NORTHERN LIGHTHOUSE BOARD
NAVIGATION AND OPERATIONS COMMITTEE

MINUTES – 19 APRIL 2023

PRESENT:	Hugh Shaw	Chair
	Brian Archibald	Commissioner
	Jamie Finlay	Commissioner
	Dick Welsh	Commissioner
	Ruth Charteris	Commissioner
	Mike Bullock	Chief Executive
	Phil Day	Director of Operations
	Mairi Rae	Director of Business Services
	Peter Douglas	Navigation Manager
	Andrew Stevenson	Asset Manager
	Tom Cairns	Delivery & Planning Manager
	Paul Hudson	Programme & Renewals Manager
	Ewen MacKerchar	Marine Operations Manager
	Gillian Burns	Navigation Officer
	Karl Davies	Coastal Inspector
	Karen Charleson	Senior Executive Assistant (Notes)
	Elaine Wilkinson	Commissioner (Observer)

ASSURANCE STATEMENT

The Navigation and Operations Committee met on 19 April 2023. The agenda covered key areas including:

- Navigation, Operations and Business Services reports
- Recent marine incidents and assessment of AtoN adequacy
- Engineering requirements for existing AtoNs and future options for forthcoming projects
- NLB lighthouse tender fleet status and helicopter operations; and
- Climate Change operational adaption measures

The Committee can confirm that assurance was received in relation to all key issues.

- The Executive provided the necessary assurance that everything was continuing to be done to mitigate against the reduction of CAT 1 AtoN availability against the IALA recommendations.
- The Capital and Maintenance Programme remains under review and is subject to modification as operational priorities change.
- The Risk Cards for Aids to Navigation Provision, Asset Loss or Damage, Information Technology and Operational Technology, Technological Change and Obsolescence and Natural Events have been viewed by the committee and are updated on a regular basis.

The Committee wishes to draw the Governance Board's attention to the following issues:

- The AtoN Category 1 availability is currently at 99.77% and remains stable. Category 2 and 3 availabilities are well above the IALA Standard.
- Following the allision when the mini-bulker *WILSON DUNDEE* fouled the Black Eye Buoy off Kyleakin, Isle of Skye (30 Nov 22) the Pier Master at Kyleakin and key stakeholders have proposed a number of mitigation measures. These include the installation of sector lights and current monitoring equipment, enhanced situational awareness and training to assist in providing accurate information for vessels, in particular first-time arrivals,

approaching the terminal. NLB will continue to monitor the situation and will offer support where required.

- Following the tragic loss of the *CEMFJORD* in the Pentland Firth in 2015, the Maritime and Coastguard Agency (MCA) have submitted an input to the International Maritime Organisation calling for formal recognition of an updated PENTREP Reporting System with the aim to enhance the safety of life and prevent pollution in this high-risk area.
- At the end of March 23, 2106 Local Lighthouse Authority (LLA) AtoN had been inspected out of a possible 2357 (89.4%) during the reporting year (April-March). The annual inspection target is 70%. Over the same period 476 NLB AtoN had been inspected out of a possible 485 (98.1%).
- The replacement helicopter aviation services contract project continues but is being hindered by the DfT's intimation that the procurement will be under Tier 2. Unless a decision is made in a timely manner to lower the requirement to a Tier 3, then this will bring assurance complications and timeline issues for NLB and the other GLAs. Discussions are ongoing but may result in a further 'existing' contract extension to enable the project to be delivered. Additional resources may be required to run another Tier 2 in addition to the ongoing VRP.
- A copy of the Climate Change Review report (2022) commissioned by NLB was circulated to the NavOps Committee and outlined the 'potential' future effects of climate change on NLB's fixed assets. Although early in the process, NLB assets have been afforded a RAG risk status and the Assets team have commenced applying local knowledge to each at risk station and are checking the likelihood of inundation which will lead to mitigations being identified for inclusion in future capital projects or minor works.
- The HQ refurbishment project has created a few fire-alarm and security related issues. There is however a good relationship between NLB and the contractor and it is anticipated that the construction element of the project will be completed by September 2023. NLB will arrange to re-install artifacts, furniture, etc, thereafter.
- There were no escalated risks for discussion at the meeting.
- The next NavOps Committee meeting is scheduled to take place on 2 August 2023 and this will be followed by a Wreck Response workshop.

