

report

meeting	NOTTINGHAMSHIRE AND CITY OF NOTTINGHAM FIRE AUTHORITY	
date	1 AUGUST 2003	agenda item number

REPORT OF THE CHIEF FIRE OFFICER

VEHICLE MOUNTED DATA SYSTEM PROJECT - UPDATE

1 PURPOSE OF THE REPORT

To update Fire Authority Members on the progress of the Vehicle Mounted Data System Project (VMDS).

2 BACKGROUND

- 2.1 The Service has given the provision of VMDS a high priority within the projected workload of Information Services. This priority is based upon the recognised need to have accurate information on premises, processes and risks with fire crews when they attend incidents. The provision of reliable and accurate risk information is considered to be a high health and safety priority.
- 2.2 VMDS is a ruggedised touch sensitive computer system that is mounted in the appliance. Risk data on premises and processes along with control measures is accessed via a mapping based display system with hypa-linked icons to locally stored data.
- 2.3 Given the quantity of data now held by the organisation, the speed of information changed/collection and the problems with keeping the information consistent throughout the organisation, a computerised system is the only effective solution to the handling of information.

3 REPORT

- 3.1 The tendering process has begun with the OJEC notice being issued on the 10 June 2003. The completion date for this is the 17 July 2003, the invitations to tender will be posted out to the companies responding to the OJEC on the 18 July 2003. The closing date for completed tenders is the 27 August 2003, with the contract being awarded during September 2003 and commencing in October 2003. The project is on schedule.
- 3.2 In order to achieve the project within the given time-scale, implementation to begin by April 2004 and budget allocation £300K in total (£200K in year 2003/04 and £100k in year 2004/05), it was deemed necessary to take a phased approach to this project.
- 3.3 Phase 1 was to be the provision of the in-cab equipment and the back office software to manage the data and the system. The installation of wireless LAN to the station to enable the maintenance of the data. The development and training of the end users.
- 3.4 Phase 2 was to be the link between Mobilising Systems (MOBS) and the Management Information System (MIS) to provide an end to end system, together with further enhancements to the systems provided in Phase 1.

- 3.5 The phased approach was adopted so as to meet budget requirements, allow technology to develop and be introduced in a controlled fashion.
- 3.6 Following discussions with suppliers it has been identified that an end to end solution to our VMDS needs is preferable and would result in greater assured integration and functionality at the same cost.
- 3.7 This extra functionality will include a data bearer in the form of General Packet Radio Service (GPRS) which uses mobile data technology to link the mobilisation from Control directly into the appliance VMDS unit. The result of this is that when an appliance is mobilised instead of having to enter the location of the incident manually into the in-cab computer the data signal will be sent by the VMDS gateway to the unit in the appliance and the screen will be activated and will display the location of the incident on the map. If the incident is a known risk site it will also be signalling this fact on the screen.
- 3.8 This development leads onto the possibility of including full (Automatic Vehicle Location System (AVLS) without further enhancements at the appliance or within the gateway software. The only additional requirement to provide AVLS will be in the display end at Control as the infrastructure would already exist. AVLS if enabled would enhance dynamic mobilising as the nearest geographic resource could be dispatched to the incident rather than the allocated station resource.
- 3.9 A second major advantage of the data link is that the mobilisation message can be sent to the appliance whether it is on or off station. The signal can be linked to an alarm to alert the crew to a message without the need to use the voice radio. This will remove the need to use the voice radio for routine messages and so elevate possible address confusion. This should lead to more accurate collection of information as it will be collected and stored whilst still on the incident ground rather than from memory on return to station.
- 3.10 Also the VMDS may be configured to support the MIS and allow the Officer in Charge (OIC) to complete the incident final page whilst still mobile and the information will be transmitted back to the MIS either by the data bearer or via the wireless LAN on return to station. The OIC would only then have to use the station computer if a full FDR1 is required for the incident, however, much of the form will already have been completed.
- 3.11 The National Replacement Radio Project recently issued Guidance Note 23 which is entitled "Firelink – Mobile Data Applications Implemented before Delivery of the National Radio System". This outlines what Firelink will provide. An extract from the document regarding the Firelink linkages to VMDS is reproduced below.

