NORTHERN LIGHTHOUSE BOARD
NAVIGATION AND OPERATIONS COMMITTEE

MINUTES 6 AUGUST 2025

PRESENT:	Jamie Finlay	Chair
	Brian Archibald	Commissioner
	Hugh Shaw	Commissioner
	Dick Welsh	Commissioner
	Mike Bullock	Chief Executive
	Phil Day	Director of Operations
	Mairi Rae	Director of Business Services
	Peter Douglas	Navigation Manager
	Andrew Stevenson	Asset Manager
	Ewen MacKerchar	Marine Operations Manager
	Joe Jeffrey	Delivery and Planning Manager
	Paul Hudson	Programme and Renewals Manager
	Joe Hothersall	Principal Mechanical Engineer
	Gillian Burns	Navigation Officer
	Adam Lewis	Coastal Inspector
	Jennifer Matthews	Coastal Inspector
	Karen Charleson	Senior Executive Assistant (Notes)

ASSURANCE STATEMENT

The Navigation and Operations Committee met on 6 August 2025. The agenda covered key areas including:

- Navigation, Operations and Business Services reports
- Recent marine incidents and assessment of AtoN adequacy
- NLB lighthouse tender fleet status and helicopter operations
- 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 every effort was being made to attain, or exceed, the IALA recommended CAT 1 AtoN availability level.

- 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:

- **AtoN Availability.** The AtoN Category 1 availability is at **99.92%** and exceeds the IALA recommended level. This reflects the teamwork and tremendous commitment,

dedication and effort by all those contributing to operations from across the organisation. Category 2 and 3 availabilities are well above the IALA standards.

- **Navigational Incidents.** One incident has been reported since the last meeting:
    - The 18m fishing vessel CRYSTAL STREAM ran aground on Barmore Island in the Clyde on 5 June and subsequently sank. The incident was not as a result of AtoN failure and occurred in the Clyde Port area where the LLA is responsible for wrecks.

- **Corran Narrows.** The new breakwater at Nether Lochaber will mean obscuring the current Corran Narrows NE light, which will be resituated on the end of the breakwater, as noted in the 2025 AtoN Review. The displayed sectors will not change. Costs for the new light will all fall to the construction project although NLB staff and a vessel will be involved in commissioning the light. There will be no temporary light displayed during the work as it is scheduled to take place through the winter when no cruise vessels – the primary user of the light – will transit through the Corran Narrows. During this period, the existing light will still be visible as it will only be obscured once the new breakwater is in place, and only when a vessel is alongside the berth.

- **Sound of Harris.** CMAL have commissioned a survey of the Sound of Harris in preparation for a new larger ferry. As part of this, they have suggested some movements to AtoN's along the ferry's route. NLB have asked CMAL for a formal submission in order to consider the suggestions against official survey data.

- **2024/25 LLA Annual Report.** The committee reviewed the report and approved it for distribution. This report is submitted annually to the Secretary of State under the Merchant Shipping Act 1995 and to Scottish Ministers under the Scotland Act 2016. The committee agreed this very useful document neatly highlights the changing and growing use of our maritime space and that it should receive a wider distribution via the NLB website and be signposted to the NLB User Group. The report highlights a reducing failure rate amongst LLA AtoN; the offshore installation failure rate increased but is based on a very small sample. Trinity House and Irish Lights have each published reports covering their areas of responsibility.

- **AtoN Inspections.** At the end of June, 187 LLA AtoN had been inspected out of a possible 2410 (7.8%) against a target of 70%. 153 AtoN are recorded as not inspected within the last 3 years. 197 NLB AtoN have been inspected out of a possible 489 (40.3%). 2 NLB AtoN are currently outwith the 3-year maximum inspection period.

- **Planned Maintenance.** Overall planned maintenance overdue is reported as 1693 out of 5724 (29.6%) marking a significant increase from the April report. The Director of Operations and Delivery and Planning Manager presented a series of slides to the committee to explain the reasons for this, and outlined a comprehensive plan of action to close much of it out over the next few months. The Governance Board should see no cause for alarm in the high numbers at present with an expected improvement in the numbers by the October report.

