Item: 4.1

Monitoring and Audit Committee: 30 March 2023.

Internal Audit Report: Freyja of Scapa – Procurement.

Report by Chief Internal Auditor.

1. Purpose of Report

To present the internal audit report regarding the procurement process for the tugboat Freyja of Scapa.

2. Recommendations

The Committee is invited to note:

2.1.

That Internal Audit has undertaken an audit on the procurement process for the tugboat Freyja of Scapa.

2.2.

The findings contained in the internal audit report, attached as Appendix 1 to this report, on the procurement process for the tugboat Freyja of Scapa.

It is recommended:

2.3.

That the Committee review the audit findings to obtain assurance that action has been taken or agreed where necessary.

3. Background

3.1.

Freyja of Scapa is the third in the series of tugs purchased by the Council from the tugboat builder and operator Sanmar. Following discussion and consideration, the former Interim Chief Executive requested that the procurement process carried out for the purchase of Freyja of Scapa be reviewed by Internal Audit.

3.2.

The objective of this audit was to review the governance around the decision to purchase the tug and the activity carried out prior to, during, and post, the full tendering process for Freyja of Scapa.

4. Audit Findings

4.1.

The audit provides substantial assurance that processes relating to the procurement of the tug are well controlled and managed.

4.2.

The internal audit report, attached as Appendix 1 to this report, does not include any recommendations.

4.3.

The Committee is invited to review the audit findings to obtain assurance that action has been taken or agreed where necessary.

5. Corporate Governance

This report relates to the Council complying with governance and scrutiny and therefore does not directly support and contribute to improved outcomes for communities as outlined in the Council Plan and the Local Outcomes Improvement Plan.

6. Financial Implications

There are no financial implications associated directly with the recommendations in this report.

7. Legal Aspects

Complying with recommendations made by the internal auditors helps the Council meet its statutory obligations to secure best value.

8. Contact Officers

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9. Appendix

Appendix 1: Internal Audit Report: Freyja of Scapa Procurement.



Internal Audit

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Freyja of Scapa - Procurement

Draft issue date: 6 March 2023

Final issue date: 17 March 2023

Distribution list: Deputy Harbour Master

Head of Marine Services, Transportation and

Harbour Master

Service Manager - Procurement

Head of Legal & Governance

Corporate Director - Strategy, Performance and

Business Solutions

Corporate Director - Enterprise and Sustainable

Regeneration

Chief Executive

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Audit Opinion

Based on our findings in this review we have given the following audit opinion.

Substantial

The framework of governance, risk management and control were found to be comprehensive and effective.

A key to our audit opinions and level of recommendations is shown at the end of this report.

Executive Summary

The objective of this audit was to review the activity carried out prior, during and post the full tendering process for Freyja of Scapa.

Our review of the procurement of Freyja of Scapa provides substantial assurance of compliance with the Council's Contract Standing Orders, Sustainable Procurement Policy, and Financial Regulations and that sound processes were followed with effective engagement carried out within the Council between Marine Services, Procurement Team, and Legal Services.

It has not been necessary to make any recommendations as a result of our audit.

The assistance provided by officers contacted during this audit is gratefully acknowledged.

Introduction

Following discussion and consideration by the Council's Chief Executive and the Council's former Interim Chief Executive it was requested that the procurement process carried out for the purchase of the tugboat Freyja of Scapa be reviewed by Internal Audit.

Freyja of Scapa is the third in the series of tugboats in the Kocacay range, purchased by the Council from the tugboat builder and operator Sanmar Denizcilik (Sanmar).

The Council's invitation to tender for the supply of the first, and up to two tugboats, Kocacay 1 and Kocacay 2 was publicised on 18 October 2017. These tugboats were later renamed Odin and Thor of Scapa.

The invitation to tender for the supply of third tugboat was published on 2 June 2022. Sanmar were the successful supplier who provided a tugboat which had been substantially built by the time of the contract award date of 9 September 2022.

This review was conducted in conformance with the Public Sector Internal Audit Standards.

Audit Scope

The scope of this audit included a review of the following:

- The governance around the Council's decision to purchase a third tugboat.
- The activity and communication, directly and indirectly, between the Council and the supplier, prior, during and post tendering process for the third tugboat.
- The Council's Invitation to Tender for the supply of the third tugboat.
- The engagement and activities of naval architect professionals engaged to assist in overseeing the design and build of the third tugboat.
- The overall procurement process of the third tugboat, including payment terms and sea trials performed.

