

From: ENG Committee

ENG7-11.1.36

To: PAP

13 October 2017

Draft workplan for ENG 2018 - 2022

Summary

Below is the draft work plan for the Engineering & Sustainability as drafted at ENG7. This is for review and comment by PAP. The radionavigation section has yet to be drafted and awaits input from Dr Alan Grant.

Action requested of the Committee

The Committee is requested to consider the attached workplan and comment as appropriate.

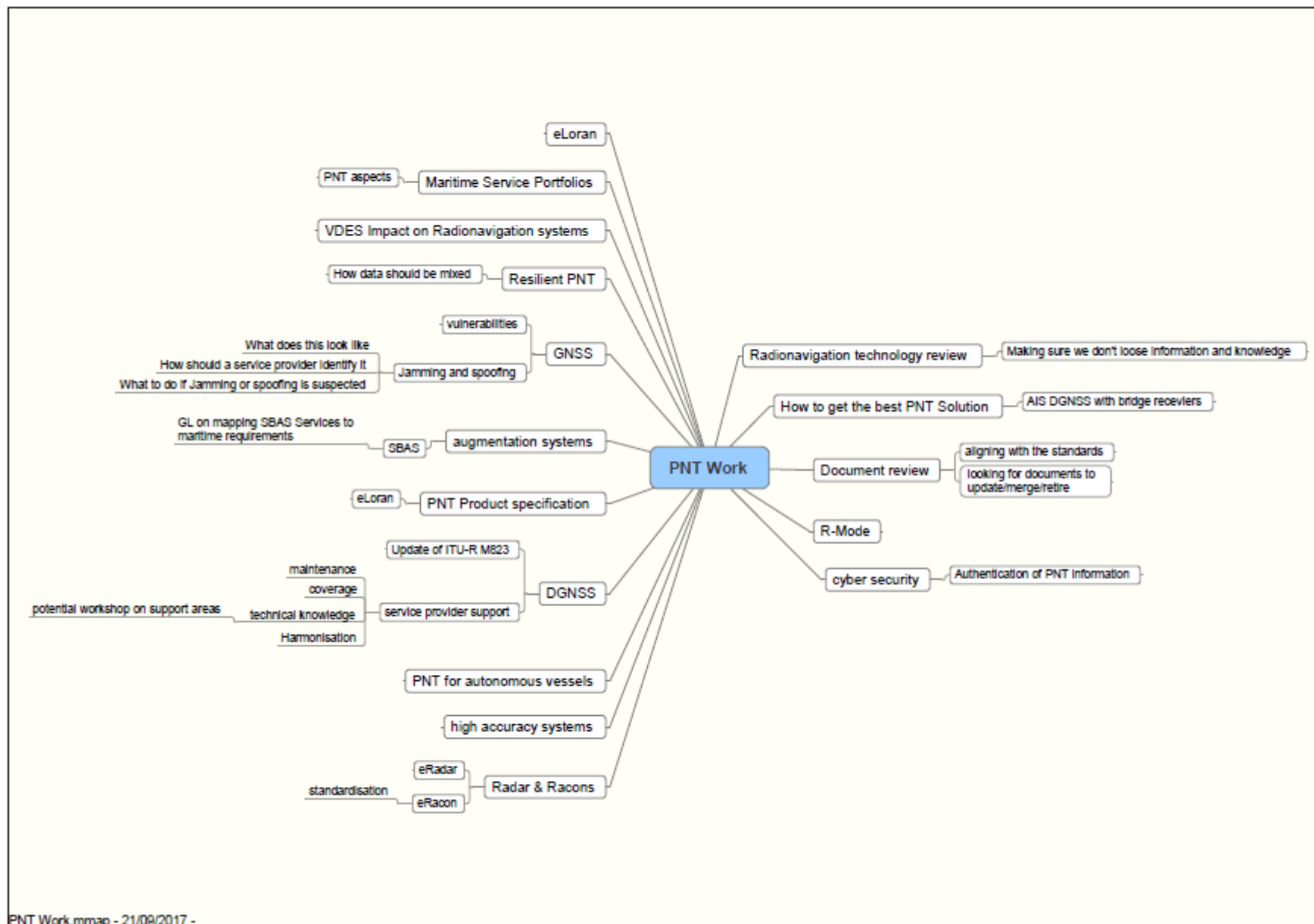
ENG Workplan for 2018 - 2022

From the IALA Standards structure, categories for ENG are :

