Proposal for the Work Programme 2022-2026 for IALA ENAV WG1 – Digital Information System

# Overview

The following Table shows an overview of the topics that have been identified as core topics of the Work Programme 2022-2026 for IALA ENAV WG1. The definition of the related tasks can be found in sections 2 and 3.

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| Topic | Related Documents | Related Tasks |
| **Maritime Resource Names** | G1143, MRN Management Guideline (under dev.) | 2.4.1 / 2.4.3 |
| **Maritime Services (MS) in the Context of e-Navigation (overarching)** |  | 2.2.11, 2.2.5, 2.2.4 |
| * Implementation of MS | G1128, G1157 |  |
| * Template for the Description of MS | G1155, G1128 |  |
| * Technical Specification of MS | G1157 | 2.2.1 |
| * Support Relevant Technologies in the Context of e-Navigation | S-100, G1117 | 2.2.12 |
| **Strategies for the enrolment of platforms for interoperable and safe information** | Platforms for e-Nav (under dev.) | 2.2.2 |
| * Vision for the future of GMDSS |  | 2.3.3 |
| * Cyber Security (in cooperation with ARM) | Outcome of the Cyber Security Workshop | 2.3.1 / 2.4.2 |
| * Integration of MS and Platforms | Platforms for e-Nav (under dev.), SECOM | 2.3.4 |
| **Update of the Common Shore-based System Architecture (CSSA)** | G1114 | 2.1.3 |
| **Traffic Management (in cooperation with VTS)** | S1040 etc. | 2.5.1 |
| **Risk Assessment and Certification Methods** |  | 2.6.1 |

# Existing Tasks

This section discusses the tasks from previous sessions, that will be continued in 2022-2026.

The following existing Tasks will be continued:

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| Task No. | Description | Status |
| 2.1.1 | Liaise with [IHO S-100 WG] on the S-100/200 structure and management concept | Ongoing |
| 2.1.6 | Support eNAV in the Development other S-200 message structures, as needed | Ongoing |
| 2.1.7 | Support WG2 aligning the message structure for Application Specific Messages (ASM) with S-200 product specification | Ongoing |
| 2.2.2 | Develop Guidance on e-Navigation Platforms in the context of Maritime Services. | Ongoing / Finalize at ENAV27 |
| 2.2.5 | Liaise with IMO NCSR regarding IMO Guidance on Maritime Services, as necessary | Ongoing |
| 2.3.1 / 2.4.2 | Develop Guidance on Cyber Security | Ongoing |
| 2.4.1 / 2.4.3 | Develop Guidance on MRN and its applications | Ongoing |
| 2.1.3 | Revise IALA G1114 on a Technical Specification for the Common Shore-Based System Architecture (CSSA) (May 2015) into a Guideline on eNavigation Maritime Archecture | Ongoing |
| 2.1.5 | Support ARM in the revision of IALA R047 on Product Specification Development and Management | Ongoing |
| 2.2.6 | Revise e-NAV 140 e-Navigation Architecture into R0140 | On Demand |
| 2.2.7 | Revise IALA 1113 on Design and Implementation Principles for Harmonised System Architectures of Shore-Based Infrastructure (May 2015) | On Demand |

# New Tasks / Tasks that have not been Started

Work on the following new tasks will be established:

**Maritime Services (MS) in the Context of e-Navigation**

| Task number / Task name | 2.2.1 / Develop a Marine AtoN Technical Service specification | | | |
| --- | --- | --- | --- | --- |
| Objectives of the task | Development of a Technical Service Specification for the exchange of marine AtoN information. This includes the distribution from shore-to-ship (S-125) and shore-to-shore (S-201). | | | |
| Expected outcome | *IALA G1128-compliant Service Specification* | | | |
| Strategic Alignment | Goal - G1  Strategy – S5 | | | |
| Scope (Describe key items that are in scope/out of scope) |  | | | |
| Expected Sessions for Completion: | Session number:  1 2 3 4 5 6 7  X | | | |
| Brief and concise description of the work to be undertaken and programme milestones (where appropriate). | Key milestones for completing the task include:   * *Service Scope and Requirements defined* * *G1128-compliant Service Specification* * *G1128-compliant Technical Service Specification* | | | |
| Task Revision and note | Ver. | Date | Part / Section Revised | Note |
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| Task number / Task name | 2.2.4 / Develop a Position Paper on the concept of Maritime Services as basic concept of eNAV (Quality of Services, Service Level Agreements) | | | |
| --- | --- | --- | --- | --- |
| Objectives of the task | Development of a position paper of the concept of Maritime Services as a basic concept of e-Navigation. | | | |
| Expected outcome | *Position Paper* | | | |
| Strategic Alignment | Goal - G1  Strategy – S5 / S2 | | | |
| Scope (Describe key items that are in scope/out of scope) | * To be defined | | | |
| Expected Sessions for Completion: | Session number:  1 2 3 4 5 6 7  X | | | |
| Brief and concise description of the work to be undertaken and programme milestones (where appropriate). | Key milestones for completing the task include:   * *Contents and Position elaborated* * *Position Paper released* | | | |
| Task Revision and note | Ver. | Date | Part / Section Revised | Note |
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| Task number / Task name | 2.2.11 / Revise Guidance Documents on Maritime Services (MS) in the Context of e-Navigation | | | |
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| Objectives of the task | Revision of existing IALA Guidance documents in the area of MARITIME SERVICES IN THE CONTEXT OF E-NAVIGATION, if required. | | | |
| Expected outcome |  | | | |
| Strategic Alignment | Goal - G1  Strategy – S5 | | | |
| Scope (Describe key items that are in scope/out of scope) | * Includes the Guidelines G1128, G1157 and G1155. | | | |
| Expected Sessions for Completion: | Session number: not to be determined.  1 2 3 4 5 6 7 | | | |
| Brief and concise description of the work to be undertaken and programme milestones (where appropriate). | Key milestones for completing the task include:   * *Release of new versions of existing guideline, if required.* | | | |
| Task Revision and note | Ver. | Date | Part / Section Revised | Note |
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| Task number / Task name | 2.2.12 / Extend S-100 Data Exchange Formats to support Low-Bandwidth Communication | | | |
| --- | --- | --- | --- | --- |
| Objectives of the task | Develop an extension of S-100 that allows transmission of S-100 data to be transmitted over communication channels with a low bandwidth. This is especially relevant for the usage of VDES for Maritime Services. It is proposed to perform this task in cooperation with ENAV WG3. | | | |
| Expected outcome |  | | | |
| Strategic Alignment | Goal - G1  Strategy – S5 | | | |
| Scope (Describe key items that are in scope/out of scope) | * S-100-related data encoding and transfer | | | |
| Expected Sessions for Completion: | Session number:  1 2 3 4 5 6 7  X | | | |
| Brief and concise description of the work to be undertaken and programme milestones (where appropriate). | Key milestones for completing the task include:   * *Developing a concept for low-bandwidth data streaming* * *Provide a Liaison Note to S-100 WG* | | | |
| Task Revision and note | Ver. | Date | Part / Section Revised | Note |
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**Strategies for the enrolment of platforms for interoperable and safe information**

