e-NAV 13 Input

Agenda item

Task Number -

Author(s) Rolf Zetterberg

Sarasota Output/1

**Report of joint meeting of the AIS + COMMUNICATION WORKING GROUP of the IALA e-NAV Committee**,  
 Intersessional meeting held 25 February – 1 March 2013, in Sarasota, FL, USA.

1. **Introduction**

The AIS+ COMMUNICATION Working Group (WG 3+ 4) of the IALA e-NAV Committee held an intersessional meeting in Sarasota, FL, USA, from 25 February to 1 March 2013, hosted by exactEarth. The venue was Indigo Hotel, Sarasota

The meeting was chaired by Rolf Zetterberg, Chair WG3+4.

The main objective of the meeting was to develop a draft input to the next meeting of ITU WP5B, explaining the need for protection of the VDL and give the rationale for VDE.

1. **Progress made**

## 2.1 General Discussions

### In the initial session the outcome of the JCG workshop in Tokyo was presented and discussed. An example of the increasing load on the AIS VDL was presented and the consequences considered. The concept of VHF Data Exchange System (VDES) was introduced with a possible allocation of frequencies for its different components. The concept includes the present AIS, two additional channels for ASM using TDMA but using different modulation and channels for terrestrial and satellite based data communication.

2.2 Draft Liaison statement to ITU WP5B on VHF Data Exchange  
  
A draft liaison statement to ITU WP5B was developed. The liaison includes two Annexes;   
- Plan for future VHF data communications  
- Working document towards a preliminary draft new report on AIS VHF Data Link (VDL) loading  
The liaison statement is intended to be the basis for a future CPM report and contains the background for the need for protection of the VDL, gives a rationale for a VDES, and adds more information ( in track changes) to the previous description of that system. The need and plans for sharing studies are described.

***Action items***

*The* ***Chair of the IALA WG3/WG4 intersessional meeting*** *was asked to forward the Draft Liaison statement on VDE (Sarasota Output 04) to the IALA secretariat as an input document to eNAV13.*

2.3 VHF Data Exchange –discussion paper

The document was progressed and will be kept as a working document within the WG.  
***Action items***

* *The* ***Chair of the IALA WG3/WG4 intersessional meeting*** *was asked to forward Working Document (Sarasota WD 02) to future meetings.*

## 2.4 Harmonized implementation of AIS ASM The Draft Guideline on The Harmonized Implementation of AIS ASM, which has been under development for a couple of years, was finalized. The document gives an overview of Application-Specific Messages (ASM) and describes how ASM should be implemented in a harmonized manner and the different aspects that should be considered during development and implementation.

***Action items***

*The* ***Chair of the IALA WG3/WG4 intersessional meeting*** *was asked to forward the Draft Guideline on The Harmonized Implementation of ASM, (Sarasota Output 04) to the IALA secretariat as an input document to eNAV13.*

## 2.5 Reliability of AIS Data

## The document “Sarasota Input 08 eNAV13 input - Reliability of AIS Data” was studied and a document with comments and possible improvements of the document was developed. The WG proposes that the scope of the document is generalized to cover other AIS data in addition to AIS AtoN data. This document, Sarasota Output 02, will be sent to eNAV13 as an input document.

***Action items:***

*The* ***Chair of the IALA WG3/WG4 intersessional meeting*** *was asked to forward the document (Sarasota Output 02) to the IALA secretariat as an input to eNAV13.*

## 2.6 S100 Product Specification for AIS ASM

## The input document “Sarasota Input 07 S100 AIS ASM Product Specification” was considered and a number of questions were raised. Questions and comments were compiled in “Sarasota WD 01” with the intention to seek clarification during eNAV13.

***Action items***

*The* ***Chair of the IALA WG3/WG4 intersessional meeting*** *was asked to keep the document Sarasota WD 01 as a working document for further work at eNAV13.*

## 2.7 Draft RTCM AIS ASM standard

The Draft RTCM standard SC 12100.0 on ASM (Sarasota Input 11) was considered and the following comments and proposals were made:

4.1.1.2 date and time. Please include an example for any ISO format in the document;  
4.1.3 b) the purpose of the ASM. Please include an example of the usage of the ASM concerning interrogation, periodic, etc.  
4.1.3 c)1) A description of each parameter. Please include the units;  
4.1.3 c)3) the value of each parameter. Please include the offset and/or scale factor if used;

No further actions are planned.

## 2.8 Other inputs

Technical inputs on regional channel allocation and modulation for VDES and Technical considerations of co-channel rejection for VDES were considered. The group has decided to retain these documents for future use (Sarasota WD 03 and 04).

**3. Presentations**

An on-line presentation “VDE-SAT A satellite component to VHF Data Exchange” was made by Nader Alagha from ESA, with assistance of Gaetan Fabritius, CLS (present at the meeting). The presentations covered:

- Background  
- Planned design of the system  
- Possible services  
- Sharing issues  
- Proposed steps forward  
After the presentation questions from the WG were answered by Nader Alagha. The group considered the information provided as very interesting and welcomed a future cooperation.

