat information?Please provide the name and contact details.

NTWC

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**Q67**

9d) Does the organisation responsible for assessing and/or receiving potential tsunami threat information operate 24x7?

**Yes**

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**Q68**

9e) What / which infrastructure is available to enable 24x7 operations? (select all that apply)

**Computers,**

**Internet,**

**Landline Phone,**

**Mobile Phone or Cell Phone,**

**GTS (WMO Global Telecommunication System),**

**UPS (Uninterruptable Power Supply)**

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**Q69**

9f) Which level of tsunami threat forecast information is produced by the responsible organisation? (select all that apply)

**Ocean-wide**

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**Q70**

9g) Does the organisation have access to national and/or international seismic networks? (please select one from the following options)

**Yes, national and international**

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Page 22

**Q71**

9h) Is national seismic data shared in real time?

**All national seismic data is shared in real time**

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Page 23: PART III: Detection and Warning

**Q72**

9i) Does your organisation have access to GNSS data?

**Yes**

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**Q73**

9j) Is the list of broadband seismometers operated by your country listed accurately in the IOTWMS seismic database http://www.ioc-tsunami.org/index.php?option=com_oe&task=viewDocumentRecord&docID=20 796)?

**Yes**

**Q74**

9k) When compared to the IOTWMS seismic database (http://www.ioc-tsunami.org/index.php?option=com_oe&task=viewDocumentRecord&docID=20 796), have you decommissioned or added broadband seismometers operated by your country (Check all that apply and include details in the comments section below)

**There are no changes**

Page 24: PART III: Detection and Warning

**Q75**

9l) Does the organisation have access to national and/or international sea level networks? (please select one answer from the following options)

**No**

Page 25: PART III: Detection and Warning

**Q76**

9m) Is national sea level data shared in real time?

**Respondent skipped this question**

Page 26: PART III: Detection and Warning

**Q77**

9n) Is the list of sea level stations operated by your country listed accurately in the IOTWMS sea level database (http://www.ioc-tsunami.org/index.php?option=com_oe&task=viewDocumentRecord&docID=20 833)?

**Yes**

**Q78**

9o) When compared to the IOTWMS sea level database (http://www.ioc-tsunami.org/index.php?option=com_oe&task=viewDocumentRecord&docID=20 833), have you decommissioned or added sea level stations operated by your country (Check all that apply and include details in the comments section below)

**There are no changes**

Page 27: PART III: Detection and Warning

**Q79**

9p) What other observing networks are operated by your country and used for tsunami early warning?

**Other (please specify below)**

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**Q80**

9q) Does the organisation have the capability of analysing real-time seismic and sea-level data for potential tsunami threat?

**No**

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**Q81**

9r) Does the organisation have capability for tsunami modelling to support generation of threat forecasts?

**No**

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**Q82**

9s) Does the organisation responsible for identifying a potential tsunami threat also issue national tsunami no threat, watches, advisories, alerts and/or warnings?

**Yes**

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**Q83**

9t) What are the threshold or criteria (for example sea levels, magnitude) for declaring a potential national tsunami emergency, watch, alert, advisory or warning?

earthquake magnitudes within the wider ocean basin is used as a basis for issuance of the advisories and warnings

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**Q84**

9u) What actions were taken by your country's National Tsunami Warning Centre (NTWC) and/or Tsunami Warning Focal Point (TWFP) in response to earthquake events and messages issued by the IOTWMS TSPs during the inter-sessional period?

Assess the potential threats

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**Q85**

9v) Did your country's NTWC and/or TWFP participate in the 6-monthly communications tests conducted by the IOTWMS TSPs?

**Yes (please name the organisation(s) that participated in the additional comments)**

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**Q86**

9w) Did your country's NTWC and/or TWFP participate in national and/or international Tsunami Exercises (eg. IOWave) conducted in the inter-sessional period between ICG meetings?

