

REQUEST FOR DEPUTY MAYOR FOR FIRE & RESILIENCE DECISION – DMFD109

Title: Replacement of Respiratory Protective Equipment (RPE)

Executive Summary:

This report seeks the approval of the Deputy Mayor for Fire and Resilience, for the London Fire Commissioner (LFC) to incur expenditure up to the value of £6,000,000 for the provision of new Respiratory Protective Equipment and the associated repair and maintenance of such equipment.

In July 2018 a London Fire Brigade (LFB) project was set up to research, plan and implement the replacement of current breathing apparatus (BA) provision, also known as respiratory protective equipment (RPE). Extensive market research and dialogue with suppliers has taken place. After the final equipment trials at the Fire Service College at the end of January 2021, MSA (Britain) Ltd were identified as the preferred bidder.

The London Fire Commissioner Governance Direction 2018 sets out a requirement for the London Fire Commissioner to seek prior consent before '*[a] commitment to expenditure (capital or revenue) of £150,000 or above*'. The Direction also provides the Deputy Mayor with the authority to '*give or waive any approval or consent required by [the] Direction*'.

Decision:

The Deputy Mayor for Fire and Resilience authorises the London Fire Commissioner to commit capital expenditure up to the value of £6,000,000 for the purchase of Replacement Respiratory Protective Equipment, including a contingency of 20%.

Deputy Mayor for Fire and Resilience

I confirm that I do not have any disclosable pecuniary interests in the proposed decision.

The above request has my approval.

Signature:



Date:

16 March 2021

PART I - NON-CONFIDENTIAL FACTS AND ADVICE TO THE MAYOR

Decision required – supporting report

1. Introduction and background

- 1.1. Report LFC-0480 explains that London Fire Brigade (LFB) has traditionally replaced its breathing apparatus (BA) provision every ten years, with a project duration on average of three years. This means BA sets are often thirteen, or more years old before replacement. Using a replacement schedule of this duration ultimately leads to increased maintenance costs keeping older equipment in service (such as the programmed replacement of re-chargeable batteries). This is compounded by the present, higher than predicted, maintenance costs of the current BA set, due to design issues with some of the components.
- 1.2. Current BA sets were placed in service in 2010, making them ten years old in 2020, so in order to take advantage of available new technology, and to ensure LFB could conclude this process in a timely fashion, the replacement project received approval to start in 2018.
- 1.3. Recommendations from the Grenfell Tower Inquiry, Her Majesty's Inspectorate of Constabulary and Fire and Rescue Service (HMICFRS) inspection reports and recent reviews in National Operational Guidance are all strategic drivers of this project. In particular, this project enables LFB to meet recommendation 26 from the Grenfell Tower Inquiry: "That the LFB urgently take steps to obtain equipment that enables firefighters wearing helmets and breathing apparatus to communicate with the bridgehead effectively, including when operating in high-rise buildings."

2. Objectives and expected outcomes

- 2.1. Through the review and replacement of current RPE the objectives are to:
 - provide improved communications to Entry Control and between BA wearers;
 - continue to provide and improve the facility for data exchange between the wearer and the entry control operative currently provided by telemetry as well as comprehensive data for management use in relation to training, health monitoring and safety event investigation;
 - deliver a respirator and Chemical, Biological, Radiological and Nuclear (CBRN) capability for every fire appliance riding position and introduce a more complete RPE capability that carries a lower physiological burden than LFB's current solution (lighter and more ergonomically designed equipment);
 - realise RPE specifications that meet the needs of the LFB, in undertaking its duties whilst encompassing health and safety and compatibility with all personal protective equipment (PPE) requirements;
 - ensure LFB benefits from the technological upgrades on the market resulting in superior Respiratory Protective Equipment;
 - review current BA ancillary equipment with specific focus on upgrading BA personal lines and rescue equipment;
 - meet recommendations from the Grenfell Tower Inquiry, or any subsequent strategies to prevent fire deaths, in support of improvements to RPE in the future; and
 - the expected outcomes of committing to expenditure are that substantial benefits will be gained from new technology, thus improving safety for firefighters and crucially enhancing LFB's ability for rescue and therefore delivering a better service to the public.

