



LONDON FIRE BRIGADE

Report title

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## Procurement of Mobile Data Terminals, Tablets and Satellite Navigation Devices

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Report to

**Corporate Services Directorate Board**  
**Operational Delivery Board**  
**Commissioner's Board**  
**Deputy Mayor's Fire and Resilience Board**  
**London Fire Commissioner**

Date

15 March 2022  
23 March 2022  
06 April 2022  
26 April 2022

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Report classification

**For Decision**

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The subject matter of this report deals with the following LFC strategic priorities :

**Delivering Excellence**

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Report number – LFC-0692

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For Publication

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### **PART I - NON-CONFIDENTIAL FACTS AND ADVICE TO THE DECISION-MAKER**

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#### Executive Summary

The report is seeking authorisation to replace all Windows 10 Mobile Data Terminals (MDTs), windows 10 tablets and satellite navigation devices (sat-nav) that are currently installed in a range of vehicles used by the LFC.

MDTs, tablets and sat-nav devices provide essential information to crews operating both on the way to and at incidents. The current hardware is at the end of its useful life and needs to be replaced to ensure that it can continue to be supported and receive updates.

By ensuring that new up to date equipment is procured, the LFC will be able to take advantage of new hardware capability, particularly in respect of being able to run modern operating systems, whilst reducing failure rates associated with older equipment.

### **For the Deputy Mayor**

That the Deputy Mayor for Fire and Resilience authorises the London Fire Commissioner to commit capital expenditure of up to the amount referred to in the part 2 report, for the purposes of procuring new mobile data terminals, windows-based tablets and satellite navigation devices and associated components.

*This LFC decision will only be taken after further consultation with the Greater London Authority's finance and legal advisers and Corporate Investment Board.*

### **For the London Fire Commissioner**

That the London Fire Commissioner approves capital expenditure up to the amount referred to in part 2 of this report, for the purposes of procuring new mobile data terminals, windows-based tablets and satellite navigation devices and associated components.

That the London Fire Commissioner delegates authority to the Assistant Director Technical and Commercial to award a contract up to the amount referred to in part 2 of this report, for the purpose of procuring new mobile data terminals, windows-based tablets, satellite navigation devices and associated components.

## **1. Introduction and background**

### **Mobile Data Terminals**

- 1.1. The current MDT's, tablets and sat nav devices deployed in the LFC fleet have been in use since mid-2017. Together these devices make an essential contribution to front line service delivery.
- 1.2. The MDTs are used specifically to allow operationally relevant data to be accessed by crews on the way to and at incidents. The information provided on the MDT is largely map-based using AZ maps to show large areas, but with the ability to zoom into specific streets and buildings (using OS MasterMap).
- 1.3. The map shows the vehicle position at all times using GPS (AVLS). On maps the following data is available to be displayed to crews:
  - Hydrant locations, including emergency water supplies and operating status (from the LFB hydrants system),
  - Building risk information including access to tactical and en-route plans on the Operational Risk Database (ORD),
  - Oxygen cylinder locations (using data supplied by the NHS).

- Overlays, including the Thames river grid, and Sites of Special Scientific Interest (SSSIs).
- Location of the Incident and the appliance, the map level will automatically adjust the closer the appliance gets to the incident.
- Measurement tool that can be used for area, distance and number of hose lengths required for the measured distance.

1.4. In addition to the data available on/via the maps, the MDTs provide:

- Mobilising messages – receipt of mobilising messages and the sending of status messaging
- General information such as standard operating procedures (aide memoires) and policy notes

1.5. The MDT has a number of modes which display different types of data (operational risks etc.), all of which are accessed via the touch screen interface menu system. The devices are fitted to the cabs of all first responder operational appliances (e.g. pumping appliances, Fire Rescue Units, Aerial appliances) enabling crews to access incident orderings, messages and the operational data described above. The software in use on the MDTs is a commercial off the shelf (COTS) product and is provided by Airbus Industries. This application is widely used amongst Fire and Rescue Services in the UK and beyond.

1.6. The receipt of mobilising messages and the ability to send status messages to Brigade Control, is achieved via integration with the mobilising system using the 'Airwave' network. A gateway service provided by Airbus facilitates this communication.

1.7. Data held on MDTs is updated using the LFC Local Area Network (LAN) located in all fire stations. When the appliance is in (or near to) the appliance bay, updates are wirelessly sent to the units and are only applied to the live system when complete. If the appliance leaves the bay at any point before data transfer is completed, the process is suspended and will resume the next time the appliance returns to the bay.

