

Please comment by  
10 May 2013



## Report of the 20<sup>th</sup> Session of the IALA ANM Committee

22 to 26 April 2013

### *Executive Summary*

- 47 members from 25 countries attended the meeting; 8 members for the first time;
- the Committee considered 51 input papers;
- the Committee produced 21 output papers, including:
  - one draft revised Recommendation;
  - five draft / draft revised Guidelines
  - ten liaison notes to other Committees and PAP;
  - instructions to other Committees about the updating of the NAVGUIDE;
  - an updated draft NAVGUIDE.
- In discussion the following points were raised (agenda item 12):
  - the amount of editorial work and reformatting of the documents was noted. However, the review of output documents prior to plenary was believed to show considerable benefit;
  - the Committee strongly supported the view that IALA Recommendations and Guidelines should be restructured and consolidated. It was represented that the purpose of each document category needs to be clearly understood;
  - it was suggested that an organigram of the structure and responsibilities for IALA publications would be helpful;
  - it was also suggested that an induction course for new members, perhaps on the Monday morning of a meeting, would assist their understanding of how IALA operates;
  - there was discussion about the duration of deployment of an Emergency Wreck Marking Buoy, which led to the suggestion that care needs to be taken to avoid contradiction with existing publications.
- Changes to the Work Programme were proposed (ANM20/output/2).

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ANM Committee

20<sup>th</sup> Session

26 April 2013

## Report of the 20<sup>th</sup> Session of the IALA ANM Committee

### 1 General

The 20<sup>th</sup> meeting of the **ANM Committee** was held from 22 to 26 April 2013 at IALA. The Chairman was Phil Day and Michael Skov was Vice Chairman. The Secretary for the meeting was Mike Hadley.



#### 1.1 Apologies

Apologies were received from:

NAME	ORGANIZATION	COUNTRY
Jaffer Abdullah	MENAS	Bahrain
Raul Escalante	Hidrovia	Argentina
Jean-Luc Fontan	CETMEF	France
Mohamad Halim	Maine Department	Malaysia
Mats Horstrom	STA	Sweden
Marek Ledochowski	Marine department, Gdynia	Poland
Phillipe Lijour	CETMEF	France
Nauru Rahman	NMSA	Papua New Guinea
Scott Smith	USCG	USA
Catherine Steenberg	Force Technology	Denmark

The Chairman opened the meeting by welcoming all attendees, with a special welcome for new members and those returning after absence.

The Chairman introduced himself and the Vice Chairman. He then extended a warm welcome to all the participants to ANM20. He then introduced the Deputy Secretary-General, Mike Card.

Mike Card began his remarks by conveying the Secretary-General's apologies and best wished for a productive meeting. He then noted that the NAVGUIDE is due to be finalised at ANM21 and went on to say that consideration may be given to producing additional manuals; anyone who had any views on this thought were asked to contact the Chairman, who would be taking part in a strategy and Committee structure meeting during the following week (PAP25). The meeting would be taking a top-down approach to IALA's strategy over 12 years (i.e. 3 Work Programmes). It was explained that the strategy review would take a two step approach; the first to provide input to the 55<sup>th</sup> session of the Council (May 2013) and so receive comment, whilst the second part of the review would take place in conjunction with PAP26, with a view to provide a finalised plan to the 56<sup>th</sup> session of the Council (December 2013). It was remarked that the new WWA website is expected to be ready by 1 May and, hopefully, the revised IALA website would be available a month later. Committee members were asked to inform the Chairman / Vice Chairman, during the week, of any inputs that they had for the strategy review. Mike Card then wished the Committee well for the coming week.

The Chairman then asked the Committee members to introduce themselves.

## **1.2 Approval of the Agenda**

The agenda (paper ANM20/1 rev3) was reviewed and adopted.

## **1.3 Administrative Announcements**

Mike Hadley provided information on health and other administrative details, including the social programme.

The Chairman thanked the Secretariat for the information provided.

The Chairman then ran through the programme for the week (Paper ANM20/4 refers), reviewing the week ahead. For the benefit of those attending ANM for the first time, the Working Group (WG) Chairmen than gave a brief overview of the work of the WGs.

## **2 Review of Action Items from ANM19**

All action items were reviewed; paper ANM20/2 refers.

### **2.1 Action Items – IALA Secretariat**

It was noted that all were complete.

### **2.2 Action Items – ANM Committee Members**

It was noted that all were complete or time expired.

## **3 Review of input papers**

The list of input papers (ANM20/3 rev2) was noted.

The input papers were reviewed, briefly, and their disposition agreed.

## **4 Reports from other bodies**

The Vice Chairman reviewed the reports of the 54<sup>th</sup> session of the Council (ANM20/5).

### **4.1 IALA Council 54<sup>th</sup> session**

From the report, the Committee noted the:

The meeting noted:

- the implementation of IALA Recommendation E.141 Ed.2, including the grandfather clause, lies with competent authorities (9.5.5);

- the workload and activity of IALA is still on the increase but that there were signs that the Committees were overloaded;
- that IALA has identified Governance as a strategic work area and is making a number of improvements in respect of administration and financial management;
- the Secretary-General is requested to review all income and expenditure and identify any savings / efficiencies that can be made;
- the Secretariat is requested to start the process for developing IALA's strategy;
- ANM Committee items (section 9.4);
- Comments by the WWA (section 10);
- The discussion on publications & pricing (section 18.2).

## 5 Reports from Rapporteurs

Where provided, presentations made during this agenda item form part of the output of the meeting and are available from the FTP server and the Committee website.

### 5.1 Risk Management and Risk Models (M1)

A presentation was made by Jakob Bang, DMA. His speaking notes are at Annex G

### 5.2 IALA Questionnaire (M2)

Jorge Teles, Direcção de Faróis, demonstrated the website used to display the Annual Questionnaire information (<http://gis.hidrografico.pt/iala/>). It was shown that without being selective about the geographical area being viewed the screen is extremely cluttered. It was noted that the IALA DGNSS information, currently available in table form from the publications page of the IALA website, will be made available. Members were encouraged to submit their national responses to the Annual Questionnaire, in order to improve the quality / value of the data available.

The Chairman asked that members should inform Jorge Teles if they have any further thoughts on possible changes to the Annual Questionnaire.

In answer to a question, Jorge Teles said that he would circulate the desired format for the specification of the positions of AtoN, should members wish to provide this information for purposes of display.

#### *Action items*

*Where this has not already been done, Committee members are requested to provide their responses to the 2012 Annual Questionnaire.*

*Members are requested to provide any thoughts on changes to the Annual Questionnaire to Jorge Teles in time for the questionnaire to be finalised at ANM21.*

*Jorge Teles is requested to provide the required format for the positioning of AtoN, for display on the website <http://gis.hidrografico.pt/iala/>.*

### 5.3 Offshore man-made structures (M3)

Raven Kurtz, Wasser-und Schifffahrtsdirektion Nord, used a presentation to make his report. He began by covering Tidal power generation sites and then offshore wind farms (OWF). Using data available from [http://en.wikipedia.org/wiki/List\\_of\\_offshore\\_wind\\_farms](http://en.wikipedia.org/wiki/List_of_offshore_wind_farms), he indicated the 10 largest currently operating, the 10 largest under construction and the top 13 proposed wind farm areas. He then indicated where projects are taking place in the North Sea, the Baltic and other regions. Raven Kurtz then showed a list of queries arising from the marking of OWF:

- Requirement for fog signals;
- Use of AIS as AtoN;
- Horizontal angle of lights;
- Lighting of inner structures;

- Unified numerical marking of structures for search and rescue purposes;
- Use of inverse illumination for short range marking;
- Use of RACON;
- Synchronisation and harmonisation of all signal and warning lights;
- Use of simulation for different marking models.

The presentation concluded with a short review of the use of offshore structures as AtoN and the use of simulation for OWF marking

The Chairman suggested that it would be useful if Raven Kurtz could speak with Peter Jensen Schjedal before drawing the attention of the Committee to the workshop on the Application of AtoN within Marine Spatial Planning, planned for 21 to 24 May, at IALA.

#### **5.4 Development of e-Navigation within AtoN Authorities (M4)**

Gerry Brine, AMSA, began by indicating the relevant outcomes from e-NAV13 (March 2013), including a review of the e-Navigation road map developed by that Committee. He then turned to e-Navigation activities in Canada, Portugal, Spain and Australia, before covering recent e-Navigation events. He ended by telling the Committee about the AMSA Navigation Symposium, planned to take place in Darwin between 29 and 31 July 2013.

The Chairman remarked that Papers EEP20/43, EEP20/44 & EEP20/45 were also relevant to this monitoring item.

#### **5.5 Development of e-Navigation for AtoN users (M5)**

There was nothing to report.

#### **5.6 Development of mobile marine products for AtoN users (M6)**

Marek Ledochowski, Urząd Morski w Gdynia, was unable to be present; there was nothing to report.

#### **5.7 IALA Dictionary (M7\*)**

There was nothing to report.

The Chairman thanked the rapporteurs for their contributions and reminded the Committee that they have been asked to provide relevant input to the rapporteurs 8 weeks before each meeting.

#### *Action item*

*Members are requested to provide relevant input to the Committee rapporteurs 8 weeks before each meeting.*

## **6 Presentations**

Copies of all presentations made have been posted on the FTP server.