Alternative Options Considered and Consultation

- 2.2. By completing this project, the LFC will benefit from market available technological advances in equipment, thus improving safety for firefighters and addressing the recommendations of inspections carried out by the HMICFRS and the Grenfell Tower Inquiry. The alternative of preserving the status quo and postponing or cancelling this project would result in not realising these benefits.
- 2.3. Also, because this project is linked with the Radio Replacement workstream (Deputy Mayor for Fire & Resilience Decision 110), its cancellation or postponement would affect LFB's ability to complete the planned improvements in LFB's radio communications system i.e. the implementation of the integrated radio interface in the breathing apparatus facemasks.
- 2.4. Delivering the Respiratory Protective Equipment (RPE) Replacement Project requires long term planning and resourcing, in order to achieve this transformation across LFB. The cancellation or postponement of all or some parts of this project will send a message from LFB that this work is currently not required, which contradicts messages LFB has sent to all staff and the wider government community.
- 2.5. There is a risk with cancellation or postponement, that some or all the corporate knowledge and external business relationships developed through the RPE Replacement Project will be lost or side-tracked. It will take time and additional investment to recover this resource and could impact on the reputation of LFB. Fire Rescue Services nationally are watching the outcome of this procurement process and many are interested in following LFB's lead.

Collaboration – emergency services

- 2.6. Research was carried out to explore options for a collaborative approach to procurement with the Metropolitan Police Service (MPS) and the British Transport Police (BTP), but their timescales and equipment requirements did not meet LFB's, so this was not pursued. The MPS use LFB equipment at incidents and the BTP have already gone ahead in procuring military specification breathing apparatus, which is not CE marked against the relevant RPE standards in EN 137.
- 2.7. The London Ambulance Service were notified of the project at the beginning and the agreement has been for LFB to keep them informed of progress. They have a minimal requirement for Breathing Apparatus, and this is only related to Extended Duration Breathing Apparatus used by the Hazardous Area Response Team (HART).

Collaboration – fire and rescue services

- 2.8. The LFB considered utilising the Devon and Somerset Framework Agreement for RPE for this procurement. As the intention was to address the complexities of the components element (spares) and combine what previously had been two separate contracts, as well as the purchase element through a risk transfer model (described in full below), and the need to maintain the in house maintenance requirement within the LFB Operational Support Centre (OSC). This falls outside of the scope available within the Framework, which resulted in the decision to advertise solely on behalf of the LFB.
- 2.9. The National Fire Chiefs Council has been kept informed of LFB's progress with this project formally through the National Respiratory Protective Equipment Working Group (RPG) and individual, informal contact has been maintained with interested services such as West Midlands Fire and Rescue Service, Hampshire Fire and Rescue Service, Northamptonshire Fire and Rescue Service and several others engaged with LFB in the National Breathing Apparatus Challenge.

Procurement

- 2.10. Previous arrangements have had a separate contract for the purchase of BA sets and for the spares to maintain them. This has meant it has been a challenge to budget sufficiently for the spares element of

the contract, with no commercial relationship between the equipment and the components required. This has resulted in LFB having no control over the budget required for spares and no recourse should there be a significant component failure, other than to replace at the LFB's own cost. One example of this was where the BA set reducers came with a ten-year service life, but LFB technicians started discovering faults with them after two years. The time it took to investigate, negotiate solutions and provide labour involved to replace the faulty parts, all had to be borne by LFB. To address this situation a combined spares and purchase contract and a range of options were included in the tender process, . The intention was to undertake an element of risk transfer from the LFB to the provider, making them responsible for the durability of the set and setting up a commercial model that links the two requirements fully, to allow LFB visibility and control over the budget.