## **Windows 10 Tablets**

1.8. The LFC deployed Windows 10 tablets to over 142 front line vehicles (pump and pump ladders) and command support units (CSU), when the last MDT refresh was carried out. These devices are deployed in the rear of the appliance cab. The ruggedised nature of the tablets means that crews are able to use them both en-route to incidents, at the incident ground and whilst undertaking other outside duties. The tablets are stored in a specific stowage area on each appliance providing recharging facilities.

1.9. As part of the last MDT refresh project the LFC deployed Windows 10 tablets to all front-line vehicles (pump and pump ladders) and Command Support Units (CSU). As the fleet has evolved over the last five years, tablets have been introduced to other vehicles including Fire Rescue Unit (FRU) and additional tablets have been deployed to the CSU to facilitate the use of the Fire Survival Guidance (FSG) application. These devices are deployed in the rear of

the appliance cab. The ruggedised<sup>1</sup> nature of the tablets means that crews are able to use them both en-route to incidents, at the incident ground and whilst undertaking other outside duties. The tablets are stored in a specific stowage area on each appliance providing recharging facilities

- 1.10. These devices are used to access a number of applications including the Operational Risk Database (ORD), Crash Recovery System (CRS) which allows crews to easily access all vehicle safety information directly at the scene, chemical data and the FSG App and the Appliance Workload App (AWA) . However, the tablets do not use the Airwave secure digital radio bearer, instead using 4G connectivity. This means the devices can be used away from the appliance, without the security constraints imposed on the MDTs , that connect to the Airwave system.

## **Satellite Navigation Devices**

- 1.11. Sat-nav devices are deployed in all vehicles with a mobilising call sign throughout the Brigade. The devices use a 4G secure bearer to interface to the Vision mobilising system (via a gateway supplied by Airbus).
- 1.12. The interface to the mobilising system allows the sat nav to receive a message from Vision and to subsequently plot a route to the incident (taking account of certain pre-defined factors such as the height and weight of the vehicle). This is in addition to allowing status updates.
- 1.13. Special appliances (such as operational support units and turntable ladders) use the sat-nav devices to receive mobilising details, as these vehicles generally do not have MDTs fitted.

## **2. Objectives and expected outcomes**

- 2.1. The objective of the report is to secure authorisation to procure replacement MDTs, tablets and satellite navigation devices. Once the procurement has completed, the project team will work with colleagues in fleet and externally with Babcock to ensure that the replacement equipment is deployed as efficiently as possible.
- 2.2. It is likely that the new equipment will be deployed when vehicles are scheduled for their regular maintenance slots, to avoid the necessity to remove the vehicle from operational use.
- 2.3. Once the new hardware has been successfully deployed, crews will benefit from being able to use modern, high speed, secure equipment that will ensure access to information on-demand in a variety of environments.

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<sup>1</sup> Ruggedised refers to a process whereby laptops / tablets are built with protective coverings and designed to withstand being dropped and exposed to moisture, to ensure maximum system availability.

- 2.4. Replacement MDT and tablets will run the Windows 10 operating system but will be capable of running Windows 11 in the future. However, applications currently in use will need to be certified and tested to run on Windows 11 prior to deployment.
- 2.5. A breakdown of the devices to be procured is set out in “Appendix A – vehicle deployment list” of this report which identified a total of 332 Satellite devices, 233 tablets and 216 MDTs (includes 20 percent spares contingency which is set out in Appendix A – vehicle deployment list of this report).
- 2.6. A significant spares holding is required to ensure that as devices fail, replacements are immediately available, whilst defective devices are processed through the repair loop. In addition, devices are required for software testing purposes (i.e., new releases of apps).

### **3. Equality comments**

- 3.1. 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.
- 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 persons 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, 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:
- tackle prejudice
  - promote understanding.
- 3.8. An Equalities Impact Assessment (EIA) has not been carried out in respect of this report. The devices to be procured will be very similar to those already installed in LFC vehicles and therefore it is not considered that there will be any change to the working environment.

#### **4. Other Considerations**

##### *Workforce comments*

- 4.1. The LFC does not propose to consult further in respect of this report.

##### *Procurement and Sustainability*

- 4.2. A number of frameworks have been considered for use to tender this requirement, and a decision has been made to utilise the LPP (London Procurement Partnership) Information, Management & Technology (IM&T) Framework which consists of suitably experienced, capable, qualified and resourced suppliers available for use by local authorities and third sector organisations as well as NHS Trusts, clinical commissioning groups, GP services and other health and social care providers within the United Kingdom and Northern Ireland. This framework offers suitable terms and conditions, competitive rates, and a sufficient number of value-added resellers to encourage competition. It is also accessible to the London Fire Commissioner.
- 4.3. Collaboration with the NFCC for a CCS (Crown Commercial Service) aggregation has been considered. However, on further investigation the timescales do not align and nor does the contract duration. Therefore, this option has been discounted. Collaboration with the GLA has been investigated and we have been advised that there are no suitable contracts in place that we can use for this procurement.
- 4.4. Any new procurement activity will need to be undertaken in line with the GLA group Responsible Procurement policy. As part of the delivery of this policy, the Greater London Authority group has affiliated with *Electronics Watch*, which requires the inclusion of additional terms and conditions for contracts with significant hardware purchases. The terms aim to improve the transparency of the supply chain and management of any non-compliance with labour standards identified with the support of *Electronics Watch*. Where hardware replacement of considerable value forms part of the requirement for any of the

options proposed, additional terms covering ethical sourcing will need to be included in the tender or re-negotiation.