It was agreed that any approvals would be dealt with as they arise rather than wait until Agenda Item 10.

1. APOLOGIES FOR ABSENCE

Apologies were received from Adam Lewis (Coastal Inspector).

The Chair welcomed Commissioners Charteris and Finlay to their first meeting of the NavOps Committee. Introductions and an overview of the Committee was provided for the benefit of the new Committee members.

2. MINUTES OF PREVIOUS MEETING

The Minutes of the Navigation Committee meeting held on 18 January 2023 were agreed and can be published on the website.

Action: Senior Executive Assistant

3. MATTERS ARISING

The Committee noted the update provided within the meeting pack. The majority of outstanding Matters Arising from the previous meeting would be addressed within the relevant subject areas.

Finance – Discussions continue around developing a report including waterfall graphs, etc for the Committee to show the change in a project over its life. It is anticipated that the first report will come to the August meeting.

Action: Programme & Renewals Manager

It was noted that Commissioner Wilkinson had attended a recent Programme and Project Board (PPB) meeting which had provided assurance around how projects are controlled and managed. Commissioner Wilkinson highly recommended that Commissioners should seek an opportunity observe a meeting of the PPB where possible.

Isle of Man Harbours – The Isle of Man Territorial Seas Committee (TSC) will be held on Friday, 28 April 2023. Commissioner Welsh has arranged a very full programme of engagement for the Chief Executive in the week running up to the meeting. An update and outcomes from the visit will be provided to the next NavOps Committee.

Action: Commissioner Welsh

Wreck Response - It is proposed to facilitate a workshop to discuss the follow-up to any wreck incident to follow the next Committee meeting ie. 1200-1330 on 2 August. All members of the Committee are invited to participate.

4. NAVIGATIONAL REQUIREMENTS

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

Sound of Luing

The first stage response to improve the marking of the Sound of Luing is scheduled to be undertaken on 12 June with the small rotation of the light at Dubh Sgeir (Luing). This is a combined operation between the Oban Technicians and NLV PHAROS.

Oil & Gas Inspections

The annual Oil & Gas inspection voyage took place on 11-20 November 2022. Due to poor weather conditions a total of 20 platforms in the Central North Sea/Moray Firth areas were inspected, together with partial inspections of the Moray East and Beatrice wind farms.

A further inspection voyage was undertaken by NLV PHAROS 23 -26 January 2023, with a further 41 platforms in the Central North Sea inspected.

Discussion ensued around using other assets to help with inspections. Consideration will be given to what can be done to help with achieving inspections next winter, however it was noted that come 2025 there will be the option of using the new vessel to be deployed on this tasking. The Director of Operations will update the Committee on any developments at the August meeting.

Action: Director of Operations

Kyleakin

The Director of Operations wrote to the Managing Director of MOWI Scotland on 20 January 2023, noting NLB's concern that without further mitigation incidents will continue to occur; and strongly suggesting the identifying and implementing of appropriate tidal windows for vessels, and clearer guidance on the approach to pass safely clear of the Black Eye buoy. The establishment of leading marks and associated short range lights (perhaps occasional for arriving vessels), was also recommended.

The Navigation Manager subsequently met with the Pier Master on 22 March 2023 to discuss sector light and current monitoring equipment options.

Pentland Firth

Further to discussions between MCA and NLB regarding reporting issues in the Pentland Firth in light of the Cemfjord loss, MCA have submitted an input to the IMO NCSR Committee calling for formal recognition of an updated PENTREP Reporting System.