Audit Findings

1.0 The Governance arrangements around the Council's decision to purchase a third tugboat.

- 1.1 On 25 September 2018, when considering the provision of towage assets, the Policy and Resources Committee recommended, inter alia:
 - 1.1.1 That the existing provision within the Non-General Fund capital programme in respect of the provision of new towage assets be increased from £8.1 million for one tug to £13.2 million, to allow two new tugs to be ordered.
 - 1.1.2 That an options appraisal for the remainder of the towage capability, including the undernoted options, should be progressed in order that a Stage 2 Capital Project Appraisal be developed for submission to the Policy and Resources Committee in due course.
 - Replacing the third tug to the same design as the new tugs.
 - Two smaller tugs to enhance flexibility and provide resilience.
 - Retaining some of the current tugs.
- 1.2 On 16 February 2021, the Policy and Resources Committee considered a Stage 2 Capital Project Appraisal which considered four options, the preferred option being to progress with replacing the third tug to the same design as the two new tugs, and the provision of a fourth tug to be based in Kirkwall and to have a zero-carbon propulsion system, with a view to achieving best value.
- 1.3 The Committee resolved, inter alia, to recommend to the Council that the Stage 2 Capital Project Appraisal in respect of a third replacement tug be approved.
- 1.4 Following a competitive tendering exercise, additional professional support from Naval Architects was engaged to support the procurement process of the third tug. Their role included review of tender documents, being part of the evaluation team and attending inspections and sea trials.

2.0 The Council's invitation to tender for the supply of the third tugboat.

- 2.1 Officers had been aware that the supplier of the previous two tugboats decided to commence building a further tugboat to the same design of Thor and Odin of Scapa around the time of their build. Sanmar are both a supplier and operator of tugboats and so had alternative options available for the use of the third tugboat.
- 2.2 Officers have confirmed that the Council did not give any expression of interest to the purchase of the third vessel before the contract was awarded following a competitive and open tendering process.
- 2.3 The keel laying certificate for the third tugboat is dated 29 December 2020. This date is significant as it allows for the option of an International Maritime Organisation (IMO) Tier 2 compliant engine to be installed. Vessels with a keel laying date on or after 1 January 2021 must be Tier 3 compliant.

- 2.4 IMO Tier 2 or 3 compliance relates to two main criteria. Firstly Tier 3 compliance requires that fuel has less than 0.1% sulphur content, irrespective of the type of engines installed. Secondly Tier 3 compliance sets the maximum level of Nitrogen Oxide (NOx) emissions permissible, broadly speaking, to approximately a quarter of those under Tier 2 compliance. Tier 3 compliant engines require additional Selective Catalytic Reduction (SCR) and Exhaust Gas Recirculation (EGR) technology. This increases engine area by around a third. Tier 3 compliant engines have reduced fuel consumption but additional costs for urea water injection into the exhaust stream and SCR maintenance.
- 2.5 On 14 April 2022, Marine Services drafted a briefing note for the Interim Chief Executive which contained the technical, environmental and commercial merits of procurement of a third tugboat with Tier 2 compared to Tier 3 classed main engines. Procurement and Legal viewpoints were asked for on the draft briefing note.
- 2.6 The draft briefing note detailed, inter alia, that a tendering process for the procurement of one tug with an option price for a second tug within 12 months of the first concluded in July 2018. As a result of a full and robust procurement process (including the principles of "most economically advantageous tender" (MEAT)) the winning yard was Sanmar. This shipyard produced a fully compliant proposal based upon a well proven and widely used design and matched the specific overall hull characteristics as specified in the Invitation to Tender. The winning yard was also the only yard which offered a second tug at the same price of the first, furthermore the report noted that the case had already been made for all (three) tugs to be replaced. The briefing note included that "it had come to our (Harbour Authorities) attention that Sanmar began the construction of a third "sister" tug on a speculative basis prior to further legislation coming into force, meaning that this tug could have Tier 2 main engines installed and meet the requirements of the IMO legislation".
- 2.7 The briefing note included two options, the first of which was to procure the third tug that was under construction from Sanmar to the same design of the two previously delivered tugboats. The second option was to proceed with a new tender process for the third tug.
- 2.8 The briefing note further included, inter alia, that:
 - 2.8.1 The two new tugs that have already been purchased and been in operation since September 2020 have proven to be of good value.
 - 2.8.2 The design of the new tugs has proven to be operationally very effective and a significant improvement on the capability of the original tugs. The new tugs meet the operational needs of the current and anticipated requirements for tanker and similar operations in Scapa Flow and Orkney.
 - 2.8.3 Operation of three sister tugs offers commonality and therefore advantages in their operation and running costs; tanker berthing operations are more easily conducted, crew training is standardised and the risk of human error working on tugs of different designs and capability is less likely. There are also significant savings in procurement, and storage of spares, with most already in stock.
 - 2.8.4 "The lead time for delivery of the sister tug under construction at Sanmar is very short, the tug would be available for sea trials etc in August 2022. Because the tug has been constructed on a speculative basis and nearly completed the contractual arrangements for purchase could be very straightforward without the requirement of several bank guarantees; a deposit and staged payment may suffice. We understand

