

# Forced Entry Equipment

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**Report to:**

Investment and Finance Board  
Commissioner's Board.  
Deputy Mayor's Fire and Resilience Board  
London Fire Commissioner

**Date:**

25 August 2022  
7 September 2022  
22 November 2022

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**Report by:**

Thomas Goodall, Deputy Assistant Commissioner TSS

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**Report classification:**

For decision

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**For publication**

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I agree the recommended decision below.



**Andy Roe**  
London Fire Commissioner

**Date** This decision was remotely  
signed on 07 April 2023

# PART ONE

## Non-confidential facts and advice to the decision-maker

### Executive Summary

This paper recommends the procurement of additional Forced Entry Equipment (FEE) for the purposes of improving operational response and reducing the inefficient use of multiple appliances where one appliance is sufficient. Given the frequency of these incident types, it is proposed that this equipment is introduced this year to avoid further inefficiency.

The London Fire Brigade (LFB) currently has 102 fire stations in addition to the River Station. 40 of these 102 stations contain 2 fire appliances – a pump ladder and a pump. The remaining 62 stations contain 1 appliance, a pump ladder. Whilst the pump ladder and pump are the same vehicle, the equipment carried on them varies. FEE assists crews in gaining entry into buildings. Currently, FEE is carried on pump ladders at all 102 fire stations across London, it is not carried on the remaining 40 pumps at 2 appliance stations.

Placing FEE on both appliance types will reduce appliance movements and increase availability of senior level one commanders.

### For the London Fire Commissioner

The London Fire Commissioner agrees to commit expenditure of up to £192,000, to be allocated from reserves, for the purpose of purchasing and maintaining Forced Entry Equipment.

To note that Babcock Critical Services Limited will be responsible for this procurement under the terms of the 2014 Vehicles and Equipment Contract on behalf of the London Fire Brigade.

To agree to delegate authority to the Assistant Director, Procurement and Commercial to make the final decision on the purchase of the new Forced Entry Equipment.

## 1 Introduction

- 1.1 Babcock Critical Services Limited (BCS) are the LFB's maintenance and service provider under the Vehicles and Equipment Contract. This contract was awarded in 2014 and runs until 2035. As part of this contract, BCS replace, service and repair all items listed within the Vehicle and Equipment Contract within a lifing profile of each asset.
- 1.2 Forced Entry Equipment (FEE) is used to gain access into a building or premises, for firefighting or emergency purposes and for assisting the London Ambulance Service to gain access to patients.
- 1.3 A complete set of FEE consists of:
  - Holmatro hydraulic door opener HDO 100;
  - Holmatro hydraulic hand pump PA 04 H2S

- Holmatro hydraulic hose B 02
  - Enforcer (door opener)
  - Halligan tool
  - Prybar
  - Rubber mallet
  - FEE carrying bag
- 1.4 The hydraulic door opening system comprises of a door opener, a hand pump and hydraulic hose with hose burst sleeve. FEE is designed for single person operation, although two-person operation is recommended (one using the door opener and one using the hand pump). The FEE that the Brigade has is in life until 2029/2030.
- 1.5 A pump ladder and pump are LFB's standard fire engines. The main difference is that a pump ladder carries an extra 13.5m Ladder hence the term Ladder and some smaller items such as the FEE. This means 40 pumps cannot currently respond to this incident type without requiring additional support.
- 1.6 Pump ladders must carry FEE because they are most likely to be mobilised for time-critical activity.

