

# Report into Providing Urban Search & Rescue (USAR) Canine Capability Within Buckinghamshire Fire & Rescue Service (BFRS)



Buckinghamshire Fire & Rescue Service

Station Commander Phill Mould

# January 2017

## Contents

1. Executive Summary.....	3
2. Introduction .....	3
3. Background .....	4
4. Options.....	5
5. Lease Option .....	8
6. Purchase Option.....	8
7. Recommend Purchase option:.....	8
8. Broad Options: .....	10
9. References .....	11

## 1. Executive Summary

- 1.1 The New Dimension programme identified and delivered national assets which enhanced the fire and rescue service (FRS) response to a range of catastrophic incidents, including natural and deliberate events, and specifically including response to large-scale structural collapse and serious transport incidents. The USAR capability was one of a number of national capabilities developed and delivered in a phased approach throughout 2006-07, and subsequently reviewed in 2014.
- 1.2 With the introduction of the USAR 'Concept of Operations' (ConOps) in 2015, the 20 government funded USAR teams from across the UK were grouped in to four zones, each comprising of five teams. Buckinghamshire have been placed in to zone 2 with; Norfolk, Essex, West Midlands & Leicestershire. Some modifications to the staffing and response from BFRS USAR capability have been required, the major change to the capability provision is that each USAR team must have their own search dog capability, provided from within the host Service. Within each Zone, two canine teams must be available for immediate deployment at any time.
- 1.3 There are two options available:
  1. Do nothing and continue with our current Memorandum of Understanding (MOU) with Hampshire Fire and Rescue Service who provide our existing canine capability until it expires.
  2. To establish an in Service canine search team.
- 1.4 If we proceed with option 2, we will enhance our current USAR capability, our local search & rescue capability and fully meet all of the National Resilience Key Performance Indicators set under the ConOps.
- 1.5 This report explains our current position, the expectations placed on USAR hosting Services and the costs associated with establishing the proposed capability.

## 2. Introduction

- 2.1 BFRS's current search dog capability is provided by Hampshire Fire & Rescue Service, through an MOU. With the introduction of the ConOps, any Services who

have contracted out this capability have been allowed to carry on until those current arrangements cease, at which point new arrangements must be in place to take over. This is a KPI within the ConOps.

- 2.2 For BFRS this ties in with our current arrangements, in that our MOU with Hampshire FRS is due to come to an end 1 February 2019, and regardless of the introduction of the ConOps, Hampshire FRS would not be willing to enter in to similar arrangements in the future.

### **3. Background**

- 3.1 The right dog can be trained to use its sensitive nose to identify and locate any number of scents; drugs, fuel and accelerants, scent pool from live as well as dead persons. These are known as air scenting dogs.
- 3.2 Air Scenting Search Dogs, search routes, paths and areas looking for human scent particles. They do not discriminate scent e.g. they do not look for specific people but will look for anyone that is in the area. Once the dog locates a missing person or an area of interest they will return to their handler, indicating with a bark or by jumping up at them. The dog will then take their handler back to the missing person or area of interest with a 'show me' command. On finding the missing person the handler rewards the dog with their favourite toy and/or food whilst heaping lots of praise on them. It is this 'game' through years of training that drives the dog to search for and find the missing person.
- 3.3 In a USAR environment, the dog is trained to search for the scent pool generated from a live person, over a large area to locate missing or trapped persons. Working on or around collapsed structures and debris piles, in confined spaces, accessing areas from height.
- 3.4 These skills can be further developed to search open areas and even water courses to locate live missing persons.
- 3.5 Developing these areas will allow for work with Police Search Teams (POLSA) to develop, searching for high risk missing persons such as dementia sufferers, vulnerable adults and children. This is an area that the Police currently utilise

voluntary organisations for, as their own General Purpose dogs, although competent to carry out the task, have a tendency to bite on finding someone.

- 3.6 The core components of a (USAR) Canine team are; the handler, the dog and the vehicle and equipment. Coupled with specialist training in USAR operations and USAR canine competency to deliver an asset that works alongside human and mechanical search operations, with the ability to carry out the search of a large area in a fraction of the time that it would take using visual or acoustic/seismic equipment and techniques. Reducing the risk to both operational personnel and those that are missing and trapped, in what can be a hostile environment.