that this vessel is the same as the ones purchased in 2020 including any variations/ modifications in place at the time".

- 2.8.5 Although the new tugs are of a standard design Sanmar had the only totally compliant design during the procurement exercise for the two tugs delivered in September 2020, in particular the draft of the vessels, whereas other designs were of deeper configuration. The draft of these vessels is a limiting factor alongside Scapa Pier. From working with Sanmar on the previous design and build project it became apparent that the design of Odin and Thor of Scapa was a standard design with a modification to enable the draft restriction to be met, and that the only shipyard that has the licence to produce this particular version is Sanmar.
- 2.8.6 In order to maintain some form of standardisation the supplier of the main engines would be the same as in the new tugs. There is now a long waiting list for the type of engines meeting Tier 3 emission requirements for a tug of a similar design to the two new tugs, in the order of 62 weeks. As these are required at a fairly early stage of the build process, delay in the delivery of a third new tug under a refreshed procurement process would be 3 years. The knock-on effect of this length of delay is the increasing age of the "Harald" and subsequent issues of reliability coupled with the additional costs keeping her in service. This would be at least one additional survey likely to cost in excess of £250,000 and the delay in the capital receipt regarding the sale of the "Harald", which at present is likely to be in the region of £1m.
- 2.8.7 Like for like a new tug with Tier 3 engines will have 6%-7% less pulling power (bollard pull) than the existing new tugs with Tier 2 engines, and therefore less capability as the existing two new tugs, ie: one of the three "new" tugs in service will not have the same operating characteristics as the others. It is well known that the operating characteristics of Tier 3 engines are not the same as Tier 2 engines from experience with the pilot vessel Scapa Pathfinder ie: main engine response times. There are very few Tier 3 main engine tugs in service, let alone "Harbour Tugs" where response times are critical to relatively close guarter operations.
- 2.8.8 There are additional operational procedures required for the operation of the SCR system on Tier 3 engines, and additional equipment to maintain and service, adding a considerable amount to the lifetime operating (revenue) costs if this option is used.
- 2.8.9 The additional capital cost for purchasing a tug with Tier 3 engines is likely to be at least £500,000 and there is a high risk they could be very significantly more by going through a tender procurement process with the uncertainty of raw material and energy price rises a shipyard will factor in, ie: as this option would not be delivered for at least another three years raw material (steel, paint etc) costs will rise, electronic component costs (control systems and navigation equipment) costs will rise.
- 2.8.10 That Option 2 will result in a vessel with different (lower) operating characteristics than the two new tugs therefore will not be a true sister vessel, will have increased operating costs in fuel and spares, and will have ongoing crew training costs as it will be different to the existing new tugs. There will be a very real risk of the capital cost being at least £1m more than Option 1, associated with ongoing revenue costs estimated at £50,000 per annum (30-year lifetime) and the loss of a capital receipt (or a substantial part of) equal to £1m.

