



# IALA COUNCIL

## 75<sup>th</sup> session



**30 May – 3 June 2022**  
**Copenhagen**  
**Denmark**

### 10 – TECHNICAL ACTIVITIES

#### 10.4 – ENG

##### 10.4.1 – ENG15 summary report

Note by the Secretariat

#### 1. INTRODUCTION

The 15th meeting of the ENG Committee was held virtually from 28 February to 17 March 2022. The session was attended by 111 registered participants from 30 countries. 16 participants attended for the first time.

The meeting continued the work for the 2018 - 2023 work period. Working in four working groups, the Committee considered 44 input papers and produced 16 output and working documents.

The overall status of the committee has been annexed to this document.

#### 2. OUTPUTS FOR APPROVAL

Two draft Recommendations have been finalised for the Council approval.

- C75-10.4.2 (ENG15-12.1.2) Revised R0204 Marine Signal Lights-Determination and Calculation of Effective Intensity
- C75-10.4.3 (ENG15-12.2.2) Revised R0141 Training and Certification of Marine Aids to Navigation Personnel

Seven draft Guidelines have been finalised for the Council approval.

- C75-10.4.4 (ENG15-12.1.1) Revised G1135 on determination and calculation of effective intensity
- C75-10.4.5 (ENG15-12.3.1) Revised G1127 on systems and services for high-accuracy positioning and ranging
- C75-10.4.6 (ENG15-12.3.2) Revised G1129 on the retransmission of SBAS Corrections Using MF-radio beacon and AIS
- C75-10.4.7 (ENG15-12.3.3) Draft new Guideline on the use of Enhanced Radar Positioning System (ERPS)
- C75-10.4.8 (ENG15-12.2.1) Draft new Guideline on quality checks for 3rd Party AtoN Service Providers
- C75-10.4.9 (ENG15-12.2.2) Draft new Guideline Training and Certification of Marine Aids to Navigation Personnel
- C75-10.4.10 (ENG15-12.2.3) Draft new Guideline on solar modules for a marine environment



One proposal on the Heritage Lighthouse of the Year has been finalised for the Council approval.

- C75-14.5.1 (ENG15-12.4.1) Proposal on the change of selection process of the Heritage Lighthouse of the Year

### **3. IALA SUBMISSION TO OTHER ORGANISATIONS**

The following liaison note was prepared for the Council approval:

- C75-12.1.1 (ENG15-12.3.7) Liaison to RTCM SC104 on R-Mode messages

### **4. LIGHTHOUSE OF THE YEAR 2022**

As regards the lighthouse of the year 2022, ENG shortlisted the following 3 nominations;

- Cap Spartel Lighthouse, Morocco
- Homigot Lighthouse, Republic of Korea
- Sumburgh Head Lighthouse, Scotland

And, ENG commend Homigot Lighthouse to IALA Council as the lighthouse it considers should be IALA Heritage Lighthouse of the Year 2022. Please refer to C75- 14.5.3 Heritage lighthouse of the year 2022.

### **5. THE COUNCIL IS REQUESTED TO**

**NOTE** the information provided in this document.


**Annex - Overall status of the ENG Committee 2018-2023 Work Programme after ENG15:**

Task		WG	Start Session	Planned End Session	Revised End Session	Progress Indicator			Status Overview
						Green	Yellow	Red	
<b>Standard 1010 – AtoN planning and service requirements</b>									
1.1.1	Revised guidance on Simulation Technology to revise G1097 in cooperation with ARM task 1.2.4	2	8	14					This task is continued by ARM
1.2.1	Develop Guidance on checking that 3rd party AtoN providers are providing what they are obliged to provide– 3rd party AtoN provider quality control. (Joint ARM cooperation)	2	9	14	15				Completed in ENG15, seeking approval in the Council
<b>Standard 1020 – AtoN Design and delivery</b>									
2.1.1	Review and update V-119 on the Implementation of Vessel Traffic Services (R0119) (Output to be a revised Recommendation and associated Guideline),( includes task 1.1.3)	1	8	12					Both for approval to Council
2.1.2	Develop Guideline on Port Traffic Signals	1	11	14					Likely to be next work plan
2.1.3	Develop E-112 Leading Lights and 1023 Leading Lines into a Guideline	1	9	14					Likely to be next work plan
2.1.4	Complete Guideline 1061 Illumination of structures	1	10	14					Likely to be next work plan
2.1.5	Update Guideline 1048 LED technologies and their use in signal lights	1	10	14					
2.1.6	Review & update guideline 1043 on Light sources	1	10	14					
2.1.7	Develop a guideline for E-106 Retroreflective materials	1	8	9					Completed
2.2.1	Develop E200-3 on light measurement into a Guideline	1	11	14					Likely to be next work plan
2.2.2	Develop new recommendation on marine light Terms of Measurement	1	12	14					Possibly needs to be pushed into new work plan
2.2.3	Develop E200-5 on Optical Performance into a Guideline	1	12	14					
2.2.4	Revise Guideline on effective intensity	1	9	11					Completed
2.2.5	Develop Guidance on monitoring of function and degradation of AtoN light sources	1	9	14					
2.2.6	<del>Develop Guidance on service factor</del>	<del>1</del>							
2.2.7	Develop Guidance on Colour fading of AtoN (plastic and painted) – methods to measure and assess	1	10	14					
2.2.8	Finish guideline G1148 Marine Signal Lights - Calculation of Luminous Intensity and Range	1	8	10					Completed
2.2.9	Develop Guidance on service factors Update Guideline 1041 on Sector Lights	1	9	14					