Riff Bank Survey

Surveys of the Riff bank were undertaken under the Civil Hydrography Programme in 2019/20 and in 2022 in order to ascertain the mobility of the bank and a recommended interval for regular survey.

As a result of these surveys, no requirement to alter NLB's buoyage provision has been identified.

The bank is not as active has had been feared and it has been scheduled in the Civil Hydrography programme on 12-year resurvey cycle.

Loch Ryan

Dumfries and Galloway Council are in the process of applying for a revised Harbour Revision Order for Stranraer which will expand the Harbour area to cover all Loch Ryan south of the ferry terminals. NLB currently operate the Spit of Scaur buoy in this area. It is intended that this buoy station will be altered to a plastic buoy and the buoy station transferred to the harbour authority; this has been discussed with the Council. The existing steel buoy will be returned to NLB stock.

Tarbet Ness

Following a request from a local astronomer the Navigation Manager attended Tarbatness with the Inverness Senior Technician on 2 March 2023. It was agreed that the blank sector of the light could be increased by approximately half an astragal (c. 11°) without detrimental impact on the function of the light. This was undertaken on a temporary basis and will be made permanent if no adverse comment is received. As the sectors of the light are not defined in Admiralty publications, no NTM is required or intended.

Very positive feedback has subsequently been received from the original correspondent.

The Committee discussed and agreed to the blank sector of the light at Tarbet Nett being increased by half an astragal (c. 11°).

Craigton Point

A visit to Craigton Point at North Kessock on 2 March 2023 was undertaken to investigate options for reducing the range of the light from the currently advertised 11/7M WRG light, and therefore facilitate a solar-powered light with no battery internal to the RNLI building on which it is located.

It was observed (and also noted by the Inverness Harbour Master) that the light is on the West side of the building was of no value to vessels approaching from the East (which are served by Longman Point). The main function of the light is to keep traffic to/from the Caledonian Canal (1.25M distant) from straying onto the Southern shoal. It is therefore considered acceptable for the range of the light to be reduced to a proposed range of 4-5 miles.

2020 AtoN Review

The Committee noted the 2020 AtoN Review tracker.

It was noted that adding AIS virtual capability to Duncansby Head, establishing a virtual AtoN for Sandy Riddle and enhancing Stroma Beacon with a virtual AtoN has been progressing however, conversations have been held with MeyGen who operate the tidal turbines and they are looking to establish virtual AIS within the Inner Sound. Should this go ahead, it would make anything NLB established on the beacon redundant.

GNSS update
GPS satellite III-6 was launched on 18 January and has now been declared operational.

Aids to Navigation Inspections
At the end of March, 2106 LLA AtoN had been inspected out of a possible 2357 (89.4%) during the reporting year (April-March). The annual inspection target is 70%. 159 AtoN are recorded as not inspected within the last 3 years, however this includes newly established and occasional AtoNs, as well as some not visible from inspecting ships. 65 faults remained outstanding at the end of the month; these are followed up by Navigation staff.

476 NLB AtoN had been inspected out of a possible 485 (98.1%). No NLB AtoN are currently out with the 3 year maximum inspection period.

Marine Licence and Sanction Requests
The Committee noted the summary of Marine Licence Activity and Sanctions for the establishment/ disestablishment of AtoN as required under the Navigation Committee Terms of Reference.

There has been a surge in licensing cases since Summer 2022, largely driven by Marine Scotland addressing a backlog of aquaculture site applications, and by the Scotwind data-gathering phase. The Scotwind licensing round has generated a number of meetings and applications for data gathering buoys & seabed sampling to date. It was noted that an extra role has been included in the Corporate Plan for future years.

5. OPERATIONS REPORT

The Committee noted and discussed the Operations report:

AtoN Availability
The Committee noted the 3 year rolling availability figures to 31 March 2023.

The figures for Category 1 (Cat 1) availability have been significantly impacted by pillar rock outages which have previously been reported. The Cat 1 availability has stabilised and will slowly improve but the impact of this significant issue will carry through for the coming 3 years.

