

LFC Strategic Bulk Fuel monitoring system

Report to:

Investment & Finance Board.....	21 May 2026
Commissioner's Board	10 June 2026
Deputy Mayor's Fire Board.....	30 June 2026
London Fire Commissioner	

Date:

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Report classification:

For decision

For publication

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

Values met

Service
Teamwork
Courage

PART ONE

Non-confidential facts and advice to the decision-maker

The London Fire Commissioner (LFC) is required to hold strategic fuel reserves at London fire stations. The strategic fuel reserves form part of the National Emergency Plan for Fuel (NEP-F) commitment via the Department for Energy Security and Net Zero (DESNZ). The London Fire Brigade (LFB) has 37 strategic bulk tank locations and a total capacity of 201,000 litres. To provide evidence to NEP-F database LFB uses a remote fuel monitoring system which records fuel used and quantities of fuel held in stock.

Executive Summary

The strategic bulk fuel tank monitoring system is currently 26 years old and because of redundancy is due for replacement. Sending the data of fuel used and quantities held in stock uses an outdated type of communications and as with most electronic devices, the technology has improved since inception. This system has been unavailable to use, since August 2025 when 2G SIM (Subscriber Identifier Module) cards were withdrawn from sale requiring manual fuel monitoring to be undertaken

LFB have been investigating replacements. The solution requires that the electronic monitoring system is replaced with a new design and the communications are changed from a 2G SIM card to a 5G SIM card solution. This will enable LFB to communicate directly with each tank monitoring system and download quantities and fuel dispensed data at pre-determined intervals.

For the London Fire Commissioner

The LFC agrees that a contract for Strategic Bulk Fuel monitoring system will be entered into in accordance with the arrangements set out in Part Two of this report.

1 Introduction and background

- 1.1 The existing method of recording the quantities and dispensing of fuel is now outdated and the equipment used has been identified as obsolete.
- 1.2 The London Fire Brigade in response to providing evidence of the quantity of reserve fuel held in stock installed a remote monitoring system during 1999. The system consists of an electronic device to record fuel levels and how much fuel is dispensed to appliances and operational LFB vehicles.

- 1.3 The system also acts as a security measure to ensure that only authorised users can charge fuel tanks from the strategic reserve. Without a fuel card the dispensing equipment is locked, and the fuel pumps will not operate.
- 1.4 The monitoring system communicated to LFB via a 2G SIM card supplied by LFB information technology team. The mobile telephone operators no longer supply 2G SIM cards. IT security team declared these machines posed a cyber security risk and should be discontinued from use.
- 1.5 Following a comprehensive review of the current system a solution which only provided a new modem able to work with a 5G SIM card was identified and costed. However, this add-on solution would not meet the Brigades ICT security requirements and has therefore been rejected in favour of a full replacement of the monitoring system.
- 1.6 Enquiries were made to find an acceptable monitoring system. This requires the entire single board computer monitoring system to be replaced and alleviates the requirement for a separate SIM card modem. This new solution would use all of the existing sensors, fuel pumps and tanks.
- 1.7 The existing fuel cards held by appliances and LFB staff will work with the new monitoring system, meaning roll out of the new system will provide an easily fulfilled solution. New fuel cards will not be required.
- 1.8 The new revised system has undergone a complete IT security review and has been declared as a marked improvement and will increase the Brigades IT cyber security requirements.
- 1.9 The cost of the new monitoring system is significantly higher than the solution identified in 1.6 and is also provided within Part 2.

2 Objectives and expected outcomes

- 2.1 The expected outcome will provide a fully functioning bulk fuel monitoring system, which can be interrogated remotely by LFB teams, this includes Central Operations, Property and Fleet.
- 2.2 The data from the monitoring system will be emailed to an ICT approved multi-use email address on a daily basis which would provide data which will be held and recorded to complete any requested audit trail.
- 2.3 Presently the station crews that have a strategic fuel tank record the stock levels on a weekly basis and record this on the Hotwire record log. As the new system will be recording this data the manual recording by crews can be reduced or stopped.

2.4 Values Comments

- 2.5 Geopolitical instability has the potential to create UK fuel shortages. In the interim, the Central Operations team worked with **courage** and step up to the challenge of manually recording and logging data.
- 2.6 The increased security from the new system means LFB are acting with **integrity** and providing honest feedback in identifying the existing system was a risk to IT cyber security.

3 Equality Comments

- 3.1 The LFC and the Deputy Mayor for Planning, Regeneration and the Fire Service 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.
- 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:
- eliminate discrimination, harassment and victimisation and other prohibited conduct.
 - advance equality of opportunity between people who share a relevant protected characteristic and people who do not share it.
 - 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:
- 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.
- 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 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:
- tackle prejudice
 - promote understanding.