### **6.1 IALA World-Wide Academy (WWA)**

Stephen Bennett spoke of the recent activities of the WWA, outlining its purpose and how it fits into wider international activity. He spoke of the support to and from the IALA Committees before indicating the Academy's target audience. The focus then turned to capacity building and the courses that are used. It was indicated that seven experts have already been endorsed and that EEP members are encouraged to register. The presentation ended with a summary of the WWA associated documentation currently with the EEP Committee for finalising and an aim for all planned model courses to be complete by the end of EEP21.

### **6.2 IHO S-100 GI registry – Martin Bransby**

The presentation, prepared by Dr Nick Ward of the GLA R&RNAV, introduced the IHO S-100 GI Registry, starting with the definition of e-Navigation, placing emphasis on the words harmonisation and integration, before covering the objectives of e-Navigation. The presentation then covered the aim of achieving a Common Information Structure, the need for a Common Maritime Data

Structure (CMDS), the need for agreed Data Exchange formats and then stated that the IHO Registry has been accepted, by the IMO, as the common baseline for the CMDS. The uses of the IHO registry were covered, together with its contents and the practical aspects that flow from this, giving examples relevant to IALA. The e-Navigation timescale was covered, as were the benefits before conclusions were drawn.

Dr Ward has indicated that he is happy to take questions ([nick.ward@gla-rrnav.org](mailto:nick.ward@gla-rrnav.org)).

There are speaking notes with this presentation.

### 6.3 ACCSEAS Update

Martin Bransby provided an update on the ACCSEAS project.

He began by showing a one-year AIS density plot of shorebased AIS coverage as an introduction to the use of IWRAP analysis. There a graphic display of the challenges facing navigators due to the planned growth in off shore structures and an indication of the existing impact on the route of the Zeebrugge – Hull ferry due to wind farms. The project has suggested that the shipping industry must join in the negotiations that are and will continue to take place with regard to Marine Spatial Planning and is also suggesting that there may be a need to establish a network of shipping routes. An Australian example of before and after route planning was shown, achieving similar results to the example shown in the presentation by Raven Kurtz.

The question was posed “How do we navigate the future North Sea?” It was suggested that e-Navigation solutions may provide the answer. There was mention of the potential impact of the opening up of the North West Passage and the Northern Sea Route before the presentation concluded with advance waning of the 2<sup>nd</sup> ACCSEAS Conference, which will be held in Edinburgh between 4 & 6 March 2014.

The Chairman thanked both of the presenters.

## 7 Establish Working Groups

The Chairman outlined the procedure to be followed by working groups, including the associated paperwork, after which two working groups were established and their tasks outlined.

Working Group (WG)	Working Group Chairman / Vice Chairman
WG1 – Navigational Requirements	Roger Barker / Jorge Teles
WG2 – Continuous Improvement	Gerry Brine / Bjorn Erik Krosness

## 8 Working Group 1 – Navigational Requirements (WG1)

The WG commenced its work by reviewing the agenda items and tasks assigned. The Chair provided clarification on what work needed to be developed at ANM 20 including working papers and potential output papers. For that purpose the 20 members of WG1 were assigned to the 6 tasks described below.

### 8.1 Produce guidance for Aids to Navigation Authorities on the user requirements and practical applications of e-Navigation, from berth to berth. (Task 1\*)

Task Leader: Harry McClenahan

Assistant Task Leader: Christian Pedersen

Assisted by: Rommel Supangan

The WG made the final revision of the draft Guideline on User Requirements and Practical Applications of e-Navigation from Berth to Berth, in order to improve its consistency and uniformity. The document is finalised.

*Action Item*

*The Secretariat is requested to forward the draft Guideline on User Requirements and Practical Applications of e-Navigation from Berth to Berth, for AtoN Authorities (ANM20/output/3) to the IALA Council, to approve.*

General user requirements and obligations have been identified and the perceived structures described. However as this document has been written prior to the IMO e-Navigation implementation plan, ANM are concerned that there is insufficient forecasted accurate information available to reflect the existing title of the document.

The Committee suggest that the title be altered to reflect that e-Navigation is an evolving concept, 'Anticipated user e-Navigation Requirements from Berth to Berth, for AtoN Authorities'.

## **8.2 Review and update the existing IALA Guideline 1018 to include the impact of advances in e-Navigation on risk control measures. (Task 2\*)**

Task Leader: Johan Pettersson

Assistant Task Leader: Jakob Bang

Assisted by: Wim Verhagen

The WG made the final revision of the guideline in order to improve its consistency and uniformity.

The guideline is finalised.

### *Action Item*

*The Secretariat is requested to forward the draft revised Guideline IALA Guideline 1018 On Risk Management (ANM20/output/4) to the IALA Council, to approve.*

## **8.3 Develop guidance on the application of maritime surface picture (e.g. AIS traffic data) for analysis in risk assessment and the provision of Aids to Navigation (Task 3\*)**

Task Leader: Roger Barker

Assistant Task Leader: Khalil Al Balushi

Assisted by: Owen James

The WG proceeded with the development of a draft guideline that will be finished at ANM21.

### *Action Item*

*The Secretariat is requested to forward ANM20/WG1/WP1 to ANM21.*

## **8.4 Develop guidance for AtoN Authorities in the use of Virtual Aids to Navigation assessing their use and contribution to safety of navigation (Task 4\*)**

Task Leader: Hideki Noguchi

The WG finished the review and update of IALA Recommendation O-143, and of IALA Guideline 1081. The documents are finished.

### *Action Item*

*The Secretariat is requested to forward the draft revised Guideline 1081 on the Provision of Virtual Aids to Navigation (ANM20/output/5) to the IALA Council, to approve.*

*The Secretariat is requested to forward the draft revised Recommendation O-143 on the Provision of Virtual Aids to Navigation (ANM20/output/6) to the IALA Council, to approve.*

## **8.5 Consider the IMO Wreck Removal Convention and its implications for AtoN Authorities and States. Develop a Recommendation for IALA Members including guidance on marking 'floating wreckage', taking into account existing IALA guidance (Task 5\*)**

Task Leader: Jorge Teles

The task was suspended at Council 54, following the outcome of ANM19..

*Action item*

*The Chairman is requested to reference ANM20/WG1/WP1 in the submission for the 2014 – 2018 Work Programme.*

**8.6 Review IALA Recommendation O-139 on the Marking of Man-made Off-shore structures (Task 12\*)**

Task Leader: Raven Kurtz

Assistant Task Leader: Ian Burgess

Assisted by: Lee Jinju, Lang Rongwei, Mamadou Balde

Roger Svinø, Willie Tsanga, Josué Youmba, Aigars Gailis

Jorge Teles

The WG compiled and review all the comments made at ANM19 and produced a consolidated draft version of recommendation O-139, to be presented at the maritime spatial planning workshop (May 2013).

*Action Item*

*The Secretariat is requested to forward ANM20/WG1/WP3 to the Maritime Spatial Planning Workshop.*

*The Secretariat is requested to forward ANM20/WG1/WP3 to ANM21.*

**8.7 Input Papers reviewed by Working Group No. 1**

8.7.1 ANM20/40 – VTS questions for the IALA Biennial Questionnaire.

The document was analysed by the WG. It was considered that, although the revision process of the IALA Questionnaire will be made at ANM 21, the range and density of the VTS proposed questions are impossible to be fully incorporated in the IALA questionnaire.

Therefore, it was considered that the best course of action would be for the VTS Committee to issue a separate questionnaire with the questions deemed necessary.

A Liaison Note to the VTS committee was drafted.

A Liaison Note to the EEP and e-NAV committee's was drafted asking for inputs for the next revision of the IALA Questionnaire.

*Action item*

*The Secretariat is requested to forward ANM20/output/7 to the VTS Committee.*

*The Secretariat is requested to forward ANM20/output/8 to the EEP and e-NAV Committees.*

*ANM Committee members are requested to identify possible improvements to the questions and format of the IALA Biennial Questionnaire.*

8.7.2 Testbeds

Papers ANM20/43, ANM20/44, ANM20/45 refer.

The WG also analysed the input papers on e-Navigation testbeds and a Liaison Note was drafted with comments for the e-NAV Committee (ANM20/output/9).

*Action item*

*The Secretariat is requested to forward ANM20/output/9 to the e-NAV Committee.*

## 8.8 List of working papers from Working Group No. 1

Number	Title
ANM20/WG1/WP1	Task 3 - Draft Guideline on AIS Analysis
ANM20/WG1/WP2	Task 5 - Recommendation marking of wrecks
ANM20/WG1/WP3	Task 12 – Draft Recommendation O-139 on The Marking of Offshore Structures

## 9 Working Group 2 – Continuous Improvement (WG2)

The WG contained 22 members of whom 5 were attending an IALA Committee meeting for the first time. The WG was very productive producing 2 output papers for submission to Council, 8 output papers to the other Committees, 2 working papers for discussion in Committee plenary and 2 working papers for input to ANM 21.

The WG commenced its work by reviewing the tasks assigned to WG2 and the 16 related input papers submitted. The Chair and Vice-Chair provided clarification on what work needed to be completed at ANM20. This included working papers for input to ANM21 and required output papers (Recommendations and Guidelines for Council approval and liaison notes to the Secretariat and other Committees).

