

**Input paper for the following Committee(s):**

(Select as appropriate)

☐ ARM

☐ ENG

☒ PAP

☐ ENAV

☐ VTS

**Purpose of paper:**

☒ Input

☐ Information

**Agenda item**

7.1.1

**Technical domain/ Task number**

**Author(s)/Submitter(s)**

Secretariat

## COMMITTEE WORK PROGRAMME 2023-2027

### 1. SUMMARY

The work programme aims to identify work items with outcomes and priorities based on IALA's strategic vision, current drivers and trends, and the IALA position document on the development of Marine Aids to Navigation.

During the 79th Council session in December 2023, the proposal (C79-10.2.1) from PAP on the Committee Work Programme 2023-2027 was approved. The approved programme is annexed to this document.

### 2. ACTION REQUESTED OF THE PAP

The PAP is requested to note the decision of Council and integrate the approved committee work programme for 2023-2027 into the committees work plans.

## ANNEX A DRAFT COMMITTEE WORK PROGRAMME 2023-2027

Reference to Standards	Scope	Title	Description	Expected outcome	Committee (*leading)	Committee work item no.	Remarks
<b>S1010 Marine AtoN planning and service requirement</b>	S1010.1 Obligations and regulatory compliance	Monitor IMO work on STCW and develop IMO submissions and supporting advice on amendments to STCW in respect of IALAs inclusion within the Convention to cover AtoN training for navigators.	Develop a training course and make relevant training material available to enhance mariners' understanding of marine aids to navigation (AtoN) and to facilitate the effective use thereof. IALA contribute to revise the STCW and relevant Model Courses.	Input to relevant IMO meetings and update IMO Model courses	ARM	ARM-1.1.1	
		Consider developing guidance on the certification of technical equipment, information systems and technical infrastructure related to MASS in the domain of IALA	Develop a guideline on the certification of technical MASS equipment, information systems, and technical infrastructure within the domain of IALA.	New Guideline	DTEC*, ENG, ARM, VTS	ARM-1.1.2 ENG-1.1.1 VTS-1.8.1 DTEC-1.1.1	
	S1010.2 AtoN planning	Compile new Guideline on AtoN Buoy Tender requirements and specification	New Guideline on Tender requirements.	New Guideline	ARM*, ENG	ARM-1.2.1 ENG-1.2.1	
		Compile guidance for buoy tender activities	WWA related	Model courses	ARM	ARM-1.2.2	
		Providing guidance on the process to implement developments of innovation	Develop a guideline on how to move from development test bed/trial reporting to implementation of innovative solutions.	New Guideline	DTEC	DTEC-1.2.1	
		Full review of Guideline G1078 The Use of AtoN in the Design of Fairways	Revise Guideline G1078	Revised Guideline	ARM	ARM-1.2.3	
		Development of aspects of digital communications, including promoting broadband connectivity for operational technology.	Based on IHO/IALA portrayal and IALA comms workshop output.		ARM, DTEC*	ARM-1.2.4 DTEC-1.2.2	
		Guidance on the use of simple Internet of Things (IoT) sensors on physical aids	Establish requirement for IoT sensors.	Guideline	ARM	ARM-1.2.5	
		Develop further guidance for navigators on the use of AtoN	Develop a guideline and make relevant training material available to enhance mariners' understanding of marine aids to navigation (AtoN) and to facilitate the effective use thereof.	Guideline Model course for use in STCW courses	ARM	ARM-1.2.6	
		Prepare an appropriate submission to IMO advising of the publication of the updated MBS highlighting MATON and MASS content.		Proposal for IMO Circular	ARM	ARM-1.2.7	
		Develop guidance on the provision of AtoN and risk management for autonomous vehicle/vessel operations (Maritime Autonomous Surface Ship, MASS)		New or revised guideline	ARM	ARM-1.2.8 DTEC-1.2.4	