- 3.8 The bulk fuel monitoring system will be a cloud-based service and will be accessible by nominated LFB personnel and is not expected to disadvantage any staff member with protected characteristics.
- 3.9 The Fuel dispensing equipment will not change under this proposal and whilst further checks have been made towards ensure the use of this equipment fully meets the equalities requirements in addition to the existing arrangements from when the systems were installed 26 years previously.

4 Other considerations

Workforce comments

- 4.1 This solution will mean that on a weekly basis the fire station crew will no longer need to record and report to Central Operations the fuel tank levels manually. As the system is a fully automated function it should also reduce the possibility of error.
- 4.2 The automatic recording system provides daily levels which can cross checked to identify any potential leaks or erroneous usage.

Sustainability comments

- 4.3 This report discusses the implementation of a fully functioning bulk fuel monitoring system. The implementation of an automated, robust and accurate reporting method for the quantities of bulk fuel used supports the ongoing carbon reporting data required by the Sustainable Development Team. This report does not introduce any significant sustainability impacts. Where new policies and/or corporate projects arise, they are subject to the Brigade's sustainable development impact assessment process.

Procurement comments

- 4.4 This requirement will be sourced in accordance with the relevant procurement regulations and the Brigades Scheme of Governance.
- 4.5 A procurement strategy will be jointly developed between procurement and the carbon net zero team to identify the best compliant route to market which will source the best value solution factoring in all the competing objectives of this requirement.
- 4.6 The following routes have been identified as compliant routes to market. These routes will be explored and compared to establish which route will compliantly deliver the brigades operational requirements, whilst demonstrating value for money.
- The Hard FM supplier ABM. The Hard FM contract allows for minor works to be carried out via the supplier's supply chain.
 - The GCA framework (National Fuels 3 RM6305, Lot 4) which can be used to source fuel tank monitoring equipment.

Communications comments

- 4.7 The proposed recommendation(s) will have an impact on people or service provision, It is recommended that communications to staff and stations follows this paper.

- 4.8 The situation in the global fuel security risks has the potential to create fuel shortages within the UK. The current issues relating to LFB strategic bulk fuel has the potential to be misused by re-filling unauthorised vehicles. Communications that the new system being installed is robust would be of benefit.
- 4.9 The current provision of EV charging equipment at LFB is being changed to a new provider with a different staff charging methodology. Fleet TSS team has provided information on how this is completed and published onto Hotwire
- 4.10 It is recommended that all staff located at the 37 strategic fuel site locations are informed. This should take place during the implementation phase of this project delivery.

5 Financial comments

- 5.1 This report seeks authority to commit capital expenditure for the purchase of new strategic bulk fuel monitoring systems across 37 strategic fuel locations. The purchase and implementation of these systems will take place in the 2026/27 financial year. The funding source is from LFB's 2026/27 Capital Programme. While individual monitoring units at each site are below the £20k capitalisation threshold, they are functionally interdependent and operate as a unified corporate network to fulfil LFB's strategic commitments under the National Emergency Plan for Fuel (NEP-F). The system is managed as a single functional network. The total cost will be recognised as a single Grouped Capital Intangible Asset in accordance with IAS 38.
- 5.2 Budget cover is available for the purchase of the systems in 2026/27. The supplier will provide the cloud-based back-office function free of charge in 2026/27, LFB would then be charged an annual fee from 2027/28 onwards which is currently budgeted for within the Facilities Management revenue budget.
- 5.3 Consideration should be given to providing a budget for the monitoring system to be updated during the next 10 years. This would ensure the system remains functionable and meets the cyber security requirements in the future.

6 Legal Comments

- 6.1 Under section 9 of the Policing and Crime Act 2017, the London Fire Commissioner (the "LFC") 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 LFC 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 LFC would require the prior approval of either the Mayor or the Deputy Mayor. Paragraph (b) of Part 2 of the said direction requires the LFC to seek the prior approval of the Deputy Mayor before "[a] commitment to expenditure (capital) 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 LFC to purchase an updated Strategic Bulk Fuel Monitoring system which has an estimated cost exceeding £150,000 and is set out in full in Part 2 of the report.

- 6.4 The arrangements proposed is consistent with the LFC's duty under section 7 (2)(a) of the Fire and Rescue Services Act 2004 ("2004 Act") to secure the provision of personnel, services, and equipment necessary to efficiently meet all normal requirements for firefighting and under section 5A of the 2004 Act to do anything it considers appropriate for the purposes of the carrying out of any of its functions.
- 6.5 The report sets out details for the proposed compliant procurement.

List of appendices

Appendix	Title	Open or confidential*
1	SDIA	Open
2	EIA	Open

Part two confidentiality

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Is there a Part Two form: YES