Task	WG	Start Session	Planned End Session	Revised End Session	Progress Indicator			Status Overview
					Green	Yellow	Red	
2.3.1	2/1	10	16					
2.3.2	2	8	12					Completed
2.3.3	2	8	14	16				Cancelled
2.3.4	2	8	10					Completed
2.3.5	2	8	12	14				Completed
2.3.6	2	14	14					Completed
2.4.1	2	10	14	16				Completed in ENG15, seeking approval in the Council
2.4.2	1	11	13	14				Deferred to next work period
2.4.3	2	8	14					
2.5.1	2	8	13	16				merged with 2.5.3
2.5.2	2	8	13	16				
2.5.3	2	8	13	14				merged in 2.5.1
2.6.1	2	10	14					likely to be postponed 2023-2026
2.6.2	2	8	14					
2.6.3	4	8	14					



Task		WG	Start Session	Planned End Session	Revised End Session	Progress Indicator			Status Overview
						Green	Yellow	Red	
2.6.4	Establish a concept for nominating one lighthouse as World Heritage Lighthouse of the year for each 'World AtoN Day'.	4	8	14					
2.6.5	Deliver Heritage Workshop	4	8	11	14				
2.7.1	Revise Recommendation R1004 to reference the UN Sustainable Development Goals	2	8	10	14				Completed
<b>Standard 1030 – Radionavigation services</b>									
3.1.1	Resilient PNT (applicable to all technical domains) – (identification, potential impact and mitigations)	3	8	11	16				
3.2.1	Terrestrial radionavigation systems	3	10	12					Completed
3.2.2	R-Mode (MF)	3	10	14	16				
3.2.3	R-Mode (AIS/VDES)	3	10	14					Task closed – VDES GL moved to ENAV
3.2.4	Workshop on R-Mode in 2019	3	9	10					Completed
3.2.5	Develop and maintain relevant Product Specifications eg. S-245 eLoran ASF data, S-246 eLoran transmitting station alamanac, S-247 Differential Loran reference station etc.	3	10	14	16				
3.2.6	Guidance on timing and synchronisation	3	8	14	-				Run over into the new work period
3.2.7	eRacon (standard approach) ; Review recommendations ENAV146 & R-101 & Guideline 1010	3	11	14	16				New Guideline produced as output of ENG15. Review of documents to run over into the new work period
3.3.1	Consideration of how and when to use SBAS in maritime.	3	9	13					GL updated at ENG15.
3.4.2	Review existing DGNSS infrastructure and provide guidance for current system	3	10	12	14	16			
3.4.3	New Recommendation on augmentation for maritime use	3	8	10	13				complete
3.4.4	Provide guidance, strategy and advice on potential new uses of marine beacon DGNSS infrastructure	3	9	11					Item merged with 3.4.2
3.4.5	High accuracy systems	3	10	14	15				Completed in ENG15, seeking approval in the Council
3.5.1	Review and update current documentation under the preview of PNT WG	3	8	14	16				



Task		WG	Start Session	Planned End Session	Revised End Session	Progress Indicator			Status Overview
						Green	Yellow	Red	
3.5.2	Monitor developments in GNSS, DGNSS, radar, resilient PNT, e-Pelorus, terrestrial systems, R-Mode, inertial and any other relevant areas etc.	3	8	14	16				
3.6.1	Update to ITU M.823, potential replacement for A.915, Liaison with IMO, ITU, RTCM, etc on related topics and project areas.	3	8	14	16				
3.7.1	Input to MSP, Integrity considerations for resilient PNT, cybersecurity impact for PNT data, DATUM considerations	3	10	14	16				
<b>Standard 1050 Training and Certification</b>									
4.1.1	Development and review of WWA courses	1,2,3	8	14					
4.2.1	Navguide updates and review	VC	9	14					
<b>Standard 1060 – Digital communication technologies</b>									
5.1.1	Review telemetry Guideline 1008	2	10	14					Deferred to next work period
5.1.2	Review of engineering support for e-navigation services, (including hot/cold climates & radio propagation). TO BE CONFIRMED	3	8	14	16				

**Legend:**

**Green** – progress as planned

**Yellow** – task needs more time, target time prolonged

**Red** – very little progress on the task, target time prolonged

**Grey** – task completed / deleted

**Blank** – task not started