Reference to Standards	Scope	Title	Description	Expected outcome	Committee (*leading)	Committee work item no.	Remarks
		Review relevant sections of the NAVGUIDE	Review relevant sections of the NAVGUIDE in cooperation with the Secretariat	Revised NAVGUIDE	ARM, ENG, VTS, DTEC	ARM-1.2.9 ENG-1.2.2 DTEC-1.2.3 VTS-1.8.2	
		Develop guidance on the provision of Marine AtoN for autonomous vehicle/vessel operations (Maritime Autonomous Surface Ship, MASS).	The Guideline will continue to be lead by DTEC	New Guideline	ARM, ENG, DETC*, VTS	ARM missing ENG-1.2.3 VTS-1.8.3	
		<del>Consider developing guidance on the certification of technical equipment, information systems and technical infrastructure related to MASS in the domain of IALA</del>	<del>Develop a guideline on the certification of technical MASS equipment, information systems, and technical infrastructure within the domain of IALA.</del>	<del>New Guideline</del>	<del>DTEC*, ENG, ARM, VTS</del>		Task deleted
	S1010.3 Levels of service (objectives, availability and categories)						
	S1010.4 Risk management	Develop Guidance on Risk Assessment and Certification Methods in the context of e-Navigation	Development of guidance documents on Risk Assessment and Certification Methods in the context of e-Navigation.	Recommendation or Guideline	DTEC	DTEC-1.4.1	
		Review Risk Management related documentation. Update as per ongoing risk toolbox developments.		Reviewed recommendations and guidelines	ARM	ARM-1.4.4	
		Consider the development of IALA as a facilitator for an ISAC (Information Sharing and Analysis Centre) in relation to cyber security.	Reference the result of the IALA Cyber Security workshop.	Discussion paper on ISAC (Information Sharing and Analysis Centre)	ARM	ARM-1.4.2	
		Develop a method to quantify and evaluate various risk mitigation options		Revised guidelines	ARM	ARM-1.4.5	
		Encourage IALA members and other organisations to share historic AIS and other vessel tracking data with IALA. IALA aims to use such data for risk assessment, research and training purposes.	Review existing guidance (including G1086) and develop new guidance to assist IALA in its aim to gather historic AIS and other vessel tracking data.	Revised guidelines	ARM	ARM-1.4.6	
		Conduct a global scan of current risk analysis tools and identify potential candidates for inclusion within the IALA Risk Management Toolbox.		Risk management toolbox survey	ARM	ARM-1.4.7	
		Monitor the IRMAS reporting tool, ensuring it meets the requirements for future records of risk management. Ensure the form is modified as required.		Reportage	ARM	ARM-1.4.8	

Reference to Standards	Scope	Title	Description	Expected outcome	Committee (*leading)	Committee work item no.	Remarks
		Ensure long term sustainable supportability for IWRAP Software.			ARM	ARM-1.4.9	
		Enhancing the safety and efficiency of navigation around offshore installations	To develop comprehensive guidance that will assist members enhance the safety of navigation and environmental protection in / around offshore renewable energy installations (OREI).	Guideline	ARM*, VTS	ARM-1.4.1 VTS-1.8.5	
		Develop guidance on cyber security for Marine AtoN		Guideline	ARM*, VTS, ENG, DTEC	ARM-1.4.3 ENG-1.4.1 VTS-2.8.4 DTEC-1.4.2	
		Develop a Guideline for Risk Assessment and Cyber Security	Guideline for Risk Assessment and Cyber Security including Risk assessment methods, Identification of risks, Identification of counter measures, Identification of core elements to ensure cyber security	New or revised Guideline	ARM*, DTEC, VTS	ARM-1.4.10 DTEC-1.4.3 VTS-1.8.6	
		Develop guidance on measurement to monitor waterway risk	Develop measures for and a method to monitor waterway risk. Includes effectiveness of risk mitigations, qualitative validation with stakeholders, and reevaluation of risks.	Update Recommendations and Guidelines as appropriate	ARM	ARM-1.4.11	New task (ARM17-11.4.3)
	S1010.5 Quality management	Develop a guideline on quality management system for VTS	Develop a guideline on quality management system for VTS	New Guideline	VTS	VTS-1.8.4	
		Develop a recommendation and guideline consolidating content from G1030, G1035 and G1004.	Compile a recommendation and guideline to incorporate all references relating to the Categorization, Availability Objectives (G1030), Availability and Reliability for Short Range Aids to Navigation (G1035), Calculation of Availability (G1004) and relevant text appearing in the 2018 & draft 2023 NAVGUIDE that are not cross-referenced in the aforementioned Guidelines.	Recommendation, Guideline	ARM	ARM-1.5.1	
		Revision of Guideline 1052 on Quality Management in Marine Aids to Navigation Service Delivery	Revised Guideline G1052	Revised Guideline	ARM	ARM-1.5.2	
		Revise Recommendation R0132 Quality management for AtoN authorities	New edition of R0132	Revised Recommendation	ARM	ARM-1.5.3	
<b>S1020 AtoN design and delivery</b>	S1020.1 Aids to Navigation signalling	Update G1043 Light sources used in visual AtoN	Review & update guideline G1043 on Light sources and amalgamate with Guideline on modern equipment in traditional lighthouses	New amalgamated Guideline	ENG	ENG-2.1.1	
		Update G1048 LED technologies and their use in signal lights	Update Guideline 1048 LED Technologies and their use in signal lights	Revise Guideline	ENG	ENG-2.1.2	

