

**NORTHERN LIGHTHOUSE BOARD
NAVIGATION AND OPERATIONS COMMITTEE**

MINUTES – 18 January 2022

PRESENT:	Mike Brew	Chair
	Alastair Beveridge	Commissioner
	Hugh Shaw	Commissioner
	Brian Archibald	Commissioner
	Duncan Murray	Commissioner
	Elaine Wilkinson	Commissioner (Observer)
	Mike Bullock	Chief Executive
	Phil Day	Director of Operations
	Mairi Rae	Director of Business Services
	Peter Douglas	Navigation Manager
	Andrew Stevenson	Asset Manager
	Paul Hudson	Programme and Renewals Manager
	Tom Cairns	Delivery and Planning Manager
	Ewen MacKerchar	Marine Operations Manager
	Gillian Burns	Navigation Officer
	Adam Lewis	Coastal Inspector
	Karen Charleson	Senior Executive Assistant

Following the decision by the Board of Commissioners (BoC) to replace the Managing Board with a Governance Board it was agreed that the next phase of work was to look at the Committee Structure. The BoC Working Group are preparing a report on this to be submitted to the Governance Board on 17 February 2022 for approval but to help with the planning of the Corporate Calendar for 2022 the BoC decided that the Committees would change to the new structure from January 2022 pending further consideration by the February Governance Board meeting.

Therefore, the remit of the Navigation Committee has been widened to include operational issues and performance. The Committee has been renamed to the Navigation & Operations Committee to reflect this change of remit.

ASSURANCE STATEMENT

The Navigation and Operations Committee met on the above date and key issues considered during the meeting included:

- Aid to Navigation availability
- A Navigation report
- Options report for the refurbishment of Pillar Rock Lighthouses
- Business Services report
- Presentation on Asset Management
- Update on COVID arrangements across NLB
- Risk Cards for Aids to Navigation Provision and Asset Loss or Damage.

The committee can confirm that:

- Assurances were received in relation to all key issues
- The financial outlook remains within budget and any corrective action required has been taken or is planned
- The Capital and Maintenance Programme remains under review and any corrective action has been taken or is planned

- The Risk Cards for Aids to Navigation Provision, Asset Loss or Damage, Information Technology and Operational, Technological Change and Obsolescence, Natural Events are utilised and updated on a regular basis
- The COVID arrangements remain under frequent review.

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

- The reduction in availability of Category 1 lights due to a combination of ageing infrastructure, winter weather, tidal limitations and helicopter availability
- Argyll and Bute Council has opted to expand its existing harbour area to cover the currently unmanaged area of Oban Bay and approaches. It is not expected that this initiative will adversely affect Oban Base. CMAL, CalMac and NLB are supportive but the stakeholder group is not. With further consultation this position may change.
- The option to extend the existing helicopter contract has been confirmed. Work will now start on the specification for a future contract and how it will be procured. Account will be taken of the difficulties experienced this winter.

1. APOLOGIES FOR ABSENCE

There were no apologies for absence.

2. MINUTES OF PREVIOUS MEETING

The Minutes of the Navigation Committee meeting held on 7 September 2021 were agreed subject to the paragraph covering Pillar Rocks being amended to reflect that the Chair of the Navigation Committee is part of the Group discussing the options around Pillar Rocks. Once this amendment has been made a copy will 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.

Audit of Isle of Man Harbours – Isle of Man Harbours were audited on 9 November 2021. Various harbours and Douglas & Maughold Head lighthouses were also visited.

Small Craft Incidents – The audit of Inverness Harbour has still to be arranged. The number of incidents within the Inverness port limits will be discussed during the audit.

Action: Navigation Manager

NLB met with MCA where the consultation to change the law to introduce watercraft e.g. paddleboards, kayaks, etc to be covered under the Merchant Shipping Act was discussed.

MAIB Report – The final report from the MAIB on the KEY BORA grounding has now been circulated to Committee Members.

It was agreed that an Action Table will be included for future meetings.

Action: Senior Executive Assistant

4. NAVIGATIONAL REQUIREMENTS

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

Reposition of buoy station

The South Carr buoy station was repositioned to approximately 225 metres NE on 25 September 2021.