The Chair advised that the priority outputs for the WG2 at ANM20 were to:

- Largely finalise the content review for Task 6 - *Co-ordinate a limited review of the IALA NAVGUIDE* taking into account input received from the EEP and e-NAV Committees and noting that the remaining input from the e-NAV Committee would not be available until ANM21.
- Complete Task 7 - Develop guidance on issues derived from revision of the MBS, such as the clarification of auxiliary marks, including examples of those debated during the consultation and drafting process
- Further progress Task 8 - *Produce Quality Management and Training guidance for AtoN services and service providers in an e-Navigation environment, in support of the IALA World-Wide Academy. Review IALA Guideline 1052.*
- Finalise for Council approval Task 9 - *Develop guidance for AtoN Authorities on level of service and changing user requirement; such as need for landfall lights and unlit AtoN*

The WG established new, or reconvened existing specialist task groups, each with a dedicated Task Leader, to progress individual agenda Items including taking into account the relevant input papers. Task leaders for each task were as follows:

- John Festarini (Task 6 - *Co-ordinate a limited review of the IALA NAVGUIDE*)
- Bjoern Erik Krosness (Task 7 - *Develop guidance on issues derived from revision of the MBS, such as the clarification of auxiliary marks, including examples of those debated during the consultation and drafting process*)
- Errol Joppich (Task 8 - *Produce Quality Management and Training guidance for AtoN services and service providers in an e-Navigation environment, in support of the IALA World-Wide Academy. Review IALA Guideline 1052*)
- John Festarini (Task 9 - *Develop guidance for AtoN Authorities on level of service and changing user requirement; such as need for landfall lights and unlit AtoN*)
- Peter Jensen (Task 18 - *Develop a supplementary Guideline to 1058 providing technical detail for simulator providers and procurers of simulation to ensure appropriate components and quality for AtoN features*)

Peter Jensen, Ernst Bolt and Martin Bransby were joined by the Committee Chair and Vice-Chair in a drafting group doing a final quality check on the draft new supplementary technical Guideline to Guideline 1058. This was an intensive piece of work

**9.1 Co-ordinate a limited review of the IALA NAVGUIDE, to incorporate amended Recommendations and Guidelines and other necessary updates (Task 6\*)**

Task Leader: John Festarini

Assisted by: Bob Trainor, Gilbert Rueras, Guttorm Tomren, Shaheen Mirza, Errol Joppich, Goffredo Monti, Marcello Tomassi

The following input papers refer:

ANM20/42 - NAVGUIDE 2014 - draft e-Navigation chapter

ANM20/48 - Liaison Note from EEP on Aids to Navigation Guide (NAVGUIDE) 2014 Update for IALA WWA

ANM20/49 - Liaison Note from EEP on the NAVGUIDE Update - General

ANM20/51 - Updated EEP Action Plan for updating NAVGUIDE

A considerable number of sections relevant to the ANM Committee were reviewed and edited as appropriate. The liaison notes from the other committees on content changes were reviewed and, as considered appropriate, reflected in the updated draft of the NAVGUIDE. The schedule and action plan for the revision of the NAVGUIDE were updated.

Liaison notes to all other Committees were prepared thanking them for their input to date, seeking clarification on any drafting issues and reminding members to provide digital images for potential inclusion in the new version.

*Action items:*

*The Secretariat is requested to forward the Liaison Note on the NAVGUIDE (ANM20/Output 10) to the EEP Committee.*

*The Secretariat is requested to forward the Liaison Note on the NAVGUIDE (ANM20/Output 11) to the e-NAV Committee.*

*The Secretariat is requested to forward the Liaison Note on the NAVGUIDE (ANM20/Output 12) to the VTS Committee.*

*The Secretariat is requested to forward the Liaison Note on the NAVGUIDE (ANM20/output/13) to the Secretariat.*

*The Secretariat is requested to forward the NAVGUIDE Schedule (ANM20/output/14) to all other Committees for their information.*

*The Secretariat is requested to forward the NAVGUIDE Work Plan (ANM20/output/15) to all other Committees for their information.*

*The Secretariat is requested to make the draft NAVGUIDE (ANM20/output/16) available on the IALA FTP server for other Committees to access for undertaking final revisions for input before ANM 21.*

*The Secretariat is requested to forward the Liaison Note on the NAVGUIDE (ANM20/output/21) to the EEP Committee.*

**9.2 Develop guidance on issues derived from revision of the MBS, such as the clarification of auxiliary marks, including examples of those debated during the consultation and drafting process (Task 7\*)**

Task Leader: Bjorn Erik Krosness

Assisted by: Minsu Jeon, Johan Westerlund, Wenzhi Yang and Arlindo Santos

Paper ANM20/22 - Development of guidance on issues derived from revision of the MBS refers.

The scope of this task is to:

- ensure other IALA documentation which referenced the MBS has been updated as appropriate;
- determine how best to provide guidance to IALA members on the various issues not able to be addressed in the MBS review process noting that the MBS itself was not being revised.

Using the framework finalised at ANM19, the task group finalised the draft guidance taking into account the following issues identified in Input Paper ANM20/22:

- adverse effect of the proliferation in the use of cardinal marks;
- the use of the Isolated Danger Mark;
- use Special Marks e.g. for navigational guidance;
- Emergency Wreck Marking Buoy.

It was agreed that the guidance should be included in the NAVGUIDE in the section related to the MBS (currently 3.2.6) and a separate guideline was not warranted. It was further agreed that the following task should be considered by ANM plenary for inclusion in the draft 2014-2018 Work Programme:

*Collect information on existing national uses of light rhythms and pictograms for Special Marks to achieve uniformity and to develop guidance as necessary.*

#### *Action items*

*The Secretariat is requested to forward the Liaison Note on the Promulgation of the IALA Maritime Buoyage System on the IALA Website Free of Charge (ANM20/Output 17) to PAP, with a view to seeking Council approval if appropriate.*

### **9.3 Produce Quality Management and Training guidance for AtoN services and service providers in an e-Navigation environment, in support of the IALA World-Wide Academy. Review IALA Guideline 1052. (Task 8\*)**

Task Manager: Errol Joppich      Assisted by: Gerry Brine

Papers ANM20/23 - Draft Revised IALA Recommendation O-132 On Quality Management for Aids to Navigation Authorities and ANM20/24 - Draft Revised IALA Guideline 1052 On Quality Management for AtoN Service Delivery refer

Progress on this task is tied to a large extent to the development of e-Navigation. At ANM19 it was agreed with the ANM Chair that with the e-navigation guidance being developed by WG1 not yet finalised it was problematic to try and complete this major aspect of the task in the current work program and a limited review of the guideline would be completed and a new task included in the draft 2014-2018 work program.

Updating of the Recommendation and Guideline to ensure currency and accuracy has occurred to date. Due to the unexpected departure of the task leader following ANM 19 the verification of the currency of examples in the existing guideline with the Competent Authorities that had provided them was not undertaken inter-sessionally prior to ANM 20. Therefore this will need to occur inter-sessionally to enable finalisation of the updated Recommendation O-132 and Guideline 1052 at ANM 21.

#### *Action item:*

*The Secretariat is requested to forward the draft revised Recommendation O-132 ANM19/WG2/WP2 to ANM 21.*

*The Secretariat is requested to forward the draft revised Guideline 1052 ANM19/WG2/WP3 to ANM 21.*

#### **9.4 Review and update Guideline 1004 for AtoN Authorities on level of service and changing user requirement; such as the need for landfall lights and unlit AtoN (Task 9\*)**

Task Leader: John Festarini

Assisted by: James Collocott, Bob Trainor, Amadou Ndiaye, Nadine Epara, Guttorm Tomren, Ricardo Alves Ribeiro

ANM 19/24 - Draft Revised IALA Guideline No. 1004 On Level of Service refers:

No further input was received in response to a request to IALA members to canvass their organisations and stakeholders on this topic and provide further examples of level of service statements.

After further detailed review at ANM 20 the draft guideline is now considered to be suitable for submission to Council for approval.

##### *Action items:*

*The Secretariat is requested to forward the draft revised Guideline (ANM20/Output 18) to Council for approval.*

#### **9.5 Review ANM Recommendations & Guidelines (Task 16\*)**

Task Leader: Gerry Brine

ANM20/25 - Documents Managed by ANM refers.

This task involves undertaking a cyclical review of all ANM Guidelines and Recommendations during each 4-year work programme. Specific document reviews already in the work programme form part of the performance of this task.

Updating of guidance documentation not the subject of detailed reviews during the current work programme has largely been completed. The Chair, Vice-Chair and WG Chairs discussed the prioritisation of documents for review in the next work programme; the *Documents Managed by ANM* list was updated.

##### *Action item*

*The Secretariat is requested to forward the Working Paper Documents Managed by ANM (ANM20/WG2/WP4) to ANM 21.*

#### **9.6 Develop a supplementary Guideline to 1058 providing technical detail for simulator providers and procurers of simulation to ensure appropriate components and quality for AtoN features (Task 18\*)**

Task Leader: Peter Jensen                      Assisted by: Ernst Bolt

Paper ANM20/46 - Revised draft Guideline on Technical Features and Technology Relevant for Simulation of AtoN

The drafting group completed a thorough, final quality check of the input document and the Guideline is ready to be submitted to Council for approval. An Executive Summary was prepared to assist the plenary's consideration of the revised draft guideline.

##### *Action item*

*The Secretariat is requested to forward the Draft Guideline on Technical Features and Visualisation Technology Relevant for Simulation of AtoN (ANM20-Output 19) to Council for approval.*

## **10 Develop a Recommendation for navigational safety matters within Marine Spatial Planning (Task 15\*)**

The Application of AtoN within MSP workshop Steering group met and confirmed final arrangements for the workshop in May 2013, at IALA.

