



Replacement Mobile Data Terminals MDTs

Subject: Procurement Report
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1. Background

A Mobile Data Terminal (MDT) is a ruggedised computer system mounted on nearly all front line response vehicles i.e Fire Engines, Command Support Units, Training Appliances, Specialist Vehicles and Kitted Spares, which has touchscreen capabilities and usually has a printer attached. MDTs are linked to Fire Control via the Airwave radio network and a secondary mobile network. This enables the vehicle location and availability status to be communicated through the MDT.

The MDT is a vital piece of equipment used by the Service to enhance Firefighter safety and delivering real-time GPS location information. It has become an integral part of how information supports operational decision making on the incident ground.

The existing MDTs provide operational personnel en route to incidents with the following:

- Data Communication with Fire Control and other appliances
- Mapping, addresses and overlays such as hydrants, flooded areas, pipelines
- Risk premises info – INTEL
- Operational aide memoirs known as ‘Handbook Files’
- Chemical Information – Hazchem
- Vehicle Safety Information for RTCs– CRASH Data

The current MDTs (Microbus PC3-1710) were purchased and fitted in 2012 and are now deemed obsolete technology and will not host modern operating software systems; the equipment is maintained by Hereford & Worcester Fire and Rescue Service (HWFRS) ICT & Intel Department. The Service is now in year six of a contract with an external contractor to maintain the current hardware and will need to renew, extend or terminate this contract in 2019.

‘SEED’ are the software manufacturers and programmers responsible for the software configuration within Fire Control and the MDTs. They provide software technical support, and fault resolution.

Hardware and software technological solutions are developing at a significant rate and replacement technological solutions procured today will need to be replaced more regularly than has been the case previously, therefore this proposal is based upon a maximum five year investment and lifespan.

This document aims to provide a clear and transparent rationale for how an appropriate mobile data terminals (MDTs) has been selected. The Service has assessed the appropriate procurement routes, the appropriate available devices and the relevant costs of those devices in determining the proposed way forward to replace the MDT hardware in 2019.

2. Service Review

The need to replace the current hardware

The review of the current MDTs in HWFRS has been completed through engagement/consultation via a multi-functional working group consisting of Service Delivery, GC Operational Policy, Risk Information Mapping and Data Manager, Fleet Manager, Equipment Manager and ICT department on their operational requirements. Market research has also been conducted to explore the most recent advances in technology and the suitability of products to meet the Service's User Specification.

Following this review it has been clearly identified that the existing MDTs are considered obsolete technology and software development has outgrown the current hardware specification. SMB approval has been obtained and funding allocated to replace all the MDT hardware in 2019. The existing MDT devices run on software systems that are no longer supported; therefore, the Service is increasingly vulnerable to product failure and inflated support costs through a very limited number of contractors.

Additional maintenance is also not something that can be easily achieved indefinitely as parts become increasingly bespoke and are no longer manufactured in large quantities, or held in stock by any UK supplier.

This is also supported by a large number of faults leading to a poor user experience and results in a lack of confidence in the equipment and is hosting outdated software.

The only viable solution for the Service is to replace the current hardware in its entirety

Proposed Way Forward

It is proposed that the replacement device should include some form of maintenance and support contract with a the supplier and this is to be included in any future procurement.

It is also proposed that any set up, configuration or installation (ICT) related services are, where possible, also outsourced as part of the replacement programme, this will reduce the reliance and capacity burden on the Service's internal ICT team and this is all in accordance with the Service's ICT strategy.

To enable the procurement to commence, the process begins with a review of the MDT User Specification, through the Multi-Functional Working Group. See **Appendix 1-** HWFRS Specification

The group identified that as mobile tablet technology is improving significantly it would benefit HWFRS to move to a mobile tablet solutions (as opposed to a laptop or built in computer type device), as they offer a 'swap in, swap out' facility when diagnosing problems, and may also offer additional functionality if the device were to be removed from the vehicle and could then be utilised a as mobile device 'on-scene'.

From a fault/maintenance perspective a removable tablet offers benefits in that the MDT could be easily and quickly unclipped from the docking station and replaced with a pre-loaded spare. If this fails to resolve the issue, the fault can then be identified as a direct hardware issue within the docking unit or rest of the vehicle technology supporting the MDT and a suitable engineer can be called in to rectify the fault. If, however the 'swap out' resolves the issue, the faulty tablet can be

sent back to Seed for a software fix, or back to the tablet supplier for hardware replacement or repair. This minimises down-time and the fault finding for front line vehicles.