Incidents

- WILSON ALICANTE - On 19 November the 88 metre general cargo ship WILSON ALICANTE, inbound to Kyleakin from Iceland, ran aground close to the South tower of the Skye bridge. After drifting in mid-channel the vessel managed to restore propulsion and made her own way to the MOWI berth. To date the MAIB has not opened an investigation into this incident.
- HAYAMA STAR – On 7 December 2021, Bulk Carrier HAYAMA STAR suffered machinery failure whilst on passage from Antwerp to Liverpool as a result of contaminated lubrication oil. The vessel anchored, initially north of Anglesey and then off the Isle of Man during Storm Barra. SOSREP issued an intervention warning, and the vessel was then, by agreement, towed to Point Lynas for fitting of replacement parts. There were very good communications throughout from both MCA and Isle of Man Harbours.

Annual Offshore Inspection Voyage

The annual inspection voyage was scheduled for 11-25 November, however unfavourable weather conditions limited this to 19 platforms in and to the east of the Moray Firth. The wind turbine arrays in the Moray Firth were also inspected.

Four of the platforms failed inspection including Saltire, with no functional AtoN (but known and a PON10 submitted), and Alba Northern with no AtoN lights showing on approach. It is disappointing to see no improvement on the standards of AtoNs on these platforms but it was noted that the level of reporting has improved.

Further opportunities in the ships' programme will be sought to inspect other platforms however it is not expected to complete inspections this year.

MASS Regulatory Review

In October 2021, the GLAs were invited to comment on DfT's Future of Transport regulatory review consultation into maritime autonomy and remote operations. In conjunction with the other GLAs, NLB responded noting in particular the requirement for MASS to utilise backups to GNSS during their navigation and the need for these to be aligned with international best practice.

Tidal Power

NLB received Stakeholder Engagement Packs from Crown Estate Scotland regarding proposed tidal power arrays by Orbital Marine Power of up to 30MW in each of two sites, North of Duncansby Head and in the Sound of Westray. Following discussion with MCA and Orkney Harbours, NLB responded expressing significant reservations regarding the potential hazards to shipping posed by what appear to be an array of large low-profile devices.

Commissioner Archibald asked, if given the drive towards renewables and the massive potential of tidal energy, was there any discussion around how they can be made less risky or more conspicuous and what is the next stage of this debate. The Navigation Manager advised that NLB would much prefer it if there was discussion with Crown Estate and Marine Scotland around where would be acceptable sites, but this is currently not happening.

The Chief Executive added that he had met with Annabel Turpie, Director of Marine Scotland, recently and briefed her on the issue around leadership on the turbine development and the lessons learned from early windfarm development.

ScotWind

The Navigation Manager updated the Committee on the recent announcement as to the potential site leases. NLB have had a number of discussions with potential operators.

The Committee noted and discussed the implications for Sule Skerry and Dubh Artach lighthouses. However, it was acknowledged that it will likely take several years before potentially anything will appear on the sites. From NLB's perspective, company engagement will happen relatively soon to start scoping, pre consultation engagements, etc and the workload of the Navigation Team will need to be monitored. It was noted that there may also be some opportunity for commercial income through this process.

Marine Scotland Licensing Team have suggested a meeting to get first thoughts on this leasing round.

GNSS Update

- GPS satellite III-5 was launched into medium earth orbit on 17 June 2021 and is now operational.
- Galileo satellites FM23 and FM24 were launched on 5 December 2021 and are currently in commissioning.
- GLONASS satellite 705 was launched on 20 October 2021 and is currently on flight test.

Marine Licence and Sanction Requests

The Committee noted the summary of Marine Licence Activity and Sanctions for the establishment/disestablishment of AtoN for information and as required under the Navigation Committee Terms of Reference. A statistical record will be included for future meetings.

Action: Navigation Manager

Light Inspection (April – March)

It was noted that at the end of December 2021, 1250 local AtoN (55%) and 401 NLB AtoNs (82%) had been inspected.