## **11 Future Work Programme (2014 – 2018)**

The closing plenary discussed the future Work Programme and members were requested to submit additional proposals to the Chair / Vice Chair inter-sessionally

### *Action item*

*Members are requested to submit proposals for the 2014 – 2018 Work Programme to the Chairman / Vice Chairman, inter-sessionally.*

## **12 Review of output and working papers**

WG Chairmen outlined the work undertaken and the issues that are being encountered; both expressed their thanks to their WG members for much hard work and the progress made. Especial thanks were voiced to the new members of both working groups for their input.

Issues arising during the reviews were:

- 1 The amount of editorial work and reformatting of the documents was noted. However, the review of output documents was believed to show considerable benefit.
- 2 The Committee strongly supported the view that IALA Recommendations and Guidelines should be restructured and consolidated. It was represented that the purpose of each document category needs to be clearly understood.
- 3 It was suggested that an organigram of the structure and responsibilities for IALA publications would be helpful.
- 4 It was also suggested that an induction course for new members, perhaps on the Monday morning of a meeting, would assist their understanding of how IALA operates.
- 5 There was discussion about the duration of deployment of an Emergency Wreck Marking Buoy, which led to the suggestion that care needs to be taken to avoid contradiction with existing publications.

The output and working papers were reviewed and their disposition agreed.

## **13 Any Other Business**

The Chairman ran through the papers associated with Any Other Business, noting the Working Groups to which they had been allocated.

### **13.1 UKHO queries**

The issues previously raised by the UKHO, on behalf of the IHO, were discussed and resolved during an inter-sessional visit to the UKHO by the ANM Committee Chairman and the Chairman of Working Group 1.

The issue regarding the charting of major and minor lights was satisfactorily resolved, with the UKHO accepting that the IALA availability categorisation of a light will generally determine the charting requirement.

A discussion was held regarding the use of Q / VQ / UQ lights and the UKHO was advised that IALA no longer use the term UQ.

### **13.2 Disaster Recovery (WG1)**

Paper ANM20/50 refers.

A Liaison Note (ANM20/output/20) to the e-NAV and EEP Committees was drafted, stating that Disaster Recovery would be proposed as a topic for the ANM Committee's 2014 – 2018 Work Programme.

#### *Action item*

*The Secretariat is requested to forward the Liaison Note on the NAVGUIDE (ANM20/output/20) to the e-NAV and EEP Committees.*

### **13.3 IALA Questionnaire (2014 – 2018)**

This topic was covered under agenda item 8.7.1.

### **13.4 Testbeds**

This item was covered under agenda item 8.7.2.

### **13.5 The IALA Bulletin**

The Chairman reminded the meeting that the editor of the IALA Bulletin has asked for suitable high-definition photographs / graphics that can be used, if necessary with attribution, in future editions and that members have been requested to suggest topics that the Bulletin should cover that are not currently included.

#### *Action items*

*Committee members are requested to provide suitable high-definition photographs / graphics that can be used, if necessary with attribution, in future editions of the Bulletin.*

*Committee members are requested to propose topics for inclusion in the Bulletin that are not currently covered.*

### **13.6 IALA Experts**

It was noted that the Chairman, Vice Chairman and the Chairman of Working Group 1 had been accredited as IALA experts during ANM20. Other members of the Committee are encouraged to consider registering for accreditation, the form for which is available on line. Further information can be obtained from Stephen Bennett ([stephen.bennett@iala-aism.org](mailto:stephen.bennett@iala-aism.org)).

#### *Action item*

*ANM members are requested to consider registering as IALA experts.*

## **14 Date and venue for next meeting**

It is intended that ANM21 will meet between 14 and 18 October 2013, at IALA. This will be the last meeting of the current Work Programme.

However, it was noted that the dates for EEP21 (7 – 11 October 2013) and ANM21 (14 – 18 October 2013) may be exchanged. A decision is expected at PAP25 (1 – 2 May 2013) and any changes will be notified to ANM and EEP Committee members.

## **15 Review of session report**

The report was reviewed and then approved by the Committee.

#### *Action item*

*The Secretariat is requested to forward ANM20/output/1 (Report of ANM20) to the Council to note.*

### **15.1 Proposed changes to the Work Programme**

Changes were proposed to the Work Programme (ANM20/output/2).

#### *Action item*

*The Secretariat is requested to forward ANM20/output/2 (Proposed changes to the Work Programme) to the Council for approval.*

## **16 Closing of the Meeting**

The Deputy Secretary-General gave a brief overview of current activities and an indication of future intentions before thanking everyone for their hard work and wished them a safe journey home

There being no further business, the Chairman then wished everyone a safe journey home and wished everyone well for the coming months before declaring the meeting closed.

## **17 List of Annexes**

1 Agenda

A copy of the agenda is at Annex A.

2 Participants

A list of participants is at Annex B.

3 Working Group Participants

A list of working group participants is at Annex C.

4 Input Papers

A list of input papers is at Annex D.

5 Output and Working papers

A list of output and working papers is at Annex E.

6 Action Items

A list of action items is at Annex F.

7 Speaking notes

The speaking notes used by Jacob Bang in support of rapporteur item M1 are at Annex G.

**ANNEX A ANM20 COMMITTEE AGENDA****20<sup>th</sup> Meeting of the Aids to Navigation Management Committee**

The 20<sup>th</sup> meeting of the **ANM Committee** will be held from 22 - 26 April, 2013, at IALA.

The opening plenary will commence at 1300 on Monday, 22 April, 2013, and the closing plenary will end at approximately 1300 on Friday, 26 April, 2013.

Committee Chair, Vice-Chair and working group Chairpersons are requested to meet at 0900 on Monday, 22 April, 2013.

Work items / Tasks being addressed during this meeting are listed in the final table of Annex G of the report of ANM18 (ANM18/output/1).

**Changes from ANM19**

1. Approval of the agenda
  - 1.1. Apologies
  - 1.2. Programme for the week
  - 1.3. Administration and safety brief
2. Review of action items from last meeting
3. Review of input papers
4. Reports from other bodies:
  - 4.1. Report from IALA Council – 54<sup>th</sup> Session, December 2012
5. Report from rapporteurs:
 

5.1. Risk Management and Risk Models (M1*)	Jakob Bang
5.2. IALA Questionnaire (M2*)	Jorge Teles
5.3. Offshore manmade structures (OREI) (M3*)	Raven Kurtz
5.4. Development of e-Navigation within AtoN Authorities (M4*)	Gerry Brine
5.5. Development of e-Navigation for AtoN users (M5*)	Martin Bransby
5.6. Development of mobile marine products for AtoN users (M6*)	Marek Ledochowski
5.7. IALA Dictionary (M7*)	Robert Trainor
6. Presentations:
 

6.1. Brief on WWA	Stephen Bennett
6.2. IHO S-100 Registry	Martin Bransby
7. Establish Working Groups
8. Working Group 1 – Navigational Requirements
  - 8.1. Produce guidance for Aids to Navigation Authorities on the user requirements and practical applications of e-Navigation, from berth to berth. (Task 1\*)
  - 8.2. Develop Recommendations on AtoN standards and navigational requirements in risk control measures included in e-Navigation (this would include a revision (or a replacement) of the existing Recommendations and Guideline on risk management (1018)). (Task 2\*)
  - 8.3. Develop guidance on the application of maritime surface picture (e.g. AIS traffic data) for analysis in risk assessment and the provision of Aids to Navigation (Task 3\*)
  - 8.4. Review and update guidance for AtoN Authorities, including Guideline 1062, in the use of Virtual Aids to Navigation assessing their use and contribution to safety of navigation (Task 4\*)

- 8.5. Consider the IMO Wreck Removal Convention and its implications for AtoN Authorities and States. Develop a Recommendation for IALA Members including guidance on marking 'floating wreckage', taking into account existing IALA guidance (Task 5\*) – Task suspended
- 8.6. Review IALA Recommendation O-139 on the Marking of Man-made Off-shore structures (Task 12\*)
9. Working Group 2 – Continuous Improvement
  - 9.1. Co-ordinate a limited review of the IALA NAVGUIDE to incorporate amended IALA Recommendations and Guidelines and other necessary updates (Task 6\*)
  - 9.2. Develop guidance on issues derived from revision of the MBS, such as the clarification of auxiliary marks, including examples of those debated during the consultation and drafting process (Task 7\*)
  - 9.3. Produce Quality Management and Training guidance for AtoN services and service providers in an e-Navigation environment, in support of the IALA World-Wide Academy. Review IALA Guideline 1052 (Task 8\*)
  - 9.4. Review and update guidance for AtoN Authorities on level of service and changing user requirement; such as need for landfall lights and unlit AtoN (Task 9\*)
  - 9.5. Develop and update of IALA Recommendation O-113 on the Marking of fixed bridges over navigable waters, also considering the marking of overhead power lines (Task 10\*) - Complete
  - 9.6. Review IALA Recommendation O-104 of 1998, for off station Signals for Major Floating Aids to Navigation and extended to considerations of Buoys of Primary Navigation Significance (BPNS) and so called Superbuoys (Task 11\*) - Complete
  - 9.7. Co-operate with the other committees in the project for AtoN Status / information exchange and associated metadata (Task 13\*) - Complete
  - 9.8. Examine the use of Audible Signals as aids to navigation and develop an IALA Guideline on their future – in conjunction with the EEP Committee (Task 14\*) - Complete
  - 9.9. Review ANM Recommendations & Guidelines for updating (Task16\*)
  - 9.10. Update IALA Guideline 1058 on the use of simulation as a tool for waterway design and AtoN planning (Task17\*) - Complete
  - 9.11. Develop a supplementary Guideline to 1058 providing technical detail for simulator providers and procurers of simulation to ensure appropriate components and quality for AtoN features (Task 18\*)
  - 9.12. Review IALA Recommendation O-130 on Categorisation and Availability Objectives for Short Range Aids to Navigation (Task 19\*)
10. Develop a Recommendation for navigational safety matters within Marine Spatial Planning (Task 15\*)
11. Future Work Programme (2014 – 2018)
12. Review of output and working papers
13. Any Other Business
  - 13.1. UKHO Queries
  - 13.2. Disaster Recovery
  - 13.3. IALA Questionnaire (2014 – 2018)
  - 13.4. Testbeds
  - 13.5. The IALA Bulletin
14. Date and venue of next meeting
15. Review of session report