- **ASP.** 1 of 5 bidders has now withdrawn from the process. The Director of Business Services outlined the future timeline of activity with a new contract commencing in December 2027. The chief risk to the project remains delay caused by uncertainty in the assurance and approvals process with HMG Departments.

- **Emergency Optics.** Following discussion of the issue and the paper prepared for the committee by the Director of Operations, the committee agreed to endorse the recommendation to continue with the approach of removing legacy emergency optics (historically installed on longer range lights) at reengineering and use a reserve optic where dual redundancy is not available.

- **Risk Cards.** Cards 5 & 6 were reviewed. Cards 8, 9, 10, 12 & 15 were noted.

Escalated Matters

- **Scottish Government Frameworks.** There is risk associated with failure for NLB to be able to access Scottish Government Framework agreements for procurement (currently used for marine gas oil, electricity, gas, banking, hire cars) and instead be required to use the requirements of the Procurement Act 2023; doing so would place a heavy burden onto NLB's procurement team in order to run tender exercises. Work is ongoing with DfT to understand the NLB position.

The Chair welcomed everyone to the August NavOps Committee.

It was noted that this was Jennifer Matthews first meeting having recently joined NLB as a Coastal Inspector.

It would also be Andrew Stevenson's last meeting before he retires and the Committee placed on record their thanks for his significant contribution to this Committee and to NLB more broadly. Andrew's extensive knowledge during the Inspection Trips has been particularly beneficial.

1. APOLOGIES FOR ABSENCE AND DECLARATIONS OF INTEREST

Apologies for absence
Apologies were received from Commissioner Charteris and Karl Davies (Coastal Inspector).

Declarations of Interest
There were no declarations of interest highlighted at the meeting.

2. MINUTES OF PREVIOUS MEETING

The Minutes of the Navigation and Operations Committee meeting held on 16 April were agreed.

3. MATTERS ARISING

The Committee noted the update provided within the meeting pack. All outstanding actions have now been closed.

4. NAVIGATIONAL REQUIREMENTS

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

Incidents

- FV CRYSTAL STREAM - The 18 metre fishing vessel ran aground on Barmore Island in the Clyde on 5 June and subsequently sank. The wreck is being salvaged (Clyde NTM 17/25 refers). The MAIB have opened an investigation.
- Storm Floris (4 August 2025) – There have been various yacht incidents during Storm Floris but nothing of significance to report.

None of these incidents were as a result of an AtoN failure.

Corran Ferry

Discussions have continued with contractors regarding the planned (2026) new breakwater at Nether Lochaber. A small tower will be constructed at the seaward end of the breakwater and will mount a directional light replacing Corran Narrows NE light, as noted in the 2025 AtoN Review. NLB staff and an NLB vessel will be involved in the commissioning of this light. The tower will be close to the current white centre line (032°) therefore it is not intended to alter the displayed sectors.

The old light will be removed by the contractor. The cost of buying and installing the new light and removal of the old light will be borne by the contractor. There will be a cost to NLB in terms of staff and ships time during commissioning of the new light. There will be no temporary light displayed during the work as it is scheduled to take place through the winter when no cruise vessels – the primary user of the light – will transit through the Corran Narrows. During this period, the existing light will still be visible as it will only be obscured once the new breakwater is in place, and only when a vessel is alongside the berth.

Sound of Harris

CMAL have recently commissioned a full survey of the Sound of Harris ferry route, to inform a future ferry replacement project. The key limitations of the route remain around the Portain beacon, and the L4 Boulder Bank/Mile Sgeir area.

CMAL/CFL have been requested to agree a joint request for any improvements to Aids to Navigation. All suggested changes represent buoy moves to deeper water. However, Mile Sgeir is not considered safe to access and it had been intended to change this buoy to a light beacon.

CMAL have also requested a site share at Portain beacon for a solar-powered tide gauge site. A Use of Facilities request will require to be submitted.