2020 AtoN Review

The Committee noted and discussed the tracker of the 2020 AtoN Review. It was agreed that for future reports where there has been a change to range, the previous range be included to provide a complete picture.

Action: Navigation Manager

Commissioner Beveridge asked what the plan was for taking forward the extension of AIS. The Director of Operation advised that AIS is included within the Corporate Plan however this particular area of work is at most risk due to capacity within Teams to deliver it. The intention is to purchase the equipment and for the Delivery & Planning Team to install over the next 2-3 years. However, this Team is heavily involved in the monitoring project and PSTN changeout. Therefore, there is the potential for significant slippage with this project due to resources and changes in personnel.

5. ENGINEERING

The Committee noted and discussed the Engineering report:

AtoN Availability

It was noted that the Availability figures do not include outages that were resolved in January 2022. It is anticipated once these are included that the Category 1 availability will fall below the IALA Standard and potentially remain at or below the minimum at Financial Year End.

Cat 1 availability has been substantially impacted by the Pillar Rocks which have presented a string of issues. The protracted failures at Bell Rock were due to one starter motor failing and prioritisation of other work meant that technicians were unable to attend. The second starter motor then failed which led to the resultant outage which was protracted by the adverse weather and narrow tidal windows.

The issues at Skerryvore and Dubh Artach are understood. It was acknowledged that if, following formal notification, temporary lights had been installed in the Summer with reduced ranges and changed the characters these significant reductions in availability would not have occurred.

Commissioner Beveridge asked if the inability to get Bell Rock fixed earlier was resource led i.e. people and/or helicopter availability rather than simply weather and tides. The Director of Operation advised that it was due to tides and daylight. When the technicians got to the station the first time the weather window meant that they could only stay for a short time, so they did not manage to complete a full repair. Technicians have since returned and completed a full repair.

Commissioner Beveridge asked for reassurance that this issue was unlikely to reoccur. The Director of Operations advised that the reality is that the Pillar Rocks are aging infrastructure and are nearing practical "end of life". For a range of reasons, they have not been prioritised earlier enough and the planned re-engineering is later than is optimal so he is unable to guarantee that there will not be further faults.

Commissioner Beveridge recognised there is a legacy issue and the consequences of that is being felt now and asked whether the refurbishment of these stations should be brought forward. The Asset Manager advised that these are more difficult stations which will involve more helicopter time and are difficult to access. Time is required to plan in more detail which is why a decision was taken to look at Hyskeir first to gain experience. Because of the difficulties experienced with access to Cape Wrath and Barra Head it is expected that only one Pillar Rock will be worked on in any one year and split over 2 years. It is felt that the programme, at the moment, is the best fit. The Asset Team are looking at what minor engineering can be completed in the meantime to try and improve the reliability.

Commissioner Beveridge asked if there was now sufficient emergency backup on the Pillar Rocks where access is a significant problem, to avoid a complete failure. The Director of Operations advised that all Pillar Rocks are fitted with emergency lights but their use does not avoid an outage and has the same adverse impact on Cat 1 availability as the light being unlit.

The Chair asked whether if NLB had its own helicopter it would have helped. The Director of Operations advised that there was no doubt that having to share a helicopter and not having sole use all year does not give the ability to do things immediately when circumstances demand and conditions allow. A Squirrel aircraft has been used on an ad hoc basis to provide load lifting capability. The Director of Operations added that preparatory work on the next helicopter contract is to commence in early 2022 with the specification development based on recent experience.

It was noted that Corran Narrows sector light had failed and there were difficulties in getting a boat in order to avoid the need to gain access from ashore and the previously identified road safety issue. Work continues to identify improved traffic management measures in order that next day access can be achieved from ashore.

The Chair wished it noted that the Committee were grateful for the effort and commitment shown by the technicians over a very difficult period.

Performance Indicators

Q4 Dashboard – The Committee noted the Q4 Dashboard which was included in the meeting pack. It was agreed that a separate session would be arranged with the Maintenance Systems Team to provide an overview of the data.