Category 2 and Category 3 availability remains well above the IALA standard.

Outages
Since the last committee there has been 4 outages over 72 hours.

Maintenance
The Committee noted the Q4 Dashboard. Overall Planned maintenance overdues are at circa 3.6% which is classed as world class internationally. This is a 15% reduction since the last report.

Operations Projects
The Committee noted the Project Dashboard which was included in the meeting pack. Temporary lights for project work remain at Fair Isle South (Skadan), Lunna Holm, Start Point and Cava.

Escalated Matters

(i) Monitoring
Some 75 RTU have been replaced across the estate. The replacement project is progressing well and remains on track to be complete by 2024 prior to PSTN switch off.

(ii) Pillar Rocks
Generator install (Dubh Artach) has been completed. A site visit has been scheduled to complete all work necessary at which time the light will be brought back to the published full

range.

(iii) Vessels

NLV POLE STAR: The vessel sustained a heavy landing in Inverness at the beginning of the month which caused some superficial hull and coating damage. Separately the Anchor windlass crown wheel has sustained some damage (lost teeth) a replacement is held as this has been a repeated issue through the life of the vessel. In the meantime to avoid further damage the vessel is not anchoring overnight but is able to anchor in an emergency

NLV PHAROS: The overhaul of the aft Palfinger crane was completed in the self-refit in late January/early February 2023. More recently the main crane developed a fault and is unusable until parts are supplied. The vessel has been able to continue helicopter operations work with a repair due on 12/13 April 2023 when the vessel is in Oban.

The last planned dive in January 2023 showed no further corrosion development of the unpainted sections of the azimuth drive. A clear business decision has been taken to plan to remedy the issue during the normal scheduled docking in February 2025. No further concession from the yard has been achieved.

(iv) Helicopter
There are no significant issues to report in relation to the existing contract. The 6 monthly helicopter meeting took place In March 2023.

(v) Vessel Replacement
As a major strategic project this will be reported on at the Governance Board.

(vi) Oban Base
No significant Matters to report.

(vii) Oban Harbour
The Director of Operations provided an update on the development of the Harbour Revision Order (HRO).

(viii) Technician vacancies
There are currently two technician vacancies in Edinburgh and one in Orkney. Although the roles have been readvertised agnostic of location limited responses have been received. Advertising the role is continuing.

Environmental

The Committee noted and discussed the Climate Change report commissioned by NLB. The report includes details of the Representative Concentration Pathways which represent the trajectories of Greenhouse gas concentration where:-

- RCP2.6 is described as a “very stringent” pathway. According to the IPCC, RCP2.6 requires that emissions start declining by 2020 and reduce to zero by 2100.
- RCP4.5 is described by the IPCC as an intermediate scenario. Emissions in RCP4.5 peak around 2040, then decline.
- In RCP8.5 emissions continue to rise throughout the 21st century. Since the IPCCs 2014 AR5 report this pathway has been thought to be very unlikely, but still possible if unknown feedback effects result in increase of emissions. RCP8.5 is generally taken as the basis for worst case climate change scenarios.

From these results the Assets team is applying local knowledge to each at risk station and checking the likelihood of inundation which will lead to mitigations being identified for inclusion in upcoming capital projects or minor works.

A verbal update will be given to the next Committee and a report on mitigations will be provided early next year.

Action: Asset Manager

NLB has responded to two consultations relating to environmental aspects.

- To Beis in relation to a consultation on the use of energy efficient light sources (LED) which would effectively remove incandescent, metal halide and CDMT from the marketplace impacting some NLB lights with traditional lens or longer ranges.

- To Scottish Government in relation to consultation on energy strategy and Just transition to emphasise the importance of Maritime and the need for pragmatic future fuels that are safe and effective.

