

Report title

Procurement of Replacement Fireboats

Report to

Commissioner's Board
Fire and Resilience Board

Date

27 March 2019
9 April 2019

Report by

Assistant Director, Technical and Commercial

Report number

LFC-0150
FRB-0039

Protective marking: **OFFICIAL**

Publication status: Published with redactions

Summary

The Brigade's two fireboats have come to the end of their serviceable life and require replacing. This report details the broad requirements, the procurement process and makes recommendations as to the replacement fireboats being procured.

Recommended decisions

The London Fire Commissioner to place orders under the vehicles and equipment contract with Babcock Emergency Services for:

- Two fireboats for a sum not exceeding that contained in confidential Appendix A.

Background

1. The Brigade's two fireboats have come to the end of their serviceable life and require replacing. The current fireboats were purpose built with flat hulls but were fitted with engines that were designed for lower duty cycles than has proven necessary. Those engines have therefore proved very unreliable and are now out of manufacture, so cannot be replaced and much of the engine spares can no longer be sourced.
2. The LFEPA Resources Committee gave approval on 16th September 2016 (FEP 2650) for funding of the replacement of the two fireboats, funding was allocated for that purpose and was programmed in for the 2018-19 capital spend budget. Funding was also allocated in the 2017-18 capital spend budget for specification and expert consultancy fees.
3. Two independent reports were subsequently commissioned from Frazer Nash, a specialist consultancy company in the field of small maritime craft and engineering. The reports were commissioned to look at;
 - a) The feasibility and potential cost of replacement Fire Boats

- b) The options feasibility of alternative low emission fuels and power units noted in September Resources Committee report (FEP 2778 – September 2017).
4. Both reports were received, and the first report concluded that the procurement of the fireboats to meet the Authority's draft outputs based specification within the agreed cost envelope was feasible. This sum aligned within the budget agreed by Members at the LFEPA Resources Committee on 16th September 2016 (FEP 2650).
 5. The second report concluded that marine diesel fuelled engines are the only realistic and affordable option for the replacement boats. There are currently no emission restrictions nor any known plans to introduce emission controls for river craft in London. However, officers have pursued vessels with the most efficient and clean burning engines by ensuring that International Maritime Organisation (IMO) tier 3 engines have been specified as a requirement within the tender documents. IMO tier 3 is currently the most stringent emissions specification that is set by regulation for sea faring vessels in North America and parts of the North Sea. The specifications for IMO tier 3 regulations requires specific NOx reducing technologies similar to that of Euro 6 engines for road vehicles. Therefore, we have adopted this standard as best practice.

Competitive Tendering Process

6. An output-based specification (OBS) was submitted to Babcock, which was developed from the operational user requirement. Babcock subsequently worked with LFB Technical and Service Support managers to review and determine the Brigade's requirements. These requirements included the following:
 - Proven reliability and durability
 - Power units that do not have any restrictions on duty cycles
 - Safe craft that conform to PLA requirements
 - Ability to pump 7000 litres of water per minute to shore
 - Ability to travel at speeds of 30 knots at 80% throttle in order to give sufficient power and a good continuous cruising speed with IMO tier 3 compliant engines.
 - Ability to plane on the water when fully laden with normal crew numbers and a full complement of allocated equipment.
7. Initial market research carried out by Frazer Nash and Babcock indicated that it is likely that only three manufacturers have the capability to deliver to our requirements.
8. Babcock drew up a suitable competitive procurement process and agreed an evaluation process with LFB officers before going out to tender with the evaluation criteria scoring matrix of:
 - 60% technical capability
 - 30% value for money
 - 10% training/other commercials.
9. Subsequently, tenders were sought by Babcock, they have now received bids and are in the process of evaluating those tenders with the assistance of the LFB responsible Officer.

10. The Commissioner is requested to approve that Babcock accept the tender from the preferred bidder that is established from the evaluation process and place orders for the two replacement fireboats.
11. Subject to agreement to place procurement orders and this being completed in May 2019, the anticipated timeframe for delivery of the first fireboat is October 2020. Delivery of the second fireboat is anticipated to be during the April 2021.
12. The potential effects of a 'No Deal EU Exit' have been explored in relation to both this project and the Vehicles and Equipment contract in general. Mitigating plans to stockpile spares have been put in place by Babcock and suppliers to address potential business continuity issues that may be caused by any future import restrictions. However, due to the unknown nature of how the exit will progress, procurement elements around currency changes and financing are obviously more difficult to establish. In other projects we have been advised of a potential port levy of between 10% to 16% being introduced if the UK Government are unable to secure a Brexit agreement with the EU and we have subsequently been advising of an additional 16% contingency in funding. Further analysis is contained within Confidential Appendix A.

Training

13. A review of the operational differences between the existing fireboats and replacement fireboats will not take place until the orders have been placed. Therefore, the outcomes and training requirements will also not be known until that time. However, officers will be advising of the training requirements with the appropriate departments as soon as an evaluation of the of the training requirements has been undertaken. Whilst general familiarisation sessions are anticipated for staff that will crew the new vessels, we do not expect the training requirements to range far beyond that.