Commissioner Archibald noted that this up-to-date modern survey gave greater depth than had previously been charted and invariably shows the older charts are more pessimistic and asked whether NLB was ready for a degree of pressure to take this into account during the next navigation review to look at where some of NLB's AtoNs are and whether they need to move where the navigable water is deeper than thought. The Navigation Manager advised that the Sound of Harris is a particularly constrained area, more so than anywhere else that has been marked by NLB. An extra metre of water in most areas is not likely to make much of a difference.

It was noted that the Civil Hydrography Programme is resurveying the South of Harris/Western Isles in the near future, and they are looking to do both conventional and LIDAR surveys. NLB only react to official data and rely on the UKHO publications for buoy provision.

The Committee agreed a formal submission from CMAL was required for further consideration of requests for changes to AtoNs. This is a great example of how NLB assists in opening up islands to trade, tourism and lifeline links.

2024/25 Annual Report

The Committee noted the 2024/25 Annual Report of Inspection/Audit of Local Aids to Navigation, Offshore Structures and Aquaculture sites. The Navigation Manager reported that the LLA failure rate is 5.9% which is significantly better than last year and the best result since 2017. The

aquaculture pass rate of inspections is 73% which is, by some margin, an all-time high and is hopefully a start of a step change. The offshore oil rig inspections failure rate was 43% which was massively higher than previous years however there was only a small number of platforms inspected and the number is therefore not considered statistically valid.

The Committee agreed that this was a very useful report and provides a very useful overview. Trinity House and Irish Lights have also published reports covering their areas of responsibility.

It was agreed that any comments/feedback would be passed back to Navigation Manager by 12 August 2025. Subject to there being no major changes, the Committee approved the report for distribution. A link to the report will also be included on the invitation to the NLBUG.

GNSS update
GPS satellite III-8 was launched from Cape Canaveral on 30 May and is currently under test.

Aids to Navigation Inspections
At the end of June 2025, 187 LLA AtoN have been inspected out of a possible 2410 (7.8%) during this reporting year. 153 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 (see attached spreadsheet).

197 NLB AtoN have been inspected out of a possible 489 (40.3%). 2 NLB AtoN are currently out with the 3 year maximum inspection period (Ve Skerries light & racon).

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.

Resourcing
The Committee noted the workload of the Navigation team, in terms of licensing cases, over the last four years. Recent growth has been driven by the Scotwind data-gathering phase, which has generated a number of meetings and applications for data gathering buoys & seabed sampling to date.

Disposal of POLE STAR IV
Commissioner Shaw reported the difficulties being experienced in getting permits to move the cargo ship SOLONG to Galloo Ghent for recycling which highlights the issues NLB may have faced if the sale of POLE STAR IV had not progressed. It is credit to the team for the tremendous amount of work that has been saved by going down the agreed route.

5. OPERATIONS REPORT

The Committee noted and discussed the Operations report. Area highlighted were:

AtoN Availability
The Committee noted the 3-year rolling availability figures to 23 July 2025.

Category 1 availability remains steady since the last meeting at 99.92%.

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

Worst 1 Year Performers
The list of the worst one year performers was noted. The majority have had no new failures since the last meeting.

Outages
Since the last meeting, there has been 4 outages over 72 hours. The delay getting to sites is largely due to helicopter availability.

Ships Downtime
NLV PHAROS had a significant failure which resulted in 29 days downtime. The issue has now been resolved. There was subsequently a problem with the crane which has also been resolved and was not regarded as downtime. The vessel is now fully operational and is making her way to Chicken Rock to conduct heliops and buoy maintenance around the Isle of Man.

Maintenance
There has been rise in overall overdues for planned maintenance for fixed installations. This has risen from 15% to 24%. The Delivery & Planning Manager shared some slides providing background information and statistics. There is work ongoing on the Q4 Dashboard to find a way of analysing the data better and making it more granular. Overall, there is no significant cause for concern.