## 4. Options

### 4.1 Option 1

- 4.2 Continue with current MOU arrangement until 1 February 2019, put nothing in place to replace it.

- 4.3 **Risks** - BFRS fall short of Home Office expectations, by way of not meeting all KPIs set out in ConOps.

- 4.4 **Cost** - To remain as we are has the least financial impact, current costs £6,600 per year. These will not increase under this option.

- 4.5 **Benefits** - Remaining as we are has no additional impact or benefits on BFRS.

### 4.6 Option 2

- 4.7 Develop an in Service Canine Search and Rescue Team, to replace current arrangements provided through MOU with Hampshire FRS.

- 4.8 **Risks** - Further reductions in USAR funding following the next Home Office comprehensive spending review, could leave BFRS having to find additional funding to maintain this canine capability.

- 4.9 **Cost** - The costs associated with the introduction and maintenance of this in Service capability, will be greater than the costs associated with those currently

contracted out. And will depend significantly on the handler model chosen to run within the capability.

**Benefits** - Enhancing the Authority's current Technical Rescue/USAR capability to support our attendance at incidents requiring the locating of missing or trapped persons, covering areas much faster than humans on foot, accessing areas not visible to a drone. Meets the Canine KPI under the ConOps.

4.10 The vehicle, dog and associated equipment & training costs will remain largely the same, regardless of the costs of the chosen handler model.

4.11 Vehicle, Kennels and Equipment, initial set up costs.

4.12 £30,000 + £4,000 + £1,500 = £35,500

4.13 Initial canine purchase:

4.14 Up to £1,000 = £1,000

4.15 Food, Vet costs, Holiday kennelling:

4.16 £300 + £400 + £400 = £1,100

4.17 Annual handler Costs, Retainer, Training days, Salary  
(If recruited as additional FTE):

4.18 £1,656 + £5,736 + £33,186 = £40,578

4.19 Annual handler Costs Retainer, Training days (If existing member of staff):

4.20 £1,656 + £5,736 = £7,392

4.21 Costs have been averaged out to give indicative funding requirements.

4.22 £30,000 capital reallocation from new vehicle underspend, will cover vehicle and conversion costs, plus the purchase of majority of the kennels and initial equipment inventory.

4.23 Reallocation of USAR budget lines, where there have been consistent underspends identified will cover additional costs. This includes handler retainer and training

days, a growth bid would need to be submitted if an additional FTE were to be recruited.

4.24 **Benefits** - Achieving all of the KPIs as detailed under the ConOps, and fully delivering a local and national USAR capability.

4.25 Developing these areas will allow for multi-agency work with Police Search Teams (POLSA) to develop, searching for high risk missing persons such as dementia sufferers, vulnerable adults and children. This is an area that the Police currently utilise voluntary organisations for, as their own General Purpose dogs, although competent to carry out the task, have a tendency to bite on finding someone.

#### 4.26 **Team Components**

4.27 To introduce a canine search team in to BFRS, will take upward of eighteen months:

4.28 A handler will need to be recruited, establishing a shift/working pattern that will be of the least financial cost to the Service, offering the greatest value for money and being able to support the National Resilience (NR) availability rota as specified under the ConOps. Depending where the handler is recruited from, an amount of training will be required to enable them to fully undertake all aspects of this role.

4.29 A vehicle will need to be sourced and modified to meet the needs of the canine team & ConOps, which complies with any regulations/recommendations, such as from the Animal Welfare Act and the RSPCA. And also fulfil any other roles that the handler/team may be required to carry out, such as Flexi Duty Officer.

4.30 Equipment will need to be purchased to support the team; Kennels, canine PPE, animal welfare equipment, training aids, etc.

4.31 An appropriate dog from a breed known to demonstrate the necessary traits required to carry out the role of a search dog in the USAR environment will need to be identified and then assessed for an initial level of competence. Once sourced, the chosen dog will then need to be trained to meet all competence requirements and grading's as detailed by NR. This aspect of the process can take

upwards of eighteen months, depending on the handler and the trainability of the chosen dog.