Reference to Standards	Scope	Title	Description	Expected outcome	Committee (*leading)	Committee work item no.	Remarks
		Develop guideline on Port Traffic Signals	Develop a new guideline on Port Traffic Signals in consultation with ARM	New Guideline	ENG	ENG-2.1.3	
		Update R0112 Leading lights	Update E-112 Leading Lights and 1023 Leading Lines into a guideline	New Guideline	ENG	ENG-2.1.4	
		Update G1061 Light application illumination of structures	Complete Guideline G1061 (2008) on Illumination of Structures	Revise Guideline	ENG	ENG-2.1.5	
		Consider developing guidance on the marking of test areas for autonomous vessels and vehicles, ice roads and competition and event areas etc	Develop Guidance on the marking of test area for autonomous/remote controlled ships/vehicles, ice roads and competition event areas.	New Guideline	ARM	ARM-2.1.1	
	S1020.2 Design, Implementation & Maintenance	Update R0203(E200-3)	Update E200-3 on Light measurement into a guideline	New Guideline	ENG	ENG-2.2.1	
		Develop Guidance on monitoring of function and degradation of AtoN light sources	Develop Guidance on monitoring of function and degradation of AtoN light sources	Add to G1077	ENG	ENG-2.2.2	
		Update G1041 Sector Lights	Update Guideline 1041 on Sector Lights to define 'Angle of Uncertainty'	Revise Guideline	ENG	ENG-2.2.3	
		Update G1037 Data collection for AtoN performance calculation	Update G1037 Data collection for AtoN performance calculation 2.0 Provides details of methods that can be used to collect information on the availability and reliability of AtoN equipment.	Revise Guideline	ENG	ENG-2.2.4	
		Update G1077 Maintenance of AtoN	Update G1077 Maintenance of AtoN 1.0 Information to help develop a maintenance strategy. Several annexes are attached to provide detailed information on the activities involved in the maintenance.	Revise Guideline	ENG	ENG-2.2.5	
		Develop Guideline on complimentary use of AtoN	Develop Guideline on complimentary use of AtoN. Eg. Tsunami monitoring, Met Hydro monitoring, Private communications platforms etc. Develop Guideline on meteorological and oceanographical data dissemination	New guideline on Complimentary use of AtoN	ENG	ENG-2.2.6	
		Update and Amalgamate the Guidelines G1108 and G1136	Update and Amalgamate the Guidelines 1108, 1136 and new guideline "AtoN equipment and structures exposed to extreme environmental conditions into one guideline"	New single Guideline on AtoN in extreme environmental conditions	ENG	ENG-2.2.7	
		Update G1064 Integrated power system lanterns (Solar LED lanterns)	Update G1064 Integrated power system lanterns (Solar LED lanterns)	Revise Guideline	ENG	ENG-2.2.8	