Finance comments

14. The finance comments are contained within confidential Appendix A.

Workforce comments

15. This report is simply in relation to two replacement fireboats, so there does not appear to be any requirement for industrial relations consultation on the issues raised within this report. Discussion with the trade unions on new equipment, and new training requirements, takes place in the project team forum and health and safety arena. To date, no formal debate has taken place on this matter in the IR arena.

Legal comments

16. Under section 9 of the Policing and Crime Act 2017, the London Fire Commissioner (the "Commissioner") is established as a corporation sole with the Mayor appointing the occupant of that office. Under section 327D of the GLA Act 1999, as amended by the Policing and Crime Act 2017, the Mayor may issue to the Commissioner specific or general directions as to the manner in which the holder of that office is to exercise his or her functions.
17. By direction dated 1 April 2018, the Mayor set out those matters, for which the Commissioner would require the prior approval of either the Mayor or the Deputy Mayor for Fire and Resilience (the "Deputy Mayor").
18. Paragraph (b) of Part 2 of the said direction requires the Commissioner to seek the prior approval of the Deputy Mayor before "[a] commitment to expenditure (capital or revenue) of £150,000 or above as identified in accordance with normal accounting practices...".

19. The Deputy Mayor's approval is accordingly required for the London Fire Commissioner to place orders with Babcock Emergency Services for the two replacement fireboats.
20. The statutory basis for the actions proposed in this report is provided by section 7 (2)(a) of the Fire and Rescue Services Act 2004, under which the Commissioner must secure the provision of personnel, services and equipment necessary to efficiently meet all normal requirements for firefighting.
21. Furthermore, under section 7 (2)(b) of the aforementioned Act the Commissioner must secure the provision of training for personnel.
22. The General Counsel also notes that the proposed procurement under the vehicles and equipment contract with Babcock Emergency Services is within the scope of services provided under the contract and is in compliance with the Public Contracts Regulations 2015.

Sustainability implications

23. At present there are currently no emission restrictions nor any known plans to introduce emission controls for river craft in London. However, the Mayor set out the intention to lead by example in the London Environment Strategy by supporting demonstrator projects for new technologies. As such, both of these new boats will be fitted with the cleanest and low emission power unit appropriate to the vessel requirements.
24. Paragraph 5 informs us that diesel engines are the only viable option at this time and that officers have pursued the most efficient and clean burning engines by ensuring that International Maritime Organisation (IMO) tier 3 engines have been specified as a requirement within the tender documents. IMO tier 3 is currently the most stringent emissions specification that is set by regulation for sea faring vessels in North America and parts of the North Sea. The specifications for IMO tier 3 regulations requires specific NOx reducing technologies similar to that of Euro 6 engines for road vehicles.
25. The innovative method of using ultrasonic antifouling technology is called for with the benefits of eliminating toxic chemical solutions.
26. It is a specified requirement that the design and throughout the boats' operating life, the suppliers must ensure that they minimise damage to the environment and use as much recyclable material as is reasonably possible. These points are included in the sustainability impacts assessment of the tender returns and are calculated and scored accordingly.

Equalities implications

27. The Public Sector Equality Duty applies to the London Fire Brigade when it makes decisions. The duty requires us to have regard to the need to:
 - a) Eliminate unlawful discrimination, harassment and victimisation and other behaviour prohibited by the Act. In summary, the Act makes discrimination etc. on the grounds of a protected characteristic unlawful.
 - b) Advance equality of opportunity between people who share a protected characteristic and those who do not.
 - c) Foster good relations between people who share a protected characteristic and those who do not including tackling prejudice and

promoting understanding.

28. The protected characteristics are age, disability, gender reassignment, pregnancy and maternity, marriage and civil partnership, race, religion or belief, gender, and sexual orientation. The Act states that 'marriage and civil partnership' is not a relevant protected characteristic for (b) or (c) although it is relevant for (a).
29. The Fireboats emergency response services are delivered in collaboration with the Royal Lifeboat Institution, the Metropolitan Police Service, The Port of London Authority and Transport for London to improve safety on the river for social, recreational and commercial users. Additionally, the Fireboats support events such as the perennial Boat Race, the Lord Mayor's pageant and the New Year Fireworks Display and community events such as the Second World War Dunkirk Rally and other pageantry events.
30. The equality impact assessment (EIA) indicates that the proposals in this report will not have a disproportionately adverse effect on any persons with a particular characteristic. This conclusion was based on the Output Based Specification (OBS) being written with the end users needs in mind. Therefore, the EIA determined that this vessel and its fixed equipment would be able to be operated by all staff in that user group, irrespective of whether or not they have a protected characteristic.
31. The tender specification requires that the design aims to eliminate any equalities issues and the tender evaluation process critically scores all EIA outcomes. The tender solutions received including initiative such as maximising automated functions, minimising onerous skill and training needs, maximising the intuitive nature and maximising the ease of use of all operator/user interface functions.
32. In addition, the contract with Babcock requires Babcock and any sub-contractor they may engage, to conform to equality legislation and LFB equalities protocol. Babcock also assess all of their providers approach to equality and ensure they are satisfied that they meet appropriate protocols, prior to them listing those companies as approved providers. Therefore, it is considered that there is an appropriate approach to equalities right through the supply chain in respect of this procurement.