"It is also intended that (Firelink) mobile terminals will support further data applications, however, there is no guarantee that any pre-existing (current Service's VMDS) data applications used by Fire Services will be supported by Firelink, nor where this is possible that Firelink will meet the costs associated with the integration" (Appendix 1).

The Service is in discussions with HMFSI to ensure that our VMDS contract will specify compatibility/adaptability with the Firelink solution.

- 3.12 Given the fact that the provision of this risk data is an issue that can be resolved now, and that the Firelink Bearer may not be in until December 2007, it is intended that the project should progress, with the contractual caveats specified above. To stop the project and wait for Firelink to complete its work would be in firefighter safety terms a very high risk strategy.

4 FINANCIAL IMPLICATIONS

- 4.1 Early indications are that, even with the extension (as set out above) it could still be achievable within the allocated budget. The estimated cost of the end to end system at the present time are in the region of £260K - £280K. There will, in addition to this, be the cost of a GPRS module for each appliance of approximately £100 per unit therefore in the region of £4k - £4.5k.
- 4.2 There will be some ongoing costs with regard to the transmission of data over a GPRS system, but this may be purchased as a block data package i.e. 10 megabyte per month across the Service from a supplier such as 'Orange' on an agreed price per month. Research is with regard to the amount of data that would be transmitted per month to allow the cost to be estimated.

5 PERSONNEL IMPLICATIONS

- 5.1 There are no personnel implications arising from this report.

6 EQUAL OPPORTUNITIES IMPLICATIONS

- 6.1 There are no equal opportunities implications arising from this report.

7 RISK MANAGEMENT IMPLICATIONS

- 7.1 The implementation of VMDS will have an impact on the Risk Management of the Service. The system will reduce the risk the organisation is exposed to by improving the management of risk.

8 RECOMMENDATIONS

- 8.1 That Members note the content of this report. Further information will be presented to the Fire Authority as to the actual cost that these further enhancements will have once the tenders have been received.

9 BACKGROUND PAPERS FOR INSPECTION

Firelink Guidance Note 23 attached.

P. Woods
CHIEF FIRE OFFICER



**CIVIL RESILIENCE
DIRECTORATE
Firelink
National Radio Strategy**

**OFFICE OF THE
DEPUTY PRIME MINISTER**

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Dear Colleague

GUIDANCE NOTE NUMBER 23

**FIRELINK - MOBILE DATA APPLICATIONS IMPLEMENTED BEFORE
DELIVERY OF THE NATIONAL RADIO SYSTEM**

At its last meeting, the *Firelink* Project Board decided that it would be useful to remind brigades about the need to exercise caution in implementing mobile data solutions in the period leading up to the realisation of *Firelink*.

It is intended that *Firelink* will provide a speech and a data bearer and that it will include a number of data applications, including AVLS, Status and messaging. (Further guidance on what will be provided by Firelink can be found in the *Scope of Supply* summary document on the *Firelink* web site at www.Firelink.org.uk). It is also intended that mobile terminals will support further data applications. However, there is no guarantee that any pre-existing data applications used by brigades will be supported by *Firelink* nor, where this is possible, that *Firelink* will meet the costs associated with the integration of existing data applications.

Brigades are therefore asked to bear this in mind in relation to any mobile data solutions that they are considering implementing in the interim period. They should regard such applications as having a limited viability determined by the *Firelink* implementation programme and consider any costs in that context. Whilst it is not possible, at this stage, to give anything approaching a firm indication of Firelink timescales, it is intended that the roll-out of Firelink will begin during 2004 and that Firelink will be fully implemented and operational by December 2007.

Brigades that are contemplating the introduction of mobile data solutions are strongly recommended to contact their local *Firelink* representative at the earliest opportunity in order to discuss their intentions.

Yours faithfully

A handwritten signature in black ink that reads "Keith Phillips". The signature is written in a cursive style with a long horizontal line extending to the right.

K.T.Phillips
HM Inspector of Fire Services
30 June 2003