IGC5 End of Financial Year Summary Report
The Committee noted the IGC KPI Report for Q4. The Director of Operations advised that NLB submissions on KPI 4 - Inspection & Maintenance, KPI 5 – GLA Vessel Statutory Tasking: AtoN Inspection and Maintenance and KPI 7 - GLA Capital Project Delivery are being reviewed to ensure consistency of reporting to provide reasonable comparisons/benchmarks.

Assets - Estates
The Committee noted the updates on issues in relation to the NLB estate.

Mercury Monitoring
The continuous monitoring equipment has now been received from GRAD. Due to its size, it will be installed during the next commissioning trip in August 2025.

Q4 Renewal/Replacement and Frameworks
All internal stakeholders have now been consulted and 93 requirements have been identified for the system. A review meeting will be scheduled to fully designate the requirements to allow the Maintenance Systems Team and Procurement to undertake market engagement to identify suitable systems and likely costs. Once this is completed a full procurement exercise will be undertaken to cover the provision and maintenance of a system including transfer of data from the existing Q4 system and training for superusers, administrators and users.

Neighbour Consultations
The Committee noted the updates on Davaar, Girdle Ness and Corran.

Apprentices
Interviews took place for Electrical Apprentices on 23 and 24 June 2025. The top two candidates offered roles (one Oban and one Edinburgh) and both have accepted. There were 28 applicants for these positions with 8 people interviewed. Out of the 8 candidates only 3 were considered suitable for the role.

The existing Mechanical Apprentice will work with Delivery & Planning up to 25 August 2025 at which point they will join the Marine Operations Department in the ERT role. The existing Electrical Apprentice will move to a technician post at the same time.

Two technician and two deck rating apprentices have been recruited for a September 2025 start. It had been the intention to recruit 4 apprentices however there was only 13 applicants for these roles and subsequently only 5 were interviewed and 2 selected for the positions.

PHAROS Defect
The Committee noted the report on the PHAROS defect.

POLE STAR Staff
The Committee noted that all current crew are fully engaged and occupied. No member of the crew has been at home unoccupied for the entire four week period.

Escalated Matters
There were no significant items to discuss.

Emergency Optics
At the last meeting the question was raised by Delivery & Planning Manager as to whether the removal of emergency optics was the right thing to do.

During refurbishment of stations in recent years the design philosophy has been to remove light sources which generally were unreliable, obsolete and often had single points of failure. The main light has been replaced with dual redundant flashing LED systems such that the failure of one LED does not reduce the range and it can be repaired prior to any other unit failing. Mains power failures no longer stop the main optic except in a very small number of sites where a reserve LED is now fitted to support the often historic rotating lens. Emergency optics have been removed from the vast majority of stations.

Stations that remain with emergency optics are only stations due for refurbishment. Primarily offshore sites where charge cycles are to be replaced with solar it is intended that they are reengineered to the same dual redundant low energy standard as the current design.

There is no longer a defence plan that requires range reduction and in any event the LED lights can be reduced in range with technician intervention. The likelihood of a reengineered site going dark is significantly reduced with the installation of a dual redundant system. Where dual redundancy cannot be engineered a reserve light is installed.

Following discussion, the Committee confirmed they were fully in agreement with the continued approach of removal of legacy emergency optics at reengineering.

6. BUSINESS SERVICES

Aviation Services Project
The Committee noted the update on the ASP project. The main risk in the project remains the assurance and approvals process, particularly within the Cabinet Office, which currently has a backlog of around 8 weeks. The project team are in regular communication with key stakeholders to ensure they are aware of the criticality of this project and its timeline.

Scottish Government Frameworks
NLB currently utilise a number of Scottish Government Framework agreements (e.g. marine gas oil, electricity, gas, banking, hire cars, etc). Some of the similar UK frameworks do not cater for supplies in Scotland. The UK has implemented procurement reform under the Procurement Act 2023 however Scottish Government are still awarding contracts based on 2015 regulations. If NLB are unable to access the Scottish Government frameworks this would place a lot of additional work onto NLB's procurement team to run tender exercises. DfT believe that there should be something within the regulations to allow us to continue to utilise the Scottish Government frameworks but have not managed to confirm this yet.

