PAP25 Input

Agenda item 14.1

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Proposal for the Categorisation of

IALA Recommendations and Guidelines

# Summary

This paper sets out a proposal for the categorisation of IALA Recommendations and Guidelines in line with the most recent edition of NAVGUIDE. It also proposes that the categorisation and the categorised tables of Recommendations and Guidelines are published on the IALA web-site.

## Purpose of the document

This document is provided as input to PAP25 for the discussion of a proposed categorisation of IALA Recommendations and Guidelines and to consider if it is suitable for publication on the IALA web-site.

## Related documents

IALA Recommendations

IALA Guidelines

IALA Publications’ List on Web Site

NAVGUIDE 2010 Edition

# Background

PAP24 requested that the current IALA Recommendations and Guidelines be reviewed with a view to their categorisation and provide input to PAP25.

# Discussion

## Review of Recommendations and Guidelines

Most IALA Recommendations and Guidelines are referenced in the 2010 edition of NAVGUIDE. It was therefore considered that the chapters/sections in NAVGUIDE could provide the basis for a suitable categorisation. Tables 1 & 2 show the chapters/sections of NAVGUIDE in which reference is made to Recommendations and Guidelines. Where no reference is made for an individual Recommendation or Guideline or where they were more recently published, a chapter/section has been allocated.

1. List of IALA Recommendations with NAVGUIDE Reference

|  |  |  | **NAVGUIDE Chapter/Section Reference** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number** | **Recommendation Name** | **Ctte** | **AtoN** | **eNav** | **VTS** | **Other** | **Mgmt** | **\*No Reference** |
| R-101 | On Maritime Radar Beacons (RACONS) | e-NAV |  | 4.13.6 |  |  |  |  |
| V-102 | On The application of the ‘User Pays’ principle to Vessel Traffic Services | VTS |  |  | 5.3 |  |  |  |
| V-103 | On Standards for Training and Certification of VTS Personnel | VTS |  |  | 5.3 |  |  |  |
| V-103/1 | Model Course – Vessel Traffic Services Operator Training | VTS |  |  | 5.3 |  |  |  |
| V-103/2 | Model Course – Vessel Traffic Services Supervisor Training | VTS |  |  | 5.3 |  |  |  |
| V-103/3 | Model Course – Vessel Traffic Services On-the-Job Training | VTS |  |  | 5.3 |  |  |  |
| V-103/4 | Model Course – Vessel Traffic Services On-the-Job Training Instructor | VTS |  |  | 5.3 |  |  |  |
| O-104 | On ‘Off Station’ Signals for Major Floating Aids | ANM | 3.2.6 |  |  | 6.6.6 |  |  |
| E-105 | On the Need to Follow National and International Standards | EEP |  |  |  |  |  | 8.7? |
| E-106 | On the Use of Retro-reflecting Material on Aids to Navigation Marks within the IALA Maritime Buoyage System | EEP | 3.1.1/3.2.6 |  |  |  |  |  |
| E-107 | On Moorings for Floating Aids to Navigation | EEP | 3.2.6 |  |  |  |  |  |
| E-108 | On The Surface Colours used as Visual Signals on Aids to Navigation | EEP | 3.1.1 |  |  |  |  |  |
| E-109 | On the Calculation of the Range of a Sound Signal | EEP |  |  |  | 6.5 |  |  |
| E-110 | For the Rhythmic Characters of Lights on Aids to Navigation | EEP | 3.2.4 |  |  |  |  |  |
| E-111 | On Port Traffic Signals | EEP | 3.2.4 |  |  |  |  |  |
| E-112 | On Leading Lights | EEP | 3.2.4/3.2.7 |  |  |  |  |  |
| O-113 | On the Marking of Fixed Bridges and Other Structures over Navigable Waters | ANM |  | 4.13.6 |  | 6.5 |  |  |
| R-115 | On the Provision of Maritime Radionavigation Services in the Frequency Band 283.5-315 kHz in Region 1 and 285-325 kHz in Regions 2 and 3 | e-NAV |  |  |  |  |  | 4.10.1? |
| O-118 | For the Recording of Aids to Navigation Positions | ANM |  |  |  | 6.6.5 |  |  |
| V-119 | On the Implementation of Vessel Traffic Services | VTS |  |  | 5.3 |  |  |  |
| V-120 | On Vessel Traffic Services in Inland Waters | VTS |  |  | 5.3 |  |  |  |
| R-121 | On the Performance and Monitoring of DGNSS Services in the Frequency Band 283.5 – 325 kHz | e-NAV |  |  |  |  | 8.4.4 |  |
| A-123 | On The Provision of Shore Based Automatic Identification System (AIS) | e-NAV |  | 4.22 | 5.3 |  |  |  |
| A-124 | On the AIS Service | e-NAV |  | 4.22 | 5.3 |  |  |  |
| A-124 App.0 | References, Glossary of Terms and Abbreviations | e-NAV |  | 4.22 |  |  |  |  |
| A-124 App.1 | Basic AIS Services, AIS Data Model and AIS Service specific MDEF sentences | e-NAV |  | 4.22 |  |  |  |  |
| A-124 App.3 | Distribution model of the AIS Service (Including relevant coverage planning aspects) | e-NAV |  | 4.22 |  |  |  |  |
| A-124 App.4 | Interaction and Data Flow Model of the AIS Service | e-NAV |  | 4.22 |  |  |  |  |
| A-124 App.5 | Interfacing model of the AIS Service | e-NAV |  | 4.22 |  |  |  |  |
| A-124 A9/10/11 | Functional Description of the AIS Service Components (AIS-PCU, AIS-LSS & AIS-SM) | e-NAV |  | 4.22 |  |  |  |  |
| A-124 App.12 | Co-location Issues at AIS Physical Shore Stations (AIS-PSS) and on-site infrastructure considerations | e-NAV |  | 4.22 |  |  |  |  |
| A-124 App.14 | FATDMA planning and Operation of an AIS Service | e-NAV |  | 4.22 |  |  |  |  |
| A-124 App.16 | DGNSS Broadcasts from an AIS Service | e-NAV |  | 4.22 |  |  |  |  |
| A-124 App.17 | Channel Management by an AIS Service | e-NAV |  | 4.22 |  |  |  |  |
| A-124 App.18 | VDL Load Management | e-NAV |  | 4.22 |  |  |  |  |
| A-124 App.19 | Satellite AIS Considerations | e-NAV |  | 4.22 |  |  |  |  |
| V-125 | On the Use and Presentation of Symbology at a VTS Centre | VTS |  |  | 5.3 |  |  |  |
| A-126 | On the Use of the Automatic Identification System (AIS) in Marine Aids to Navigation Services | ANM |  | 4.23 | 5.3 |  |  |  |
| V-127 | On Operational Procedures for Vessel Traffic Services | VTS |  |  | 5.3 |  |  |  |
| V-128 | On Operational and Technical Performance Requirements for VTS Equipment | VTS |  |  | 5.3 |  |  |  |
| R-129 | On GNSS Vulnerability and Mitigation Measures | e-NAV |  |  |  |  |  | 4.12.6? |
| O-130 | On Categorisation and Availability Objectives for Short Range Aids to Navigation | ANM | 3.1/3.2.6 |  |  | 6.3.1 | 8.4.3 |  |
| O-132 | On Quality Management for Aids to Navigation Authorities | ANM |  |  |  |  | 8.7 |  |
| O-134 | On the IALA Risk Management Tool for Ports and Restricted Waterways | ANM |  |  |  |  |  | 8.3.1? |
| R-135 | On the Future of DGNSS | e-NAV |  | 4.10.1 |  |  |  |  |
| V-136 | On Participation in the World VTS Guide | VTS |  |  |  |  |  | 5.2? |
| P-137 | On Quality Management Systems for Competent Pilotage Authorities and Pilotage Service Providers | PAF |  |  |  |  |  | 6.1.1? |
| O-138 | On the Use of GIS and Simulation by Aids to Navigation Authorities | ANM |  |  |  | 6.3.5 | 8.5.4 |  |
| O-139 | On the Marking of Man-Made Offshore Structures | ANM |  |  |  | 6.5 |  |  |
| e-NAV-140 | On the e-Navigation Architecture – the initial Shore-based Perspective | e-NAV |  | 4.8 |  |  |  |  |
| E-141 | On Standards for Training and Certification of AtoN Personnel | EEP |  |  |  |  | 8.12.3 |  |
| E-141/1 | Model Course On Level 1 Manager Training | EEP |  |  |  |  | 8.12.3 |  |
| E-141/2 | Model Course On Senior Management Training | EEP |  |  |  |  | 8.12.3 |  |
| E-142 | On Maritime Data Sharing ‘IALA-NET’ | EEP |  | 4.27 |  |  |  |  |
| O-143 | On Virtual Aids to Navigation | ANM |  |  |  |  |  | 4.23? |
| e-NAV-144 | On Harmonized implementation of Application Specific Messages (ASM) | e-NAV |  |  |  |  |  | 4.26? |
| V-145 | On the Inter-VTS Exchange Format (IVEF) Service | VTS |  |  |  |  |  | 5.2? |
| e-NAV-146 | On Strategy for Maintaining Racon Service Capability | e-NAV |  |  |  |  |  | 4.13.8? |
| E-200-0 [1] | Marine Signal Lights – Part 0 - Overview | EEP |  |  |  |  |  | 3.1? |
| E-200-1 | Marine Signal Lights – Part 1 – Colours | EEP |  |  |  |  |  | 3.1.1? |
| E-200-2 | Marine Signal Lights – Part 2 - Calculation, Definition and Notation of Luminous Range | EEP | 3.2.3/3.2.4 |  |  |  |  |  |
| E-200-3 | Marine Signal Lights – Part 3 - Measurement | EEP | 3.1.1/3.2.3 |  |  |  |  |  |
| E-200-4 | Marine Signal Lights – Part 4 - Determination and Calculation of Effective Intensity | EEP |  |  |  |  |  | 3.2.3? |
| E-200-5 | Marine Signal Lights – Part 5 - Estimation of the Performance of Optical Apparatus | EEP |  |  |  |  |  | 3.2.3? |