Action: Asset Manager

It was agreed that once the Committee have had their session with the Team then some fine tuning of the Dashboard would be undertaken to provide more focus on the information presented. It was suggested that the Executive Team should establish benchmarks and only show anything that is a sufficient exception or deviation from benchmark.

Action: Director of Operation/Asset Manager

Commissioner Wilkinson asked if there was anything within the Dashboard that the Committee should be concerned about. Leaving aside the availability issues previously discussed, the Director of Operation advised he is aware of the overall trend and overdues in maintenance of equipment will only be resolved when technicians can attend stations.

Projects Dashboard – The Committee noted the Projects Dashboards from the Business Support Team (which provides information on the financial aspects) and Programme & Renewals Team (which shows the progress of projects). These are a direct feed from the Programme and Project Board. The Executive are very aware of the scope changing considerably on some of the older, long-running, projects and therefore additional costs have been incurred. Scopes on more recent projects have stayed stable and costs have not largely changed.

Tri-GLA Dashboard – The Committee noted the Coordinated Fleet Management Dashboard summary. This Dashboard is supplied on a quarterly basis and provides agreed Tri-GLA KPIs. The KPIs are not good comparators as all 3 GLAs do things differently. The main KPIs to focus on are the Fleet Review and Risk Response. It was agreed that this Dashboard was too detailed for the purposes of the Committee and that the Executive would review it and report on relevant items in future.

Action: Director of Operations

Escalated Matters

Monitoring - Delays previously reported in the project continue but have been mitigated and the new top end has now gone online with Harwich staff trained and operating the new system. The Datac system is continuing to monitor the 10 sites remaining until the RTU have been changed. This commenced at the end of 2021 with 2 sites so far updated and the planned roll-out due to be completed by the end of FY21/22.

The end of Orbcomm services later this year and the larger issue of PSTN replacements by end of 2025 is being addressed in a separate project which requires the change-out of a significant number of RTUs.

Vessels - Both vessels are fully operational with recent defects on NLV PHAROS crane and NLV POLE STAR sewage system resolved. NLV PHAROS has a re-emerging defect on the starboard windlass which is being taken up under warranty with the SME following previous repairs.

NLV PHAROS will go into drydock on 23 February 2022 in Belfast.

NLV PHAROS had 3 cases of COVID in 2 separate circumstances whilst alongside in Leith over the Christmas and New Year period. Appropriate procedures were followed and once 2 full sets of PCR test gave assurance to the Port Authority the pilot was permitted onboard and the vessel was able to depart. This caused a 3 day operational delay in the vessel's planned activities. Both vessels will avoid going into larger ports for the time being to avoid being caught in port in similar circumstances.

Commissioner Archibald asked how many ports NLV vessels go into that require a pilot. The Director of Operations advised that it is virtually zero for NLV POLE STAR unless the Master is unfamiliar with the port. NLV PHAROS exceeds the usual length constraint and requires a pilot for many of the ports. There are no operational constraints imposed by NLB by taking pilots.

Oban Harbour

The Director of Operations provided an update on the recent developments around the establishment of a Trust Port.

Tower Lighthouse Blue-Sky Report

The Committee noted the report from the Workshop on 1 November 2021 and the outcomes.

Commissioner Beveridge asked for confirmation that none of the options had been discounted at this point of time. The Asset Manager advised that it was agreed at the Workshop that NLB should progress with some form of hybrid solar/wind/ generator system depending on the location and whether staff need to live on the station. Consideration is to be given to using NLV PHAROS as a floating hotel to reduce the requirement to live on to emergency only. NLB will keep abreast of advances in technology, e.g. drones, to ensure that regular reviews are undertaken and, when appropriate, the lighthouse systems will be updated to ensure sustainable and reliable maintenance can be undertaken.

6. BUSINESS SERVICES

Procurement

Supply of Paint and Solar Panels have been impacted in the last two of months of 2021. Oban stores will keep in contact with suppliers to monitor these and TH as Project Managers for these items have been notified to raise with suppliers.

Paint delays may have an impact on the buoyage work. There have still been occasions where an occasional tin of red paint has solidified. The supplier has always replaced the product but TH has been briefed so that they can take the issue further with the supplier.