## 2 Background

- 2.1 The need for FEE has been identified through analysis of LFB data, staff suggestions and the Commissioner's programme of station visits. The detail of this has been laid out below.
- 2.2 The current arrangements for FEE are inefficient. During the Commissioner's recent and ongoing station engagement sessions he has identified from evidence provided by operational staff that a lack of FEE on pumps is having a disproportionately negative impact on operational responses.
- If a pump attends an incident requiring FEE, they must request and wait for a pump ladder to get the correct equipment to the scene. This leads to delays, additional vehicle movements, and unnecessary unavailability of crews.
  - Pump ladders are crewed by station officers (the most senior level one commander). Therefore, if a pump ladder has to attend this reduces the immediate availability of this finite officer resource when a lower rank can manage these incident types.
- 2.3 This is a key initiative from the Commissioner's staff engagement sessions which demonstrate that he is listening to staff and, where appropriate, implementing quick reforms to improve operational effectiveness.
- 2.4 Pump ladders at two appliance stations are normally crewed with a station officer in charge. Station officers are LFB's most senior level one commanders and are expected to take command of an escalating incident.
- 2.5 LFB has seen an increase in attendance at incidents involving persons collapsed behind locked doors (CBLD) from an annual average of 1,421 (2017-20) to 7,392 in 2022. This is likely to be as a result of a new approach to CBLD incidents agreed between LFB, Metropolitan Police Service (MPS) and London Ambulance Service (LAS) to improve this service. It is highly likely that FEE will be required at these incident types, when officers must force entry to a property to enable LAS officers to reach patients. The new approach is based on a greater understanding between the three services of LFB's capability in this area, and has put a formal mechanism in place for requesting LFB resources early at these incident types when a call is made into another agency. In turn this means LFB are being called earlier and more often.
- 2.6 A Memorandum of Understanding between LFB, MPS and LAS is currently being agreed via LFB's governance process, in order to formalise this agreement.
- 2.7 Incidents that require forced entry can often be time consuming to resolve, and on some occasions are not time critical. Each represents the potential for a station officer to be made

unavailable if FEE is only available on pump ladders. By adding FEE to the pumps, the pump can be mobilised leaving the station officer available for more complex incidents. Incident data outlined below illustrates this inefficiency, and potential for efficiency gains.

### 3 Benefits

- 3.1 In their 2018/19 inspection report His Majesty's Inspectorate of Constabulary and Fire and Rescue Services (HMICFRS) reported that 57% of staff do not have confidence in LFB's feedback mechanisms and raised 'improving efficiency of response to staff concerns' as an area for improvement. Implementing this initiative quickly demonstrates to staff that their suggestions are taken on board where it makes sound business sense.
- 3.2 This initiative improves the safety of communities. It also improves officer availability across the Brigade, reduces appliance movements and increases the availability of appliances for responding to time critical incidents. It improves the cost effectiveness of delivering the FEE capability to the incident ground.
- 3.3 In 2022 49% of incidents involving gaining entry were attended by an appliance with a station officer in charge (3,705 incidents). On average these appliances spent 26 minutes at these incidents and a total of just over 1,600 hours. This is a significant draw on a more senior officer than is generally required for these incidents. Following the deployment of FEE on pumps, LFB anticipates that in most instances only a pump would be mobilised to this type of incident. This would free up most if not all of the 1,600 hours spent by station officers at these incidents, based on 2022 figures.
- 3.4 Similarly, on average a pump spends 39 minutes at these incidents, and this is attributable to the pump waiting for the additional attendance of a pump ladder to obtain FEE. Following the deployment of FEE on pumps, when pump crews are not required to wait for a pump ladder to arrive, this would reduce the amount of time spent by pumps at incidents from an average of 39 minutes to 26 minutes, a saving of 13 minutes per incident; this would represent a saving of 800 hours per year, based on 2022 figures.
- 3.5 The potential benefits outlined in 2.7-2.8 are estimates based on current practices and incident trends. Incident data will be reviewed periodically following the deployment of additional FEE to ensure these benefits have been realised.
- 3.6 There is no additional training requirement for this equipment as firefighters are already trained to use it, and it is included in the Development and Maintenance of Operational Professionalism (DaMOP) programme.
- 3.7 The current FEE carried on the pump ladders are still within life until 2029/30. Therefore, rolling this equipment out to pumps, rather than an alternative forced entry solution, is the most effective solution because there is no additional training requirement, and the capability remains the same across the fleet.

### 4 Recommendation

- 4.1 It is recommended that FEE is provided on all front-line pumping appliances. Currently, all Pump Ladders carry FEE. FEE should be added on LFB's current fleet of pumps which consists of 40 additional pumping appliances, plus an additional reserve stock of 4 to manage servicing and defects.
- 4.2 Adding FEE to the remaining 40 pumps will improve the LFB's operational effectiveness by:
  - Providing a faster response. Pumps assigned to an incident will not be required to wait for a pump ladder to be order to an incident to utilise the FEE to effect entry to a premises.
  - Increasing availability of senior level one incident commanders (Station Officers).
  - Sending one appliance to FEE incidents instead of two.

