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| IALA COUNCIL79th session | Logo, company name  Description automatically generated | 11-14 December 2023IALA Headquarters | 3 June 2023 **Rio de Janeiro**  **Brazil** |

# 10 – technical activities

## *10.2 – Committee work organisation*

10.2.1 – Committee work programme 2023-2027

Note by the Secretariat

# INTRODUCTION

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 first half of 2023, the four committees convened and made progress on the work items previously approved by the Council (C78-7.2).

In accordance with this progress, the PAP has thoroughly prepared a revised Work Program covering the 2023-2027 work period also including the changes of the IALA Standards which were approved by the General Assembly at its 14th session in Rio de Janeiro. This revised program is included as an annex to this document.

# THE COUNCIL IS REQUESTED TO

**Approve** the draft Work Programme for the committees for 2023-2027.

1. Draft committee work programme 2023-2027

| Reference to Standards | Scope | Title | Description | Expected outcome | Committee (\*leading) | Committee work item no. | Remarks |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S1010  Marine AtoN planning and service requirement | 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 |  |
|  |  | 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 |  |
|  |  | ~~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~~ |  | 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 |  |
|  |  | 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 |  |
| S1020  AtoN design and delivery | 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 |  |
|  |  | 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 |  |
|  |  | 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. ~~Take into consideration input from China MSA on Marine Electronic Fence (ARM15).~~ | 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 Llighthouse of the Year award | Maintain the Award | ENG | ENG-2.6.3 |  |
|  |  | 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 |  |
| S1030 Radionavigation services | 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 |  |
| S1040 VTS | 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 |  |
|  |  | 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.   1. Technical Service Specification for VTS Traffic Clearance 2. 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 |  |  |  |  |  |  |
|  | 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 |  |
| S1050 Training and certification | 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   1. C0103-2 VTS supervisor 2. C0103-4 OJT instructor 3. 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, competency, certification and revalidation | 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 |  |
|  |  | 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 |  |  |  |  |  |  |
| S1060 Digital communication technologies | S1060.1 Wide and medium bandwidth systems | ~~Harmonized implementation of Application Specific Message (ASM)~~  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 and roadmap 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 communications and future resilient positioning, navigation and timing solutions based on VDES. | New Guideline | DTEC | DTEC-6.3.4 |  |
|  |  | 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 |  |
| S1070 Information services | 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 |  |
|  |  | 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 the digitalisation of waterways | Develop a guideline on the developments and implementation of the the digitalisation of waterways .  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 |  |