

**NORTHERN LIGHTHOUSE BOARD
NAVIGATION COMMITTEE (HARWICH)**

MINUTES – 12/13 December 2018

PRESENT:	Alastair Beveridge	Chairman
	Mike Brew	Commissioner
	Hugh Shaw	Commissioner
	Graham Crerar	Commissioner
	Elaine Wilkinson	Commissioner (Observer)
	Phil Day	Director of Operations
	Mairi Rae	Director of Business Services
	Peter Douglas	Navigation Manager
	Karen Charleson	Senior Executive Assistant (notes)

12 December 2018

1. APOLOGIES FOR ABSENCE

Apologies for absence were received from Mike Bullock, Chief Executive.

2. MINUTES OF PREVIOUS MEETING

The Minutes of the Navigation Committee meeting held on 19 September 2018 were agreed subject to the deletion of bullet point 3 “vehicles” in Technical Discussion on page 3. Following this change it was agreed that a copy could be published on the website.

Action: Senior Executive Assistant

3. MATTERS ARISING

The Committee noted that Matters Arising from the previous meeting would be addressed within the relevant subject areas.

Isle of Man – Nairobi Convention – Wreck Removal

Commissioner Brew advised that direct contact between the Manx Government and DfT had now been established.

4. OPERATIONAL REQUIREMENTS

The Committee noted the report and discussion took place on the following items:

High Density Electronic Navigation Charts (ENC) of Oban Bay

The Committee noted that UKHO are currently trialing high density ENCs and discussed the examples included with the meeting papers that show the different safety contours and the effect on chart portrayal.

2020 AtoN Review

The Committee noted that work has commenced on the 2020 AtoN review including an external workshop on 1 November 2018 and an internal workshop on 16 November 2018. The main areas of interest are:

- Aligning the review with the Corporate Plan/Capital Works programme

- Potential establishment of an AIS network for the transmission of Virtual AtoN
- Future of DGNSS
- A limited number of new or altered AtoN e.g. Loch Sunart)
- Potential use of daytime lights in low visibility

As in the last review AIS plots will be sourced for areas of specific interest. Efforts will also be made to ascertain cruise ship data, input from other commercial ships and any proposed changes to existing routing from the MCA.

It was agreed to use the future scheduled meetings to look at the three geographical areas with a round up at the December 2019 meeting. The Navigation Manager will circulate background information and a copy of the last AtoN Review.

Action: Navigation Manager

Resilient PNT

The Committee noted the article regarding development of a Quantum accelerometer which is potentially a major component of future inertial navigation systems. The Director of Operations advised that the GLAs Research and Development (GRAD) Team are actively monitoring developments and, if it was felt the GLAs should be more involved, could be asked to look at it and advise on the best way forward.

eLoran

The Navigation Manager advised that the US Coastguard have been directed to find an alternative terrestrial based positioning system within the next two years. It was noted that UK Government's Blakett Report has covered a lot of this and there is active work, which GRAD is on the Committee for, which are developing aspects of this and one or two of the projects GRAD are currently undertaking deliver some of the solutions of the issues highlighted in the report.

Port Marine Safety Code Audit

It was noted that re-audits were undertaken of Loch Ryan Port, Port of Cairnryan, Peel Ports and Forth Ports. No issues were noted.

Marine Licence and Sanction Requests

The Committee noted the summary of Marine Licence Activity and Sanctions for the establishment/disestablishment of AtoN.

Oban Bay

The Committee noted that a local stakeholder meeting had been held on 4 October on NLV PHAROS. At the meeting existing hazard assessments were reviewed and interactions between large and small vessels, groundings on the Corran Ledge, cruise vessel passenger transfers, and the use of VHF safety broadcasts were discussed. After further discussions with the Harbour Manager, revised buoyage schemes were proposed to allow as much as possible of the width of the channel to be utilised by using gated, synchronised, lateral marks, all of which could be plastic Type 4 buoys. The Navigation Committee discussed the proposals and agreed in principle to discontinue the cardinal buoy and replace with 5 starboard hand buoys and 2 port hand buoys. The Navigation Manager would work with the ships to decide the exact position of the buoys

Action: Navigation Manager

It was also agreed that the Navigation Manager would speak with the UKHO to see if it would be possible to get a better survey of the Corran Ledge.

Action: Navigation Manager

Oban Bay Harbour

The Director of Operations advised that NLB have been working on protected provisions within a Harbour Order.