**ANNEX B ANM20 PARTICIPANTS****Countries****Australia****Australian Maritime Safety Authority**

Mr Gerry BRINE  
 Aids to Navigation, Navigation Safety & Int'l Division  
 82 Northbourne Avenue, Braddon ACT 2612  
 GPO Box 2181, Canberra ACT 2601  
 Australia

Phone +61 2 6279 5049  
 Fax +61 2 6279 5986  
 Mobile phone: +61 408 769 400  
 e-mail (main): gerry.brine@amsa.gov.au  
 e-mail (alternative): gerrybrine@gmail.com

**Australian Maritime Systems**

Mr. Errol JOPPICH  
 655 McArthur Av. Central  
 Pinkenba, QLD 4009  
 Australia

Phone +61 736 334 104  
 Fax +61 736 334 199  
 Mobile phone: +61 417 758 226  
 e-mail (main): etj@marsys.com.au

**Brazil****Centro de Sinalização Náutica "Almirante Moraes Rego"**

Cdr Ricardo ALVES RIBEIRO  
 Brazilian Aids to Navigation Dept  
 Rua Barao de Jaceguay s/n  
 Niteroi Rio de Janeiro  
 Brazil

Phone +55 21 2189 3139  
 Mobile phone: +55 21 7122 7185  
 e-mail (main): ricardo@camr.mar.mil.br

**Cameroon****Autorité Portuaire Nationale**

Mrs Nadine EPARA  
 BP-11538  
 Yaoundé  
 Cameroon

Phone +237 77 76 53 55  
 Fax +237 22 23 73 14  
 e-mail (main): nadineepara@yahoo.fr

**Autorité Portuaire Nationale**

Mr Willie TSANGA  
 BP-11538  
 Yaoundé  
 Cameroon

Phone +237 99 93 95 39  
 Fax +237 22 23 73 14  
 e-mail (main): tsangambawillie@yahoo.fr

**Autorité Portuaire Nationale**

Mr Josue YOUMBA  
 BP-11538  
 Yaoundé  
 Cameroon

Phone +237 22 23 73 14  
 e-mail (main): jyoumba@yahoo.fr

**Canada****Canadian Coast Guard**

Mr John FESTARINI  
 200 Kent Street  
 Ottawa, Ontario  
 K1A 0E6  
 Canada

Phone +1 613 998 1381  
 Fax +1 613 998 8428  
 Mobile phone: +1 613 612 5022  
 e-mail (main): john.festarini@dfo-mpo.gc.ca

**China  
(People's  
Republic of)****China MSA**

Mr Rongwei LANG  
 11 Jianguomennei Avenue  
 Beijing 100736  
 China

Phone +86 22 5887 6906  
 Fax +86 22 5887 6904  
 Mobile phone: +86 18920280829  
 e-mail (main): captain\_eric@sohu.com  
 e-mail (alternative): tjatn@public.tpt.tj.cn

**China MSA**

Mr Wenzhi YANG  
 190, Siping Road  
 Hongkou District  
 Shanghai  
 P.R. of China

Phone +86 (0)21 660 72746  
 Fax +86 (0)21 660 72744  
 e-mail (main): yangwenzhi@msa.gov.cn

**Denmark****Danish Maritime Authority**

Mr. Jakob BANG  
 Marine Superintendent  
 Carl Jacobsens Vej 31  
 2500 Valby  
 Denmark

Phone +45 91 37 61 73  
 Mobile phone: +45 20 52 85 41  
 e-mail (main): cjb@dma.dk

**Danish Maritime Authority**

Mr Christian KOPP PEDERSEN  
 Aids to Navigation Operations  
 Carl Jacobsens Vej 31  
 2500 Valby  
 Denmark

Phone +45 24 69 07 20  
 Mobile phone: +45 24 69 07 20  
 e-mail (main): CKP@dma.dk

**Danish Maritime Authority**

Mr. Michael SKOV  
 Head of Division  
 Carl Jacobsens Vej 31  
 2500 Valby  
 Denmark

Phone + 45 391 37 61 71  
 Fax + 45 91 37 50 01  
 Mobile phone: + 45 20 53 25 84  
 e-mail (main): msk@dma.dk

**Force Technology**

Mr Peter Jensen SCHJELDAHL  
 Hjortekaersvej 99  
 2800 Kgs. Lyngby  
 Denmark

Phone +45 72 15 77 15  
 Mobile phone: +45 29 29 18 18  
 e-mail (main): psj@force.dk

**Germany Wasser-und Schifffahrtsdirektion Nord**

Captain Raven KURTZ  
 Hindenburgufer 247  
 D-24106 Kiel  
 Germany

Phone +49 431 3394 8120  
 Fax +49 431 3394 6399  
 Mobile phone: +49 173 610 68 44  
 e-mail (main): raven.kurtz@wsv.bund.de  
 e-mail (alternative): ravenkurtz@web.de

**IALA IALA Deputy Secretary General**

Mr. Michael D. CARD  
 10 rue des Gaudines  
 78100 Saint Germain en Laye  
 France

Phone +33 1 3451 70 01  
 Fax +33 1 34 51 82 05  
 Mobile phone: +33 6 83 43 27 99  
 e-mail (main): michael.card@iala-aism.org

**IALA Technical Coordination Manager**

Dr. Mike HADLEY  
 10 rue des Gaudines  
 78100 Saint Germain en Laye  
 France

Phone +33 1 34 51 70 01  
 Fax +33 1 34 51 82 05  
 Mobile phone: +44 7887 548 227  
 e-mail (main): mike.hadley@iala-aism.org  
 e-mail (alternative): advnav@btinternet.com

**IALA-WWA, Programme Manager**

Mr Stephen BENNETT  
 10 rue des Gaudines  
 Saint Germain en Laye  
 France

Phone +44 243 533 148  
 Fax +33 1 34 51 82 05  
 Mobile phone: +44 7787 320 761  
 e-mail (main): Stephen.Bennett@iala-aism.org

**Ireland Commissioners of Irish Lights**

Capt Harry McCLENAHAN  
 Harbour Road  
 Dun Laghoaire  
 Co. Dublin  
 Ireland

Phone +353 1 98 18 472  
 Fax +353 86 82 14 35  
 Mobile phone: +353 868 201 435  
 e-mail (main): harry.mcclenahan@cil.ie

**Italy Italian Navy**

Capt Goffredo MONTI  
 Italian Navy Directorate  
 Via Toarmina  
 Roma  
 Italy

Phone +39 39 33 05 05 15  
 Mobile phone: +39 393 30 50 515  
 e-mail (main): goffredo.monti@marina.difesa.it  
 e-mail (alternative): goffredomonti@libero.it

**Italian Navy**

Cdr Marcello TOMASSI  
 VIA Giuseppe Taverna 100  
 00135 Roma  
 Italy

Phone +39 06 36 80 72 16  
 e-mail (main): marcello.tomassi@marina.difesa.it

**Japan Japan Aids to Navigation Association (JANA)**

Mr. Tamotsu IKEDA  
 Kaiji-Center Bldg.  
 4-5, Kouji-Machi, Chiyoda-ku  
 Tokyo 102-0083  
 Japan

Phone +81 (0)3 3230 1470  
 Fax +81 (0)3 3230 1050  
 e-mail (main): ikeda\_t@jana.or.jp

**Japan Coast Guard, Maritime Traffic Department, Administration and Planning**

Cdr. Hideki NOGUCHI  
 2-1-3 Kasumigaseki  
 Chiyoda-ku  
 Tokyo 100-8918  
 Japan

Phone +81 3 3591 6361  
 Fax +81 3 3591 5468  
 Mobile phone: +81 803468 1198  
 e-mail (main): noguchi-i8twy@kaiho.mlit.go.jp  
 e-mail (alternative): hideki.noguchi@gmail.com

**Kingdom of Bahrain MENAS**

Mr Shaheen MIRZA  
 MENAS Maritime Operations Centre  
 P.O. Box 66  
 Kingdom of Bahrain

Phone +973 17 82 85 50  
 Fax +973 17 72 77 65  
 Mobile phone: +973 39 65 01 80  
 e-mail (main): mirza@menas.com.bh  
 e-mail (alternative): info@menas.com.bh

**Latvia Latvian Hydrographic Service, Maritime Administration of Latvia**

Mr Aigars GAILIS  
 5, Trijadibas Street  
 LV-1048 Riga  
 Latvia

Phone +371 67062145  
 Fax +371 67062139  
 Mobile phone: +371 264 499 24  
 e-mail (main): aigars.gailis@lhd.lv  
 e-mail (alternative): aigars111@gmail.com

