

**NORTHERN LIGHTHOUSE BOARD  
NAVIGATION COMMITTEE**

**MINUTES – 18 September 2019**

<b>PRESENT:</b>	Alastair Beveridge	Chair
	Mike Brew	Commissioner
	Hugh Shaw	Commissioner
	Duncan Murray	Commissioner
	Mike Bullock	Chief Executive
	Phil Day	Director of Operations
	Mairi Rae	Director of Business Services
	Peter Douglas	Navigation Manager
	Andrew Stevenson	Assets Manager
	Alastair Rae	Project Leader (Programme and Renewals)
	Alan Cran	Principal Electrical Engineer
	Karen Charleson	Senior Executive Assistant (notes)
Observers:	Mike Spain	Business Support Manager
	Colin Brolly	Procurement Manager
	Tom Cairns	Delivery and Planning Manager
	Jim McBrier	Risk and Improvement Manager
	Billy Byrne	Health and Safety Manager

**1. APOLOGIES FOR ABSENCE**

There were no apologies for absence noted. The Chair welcomed members of the Senior Management Team who were in Oban for the Executive Group as observers to the Navigation Committee.

**2. MINUTES OF PREVIOUS MEETING**

The Minutes of the Navigation Committee meeting held on 21 March 2019 were agreed. It was agreed that a copy could be published on the website.

*Action: Senior Executive Assistant*

**3. MATTERS ARISING**

The Committee noted that the majority of Matters Arising from the previous meeting would be addressed within the relevant subject areas. The Committee discussed the following items:

- Area 5 Pentland Firth – The Navigation Manager has checked if it would be possible to replace Pentland Skerries Physical AIS with Virtual AtoN for Pentland Skerries and Sandy Riddle broadcast from Duncansby Head, and confirmed that the unit that THLS have been using for this is capable of providing both its own data and up to 5 virtual aids to navigation.
- Bullia Skerry - The Navigation Manager has discussed the proposed change with Shetland Island Council. The SIC Harbour Master is content with the proposal and will consult with the local users on NLB's behalf. No feedback has been received.
- Irvine Beacon – The DfT were briefed during LISW on the Navigation Committee's decision not to proceed with the project. A formal letter will be sent in due course.

*Action: Chief Executive/Director of Operations*

#### 4. OPERATIONAL REQUIREMENTS

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

##### 2020 AtoN Review Timetable

The Committee noted the AtoN Review programme as follows:

- October 2019 –GLA Peer Review of all supporting Risk Assessments
- November 2019 – Present proposed changes to SUCG
- December 2019 - Navigation Committee review of draft output document
- 2020 (tbc.) – to Chief Executives' Committee and all 3 Boards for approval
- May 2020 – publish at JUCG

##### Dunollie

Feedback was received with regard to any potential alterations on re-engineering the Dunollie light. Consequently a minor change to the sectors is recommended to increase the left hand green sector from 138°-143 ° (5°) to 138°-150° (12°), which would be visible inside Maiden Island but not further North. The Committee discussed the recommendation and agreed not to approve the change as it was felt the risks to visiting vessels, who might not know the water, outweigh the benefits. The Navigation Manager will feedback to the proposer accordingly.

*Action: Navigation Manager*

##### Loch Spelve

Following the destruction by weather of the starboard hand beacon in Loch Spelve, the owner Scottish Sea Farms applied for sanction to discontinue the beacon as it was not required by their vessels or Inverlussa, the other commercial operator in the Loch. Subsequently a request has been received that NLB consider marking the rock. Following discussion, it was agreed to consult the SUCG in November for their thoughts on establishing an unlit beacon similar to Cleit Rock.

*Action: Navigation Manager*

##### Calve Island

During discussions with the Harbour Master at Tobermory regarding the AtoN Review, it was requested that NLB give consideration to establishing a light at the North end of Calve Island. The Committee discussed the request and agreed that this was a matter for the Harbour Authority and was not appropriate for NLB to provide. The Navigation Manager will reply accordingly with the offer of advice and assistance on type of light.