#### 4.3 Alternative options have been considered:

- Placing pump ladders on the pre-determined attendance (PDA) for forced entry incidents. Whilst this measure will mean that the correct equipment will get to the incident quickly, it will increase the draw on station officers (if applied in 2022, Station Officers would have spent 3,294 hours at this incident type). This would, therefore, not achieve one of the objectives of this paper, which is to increase availability of station officers for more complex incidents.
- Alternative crewing or transportation mechanisms. Measures such as delivering this equipment to the incident ground using logistical vehicles are impractical because it increases vehicles movements (a crew of firefighters will always be required to operate the equipment, so it is more efficient for the equipment to arrive with firefighters on the same vehicle). Providing the equipment via alternative vehicles will also increase the time spent at incidents in the majority of cases because a fire appliance with crew will arrive at an incident faster than any of LFB's logistical vehicles.
- Placing FEE on pumps instead of pump ladders. Whilst this initiative would increase the availability of Station Officers, it would remove a vital item of equipment from the vehicles most likely to provide the first Breathing Apparatus teams in the early stages of a time critical incident where effecting entry in fire conditions is an early tactic. Therefore, whilst this measure would go some way to resolving inefficiencies in forced entry incidents, it will create a risk critical capability gap in our fire response.

## 5 Costings

- 5.1 The cost of providing FEE on pumps is £192,000 made up from £148,000 for the purchase of the FEE to be taken from capital funds and £44,000 to be used from revenue funds to cover the 10-year slot price for these new items of equipment. This is shown in table 1 below.
- 5.2 The slot price is an inspection and maintenance cost. BCS will inspect, service and maintain in line with Health and Safety requirements. This includes collection & delivery to any LFB Fire Station with a maximum 5-day turn-around. This also has an element of direct overhead and profit but not including unfair wear and tear and loss.
- 5.3 A 10% contingency has been factored into the cost of the FEE to allow for the cost of inflation due to the current economic climate. This contingency will only be used for unforeseen rises in costs and will not be required for the maintenance cost as this is a fixed price.

**Table 1; Item cost breakdown.**

Slot	No	Cap Cost	Slot Cost (10 Years)	Item Cap Cost	Annual Slot Cost	% Slot of Capital
CF2 Carrying bag	44	£516.56	£11,066.00	£11.74	£25.15	214.22%
Enforcer	44	£12,640.00	£1,425.60	£287.27	£3.24	1.13%
Halligan Tool	44	£11,500.00	£1,425.60	£261.36	£3.24	1.24%
Prybar	44	£987.80	£1,425.60	£22.45	£3.24	14.43%
Rubber Mallet	44	£303.60	£1,425.60	£6.90	£3.24	46.96%
Door Opener (incl. hydraulic hose and hand pump)	44	£108,509.83	£26,914.80	£2,466.13	£61.17	2.48%
<b>Total</b>	44	£134,457.79	£43,683.20	£3,055.86	£99.28	3.25%
10% contingency		£13,445.78				
<b>TOTAL</b>		£148,000	£44,000			

## 6 Equality comments

- 6.1 The LFC and the Deputy Mayor for Fire and Resilience are required to have due regard to the Public Sector Equality Duty (section 149 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.
- 6.2 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.
- 6.3 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.
- 6.4 The Public Sector Equality Duty requires decision-takers in the exercise of all their functions, to have due regard to the need to:
- eliminate discrimination, harassment and victimisation and other prohibited conduct.
  - advance equality of opportunity between people who share a relevant protected characteristic and persons who do not share it.
  - foster good relations between people who share a relevant protected characteristic and persons who do not share it.
- 6.5 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:

- remove or minimise disadvantages suffered by persons who share a relevant protected characteristic where those disadvantages are connected to that characteristic.
- 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.
- 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.

6.6 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.

6.7 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:

- tackle prejudice
- promote understanding.

6.8 An EIA was completed in September 2019 when the previous FEE was placed on the run. Given that an additional 44 sets of the same equipment are being procured the EIA has been reviewed and no additional changes are required.

