

From: ENAV Committee

To: IALA committees, PAP

30 September 2022

## LIAISON NOTE

### New Technology Review Summary Table

#### 1 INTRODUCTION

During the IALA 2018-2023 work term the ENAV Committee has been seeking out and reviewing new and developing technologies, as well as repurposing of existing technologies, that may be suitable within the IALA domain.

To assist with this, the IALA Council approved IALA G1153 – Template for the review of emerging technologies for possible use by IALA members (2019).

Based on the proposed technologies, three tables have been completed, with more in progress. A summary table of all tables considered has been created, noting the status of the review (Annex A). To provide access to the reviews carried out, a folder has been created on the IALA File Share under 'ENAV / Completed Technology Reviews – Task 1.1.5 – ENAVWG2'

#### 2 ACTION REQUESTED

IALA Committees are requested to:

- 1 Note the status of review of emerging technologies, as provided in the summary table.
- 2 Note the completed reviews, available on the IALA File Share
- 3 Identify possible technologies for review and submit these to the ENAV Committee using the IALA G1153 template.

#### 3 ANNEXES

- 1 New Technology Summary Table

## ANNEX A. New Candidate Technology Tracker

No.	Candidate Technology	Action / Outcome	ENAV Start Session	ENAV Planned End Session	Revised End Session	Progress Indicator			Status Overview
						Green	Amber	Red	
<b>WG3 Emerging Technologies</b>									
1.	3GPP – 4G (including LTE)	Green	22	24	24	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Completed / forward to WG3
2.	LoRa (Lorawan)	Green (some amber)	25	26	27	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Completed
3.	Digital VHF - dPMR	On hold	24	25	---	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Confirming status of digital VHF Voice
4.	Leo Constellation Developments – initial review indicated not suitable for full template review	On hold	25	---	---	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	On hold
5.	NAVDAT – development in progress, updates provided to IMO - deemed not suitable for full template review. May be reviewed if further input is received.	On hold	25	---	---	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	On hold
6.	LiFi (Light Fidelity) – no input or expertise received. May be reviewed if input is received.	On hold	25	---	---	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	On hold
7.	Resilience in PNT: GPS/GNSS (presented by Orolia, technology called M SecureSync)	Amber (some green)	28	29	29	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Completed
8.	Resilience in PNT: GPS/GNSS (presented by Orolia, GNSS antenna systems)	Green	28	29	29	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Completed

No.	Candidate Technology	Action / Outcome	ENAV Start Session	ENAV Planned End Session	Revised End Session	Progress Indicator			Status Overview
						Green	Amber	Red	
9.	5G Precise Positioning (presented by Qualcomm)	In Progress	28	31		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Commenced
10.	AI detection of ships in ports / Synthetic images (Presented by SeerBI)	Deciding next steps	30	TBC		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	To be decided
11.	IMT 2020 on buoys (Presented by Jet Engineering)	Deciding next steps	30	TBC		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	To be decided
12.	Metal Surface Wave communication (Presented by KRISO/ SWT, technology called MS@MS)	Submitted To be reviewed	30	32		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Commenced
13.	Ships Air draft remote measurement (Presented by China MSA)	Submitted To be reviewed	30	32		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Commenced
14.	SigFox (Irish Lights)	Proposed				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Next steps:

1. MSM Communication (item 12) to complete evaluation for ENAV31
2. Ship air draft (Item 13) to complete evaluation for ENAV31
3. Irish Lights (Ronan Boyle) to complete SigFox evaluation for ENAV 31 (New item)