*Action: Navigation Manager*

##### Oban Bay

A review of the incident information for the summer to date has seen a large reduction in groundings and proportionally less navigational infringements/near misses involving ferries since the implementation of the new buoyage.

##### L4 and McCaskill Rock Buoys

A new operator has been identified to service these otherwise inaccessible buoys at a competitive price and it is not intended to progress their replacement with beacons.

##### Beatrice Wind Farm

NLV POLE STAR conducted an inspection of the newly commissioned Beatrice offshore wind farm on 12 August. A number of lighting and marking discrepancies were identified and referred back to the operator for correction. NLV POLE STAR is due back shortly to carry out a re-inspection.

##### Rosyth ferry

TEC Offshore have announced plans to start a daily ferry service between Rosyth and Eemshaven. Limited information is available at present.

### Port Marine Safety Code Audit

Re-audits were undertaken of Wick Harbour Authority on 13 June and Scrabster Harbour Trust on 14 June. No significant issues were noted.

### Wrecks

A fishing vessel ran aground on The Clubb rock, Ve Skerries on 4 August. All 15 people on board were winched off successfully. The Ve Skerries light was operating correctly. The wreck does not substantially increase the grounding/collision risk that already exists due to the rock and therefore is not deemed a hazard to navigation.

Another fishing vessel foundered 75nM NE of Fraserburgh on 18 August. All the crew were successfully rescued. As the depth of water is 120 metres, this wreck is not considered to be a hazard to navigation.

### GNSS update

From 11 July until 18 July 2019 the whole Galileo constellation suffered a fault. It was noted that the system is still officially only offering Initial Operational Capability (IOC).

Jamming incidents have been widely reported. It was noted that there is an increasing level of awareness of this within the maritime press.

### Marine Licence and Sanction Requests

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

### DGPS

The Committee noted the final report from GRAD on the GLA DGPS User consultation and the Inter GLA Committee (IGC) 5 Brief on the future of GLA DGPS. A meeting of IGC5 met on 5 September 2019 and agreed that the recapitalisation of the DGPS system is not required. IGC 5 recommend that the system can be turned off after two full financial years and that it is not necessary to run on to 2025. Advance notice and a comprehensive communications strategy was recognised as being essential. The Navigation Committee debated the recommendation and discussed the issues in detail. Following discussion the Committee agreed to recommend that the Managing Board endorse the IGC 5 proposal.

### 2020 AtoN Review

The Committee noted the summary of all proposed NLB inputs for the 2020 AtoN Review and discussed:

#### Area 1 - Isle of Man, North Channel and Clyde

- Point of Ayre - Re-engineer with a minimum 18 nM range
- Corsewall - Re-engineer with a minimum 18 nM range. Currently 22 mile nominal range. Still to consult with Irish Lights and get feedback from Stena and P&O. More work required.
- Loch Ryan - Will remain a 12 mile red light
- Pladda - Will remain a 17 mile light
- AIS and VAIS - Add to Point of Ayre and Corsewall. Mull of Galloway subject to further discussions with Irish Lights

#### Area 2 - Mull of Kintyre to Ardnamurchan

- Dubh Artach – Re-engineer with a minimum 18 nM range
- Skerryvore - Re-engineer with a minimum 18 nM range
- MacQuarrie's Rock (Ulva) – Establish an Isolated Danger Mark buoy. Agreed not to take forward at the moment. Will look at again at the next review.
- Bhanarach Rocks (Gigha) - Establish an East Cardinal Mark buoy. Due to the number of incidents in the area if was agreed to approve this request.