List of Appendices

Appendix	Title	Protective Marking
A.	Tender evaluation results In commercial confidence.	Official-Sensitive (Commercial)

Confidential Appendix A Tender evaluation and cost breakdown

Freedom of Information Act 2000

43 Commercial interests

(2) Information is exempt information if its disclosure under this Act would, or would be likely to, prejudice the commercial interests of any person (including the public authority holding it).

Recommended decision

33. The London Fire Commissioner place orders under the vehicles and equipment contract with Babcock Emergency Services for:

- Two fireboats for a sum ranging from £3,600k, but not exceeding £5,908k (£5,093k +£815k for 16% Brexit contingency)

(Please note that the higher sum is the highest bid received in the tender process, despite the bidder not including any options or extended warranty provisions. A more accurate figure and detail of the preferred bid will be determined as the tender evaluations take place and this paper travels through the LFC governance process. Early approval is being sought prior to conclusion of the evaluation process, so as to try to ensure orders can be placed in good time and within the 90-day tender validity period.)

Detail

34. The Frazer Nash report concluded that a price of £1,285k per boat was feasible to meet the Authority's draft outputs-based specification. Though slightly increased, this sum broadly aligned within the budget agreed by Members at the Resources Committee on 16th September 2016 (FEP 2650). However, as can be seen in paragraph 32 of this confidential appendix, the highest bid has come in at over double that estimate, and all bids reflect a significant increase in actual costs against the potential costs we were advised of by Frazer Nash.

35. A request has subsequently been made via Babcock, for Frazer Nash to comment back on how there has been such a large variance in actual costs opposed to their specialist advice on potential costs. To date, although we have received a response, it does not provide a credible explanation. Therefore, a further request has been made clarifying a number of questions we would like answered as follows:

- How is there now such a wide variance in price, with the total cost of the higher bid appearing to be over double what Frazer Nash informed us was achievable?
- Why was Frazer Nash chosen to carry out the feasibility study?
- Who chose them to carry out the feasibility study?
- As we made it quite clear as to what we would require within the original OBS, as specialists in the field, why did Frazer Nash not take all of the requirements we put into OBS into account when drawing up the projected costs?
- Do we have any redress to the money they charged us for appears to be such a flawed report?
- How do we avoid this situation in the future?

Confidential Appendix A Tender evaluation and cost breakdown
Freedom of Information Act 2000

43 Commercial interests

(2) Information is exempt information if its disclosure under this Act would, or would be likely to, prejudice the commercial interests of any person (including the public authority holding it).

36. However, with the current situation in relation to serviceable life, unreliability and unavailability of spare parts for our current fireboats, the procurement of two new fireboats is imperative if we are to maintain our ability to provide an operational service on the River Thames.
37. Due to the consultancy work required to establish the LFB requirements/specifications and soft market research, 26 months have now passed. There has subsequently been inflation and we are currently facing the uncertainty of Brexit with and expectation of the major components for the boats to be supplied by external countries. Therefore, although currently unknown, there is also anticipation that there could be up to a 16% increase in costs to cover potential port levies in a no-Brexit deal situation (this is reflected in paragraph 29). We have included this cost as we've been directly informed of the potential 16% increase by our contractor Babcock, who have in turn been informed by bidders submitting high cost tenders in other vehicle and equipment procurement projects for the LFB. Therefore, the sum of up 16% is based on commercial information received and has been included to ensure prudent cost analysis and financial forecasting.

Finance Comments

38. This report requests the approval for the replacement of the Brigade's two fireboats at a cost not exceeding £5,908k. Tenders for the two replacements fireboats have been received with prices ranging from £3,600k to £5,093k. These tenders are currently being evaluated and the final contract price will be determined during this process.
39. A number of the major components for the boats are expected to be supplied by other countries and this with the uncertainty of Brexit, it is considered that costs for all tenders could increase by up to 16%, that would result in the total cost of the project being £4,176k to £5,908k based on the lower and highest tender price received. If this project was financed from external borrowing, the annual debt charges would be £335k based on the lowest price of £4,176k and calculated based on a twenty-year life (£209k annual debt repayment) and annual interest charge of £126k based on a 3% interest rate. Based on the highest price of £5,908k the annual debt charges would be £472k, £295k annual debt repayment and an annual interest charge of £177k.
40. In the existing capital programme, there is a capital budget of £2,500k for the replacement of the two fireboats. This budget will be updated once the tender evaluation is complete and the final cost requirement is known.