Standards	Work item title	WG	Comment
AtoN Design and Delivery			
Visual signalling (Vision, Colour, Conspicuity, Rhythmic characters)	Update E-111 Port Traffic Signals.	1	
	Develop E-112 Leading Lights and 1023 Leading Lines into a Guideline.	1	
	Revise Guideline 1041 on sector lights.	1	
	Complete Guideline 1061 Illumination of structures.	1	
	Review & update guideline 1043 on Light sources.	1	
	Develop guideline for E-106 Retroreflective materials.		
Range and performance (visual and audible)	Develop E200-3 on measurement into a Guideline.	1	
	Develop E200-5 on Optical Performance into a Guideline.		
	Develop Guideline on effective intensity.	1	
	Develop Guidance on monitoring of function and degradation of AtoN light sources.	1	
	Develop Guidance on service factors.	1	
	Develop Guidance on Colour fading of AtoN (plastic and painted) – methods to measure and assess.	1	
	Joint ENG/ARM WORKSHOP – topic to be ascertained.	2	
Design, Implementation & Maintenance	Develop guidance to identify appropriate standards for AtoN equipment with extreme environmental conditions (humidity, temperature, enclosure ratings, UV etc) Also including peak intensity specification for LED AtoN, batteries, optic service factor, thermal cap, etc.	2	
	Complete guidance on maintenance of AtoN structures.	2	
	Develop Guideline on Tidal flow data capture and display	2	
Power systems	Develop Guidance on what constitutes a good Marine AtoN solar panel.	2	

	Deliver a WORKSHOP - IALABATT/ IALALITE	1 & 2	
	Monitor Battery development for use in AtoN	2	
Floating AtoN (buoys, moorings, stability, etc.)	Develop guidance on Buoy Stability Testing Procedure for use afloat. New guidance or develop existing.	2	
	Develop new or existing guidance on Radar reflection properties of plastic buoys.	2	
	Complete guideline on floating AtoN.	2	
Environment, Sustainability & Legacy	Develop Guidance on Modern equipment in traditional lighthouses. Merge from 1043 & 1048.	2	
	Monitor Climate Change to inform IALA of impact and potential adaptation requirements for AtoN providers.	2	
	Supervision of the Heritage Forum	2	
Radionavigation Services	To be completed with input from ENAV WG5		
Satellite positioning and timing			
Terrestrial positioning and timing (including eLoran, eChayka, R-mode)			
Racon & radar positioning			
Augmentation services (SBAS & DGNSS)			
Training and Certification			
Training and assessment	Development and review of WWA courses	1 & 2	
Competency certification and revalidation			
Simulation in training			
Human factors			
Capacity building	Navguide updates and review	1 & 2	
AtoN Planning and Service Requirements			
Obligations and regulatory compliance			

AtoN Planning (offshore signals, bridge signals, traffic signals, MBS, fairway design)	Develop guidance on AtoN simulation technology. ARM or ENG?	2	
	Develop Guidance on protection zones in light and daymark sectors and radar/ VTS systems to avoid obstructions due to structures, mooring ships, etc and competing lights (Joint ARM cooperation).		
Levels of service objectives. (Availability and Categories)			
Risk Management			
Virtual marking			
Quality management	Develop Guidance on checking that 3 rd party AtoN providers are providing what they are obliged to provide– 3 rd party AtoN provider quality control. (Joint ARM cooperation)	2	
Digital Communications Technologies			
Harmonised maritime connectivity (Maritime Internet of Things, intelligent sensors, AtoN monitoring)	Review telemetry Guideline 1008.	2	
	Develop guidance on how to package monitoring information on AtoN status such that it can be fed into the MCP (Maritime Connectivity Platform) as an MSP.	2	
	Cyber security for AtoN operations. (Joint ENAV co-operation).	2	
	Deliver WORKSHOP on engineering support for e-navigation services, including hot/cold climates & radio propagation.	2	



STRATEGIC VISION FOR 2018-2026

IALA's Strategic Vision for the period from 2018 to 2026 is the following.

Purpose

The aim of IALA is to foster the safe, economic and efficient movement of vessels, through improvement and harmonisation of aids to navigation worldwide and other appropriate means, for the benefit of the maritime community and the protection of the environment.

Motto

"Successful voyages, sustainable planet."

Goals

G1 – Marine Aids to Navigation are harmonised through international cooperation and the provision of standards.

G2 - All coastal states have contributed to an efficient global network of Marine Aids to Navigation through capacity building and the sharing of expertise.

Strategies

S1 - Develop Standards suitable for direct citation by States, in areas deemed important by the General Assembly, and the related Recommendations and Guidelines.

S2 - Position IALA as the source of standards, knowledge, and expertise that will enable States to provide Marine Aids to Navigation, in accordance with relevant international obligations and recommendations.

S3 - Coordinate the further development of Marine Aids to Navigation, taking into account new technologies and sustainability.

S4 - Continue to develop capacity building activities to improve the global provision of Marine Aids to Navigation.

S5 - Harmonise the information structure, Maritime Service Portfolios, and communications for e-Navigation by creating standards, and by cooperation with other international organisations, to achieve worldwide interoperability of shore and ship systems, including IMO sustainability goals for a maritime transport system.

S6 - Improve and harmonise the delivery of VTS globally and in a manner consistent with international conventions, national legislation and public expectations, , to ensure the safety and efficiency of vessel traffic and to protect the environment.

S7 - Work towards the transformation of IALA into an IGO, to enable the organisation to better fulfil its objectives.

S8 - Ensure that the resources and capabilities of the Secretariat are sufficient to enable IALA and its committees and organs to reach its goals.