Reference to Standards	Scope	Title	Description	Expected outcome	Committee (*leading)	Committee work item no.	Remarks
		Full review of A-126, G1084 and other AIS associated documentation	ARM coordinate cross-committee review to consolidate and update AIS documentation into a succinct document suite. <del>Take into consideration input from China MSA on Marine Electronic Fence (ARM15).</del>	Revised recommendations and guidelines	ARM*, ENG, VTS, DTEC	ARM-2.2.1 ENG-2.2.9 VTS-2.8.5 DTEC-2.2.1	
		Develop an IALA guideline on the Maritime Architecture Framework		New guideline	ARM	ARM-2.2.2	
		Develop an IALA recommendation and guideline on developing Harmonized Waterway Concept	Develop recommendation & guideline (with possible repository of waterways hosted by IALA)	New recommendation and guideline	ARM	ARM-2.2.3	
		Develop Recommendation and Guideline on the use of Drones for AtoN inspection and maintenance		New recommendation and guideline	ARM* VTS	ARM-2.2.4 VTS-2.8.6	
	S1020.3 Floating Aids to Navigation	Develop guidance quantifying floating AtoN characteristics	Develop guidance quantifying characteristics to meet nautical and operational requirements and ways to verify them	New or revised guideline	ENG	ENG-2.3.1	
		Creating an overview guidance on floating AtoN	Creating an overview guidance on floating AtoN	New Guideline on floating AtoN	ENG	ENG-2.3.2	
		Update Recommendation R0107 (E-107) Moorings for floating AtoN	Update Recommendation E-107 Moorings for floating AtoN 2.0 Technical recommendation on moorings.	Updated Recommendation on moorings for floating AtoN	ENG	ENG-2.3.3	
		Update G1066 Design of floating AtoN moorings	Update G1066 Design of floating AtoN moorings 1.1 General consideration on mooring materials, and comparison of mooring loads and design.	Updated Guideline on Design of floating AtoN moorings	ENG*, ARM	ENG-2.3.4 ARM-2.3.1	
	S1020.4 Environment & Sustainability	Review and update as necessary G1036, the Green Guide	Review and update as necessary of G1036 on Environmental Management in Aids to Navigation (the Green Guide)	Revise guideline on Environmental and Sustainability responsibilities.	ENG	ENG-2.4.1	
		Guidance on through life environmental impact	Guideline on how to assess the through life environmental impact of AtoN and AtoN provision	New Guideline	ENG	ENG-2.4.2	
	S1020.5 Power systems						
	S1020.6 Heritage and Culture	Maintain the Heritage web page on the IALA website	Maintain the Heritage web page on the IALA website	Updated Heritage web page	ENG	ENG-2.6.1	
		Develop Guidance on modern equipment in traditional lighthouses	Develop Guidance on modern equipment in traditional lighthouses	New Guideline	ENG	ENG-2.6.2	
		Heritage Lighthouse of the Year award	Make proposal for the Heritage Lighthouse of the Year award	Maintain the Award	ENG	ENG-2.6.3	

Reference to Standards	Scope	Title	Description	Expected outcome	Committee (*leading)	Committee work item no.	Remarks
		Write the Heritage lecture for the WWA L1.1 AtoN Manager course	Write the Heritage lecture for the WWA L1.1 AtoN Manager course	New module on Heritage to include in the L1.1 course.	ENG	ENG-2.6.4	
		Review of documents pertinent to heritage reviewed	Review of documents pertinent to heritage reviewed	Revised documents	ENG	ENG-2.6.5	
		Update G1063 Agreement for complementary use of lighthouse property.	Update G1063 Agreement for complementary use of lighthouse property. What should the agreement contain and safety aspect of the agreement including examples of few countries.	Updated Guideline	ENG	ENG-2.6.6	
		Review Guidelines 1074, 1075 & 1076 on Branding, Business plans and Building Conditioning for content and relevance.	Review Guidelines 1074, 1075 & 1076 on Branding, Business plans and Building Conditioning for content and relevance.	Reviewed guidelines	ENG	ENG-2.6.7	
<b>S1030 Radionavigation services</b>	S1030.1 Satellite positioning and timing	Develop guidance on timing and synchronization	New Guideline on the need and potential solutions on timing and synchronization.	New Guideline	ENG	ENG-3.1.1	
		WWRNP review	Review and update the World Wide Radionavigation Plan (2012).	Updated WWRNP	ENG	ENG-3.1.2	
	S1030.2 Terrestrial positioning and timing	R-Mode development	Development of R-Mode Guideline Coordination of R-Mode test beds	New Guideline	ENG	ENG-3.2.1	
	S1030.3 Augmentation services	Augmentation systems	Monitoring DGNSS developments, both SBAS and marine Radiobeacon and update IALA documents as necessary	Reportage	ENG	ENG-3.3.1	
		High accuracy positioning systems	Guidance on new systems and how they can be used	New Guideline	ENG	ENG-3.3.2	
		PNT technology review	Monitor developments in radionavigation topics for information exchange and development of appropriate guidance (inc. resilient PNT, cyber security, timing aspects etc). Rapporteur reports and new documents as required.	Reportage	ENG	ENG-3.3.3	
	S1030.4 Racon & radar positioning	Radar & Enhanced Racon positioning	Development of eRacon/eRadar technology Review related IALA documents	Revised Guideline	ENG	ENG-3.4.1	
<b>S1040 VTS</b>	S1040.1 VTS implementation	Develop guidance for establishing a compliance and enforcement framework by participating ships in a VTS area	Develop guidance for establishing a compliance and enforcement framework by participating ships	New Guideline	VTS	VTS-1.1.2	

