



**REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE
SERVICES COMMITTEE ON 6 SEPTEMBER 2022**

SUBJECT: MARINE SAFETY AND OPERATIONAL UPDATE Q1 2022-2023

**BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT AND
FINANCE)**

1. REASON FOR REPORT

1.1 To inform the Committee on matters of Marine Safety and compliance with the Port Marine Safety Code (PMSC) for the period Q1 year 2022/23.

1.2 This report is submitted to Committee in terms of Section III (F) (25) of the Council's Scheme of Administration relating to the functions of Council as Statutory Harbour Authority (SHA).

2. RECOMMENDATION

2.1 **Committee is asked to consider and note the safety performance, fulfilling their function as Duty Holder under the Port Marine Safety Code.**

3. BACKGROUND

3.1 Under the statutory requirements of the Port Marine Safety Code (PMSC) the organisation (Moray Council) must appoint a duty holder to ensure compliance with the PMSC is achieved. The organisation must provide a report on PMSC performance annually as a minimum.

3.2 The role of Duty Holders is held by Members of the ED&IS committee. The role requires accountability for ensuring the organisation's compliance with the PMSC.

3.3 At a meeting of this committee on 20 March 2018 it was agreed that a report on PMSC would be submitted quarterly (paragraph 6 of the minute refers)

3.4 Moray Council, in its capacity as a Statutory Harbour Authority, is committed to undertaking and regulating marine operations to safeguard all its harbour areas, the users, the public and the environment through its safety management system (SMS).

4. **Q1 Review**

4.1 The following sections of the report set out an overview of marine safety performance quarter 1 of 2022/23.

PMSC Audit

4.2 A full annual audit of Moray Council compliance with PMSC was carried out by Marex Marine within their capacity as designated person. The Audit was conducted at Buckie Harbour Office on 12 October 2021 and concluded that the Moray Council harbours are compliant with the PMSC. The Audit process made observations. The open items from this are provided in the table below.

Observation	Progression
Review Harbour Bye-laws with particular regard to continued relevancy	Liaison with legal department required to establish a time to review bye-laws during 2022/23.
Consider cyber security protocols	Addition of cyber security policy to be added to SMS during review cycle including update of IT systems in new harbour office. IT consultation is ongoing with council officers during process of office move.
SMS updates, rewording suggestions	Review of SMS with aid from Quality Management Systems department planned September/ October 2022.
Consideration of adding extra safety signs around harbour	In conjunction with ongoing water safety group meetings and work stream considerations for signs required to be discussed. Signs on order and being produced currently.
Increasing drills carried out with external institutions suggested	Plans to be made to include exercises with local fire brigade large scale cross council drill to be organised with Aberdeenshire council with Emergency planning officer.

It should be noted that duty holders are required to be conversant with PMSC and its relevant content. Training for Duty Holders was provided by the designated person on 15 August 2022.

Key Performance Indicators

4.3 Details of the Council's compliance with PMSC are provided below.

Q1 Accident, Incident and Near Miss Statistics

4.4 Incident statistics Summary Table

Quarter	Injuries	Incidents	Near Misses
1	0	2	0

4.5 There was an incident within Portknockie harbour on 8 June 2022. A harbour user was washed off of the quayside near to entrance channel by a wave. Members of a local swimming group were close to the scene and saw the

incident. The responders proceeded to the life saving devices situated in the harbour and upon opening the life ring float to recover the casualty found that there was no device in place at that location or the location next along the quayside.

- 4.6 By utilisation of a buoyed creel thrown to the casualty with assistance of a passing boat at this time the casualty was rescued from the water unharmed.
- 4.7 An ambulance had been called in the response and trained medical professionals attended to the casualty but found them fit and well with no injuries. No further treatment was required
- 4.8 Maintenance of the life rings was completed on 26 May 2022, at which time the life rings were in place. Planned maintenance of the life rings is currently undertaken monthly.
- 4.9 The Harbourmaster was informed of the incident the following morning and attended the site, confirming the life rings were missing. Replacement rings were immediately installed and additional life rings were ordered to increase spare stock.
- 4.10 Planned monthly maintenance arrangements will continue, as it is deemed this is an acceptable schedule of maintenance and repair. However, harbour staff will spot check life rings when they are attending any harbours for works, to ensure all are in place.
- 4.11 The incident was notified to the Coastguard and reported to Council, including public relations.
- 4.12 A press release was issued and further education drives through the water safety group will be undertaken to further highlight the dangers associated with tampering with and vandalising life-saving equipment. This is also a matter for discussion at Harbour Advisory Committees.
- 4.13 An incident occurred on 25/06/22 at Findochty Harbour involving the new pontoons, whereby a section of pontoon was found to be moving excessively. Action was taken to make the pontoon safe and an investigation has been undertaken by officers, in consultation with the manufacturer to identify what caused the incident and what mitigation may be required in future.