6. BUSINESS SERVICES

Tri-GLA Collaboration

Discussions continue with DfT, DoT and IL. A draft Note Verbale has now been received and is currently being finalised. The Note Verbale is an agreement between the two Governments which will allow procurement to continue for a two year window. The assumption is that if a procurement commenced within the 2-year period it would be allowed to continue to its conclusion. Thereafter procurement may be determined by the Procurement Reform Bill. It is thought the new Windsor Framework may assist with cross-border activities with no diminution of rights from the Good Friday agreement.

Aviation Services Project (ASP)

On 31 March 2023 NLB were advised that DfT CAB considers the ASP project to be a Tier 2. NLB are continuing to discuss options with DfT and an SRO Briefing was instigated highlighting issues and reasons why this project should be a Tier 3. The next stage is for the Chief Executive to get together with Paul Rodgers – Director, Group Commercial - to talk this through.

Workshops to consider options with other GLAs have commenced and KPMG are assisting with these and the development of the SOBC.

Supplier Issues

Solar Panels - Following price increases from the current solar panel supplier, NLB have now placed orders with an alternative supplier which are expected into stock in April 2023.

Paint (Delays with supply of yellow paint in 20 litre containers) – TH confirmed they are now using 5 litre tins to overcome this issue. NLB order placed in November, earlier than required, due to the known delays in production in Germany. This is not causing any operational issues at present, but Procurement will continue to monitor.

Procurement Issue (StormGeo) - TH had previously indicated that they would be tendering for this service and were advised to include an option for NLB to participate in the procurement. NLB Masters received a notification from the supplier on 5 April advising the service was ceasing. Procurement queried this to discover that after feedback from TH Masters, TH had decided not to pursue StormGeo but were instead considering a Professional subscription to Windy app. The Operations and Procurement IGCs were not made aware StormGeo was being discontinued. NLB are now reviewing options with NLB Masters.

Business Development

The Committee noted the update on commercial work.

Facilities
The HQ refurbishment work has created a few fire alarm and security related issues. The facilities team have been on hand to deal with each issue as it has occurred.

Knowbe4 Training
The latest batch of training has been issued to staff and for the first time Commissioners have been invited to complete this training. A few staff and Commissioners are being chased to complete but the majority have completed this useful training. ICT continue to promote cyber awareness threats through regular updates via Teams.

GIAA undertook a Cyber Awareness audit in March 2023 this included a user survey which received responses from 104 employees. The audit gave a SUBSTANTIAL rating and gave some reassurance that the cyber risk message is being received by staff.

ISO27001
LRQA auditor undertook a routine surveillance audit on 11 & 12 April 2023. There was one minor non-conformance raised around Line Managers and new staff ICT requirements.

Quinquennial Revaluation Exercise
There was a delay to the delivery of the tri-GLA methodology paper by the TH appointed consultant, RSK, who needed to undertake additional works to fully develop the wind turbine modern equivalent asset.

Engineers from the 3 GLA's worked on developing the methodology paper for the structures and agreed that one was also required for the Mechanical and Electrical plant and machinery as well as auxiliary systems, AIS, Racons, etc.

The finalised documents were available on 23 March 2023 and once the NLB Plant and Machinery spreadsheet was finalised this was passed to VOA on 28 March 2023. VOA have confirmed receipt and are working on updating their spreadsheet. However due to the delay in getting VOA the information they are concentrating on TH's estate first as their estate is much smaller. To date VOA have not come back with a timescale for finalising NLB's spreadsheet. There is a limited period of time once the information is received to compare against the previous financial values and do the associated accounting entries, recalculate depreciation, etc before the due date for Period 13 results to DfT on 9 May. This may mean NLB will have to report the asset valuation changes in next year's results.

It was noted that the VOA Officer visited Craigton Point, Chanonry, Rubha Reidh, Ardnamurchan, Corran Point, Coran Narrows NE and Dunollie Light Houses between 13-16 March as well as Oban Base on 16 March 2023 to carry out the machinery valuation.

Project Spend
The Committee noted the summary of the 2022/23 project spend for capital and revenue to Period 12 (31March 2023). Final year-end adjustment is still being completed.