\* Chapter in NAVGUIDE allocated although not referenced

1. List of IALA Guidelines with NAVGUIDE Reference

|  |  |  | **NAVGUIDE Chapter/Section Reference** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Guideline Name** | **Ctte** | **AtoN** | **e-Nav** | **VTS** | **Other** | **Power** | **Mgmt** | **\*No Reference** |
| 1004 | On Levels of Service | ANM |  |  |  |  |  | 8.2.4 |  |
| 1005 | On Contracting Out Aids to Navigation Services | ANM |  |  |  |  |  | 8.9.2 |  |
| 1006 | On Plastic Buoys | EEP | 3.2.6 |  |  |  |  |  |  |
| 1007 | On Lighthouse Maintenance | Heritage |  |  |  |  |  |  | 8.8.1? |
| 1008 | On Remote Control and Monitoring of Aids to Navigation | EEP |  |  |  |  |  |  | 3.2.5/  8.8.2? |
| 1010 | On Racon Range Performance | R-NAV |  | 4.13.6 |  |  |  |  |  |
| 1011 | On A Standard Method for Defining and Calculating the Load Profile of Aids to Navigation | EEP | 3.2.6 |  |  |  |  |  |  |
| 1012 | For the Protection of Lighthouses and Aids to Navigation against Damage from Lightning | Heritage |  |  |  |  | 7.4.2 |  |  |
| 1014 | On Accreditation of VTS Training Courses | VTS |  |  | 5.3 |  |  |  |  |
| 1015 | On Painting Aids to Navigation Buoys | EEP |  |  |  |  |  |  |  |
| 1016 | On Bilateral Agreements and Inter-agency Memorandums of Understanding on the Provision of DGNSS Services in the Frequency Band 283.5 – 325 kHz | R-NAV |  |  |  |  |  |  | 4.10.1? |
| 1017 | On Assessment of Training for VTS | VTS |  |  | 5.3 |  |  |  |  |
| 1018 | On Risk Management | ANM |  |  | 5.3 |  |  | 8.3 |  |
| 1020 | On Training Related to AtoN | ANM |  |  |  |  |  |  |  |
| 1023 | The Design of Leading Lines | EEP | 3.2.4/  3.2.7 |  |  |  |  |  |  |
| 1027 | On Simulation in VTS Training | VTS |  |  | 5.3 |  |  |  |  |
| 1028 | On Universal Automatic Identification (AIS) – Volume 1, Part 1 – Operational Issues | AIS |  | 4.21 | 4.26 |  |  |  |  |
| 1029 | On the Universal Automatic Identification System (AIS) – Volume 1, Part 2 – Technical Issues | AIS |  | 4.21 | 4.26 |  |  |  |  |
| 1032 | On Aspects of Training of VTS Personnel Relevant to AIS | VTS |  |  | 5.3 |  |  |  |  |
| 1033 | On the Provision of Aids to Navigation for Different Classes of Vessels, Including High Speed Craft | ANM |  |  |  |  |  |  |  |
| 1035 | On Availability and Reliability of Aids to Navigation | EEP | 3.1/  3.2.6 |  |  |  |  | 8.4.3 |  |
| 1036 | On Environmental Consideration in Aids to Navigation Engineering. | EEP | 3.2.6 |  |  |  |  | 8.10 |  |
| 1037 | On Data Collection for Aids to Navigation Performance Calculation | EEP | 3.2.6 |  |  |  |  |  |  |
| 1038 | On Ambient Light Levels at which Aids to Navigation should switch on and off | EEP | 3.2.4 |  |  |  |  |  |  |
| 1039 | On Designing Solar Power Systems for Aids to Navigation | EEP |  |  |  |  |  |  | 7.2.1? |
| 1041 | On Sector Lights | EEP | 3.2.7 |  |  |  |  |  |  |
| 1043 | On Light Sources used in Visual Aids to Navigation | EEP | 3.2.2/  3.2.6 |  |  |  |  |  |  |
| 1045 | On Staffing Levels at VTS Centres | VTS |  |  | 5.3 |  |  |  |  |
| 1046 | On Response Plan for the Marking of New Wrecks | ANM | 3.2.6 |  | 5.3 |  |  |  |  |
| 1047 | On Cost Comparison Methodology of Buoy Technologies | EEP | 3.2.6 |  |  |  |  |  |  |
| 1048 | On LED Technologies and their use in Signal Lights | EEP |  |  |  |  |  |  | 3.2.2? |
| 1049 | On the Use of Modern Light Sources in Traditional Lighthouse Optics | EEP |  |  |  |  |  |  | 3.2.2? |
| 1050 | On the Management and Monitoring of AIS Information | ANM |  | 4.23 |  |  |  |  |  |
| 1051 | For the Provision of Aids to Navigation in Built-up Areas | ANM |  |  |  |  |  |  | 3.2.4? |
| 1052 | On Quality Management Systems for Aids to Navigation Service Delivery | ANM |  |  |  |  |  | 8.7 | 8.8.1 |
| 1053 | On the Submission of a DGNSS Service for Recognition as a Component of the IMO WWRNS | R-NAV |  |  |  |  |  |  | 4.9? |
| 1054 | On Preparing for a Voluntary IMO Audit on Aids to Navigation Service Delivery | ANM |  |  |  |  |  |  | 8.1? |