- 2.11. The preferred bidder for this procurement, MSA (Britain) Ltd (MSA), are offering a lighter BA set overall, a simpler, easier to use control unit and wireless repeaters that are light and easy to deploy with minimal interventions from the user, compared to previous BA sets. Their telemetry entry control board is NOG compliant, a fraction of the weight of the current board and tablet-based with intuitive operation. Data on firefighters' breathing rates, activity in BA and emergency signals is automatically uploaded to the cloud and can easily be downloaded for use in accident investigation and health monitoring.
- 2.12. An open procurement procedure was chosen for this project, due to the small size of the market and the specific nature of LFB's requirement. Initial market engagement was undertaken in 2018 prior to the initiation of the procurement process to ensure that the nature of the requirement (a combined spares and purchase contract with some form of warranty provision which would pass the risk of failure on to the provider) could be fulfilled by the market.
- 2.13. The Tender was drafted to include a suite of commercial models for tenderers to bid against:
- comprehensive life warranty of BA set and equipment;
 - reduced scale life warranty of BA set and equipment; and
 - capital purchase and spares bought by LFC as required (similar to current provision).
- 2.14. The duration of the proposed contract was agreed to be 10 years, with an option to extend for a further period or period of up to 5 years. This was agreed due to the anticipated life span of the sets being 10 years, and with a view to run concurrently with the anticipated lifespan of the associated cylinders being purchased, should the LFC decide to extend. This timescale is also anticipated to mitigate any future compatibility issues between cylinder and set (and therefore potential certification difficulties) that were identified as a risk at the implementation of this project.
- 2.15. The OJEU notice was published on 31/07/20 with a tender return deadline of 16/10/2020, to allow tenderers sufficient time to respond to the various options. 2 bids were received in response to the OJEU notice, from Draeger Safety UK Ltd and from MSA (Britain Ltd). Evaluation sessions were held by the LFB evaluation team, comprising participants from Operational Policy and Assurance, Operational Support Group, ICT, Sustainability and Procurement.
- 2.16. MSA was chosen as the preferred bidder following the tender exercise, with the preferred commercial model being a comprehensive life warranty of BA set and equipment, as set out below.

Selected commercial model

- 2.17. In the selected model, the parameters and definitions of fair wear and tear are crucial, as LFB will remain liable for costs of labour and spares needed as a result of unfair wear and tear, loss, accident or wilful misuse. There will be an initial capital outlay for the sets, cylinders and ancillary equipment.
- 2.18. This model includes an initial two-year fully comprehensive warranty of the sets and associated components. The successful provider MSA will be required as part of the contract to provide all spares and replacement kits and replaceable components within the parameters of fair wear and tear within

this initial two years. All labour will be undertaken by LFC technicians. A planned maintenance schedule has been completed during the tender process and should there be any additional repairs needed for fair wear and tear, the labour cost of these will be re-charged to the provider using the hourly rate of an LFB technician (currently £22 per hour) , and the provider will also have to provide any additional components that are required for no extra cost. The re-charge will not apply to the costs of labour and parts needed as a result of unfair wear and tear, loss, accident or wilful misuse, as these will be at the LFB's cost. Detail of the selected commercial model are:

Fully inclusive service charge – eight years

- This will be a fully comprehensive warranty for eight years and will be in the form of a service charge. The service charge will, as in the initial warranty period, include all spares and replacement kits and replaceable components needed within fair wear and tear but exclude labour costs (eight years rather than ten is cited because the first two are under warranty).
- The service charge will also include all additional costs needed to manage the contract, including refresher training for technicians, management, and more.
- MSA was required to complete a schedule of components required to maintain their sets as part of their tender, indicating the anticipated frequency of replacement for each element during these eight years. The time needed to make these repairs was also documented. This will be a schedule of the contract.
- The labour cost to make these planned fair wear and tear repairs set out in the schedule will be covered by the LFB, i.e. it will not be covered by the service charge. If, however, a repair is needed more frequently than is anticipated, LFB will recharge MSA for the cost of the labour to make this repair, using the hourly rate of an LFB technician, as set out in the tender documents, and MSA will also have to provide any additional components that are required for no extra cost. This would not extend to 'exceptional' repairs which remain the LFB's responsibility.
- The cost for this option is £6,000,000 It is important to note that this will include all necessary repairs, spares and maintenance, training and management of the contract throughout the life of the contract. The only additional costs which cannot be quantified at this point relate to any replacements of components or equipment resulting from "unfair wear and tear".

2.19 The LFC has determined that this commercial model option will generate the best value for money through analysis of the schedules provided by MSA. As noted above, a schedule of expected repairs was completed and the costs of the components for these repairs and the duration of the labour time to make the necessary repairs was also included. This was tested for veracity during the technical trials in January 2021. This information was used to analyse the costs of each option and allow the LFC to determine the value for money potential fully.

Costs

2.20 Costs of the preferred bid and commercial model are outlined below. The total bid by MSA is £4,998,439.89 with no service charge cost for the ten-year contract period. A 20% contingency would cover the additional five years of the contract extension period if taken up, amounting £5,998,128 in total.