The software providers (SEED) have also produced a second version of the existing software (MDT2.x) which provides greater functionality. MDT2.x cannot run on the majority of the existing MDTs provided within HWFRS.

The replacement tablet will need to perform the same tasks as the current MDT and will therefore require the same level of Airwave accreditation, so it will be stipulated that any device must be Certified for use on Airwave network and elements of the ESN network.

Market research indicates the manufacturers of the most suited rugged tablet type devices are:-

1. Panasonic
2. Getac
3. Dell &
4. Durabook

The Authority requires 76 MDT Devices nearly all supplied and fitted with cab mounts to be procured as a one off purchase. In addition an installation, maintenance and support contract will also be required.

The Shropshire Fire & Rescue Service (SFRS) requires 48 MDT Devices nearly all supplied and fitted with cab mounts to be procured as a one off purchase. In addition an installation, maintenance and support contract will also be required.

3. Procurement

The specification (**Appendix 1**) provides some key user and technical criteria allowing available routes to market to be explored.

- Procurement via the Open Market. There are numerous devices laptop, computer and tablet style on the market that could host the software and could be fitted by a range of suppliers; this would also allow the upgrade for MDT2 to take place. However this option is not preferable as the value of this procurement is above OJEU threshold and would require a specific OJEU compliant process to be undertaken. This route would impact on HWFRS as the time needed to carry out bid evaluations doesn't align with the ICT department resource capacity. There is also no guarantee that the outcome of the procurement process will make sufficient cost savings for HWFRS due the low quantity of devices being purchased and there are significant cost and capacity implications for undergoing such a procurement route.
- There is a compliant government framework that can meet our requirements, therefore legitimately negating the need to undergo a full open market OJEU process.
Crown Commercial Services (CCS), RM3733 Technology Service 2 Framework; Lot 1- Hardware.
CCS, a national public sector procurement framework, it offers a wide range of options and suppliers with heavily discounted public sector specific products. This framework complies with all appropriate and relevant legal requirements.

- The option for a national collaborative procurement was explored in 2017, which was lead by Dorset & Wiltshire Fire and Rescue Service (D&WFRS) on behalf of 7 Fire and Rescue Service. This procurement was run as mini competition by CCS via the RM3733 Technology Service 2 Framework- Lot 1- Hardware (Reference NFC74). Due to HWFRS ICT capacity to deliver a replacement MDT project HWFRS were unable to participate within this procurement exercise within the given timescale, following our initial expressed interest.

The aggregated procurement in this process brought together common Mobile Data Terminal (MDT) Tablet requirements, including the installation, for 7 different fire and rescue services, totaling 763 devices.

The D&WFRS competition was run through a national framework, as a two tier process Part 1; Trialing of the devices (**Appendix 2** RFI Evaluation) and Part 2; the Tender Process (**Appendix 2** Tender Specification), the documents following the conclusion of market research (**Appendix 3** Market Research) were produced by D&WFRS, in conjunction with the other 7 Fire Services Requirements.

The device purchased as a result of this process is the Panasonic CF33, supplied by Centraprise (reseller of Panasonic) the installation will be carried out by Centraprise contractor Mappel.

Running the aggregated procurement achieved an indicative saving of 26% when compared to a blend of average bid prices and market pricing (where available). This is the equivalent to a total saving of £807,000 for the customers who took part, giving a reduction or around £1000 per complete device package.

In terms of lessons learned from the aggregated procurement, HWFRS will consider the Following key points:

- Establish resource contingency to cover absences and ensure this resource is kept informed of the latest status and actions
- Version control documents
- Clarify evaluation strategy with all participating including the type and date of when information will be received by the evaluation team
- Timetable process and adjust, communicating to all involved as and when required, Include a critical path so that each Fire and Rescue Service (FRS) has time to follow internal governance and allow contingency.
- State a minimum warranty and ask for options in tender submissions
- Ensure the specification makes it clear the intended application and use
- Due to the success of the previous aggregated national collaborative procurement a repeat national exercise may be run in 2019, however no timescales or Fire Service has yet been identified to lead this procurement, making the viability of this aggregated demand not possible to determine at this time. HWFRS have only a limited window in relation to ICT capacity to undertake this procurement and implementation and it is not likely to align with any future national process.