| 1055 | On Preparing for a Voluntary IMO Audit on Vessel Traffic Services Delivery | ANM |  |  | 5.3 |  |  |  | 8.1? |
| 1056 | On The Establishment of VTS Radar Services | VTS |  |  | 5.3 |  |  |  |  |
| 1057 | On the use of Geographical Information Systems (GIS) by Aids to Navigation (AtoN) Authorities | ANM |  |  |  |  |  | 8.5.4 |  |
| 1058 | On the Use of Simulation as a Tool for Waterway Design and AtoN Planning | ANM |  |  |  | 6.3.5 |  | 8.5.4 |  |
| 1059 | On the Comparison of AIS Stations | AIS |  |  |  |  |  |  | 4.20? |
| 1060 | On Recapitalisation of DGNSS | R-NAV |  | 4.10.1 |  |  |  |  |  |
| 1061 | On Light Applications – Illumination of Structures | EEP |  |  |  |  |  |  | 3.2.4? |
| 1062 | On The establishment of AIS as an Aid to Navigation | ANM |  |  |  |  |  |  | 4.23? |
| 1063 | On Agreements for Complementary use of Lighthouses | Heritage |  |  |  |  |  |  | 8.11.2? |
| 1064 | On Integrated Power Systems Lanterns (Solar LED Lanterns) | EEP | 3.2.8 |  |  |  |  |  |  |
| 1065 | On Aids to Navigation Signal Light Beam Vertical Divergence | EEP |  |  |  |  |  |  | 3.2.6? |
| 1066 | On The Design of Floating Aid to Navigation Moorings | EEP | 3.2.6 |  |  |  |  |  |  |
| 1067-0 | On Selection of Power Systems for Aids to Navigation and Associated Equipment | EEP | 3.2.6 |  |  |  | 7.1 |  |  |
| 1067-1 | On Total Electrical Loads of Aids to Navigation | EEP | 3.2.6 |  |  |  | 7.1 |  |  |
| 1067-2 | On Power Sources | EEP | 3.2.6 |  |  |  | 7.1 |  |  |
| 1067-3 | On Electrical Energy Storage for Aids to Navigation | EEP | 3.2.6 |  |  |  | 7.1 |  |  |
| 1068 | On Provision of a Navigational Assistance Service by a Vessel Traffic Service | VTS |  |  |  |  |  |  | 5.2? |
| 1069 | On Synchronisation of Lights | ANM |  |  |  | 6.3.5 |  |  |  |
| 1070 | On VTS role in managing Restricted or Limited Access Areas | VTS |  |  |  |  |  |  | 5.2? |
| 1071 | On Establishment of a Vessel Traffic Service beyond Territorial Seas | VTS |  |  | 5.3 |  |  |  |  |
| 1072 | On AtoN Information Exchange & Presentation | e-NAV |  | 4.4/4.8/  4.30 |  |  |  |  |  |
| 1073 | On Conspicuity of AtoN lights at Night | EEP |  |  |  |  |  |  | 3.2.3? |
| 1074 | On Branding and Marketing of Historic Lighthouses | EEP |  |  |  |  |  | 8.11 |  |
| 1075 | On A Business Plan for the complementary use of a Historic Lighthouse | EEP |  |  |  |  |  | 8.11 |  |
| 1076 | On Building Conditioning of Lighthouses | EEP |  |  |  |  |  | 8.8.1 |  |
| 1077 | On Maintenance of Aids to Navigation | EEP | 3.2.6 |  |  |  |  | 8.8.1 |  |
| 1078 | On The Use of Aids to Navigation in the Design of Fairways | ANM |  |  |  |  |  |  | 6.3?? |
| 1079 | On Establishing and Conducting User Consultancy by Aids to Navigation Authorities | ANM |  |  |  |  |  | 8.2.4 | 8.5.4 |
| 1080 | On the Selection and Display of Heritage Artefacts | ANM |  |  |  |  |  |  | 8.11? |
| 1081 | On Virtual Aids to Navigation | ANM |  |  |  |  |  |  | 4.23? |
| 1082 | On an Overview of AIS | e-NAV |  |  |  |  |  |  | 4.18? |
| 1083 | On Standard Nomenclature to identify and refer to VTS centres | VTS |  |  |  |  |  |  | 5.2? |
| 1084 | On Authorisation of AIS AtoN | ANM |  |  |  |  |  |  | 4.23? |
| 1085 | On Standard Format for Electronic Exchange of AtoN Product Information | EEP |  |  |  |  |  |  | 8.8.1? |
| 1086 | On the Global Sharing of Maritime Data & Information | ANM |  |  |  |  |  |  | 4.27? |
| 1087 | On Procedures for the Management of the IALA Domains under the IHO GI Registry | e-Nav |  |  |  |  |  |  | 4.4? |
| 1088 | Introduction to Preparing S-100 Product Specifications | e-NAV |  |  |  |  |  |  | 4.4? |
| 1089 | On Provision of Vessel Traffic Services (INS,TOS & NAS) | VTS |  |  |  |  |  |  | 5.2? |
| 1090 | On the Use of Audible Signals | EEP |  |  |  |  |  |  | 6.5? |
| 1091 | On Bird Deterrents | EEP |  |  |  |  |  |  | 8.8.1? |
| 1092 | On Safety Management for AtoN Activities | EEP |  |  |  |  |  |  | 8.8.1? |
| 1093 | On the Management of Surplus Lighthouse Property | EEP |  |  |  |  |  |  | 8.11? |

