From: ARM Committee PAP29-7.3.1 (ARM2-11.1.7)
To: PAP and IALA Technical Committees & Secretariat 29 May 2015

Liaison Note

NAVGUIDE Update – Review Process

1 Introduction

Liaison Note ARM1-11.1.8, NAVGUIDE Update – Ways of Working, provided guidance on updating the NAVGUIDE in the IALA Wiki. This Liaison note seeks to clarify what committees should focus on when reviewing the NAVGUIDE, and a process for updating the Wiki.

2 Review Process

The NAVGUIDE has been uploaded to the IALA Wiki, and is now available to be worked on in a collaborative manner. Each committee is responsible for updating its "own" pages. The ARM Committee is responsible for coordinating the review process and monitoring progress. If not submitted already, each committee is reminded to provide a point of contact/coordinator to liaise with the ARM task leader (Martin Bransby – martin.bransby@gla-rrnav.org) who will coordinate the NAVGUIDE review process on behalf of the ARM Committee.

The purpose of the NAVGUIDE is to provide a first point of reference on all aspects of providing an AtoN service. The manual also provides references to more detailed guidance from IALA, IMO and related organisations on specific topics. When reviewing sections of the NAVGUIDE, technical committees should be mindful of this purpose. Each section should provide an executive summary like overview of each topic, and reference IALA, IMO, and related organisations' documents where applicable. Authors should provide internet links to references where possible.

In order to publish the NAVGUIDE Wiki in a timely fashion, all tables were inserted as images throughout the Wiki. All committees should create new tables if table template is available and replace the corresponding images. If training on use of the Wiki is needed, contact David Hayes, david.hayes@thls.org or another Wiki competent person within the committees. Additionally, all committees are reminded to provide pertinent photos throughout the NAVGUIDE where applicable.

When making changes to the Wiki, committees should "edit" the NAVGUIDE directly, and "publish" the changes when corrections/updates are made. Coordinators responsible for individual sections should ensure that a description of what was changed, and why the change was made is entered in the section's "Discussion" page. Once the committee responsible for the section being updated approves the update, the relevant pages must be protected through the "Edit" function being disabled by a Wiki administrator, to ensure it can no longer be edited.

3 Action requested

All IALA technical committees are requested to:

- Provide a point of contact/coordinator to liaise with the ARM task leader (Martin Bransby – martin.bransby@gla-rrnav.org) who will coordinate on behalf of the ARM Committee. Each appointee will be responsible for the updating of the relevant sections of the NAVGUIDE as detailed in Table 1.
- Create a standing agenda item for the updating of the NAVGUIDE at each committee session as required.

- When reviewing responsible sections of the NAVGUIDE, ensure that each section where possible reads as an executive summary.
- When creating / amending documentation an executive summary within the document for later use in the NAVGUIDE should be generated.
- Ensure all relevant documents and publications are referenced with the most current version throughout the NAVGUIDE.
- Where possible ensure all tables are created to replace corresponding images.
- Provide pertinent photos for applicable sections of the NAVGUIDE.
- Provide reasons for edits in chapter discussion page.
- Update tracking table and provide liaison note to the ARM Committee when section updates have been approved and protected.

Table 1 - NAVGUIDE Committee Allocations

NAVGUIDE - Committee Allocation

SECTION	SUB-SECTION	ALLOCATED TO
Foreword		Secretariat
Acknowledgement		Martin Bransby
Table of Contents		Martin Bransby
Chapter 1 - Introduction		
1.1	Purpose and Scope	Secretariat
1.2	Background	Secretariat
1.3	Membership	Secretariat
1.4	IALA Structure	Secretariat
1.4.1	IALA Council	Secretariat
1.4.2	General Assembly	Secretariat
1.4.3	Committees	Secretariat
1.4.4	Policy Advisory Panel	Secretariat
1.4.5	Conferences, Symposiums and Exhibitions	Secretariat
1.4.6	Workshops and Seminars	Secretariat
1.5	IALA Publications	Secretariat
1.5.1	IALA Recommendations	Secretariat
1.5.2	IALA Guidelines	Secretariat
1.5.3	IALA Manuals	Secretariat
1.5.4	IALA Dictionary:	Secretariat
1.5.5	Other Documentation:	Secretariat
1.5.6	Related Organisations	Secretariat
Chapter 2 - Concepts and Accuracy of Navigation		
2.1	Navigational Methods	Bob Trainor
2.2	Accuracy Standards for Navigation	Bob Trainor
2.3	Phases of Navigation	Bob Trainor
2.3.1	Ocean Navigation	Bob Trainor
2.3.2	Coastal Navigation	Bob Trainor
2.3.3	Harbour Approach	Bob Trainor
2.3.4	Restricted Waters	Bob Trainor
2.4	Measurement Errors and Accuracy	Bob Trainor
2.4.1	Measurement Error	Bob Trainor
2.4.2	Accuracy	Bob Trainor
2.5	Hydrographic Considerations	Artur Marques
2.5.1	Charts	Artur Marques
2.5.2	Datum	Artur Marques
2.5.3	Accuracy of Charts	Artur Marques