## **5. Financial comments**

5.1. Please refer to the part 2 report.

## **6. Legal comments**

- 6.1 Under section 9 of the Policing and Crime Act 2017, 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 for Fire and Resilience (the Deputy Mayor).
- 6.3 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 or revenue) of £150,000 or above as identified in accordance with normal accounting practices...”.
- 6.4 The Deputy Mayor's approval is accordingly required for the LFC to enter into a contract for the provision of new mobile data terminals, windows-based tablets, satellite navigation devices and associated components at a cost of up to the amount referred to in part 2 of this report.
- 6.5 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 LFC has the power to secure the provision of personnel, services and equipment necessary to efficiently meet all normal requirements for firefighting; and section 5A allows the LFC to procure personnel, services and equipment they consider appropriate for purposes incidental or indirectly incidental to their functional purposes.
- 6.6 This report confirms the provision of new mobile data terminals, windows-based tablets, satellite navigation devices and associated components shall be secured via the LPP (London Procurement Partnership) Information, Management & Technology (IM&T) Framework which was tendered compliantly in accordance with the Public Contract Regulations 2015.

### List of Appendices

Appendix	Title	Open or confidential
1.	Appendix A – vehicle deployment list	Open

**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 – YES**

**ORIGINATING OFFICER DECLARATION:**

Drafting  
officer to  
confirm the  
following  
(✓)

**Drafting officer**

Julian Martin has drafted this report and confirms the following:

**Assistant Director/Head of Service**

Julian Martin has reviewed the documentation and is satisfied for it to be referred to Board for consideration.

**Advice**

The Finance and Legal teams have commented on this proposal;

Saminara Raman Legal Advisor, on behalf of General Counsel (Head of Law and Monitoring Officer)

David O'Sullivan Financial Advisor, on behalf of the Chief Finance Officer



## Fleet Summary

Type	Description	Stars Call Sign	ACTIVE	RESERVE	TRAINING	Total	SatNav	Tablet	MDT
AWD	All Wheel Drive	Y	1			1	1	1	1
BFU	Bulk Foam Unit	Y	3			3	3	3	0
CSU	Command Support Unit	Y	8	1		9	8	16	7
DIM	Detection Identification and Monitoring	Y	3			3	3	3	3
Fireboat	Fire Boat	Y	1	1		2	1	1	
FRU	Fire Rescue Unit	Y	14	4	1	19	14	14	14
HVP	High Volume Pump	Y	5		1	6	5		
HLU	Hose Layer	Y	4	1		5	4		
MDU	Mass Decontamination Unit	Y	4		1	5	4		
PM	ND Prime Mover	Y	18		7	25	18		
OSU	Operational Support Unit	Y	6	1		7	6		
DPL	Pumping Appliance	Y	144	27	17	188	188	144	144
TL	Turntable Ladder	Y	1	1		2	1	1	1
TLA	Turntable Ladder 32m	Y	9	3		12	9	9	9
TLE	Turntable Ladder 64m	Y	1		2	3	1	1	1
HDU	Heavy Distribution Unit	N	1			1	1		
LRL	London Resilience Lorry	N	2			2	2		
MPV	Multi Purpose Vehicle	N	4			4			
MV	Medium Van	N	24		3	27			
USAR	Urban Search and Rescue	N	17		3	20			
DHB	Double Hose Box	N	5		1	6			
FID	Dog?	N	1			1	1		
FIV	Fire Investigation	N	5			5	5		
FLT	Fork Lift Truck	N	4			4			
GPVH		N	1			1	1	1	
HP	Hydraulic Platform	N				0			
SSU	Scientific Support Unit	N				0			
MDR	Mass Decontamination Rerobe	N				0			
MRS	Medium Rescue Support	N				0			
ALP	Aerial Ladder Platform	N				0			
IRU	Incident Response Unit	N				0			
MDD	Mass Decontamination Disrobe	N				0			
MPC	Medium People Carrier	N				0			
Fleet Distribution			286	42	37	369	276	194	180
Spares							56	39	36
Total							332	233	216

## Key

Already done
Fleet Figures
Stars / Mobs
Required
Disposed