Business Support

The Committee noted the update on vessel charter work, buoy maintenance and Rig Watchers.

Finance

The Committee noted the summary of the current year's project spend for capital and revenue including their RAG status. This information is being developed to highlight total project costs over multiple years. In the meantime, it was agreed to utilise the code column to summarise any changes in future reports.

Action: Director of Business Services

Commissioner Beveridge asked whether money was allocated for the increased access to aircraft. The Director of Business Services advised that the use of the Squirrel would be at an agreed cost when it has to be used. All 3 GLAs have used the Squirrel on an ad hoc basis. This use should not produce a significant change in cost.

ICT

NLB experienced an increase in cyber threats on the lead up to and around Christmas. This is a period when such threats tend to happen as people's guard tends to be down. Dealing with attempts takes the ICT Team a substantial amount of time.

7. ASSET RISK MANAGEMENT PRESENTATION

The Asset Manager gave a presentation on Asset Risk Management. The presentation covered:

- Standard Practice
- Risk & Opportunities Register
- Other activities

The Committee were reassured to see priorities are risk based and feed into appropriate plans and that Pillar Rocks feature in the plan. It was agreed the Risk & Opportunities Register would be presented to the Committee on a regular basis. A session will be set up to provide an overview and more detail on the spreadsheet.

Action: Asset Manager

8. COVID UPDATE

NLB remains responsive to the Scottish Government updates. The weekly COVID meeting continues and policy updates are issued as appropriate.

The Maritime Mutual Support Group continues to provide a good source of advice and comfort. A good example is that a meeting has been set up with Marine Scotland to share experiences of their refit in another jurisdiction.

9. NOTICES TO MARINERS

The six Notices to Mariners (NtM 12 of 2021, NtM 13 of 2021, NtM 14 of 2021, NtM 1 of 2022, NtM 2 of 22 and NtM 3 of 2022) published since the last meeting were noted.

The Chair noted that NLB does not maintain slipways. The Asset Team are currently considering a request from technicians to reintroduce boat access to some sites. However it is likely that the current policy will be maintained due to the resources that would be required to maintain all slipways. In the meantime appropriate signage is in place at slipways.

10. RISK CARD REVIEW

The Committee reviewed Risk Card Numbers 5 – AtoN Provision and 10 – Asset Loss/Damage at this meeting. Risk Cards Numbers 6 – Information Technology and Operational Technology; 9 – Technological Change and Obsolescence; and 12 – Natural Events were included for noting and will be reviewed in turn.

AtoN Provision

The Committee discussed Risk Card Number 5 and agreed:

- Additional Actions – “Implementation of new AtoN monitoring systems 2020/21” can be removed after the next review.
- Additional Actions – “Liaise with Helicopter Provider and GLAs to ensure the close management of helicopter risks associated with BREXIT process” can be removed.
- Other Additional Actions – to be reviewed and moved to Control & Treatment if appropriate.
- Procurement Issues – A check to ensure this is covered within another Risk Card will be undertaken.

Information Technology and Operational Technology

The Committee discussed the issue around Ransomware and a Ransomware Policy. It was agreed to raise this item with the Governance Board for discussion and direction.

Action: Chair

Asset Loss/Damage

The Committee discussed Risk Card Number 10 and agreed:

- Additional Actions - Add "Review of ISO 27001 to cover aspect of operational technology".

The Risk Cards will be updated to align with the comments.

11. POLICY APPROVALS

There were no Policy Approvals required for this meeting.

12. ANY OTHER BUSINESS

Whiting Rocks

Commissioner Beveridge highlighted that as part of the last AtoN Review the provision of a buoy or a means of marking the Whiting Rocks in the East Loch Tarbet was agreed and referred to Calmac. To date nothing has happened. The Navigation Manager undertook to get an update from Calmac before the next meeting.

Action: Navigation Manager

13. ASSURANCE STATEMENT

The Chair will draft an Assurance Statement following the meeting and circulate to Committee members for agreement.

14. DATE AND TIME OF NEXT MEETING

The next meeting of the Navigation Committee will take place on 20 April 2022 at 10.00am.