\* Chapter in NAVGUIDE allocated although not referenced

## Proposed Categorisations

The first step in providing aids to navigation is to determine the requirements for aids to navigation. This, however, is usually carried out in the context of knowledge of the features and attributes of aids to navigation. It is, nevertheless, considered that ‘Determining Aids to Navigation Requirements’ should be the first category in the list. On the basis of this comment and in general keeping with the NAVGUIDE chapters/sections, the following categorisations are proposed.

* Determining Aids to Navigation Requirements;
* Aids to Navigation – Lights, Structures;
* Floating Aids to Navigation;
* Power Systems for Aids to Navigation;
* Aids to Navigation Maintenance;
* Aids to Navigation Training;
* Radionavigation – Racons;
* Radionavigation – Differential GNSS;
* Automatic Identification System;
* e-Navigation;
* Vessel Traffic Services;
* VTS Training
* Management Issues;
* Pilotage Authority Issues;
* Fog Signals.

This categorisation list should not be considered definitive but should evolve as Recommendations and Guidelines on new areas of technology and other issues are produced.

Tables 3 & 4 set out the current List of Recommendations and Guidelines in their proposed categories.

1. Categorised List of IALA Recommendations

| **Category** | **Number** | **Edition** | **Recommendation Name** | **Ctte** | **Original** | **Revised** |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Determining Aids to Navigation Requirements** |  |  |  |
| AtoN Req | O-134 | Ed 2 | On the IALA Risk Management Tool for Ports and Restricted Waterways | ANM | May-06 | May-09 |
| AtoN Req | O-139 | Ed1 | On the Marking of Man-Made Offshore Structures | ANM | Dec-08 |  |
| AtoN Req | O-113 | Ed 2 | On the Marking of Fixed Bridges and Other Structures over Navigable Waters | ANM | May-98 | Dec-11 |
| AtoN Req | O-138 | Ed 1 | On the Use of GIS and Simulation by Aids to Navigation Authorities | ANM | Dec-07 |  |
|  |  |  | **Aids to Navigation - Lights, Structures** |  |  |  |
| AtoN | E-200-0 [1] | Ed1 | Marine Signal Lights – Part 0 - Overview | EEP | Dec-08 |  |
| AtoN | E-200-1 | Ed1 | Marine Signal Lights – Part 1 – Colours | EEP | Dec-08 |  |
| AtoN | E-200-2 | Ed1 | Marine Signal Lights – Part 2 - Calculation, Definition and Notation of Luminous Range | EEP | Dec-08 |  |
| AtoN | E-200-3 | Ed1 | Marine Signal Lights – Part 3 - Measurement | EEP | Dec-08 |  |
| AtoN | E-200-4 | Ed1 | Marine Signal Lights – Part 4 - Determination and Calculation of Effective Intensity | EEP | Dec-08 |  |
| AtoN | E-200-5 | Ed1 | Marine Signal Lights – Part 5 - Estimation of the Performance of Optical Apparatus | EEP | Dec-08 |  |
| AtoN | E-110 | Ed 3 | For the Rhythmic Characters of Lights on Aids to Navigation | EEP | May-98 | Jun-12 |
| AtoN | E-108 | Ed 2 | On The Surface Colours used as Visual Signals on Aids to Navigation | EEP | May-98 | Dec-09 |
| AtoN | E-111 | Ed 1 | On Port Traffic Signals | EEP | May-98 |  |
| AtoN | E-112 | Ed 1.1 | On Leading Lights | EEP | May-98 | Dec-05 |
| AtoN | O-130 | Ed 2 | On Categorisation and Availability Objectives for Short Range Aids to Navigation | ANM | Dec-04 | Jun-11 |
|  |  |  | **Floating Aids to Navigation** |  |  |  |
| Floating AtoN | E-106 | Ed 1 | On the Use of Retro-reflecting Material on Aids to Navigation Marks within the IALA Maritime Buoyage System | EEP | Dec-05 |  |
| Floating AtoN | E-107 | Ed 2 | On Moorings for Floating Aids to Navigation | EEP | Dec-05 | May-09 |
| Floating AtoN | O-118 | Ed 1.1 | For the Recording of Aids to Navigation Positions | ANM | Jun-00 | Dec-05 |
| Floating AtoN | O-104 | Ed 2 | On ‘Off Station’ Signals for Major Floating Aids | ANM | May-98 | Jun-12 |
|  |  |  | **Aids to Navigation Training** |  |  |  |
| AtoN Training | E-141 | Ed 1 | On Standards for Training and Certification of AtoN Personnel | EEP | Dec-09 | Dec-12 |
| AtoN Training | E-141/1 | Ed 1 | Model Course On Level 1 Manager Training | EEP | Dec-11 |  |
| AtoN Training | E-141/2 | Ed 1 | Model Course On Senior Management Training | EEP | Dec-11 |  |
|  |  |  | **Radionavigation - Racons** |  |  |  |
| RNav-Racons | R-101 | Ed 2 | On Maritime Radar Beacons (RACONS) | e-NAV | Jan-95 | Dec-04 |
| RNav-Racons | e-NAV-146 | Ed1 | On Strategy for Maintaining Racon Service Capability | e-NAV | Dec-11 |  |
|  |  |  | **Radionavigation - Differential GNSS** |  |  |  |
| RNav-DGNSS | R-115 | Ed 1 | On the Provision of Maritime Radionavigation Services in the Frequency Band 283.5-315 kHz in Region 1 and 285-325 kHz in Regions 2 and 3 | e-NAV | Dec-99 |  |