Aids to Navigation

- 4.14 As a Local Lighthouse Authority, Moray Council is required to report the availability of all of its navigational lights to the Northern Lighthouse Board in March of each year. Currently the Port Closed light on the North Pier in Buckie is unavailable resulting in availability figures being decreased. This has been discussed with the Northern Lighthouse Board and they have noted it is not an urgent requirement as the light is not mandatory and other provisions to communicate any port closures are available.
- 4.15 New solar powered lights will be installed in Burghead and Buckie. The new solar powered lighting will decrease the number of faults observed and as a result over time lead to an increase in the availability figures for all

navigational aids. This work has been funded by Scottish Government Marine Fund Scotland Scheme.

4.16 A risk assessment for changing the lighting system will be prepared and approved by the Northern Lighthouse Board. A Notice to Mariners has been prepared and this will be sent to all harbour users and the UKHO so visiting vessels can be informed of this change.

4.17 The table below summarises the availability of Navigational lights under Moray Council's responsibility.

IALA Category	No Of Aids	Total Hours	No Of Failures	OOS Hours	MTTR	MTBF	Availability	Target Availability
Moray Council								
CAT 1	1	26,304	0	0:00	0:00	0:00	100.00 %	99.80 %
CAT 2	15	394,560	6	31333:58	5222:20	60537:40	92.06 %	99.00 %
CAT 3	4	105,216	1	5222:00	5222:00	99994:00	95.04 %	97.00 %
No Category	0	0	0	0:00	0:00	0:00	0.00 %	0.00 %
Totals		20						

The 'Availability Objective' is calculated over a rolling 3-year period. This means that over this period a Cat 1 Aid to Navigation needs to be functional for 99.8% of the time. Currently Moray Council is meeting this target. The availability of Cat 2 and 3 lights is below the target availability.

4.18 The target for the year 2022/23 is to increase the availability figures of Cat 2 lights to 95% and cat 3 lights to 97%. This will be achieved by utilisation of new solar powered lights that once installed will provide more efficiency due to less reliance on unsuitable cabling prone to faults.

Pilotage

4.19 Pilotage is not compulsory at Buckie harbour, and therefore not all cargo movements require the services of a pilot. The number of pilotage acts carried out in the first quarter of 2022/23 was 10, in relation to 22 vessel movements in and out of the harbour. This included 1 act of pilotage in hours of darkness

Training

4.20 There are currently two members of staff deemed competent to pilot, one unrestricted and one restricted to daylight hours. By Q3 it is anticipated that both members of staff will be competent to pilot without restrictions and that a third member of staff will be fully trained. Training will begin for other harbour staff after Q3.

4.21 Training requirements for all harbour staff is currently being reviewed. During Q1 Oil spill level 3 training was completed by 3 members of staff. During Q2 training is scheduled for:

- First aid refresher training
- Excavator training
- Duty Holder PMSC training

Training for Port Facility Security is currently being sourced.

Staffing

- 4.22 Recent recruitment within the harbours team includes the appointment of one new harbour assistant.
- 4.23 Recruitment for MV Selkie staff is ongoing.

Conservancy

- 4.24 Dredging has continued into the quarter 1 of 2022/23, with priority given to Buckie navigational channel and Burghead channel.
- 4.25 From 1 April 2022 to 30 June 2022 the total amount of spoil removed to designated spoil grounds was 3460 Tonnes over 30 digging days. This includes the harbours of Portknockie Burghead and Buckie (see table 2 para 4.32).
- 4.26 Burghead groyne is at the end of its serviceable life, which is increasing the deposition of sediment at the harbour channel. A package of work is currently being developed to address this issue.
- 4.27 In Buckie the current depth under chart datum is officially 2.1 Metres with relevant Notice to mariners promulgated. There has been significant improvement in the depth of the channel as a result of work carried out in quarter 1 and the indication subject to survey of the channel is that depth under chart datum exceeds 2.5 Metres.
- 4.28 There is a notice to mariners published warning vessels of the fluctuating depths within the entrance channel of Burghead advising all mariners to contact Harbourmaster for accurate information and tidal information.
- 4.29 The priority areas for dredging remain Burghead (sand bank approaching harbour entrance) and Buckie (entrance channel). Other dredging requirements include:
- Hopeman: Different options to increase the efficiency of dredging at Hopeman are being considered and a plan detailing these will be developed in 2022/23.
 - Cullen: dredging by the Selkie will focus on the beach side of the basin.
 - Portknockie: there is no need for dredging plans at Portknockie at this time however the entrance and pontoon basin will be closely monitored. .
 - Findochty: Dredging is required at the entrance channel and areas around the middle jetty.
- 4.30 There has been an increase in available water under chart datum of 1.0 metre in the west basin and channel at Findochty harbour as a result of the dredging campaign in 2021/22

