

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

☐ ARM                      ☐ ENG                      ☐ PAP  
☐ DTEC                      ☒ VTS

Purpose of paper:

☒ Input  
☐ Information

Agenda item 7.2

Technical Domain / Task Number <sup>2</sup> .....

Author(s) / Submitter(s) CDR. Kinji TAKEUCHI and LCDR. Mayumi ARITA, Japan Coast Guard

## Proposal on the work for the guideline on the disaster management of Vessel Traffic Service

### 1 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 that the Committee develop guidelines for the disaster management in relation to VTS.

#### 1.1 Purpose of the document

It is recommended that the development of documents for the disaster management of VTS should be commenced in consideration of the severe damage of current natural disasters; this work may include the development of appropriate guideline for VTS. In addition, the Japan Coast Guard wishes to inform the Committee of its intention to contribute to the work of the future Committee's sessions on this subject.

#### 1.2 Related documents

- R1009 on Disaster Recovery: This document emphasizes responsibilities and initial response strategies, including comprehensive disaster recovery planning.
- R1004 on Sustainability in Marine Aids to Navigation: Addresses sustainable practices in providing marine navigational aids.
- R0127 on VTS Operations: This document provides practices for interactions between the VTS, participating vessels and allied service.
- G1120 on Disaster Recovery: Similar in scope to R1009, focusing on recovery aspects.
- G1141 on Operational Procedures for VTS: Section 5.2.8 specifically deals with natural disasters, outlining operational procedures during events like earthquakes, tsunamis, tidal waves, fires, and extreme weather. Key actions include disseminating information to vessels within VTS areas, implementing local response protocols, and coordinating with Marine Rescue Coordination Centers (MRCC).
- G1102 on VTS Interaction with Allied or Other Services: Annex C of this document replicates some content from G1141, emphasizing the importance of VTS in collaborative disaster response scenarios.
- G1089 on Provision of a VTS: Section 4.1.2, describing the examples of timely and relevant information, includes Tsunami in the item of the meteorological warning.

## 2 BACKGROUND AND DISCUSSION

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

Those natural disasters often create dangerous situation for maritime traffic which can lead to serious maritime accidents; for example, in 2018 in Japan, extremely strong wind accompanied 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 addition, in 2011 in Japan, there were too many ships stacked in the Tokyo bay, which made it difficult for all the ships in the bay to evacuate from the bay.

In case of such natural disasters, the role of VTS is crucial in minimising the potential damage as small as possible. In this regard, some guidelines for sharing knowledge and experience on the VTS disaster management could be useful for the competent authorities. These guidelines may include examples of regulatory provisions on the disaster management and operational procedures for VTS centers under the condition of natural disasters with some daily basis preparations.

For example, Japan has several regulatory provisions on the disaster management, i.e. typhoons and earthquakes, for vessel traffic safety. In addition, in Japan, there are some operational procedures for VTS centers under the condition of natural disasters with some daily basis preparations. Those case studies from Japan together with those from other countries could be a basis of the discussion in the development of the guideline.

## 3 POSSIBLE CONTENTS OF THE GUIDELINE

- Risk Assessment and Planning: Guidelines on assessing risks specific to various natural disasters like earthquakes, tsunamis, or severe weather conditions, and developing comprehensive disaster management plans.
- Communication Protocols: Establishing clear communication channels among VTS, vessels, and relevant maritime authorities for efficient information dissemination during disasters.
- Emergency Procedures: Detailed procedures for VTS operations during emergencies, including vessel rerouting, port closures, and emergency assistance coordination.
- Training and Drills: Recommendations for regular training and drills for VTS operators and stakeholders to ensure preparedness for disaster scenarios.
- Data Management and Technology Utilization: Utilizing technology for better prediction and response to natural disasters, and managing essential data effectively.
- Collaboration with Other Agencies: Guidelines for effective collaboration with meteorological agencies, emergency services, and other relevant authorities.
- Post-Disaster Recovery Plans: Strategies for quick recovery and resumption of normal operations post-disaster, including damage assessment and repair prioritization.
- Review and Update of Guidelines: Regular review and updating of the guidelines based on new insights, technological advancements, and past disaster experiences.

## 4 ACTION REQUESTED OF THE COMMITTEE

JCG proposes to the VTS committee a new work which may include the following:

- 1 to develop a new guideline for the disaster management from VTS; and
- 2 to review, study and/or develop other associated documents as appropriate.