**Netherlands Ministry of Infrastructure and The Environment**

Mr Wim VERHAGEN  
 P O Box 5807  
 2280 HV Rijswijk  
 The Netherlands

Phone +31 70 336 66 80  
 Fax +31 70 319 4238  
 Mobile phone: +31 6 270 38 245  
 e-mail (main): wim.verhagen@rws.nl

**Ministry of Infrastructure and the Environment**

Mr Ernst BOLT  
 Postbus 5044  
 2600 GA Delft  
 The Netherlands

Phone +31 88 7982 508  
 Fax +316 513 312 06  
 Mobile phone: +31 6 513 312 06  
 e-mail (main): ernst.bolt@rws.nl  
 e-mail (alternative): ebolt@gmx.net

**Norway****Norwegian Coastal Administration**

Mr. Bjorn Erik KROSNESS  
 Postboks 1502  
 NO-6025 Aalesund  
 Norway

Phone +47 70 23 10 54  
 Fax +47 70 23 10 08  
 Mobile phone: +47 90 77 24 94  
 e-mail (main): bjorn.erik.krosness@kystverket.no

**Norwegian Coastal Administration**

Mr Roger Njord SVINO  
 Postboks 1502  
 N-6025 Aalesund  
 Norway

Phone +47 701 601 60  
 e-mail (main): roger.njord.svino@kystverket.no

**Norwegian Coastal Administration**

Mr Guttorm TOMREN  
 Postboks 1502  
 NO-6025 Aalesund  
 Norway

Phone +47 70 23 1150  
 Fax +47 70 23 10 08  
 Mobile phone: +47 90 79 28 74  
 e-mail (main): guttorm.tomren@kystverket.no

**Oman,  
Sultanate of****AMNAS**

Mr Khalil AL BALUSHI  
 General Manager  
 P.O. Box 1677  
 CPO Seeb, PC 111  
 Oman, Sultanate of

Phone +968 24 462 000  
 Fax +968 24 46 2010  
 Mobile phone: +968 99249200  
 e-mail (main): khalil@amnas-oman.com

**Philippines Philippine Coast Guard**

Commodore Gilbert RUERAS  
 Maritime Safety Services Command  
 Headquarters Philippines Coast Guard  
 139 25th Street, Port Area  
 Philippines

Mobile phone: +63 9 17 59 82 177  
 e-mail (main): gdlrueas@yahoo.com

**Philippine Coast Guard**

Commander Rommel SUPANGAN  
 Maritime Safety Services, CG-8  
 Headquarters Philippine Coast Guard  
 139 25th Street, Port Area 1018  
 Philippines

Mobile phone: +63 9 17 54 21 995  
 e-mail (main): rsupangan\_95@yahoo.com

**Portugal Direcção de Faróis**

Mr Arlindo SANTOS  
 Estrada Marginal  
 2770-210 Paço de Arcos  
 Portugal

Phone +351 21 44 61 660  
 Fax +351 21 44 10 193  
 e-mail (main): dirfarois@sapo.pt  
 e-mail (alternative): arlindo.ferreira.santos@marinha.pt

**Direcção de Faróis**

LtCdr Jorge TELES  
 Estrada Marginal  
 2720-210 Paço de Arcos  
 Portugal

Phone +351 21 446 1666  
 Mobile phone: +351 9166 30653  
 e-mail (main): santos.teles@marinha.pt

**Republic of Guinea ANAM**

Mr Mamadou Alpha BALDE  
 Chef de la Division Phares et Balises  
 BP 534  
 Conakry  
 Republic of Guinea

Phone +224 66 49 14 762  
 Fax +224 664 91 47 62  
 e-mail (main): alphabaguire@yahoo.fr



**South Africa South African Maritime Safety Authority**

Mr. James COLLOCOTT  
 163 Tygerberg Park  
 Henrik Verwoed Drive,Platteklouf  
 Cape Town 7500  
 South Africa

Phone + 27 21 938 3310  
 Fax + 27 86 591 7990  
 Mobile phone: +27 82 45 84 890  
 e-mail (main): jcollocott@samsa.org.za

**Sweden Swedish Maritime Administration**

Mr Johan WESTERLUND  
 Diamantvägen 47  
 611 44 Nyköping  
 Sweden

Phone +46 10 478 48 30  
 Mobile phone: +46 708 19 14 44  
 e-mail (main): johan.westerlund@sjofartsverket.se  
 e-mail (alternative): waez@hotmail.com

**Swedish Transport Agency**

Mr Johan PETTERSSON  
 Maritime Department  
 S-601 73 Norrköping  
 Sweden

Phone +46 10 495 33 34  
 Mobile phone: +46 76 72 10 47  
 e-mail (main): johan.pettersson@transportstyrelsen.se

**UK General Lighthouse Authorities of UK & Ireland**

Mr Martin BRANSBY  
 The Quay  
 Harwich  
 Essex  
 UK

Phone +44 (0)1255 245 042  
 Mobile phone: +44 (0)7770 265 652  
 e-mail (main): martin.bransby@gla-rnav.org

**Pharos Marine Ltd.**

Mr. Owen JAMES  
 Steyning Way  
 Hounslow, Middlesex  
 TW4 6DL  
 UK

Phone +44 20 8538 1100  
 Fax +44 20 8577 4170  
 Mobile phone: +44 7767785794  
 e-mail (main): ojames@pharosmarine.com

**Tideland Signal Ltd.**

Mr. Ian BURGESS  
Kendal House  
Victoria Way  
Burgess Hill West Sussex RH15 9NF  
UK

Phone +44 1444 87 22 40  
Fax +44 1444 87 22 41  
Mobile phone: +44 7799646445  
e-mail (main): [iburgess@tidelandsignal.ltd.uk](mailto:iburgess@tidelandsignal.ltd.uk)

**Trinity House Lighthouse Service**

Capt Roger BARKER  
Director of Navigational Requirements  
Tower Hill  
EC3N 4DH  
UK

Phone +44 207 481 6917  
Fax +44 207 480 7662  
Mobile phone: +44 7785 111 519  
e-mail (main): [roger.barker@thls.org](mailto:roger.barker@thls.org)

**USA****US Coast Guard**

Mr Robert TRAINOR  
Visual Navigation Branch  
2100 Second Street SW  
Washington DC  
United States

Phone +1 202 372 1550  
Fax +61 202 372 1992  
e-mail (main): [robert.m.trainor@uscg.mil](mailto:robert.m.trainor@uscg.mil)  
e-mail (alternative): [rctrainor@frontiernet.net](mailto:rctrainor@frontiernet.net)

**ANNEX C WORKING GROUP PARTICIPANTS****Working Group 1 Navigational Requirements**

	Name	Organisation / Country
1	Roger Barker (Chairman)	THLS / England & Wales
2	Jorge Teles (Vice Chairman)	Direcção de Faróis / Portugal
3	Khalil Al Balushi	AMNAS / Oman
4	Mamadou Alpha Balde	ANAM / Republic of Guinea
5	Jakob Bang	DMA / Denmark
6	Ian Burgess	Tideland Signal / UK
7	Aigars Gailis	Latvian Maritime Administration
8	Owen James	Pharos Marine / UK
9	Raven Kurtz	WVS / Germany
10	Rongwei Lang	China MSA
11	Jinju Lee	Woori Marine / Republic of Korea
12	Harry McClenahan	CIL / Ireland
13	Hideki Noguchi	JCG / Japan
14	Christian Pedersen	DMA /Denmark
15	Johan Pettersson	STA / Sweden
16	Rommel Supangan	Phillippines Coast Guard
17	Roger Nord Svinø	NCA / Norway
18	Willie Tsanga	APN / Cameroon
19	Wim Verhagen	Ministry of Infrastructure & the Environment / The Netherlands
20	Josué Youmba	APN / Cameroon

## Working Group 2 Continuous Improvement

	Name	Organisation / Country
1	Gerry Brine (Chairman)	AMSA / Australia
2	Bjoern Erik Krosness (Vice Chairman)	Norwegian Coastal Administration
3	Ernst Bolt	Rijkswaterstaat / The Netherlands
4	Martin Bransby	GLA R&RNAV / UK
5	James Collocott	SAMSA / South Africa
6	Nadine Epara	APN / Cameroon
7	John Festarini	CCG / Canada
8	Tamotsu Ikeda	JANA / Japan
9	Minsu Jeon	Korean Association of AtoN
10	Errol Joppich	AMS / Australia
11	Shaheen Mirza	MENAS / Bahrain
12	Gofredo Monti	Italian Navy
13	Amadou Ndiaye	Port Autonome de Dakar / Senegal
14	Ricardo Alver Ribeiro	Brazilian Navy
15	Gilbert Rueras	Philippine Coast Guard
16	Arlindo Santos	Portuguese Lighthouse Authority
17	Peter Jensen Schjedal	Force Technology / Denmark
18	Marcello Tomasi	Italian Navy
19	Guttorm Tomren	NCA / Norway
20	Robert Trainor	USCG / USA
21	Johan Westerlund	SMA / Sweden
22	Wenzi Yang	China MSA