- 2.8.11 The briefing note included a recommendation to procure the third tug by direct contract with Sanmar which would be a true sister tug to the new tugs recently delivered with variations to the original specifications reflecting experience gained during the previous design and build contract and operating the new tugs in service.
- 2.9 The Procurement Team reviewed the briefing note and advised that the procurement for the third tug would need to comply with the Council's Contract Standing Orders (CSOs) with a view that none of the exceptions or exemptions from CSOs could be justifiably met in this instance. In light of this advice, the briefing note was not circulated.
- 2.10 Procurement advised that one of the circumstances within CSOs where direct award may be made is where "The Council is satisfied that there are special circumstances justifying an exception from these CSOs or any part of them". However, Procurement's advice was that this should not be used in these circumstances based on the very high level of risk to the Council on the basis of the following points, (as summarised):
 - 2.10.1 There is a requirement to publish the contract award notice in legislation for contracts and it is highly likely that an award for a procurement of this value without competition would attract a significant amount of attention.
 - 2.10.2 The risk of legal challenge from other shipyards who would want the chance to design and build a tug.
 - 2.10.3 Following a recent quarry stone procurement, the findings and recommendations contained within an Internal Audit Report to the Council had increased scrutiny over direct purchases.
 - 2.10.4 The Council approved its revised Sustainable Procurement Policy in March 2022 with a requirement to complete a Sustainable Procurement Impact Assessment in all instances where there is potential to minimise the use of carbon-based energy and its associated emissions.
 - 2.10.5 Estimated differences in costs to the Council between a direct award compared to a tender submission are uncertain before a tendering exercise has been carried out.
- 2.11 Procurement advised that a compliant procurement process which would ensure that available options submitted by the market in an open and transparent process, could go ahead on the original basis with the specification developed by the consultant as planned, with the addition of a lot for a part constructed vessel in a similar approach undertaken with the purchase of the pilot vessel, this would allow for both options to be evaluated under the usual MEAT criteria.
- 2.12 A Sustainable Procurement Impact Assessment (SPiA) was completed by Marine Services on 27 May 2022.
- 2.13 On 2 June 2022 the invitation to tender for the supply of one new towage boat was publicised on the Procurement Contract Scotland portal. The invitation being in two lots, lot 1 for a vessel currently under construction and meeting the Council's specification and lot 2, the build of a new boat to the Council's specifications detailed in lot 1 apart from the main engines which must be IMO Tier 3 Compliant. The deadline for returns was set to 4 July 2022.
- 2.14 Each of lot 1 and lot 2 received 1 tender.

3.0 The overall procurement of the third tug, including payment terms and sea trials performed for the third boat.

- 3.1 Tenders received were reviewed and quality scored by a tender evaluation panel of four Officers within Marine Services and one external consultant. The Service Manager for Procurement was part of the evaluation panel in an advisory role only.
- 3.2 A detailed Award Recommendation Report (the report) for the supply of the new tug was prepared by the Procurement Team.
- 3.3 Sections of the report included, the purpose of the procurement, the nature of the requirements, the tender procedure adopted, notes and list of interested parties, selection stage Single Procurement Document (SPD) evaluation results, technical evaluation results, price evaluation results including whole life costs, tender clarification communication, payment instalment schedule and an award recommendation based on the results of the evaluation of tenders received.
- 3.4 The report noted, inter alia, that "As we are purchasing a boat that will be the finished article, the financial assessment also assumes a much lower level of importance than if the vessel still had to be built. The risk of the business failing during construction has already passed and we are only really going to have a very small exposure on any warranty work which in all probability would be subcontracted once the vessel is in Orkney".
- 3.5 The report recommended that, based on the result of the evaluation of tenders described in the report, the tender evaluation panel recommends the award of the contract to Sanmar, having demonstrated that they have submitted the Most Economically Advantageous Tender (MEAT).
- 3.6 The Award Recommendation Report was approved by three persons. The Officer with delegated authority to manage a procurement exercise in accordance with CSOs (the Service Manager, Procurement), the relevant Corporate Director (being the Corporate Director for Enterprise and Regeneration) and the Authorised Signatory who is signing the Contract (the Interim Chief Executive).
- 3.7 The Contract for the supply of the third tug was dated 8 September 2022.
- 3.8 In common with boats built on a speculative basis, the upper section of the boat was left unpainted to avoid the need to repaint or repair damage to the paintwork. The Harbour Authority advised for the colour scheme to be the same as the first two tugs and for a non-slip decking to be installed as per the Harbour Authority's standards. The boat already had air conditioning units installed which is normal in warmer parts of the world but superfluous to the Orkney climate. There was no benefit in having these units removed.
- 3.9 Similarly, in common with standard practice, inspections and sea trials are first carried out by the shipbuilder to ensure the vessel meets their own standards. Between 9 September 2022 and 16 September 2022, three members of Council staff and the external consultant carried out technical inspections, various other inspections, then sea trials. Documentation was also checked for being complete and up to date. Following these inspections and sea trials, technical acceptance was provided and delivery of the tugboat to Orkney was arranged.