Supplier performance (buoy paint flaking)
Trinity House were procurement lead on this contract so their Contract Manager is now leading discussions with the supplier regarding the buoy paint flaking. The current contract expires on 14 August 2025 and Trinity House are working on the replacement contract.

Business Development
The Committee noted the update on business development.

Facilities
The Facilities Team have now transferred to Delivery & Planning Team. The final furniture deliveries have been received and work continues on the financial settlement.
Estates
The Committee noted the update on Use of Facilities applications.

Development of George Street, Edinburgh
Edinburgh Council have issued an update on the proposed development of George Street, Edinburgh. There will be restrictions to the front of George Street between 7pm and 10am. Access to the rear of the building can still be access through the Rose Street entrance.

Secure by Design
There is a new requirement for all Government Departments procuring software with lifetime costs exceeding £1m or including an artificial intelligence (AI) element. This entails extra checks to ensure security and integrity of systems and requires all NLB teams to be both aware and briefed on its operation. This will require change to NLB "Form 0" operation. Initial briefings with key staff have started and draft amendments to Form 0 have been proposed.

Project Spend
The Committee noted the summary of the 2025/26 project spend for capital and revenue to Period 3 (30 June 2025). We are continuing to programme projects beyond the budget available to accommodate any projects which cannot complete due to weather, resources, etc. This position is under continual review at the monthly Programme and Project Board.

7. NOTICES TO MARINERS

Notices to Mariners 08 of 2025 – Kinnaird Head – Establishment of AIS AtoN; 09 of 2025 – Haskeir – Alteration to MMSI and 10 of 2025 – Dunnet Head – Temporary Light, were published since the last meeting.

8. ESCALATED RISKS AND RISK CARD REVIEW

Escalated Risks
There were no escalated risks to raise at this meeting.

Risk Card Review
The Committee reviewed Risk Card Numbers 5 – AtoN Provision and 6 – Information Technology and Operational Technology.

Risk Card 5 – AtoN Provision

- Additional Actions – Revise "Follow up letter to be sent by NavOps Chair to underperforming LLA identified within the Annual LLA Report." to read "Follow up letter could be sent by NavOps Chair to underperforming LLA identified within the Annual LLA Report" and move to Control & Treatment. Attention will also be drawn to the LLA report at the NLBUG.

- Additional Actions – Remove “Work being undertaken to introduce new vessel Planned Maintenance System.” as this is now operational for NLV PHAROS.
- Additional Actions - Revise “Ongoing Aton review – implementation” to read “2025 AtoN Review Implementation”.
- Control & Treatment – “Noting phase out of traditional (metal halide) lamp technology commencing Dec 2023. Mitigation by appropriate stock held and ongoing replacement of equipment.” This is now subject to a wider review by GRAD and there is additional work ongoing.

Risk Card 6 - Information Technology and Operational Technology.

- Additional Actions – Review the wording of “Function and maturity of Information Management Group (including new ICT vetting and approval).” to reflect secure by design.

Risk Cards Numbers: 8 – Exploitation of Reserve Capacity; 9 – Technological Change; 10 – Asset Loss/Damage; 12 – Natural Events and 15 – Climate Emergency (Adaptation) were noted.

9. POLICY APPROVALS

Emergency Optics
The Committee confirmed they were fully in agreement with the continued approach of removal of legacy emergency optics at reengineering

2024/25 Annual Report
It was agreed that any comments/feedback would be passed back to Navigation Manager by 12 August 2025. Subject to there being no major changes, the Committee approved the report for distribution.

10. ANY OTHER BUSINESS

There were no items of any other business identified for discussion at this meeting.

11. 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

12. DATE AND TIME OF NEXT MEETING

The next meeting of the Navigation and Operations Committee will take place on 22 October 2025 at 10am. This will be a virtual meeting.