**ANNEX D LIST OF INPUT PAPERS**

All papers are posted on the FTP server and the Committee website

Meeting	Number	Title / Author (if required)	Agenda Item	Presented by / WG	Posting
		Report of ANM19		All	1
		ANM input paper template		All	1
ANM20/	1 rev3	Agenda	1	PD / TCM	Late
ANM20/	2	Action Items from ANM19	2	PD / TCM	1
ANM20/	3	Papers' List ( <b>Finalised at pre-meeting</b> )	3	PD / TCM	1
ANM20/	4	Programme for the week ( <b>Finalised at pre-meeting</b> )	3	PD / TCM	1
ANM20/	5	Report C54	4.1	PD / TCM	1
ANM20/	6	Task 1 Draft Guideline on User Requirements and Practical Applications of e-Navigation from Berth to Berth	8.1	1	1
ANM20/	7	Task 1 Draft IALA Guideline on Harmonised Portrayal of e-Navigation Information	8.1	1	1
ANM20/	8	Task 2 Draft revised Guideline 1018 Ed3 Risk Management	8.2	1	1
ANM20/	9	Task 3 Draft Guideline on AIS Analysis	8.3	1	1
ANM20/	10	Task 4 Draft revised Guideline1081 Ed1 Virtual AtoN	8.4	1	1
ANM20/	11	Task 4 Draft revised recommendation O-143 Ed1 Virtual Aids to Navigation	8.4	1	1
ANM20/	12	Rejected Draft Recommendation on the marking of drifting wreckage	8.5	1	1
ANM20/	13	Task 12 Brief report about review of O-139 from ANM19	8.6	1	1
ANM20/	14	Task 12.2 Brief report about review of O-139 from ANM19, Annex 1	8.6	1	1
ANM20/	15	Task 12.2 Brief report about review of O-139 from ANM19, Annex 2	8.6	1	1
ANM20/	16	Task 12.2 Brief report about review of O-139 from ANM19, Annex 3	8.6	1	1
ANM20/	17	Task 12.2 Brief report about review of O-139 from ANM19, Annex 4	8.6	1	1
ANM20/	18	Task 12.2 Brief report about review of O-139 from ANM19, Annex 5	8.6	1	1
ANM20/	19	Task 12.3 Brief report about review of O-139 from ANM19, Annex 6	8.6	1	1
ANM20/	20	Task 12.1 Brief report about review of O-139 from ANM19, Annex 7	8.6	1	1
ANM20/	21	Task 12.4 Brief report about review of O-139 from ANM19, Annex 8	8.6	1	1
ANM20/	22	Task 7 MBS issues	9.2	2	1
ANM20/	23	Task 8 Revised IALA Recommendation O-132 on Quality Management	9.3	2	1
ANM20/	24	Task 8 Revised IALA Guideline 1052 on QMS for AtoN Service Delivery	9.3	2	1
ANM20/	25	Task 16 Documents Managed by ANM	9.9	2	1

ANM20/	26	Draft revised Guideline 1004 on Level of Service	9.9	2	1
ANM20/	27	Technical Features and Technology Relevant for Simulation of AtoN. <b>Replaced by ANM20/46</b>	9.11	2	1
ANM20/	28	German Guidelines for the Design, Marking and Operation of wind generators	8.6	1	1
ANM20/	29	Review of O-139 at ANM19	8.6	1	1
ANM20/	30	<b>Report of PAP24</b>	4.2	PD / TCM	4
ANM20/	31	<b>MSC 91</b>	4.3	PD / TCM	4
ANM20/	32	Updating IALA documentation	11	PD / MS	1
ANM20/	33	Master List of IALA Recommendations	11	PD / MS	1
ANM20/	34	Master List of Guidelines	11	PD / MS	1
ANM20/	35	Master List of Other publications	11	PD / MS	1
ANM20/	36	Master List of Model Courses	11	PD / MS	1
ANM20/	37	Meeting programme revised C54	INF	All	2
ANM20/	38	Best Practice - Conference 2014	INF	All	2
ANM20/	39	Best practices submission form	INF	All	2
ANM20/	40	Liaison note from VTS on IALA Questionnaire	13.1	1	2
ANM20/	41	Liaison Note from e-NAV about NAVGUIDE	9.1	2	2
ANM20/	42	NAVGUIDE 2014 - draft e-navigation chapter with track changes	9.1	2	2
ANM20/	43	e-NAV WG on testbeds ToR and WP	13.2	1	2
ANM20/	44	Discussion paper on testbeds	13.2	1	2
ANM20/	45	Liaison note from e-NAV13 on e-Navigation Roadmap	8.1	1	2
ANM20/	46	Revised draft Guideline on Technical Features and Technology Relevant for Simulation of AtoN. <b>Replaces ANM20/27.</b>	9.11	Drafting group	2
ANM20/	47 rev1	ANM20 Work Plan	-	C&VC	Late
ANM20/	48	Liaison Note from EEP on the NAVGUIDE Update for IALA WWA	9.1	2	Late
ANM20/	49	Liaison Note from EEP on the NAVGUIDE Update - General	9.1	2	Late
ANM20/	50	Liaison note from EEP to e-NAV & ANM on Disaster Recovery	13.2	C&VC	Late
ANM20/	51	NAVGUIDE 2014 - EEP Action Plan	9.1	2	Late

**ANNEX E LIST OF OUTPUT AND WORKING PAPERS**

Output documents are submitted for review/action by a body other than the Committee initiating the document.

<b>Number</b>	<b>Title</b>	<b>Status</b>
ANM20/output/1	Draft Report	To Council to note
ANM20/output/2	Requested changes to the Work Programme	To Council to approve
ANM20/output/3	Draft Guideline on User Requirements and Practical Applications of e-Navigation from Berth to Berth	To Council to approve
ANM20/output/4	Draft revised Guideline 1018 on Risk Management	To Council to approve
ANM20/output/5	Draft revised Guideline 1081 on Virtual Aids to Navigation	To Council to approve
ANM20/output/6	Draft revised Recommendation O-143 Virtual Aids to Navigation	To Council to approve
ANM20/output/7	Liaison to VTS on the Annual Questionnaire	To VTS37
ANM20/output/8	Liaison note to e-NAV & EEP on the Annual Questionnaire	To e-NAV14 & EEP21
ANM20/output/9	Liaison note to e-NAV on e-Navigation testbeds	To e-NAV14
ANM20/output/10	Liaison Note to EEP about the NAVGUIDE	To EEP21
ANM20/output/11	Liaison Note to e-NAV about the NAVGUIDE	To e-NAV14
ANM20/output/12	Liaison Note from ANM to VTS about the NAVGUIDE	To VTS37
ANM20/output/13	Liaison Note from ANM to Secretariat about the NAVGUIDE	To the Secretariat
ANM20/output/14	NAVGUIDE Timetable	To VTS37, e-NAV14 & EEP21
ANM20/output/15	NAVGUIDE Work Plan	To VTS37, e-NAV14 & EEP21
ANM20/output/16	Draft NAVGUIDE	To VTS37, e-NAV14 & EEP21
ANM20/output/17	Liaison Note on the Promulgation of the IALA Maritime Buoyage System on the IALA Website	To PAP25 & Secretariat
ANM20/output/18	Draft revised Guideline 1004 on Levels of Service	To Council to approve
ANM20/output/19	Draft Guideline on Technical Features and Technology Relevant for Simulation of AtoN	To Council to approve
ANM20/output/20	Liaison Note to EEP & e-NAV on Disaster Recovery	To e-NAV14 & EEP21
ANM20/output/21	Liaison Note to EEP about the NAVGUIDE	To EEP21

Working papers are documents that will remain within the Committee for further review.

Number	Title	Status
ANM20/WG1/WP1	Draft Guideline on AIS analysis	To ANM21
ANM20/WG1/WP2	Draft Recommendation on the marking of wrecks	To ANM21
ANM20/WG1/WP3	Draft revised Recommendation O-139 on the marking of offshore structures	To ANM21
ANM20/WG2/WP1	Discussion paper on MBS guidance	To ANM21
ANM20/WG2/WP2	Revised IALA Recommendation O-132 on Quality Management	To ANM21
ANM20/WG2/WP3	Revised IALA Guideline 1052 on QMS for AtoN Service Delivery	To ANM21
ANM20/WG2/WP4	Documents managed by ANM	To ANM21
ANM20/WG2/WP5	Executive Summary - IALA Guideline on Simulation	To ANM21
ANM20/C&VC/WP1	ANM20 2014 – 2018 Work Programme proposals	To ANM21

