Input paper: [[1]](#footnote-1) DTEC3-5.2.2.2

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

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

X DTEC **□** VTS **□** Information

Agenda item [[2]](#footnote-2) 5.2

Technical Domain / Task Number 2 DTEC-7.1.2

Author(s) / Submitter(s) Finnish Transport Infrastructure Agency

Status report from Task Group DTEC-7.1.2 Digitalization of Waterways

# Summary

During DTEC1 meeting, WG2 started to work on a new task: Develop guidance for IALA members on the digitalisation of waterways. The Task Group continued its work during DTEC2 meeting and held three (3) intersessional online meetings between DTEC2 and DTEC3.

The target date for finalization of the new guideline is DTEC6 (spring 2026). However, the Task Group wishes to deliver an interim version of the Guideline for Council approval already in spring 2025 while the target date for the final version would remain in spring 2026.

## Purpose of the document

This document reports the results of the intersessional work and introduces the plan for the future work.

## Related documents

DTEC3-5.2.2.2.1 Draft IALA Guideline on Digitalization of Waterways

DTEC3-5.2.2.2.2 Draft Liaison note DTEC to all committees (and PAP) on digitalisation of waterways guideline

# Background

The Task DTEC-7.1.2 aims to develop new Guideline on Digitalisation of Waterways. The main objectives of the new Guideline are:

* Define what is meant by digitalisation of waterways.
* Provide guidance on identifying digital maturity of waterways.
* Review guidance on the use of simulation as a tool in waterway design and AtoN planning (IALA G1058 and G1097, noting this has been superseded by G1058 Ed 3.0).
* Identify best practice in development and use of digital twins.
* Provide guidance on the use of digital twins for fairways / aids to navigation provision.
* Identify uses of digital twins for planning, monitoring and maintenance.
* Identify options to share information on the fairway infrastructure and services in a digital format with users.
* Link with, for example, IMT-2030 and beyond for data exchange, AI/ML, S100.
* Identify opportunities to enhance sustainability through the use of technology / digital twins for fairways and AtoNs.

# Discussion

## Intersessional work

Task Group held three intersessional online meetings were the offline work done by the members of the group was reviewed. The meetings were announced via the IALA Committee Dashboard and additional notifications were sent by e-mail to the registered members of the Task Group.

Unfortunately, some members of the group experienced difficulties connecting to Teams meetings and because of that the meetings were partly held outside the announced IALA Teams environment. The group will continue the work to solve this problem.

## Task group members

The current members of the Task Group are:

* Jan-Hendrik Oltmann (jan-hendrik.oltmann@wsv.bund.de )
* Ronan Boyle (ronan.boyle@irishlights.ie)
* Natacha Riendeau (natacha.riendeau@dfo-mpo.gc.ca)
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* Kaisu Heikonen ([kaisu.heikonen@ftia.fi](mailto:kaisu.heikonen@ftia.fi))

Members of the DTEC committee interested in join the Task Group are asked to send e-mail to Kaisu Heikonen.

## Status of the draft Guideline

The structure of the Guideline has been slightly modified (new sections added) and new content has been introduced throughout the document. An important reference and source of information has been the material from the EU project DIWA (Digitalisation of Inland Waterways).

Many parts of the document are still under development, but Task Group believes that the document is mature enough to be compiled to an interim version of the guideline during the DTEC3 meeting.

## Plan for future work

Task Group plans to

* Compile an interim version of the Guideline during DTEC3 meeting and send it to the other IALA Committees for review and comments.
* Finalize the interim version of the Guideline during DTEC4 (spring 2025) based on comments received and if approved by DTEC4 meeting send it to Council for approval.
* Continue drafting the final version of the draft Guideline until DTEC6. Online intersessional meetings will be held between committee meetings to review the offline work done by members.

# Action requested of the Committee

The Committee is requested to:

1. Note the status of the Task DTEC-7.1.2.
2. Compile an interim version of the Guideline based on the current draft (input DTEC3-5.2.2.2.1) and any other input provided to the DTEC3 meeting.
3. Approve sending the interim version of the Guideline, attached to a Liaison note (draft provided as input DTEC3-5.2.2.2.2), to all other IALA Committees [and PAP] for review and comments.

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