Bidder:	Initial Purchase Price (total as based on current equipment list) for ten-year period	Initial Purchase Price with 20% contingency	Comprehensive Warranty: Cost of 8-year warranty
MSA (Britain) Ltd	£4,998,439.89	£6,000,000	£0.00

2.19. The costs of servicing and maintaining the equipment per year will be up to approximately £471,000, which is based on an average of the last three years. These costs are already budgeted for the service and maintenance of LFB's existing RPE and therefore do not require additional Deputy Mayor approval in relation to this procurement. LFB are confident that this figure will be reduced over the coming years for reasons including but not limited to:

- new equipment will initially need less maintenance or replacement;
- at every stage of the project LFB have identified ways of reducing the capital purchase quantities which means there will be less equipment to maintain and therefore lower labour and component costs;
- LFB have rationalised Standard Duration Breathing Apparatus (SDBA) and EDBA sets meaning that there is only one model to buy and maintain spares for thus reducing stock levels; and
- a smarter way of supplying spare sets to stations has been identified, which means that the number of sets held can be reduced with the resultant lower cost of servicing.

3. Equality comments

3.1. The London Fire Commissioner and the Deputy Mayor for Fire and Resilience are required to have due regard to the Public Sector Equality Duty (s149 of the Equality Act 2010) when taking decisions. This in broad terms involves understanding the potential impact of policy and decisions on different people, taking this into account and then evidencing how decisions were reached.

3.2. It is important to note that consideration of the Public Sector Equality Duty is not a one-off task. The duty must be fulfilled before taking a decision, at the time of taking a decision, and after the decision has been taken.

3.3. The protected characteristics are: Age, Disability, Gender reassignment, Pregnancy and maternity, Marriage and civil partnership (but only in respect of the requirements to have due regard to the need to eliminate discrimination), Race (ethnic or national origins, colour or nationality), Religion or belief (including lack of belief), Sex, and Sexual orientation.

3.4. The Public Sector Equality Duty requires decision-takers in the exercise of all their functions, to have due regard to the need to:

- a) eliminate discrimination, harassment and victimisation and other prohibited conduct;
- b) advance equality of opportunity between people who share a relevant protected characteristic and persons who do not share it; and
- c) foster good relations between people who share a relevant protected characteristic and persons who do not share it.

3.5. Having due regard to the need to advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to:

- a) remove or minimise disadvantages suffered by persons who share a relevant protected characteristic where those disadvantages are connected to that characteristic;
- b) take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it; and
- c) encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

- 3.6. The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities.
- 3.7. Having due regard to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to:
- a) tackle prejudice; and
 - b) promote understanding.
- 3.8. A smaller, lighter weight, more ergonomic RPE set would be a feature, which will support LFB to attract and encourage more diverse groups to consider firefighting as a career, especially for those who have not previously considered a career as a firefighter.
- 3.9. The benefits of making the RPE equipment lighter and more ergonomic will encourage more people to join as a firefighter. In 2016, LFB commissioned research by 'Future Thinking into the barriers facing women when considering a career as a firefighter'. Relevant findings included:
- the work being perceived as "dangerous, too physical";
 - the perception of a woman firefighter as being someone who needs "exceptional upper body and general strength"; and
 - perceived barriers such as "dangerous and risky", "not physically strong enough", "it is very daunting".
- 3.10. The research concluded that "it is important to note that even if the LFB are able to address the barriers we have identified, the role itself only genuinely appeals to the minority." It is therefore even more crucial that we take as many steps as possible, to demonstrate due regard to the Public Sector Equality Duty, in ensuring that the LFB is encouraging to participate in activities where their participation is disproportionately low. Making LFB's equipment as light as possible, is a tangible step towards this aim.
- 3.11 The LFB Inclusion Team have been consulted throughout this project and an Equality Impact Assessment has been completed. Any potential negative impacts of this project such as the arduous nature of wearing and working in breathing apparatus, have been mitigated by focussing on developmental work with the suppliers to produce lighter and more ergonomically designed equipment. This has prevented any particular group being adversely affected.

4. Other considerations

Sustainability

- 4.1. The procurement was risk assessed against LFB's Responsible Procurement policy PN696, and relevant evaluation criteria included, in the Invitation to Participate. The specification covers:
- a) Waste disposal options including the potential for reuse or recycling of both the 8 litre cylinders and BA sets;
 - b) A rationalised approach to cylinder stocks and BA sets to one model that means that less equipment is required overall, reducing the consumption of materials and associated impacts.
 - c) The more efficient provision of BA, via the revised cylinder size and compatibility with Extended Duration Breathing Apparatus (EDBA), will result in fewer vehicle movements to provide EDBA to major incidents and therefore reducing air emissions correspondingly.
- 4.2. The Social Value evaluation criteria questions cover the disposal of current assets, and their approach to managing the socio-economic and environmental impacts including waste reduction (packaging);

circular economy opportunities (take back, refurbishment, remanufacture); transport emissions and support for disadvantaged groups.