Reference to Standards	Scope	Title	Description	Expected outcome	Committee (*leading)	Committee work item no.	Remarks
		Develop guidance on the implications of maritime autonomous surface ships (MASS) from a VTS perspective	a) Develop guidance on the implications of maritime autonomous surface ships (MASS) from a VTS perspective. b) Assess the implications associated with the advent of MASS on IALA Standards specifically related to the establishment and operation of VTS (scoping exercise)	New Guideline or contribute to a single IALA MASS guideline	VTS	VTS-1.1.3 a) VTS-1.1.3 b)	
		Develop guidance on delineating the VTS area	Develop guidance on delineating the VTS area. considering risk assessment and MRN	New or revised Guideline	VTS*, ARM	VTS-1.1.4 ARM-4.1.1	
		Develop guidance to assist competent authorities for VTS establish an appropriate policy and regulatory framework to meet their obligations	Develop guidance to assist competent authorities for VTS establish an appropriate policy and regulatory framework to meet their obligations	New or revised Guideline (G1150)	VTS	VTS-1.1.5	
	S1040.2 VTS operations	Develop guidance for digital route exchange within VTS operations	Develop guidance for digital route exchange within VTS operations (application of S-421)	New Guideline	VTS	VTS-1.2.1	
	S1040.3 VTS communications	Develop guidance on VTS digital communications	Develop guidance on VTS digital communications (operational aspects) (in consultation with DTEC)	New Guideline	VTS*, DTEC	VTS-1.3.1	
		Review and update IMO Resolution A.918(22) on SMCP	Revision of IMO Resolution A.918(22) IMO Standard Marine Communication Phrases, particularly as regards VTS communication phrases.	Revised IMO Resolution on SMCP	VTS	VTS-1.3.2	
	S1040.4 VTS auditing and assessing	Develop guidance on aptitudes required by VTS operators	Guidance specifying the aptitudes required by VTS operators (aptitude/psychometric testing?) and how to assess for those aptitudes taking into consideration national legislation and requirements.	New Guideline	VTS	VTS-3.4.1	
	S1040.5 VTS Data and Information Management	Revise G1177 Portrayal of VTS information	Revise G1177 on portrayal of VTS information	Revised Guideline	VTS	VTS-2.5.1	
		Develop Technical Service Specifications for VTS	Develop technical service specifications for digital data exchange between VTS and other entities - primarily ships. a) Technical Service Specification for VTS Traffic Clearance b) Technical service Specification for Route Exchange	Technical service specification	VTS	VTS-2.5.2  VTS-2.5.2 a) VTS-2.5.2 b)	
	S1040.6 VTS technologies	Update G1111-1 Producing requirements for the core VTS system	Consider updating G1111-1 to include guidance on VTS Management Information Systems	Revised guideline	VTS	VTS-2.6.1	
	S1040.7 VTS additional services						