| RNav-DGNSS | R-121 | Ed 1.1 | On the Performance and Monitoring of DGNSS Services in the Frequency Band 283.5 – 325 kHz | e-NAV | Jun-01 | Dec-04 |
| RNav-DGNSS | R-135 | Ed 2 | On the Future of DGNSS | e-NAV | Dec-06 | Dec-08 |
| RNav-DGNSS | R-129 | Ed 2 | On GNSS Vulnerability and Mitigation Measures | e-NAV | Dec-04 | Dec-12 |
|  |  |  | **Automatic Identification System** |  |  |  |
| AIS | A-124 | Ed 2 | On the AIS Service | e-NAV | Dec-02 | Dec-12 |
| AIS | A-124 App.0 | Ed1 | References, Glossary of Terms and Abbreviations | e-NAV | Dec-12 |  |
| AIS | A-124 App.1 | Ed1 | Basic AIS Services, AIS Data Model and AIS Service specific MDEF sentences | e-NAV | Dec-11 |  |
| AIS | A-124 App.3 | Ed1 | Distribution model of the AIS Service (Including relevant coverage planning aspects) | e-NAV | Dec-12 |  |
| AIS | A-124 App.4 | Ed1 | Interaction and Data Flow Model of the AIS Service | e-NAV | Dec-11 |  |
| AIS | A-124 App.5 | Ed1 | Interfacing model of the AIS Service | e-NAV | Dec-11 |  |
| AIS | A-124 A9/10/11 | Ed1 | Functional Description of the AIS Service Components (AIS-PCU, AIS-LSS & AIS-SM) | e-NAV | Dec-12 |  |
| AIS | A-124 App.12 | Ed1 | Co-location Issues at AIS Physical Shore Stations (AIS-PSS) and on-site infrastructure considerations | e-NAV | Dec-12 |  |
| AIS | A-124 App.14 | Ed2 | FATDMA planning and Operation of an AIS Service | e-NAV | Dec-08 | Dec-11 |
| AIS | A-124 App.16 | Ed1 | DGNSS Broadcasts from an AIS Service | e-NAV | Dec-11 |  |
| AIS | A-124 App.17 | Ed1 | Channel Management by an AIS Service | e-NAV | Dec-11 |  |
| AIS | A-124 App.18 | Ed1 | VDL Load Management | e-NAV | Dec-11 |  |
| AIS | A-124 App.19 | Ed1 | Satellite AIS Considerations | e-NAV | Dec-11 |  |
| AIS | A-123 | Ed 2 | On The Provision of Shore Based Automatic Identification System (AIS) | e-NAV | Dec-02 | Jun-07 |
| AIS | A-126 | Ed 1.5 | On the Use of the Automatic Identification System (AIS) in Marine Aids to Navigation Services | ANM | Jun-04 | Jun-11 |
| AIS | O-143 | Ed1 | On Virtual Aids to Navigation | ANM | Mar-10 |  |
| AIS | e-NAV-144 | Ed 1 | On Harmonized implementation of Application Specific Messages (ASM) | e-NAV | Jun-11 |  |
| AIS | E-142 | Ed 1 | On Maritime Data Sharing ‘IALA-NET’ | EEP | Dec-09 |  |
|  |  |  | **e-Navigation** |  |  |  |
| eNav | e-NAV-140 | Ed 1 | On the e-Navigation Architecture – the initial Shore-based Perspective | e-NAV | Dec-09 |  |
|  |  |  | **Vessel Traffic Services** |  |  |  |
| VTS | V-119 | Ed 2 | On the Implementation of Vessel Traffic Services | VTS | Dec-00 | Dec-09 |
| VTS | V-136 | Ed 1 | On Participation in the World VTS Guide | VTS | Dec-07 |  |
| VTS | V-127 | Ed 2 | On Operational Procedures for Vessel Traffic Services | VTS | Jun-04 | Jun-11 |
| VTS | V-128 | Ed 3 | On Operational and Technical Performance Requirements for VTS Equipment | VTS | Jun-05 | Jun-07 |
| VTS | V-125 | Ed 3 | On the Use and Presentation of Symbology at a VTS Centre | VTS | Jun-03 | Jun-12 |
| VTS | V-120 | Ed 1.1 | On Vessel Traffic Services in Inland Waters | VTS | Jun-01 | Jun-05 |
| VTS | V-145 | Ed1 | On the Inter-VTS Exchange Format (IVEF) Service | VTS | Jun-11 |  |
| VTS | V-102 | Ed 1.2 | On The application of the ‘User Pays’ principle to Vessel Traffic Services | VTS | Mar-98 | Dec-11 |
|  |  |  | **VTS Training** |  |  |  |
| VTS-Training | V-103 | Ed 2 | On Standards for Training and Certification of VTS Personnel | VTS | May-98 | Dec-09 |
| VTS-Training | V-103/1 | Ed 2 | Model Course – Vessel Traffic Services Operator Training | VTS | Mar-99 | Dec-09 |
| VTS-Training | V-103/2 | Ed 2 | Model Course – Vessel Traffic Services Supervisor Training | VTS | Mar-00 | Dec-09 |
| VTS-Training | V-103/3 | Ed 2 | Model Course – Vessel Traffic Services On-the-Job Training | VTS | Mar-99 | Dec-09 |
| VTS-Training | V-103/4 | Ed 2 | Model Course – Vessel Traffic Services On-the-Job Training Instructor | VTS | Dec-01 | Dec-09 |
|  |  |  | **Management Issues** |  |  |  |
| Management | E-105 | Ed 1 | On the Need to Follow National and International Standards | EEP | May-98 |  |
| Management | O-132 | Ed 2 | On Quality Management for Aids to Navigation Authorities | ANM | Dec-05 | Dec-06 |
|  |  |  | **Pilotage Authority Issues** |  |  |  |
| Pilotage | P-137 | Ed 1 | On Quality Management Systems for Competent Pilotage Authorities and Pilotage Service Providers | PAF | Dec-07 |  |
|  |  |  | **Fog Signals** |  |  |  |
| Fog Signals | E-109 | Ed 1 | On the Calculation of the Range of a Sound Signal | EEP | May-98 |  |