2.5.4	Charted Buoy Positions	Artur Marques

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3.1.2	Visibility of a Mark	ENG
3.1.3	Meteorological Visibility	ENG
3.1.4	Atmospheric Transmissivity	ENG
3.1.5	Atmospheric Refraction	ENG
3.1.6	Contrast	ENG
3.1.7	Use of Binoculars	ENG
3.1.8	Range of a Visual Mark	ENG
3.1.9	Geographical Range	ENG
3.2	Aids to Navigation Lights	ENG
3.2.1	Gas Lights	ENG
3.2.2	Electric Lights	ENG
3.2.3	Photometry of Marine Aids to Navigation Signal Lights	ENG
3.2.4	Rhythms/Character	ENG
3.2.5	Fixed Aids to Navigation	ENG
3.2.6	Floating Aids to Navigation	ENG
3.2.7	Sector Lights and Leading (Range) Lines	ENG
3.2.8	Integrated power supply lanterns	ENG

Chapter 4 - e-Navigation

4.1	Introduction	ENAV
4.2	Definition of e-Navigation	ENAV
4.3	A Vision for e-Navigation	ENAV
4.4	Strategy & Implementation	ENAV
4.5	IALA's Role	ENAV
4.6	E-Navigation Architecture	ENAV
4.6.1	The IMO Adopted Overarching Architecture	ENAV
4.6.2	User’s Perspective of e-Navigation in Architectural Terms	ENAV
4.6.3	The Common Maritime Data Structure	ENAV
4.6.4	The Shore-based Setup for Facilitating e-Navigation	ENAV
4.7	Technology for e-Navigation	ENAV
4.8	IALA Plan	ENAV
Electronic Position Fixing Systems		
4.9	Global Navigation Satellite Systems (GNSS)	ENAV
4.9.1	GPS	ENAV
4.9.2	GLONASS	ENAV
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4.9.4	Beidou/Compass	ENAV
4.9.5	QZSS	ENAV
4.9.6	IRNSS	ENAV
4.10	Differential GNSS	ENAV
4.10.1	IALA Beacon DGNSS	ENAV

4.10.2	SBAS	ENAV
4.11	Receiver Autonomous Integrity Monitoring (RAIM)	ENAV
4.12	Terrestrial - eLoran	ENAV
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4.12.3	eLoran Performance	ENAV
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4.12.6	eLoran as a Viable Backup to GNSS	ENAV
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Communications		
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4.31	Meteorological and Hydrological Information	ENAV
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5.2	Services	Thomas Southall
5.3	VTS System	Kevin Gregory

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6.1.2	Types of Pilotage	Gerry Brine
6.1.3	Other Pilotage Considerations	Gerry Brine
6.1.4	IMO documents relating to pilotage or pilot training and certification	Gerry Brine
6.2	Ships Routeing	Guttorm Tomren
6.2.1	Objectives	Guttorm Tomren
6.2.2	Definitions	Guttorm Tomren
6.2.3	Vessel Manoeuvring Considerations	Guttorm Tomren
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6.3.1	Design Elements	John Festarani
6.3.2	Dredging Considerations	Artur Marques
6.3.3	Hydroographic Considerations	Artur Marques
6.3.4	Economic Considerations	John Festarani
6.3.5	Design Validation and Visualisation and the use of Related Tools	John Festarani
6.4	The Marking of Man-Made Offshore Structures	Christian Herrlich
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6.8	Under Keel Clearance Management Systems	John Festarani

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7.2.2	Wind Energy	ENG
7.2.3	Wave Energy	ENG
7.3	Rechargeable Batteries	ENG
7.3.1	Principal types	ENG
7.3.2	Primary Cells	ENG
7.3.3	Internal Combustion Engine/Generators	ENG
7.6	Electrical Loads and Lightning Protection	ENG
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8.2.2	Level of Service Statement for Quantity	Johan Westerlund
8.2.3	Level of Service Statements for Quality	Johan Westerlund
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8.2.5	Mix of Aids to Navigation (Layers of Service)	Johan Westerlund
8.3	Risk Management	Roger Barker
8.3.1	IALA Risk Management Tools	Roger Barker
8.3.2	Risk Management Decision Process	Roger Barker
8.3.3	Levels of Risk	Roger Barker
8.4	Availability Objectives	Bob Trainor
8.4.1	Calculation of Availability	Bob Trainor
8.4.2	Definition and Comments on Terms	Bob Trainor
8.4.3	IALA Categories for Traditional Aids to Navigation	Bob Trainor
8.4.4	Availability and Continuity of Radionavigation Services	Martin Bransby
8.4.5	Over and Under Achievement Issues	Martin Bransby
8.4.6	Continuity	Martin Bransby
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8.5.2	Strategic Plans	Guttorm Tomren
8.5.3	Operational Plans	Guttorm Tomren
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8.6	Performance Measurement	Christian Herrlich
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