4.0 Conclusion

4.1 Processes followed during the procurement of the tugboat Freyja of Scapa were compliant with the Council's Contract Standing Orders, Sustainable Procurement Policy, and Financial Regulations.

Key to Opinion

Audit Opinion

Opinion	Definition
Substantial	The framework of governance, risk management and control were found to be comprehensive and effective.
Adequate	Some improvements are required to enhance the effectiveness of the framework of governance, risk management and control.
Limited	There are significant weaknesses in the framework of governance, risk management and control such that it could be or become inadequate and ineffective.
Unsatisfactory	There are fundamental weaknesses in the framework of governance, risk management and control such that it is inadequate and ineffective or is likely to fail.

Annex 1 - Summary Timeline of Events

Freyja of Scapa - Procurement

<u>Date</u>	<u>Description</u>
29/12/2020	Keel Laying Certificate dated for the Tugboat – Freyja of Scapa.
01/01/2021	IMO Tier 3 regulations came into force, operating in the Baltic and North Sea areas, for all vessels above 24 metres and which have had their keel laying after 1 January 2021.
16/02/2021	The Policy and Resources Committee considered a report detailing the options to the provision of towage assets and recommended to the Council to approve the replacement of the third tug to the same design as the previous two new tugs. The attached Stage 2 Capital Appraisal Report detailed estimated purchase and associated consultancy costs of the potential procurement.
02/03/2021	The Council approved the Stage 2 Capital Project Appraisal in respect of the third replacement tug.
10/09/2021	Publication of the invitation to tender for the provision of consultancy services for the provision of the third tug.
19/11/2021	Contract awarded for the provision of consultancy services for the provision of one new tug for Orkney Harbour Authority.
27/05/2022	Sustainable Procurement Impact Assessment for the new tugboat was completed.
02/06/2022	Publication of the invitation to tender for the supply of one new towage boat. The invitation to tender was in two lots.
	Lot 1 - Supply of One New Tugboat (Design and Build) - Currently Under Construction. The anticipated Contract Duration from award of Contract (Lot 1) to delivery of the vessel, following successful sea trials, will be from August 2022 to 31 January 2023.
	Lot 2 - The provision (design and build) of one new-build tugboat to meet the Council's specification as detailed in Lot 1, apart from the main engines which must be IMO Tier 3. It is recognised that the contract duration (for Lot 2) will be subject to the global supply market, therefore the provision (design and build) of one new-build tug boat to meet the Council's specification is to be delivered subject to successful sea trials within 36 months of the award of Contract.
	The deadline for returns was set to 4 July 2022
05/07/2022	Automatic Identification Systems (AIS) onboard transceiver indicated commencement of movement of Kocacay 3 (the former name of Freyja of Scapa).

14/7/2022 to 15/7/2022	Virtual yard inspections were undertaken to both nominated yards.
24/08/2022	Tender evaluations were completed.
24/08/2022	Financial Assessment of supplier carried out by Accountancy.
24/08/2022	Service Manager, Procurement commences with Standstill letters to unsuccessful tenderer.
24/08/2022	Award Recommendation Report approved by the Service Manager, Procurement.
26/08/2022	Award Recommendation Report approved by the relevant Corporate Director (Client Service).
26/08/2022	Award Recommendation Report approved by the Authorised Signatory signing the Contract in accordance with CSO 12.1.3.
08/09/2022	Contract date for the supply of one new tugboat under construction.
09/09/2022 to 16/09/2022	On-site inspections and sea trials caried out by OIC staff and the external project consultant.
16/09/2022	Supplier of the tugboat issues an invoice for 55% of the contract price.
23/09/2022	Payment made for invoice dated 16/09/2022 following technical acceptance trials to the satisfaction of the authority at / in the sea around the shipyard.
28/09/2022	Contract Award Notice published for lot 1, the supply of one new tugboat under construction.
06/10/2022	Kocacay 3 sets sail from Turkey to Orkney.
11/10/2022	Supplier issues second invoice for 42.5% of the contract price (leaving a retention amount of 2.5%).
22/10/2022	Kocacay 3 arrives in Orkney.
25/10/2022	Payment for second instalment made to invoice dated 11/10/2022.
28/10/2022	Freyja of Scapa is cleared for service by the Maritime and Coastguard Agency (MCA).