1. Categorised List of IALA Guidelines

| **Category** | **No.** | **Edition** | **Guideline Name** | **Ctte** | **Original** | **Revised** |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Determining Aids to Navigation Requirements** |  |  |  |
| AtoN Reqs | 1018 | Ed 2 | On Risk Management | ANM | Dec-00 | Dec-08 |
| AtoN Reqs | 1057 | Ed1 | On the use of Geographical Information Systems (GIS) by Aids to Navigation (AtoN) Authorities | ANM | Dec-07 |  |
| AtoN Reqs | 1058 | Ed2 | On the Use of Simulation as a Tool for Waterway Design and AtoN Planning | ANM | Dec-07 | Jun-11 |
| AtoN Reqs | 1033 | Ed 1 | On the Provision of Aids to Navigation for Different Classes of Vessels, Including High Speed Craft | ANM | Dec-03 |  |
| AtoN Reqs | 1046 | Ed 1 | On Response Plan for the Marking of New Wrecks | ANM | Jun-05 |  |
| AtoN Reqs | 1051 | Ed1 | For the Provision of Aids to Navigation in Built-up Areas | ANM | Dec-05 |  |
| AtoN Reqs | 1069 | Ed1 | On Synchronisation of Lights | ANM | May-09 |  |
| AtoN Reqs | 1078 | Ed1 | On The Use of Aids to Navigation in the Design of Fairways | ANM | Jun-11 | Jun-11 |
|  |  |  | **Aids to Navigation - Lights, Structures** |  |  |  |
| AtoN | 1043 | Ed 1.2 | On Light Sources used in Visual Aids to Navigation | EEP | Dec-04 | Dec-11 |
| AtoN | 1073 | Ed1 | On Conspicuity of AtoN lights at Night | EEP | Jun-11 |  |
| AtoN | 1048 | Ed1 | On LED Technologies and their use in Signal Lights | EEP | Dec-05 |  |
| AtoN | 1064 | Ed1 | On Integrated Power Systems Lanterns (Solar LED Lanterns) | EEP | Dec-09 |  |
| AtoN | 1049 | Ed2 | On the Use of Modern Light Sources in Traditional Lighthouse Optics | EEP | Dec-05 | Dec-07 |
| AtoN | 1038 | Ed 2 | On Ambient Light Levels at which Aids to Navigation should switch on and off | EEP | Dec-04 | May-09 |
| AtoN | 1023 | Ed 1.1 | The Design of Leading Lines | EEP | Dec-01 | Dec-05 |
| AtoN | 1041 | Ed 2 | On Sector Lights | EEP | Dec-04 | Dec-08 |
| AtoN | 1061 | Ed1 | On Light Applications – Illumination of Structures | EEP | Dec-08 |  |
| AtoN | 1008 | Ed 2 | On Remote Control and Monitoring of Aids to Navigation | EEP | Oct-98 | May-09 |
| AtoN | 1035 | Ed 2 | On Availability and Reliability of Aids to Navigation | EEP | 1989 | Dec-04 |
| AtoN | 1037 | Ed 2 | On Data Collection for Aids to Navigation Performance Calculation | EEP | Dec-04 | Dec-09 |
|  |  |  | **Floating Aids to Navigation** |  |  |  |
| Floating AtoN | 1047 | Ed1 | On Cost Comparison Methodology of Buoy Technologies | EEP | Dec-05 |  |
| Floating AtoN | 1006 | Ed 3 | On Plastic Buoys | EEP | Oct-97 | Dec-08 |
| Floating AtoN | 1015 | Ed 1.1 | On Painting Aids to Navigation Buoys | EEP | May-01 | Dec-05 |
| Floating AtoN | 1065 | Ed1 | On Aids to Navigation Signal Light Beam Vertical Divergence | EEP | May-09 |  |
| Floating AtoN | 1066 | Ed1.1 | On Moorings for Floating Aids to Navigation | EEP | May-09 | Jun-10 |
|  |  |  | **Power Systems for Aids to Navigation** |  |  |  |
| AtoN Power | 1011 | Ed 1 | On a standard method for defining and calculating the load profile of aids to navigation | EEP | Dec-99 |  |
| AtoN Power | 1067-0 | Ed1.1 | On Selection of Power Systems for Aids to Navigation and Associated Equipment | EEP | May-09 | Jun-11 |
| AtoN Power | 1067-1 | Ed1 | On Total Electrical Loads of Aids to Navigation | EEP | May-09 |  |
| AtoN Power | 1067-2 | Ed1 | On Power Sources | EEP | May-09 |  |
| AtoN Power | 1067-3 | Ed1 | On Electrical Energy Storage for Aids to Navigation | EEP | May-09 |  |
| AtoN Power | 1039 | Ed 1 | On Designing Solar Power Systems for Aids to Navigation | EEP | Dec-04 |  |
|  |  |  | **Aids to Navigation Maintenance** |  |  |  |
| AtoN Mtce | 1077 | Ed1 | On Maintenance of Aids to Navigation | EEP | Dec-09 |  |
| AtoN Mtce | 1007 | Ed 1.1 | On Lighthouse Maintenance | Heritage | Oct-97 | Dec-05 |
| AtoN Mtce | 1076 | Ed1 | On Building Conditioning of Lighthouses | EEP | Dec-09 |  |
| AtoN Mtce | 1012 | Ed 2 | For the Protection of Lighthouses and Aids to Navigation against Damage from Lightning | Heritage | Jun-00 | Dec-05 |
| AtoN Mtce | 1091 | Ed1 | On Bird Deterrents | EEP | Dec-12 |  |
| AtoN Mtce | 1036 | Ed 1 | On Environmental Consideration in Aids to Navigation Engineering. | EEP | Dec-04 |  |
|  |  |  | **Aids to Navigation Training** |  |  |  |
| AtoN Training | 1020 | Ed 1.1 | On Training Related to AtoN | ANM | Dec-01 | Dec-05 |
|  |  |  | **Radionavigation - Racons** |  |  |  |