As part of this procurement a standardised MDT specification has been drafted and produced by a team of FRS ICT expert volunteers co-ordinated by NFCC, which would need to be finalised as part of the process, with those FRS who express an interest in taking part.

See **Appendix 4**- National Standard Specification.

As individual Fire Services requirements are all likely to be similar there is benefit to pooling this effort to avoid duplication and facilitate the aggregation. The Fire and Rescue Services procurement role will mainly be a due diligence role of reviewing accuracy of documentation and providing progress updates so that Fire and Rescue Services are aware of how to engage and when.

After a review of D&WFERS specifications **Appendix 2** and NFCC national standardised specification **Appendix 4** the technical requirements fully align to HWFRS requirements in both capability and functionality **Appendix 1**.

Confirmation from NFCC and CCS has also confirmed that and devices identified in a future procurement exercise will be procured on a 100% price evaluation criteria following market research by Fire and Rescue Service having identified that this was the only solution which met the technical needs.

- The 'Firelink' Project Agreement (Airwave) is a national public sector procurement framework that HWFRS can access. Airwave is a national government led contract made directly with Home Office, which allows Motorola to supply and deal directly with all Emergency Services for a range of communication and emergency service specific devices including MDT's.

This is a fully managed service whereby Motorola (the company who deliver the Airwave contract), not only provide the network coverage but also the hardware, installations and maintenance.

Telent is the preferred support service company utilised in this instance by both HWFRS and Motorola- This would be advantageous for HWFRS as Telent hold current survey data for all the operational fleet of vehicles currently in use in HWFRS, and therefore this may reduce the overall contracted price to fit the Motorola product.

There are currently no MDT devices on the market that meet ESN C1 compliance and it is not anticipated there will be anytime soon, however Motorola are an approved contractor for ESN devices which could benefit HWFRS in the future, through forming a strategic relationship and obtaining compatibility and compliance with future device requirements.

This national Airwave contract currently runs to the end of December 2021 following an extension, so HWFRS would only be able to have a fully managed service for a maximum of 36 months under this agreement, however extensions to this could be obtained directly with the suppliers of any such devices.

Part of this core national contract includes a call-off catalogue for the provision of additional or replacement equipment. This process is rigorously monitored by the Home Office who manage the relationship with Airwave. See **Appendix 5**- Fire Product Catalogue 2017.

The MDT products in the catalogue are both relatively new additions (2017) and as such have undergone the testing and scrutiny required before being allowed to become part of this core contract. This allows HWFRS to buy directly from the Airwave catalogue without

the need for a formal tender process. This framework complies with all appropriate and relevant legal requirements.

This framework is HWFRS preferred option for procurement of the replacement MDT hardware, fitting and maintenance.

HWFRS have analysed the available documentation used by D&WFRS in their recent and extensive MDT replacement project, this provides HWFRS with efficiency through not repeating any such evaluation or process while still ensuring value for money (demonstrated below Section 4 Evaluation) for both purchaser and supplier by not repeating another process.

- An alternative route for HWFRS would be to purchase from Health Trust Europe framework as a Direct Award, but the benefits highlighted by using the Firelink Project Agreement outweigh this option.

4. Evaluation

Stage 1- Technical & Quality

Based on the recent outcome for D&WFRS tender exercise which was as extensive 2 stage process HWFRS are satisfied that the best overall offer in the market was obtained by taking into consideration both price and non-price factors. For which sealed bids were received simultaneously from 3 suppliers, opened and evaluated on a specified deadline date leading to award of the contract to Centraprise for the Panasonic CF33.

The awarded device above is available as a direct purchase immediately from Motorola through the Firelink Airwave framework, and Motorola have confirmed that the required number of devices are currently in stock, thus reducing the normal 12-14 week lead time. Procurement for this device through this framework mitigates the need to repeat the tender exercise based on the aligned specifications which are virtually identical.

Stage 2- Price

A cost comparison and evaluation was carried out on prices supplied by Motorola as part of the Firelink Project Agreement (Airwave) and the recent National Collaborative Procurement lead by D&WFRS to ensure that we are able to demonstrate value for money by direct awarding without the need of running a competitive process (these costs have not been published due to commercial sensitivity), however adequate data has been supplied to enable a reasonable evaluation.