- Ross Rock (Loch Sunart) - Establish a South Cardinal Mark buoy. Look at again at the next review.
  - Broad Rock (Loch Sunart) - Establish an Isolated Danger Mark buoy. Look at again at the next review.
  - Corran Narrows SE - Establish a sector light for southbound traffic. A navigational study to determine what it required for the whole area will be carried out and reported to the next meeting.
- Action: Navigation Manager**
- Fladda - Add daytime conspicuity switching for use in restricted visibility. Eileanan Dubha probably more suitable for trial but keep in review

#### Area 3 - Ardnamurchan to Barra Head; Cape Wrath to the Flannan Isles

- Cape Wrath - Re-engineer with a minimum 18 nM range. Try to get range as high as possible.
  - Haskeir - Re-engineer with a minimum 18 nM range. No engineering pressure to reduce range. Leave range as is or come back to the Committee if a technical can be found to provide more than 18nM range.
  - Whale Rock buoy - Replace with virtual AIS transmitted from St Kilda/Flannans/Haskeir. Take proposal to SUCG/Chamber of Shipping.
- Action: Navigation Manager**
- Murcadh Breac (Torridon) - Proposed by Clyde Cruising Club. Establish a West Cardinal buoy. Agreed to leave for the time being.
  - Sgeir Graidach - Establish virtual AIS AtoN. Agreed to leave for the time being.
  - Eileanan Dubha (Lochalsh) - Add daytime conspicuity switching for use in restricted visibility. Trial either here or Fladda
  - AIS & Virtual AIS Capability - Add to Neist Point, Eilean Glas and Rubh Re.

#### Area 4 – Scotland North Coast; Orkney Islands (excluding Pentland Firth)

- North Rona - Re-engineer with a minimum 18 nM range. Technical options being investigated.
- North Ronaldsay - Will remain a 24 mile light, subject to technical solution being identified.
- Skerry of Ness - Re-engineer as LED light with no green sector but precise cut-off at 090° following feedback from Orkney Fisheries Association.

#### Area 5 –Pentland Firth

- Pentland Skerries - Will remain a 23 mile light, subject to technical solution being identified
- AIS & VAIS Capability – Establish a real/physical AIS at Duncansby Head with virtual capability. Establish a Virtual AtoN for Sandy Riddle (AtoN transceiver is capable of transmitting own (Real) message and up to 5 Virtual AtoN).
- Continue to broadcast a physical/real AIS from Pentland Skerries

#### Area 6 – Shetland Islands

- Foula- Re-engineer and establish red sector to East (257° - 277°). Keep as a 17 nM light.
- Sumburgh Head - Re-engineer retaining a 23 mile light, subject to technical solution being identified.
- Hoo Stack - Re-engineer with LED sector light and discontinue directional light.
- Bullia Skerry - Re-engineer with a minimum 3 nM range. Currently 5 mile nominal range. Seeking local user input.

#### Area 7 - Clythness to Rattray Head

- AIS & Virtual AIS Capability - Add to Kinnaird Head.

#### Area 8 - Rattray Head to St Abb's Head

- Bell Rock - Re-engineer retaining an 18 mile light
- Girdle Ness – Re-engineer retaining a 22 mile light, subject to technical solution being identified.
- AIS & Virtual AIS Capability - Add to Buchan Ness, Fife Ness and St Abbs Head.

#### Effective Range of 18NM LED Light

The Committee noted the paper detailing the effective range of 18 nM LED light (from GRAD tool, sample for Hebrides area) based on statistical visibility conditions. The Chief Executive enquired as to whether the effect of climate change had been taken into account. The Navigation Manager did not believe that climate change had been taken into account. It was agreed to think about future climate the next time this was tested. It was noted that climate change is included within the Environmental Risk Register but not in direct relation to an AtoN.

#### Triple I Audit

It was noted that NLB's processes for review and provision of AtoN had been audited by GIAA as a 'mock audit' for the IMO Triple I (Implementation of IMO Instruments) audit scheduled for 2020. This audit received a "Substantial" rating which reaffirms the processes being followed are robust.

## **5. ENGINEERING**

The Committee noted and discussed the Engineering report:

#### Programme and Renewals

Temporary lights remain at Duncansby Head, Kinnaird Head, Mull of Kintyre, Mull of Galloway, Eilean Glas and Stroma.

Portain Beacon - Following confirmation that the navigational requirement remains to establish a beacon in lieu of a buoy the design has progressed. The construction of the beacon will commence in financial year 2020-21.