| RNav-Racons | 1010 | Ed 2 | On Racon Range Performance | R-NAV | Dec-99 | Jun-05 |
|  |  |  | **Radionavigation - Differential GNSS** |  |  |  |
| RNav-DGNSS | 1016 | Ed 1 | On Bilateral Agreements and Inter-agency Memorandums of Understanding on the Provision of DGNSS Services in the Frequency Band 283.5 – 325 kHz | R-NAV | Jun-01 |  |
| RNav-DGNSS | 1053 | Ed1 | On the Submission of a DGNSS Service for Recognition as a Component of the IMO WWRNS | R-NAV | Dec-06 |  |
| RNav-DGNSS | 1060 | Ed2 | On Recapitalisation of DGNSS | R-NAV | Dec-08 | Jun-11 |
|  |  |  | **Automatic Identification System** |  |  |  |
| AIS | 1082 | Ed1 | On an Overview of AIS | e-NAV | Jun-11 |  |
| AIS | 1028 | Ed 1.3 | On Universal Automatic Identification (AIS) – Volume 1, Part 1 – Operational Issues | AIS | Dec-02 | Dec-04 |
| AIS | 1029 | Ed 1.1 | On the Universal Automatic Identification System (AIS) – Volume 1, Part 2 – Technical Issues | AIS | Dec-02 |  |
| AIS | 1059 | Ed1 | On the Comparison of AIS Stations | AIS | Jun-08 |  |
| AIS | 1062 | Ed1 | On The establishment of AIS as an Aid to Navigation | ANM | Dec-08 |  |
| AIS | 1081 | Ed1 | On Virtual Aids to Navigation | ANM | Mar-10 |  |
| AIS | 1084 | Ed1 | On Authorisation of AIS AtoN | ANM | Jun-11 |  |
| AIS | 1050 | Ed1 | On the Management and Monitoring of AIS Information | ANM | Dec-05 |  |
| AIS | 1086 | Ed1 | On the Global Sharing of Maritime Data & Information | ANM | Jun-12 |  |
|  |  |  | **e-Navigation** |  |  |  |
| eNav | 1072 | Ed1 | On AtoN Information Exchange & Presentation | e-NAV | Dec-09 |  |
| eNav | 1087 | Ed1 | On Procedures for the Management of the IALA Domains under the IHO GI Registry | e-Nav | Dec-12 |  |
| eNav | 1088 | Ed1 | Introduction to Preparing S-100 Product Specifications | e-NAV | Dec-12 |  |
|  |  |  | **Vessel Traffic Services** |  |  |  |
| VTS | 1056 | Ed1 | On The Establishment of VTS Radar Services | VTS | Jun-07 |  |
| VTS | 1068 | Ed1 | On Provision of a Navigational Assistance Service by a Vessel Traffic Service | VTS | May-09 |  |
| VTS | 1070 | Ed1 | On VTS role in managing Restricted or Limited Access Areas | VTS | Dec-09 |  |
| VTS | 1071 | Ed1 | On Establishment of a Vessel Traffic Service beyond Territorial Seas | VTS | Dec-09 |  |
| VTS | 1089 | Ed1 | On Provision of Vessel Traffic Services (INS,TOS & NAS) | VTS | Dec-12 |  |
| VTS | 1083 | Ed1 | On Standard Nomenclature to identify and refer to VTS centres | VTS | Jun-11 |  |
| VTS | 1045 | Ed 1 | On Staffing Levels at VTS Centres | VTS | Dec-05 |  |
| VTS | 1055 | Ed1 | On Preparing for a Voluntary IMO Audit on Vessel Traffic Services Delivery | ANM | Dec-06 |  |
|  |  |  | **VTS Training** |  |  |  |
| VTS Training | 1014 | Ed 3 | On Accreditation of VTS Training Courses | VTS | Sep-00 | Dec-11 |
| VTS Training | 1017 | Ed 1.1 | On Assessment of Training for VTS | VTS | Jun-01 | Dec-05 |
| VTS Training | 1027 | Ed 1 | On Simulation in VTS Training | VTS | Jun-02 | Dec-08 |
| VTS Training | 1032 | Ed 1.1 | On Aspects of Training of VTS Personnel Relevant to AIS | VTS | Jun-03 | Dec-05 |
|  |  |  | **Management Issues** |  |  |  |
| Mgmt | 1004 | Ed 1.1 | On Levels of Service | ANM | Oct-97 | Dec-05 |
| Mgmt | 1005 | Ed 2 | On Contracting Out Aids to Navigation Services | ANM | 1998 | Dec-05 |
| Mgmt | 1079 | Ed1 | On Establishing and Conducting User Consultancy by Aids to Navigation Authorities | ANM | Dec-09 |  |
| Mgmt | 1052 | Ed2 | On Quality Management Systems for Aids to Navigation Service Delivery | ANM | Dec-05 | Dec-06 |
| Mgmt | 1092 | Ed1 | On Safety Management for AtoN Activities | EEP | Dec-12 |  |
| Mgmt | 1054 | Ed1 | On Preparing for a Voluntary IMO Audit on Aids to Navigation Service Delivery | ANM | Dec-06 |  |
| Mgmt | 1063 | Ed1 | On Agreements for Complementary use of Lighthouses | Heritage | Dec-08 |  |
| Mgmt | 1074 | Ed1 | On Branding and Marketing of Historic Lighthouses | EEP | Dec-09 |  |
| Mgmt | 1075 | Ed1 | On A Business Plan for the complementary use of a Historic Lighthouse | EEP | Dec-09 |  |
| Mgmt | 1080 | Ed1 | On the Selection and Display of Heritage Artefacts | ANM | Dec-11 |  |
| Mgmt | 1093 | Ed1 | On the Management of Surplus Lighthouse Property | EEP | Dec-12 |  |
| Mgmt | 1085 | Ed1 | On Standard Format for Electronic Exchange of AtoN Product Information | EEP | Jun-12 |  |
|  |  |  | **Fog Signals** |  |  |  |
| Fog Signals | 1090 | Ed1 | On the Use of Audible Signals | EEP | Dec-12 |  |