**Yes (please name the exercise(s) and organisation(s) that participated in the additional comments)**

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**Q87**

9x) After the December 26 2004 tsunami and until now, was your country impacted by any damaging tsunami? If Yes, what was your national response to each event (please comment if warnings were issued by your NTWC in a timely manner to enable communities to respond, if public were evacuated, etc.)

**No**

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**Q88**

9y) Since 2018, have there been any enhancements in your national warning SOPs and alerting?

Yes (please specify the enhancements):

no comment

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Page 28: PART III: Dissemination

**Q89**

10a) How is the tsunami information (warning, public safety action, etc) disseminated within country? (select all that apply)

**Email,**

**SMS,**

**Telephone,**

**Radio,**

**WhatsApp / Facebook / Other social media,**

**Sirens,**

**Television,**

**Warning towers,**

**Police/military,**

**Public alert system,**

**VHF radio**

---

**Q90**

10b) For each emergency response organisation listed below, which communication methods for emergency response are available? (select all that apply)

| | |
|---|---|
| National DMOs | **Telephone, Email, SMS, Siren** |
| Local DMOs | **Telephone, Email, SMS, Siren** |
| General Public | **SMS, Siren** |
| Coastal Communities | **SMS, Siren** |
| Media | **Telephone, Email, SMS** |

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**Q91**

10c) How is the warning situation terminated?

Through the same channels used in the dissemination process

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**Q92**

10d) What website is used for display of national threat status during events? Please provide the URL.

https://meteo.go.ke/

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**Q93**

10e) Does your country's national tsunami warning system utilise the Common Alert Protocol (CAP) for the dissemination of warnings? If yes, please describe how the CAP is integrated into your warning dissemination processes, including any platforms or communication channels that are specifically utilised to broadcast CAP-formatted alerts to the public and relevant stakeholders.

Yes (please describe how CAP is integrated):
no comment

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**Q94**

10f) Who is primarily responsible for the direct dissemination of tsunami alerts to the public in your country, and what is the timeframe for these alerts to achieve effective last-mile responses? Please provide details.

The NDMO and Local DMOs and the BMUs are responsible for the dissemination of the alerts, this usually take less than 30minutes in normal operation

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Page 29: PART IV: Standard Operating Procedures

**Q95**

11a) For each of the (upstream) emergency response issues listed below (in rows), consider the four questions (in columns). Select a yes/no response using the drop-down menus.

| | Does your SOP address this aspect of tsunami emergency response? | Is support required to develop/improve this aspect of tsunami emergency response in your SOP? | Is support required to develop Human Resources in this aspect of tsunami emergency response? | Is support required to develop infrastructure for this aspect of tsunami emergency response? |
|---|---|---|---|---|
| 24/7 Emergency Operation Centre (EOC) | Yes | Yes | Yes | Yes |
| Receiving information from the NTWC | Yes | Yes | Yes | Yes |
| Response Criteria / decision making | Yes | Yes | Yes | Yes |

**Q96**

11b) For each of the (downstream) emergency response issues listed below (in rows), consider the four questions (in columns). Select a yes/no response using the drop-down menus.

| | Does your SOP address this aspect of tsunami emergency response? | Is support required to develop/improve this aspect of tsunami emergency response in your SOP? | Is support required to develop Human Resources in this aspect of tsunami emergency response? | Is support required to develop infrastructure for this aspect of tsunami emergency response? |
|---|---|---|---|---|
| Warning dissemination | Yes | Yes | Yes | Yes |
| Evacuation call procedures | Yes | Yes | Yes | Yes |
| Community evacuation procedures | Yes | Yes | Yes | Yes |
| Communication with NTWC | Yes | Yes | Yes | Yes |
| Communication with Local Government | Yes | Yes | Yes | Yes |
| Media arrangements | Yes | Yes | Yes | Yes |
| Communication with other stakeholder i.e. Red Cross, Fire Brigade, Search and Rescue, Police, Army, Navy etc. | Yes | Yes | Yes | Yes |

**Q97**                                                    **Yes**

11c) Would your country be willing to share your SOPs
with the IOTIC and other countries?

