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

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

**X** ENAV **X** VTS **□** Information

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Digital Communications Technology in VTS

Input to VTS47 and ENAV24

# Summary

This document introduces the report and associated outcomes from the *Expert Meeting on the Use of Digital Communication Technology in Vessel Traffic Services* hosted by Japan Coast Guard (12-15 March 2019, Tokyo, Japan), for the Committee’s consideration at VTS47 and ENAV24.

## Related documents

Related documents include:

* Input paper - *VTS47-3.1.3.1 Report from the Expert Meeting on the Use of Digital Communication Technology in Vessel Traffic Services*

# Background

It is expected that the use of digital communication by VTS will increase significantly in the near future as a means to enhance communications and reduce the opportunity for misunderstanding caused by a miss hearing and/or a language barriers in communication between ship and shore and ship and ship.

In addition to AIS, some VTSs use other digital communication system such as satellites, internet and mobile phone with not only vessels but also other stakeholders and plan to use emerging digital communication technologies such as VDES, NAVDAT and LTE-M for the provision of clear, concise and unambiguous communications in VTS.

Noting these developments, Japan Coast Guard hosted the Expert Meeting to exchange knowledge, experience and information on the current and future use of digital communication technology in VTS and to identify the gaps and challenges of digital communication technologies in order to promote appropriate and better use of such technologies in VTS in the future.

The goals for the meeting were to:

* To facilitate understanding of the current use and/or the future plan of digital communication in each nation
* To identify gaps and challenges on the use of digital communication in VTS
* Based on the gaps and challenges identified, to develop possible solutions
* To develop report and recommendations

# Discussion

Eighteen participants from Australia, Norway, Singapore, the United States and Japan, representing Competent Authorities, Port Authorities and maritime industries participated in the meeting.

The key conclusions and recommendations from the meeting include:

* The use of digital communication technology to reduce the opportunity for misunderstanding through the provision of clear, concise and unambiguous communications offers numerous benefits to VTS, mariners and allied services.

IALA is invited to promote the use of digital communication technologies by:

* Preparing a high-level discussion paper to identify and communicate the benefits of digital communications technologies to all stakeholders.
* Consider the application of digital communications in all guidance documents currently being prepared, where applicable.

In particular, it is suggested that following the release of IALA guidance for VTS voice communications, including structure and phraseology in the near future, consideration be given to preparing guidance for digitally communicating information based on standard VTS voice phraseology.

Note**:** it is suggested these documents could be developed jointly by the VTS and ENAV Committees.

* Consider developing a definition for digital communication in VTS to ensure a common understanding within the maritime sector. Noting that there are two types of digital communication in VTS, human to human and machine to machine, the following draft definition was developed at the meeting.

*“Digital communication in Vessel Traffic Service is exchange of validated information and data in interaction between ship and shore.”*

* The portrayal of information is essential for the VTS communication purpose and although recognizing the portrayal issue is not digital communication technology matter in a narrow sense and out of the remit of IALA, IALA should continue to be involved in the development of portrayal issue at IHO, IMO, IEC, etc.
* The IALA symposium at Rotterdam in 2020 and IHMA Congress in 2020 provide a great opportunity for the promotion and facilitation of use of digital communication technology in VTS and therefore the participation of the members of VTS and ENAV Committee is encouraged.
* The IALA Workshop on initial operating capability phase for e-navigation services in Singapore also provides a good opportunity for considering the use of digital communication technology in VTS and its output should be shared with all IALA Committees, especially VTS and ENAV.

# Action requested of the Committee

The Committee is requested to note the report and recommendations from the Expert Meeting on the Use of Digital Communication Technology in Vessel Traffic Services (*VTS47-3.1.3.1 Report from the Expert Meeting on the Use of Digital Communication Technology in Vessel Traffic Services*) in progressing its 2018-2022 work programme tasks where digital communications technology may be applicable.

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-1)
2. Leave open if uncertain [↑](#footnote-ref-2)