Selkie

- 4.31 MV Selkie has completed works within Buckie, Burghead and Portknockie during the first quarter of 2022/23. The below table summarises the work carried out during the quarter:

Table 1: Days worked and total tonnage removed Q1 2022/23 vs Q4 2021/22

Year	Days working	Weather days	Maintenance	Working days %	Tonnage Removed
2022/23 Q1	30	12	20	48	3,460
2021/22 Q4	24	30	9	38	3,330

Table 2: Summary of works carried out per harbour during Q1

Harbour	Cumulative working days	Cumulative weather days	Cumulative maintenance days	Tonnage removed
Buckie	23	29	20	2,240
Burghead	6	1	0	1,040
Portknockie	1	0	0	180
Total (%)	30 (48.5)	12 (19.25)	20 (32.25)	3,460

- 4.32 During the first quarter of 22/23 there has been a slight increase in the total tonnage removed to spoil by MV Selkie compared to the previous quarter (Q4 3,330, see Table 1 para 4.32). There has also been an increase in working day % increasing from 38% in Q4 to 48.5%. This is still below the target KPI of 50%. There has been an increase in days lost to unplanned maintenance unfortunately which explains the high maintenance day figure. The increase in maintenance was due to a ruptured hydraulic hose dating from construction of the vessel. The hose was required to be shipped from Germany via the excavator manufacturer. Spares have been ordered to ensure the situation does not repeat.
- 4.33 The plan for increased efficiency moving forward is to maximise the number of days crewed on vessel and continue to work effectively with maintenance to lower the number of maintenance days. A computer based planned maintenance system is ordered and currently in the process of being implemented on board Selkie and throughout the harbours. This will increase efficiency of auditing maintenance, allow greater ability to scrutinise maintenance and its history and allow remote access monitoring of all maintenance.
- 4.34 Procurement process to install Marine mammal observation equipment is currently being undertaken. This equipment would allow Selkie to work in more marginal weather conditions above a force 3 at spoil dumping grounds. This would further improve the efficiency of dredging operations.
- 4.35 KPIs measuring the percentage of days working and days of maintenance are summarised below:

Table 3: Comparison of working days compared to weather and maintenance

Year	Days working %	Weather days %	Maintenance %
2022/23 Q1	48.5	19.25	32.25

Currently during Q1 although an increase of working days has been observed the vessel has not reached target of 50% days worked. This is largely due to the hydraulic hose issue mentioned in paragraph 4.43. The lessons learned from the situation and the increased scrutiny over planned maintenance will be used to attain the KPI targets moving forward.

Green Harbours

4.36 There has been continuing work carried out with the focus on lowering carbon emissions and promoting overall environmentally sound practices within the harbours. This includes plans to upgrade the electrical infrastructure available within Buckie harbour in particular over the coming years allowing less reliance on fossil fuel generators for power.

4.37 **KPI Summary Table**

KPI	Progress at the end of Q1	Completion Target Date
Conservancy		
Buckie Channel Depth 3.0M	Current official depth 2.1M (2.5 M sounded by pilot boat)	31/03/23
Buckie Basin 1/2/3 depth 3.0M	Current depth 2.2M	31/03/23
Provide 0.3M channel Burghead	Current depth 0.0M	31/03/23
Productivity		
Maintenance days less than 20%	Currently 32%	Continuous review
Working days greater than 50%	Currently 48.5%	Continuous review
Total minimum tonnage removed above 14,120 Tonnes (aspirational target 18,000 Tonnes)	Q1 3,460 (annual projection x4 therefore 13,840)	31/03/23
Total working days above 77 (target 100)	30 end of Q1 (currently on target)	31/03/23
Staffing		
Full Time master	Q2 recruitment campaign (long term skilled agency worker currently)	30/09/22
Safety management/ Maintenance		
SMS review and Update	In progress	31/10/22
Full Risk assessment update	In progress annual review completed.	31/10/22
Planned maintenance system implementation	Processing and implementation due to be in place and operational by end of September.	31/08/22
Financial		
Lower Running costs to within Budget	To be reviewed	31/03/23

5. FORWARD PLANS

5.1 It is proposed that MV Selkie continues to fulfil its role in carrying out maintenance dredging across the council's harbours. However, as agreed by

members at a meeting of Moray Council on 29 June 2022 paragraph 22 of the minute refers, a specific outsourced dredging campaign is being planned to:

- a) Provide the necessary depths of water associated with the Moray West Offshore O&M contract at Buckie and
- b) To re-establish the channel at Burghead harbour.