- 4.3. MSA has both a statement and published policy and practice in addressing the relevant issues under the Modern Slavery Act 2015.

5. Financial comments

- 5.1. This report requests the expenditure for the purchase of new Respiratory Protective Equipment (RPE) through MSA. The estimated cost of up to £6,000,000, including a 20% contingency, based on the preferred bidder will be charged to the capital programme.
- 5.2. There is currently an approved capital budget of £8,200,000 in LFB 2021/22 budget for Operational Equipment, for the RPE replacement and fireground radios. It is expected that up to £2,150,000 is to be used for the purchase of radios and associated equipment. This leaves a balance of £6,050,000, which can be applied to the Replacement of RPE and allows for any incidental costs relating to the project.
- 5.3. The capital element of the RPE purchase, as set out in the report at up to £6,000,000 will incur annual capital financing costs of £600,000, for the provision to repay debt (Minimum Revenue Provision), based on a 10-year asset life and £150,000 for interest per annum, at a forecast rate of 2.5%. The capital financing costs for the current capital budget are included within the revenue budget in the 2021/22 LFB Budget Submission.
- 5.4. The report notes that the costs of servicing and maintaining the equipment per year is approximately £471,000, which is based on an average of the last three years. This cost will be contained within the annual revenue budget for the maintenance and repairs of breathing apparatus; this budget be continued to provide the revenue stream of this project. The report also notes that there is confidence that this figure will be reduced over the coming years. Any savings identified will be considered and reported on as part of the annual budget setting process.

6. Legal comments

- 6.1. 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.
- 6.2. 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"). 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...".
- 6.3. The Deputy Mayor's approval is accordingly required for the expenditure up to £6,000,000 for the provision of new Respiratory Protective Equipment and the associated repair and maintenance of such equipment as described in this report.
- 6.4. The statutory basis for the actions proposed in this report is provided by Sections 7 and 8 of the Fire and Rescue Services Act 2004, which states that fire and rescue authorities must make provision for the purpose of fighting fires and rescuing people in the event of road traffic accidents. In making this provision a fire and rescue authority must, amongst other things, secure the provision of the equipment necessary efficiently to meet all normal requirements.

- 6.5. The LFC's General Counsel also notes that the proposed equipment is being procured in compliance with the Public Contracts Regulations 2015 and the Commissioner's Standing Orders relating to Procurement.

Appendices and supporting papers:

Appendix 1: LFC-0480 – Replacement of Respiratory Protective Equipment (RPE)

Public access to information

Information in this form (Part 1) is subject to the Freedom of Information Act 2000 (FOI Act) and will be made available on the GLA website within one working day of approval.

If immediate publication risks compromising the implementation of the decision (for example, to complete a procurement process), it can be deferred until a specific date. Deferral periods should be kept to the shortest length strictly necessary. **Note:** This form (Part 1) will either be published within one working day after approval or on the defer date.

Part 1 Deferral:**Is the publication of Part 1 of this approval to be deferred? YES**

If YES, for what reason:

The commercial interests of the London Fire Commissioner require deferral of the decision until after the cooling off period for the contract award has expired.

Until what date: 01 May 2021

Part 2 Confidentiality: Only the facts or advice considered to be exempt from disclosure under the FOI Act should be in the separate Part 2 form, together with the legal rationale for non-publication.

Is there a part 2 form – NO

ORIGINATING OFFICER DECLARATION:

Drafting officer to confirm the following (✓)

Drafting officer

Richard Berry has drafted this report with input from the LFC and in accordance with GLA procedures and confirms the following:

✓

Assistant Director/Head of Service

Niran Mothada has reviewed the documentation and is satisfied for it to be referred to the Deputy Mayor for Fire and Resilience for approval.

✓

Advice

The Finance and Legal teams have commented on this proposal.

✓

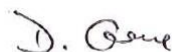
Corporate Investment Board

This decision was agreed by the Corporate Investment Board on 15 March 2021.

EXECUTIVE DIRECTOR, RESOURCES:

I confirm that financial and legal implications have been appropriately considered in the preparation of this report.

Signature



Date

16 March 2021