**ANNEX F ACTION ITEMS***Action Items for Secretariat*

1. The Secretariat is requested to forward the draft Guideline on User Requirements and Practical Applications of e-Navigation from Berth to Berth, for AtoN Authorities (ANM20/output/3) to the IALA Council, to approve. 9
2. The Secretariat is requested to forward the draft revised Guideline IALA Guideline 1018 On Risk Management (ANM20/output/4) to the IALA Council, to approve. 9
3. The Secretariat is requested to forward ANM20/WG1/WP1 to ANM21. 9
4. The Secretariat is requested to forward the draft revised Guideline 1081 on the Provision of Virtual Aids to Navigation (ANM20/output/5) to the IALA Council, to approve. 9
5. The Secretariat is requested to forward the draft revised Recommendation O-143 on the Provision of Virtual Aids to Navigation (ANM20/output/6) to the IALA Council, to approve. 9
6. The Chairman is requested to reference ANM20/WG1/WP1 in the submission for the 2014 – 2018 Work Programme. 10
7. The Secretariat is requested to forward ANM20/WG1/WP3 to the Maritime Spatial Planning Workshop. 10
8. The Secretariat is requested to forward ANM20/WG1/WP3 to ANM21. 10
9. The Secretariat is requested to forward ANM20/output/7 to the VTS Committee. 10
10. The Secretariat is requested to forward ANM20/output/8 to the EEP and e-NAV Committees. 10
11. The Secretariat is requested to forward ANM20/output/9 to the e-NAV Committee. 10
12. The Secretariat is requested to forward the Liaison Note on the NAVGUIDE (ANM20/Output 10) to the EEP Committee. 12
13. The Secretariat is requested to forward the Liaison Note on the NAVGUIDE (ANM20/Output 11) to the e-NAV Committee. 12
14. The Secretariat is requested to forward the Liaison Note on the NAVGUIDE (ANM20/Output 12) to the VTS Committee. 12
15. The Secretariat is requested to forward the Liaison Note on the NAVGUIDE (ANM20/output/13) to the Secretariat. 12
16. The Secretariat is requested to forward the NAVGUIDE Schedule (ANM20/output/14) to all other Committees for their information. 12
17. The Secretariat is requested to forward the NAVGUIDE Work Plan (ANM20/output/15) to all other Committees for their information. 12
18. The Secretariat is requested to make the draft NAVGUIDE (ANM20/output/16) available on the IALA FTP server for other Committees to access for undertaking final revisions for input before ANM 21. 12
19. The Secretariat is requested to forward the Liaison Note on the NAVGUIDE (ANM20/output/21) to the EEP Committee. 12
20. The Secretariat is requested to forward the Liaison Note on the Promulgation of the IALA Maritime Buoyage System on the IALA Website Free of Charge (ANM20/Output 17) to PAP, with a view to seeking Council approval if appropriate. 13
21. The Secretariat is requested to forward the draft revised Recommendation O-132 ANM19/WG2/WP2 to ANM 21. 13
22. The Secretariat is requested to forward the draft revised Guideline 1052 ANM19/WG2/WP3 to ANM 21. 13

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|-----|---|----|
| 23. | The Secretariat is requested to forward the draft revised Guideline (ANM20/Output 18) to Council for approval.  | 14 |
| 24. | The Secretariat is requested to forward the Working Paper Documents Managed by ANM (ANM20/WG2/WP4) to ANM 21.   | 14 |
| 25. | The Secretariat is requested to forward the Draft Guideline on Technical Features and Visualisation Technology Relevant for Simulation of AtoN (ANM20-Output 19) to Council for approval. | 14 |
| 26. | The Secretariat is requested to forward the Liaison Note on the NAVGUIDE (ANM20/output/20) to the e-NAV and EEP Committees.   | 16 |
| 27. | The Secretariat is requested to forward ANM20/output/1 (Report of ANM20) to the Council to note.  | 16 |
| 28. | The Secretariat is requested to forward ANM20/output/2 (Proposed changes to the Work Programme) to the Council for approval.  | 17 |

#### *Action Items for Members*

- |     |   |    |
|-----|---|----|
| 29. | Where this has not already been done, Committee members are requested to provide their responses to the 2012 Annual Questionnaire.  | 6  |
| 30. | Members are requested to provide any thoughts on changes to the Annual Questionnaire to Jorge Teles in time for the questionnaire to be finalised at ANM21.                                       | 6  |
| 31. | Jorge Teles is requested to provide the required format for the positioning of AtoN, for display on the website <a href="http://gis.hidrografico.pt/iala/">http://gis.hidrografico.pt/iala/</a> . | 6  |
| 32. | Members are requested to provide relevant input to the Committee rapporteurs 8 weeks before each meeting.   | 7  |
| 33. | ANM Committee members are requested to identify possible improvements to the questions and format of the IALA Biennial Questionnaire.   | 10 |
| 34. | Members are requested to submit proposals for the 2014 – 2018 Work Programme to the Chairman / Vice Chairman, inter-sessionally.  | 15 |
| 35. | Committee members are requested to provide suitable high-definition photographs / graphics that can be used, if necessary with attribution, in future editions of the Bulletin.                   | 16 |
| 36. | Committee members are requested to propose topics for inclusion in the Bulletin that are not currently covered.   | 16 |
| 37. | ANM members are requested to consider registering as IALA experts.  | 16 |

## **ANNEX G      SPEAKING NOTES FOR RISK MANAGEMENT AND RISK MODELS (M1\*) – JAKOB BANG, DMA**

### Slide 1

Introduction

### Slide 2

I will start my report on the monitoring item M1 regarding risk management and risk models with a few words on the IALA Training seminar on risk management which was held in Sydney Australia in November 2012, the week before ANM 19. From the report I could see that the seminar was attended by 66 delegates from 18 countries. Fifty-one delegates were local to the region.

The seminar contained a series of presentations, including an introduction to the IALA Risk Management Toolbox.

The seminar provided an excellent opportunity for delegates to get to know and discuss the theory and practice of the IALA Risk Management toolbox, drawing on the expertise of the instructors and the other delegates.

### Slide 3

The IALA Risk Management Toolbox includes the Quantitative Tool – IWRAP, the Qualitative Tool – PAWSA and Simulation Tools. The complementarity of the three components in the toolbox (PAWSA, IWRAP Mk2 & simulation) was reviewed and a way in which each could play its part in a combined approach to risk management of a waterway was presented at the seminar.

The complementarity of the three components PAWSA, IWRAP and simulation will enable national authorities to better meet their obligations under SOLAS. As I have mentioned before, it is important that the words from seminars are spread to colleagues, especially to them with regulatory responsibilities also with the approaching mandatory IMO audit scheme in mind.

### Slide 4

A new version of IWRAP MKII was launched in January 2013 and it contains a number of changes and new functionalities. The program seems to be more and more user friendly, and here you see some of the improvements:

When a project is started you can let IWRAP create all the necessary the folders, before all folders had to be created manually.

If you have access to a web map service (WMS) IWRAP can now show this, so you always have updated charts.

You can filter the data, so the density plot can now be created for a particular time period, a particular time of day and for one or several ship types.

The result of a job can now be shown as incidents per year or as years between incidents

Before all AIS-data had to be in the same format and be imported together. It is now possible to import AIS data in several stages and in different format.

From GateHouse I have received the updated number of licenses, and it says 19 licenses of the commercial IWRAP MKII and 149 registered users of the free version.

There are still not many users of the commercial version. We use it in Denmark and Roger reported to me that Trinity House are continuing to make use of the IWRAP to assess possible changes in risk as offshore renewable energy developments are proposed.

IALA will again conduct an IWRAP training session, in November I believe, and I can only recommend you to attend these training sessions. There will be more information on the IALA website.

Additional information about pricing etc. for the commercial version is available at: <http://webshop.gatehouse.dk>

### Slide 5

As I said before, the IWRAP program has become more user friendly and it is quite easy to create AIS density plot. These density plots can be very useful to compare for instance the changes in traffic separation schemes. In this picture use see the traffic patterns before we implemented a TSS between island Bornholm and Sweden. The next picture shows the traffic after the TSS Bornholmsgat came into force. It is interesting to see the significant changes in the traffic patterns after the implementation, and for this purpose statistic AIS-data are very useful.

The IALA council mentioned in their report of the 54th Session that IALA National Members are invited to provide AIS data before and after when they implement change in their AtoN, for evaluation of causation factor of such aids. So I believe it's an area we need to continue exploring and also use it to support proposals that are submitted to the IMO.

#### Slide 6

The maritime potential for growth in the Arctic regions as a consequence of the melting of the ice and expansion of navigable waterways and increased traffic call for enhanced focus on safety of navigation in this large geographical area.

Denmark is in a process of strengthen co-operation with other Arctic states on safety of navigation, and from John and his Canadian colleges we have received valuable material on the safety of navigation in the Northwest passage as well as there has been meetings between our two countries on the subject.

In September 2013 the IALA EEP Committee expects to arrange a Polar Engineering Seminar in Nuuk Greenland, and we hope that this increased cooperation between Arctic nations will end up in a common approach to handle the safety of navigation in Arctic waters.

The large geographical area makes it difficult to monitor maritime traffic around Greenland and in the entire Arctic region. In order to increase the surveillance possibilities in the area Denmark has started a pilot project on satellite based AIS monitoring of ship traffic in Arctic waters. It is a collaboration between the Danish Maritime Authority and the University of Aalborg.

#### Slide 7

On Monday 25 February 2013, this small satellite was launched from this rocket. So far the satellite has been a success, and we receive a lot of AIS-data, including data from the remote areas in Arctic waters.

#### Slide 8

The data we received are stored in our AIS-database and we can extract data and use them in IWRAP, and this give us new possibilities to analyse the traffic from density plot and to calculate the numbers of grounding and collision in the area from model jobs in IWRAP

#### Slide 9

Satellite-based AIS systems are expected to have great potential both in Arctic waters and in the big oceans, and during a few years I expect that there will be worldwide coverage by AIS, and national administrations will be able to use the data for many purposes. This scenario might cause some challenges for the LRIT mandatory system.

I have just on slide left, and as I mentioned in the beginning there was a seminar on risk management in Sydney, there was a lot of serious presentations but also space for a good laugh. Actually THE RISK MANAGEMENT SONGBOOK was introduced.

#### Slide 10

Refrain from a song from this songbook. Its style is made like a rap song – and it was therefore off course named IWRAP

IWRAP – This is an IALA tool!

IWRAP – Keeps you smart and cool.

IWRAP – Better book a seminar!

IWRAP – Software make you a star!