1. NLB will be part of the Stakeholder Group which should be established through the Harbour Order. The Stakeholder Group should be consulted on navigational safety, general safety and operational changes and that the output from that group is reported to the Harbour Board.
2. NLB and their successors will continue to provide and maintain AtoNs for vessels to transit from Maiden Island through Kerrera Sound to Cutter Rock to enter Oban Harbour which excludes any marking of man-made hazards. Provision of AtoNs will be determined in consultation with the Harbour Board but is at the final discretion of the Commissioners or their successors.
3. The Harbour Board should not hinder any of NLB operations or its berth
4. NLB will collect harbour dues on their behalf but there will be exception for any visiting Government vessels
5. Exclusion on harbour area to give a 20 metre buffer round the face of the NLB pier
6. NLB Helicopter operations are to be protected
7. NLB will have a say in any harbour developments that may impact on our approach to our berth.

The Navigational Committee noted the impact for NLB. The Director of Operations will now submit these proposals to the Managing Board to consider.

Action: Director of Operations

5. ENGINEERING

The Committee noted and discussed the Engineering report:

Programme and Renewals

Temporary lights remain at Copinsay, and Ardnamurchan, With the exception of Copinsay work is complete but installation of the new LED lanterns is awaited. In addition temporary lights have been established at Duncansby Head, Mull of Kintyre, Stroma and Mull of Galloway for commencement of 2018/19 work programme work.

Irvine Beacon – Awaiting Procurement process for fabrication and installation. This will proceed as soon as possible but construction will be in the 19/20 financial year and has been included in the recent corporate plan bid.

Assets

Availability - The Committee noted the 3 year rolling availability figures to 30 November 2018. Since the last committee there has been 5 outages with 2 over 72 hours.

Monitoring - The upgraded NLB monitoring servers at Edinburgh and Oban continue to demonstrate stable performance. Webscada is also operational. Penetration testing of the existing system is planned for January 2019.

A technical specification for the replacement monitoring system was prepared and submitted to procurement on schedule in August 2018. The tender closes on 19 December 2018.

DGPS – The Committee noted the updates on the previously reported issues with the DGPS system. Replacement and configuration of routers for DGPS transmission sites and far field monitoring sites following changes to BT systems is necessary. Time delays and technical difficulties are being experienced in commissioning the new routers.

Cape Wrath

The design for reengineering Cape Wrath are being progressed. Solarisation had been considered but it has now been agreed to move to a hybrid station. Options for a light source are being investigated.

2015 Aton Review

The Committee noted the Summary of Proposed Changes and Stations Update document for the AtoN Review.

6. NOTICES TO MARINERS

The Notices to Mariners published since the last meeting were noted.

8. ANY OTHER BUSINESS

Wreck Marking Buoys

The Navigation Committee discussed a request from the Marine Operations Manager to change the wreck buoy held onboard NLV POLE STAR from a type 3 size buoy to a smaller Tideland type buoy to provide more storage space on the vessel. The Committee agreed to this requested based on the other contingencies NLB have in place.

Scottish Users Consultative Group (SUCG)

The Chairman thanked the Navigation Team for coordinating the successful SUCG meeting on 1 November 2018.

9. DATE AND TIME OF NEXT MEETING

The next meeting of the Navigation Committee will take place on 21 March 2019.

13 December 2018

Mike Bullock, Chief Executive joined the Navigation Committee for this Agenda Item.

7. TECHNICAL DISCUSSION

The Navigation Committee were given a tour of the Monitor Centre and the buoy yard by Simon Millyard, Engineering & Operations Manager at Trinity House (TH). This was followed by presentations on Virtual AtoN, DGPS survey, VDES and RTUs by Dr Alan Grant and Gareth Wimpenny of GRAD. The presentations covered:

- VAtN from Ship to Shore
 - GLA Research Work
 - 2014 Project to demonstrate the ability to remotely configure a Kannad AtoN to provide VAtN
 - MMSI
 - The current position
- DGPS Survey – Initial Responses
 - Submissions
 - Face-to-face surveys
 - Results to date
 - Issues raised which will be investigated.
- Public Key Authentication for AIS and the VHF Data Exchange System (VDES)
 - AIS vulnerabilities
 - VAtNs
 - What we need to protect against

- Public Key Cryptography
- Choosing an algorithm and key size
- AIS Authentication
- VHF Data Exchange System
- VDES Sub-systems
- VDES ASM
- VDES Authentication Demonstrator
- Prototype Authentication Solution

- Remote Telemetry Unit (RTU) Overview
 - RTU Comparison report
 - Water Industry Telemetry Standards (WITS)
 - Modular RTU
 - Single Unit RTU
 - Combined RTU & Communications

The Committee thanked Simon Millyard and the GRAD Team for the very informative presentations and for the tour of TH's facilities and buoy yard.