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Input paper for the following Committee(s): check as appropriate Purpose of paper:

**□** ARM **□** ENG **□** PAP **X** Input

**□** DTEC **X** VTS **□** Information

Agenda item 8.7

Technical Domain / Task Number 2 1.9.1

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Proposal for the revision of guidelines related to Vessel Traffic Service operations in natural disaster

# Summary

The role of VTS is crucial for the maritime safety under the condition of severe natural disaster, which is caused by earthquakes and tsunamis, or serious weather. This paper proposes revisions of guidelines related to VTS operations in natural disasters.

## Purpose of the document

This document is to propose to revise guidelines related the natural disaster management align with task 1.9.1; the work consists of adding relevant items to existing guidelines.

IALA documents should be a comprehensive reference guide, and it is recommended to include the content necessary for VTS operators to have awareness and respond appropriately in any difficult situations.

In recent years, extreme weather conditions and disasters have become more severe and have had a greater social impact all over the world. Since disaster response could occur at any location in the world, it is believed that VTS operators need to be prepared for such a situation.

The proposal would help VTS operators to consider what to do in the event of a natural disaster. This could contribute to the safety of navigation by providing appropriate information from VTS in difficult situations.

## Related documents

* G1120 on Disaster Recovery: This document emphasizes responsibilities and initial response strategies, including comprehensive disaster recovery planning.
* G1141 on Operational Procedures for Delivering VTS: Section 5.2.8 specifically deals with natural disasters.

# Background

The global warming is bringing severe weather conditions; for example, there are increasing number of typhoons around Asian countries. In addition, there are some huge large earthquakes and tsunamis frequently around Japan and the world.

Those natural disasters often develop dangerous situation for maritime traffic which can lead to serious maritime accidents; for example, in Japan,

* In 2011, Great East Japan Earth quake occurred. There were quite a lot of ships stacked and anchored in Tokyo Bay due to the shutdown of ports, and made it difficult for ships in the bay to evacuate from the bay.
* In 2018, extremely strong wind caused by a typhoon got a vessel in dragging anchor, as a result, the vessel collided with a bridge that was the only access to the airport.

In case of such natural disasters, the role of VTS is crucial in minimising the potential damage as small as possible.

Japan is famous for its frequent disasters such as typhoon and earthquakes and the Japan Coast Guard has a great deal of experience in responding to them. There are several operational procedures for VTS centres as well as legal provisions regarding the response to ensure the vessel traffic safety in the event of natural disasters in preparation and actual situations.

In this regard, it could be useful for competent authorities and VTS authorities to have knowledge and perspective on responding the disaster situation including daily basis preparations.

# DISCUSSION

The work for the revision is to add some items as triggers for further consideration in each authority. These are actual items that are being done in Japan.

As the extent of the responsibility of the VTS authority varies from country to country, the actual response that is implemented is not unified. However, in the event of a disaster, various obstacles may arise and communication with the relevant authorities may not be possible. It is therefore very important to respond flexibly, regardless of the extent of the authority. It is also useful to have a common understanding of the actions to be taken in case of a disaster among shore-based authorities, stakeholders and vessels.

The proposed revisions are as follows:

* IALA Guideline G1120 Disaster Recovery

**Add below sentences at the last part of Section 4. FIRST RESPONSE AFTER A DISASTER.**

In addition, in the event of natural disaster, it should be considered that communications between relevant authorities, stake-holders and ships could be impossible due to the damage and failures of facilities. This also would disrupt the understanding of the disaster situation, the monitoring of the operational status of Aids to Navigation and shore facilities due to interruption of data exchange, and the operations of the VTS centres.

Given these possibilities, it may be essential to develop guidelines in advance for authorities, VTS centres, relevant personnel and vessels for action to be taken immediately after the occurrence of disaster, in order that they have a common understanding of disaster response and are able to act on their respective responsibilities.

* IALA Guideline G1141 Operational Procedures for Delivering VTS

**Revise Section 5.2.8 as follows:**

**(Original)**

5.2.8. NATURAL DISASTER

Natural disaster procedures should be established to deal with situations such as earthquakes, tidal waves, fire, and exceptional weather conditions. Actions may include:

* + Promulgate information to vessels in the VTS area;
  + Act on local call-out procedures; and
  + Inform MRCC.

**(Draft Revision)**

5.2.8. NATURAL DISASTER

Natural disaster procedures should be established to deal with situations such as earthquakes, tsunamis, tidal waves, fire, hurricane, typhoon, and exceptional weather conditions. Actions may include:

* Promulgate information to vessels in the VTS area, for example:
* Occurrence of major earthquake/disaster
* Issuance of tsunami information
* Advisory for evacuation from the port/area
* Restriction on navigation
* Closure of the port/area
* Preventing dragging anchor
* Act on local call-out procedures such as the support for the transportation of emergency supplies　and resources by vessels; and
* Inform and cooperation with MRCC.

# Action requested of the Committee

VTS committee is requested to:

1. Consider this proposal;
2. Inform this proposal to DTEC committee and ARM committee, if necessary; and
3. Take necessary action appropriately.