Cape Wrath - Phase 3 of the refurbishment in 2020-21 will be the replacement of the light source utilising a new solar array. The final light source has not yet been identified but it is possible there may be a small range reduction.

#### Assets

Availability - The Committee noted the 3 year rolling availability figures to 31 August 2019. The Committee noted the improvement in the Category 1 availability and also that the Category 3 availability has improved dramatically following small number of very long AIS outages dropping off the three year rolling average and a review of the data finding an error in the fault entries.

Since the last committee there has been 1 outage - over 72 hours.

Monitoring - The existing monitoring system and servers continue to operate reliably. Final assessment of the tenders submitted by two suppliers was being carried out and the contract has been awarded. The Functional Design Specification has been received and is being reviewed. The contractor has also started to emulate the existing communications protocol.

#### 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.

## 7. RISK CARD REVIEW

The Committee reviewed the Risk Card and discussed:

- Risk escalated through Executive Group - The process for defining, configuring, verifying and recording the character (including range and colour) of AtoN's is undefined. There is a risk that AtoN's are installed with the incorrect character or that mistakes in configuration are not identified. The Asset Team are working with Gillian Burns (Navigation Officer) to look at the process of how the character is set and checked during commissioning and after use.
- New Risk Cause – Helicopter Management -- Add co-ordinated helicopter management in terms of being able to respond to outages.
- Control & Treatment – delete “Review of NLB Monitoring requirements 2018 onwards”;
- Additional Actions – delete “DGPS user consultation” and “Cyber security included in replacement monitor system”
- Additional Actions – move “Implementation of Asset Management Policy” to control & treatment as this has now been implemented.
- Potential Risk Clause - Climate Change. Draw concept out to capture weather, low visibility, electrical storms, sea level changes, etc.

## 8. ANY OTHER BUSINESS

### Review Terms of Reference

The Committee reviewed the revised Terms of Reference and subject to the change of title at 2(c) from “Director of Marine Operations” to “Director of Operations” the changes were agreed.

### SUCG Agenda

The Committee noted and agreed the draft Agenda but requested that the AtoN Review be moved to the start of the meeting.

**Action: Navigation Manager**

### Point of Ayre – Winkie

The Director of Business Services advised that there has been some issues around who owned the land the light was situated on as it has transpired that the light had been moved. There had been a concern that the movement of the light was going to be contested but confirmation has now been received that this is not going to happen. NLB can now progress with getting title granted for where Winkie currently sits and will establish if the purchaser is still interested.

**Action: Director of Business Services**

It was agreed that the chart description requires to be changed with UKHO.

**Action: Navigation Manager**

### Fixed Flashing Light Trial

The Navigation Manager advised the Commissioner Shaw, Alastair Rae and the Navigation team had been on board NLV PHAROS for a viewing trial of St Abbs Head Light. An additional light had been installed at St Abbs to show approximately 1% of the main light output and they found the fixed light was very effective in being able to retain awareness of the location of the light between flashes. Overall the trial was successful and the idea worked well. Whether to put a fixed flashing light in a station will be an aspect to consider during the planning of maintenance/re-engineering going forward, and further discussion is required with the supplier of NLB's large LED lights, as this functionality may be possible without additional light units.

### Isle of Man Wreck Response

A table top review is required to be set up between the Isle of Man Government, DfT and NLB to agree what will happen if there is a wreck in Isle of Man waters, how the DfT is going to respond and clarify NLB's role. Commissioner Brew will have a think about how he wishes to progress this issue and set some objectives for any meeting.

**Action: Commissioner Brew**

### Royal Institute of Navigation (RIN) Conference

The Navigation Manager advised the RIN is holding the Annual International Navigation Conference at the Edinburgh International Conference Centre 18-21 November. On Monday, 18 November they are holding a training course on Securing Positioning & Timing. If anyone wishes to attend please let Peter Douglas know.

**Action: All**

## **9. DATE AND TIME OF NEXT MEETING**

The next meeting of the Navigation Committee will take place on 11 December 2019 at 10am in Stevenson Room 2.