## 7. Workforce comments

7.1 Discussions with the Fire Brigades Union (FBU) on this initiative have taken place. The FBU is supportive of increasing the amount of FEE available for operational incidents. It has also, in part, been put forward through staff suggestions, which have been discussed during the Commissioner's programme of station visits and been positively received. At the point of putting this recommendation forward this included 53 of London's 103 fire stations.

## 8. Sustainability comments

8.1 At the end of their serviceable life the FEE will either be resold or recycled by Babcock Critical Services Limited under the provisions of the 2014 Vehicle and Equipment Contract. The disposal process will fulfil LFB obligations under the Environmental Duty of Care Regulations and if the equipment is to be scrapped, or broken up for parts, the Vehicle and Equipment Contractor will provide full details relating to the disposal of the component parts and will ensure that the Authority's obligations are documented and adhered to.

8.2 FEP2237, the 2014 vehicles and equipment contract with Babcock Critical Services Limited provides for the capital replacement of fleet and equipment throughout the contract period of 21 years. Under the contract, Babcock Critical Services Limited procure the new vehicles and equipment and replace the existing assets at their life expiry. Babcock Critical Services Limited have policies in place relating to anti-slavery, sustainability, and anti-corruption and this is done in accordance with the specifications and approvals issued by the LFB.

8.3 A technical Sustainability Development Impact Assessment has been completed previously for this item of equipment.

8.4 By having FEE on all appliances, it would eliminate the need for a pump ladder to be called out after a pumping appliance had already been mobilized, therefore reducing fuel consumption and reducing emissions.

## 9. Procurement comments

- 9.1 All of the vehicles and equipment to support the operation of the London Fire Commissioner is provided through a long-term contract with BCS. The procurement and commercial approaches are discussed and agreed between LFB and BCS to arrive at the solution which provides best value for money overall. The provision of this additional equipment has been highlighted as an urgent requirement to expand the number of vehicles which carry this added to ensure greater operational resilience and BCS have moved at pace to support the requirement. The additional equipment is required to match that which already exists and if different equipment was obtained the LFC would incur a substantial cost for retraining all firefighters as well as delaying the roll out of the additional equipment. It will be necessary to award a contract to the existing supplier (who was appointed following a competitive tender) without a further competition to avoid the costs of additional training and ensure that the equipment is provided quickly.

## 10. Communications comments

- 10.1 Fire stations will be advised via the LFB internal intranet, and each FEE will have a technical note including delivery timescales.
- 10.2 All staff will be informed of this provision via e-mail and Hotwire.

## 11. Financial comments

- 11.1 The annual revenue budget, for the maintenance element of the whole life cost for the 44 new sets of equipment, will be provided from a permanent virement as agreed between Technical & Service Support (TSS) and the Commissioner's Office. The permanent virement of £4.4k per year is based on the average of the overall 10-year maintenance cost of £44k. The virement is expected to be funded from an existing underspending budget to be identified within Operations.
- 11.2 This report is requesting to commit capital expenditure of £148,000 including 10% contingency for the purchase of Forced Entry Equipment. As this will be funded through a reserve drawdown there will be no additional borrowing costs factored into the capital programmed.

## 12. Legal comments

- 12.1 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.
- 12.2 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").
- 12.3 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...". The decision to purchase and maintain new Forced Entry Equipment at a cost of up to £192,000 will therefore require approval from the Deputy Mayor.
- 12.4 The proposed recommendation is also for the London Fire Commissioner to delegate authority to the Assistant Director, Procurement and Commercial to make final decision regarding the purchase of Forced Entry Equipment referred in this report, which is permitted under Part 4 of the LFC Scheme of Governance.



- 12.5 The statutory basis for the actions proposed in this report is provided by sections 7 and 5A of the Fire and Rescue Services Act 2004 ("FRSA 2004"). Under Section 7 (2)(a) FRSA 2004 the Commissioner has the power to secure the provision of personnel, services and equipment necessary to efficiently meet all normal requirements for firefighting. Furthermore, Section 5A allows the Commissioner to procure personnel, services and equipment they consider appropriate for purposes incidental or indirectly incidental to their functional purposes.
- 12.6 The report confirms the provision of Forced Entry Equipment will be secured via an existing contract with Babcock, which was tendered compliantly in accordance with the Public Contract Regulations.

## List of appendices

Appendix	Title	Open or confidential*
1	None	

## Part two confidentiality

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

**Is there a Part Two form:** NO