| Task number / Task name | 2.3.3 / Develop Guidance on Future Concepts of GMDSS | | | |
| --- | --- | --- | --- | --- |
| Objectives of the task | Development of a recommendation or guideline on future concepts of GMDSS, including the integration of safety-relevant e-Navigation Services and the inclusion of new technologies in GMDSS. | | | |
| Expected outcome | *Recommendation or Guideline* | | | |
| Strategic Alignment | Goal - G1  Strategy – S5 | | | |
| Scope (Describe key items that are in scope/out of scope) |  | | | |
| Expected Sessions for Completion: | Session number:  1 2 3 4 5 6 7  X | | | |
| Brief and concise description of the work to be undertaken and programme milestones (where appropriate). | Key milestones for completing the task include:   * *Proposals for future concepts of GMDSS elaborated* * *Recommendation or Guideline released* | | | |
| Task Revision and note | Ver. | Date | Part / Section Revised | Note |
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| Task number / Task name | 2.3.4 / Develop Guidance On the Integration of Maritime Services And Platforms | | | |
| --- | --- | --- | --- | --- |
| Objectives of the task | Development of a recommendation or guideline that discusses the integration of Maritime services to e-Navigation Platforms. | | | |
| Expected outcome |  | | | |
| Strategic Alignment | Goal - G1  Strategy – S5 | | | |
| Scope (Describe key items that are in scope/out of scope) | * A more practical guidance document is expected, that considers the practical implications and partially the implementation of Maritime Services with regard to platform elements. * This could include sections on how to establish Identity Management, Service Discoverability and orchestration of many services in a Service-oriented Architecture | | | |
| Expected Sessions for Completion: | Session number:  1 2 3 4 5 6 7  X | | | |
| Brief and concise description of the work to be undertaken and programme milestones (where appropriate). | Key milestones for completing the task include:   * *Concepts for integrating Maritime Services to e-Navigation Platforms elaborated* * *Recommendations and/or Guidelines released.* | | | |
| Task Revision and note | Ver. | Date | Part / Section Revised | Note |
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**Traffic Management (in cooperation with VTS)**

| Task number / Task name | 2.5.1 / Develop Guidance on Traffic Management in the Context of e-Navigation | | | |
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| Objectives of the task | Development of a recommendation or guideline on the integration of e-Navigation concepts and architectures into existing Vessel Traffic Services regarding traffic management focusing on harmonization, interoperability, security and effiency. This task has to be coordinated with VTS Committee | | | |
| Expected outcome | *Recommendation or Guideline* | | | |
| Strategic Alignment | Goal - G1  Strategy – S5 / S6 | | | |
| Scope (Describe key items that are in scope/out of scope) | * Integration of e-Navigation concepts and methods into current VTS systems / traffic management. | | | |
| Expected Sessions for Completion: | Session number:  1 2 3 4 5 6 7  X | | | |
| Brief and concise description of the work to be undertaken and programme milestones (where appropriate). | Key milestones for completing the task include:   * *Liaison with VTS Committee* * *Concept for the integration of e-Navigation and VTS / Traffic Management* * *Release of recommendations and/or guidelines* | | | |
| Task Revision and note | Ver. | Date | Part / Section Revised | Note |
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**Risk Assessment and Certification Methods**

| Task number / Task name | 2.6.1 / DEVELOP Guidance on Risk Assessment and Certification Methods in the context of e-Navigation | | | |
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| Objectives of the task | Development of guidance documents on Risk Assessment and Certification Methods in the context of e-Navigation. | | | |
| Expected outcome | *Recommendation or Guideline* | | | |
| Strategic Alignment | Goal - G1  Strategy – S5 | | | |
| Scope (Describe key items that are in scope/out of scope) | * Risk assessment for safety and security risks of new e-Navigation Technologies * Certification of e-Navigation Systems | | | |
| Expected Sessions for Completion: | Session number:  1 2 3 4 5 6 7  X | | | |
| Brief and concise description of the work to be undertaken and programme milestones (where appropriate). | Key milestones for completing the task include:   * *Concepts for Certification and Risk Assessment in the context of e-Navigation elaborated* * *Recommendations and/or Guidelines released.* | | | |
| Task Revision and note | Ver. | Date | Part / Section Revised | Note |
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