Reference to Standards	Scope	Title	Description	Expected outcome	Committee (*leading)	Committee work item no.	Remarks
	N/A	Consider relevant VTS documents to be revised /updated	Revise and update VTS recommendations, guidelines, and model courses	Revised VTS documents	VTS	VTS-1.9.1 VTS-2.9.1 VTS-3.9.1	
	N/A	Continuous update of the VTS Manual	Updating the VTS Manual after each Council meeting in order to always have an updated electronic version.	Updated VTS Manual	VTS	VTS-1.9.2	
	N/A	Review the VTS questionnaire and conduct a digital global survey	Revise the questions on VTS to be aligned with the new IMO resolution and conduct global VTS surveys whenever needed.	Input to VTS tasks and guidelines	VTS	VTS-1.9.3	
	N/A	Proceed with the “living document” on “Future VTS”, including emerging technologies and Human Element	Continue discussion on Future VTS, including emerging technologies and Human Element to provide information to assist with future work programme tasks and of emerging trends and technologies that will impact on VTS	Input to VTS tasks and guidelines	VTS	VTS-1.9.4	
<b>S1050 Training and certification</b>	S1050.1 Training and assessment	Develop a model course on incident response and crisis coordination	Develop a model course on training on incident response and for crisis coordinators within AtoN and VTS system operating organisations.	Model course	ARM*, VTS	ARM-5.1.1 VTS-3.8.3	
		Training in implementation of digital solutions (data analytics & maritime informatics)	Develop a guideline on skills related to the digital environment, such as data analytics and maritime informatics and associated training programs with WWA.	New Guideline and training programs	ENG, ARM, DTEC*, VTS	ARM-5.1.2 ENG-5.1.2 VTS-3.8.5	
		Revision of G1103 Train the Trainer	Revision of G1103 on Train the Trainer	Revised guideline	VTS	VTS-3.8.1	
		Develop guidance for remote training in VTS	Develop a Guideline for Remote training in VTS	New or revised guideline	VTS	VTS-3.8.2	
		Develop guidance for dealing with stress or trauma in VTS operations	Develop new IALA guidance in establishing support for VTS Personnel that have handled a significantly stressful or traumatic incident in VTS operations	New guideline or consider to merge with other relevant guideline	VTS	VTS-3.1.1	
		Revision of VTS model courses a) C0103-2 VTS supervisor b) C0103-4 OJT instructor c) C0103-5 VTS revalidation process		Model courses	VTS	VTS-3.8.7 a) VTS-3.8.7 b) VTS-3.8.7 c)	
		Revision of G1027 on Simulation in VTS training	Revision of G1027 on Simulation in VTS training	Revised guideline	VTS	VTS-3.8.6	
		WWA lesson plans to review	Review and update of the WWA Lesson plans as requested by the Academy.	Review and update of the WWA Lesson plans	ENG*, ARM, DTEC, VTS	ARM-5.1.3 ENG-5.1.1 VTS-3.8.4 DTEC-5.1.1	
	S1050.2 Accreditation,	Consider including English Language Competency requirements in VTS operations	New guidance on development of [or provision of] a VTS specific English language assessment.	New guideline	VTS	VTS-3.8.8	

Reference to Standards	Scope	Title	Description	Expected outcome	Committee (*leading)	Committee work item no.	Remarks
	competency, certification and revalidation						
		Develop a model course on AtoN Cyber Security arrangements		Model course	ARM	ARM-5.2.1	
		Create S-100 model course	How to make use of S-100 product specifications	Model course	ARM	ARM-5.2.2	
	S1050.3 Capacity building						
<b>S1060 Digital communication technologies</b>	S1060.1 Wide and medium bandwidth systems	<del>Harmonized implementation of Application Specific Message (ASM)</del> Review and update R0144 and G1095 – Update to the latest development of ASM	Harmonized implementation of Application Specific Message (ASM)	Recommendation and guideline	DTEC	DTEC-6.1.1	
		Review G1050 Management and Monitoring of AIS Information	Coordinate with ARM WG3 (IALANET, etc.).	Revised guideline and Periodic Review	ARM	ARM-6.1.1	
	S1060.2 Narrow bandwidth systems	Contribute to the development of IMT-2030 by formulating user requirements for Marine AtoN.	Contribute towards the development of 3GPP mobile communication standards, with a specific focus on the maritime industry vertical.	Guideline, Reportage, input to 3GPP	DTEC	DTEC-6.2.1	
	S1060.3 Harmonised maritime connectivity	Update G1008 Remote control and monitoring of AtoN	Remote control and monitoring of AtoN. Objectives of remote control and monitoring, and technical aspects such as communication links, display, maintenance and integration with other systems.	Revised Guideline	ENG	ENG-6.3.1	
		Develop guidance on Digital VHF communication	Develop a guideline for migrating current analogue VHF voice communications to digital VHF voice communications.	New Guideline	DTEC*, VTS	DTEC-6.3.2 VTS -2.8.7	
		Develop a Guideline for VDES VDL integrity monitoring	Provide references and advice for authorities to monitor the integrity of VDL. Internally, make VDES VDL operating normally. Externally, specify the common services and functions of the AIS/VDES VDL monitoring system or platform.	New Guideline	DTEC	DTEC-6.3.3	
		Develop Guidelines on VDES Authentication Techniques	Describe potential methods for authenticating VDES transmissions, including VDES R-Mode signals. Provide basis for the development of an international standard for VDES authentication, so that all mariners can have trust in e-navigation	New Guideline	DTEC	DTEC-6.3.4	