The Programme and Renewals Manager advised that an internal project is currently being run to further strengthen cost estimating capability. This will assist in providing a higher degree of confidence, analysis and accuracy in cost estimating for future projects within the Corporate Plan. This work will also put NLB in a good position for the Procurement Reform (Should Cost Estimating).

HQ Refurbishment
The Chair enquired as to whether the HQ Refurbishment Project was still on schedule. The Chief Executive, as SRO, has every confidence the contract will be delivered as anticipated highlighting the good relationship between NLB and the contractor. Staff continue to be updated through the Chief Executive's Weekly Message.

7. COVID UPDATE

The Maritime Mutual Support Group continues to meet on a three weekly basis to exchange any best practice and learnings.

There is currently one case of COVID on NLV PHAROS will mild symptoms.

It was agreed to remove this Item from future Agendas.

Action: Senior Executive Assistant

8. NOTICES TO MARINERS

There were no Notice to Mariners issues since the last meeting.

9. ESCALATED RISKS AND RISK CARD REVIEW

There were no escalated risks for discussion at this meeting.

The Committee reviewed the Risk Cards and the following changes were identified:

AtoN Provision
New Risk – Reference helicopter contract and risk around Tiering. Consideration to be given to escalating this risk to DfT.
Navigation Committee – Update references to Navigation Committee to Navigation & Operations Committee.

Commissioner Archibald asked if NLB had made a response to the consultation on Highly Protected Marine Areas and if there was anything the Committee needed to be aware of. The Director of Operations advised that there were no grounds for NLB to put in a response. Whilst there were a number of controls being introduced that might affect AtoN users, there was nothing in the consultation which would stop NLB conducting its service. If these Highly Protected Areas go ahead NLB will monitor and comment if there is anything the affects navigational safety or NLB operations.

Information Technology and Operational Technology
Additional Actions – Capture power generation capability in HQ.

10. POLICY APPROVALS

No Policy approvals required for this meeting.

11. ANY OTHER BUSINESS

Joint Users Group (JUG)
The next JUG is scheduled to be held on 18 May 2023 in London. The Director of Operations will report back on any business of note.

Action: Director of Operations

AtoN Review/Risk Response Criteria
The process for the next AtoN Review has commenced. The GLAs are also considering a review of Risk Response Criteria. Both these are Tri-GLA activities and a meeting is scheduled for 18 May 2023 to start planning.

Industrial Action

There are currently live ballots out with several of the Unions NLB work with that could lead to Industrial Action. Fourteen days' notice is required for strike dates.

Ships can only go on strike if the vessel is safely moored alongside. It is not NLB's intention to bring the ships back to port other than for programmed activities. When this occurs for crew changeover, etc there is a risk those dates are chosen for strike action. There are ongoing discussions with the Union to reach agreement for NLB vessels to respond to wrecks and new dangers during strike periods.

It is unlikely that NLB will backfill Technicians absence. Notice to Mariners will be issued for any outages. NLB will endeavour to maintain monitoring.

Contractors working on NLB sites are expected to be unaffected except where they are being supported by striking NLB staff or vessels.

Delivery & Planning Manager

It was noted that Tom Cairns will retire at the end of June 2023 after 32 years of service. Tom took over Delivery & Planning at the time of reorganisation and kept maintenance ongoing while NLB went through substantial restructuring elsewhere in the organisation. Tom is one of the architects of the new NLB and set us on a path that is much more fit for the 21st Century. The Committee wished Tom all the very best for the future.

13. ASSURANCE STATEMENT

The Chair will circulate a draft Assurance Statement following the meeting. Committee Members are requested to send any comments/amendment to the Chair over the next few days.

Action: All

14. DATE AND TIME OF NEXT MEETING

The next meeting of the NavOps Committee will take place on 2 August 2023 at 09.30am. Whether the meeting will be in person or virtual will be confirmed when the meeting papers are issued.