 Input paper: [[1]](#footnote-1) ENAV18-11.9.1

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

**□** ARM **□** ENG **□** PAP **☒** Input

**☒** ENAV **□** VTS **□** Information

Agenda item [[2]](#footnote-2) 11

Technical Domain / Task Number 2 …………………………………

Author(s) / Submitter(s) Hannu Peiponen, Antti Kukkonen / Furuno Finland Oy

Structure of IALA Documentation on VDES

# Summary

This paper introduces a proposal for structuring the IALA documentation on VDES, including proposal for establishing IALA documentation for VDES related applications.

## Purpose of the document

Purpose of this document is to introduce our proposal for the IALA documentation structure on VDES. The motivation for structuring the documentation as proposed is to elaborate better what VDES is and what will it deliver and by this means assist in perceiving how the real-life implementations could be structured.

An example of proposed new documentation is submitted separately for ENAV18, see Related documents.

The proposal on documentation structure within this input document is intended for discussion at ENAV18.

## Related documents

ENAV17-14.1.11: Liaison Note [on] Draft Guidelines on User Requirements for VDES.

ENAV18-11.10: Draft IALA Guideline on VDES related applications-2016-03-01.docx

# Background

IALA ENAV Committee WG3 has been working on defining the key user requirements for VDES for the purpose of understanding better the environment for which the communications should be developed for. This work has resulted a summary of VDES user requirements, which was distributed within IALA after ENAV17 (ENAV17-14.1.11: Liaison Note [on] Draft Guidelines [on] User Requirements for VDES).

The user requirements document included in ENAV17-14.1.11 was developed to a further stage during the IALA VDES Workshop arranged in Tokyo 15-19 February 2016.

An idea that emerged in the workshop suggested that this document could evolve to become a guideline for the VDES related e-Navigation applications, thus complementing the technical VDES documentation that falls under scope of IALA ENAV WG3 communications.

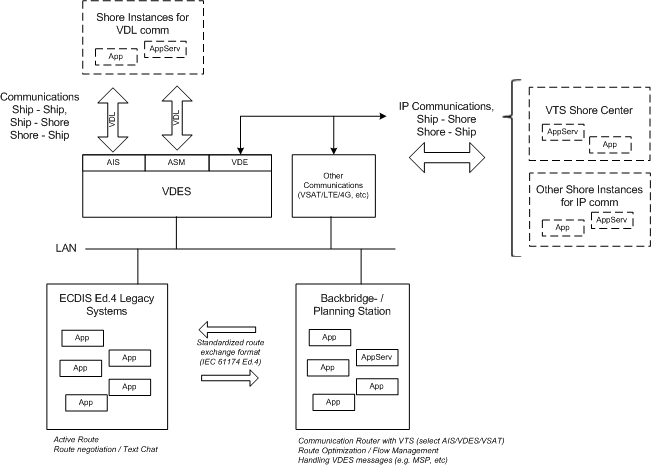
# Discussion

In consideration of practical implementation of VDES for Maritime domain, we foresee that in parallel to some amount of required new development in form of VDES-capable radio equipment, a feasible roll-out of the desired functionalities discussed around VDES will require implementation of sub-sets of the desired functionalities as VDES related applications into several existing equipment and systems within the maritime domain including ashore and onboard sub-domains.

Considering that these sub-domains have to co-operate fluently for the e-Navigation to be feasible, a successful implementation of VDES would thus benefit from modular structure of the related documentation.

A proposed way forward is a split of the documentation into two parts. One part for describing the actual communications technology that is used to transfer information by using the available data communication methods including VDES and another part for describing the applications that may use the data communication methods of the VDES as a means of transporting the related information.

An outline of the division is presented in Figure 1.



Another part of the documentation could describe how the VDES related applications are intended to work and interact with other systems, equipment and users.

One part of the documentation could describe how the VDES communications is intended to operate.

Figure 1 Proposed Structure of IALA Documentation on VDES as seen from ship equipment domain point of view

The documentation could be drafted as guidelines and provisional titles for the two separate documents could be:

1) IALA guideline on VDES communication technology related aspects and

2) IALA guideline on VDES related applications.

It is understood that the content of the documentation on radio technical aspects falls within the scope of IALA ENAV WG3 communications whereas the content related to applications may overlap with the efforts of other workgroups within the IALA ENAV Committee.

It is understood that the VDES related applications may be a subset of a broader scope of e-Navigation related applications.

It is further understood that some e-Navigation applications that are related to VDES may be falling to the domain of IALA whereas others may be coordinated by other bodies.

# References

# Action requested of the Committee

The Committee is requested to

1. Note the information above,

2. Consider the proposal and

3. Take further actions as considered necessary.

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