Reference to Standards	Scope	Title	Description	Expected outcome	Committee (*leading)	Committee work item no.	Remarks
			communications and future resilient positioning, navigation and timing solutions based on VDES.				
		Develop Guidelines on VDES resource sharing and coordination/cooperation	Develop a guideline that provides framework of VDES resource sharing and coordination / cooperation for VDES satellites providers, VDES land-stations and VDES users to realize smooth and effective VDES communications on both official and private communications.	New Guideline	DTEC	DTEC-6.3.5	
		Review and update R1007 The VHF Data Exchange System (VDES) for shore infrastructure	Update to the latest development of AIS	Revised R1007	DTEC	DTEC-6.3.6	
		Liaise with ITU on Recommendation ITU-R.M 2092-1	LN to ITU WP5B in regards with the Recommendation ITU-R.M 2092-1: Consider future development of VDES	Liaison note	DTEC	DTEC-6.3.7	
		Liaise with IEC on the Test standard for VDES	Test standard for VDES: Contribute to the development of VDES test standard	Liaison note and input document	DTEC	DTEC-6.3.8	
		Develop guidance on documentation on communications channels for public service digital information services in coastal areas	Develop documentation on (free-to-air, non-commercial) communications channels to be used by coastal authorities for digital information transfer between ship and shore in coastal areas may absorb A-123 and A-124	New Recommendation or Guideline	DTEC	DTEC-6.3.9	
		New IALA Guideline on VDES system integration into ship and shore side	Develop documentation on the integration and operations of VDES for different user groups - leveraging the capabilities VDES provide and maintain them by managing the resource by optimized operations.	New Guideline	DTEC	DTEC-6.3.10	
		Review und update G1062 Establishment of AIS as a [Marine] Aid to Navigation	Update to the latest development of AIS; This revision must be reflected in G1022, i.e. MatON	Revised G1062	ARM	ARM-6.3.1	
		Recommendation for the AIS Service	Develop Recommendation for the AIS Service Planned in draft Standard S1060 (supersedes A-124). Move recommendation A-124 content to Recommendation R0123 or remainder to Guideline(s)	New Recommendation	DTEC*, ARM	DTEC-6.3.11 ARM-6.3.2	
		Review of the contents of A-124 series recommendations	A-124 APPENDIX 0 to APPENDIX 19 become Guidelines for Recommendation R1008: Move recommendation A-124 content to Recommendation R0123 remainder to Guideline(s)	New Guideline	DTEC*, ARM	DTEC-6.3.12 ARM-6.3.3	
		Develop guidance on NAVDAT development considering shore based infrastructure	Draft Recommendation and Guideline for Digital navigational data system (NAVDAT) considering shore based infrastructure.	New Recommendation and Guideline	DTEC	DTEC-6.3.13	
		Define user requirements for Maritime Connectivity, Maritime Internet of Things (IoT), and MRN addressing (may be three subtasks)	Revised Guideline G1143 to include aspects relevant to MRN	Revised guideline	ARM	ARM-6.3.4	