## Comments

Many Recommendations and Guidelines could be considered to fit into a number of the proposed categories. It could be argued that, for example, Guideline1004 ‘On Levels of Service’ should be under the category ‘Determining Aids to Navigation Requirements’. The view was taken that this is a high level policy document and would better lie in the ‘Management’ category whereas Guideline 1018 ‘On Risk Management’, involving methods on how to determine requirements for aids to navigation fits better in the section ‘Determining Aids to Navigation Requirements’.

## Other Issues

* Guideline 1015 on ‘Painting AtoN Buoys’ is still available but an amendment note in Guideline 1077 in May 2008 indicates Guideline 1015 should be withdrawn. This may have been subsequently rescinded.

Guideline 1015 has been withdrawn.

* Guideline 1020 is a guideline on training related to aids to navigation. Should this be withdrawn in view of advances with the WWA?
* Guideline 1033 is a guideline on the provision of aids to navigation for different classes of vessels, including high-speed craft and provides guidance on the risk analysis required. Should this be reviewed in the context of the current PAWSA and IWRAP models?
* A number of issues were found when accessing documents on the website and these are outlined in Appendix 1. A few of these issues have subsequently been resolved and the remaining issues should be corrected when the new website is brought into use.

# Action requested of PAP25

* PAP25 is requested to consider adopting the categorisation of IALA Recommendations and Guidelines outlined in Section 3.2
* PAP25 is requested to consider if it would be beneficial to users if the Recommendations and Guidelines were published on the new web-site as set out in the categorised format in Tables 3 & 4.
* PAP25 is requested to consider the issues set out in Section 3.4.

1. Issues relating to the IALA Web-site

Comment in red by TCM

* The IALA Publications’ List on the web-site does not appear to have been updated since 2010.

This is correct and is a past error that should have been spotted, up to the time that Gwenola left. As I understand matters, the revised website will start with an up-to-date documents list and be much easier to maintain.

* A document naming system which reflects the number and name of the document being downloaded would be useful. Currently documents in the list are named, for example, as ‘doc\_380\_eng’. This is the English version of Guideline 1087 but bears no relationship to the Guideline number or name.

Agreed but I don’t think that this is achievable with the current website.

* Guideline 1004 ‘On Levels of Service’ is the only Guideline not available as a downloadable document and is only available on application to IALA.

This has been fixed.

* Guideline 1068 ‘On Provision of a Navigational Assistance Service by a Vessel Traffic Service’ is in the master publication list but does not appear in the List of Guidelines which can be downloaded.

Guideline 1068 was superseded by Guideline 1089 in December 2012 (Council 54). As already noted, the master list needs to be updated but this will not happen until the new website is operational.

* Guideline 1074 ‘On Branding and Marketing of Historic Lighthouses’ and Guideline 1076 ‘On Building Conditioning of Lighthouses’ will not open in the list of ‘Guidelines’ but reverts the user to a page on the web-site.

I have tried twice to correct this but with no success. The error messages returned are :

**Warning**: unlink(../../iala/publications/documentspdf/doc\_251\_eng.pdf) [[function.unlink](http://www.iala-aism.org/private/modif/function.unlink)]: No such file or directory in **/home/ialaaism/www/private/modif/publications2.php** on line **41**

**Warning**: chmod() [[function.chmod](http://www.iala-aism.org/private/modif/function.chmod)]: No such file or directory in **/home/ialaaism/www/private/modif/publications2.php** on line **58**

**Warning**: Cannot modify header information - headers already sent by (output started at /home/ialaaism/www/private/modif/publications2.php:41) in /home/ialaaism/www/private/modif/publications2.php on line 103

* Recommendation E-112 ‘On Leading Lights’ appears twice in the list of ‘Recommendations’. The second one in the list downloads the correct revised 2005 document and not the 1998 one indicated. The first one gives the message ‘Failed to load PDF document’.

This is because it is an Excel file and would not be fit for purpose as a PDF. The revised website hopefully will take care of non-PDF files. Otherwise it will need to be marked as ‘available on application’.

* Old editions of V102 ‘On The application of the ‘User Pays’ principle to Vessel Traffic Services’ and V127 ‘On Operational Procedures for Vessel Traffic Services’ remain on the list of ‘Recommendations’

Corrected.

* The Spanish version of E200-5 ‘Marine Signal Lights – Part 5 - Estimation of the Performance of Optical Apparatus’ appears twice in the list of ‘Recommendations’

One has been deleted.

* There are a number of incidences where the name of a Recommendation or Guideline on the appropriate list on the web-site is not the same as the actual name of the Recommendation or Guideline, for example, Guideline 1017 ‘On Assessment of Training for VTS’.

This has been corrected for the postings to the revised website.

* An error occurs when downloading Guideline 1047 ‘On the Cost Comparison of Buoy Technologies’. Edition 1 of what appears to be Guideline 1052 ‘On the Use of Quality Management Systems for AtoN Service Delivery’ is downloaded when trying to access Guideline 1047 although it is named Guideline 1047. The real Guideline 1047 is not available.

This has been corrected.

* It is ironic that trying to download Guideline 1085 ‘On Standard Format for Electronic Exchange of AtoN Product Information’ results in ‘Failed to load PDF document’.

This is because it is an Excel file and would not be fit for purpose as a PDF. The revised website hopefully will take care of non-PDF files. Otherwise it will need to be marked as ‘available on application’.