Based on the purchase of:-

- Demountable MDT Device; Panasonic CF33
- Power Supply
- Vehicle Dock

Costs are on a like for like basis when compared to those awarded by the D&WFRS collaborative group.

Based on the recent National process (CCS/D&WFRS) pricing schedule HWFRS have been able to estimate a saving of £42.86 per device, power supply and dock if purchased directly from the Firelink Project Agreement instead of running a further competition via the CCS framework RM3733 Technology Service 2 Framework; Lot 1- Hardware.

This would be an indicative saving of 1% for HWFRS when compared to those prices of the D&WFRS procurement, making a total of £5,537.36 based on the 76 devices, power supply and dock required by HWFRS.

Estimated contract Value for HWFRS £296,493.48

- CF33 Devices £239,400 and Fully Managed Support £57,093.48 (total over 36 months)

Estimated contract Value for SFRS £296,493.48

- CF33 Devices £151,200 and Fully Managed Support £36,036.36 (total over 36 months)

5. Recommended Decision

Based on the national evaluation (D&WFRS) Motorola Solutions is awarded HWFRS and SFRS contract for the procurement of the CF33 Panasonic MDTs devices over the other offerings available on the open market, via the Firelink Framework as a direct award.

This procurement route has been agreed at SMB and by Fire Authority Group Leaders (July 2018), in conjunction with the DCFO, and Head of Legal Services/Monitoring Officer.

Due to the co-ordinating need/timescales and interoperability HWFRS and SFRS will both purchase these devices.

The devices will be purchased individually by each Authority although through further negotiation with Motorola, there is an agreement to honour the price break of over 100 units combined by both Authorities, even if ordered separately (due to each services internal approval process), but will work together in the implementation as a joint collaborative exercise.

Airwave will provide the Panasonic CF33 'package' with ongoing support/repair.

This package includes:

- Vehicle survey and design amendments
- Airwave reference system approval costs
- Roll out project management from Telent
- Support from Airwave Technical authority and service management team
- Tablet
- Power Supply
- Dock
- Replacement 4G antennae
- Grab handle (Which can be left on when in the dock)
- A genuine fully managed service, with ongoing support for 3 years.
- Cover for the vehicle installation
- Management of any repairs

HWFRS & SFRS purchased the above package on 21st September 2018.

6. Projected Efficiencies

HWFRS will benefit from using the Firelink Framework as it is: quick and easy to use, no sign up fee, quantity price breaks available of over 100 units.








The Authority also made non cashable savings due to using the National Airwave Framework and not having to run a full tender process, which can involve an extensive and lengthy process with high demands on staff and additional risks of legal challenge from suppliers.

The catalogue is subject to indexation (2018 4.3%) which has been held back by Motorola if purchased by both services before the 15th September 2018.

Collaborative purchase with SFRS has also resulted resilience and interoperability through the Joint Emergency Services Interoperability Programme (JESIP) and Command Support Incidents.

7. Full Audit trail

<http://sharepoint1/sites/Procurement/Contracts/ICT/HWFRS54%20Mobile%20Data%20Terminals/Forms/AllItems.aspx?RootFolder=%2Fsites%2FProcurement%2FContracts%2FICT%2FHWFRS54%20Mobile%20Data%20Terminals%2FMotorola&FolderCTID=0x01200026721808587F614EA05A1FA47F712441&View={49EA6B8F-671F-41A1-B094-F30FD0D54973}&InitialTabId=Ribbon%2ELibrary&VisibilityContext=WSSTabPersistence>

<p>Appendix 1- HWFRS and SFRS Specification</p>	 Technical Specification for MDT
<p>Appendix 2- National Collaborative Tender Documents D&WFRS (DRAFT)</p>	 RFI Evaluation.docx  NFC74 ITT Annex E Statement of Require  Technical Specification for Fixer
<p>Appendix 3- Market Research</p>	 MDT Market Research.docx
<p>Appendix 4- National Standardised (DRAFT) Specification</p>	 Standardised MDT Specification ..xlsx
<p>Appendix 5- Fire Product Catalogue</p>	 Fire Product Catalogue 2017 V8.2