Reference to Standards	Scope	Title	Description	Expected outcome	Committee (*leading)	Committee work item no.	Remarks
<b>S1070 Information services</b>	S1070.1 Data models and data encoding	Contribute to the standardization efforts with respect of the requirements of the S-100 domain experts	Support and contribute to international standardization efforts (IMO, IHO, WMO, etc.)	Contribution to other International organisations	ARM*, DTEC	ARM-7.1.2 DTEC-7.2.1	
		New Guideline on Operational considerations for S-200 (S-201 AtoN information and S-230 Application Specific Messages)	Guideline on Operational considerations for S-200	Guideline	ARM	ARM-7.1.3	
		Continue to Develop Product Specification S-201. Continue development on S-201, specifically on Maintenance, data validation, and harmonization with S-125, S-124, and S-101	Review and revise S-201 as needed, publishing edition 2.0 and continuing development throughout the work plan	Product specification	ARM	ARM-7.1.4	
		Coordinate with IHO on implementation of IALA PS into S-98	Ref. IALA/IHO Workshop Support IHO's S-100 Implementation documents with consideration of IALA's remit within S-100.		ARM	ARM-7.1.5	
		Continue development on S-125 in coordination with IHO NIPWG	Draft Product Specification for S-125 to be delivered to IHO, (Ref workshop - develop S-125 as a suitable replacement for the List of Lights and Fog Signals. S-125 should be tested at the earliest opportunity utilizing the services of the IHO Singapore lab that have been offered for this purpose. Review and revise S-125 as needed, publishing edition 1.0 and continuing development throughout the work plan	S-125 PS	ARM	ARM-7.1.6	
		Continue development on MRN documentation, considering inputs from IALA Secretariat, other committees, or others as needed	Review and revise MRN Guidelines and Recommendation as needed, publishing edition 2.0 and continuing development throughout the work plan	Revised Guideline	ARM	ARM-7.1.7	
		Review Guideline G1106 on producing an IALA S-200 series Product Specification	Reference the report of the first IALA/IHO Workshop in 2022. To update the existing guideline G1106	Revised Guideline	ARM	ARM-7.1.8	
		Coordinate Committee support and submissions for IALA representation at IHO working groups in cooperation with Secretariat (HSSC, S-100WG, NIPWG)	IHO coordination including IALA submission to HSSC on the requirement to amend S-101 AtoN portrayal.		ARM*, DTEC	ARM-7.1.9 DTEC-7.2.2	
		Monitor the development of S-201 Testbed	Update reports on S-201 testbed	Reportage	ARM	ARM-7.1.10	
		Develop, implement and execute procedures for IALA to add, maintain and harmonize items to the IHO S-100 Feature Concept Dictionary(FCD)	Guidance on the procedures to add definitions to the FCD. Coordination of harmonization of IALA definitions. Guidance and templates for add features and definition to the FCD. Update the existing guideline G1087	New and/or revised guideline	ARM	ARM-7.1.11	

Reference to Standards	Scope	Title	Description	Expected outcome	Committee (*leading)	Committee work item no.	Remarks
		Create S-200 Implementation Plan, following similar S-100 Implementation Strategy and/or Roadmap	Develop a transition plan aiming to the creation adoption and delivery of S-200 products and services		ARM	ARM-7.1.12	
		Develop a Product Specification S-212 for VTS on digital information	Develop a Product Specification S-212 under the S-100 framework for VTS	New Product specification	VTS	VTS-2.8.1	
		Review and update Recommendation R0145	Review and update Recommendation R0145 (V-145) on the Inter-VTS Exchange Format (IVEF) Service (Output to be a revised Recommendation and associated Guideline including a technical service and/or product specification S-210)	Revised recommendation and new Guideline	VTS	VTS-2.8.2	
		Review Guideline G1159 on ship reporting from the shore-side perspective	Guideline for Coastal States on implementation of MSW	Revised Guideline	ARM	ARM-7.1.15	
		Develop a discussion paper on digitalisation in the scope of IALA	Development of a vision for digitalization of shipping and maritime transportation - Document sketching the IALA vision on digitalization of waterways and shipping	Discussion paper	DTEC	DTEC-7.1.1	
		Develop guidance on Digital Fairway	Develop a guideline on the developments and implementation of the digital fairway. Reference G1058 and G1097.	New IALA guideline	DTEC*, ARM	DTEC-7.1.2 ARM-7.1.1	
		Review G1114 A Technical Specification for the Common Shore-based System Architecture (CSSA)	Consider developing a System Architecture Concept for Digitalized Waterways and Maritime Transformation: Architecture Pattern, Architecture Overview, Architecture Details / Platforms / Services	Revised Guideline	DTEC	DTEC-7.1.3	
		Consider developing a Recommendation for digital platforms	Recommendation on platforms to be used for implementation of the proposed Architecture (G1114 Update): Definition of the architecture based on Updated G1114, Description of platform elements	New Recommendation	DTEC	DTEC-7.1.4	
	S1070.2 Data exchange systems	Review G1128 Specification of e-Navigation technical services	Revise the Guideline from basic concepts and guideline for developers on technical services adjusted to the digital platform concepts. Reference G1155.	Review G1128	DTEC	DTEC-7.1.5	
		Development of technical service specifications for the provision of AtoN information	To develop technical service specifications for the provision of AtoN information using the G1128 guideline 'Specification of e-navigation technical services'.	Technical service specifications	ARM	ARM-7.1.14	
	S1070.3 Terminology, symbology and portrayal	Develop guidance on the symbology and portrayal of AtoN for charting		New Recommendation and guideline	ARM*, VTS	ARM-7.1.13	