The updated document is retained for future use (Sarasota WD 05).

**4. Next Meeting**

The next meeting will take place during eNAV13 at IALA HQ in St Germain en Laye, March 18-23, 2013.

1. **The Final Plenary**

This report was considered, amended and accepted as representing the actual progress made and the results of the meeting in Sarasota.

The chair thanked exactEarth for hosting the meeting. The chair also thanked all participants for their attendance, hard work and contributions to the discussions and wished everybody a safe journey home.

**Rolf Zetterberg**

Chair AIS+ COMMUNICATION Working Group (WG3+ WG4) of IALA e-NAV Committee**.**

**Annex A:**

**Participants.**

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| --- | --- | --- |
| **Name** | **Organization** | **Country** |
| Arroyo, Jorge  Vice chair WG 3 | USCG | USA |
| Bober, Stefan | Federal Waterways and Shipping Adm | Germany |
| Browning, Peggy | exactEarth | USA |
| Fabritius, Gaetan | CLS | France |
| van Gils, Jeffrey | Rijkswaterstaat | Netherlands |
| Guichoux,Yann | CETMEF | France |
| Jones, Stephen | Australian Maritime Systems | Australia |
| Haugen, Tony | Kongsberg Seatex | Norway |
| Hideki, Noguchi | JCG | Japan |
| Kautz, Bill | USCG | USA |
| Kulig, Angela | exactEarth | Canada |
| Lindborg, Johan | SAAB | Sweden |
| Miyadera Yoshio | Japan Radio Company | Japan |
| Nakagawa, Hiroyasu | Furuno | Japan |
| Norsworthy, Ross | USCG | USA |
| Paap, Pieter | Rijkswaterstaat | Netherlands |
| Pokorny, Peter | AMSA | Australia |
| Rissone, Christian | ANFR | ITU |
| Safar, Jan | GLA | UK |
| Schultz, Johnny | L3 Communications | USA |
| Smith, Paul | USCG | USA |
| Tetreault, Brian | US Army Corps of Engineers | USA |
| Valette, Jean Jacques | CLS | France |
| Zetterberg, Rolf Chair WG 3 | SMA | Sweden |

**Appologies**

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| --- | --- | --- |
| **Name** | **Organization** | **Country** |
| Blackhurst, Peter | Inmarsat | UK |
| Borgehese, Francesco | Elman | Italy |
| Cabeceira, Marcos Lopez | GMV | Spain |
| Cairns, Bill | USCG | USA |
| Carson-Jackson, Jillian | AMSA | Australia |
| Coutu, Jean Francois | CCG | Canada |
| Heikonen, Kaisu | TSA | Finland |
| Kempe, Philip | Swedish Transport Agency | Sweden |
| Oltmann, Jan Hendrik | Federal Waterways and Shipping Adm | Germany |
| Siht, Alar | EMA | Estonia |
| Tremlett, Robert | Maritime Consultant | UK |
| Vollero, Antonio | Comando Generale del Corpo delle Capitanierie di Porto | Italy |
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**Annex B.**

**Input Documents**

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| **INPUT DOCUMENTS** | **Title** |
| 01 | Draft agenda |
| 02 | List of documents Rev B |
| 03 | Norrkoping WD 01 VDE discussion |
| 04 | Norrkoping WD 02 Rationale for augmentation of AIS and introduction of VDE |
| 05 | e-NAV12 WG3+4 WD Rationale for augmentation of AIS and introduction of VDE |
| 06 | WD 03 Melbourne Harmonised implementation of ASM |
| 07 | 231112- S100 AIS ASM Product Specification |
| 08 | e-NAV13 Input paper – Reliability of AIS-Data |
| 09 | e-NAV12 WG3&4 WP1 Draft Guideline on Polar Communications |
| 10 | Tokyo workshop report |
| 11 | Draft RTCM standard on AIS ASM |
| 12 | Consideration of Regional Channel Allocation and Modulation for VDES by JRC |
| 13 | Technical Considerations of Co-channel rejection by VDES by JRC |
| 14 | ESA presentation IALA WG34 |

**Output documents**

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| **Output Document** | **Title** |
| 01 | Report of the intersessional WG 3 + WG 4 meeting |
| 02 | Comments on eNAV13-28 Reliability of AIS Data |
| 03 | Cover note – Liaison to ITU on VDE |
| 03A | Liaison note to ITU on VDE |
| 03B | Annex 1 to Liaison note to ITU on VDE |
| 03C | Annex 2 to Liaison note to ITU on VDE |
| 04 | Draft Guideline on the harmonized Implementation of AIS ASM |
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**Working Documents** (for next WG meeting)

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| **Working Document** | **Title** |
| 01 | Liaison note on Draft S100 Product Specification for AIS ASM |
| 02 | Draft AIS/VDE/VDES Discussion Paper |
| 03 | Consideration of Regional Channel Allocation and Modulation for VDE by JRC |
| 04 | Technical consideration of co-channel rejection for VDES by JRC |
| 05 | ESA presentation- IALA WG34 - final |
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