Page 30: PART IV: Evacuation Infrastructure

**Q98**

12a) Does your country have the following evacuation infrastructure? (select all that apply and detail specific areas). Please use the scroll bar below to view the entire table.

| | |
|---|---|
| Evacuation shelter | **Yes** |
| Vertical evacuation structure | **No** |
| Natural or artificial hill for vertical evacuation | **Yes** |
| Evacuation signage | **Yes** |

**Q99**

12b) Is your evacuation infrastructure integrated in the evacuation plan?

**Yes**

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Page 31: PART IV: Tsunami Exercises

**Q100**

12c) Are tsunami exercises incorporated within national policies and guidelines? (select all that apply)

**National guidelines**

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**Q101**

12d) At what levels were the exercises conducted during the inter-sessional (between ICG meetings) period? (select all that apply)

**Regional level**

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**Q102**

12e) What kind of tsunami exercise activities have been undertaken in your country and how many times during the inter-sessional (between ICG Meetings) period?

| | |
|---|---|
| National tsunami drill/exercise | **Yes** |
| Comment: | 3 |
| Indian Ocean Wave exercise | **Yes** |
| Local tsunami drill/exercise | **Yes** |

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Page 32: PART IV: Public Awareness

**Q103**

13a) Who is responsible for tsunami public awareness programmes in your country?

**National Tsunami Warning Centre**

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**Q104**

13b) What tsunami related education and awareness materials do you have? (select all that apply)

**Posters**

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**Q105**

13c) Would your country be willing to share these education and awareness materials with the Indian Ocean Tsunami Information Centre (IOTIC) and other countries?

**Yes**

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**Q106**

13d) Do you undertake the following tsunami awareness activities?

| | |
|---|---|
| World Tsunami Awareness Day | **Yes** |
| Global Disaster Risk Reduction day | **Yes** |
| Public tsunami preparedness outreach | **Yes** |
| School and/or children awareness | **Yes** |
| Exhibitions | **Yes** |
| Tsunami Exercise | **Yes** |

**Q107**

13e) Use the boxes below to indicate any areas in which you require support from the IOTIC to develop or enhance public awareness in your country. If you do not require support, please leave blank.

**Customisation of general materials to country or community**

**,**

**Development of tsunami awareness programmes, activities or campaigns**

**,**

**Participation/support by international agencies or experts to your country's activities**

**,**

**Provision of general tsunami awareness materials**

**Q108**

13f) Can your country offer support to other Member States to develop or enhance public awareness in their country?

**No**

## Page 33: PART V: UNESCO-IOC Tsunami Ready Recognition Programme (TRRP)

**Q109**

14a) Does your country have an interest to participate in the UNESCO-IOC TRRP?

**Yes, we are already participating**

**Q110**

14b) Aside from UNESCO-IOC TRRP, is your country currently implementing any other tsunami resilience and preparedness related initiatives or programmes?

**No**

**Q111**

14c) What number of villages, cities/districts and provinces/state levels in your country are at risk to tsunami?

Province / State          **4**

**Q112**

14d) Does your country have a National Tsunami Ready Board (NTRB)The National Tsunami Ready Board (NTRB) is responsible for guiding the community on the steps for Tsunami Ready recognition and for the review and approval of the community's Tsunami Ready application. It consists of designated representatives of the National Emergency Management Agency or Disaster Mangement Office, NTWC, TNC, the scientific community, and other invited guests.

**No (if no, is there another existing coordination mechanism that can fulfil this role of NTRB? please specify below)**

**Q113**

14e) Which institution(s) should be involved in the implementation of TRRP or similar national initiative? (please use a comma between the name of the institutions)

NTWC, NDMO, LDMOs, Humanitarian agencies

**Q114**

14f) Are any communities (for example, villages, cities, districts, provinces or states) in your country currently working towards implementing or interested in implementing the UNESCO-IOC TRRP or similar national initiative?

