

SAIHC DISASTER RESPONSE FRAMEWORK

Submitted by: South Africa for SAIHC

- References:**
- A. IHO Publication M-3 - *Repertory of IHO Resolutions*, 2nd Edition - 2010, Updated to August 2018, including current Resolution:
 - B. 3rd Meeting of the Council – Summary Report.
 - C. 16th SAIHC Conference – Summary Report.
 - D. PRO-3.2 Revision Of IHO Resolution 1/2005 – IHO Response To Disasters

PROPOSAL

The proposed revised IHO Resolution 1/2005 as amended introduces an improved framework under which the IHO and the SAIHC can respond to disasters with sensible measures in a timely manner, within the scope of work of both the IHO and the RHCs. Noting the endorsement by the Council, SAIHC Members are invited to review and approve the proposed draft as presented herewith, as well as to review and populate the contact list provided in Annex A.

1 Introduction

This document aims at preparing the SAIHC to respond to disasters in accordance with the References. In recent years, huge earthquakes, tsunamis, hurricanes and other natural disasters occurred all over the world, and not only severely affected local communities through the widespread loss of life and the extensive destruction of most facilities, but also severely affected safety of navigation through the destruction of port facilities and the creation of new navigational obstacles. A huge number of refugees were created and immediately suffered from shortages of food, water and fuel. In such circumstances support by sea transport was vital and depended on the immediate restoration of appropriate hydrographic and charting services.

It should be noted that “the Sendai Framework for Disaster Risk Reduction 2015-2030” was adopted at the 3rd United Nations (UN) World Conference on Disaster Risk Reduction (WCDRR3), where international organizations are expected to implement activities to understand and manage disaster risks.

Various data and information obtained from hydrographic and charting activities are beneficial for sharing information right after a disaster, the development of restoration plans for damaged coastal areas and for strategies for disaster risk reduction. It would be important to provide hydrographic information effectively in the process from the occurrence of the disaster to the recovery.

The Southern African and Islands Hydrographic Commission (SAIHC) and its Member States should ensure adequate preparedness so as to enable an immediate and appropriate response to any future disaster affecting coastal areas of the region. Hydrographic Offices should therefore be part of their States' National Plan, developed beforehand to respond immediately after the occurrence of such severe disasters and participate in and cooperate in the development and implementation of the restoration plans for the damaged coastal areas and the strategies for disaster risk reduction within their area of responsibility, which may vary from Member State to Member State. As such, following activities can be identified with the overarching framework of the Convention on the IHO and General Regulations of the IHO.

2 Activities

a) By coastal States within SAIHC:

All coastal States within SAIHC are encouraged to develop contingency plans in advance in order to be prepared in case a disaster occurs. The specific roles and tasks of the Hydrographic Offices within these depend on the individual national governance structures. Contingency plans may contain the following key elements as appropriate:

- i) Immediately upon the occurrence of a disaster, including tsunami, promulgate appropriate navigational warnings and necessary information and advice to shipping through existing channels (e.g. NAVTEX) using appropriate ways, such as graphical information on maps and charts including geographic extent of the disaster. In addition, and following further monitoring and assessment, promulgate updated warnings, information and advice in accordance with the development of the event.
- ii) Co-operate with the NAVAREA VII (South Africa) and VIII (India) coordinators and other national coordinators so that warnings, information and advice can be made available to mariners beyond the area of national jurisdiction as soon as is practicable.
- iii) Assess the extent of damage to the coastal area particularly to ports, harbours, straits, approaches, and other restricted areas, by whatever means available.
- iv) Assess, in co-operation with other national agencies, for example, lighthouse and port authorities, the extent of damage to navigational aids.
- v) Prioritize actions and allocate resources in order to identify requirements and undertake preliminary re-surveys starting with the most critical areas for navigation, aiming at ensuring the passage of support and supplies through maritime channels and ports, and the marking of new dangers where necessary. In case international assistance for re-surveys is required, the same may be pursued through diplomatic channels while keeping the NAVAREA VII coordinator informed.

- vi) Assess the specific effects on shipping of the existence of obstacles and any changes to the seafloor that can hinder navigation, taking full account of the effects of drifting obstacles which may also hinder preliminary survey results.
- vii) Take the following action to assess and define new hydrographic or cartographic requirements, including:
 1. Conducting hydrographic surveys in harbours and approaches as soon as practicable wherever the depth is likely to have changed due to geomorphic change, obstacles, or accumulation of sediment. Surveys should be progressed incrementally in support of progress in reconstruction of port facilities.
 2. Checking and confirming relevant benchmarks. Re-defining chart datum, if necessary.
 3. Providing nautical information as soon as practicable. Providing chart correction information or new editions of charts incrementally according to priorities and available resources. Indicating newly surveyed areas in chart correction information or on new editions of charts in order to highlight areas of more reliable information in areas where significant changes of depth have taken place.
- viii) In case, only humanitarian assistance is required, the nearest operational port may be indicated to NAVAREA VII coordinator.

Also, actions to be taken in an ordinary period may contain the following key elements as appropriate:

- i) Prepare equipment and information and conduct exercises to implement the contingency plan.
- ii) Prepare and keep updated SAIHC Disaster Response Contact List (Annex A) identifying stakeholders that will need to be contacted in order to obtain/to pass relevant information.
- iii) Share information about disaster response with the Chair of SAIHC and the IHO Secretariat as appropriate. This includes support requests for the immediate disaster response as well as the recovery response, for instance enabling entry survey or subsequent updating of nautical charts.

It is also very important for coastal States to collect relevant coastal and bathymetric data in their areas of responsibility and to make this available to the appropriate organizations to support the establishment and improvement of tsunami early warning systems, protection of coastal areas and relevant simulation studies. In particular, coastal States should co-operate and support the IOC Tsunami Warning Programme (www.ioc-tsunami.org) in setting up sea-level and tide gauges networks, procedures and systems for the exchange and transmission of near real time sea-level data¹. One to five minute transmission of sea-level data, properly sampled (~1 min rather than 15 min or 1 h) is recommended for specific gauges likely to provide early warnings of tsunamis and storm surges.

¹See also "Manual on Sea Level: Measurement and Interpretation Volume IV"

https://www.psmsl.org/train_and_info/training/manuals/

Any necessary regional cooperation for the collection of data can be coordinated through SAIHC with other States in the Region and regional bodies of other International Organizations as appropriate, such as the IOC.

b) By SAIHC:

SAIHC has included disaster preparedness response as an Agenda item on meetings as per the proposed IHO Resolution 1/2005 – IHO Response to Disasters.

- i) The Chair of SAIHC may act as a broker for hydrographic demand (from the affected countries) and supply (by countries offering assets).
- ii) SAIHC has commenced with implementing capacity building for disaster preparedness and response.
- iii) Prepare a list of major ports, anchorages and straits for the region as a ready reckoner for all member states with information on berths, depths alongside etc in consultation with all member states.

c) By the IHO Secretariat:

- i) The IHO Secretariat should promote actions by member states and SAIHC as appropriate. The IHO Secretariat should promote sharing best practices regarding disaster preparedness and response provided by member states for the world resilience.

3 Diplomatic clearance

Effective disaster response predicated on diplomatic clearance to actually deploy the offered hydrographic assets in theatre. It is the responsibility of affected coastal States to institute procedures to progress 'hydrographic' requests timely through their Nations Diplomatic channels. As it is the national responsibility of the Member States offering such support, to use those channels. The IHO Secretariat and Chairs of SAIHC have no means to absorb these national responsibilities.