5.2 These will be procured to be delivered as soon as practicable in line with Marine Scotland licensing requirements.

6. **General Safety Updates**

Safety related works

6.1 There have been a number of jobs completed during Q1 improving safety conditions within all harbours, these works include:

- Repair of small potholes in Buckie and Cullen
- Use of algacide to remove potential slip hazards on quaysides.
- Repair of tyre fenders in Buckie
- Repair of ladders and hand holds throughout harbours.
- Replacement of life-rings.
- Repair of Water supply and steps in Findochty.
- Final completion and amendments to berthing applications.
- Pontoon repairs in Portknockie
- Install of new fenders on North pier Buckie
- Various algacide treatments across harbours
- Remove and replace rope ladder in Buckie
- Upgraded all shed lighting in Burghead to LED
- Replaced lifebuoy holder, lifebuoy's and lines across harbours
- Installed numerous ladder handrails at Burghead, Hopeman, Buckie and Findochty
- Replaced chain on steps to lighthouse (Findochty) with ropes and tightened with turnbuckle
- Stripped and painted lighthouse (Findochty) to reassert the efficiency of the daymark (unlit aid to navigation).

Master action List

6.2 *List of safety related jobs required to be completed in all harbours comprising the Master action list:*

Priority category	Number of safety related jobs needing completion at beginning of Q1	Number of safety related jobs still outstanding at end of Q1	Total safety related jobs completed during Q1
1	20	1	19
2	23	13	10
3	42	30	12

4	24	19	5
Totals	109	63	46

Master action list is a list of all safety related jobs required within the harbours segregated in to 4 categories. Category 1 deemed the most important. During Q1 all but 1 outstanding cat 1 safety jobs were completed.

The remaining Priority 1 item is the repairs to Pathfinder which was completed 11 August.

Signage

6.3 The signs listed below have been ordered and will be erected when received.

1. 4 signs to restrict general access to the pontoons
2. Harbour operations signs.
3. Designated visitor berths.
4. Operational speed restrictions
5. Keep slipway clear signs.

7. Objectives identified for remaining quarters of 2022/23

- Detailed review of the Safety Management System: the SMS will be reviewed during quarter 2 and 3 and a revised SMS will be presented to a future meeting of this committee. This will include emergency response and preparedness review, full risk assessment and health and safety reviewing and updating required given upcoming move of harbour office, scheduled for late summer / early autumn to temporary facilities in the Drifter whilst new harbour and O&M facilities are constructed.
- Further development of SMS support checklists to aid compliance with Safety management system.
- Report and review new KPIs.
- Undertake further reviews of Marine Policy and Harbour Bye-laws.
- Review training requirements and request necessary training.
- Increase momentum of Pilot training and accreditation leading to 2 fully competent Pilots within the Harbour team by end of Q3.

8. SUMMARY OF IMPLICATIONS

(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))

Sustainable harbours maintained to operate safely and efficiently contribute to the economic development of Moray.

(b) Policy and Legal

Non-compliance with the Code will have legal implications.

(c) Financial implications

Non-compliance of the Code may have financial implications.

(d) Risk Implications

Failure to comply with the Port Marine Safety Code could result in prosecution of the authority.

(e) Staffing Implications

No staffing implications arise from this report.

(f) Property

There are no property implications arising from this report.

(g) Equalities/Socio Economic Impact

There are no specific equalities matters, however, the Equalities Officer has been consulted and comments incorporated into this report.

(h) Climate Change and Biodiversity Impacts

There are no climate change and biodiversity implications arising from this report.

(i) Consultations

The Depute Chief Executive (Economy, Environment and Finance), Head of Environmental and Commercial Services, Legal Services Manager, Principal Accountant, Committee Services Officer (L Rowan), and Equalities Officer have all been consulted and their comments incorporated into this report.

9. CONCLUSION

9.1 The Council is currently deemed to be compliant with the PMSC, however, work to maintain a safe environment remains an ongoing matter in a dynamic environment. Diligent staffing and constant monitoring and risk assessing will be utilised to maintain compliance as demands evolve.

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Background Papers:

Ref: SPMAN-524642768-770