**No**

**Q115**

14g) Have any communities in your country achieved recognition through UNESCO-IOC TRRP or similar national initiative?

**No**

## Page 34: PART V: UNESCO-IOC Tsunami Ready Recognition Programme (TRRP)

**Q116**

15a) Is there national capacity to develop tsunami hazard maps?

**No, there is a strong need for technical support organised through IOTIC and/or ICG/IOTWMS activities**

**Q117**

15b) Is there national capacity to train the community on identifying and estimating the number of people that live in the tsunami hazard zone?

**Yes, it can be partially done through mobilising national experts and funding, but also needs some international technical expertise**

**Q118**

15c) Is there national capacity to train the community on the inventory of available economic, instrastructural, political, and social resources to reduce tsunami risk at the community level?

**Yes, it can be partially done through mobilising national experts and funding, but also needs some international technical expertise**

**Q119**

15d) Is there national capacity to work with the community to develop tsunami evacuation maps, plans and procedures at the community level?

**No, there is a strong need for technical support organised through IOTIC and/or ICG/IOTWMS activities**

**Q120**

15e) Is there national capacity to work with the community to develop a public display of tsunami information?

**Yes, it can be partially done through mobilising national experts and funding, but also needs some international technical expertise**

**Q121**

15f) Is there national capacity to work with the community to develop local context outreach and public education materials?

**Yes, it can be partially done through mobilising national experts and funding, but also needs some international technical expertise**

**Q122**

15g) Is there national capacity to train and build capacity of community to be able to organise and implement outreach and education activity?

**Yes, it can be partially done through mobilising national experts and funding, but also needs some international technical expertise**

**Q123**

15h) Is there national capacity to train and build capacity of community to be able to organise and implement tsunami exercises?

**Yes, it can be partially done through mobilising national experts and funding, but also needs some international technical expertise**

**Q124**

15i) Is there national capacity to train and build capacity of communities to be able to develop their community Emergency Operation Plan?

**No, there is a strong need for technical support organised through IOTIC and/or ICG/IOTWMS activities**

**Q125**

15j) Is there national capacity to train and build capacity of communities to manage 24/7 tsunami emergency response operation?

**No, there is a strong need for technical support organised through IOTIC and/or ICG/IOTWMS activities**

**Q126**

15k) Is there national capacity to train and work with the communities to develop mechanisms (means and procedures) to receive 24/7 warning?

**No, there is a strong need for technical support organised through IOTIC and/or ICG/IOTWMS activities**

**Q127**

15l) Is there national capacity to train and work with the communities to develop mechanisms (means and procedures) to disseminate 24/7 warning to the community?

**Yes, it can be partially done through mobilising national experts and funding, but also needs some international technical expertise**

Page 35: PART V: UNESCO-IOC Tsunami Ready Recognition Programme (TRRP)

**Q128**

15m) Which of the following challenges inhibit the implementation of TRRP or similar national initiatives in your country? (select all that apply)

**Tsunami is not a high priority hazard in country,**

**Limited support of government (for example, policy, financial)**

**,**

**Lack of community interest**

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**Q129**

16) Please briefly describe any innovations or modifications to national tsunami warning and mitigation procedures or operations since the last reassessment. For example, this might include tsunami related research projects, implementation of new seismic and/or sea level monitoring technologies, tsunami mitigation activities and best practices (especially in preparedness and emergency management), as well as public education programmes or other measures taken to heighten awareness of the tsunami hazard and risk.

There has been modernization of the marine observation network for sea level monitoring. A development of a marine spatial plan is in process to plan effectively for the marine space.

**Q130**

17) Please provide a brief summary of plans for future tsunami warning and mitigation system improvements

Colaboration with China Ocean Administratuin to develop research centre for the ocean and enhance the marine observation

**Q131**

18) Please list areas where your country would like support for targeted capacity development.

1. Tsunami Inundation modelling
2. Development of revevant national tsunami policies

**Q132**

Upload Documents

**Respondent skipped this question**