4.32 The costs associated with the introduction and maintenance of this in Service capability, will be greater than the costs associated with those currently contracted out. And will depend significantly on the shift pattern chosen to run within the capability.

4.33 The vehicle, dog and associated equipment and training costs will remain largely the same, regardless of the costs of the chosen handler model.

#### 4.34 Vehicle

4.35 Any vehicle would have to support the working life of the canine team, in the region of eight years. Once embedded, if a decision was taken to continue with the capability for a period longer than this the vehicle may need to be refreshed.

4.36 A large van type vehicle, Transporter/Transit, capable of carrying two dogs and all associated Personal Protective Equipment (PPE) and supplies to support a deployment of up to 30 days.

### 5. Lease Option

5.1 £3500 to £4500 annual full maintenance lease over four years, 100,000 miles. Would require full conversion; kennelling, storage, ancillary's, Blues & Twos, airwave radio: Costs associated with this approximately £10,000. Lease option would also require reverting vehicle back to pre-conversion state, on end of lease/vehicle hand back.

### 6. Purchase Option

6.1 Up to £30,000 would be required, initial quote received for fully converted vehicle £26,700. Small amount of additional maintenance costs throughout the life of the vehicle, which if leased would not be Services liability.

### 7. Recommend Purchase option:

7.1 Procure vehicle, supplied fully converted, with guarantees and warranties on work. Removable kennels make for a more versatile vehicle, no mileage penalties or



large reconversion costs, residual resale value of vehicle at end of working life.

7.2 Purchase would be through capital underspend, current new appliance underspend would support this.

### 7.3 Equipment & PPE

7.4 An assortment of leads, harnesses, jackets and boots. Welfare equipment, bowls, water containers, food storage, blankets and bedding. Other ancillary's; first aid kit, torches etc. £1,500

7.5 Two kennels, one for home and one for place of work. £4,000

### 7.6 Canine

7.7 Purchase price/donation: £300 to £1000

7.8 Vets fees and vaccinations: £300 a year

7.9 Holiday Kennelling: Maximum of £400 a year

7.10 Food: £400 a year

7.11 Insurance covered by Services current Insurance policy

7.12 Training, continual training, no specific courses. Programme of regular validation and training exercises planned, approximately quarterly basis.

### 7.13 Dog Handler

7.14 Each USAR hosting Service has got its own canine team response model. Some are similar to BFRS, in that they currently buy in the capability from another Service. Others have operational members of staff that carry out the dual role, another has a member of support staff that dual roles.

7.15 Whoever the selected individual is, they will have to undertake and maintain USAR technician training, including safe work at height and Line Access & Casualty Extrication (LACE). Be familiar with working for a semi-disciplined Service, within

a structured Incident Command system. Funded from existing USAR training budget.

7.16 They will be committed to maintain availability complying with the ConOps framework, through the NR availability system. And whilst showing available, undertake any deployment request through the National Resilience Call Centre (FRNCC) which may be of an extended duration of up to 30 days, in support of national incidents, within and outside of Zone 2.

## **8. Broad Options:**

8.1 Full time operational member of existing USAR team. Who would take on the dog handler role alongside their current role. Paid an additional allowance for the role, recall to duty and training commitment.

8.2 Full time operational member of firefighting staff. Who would take on dog handler role alongside their current role. Paid an additional allowance for the role, recall to duty and training commitment, and could be based at any BFRS location.

8.3 Part time role, recruited from inside/outside of organisation, similar to On-Call firefighter role. Could be a member of support staff.

8.4 Flexi Duty Officer, who would take on the dog handler role. Paid an additional allowance for role, recall to duty and training commitment.

8.5 Work with Non-Government Organisation, for example Bucks Search Dogs. Agree a Payment structure/donation for availability and training with BFRS.

8.6 By integrating this new role with an existing operational member of staff, the Service will optimise its resources whilst achieving the best value for money option, with training time and costs vastly reduced.

8.7 [Recommendation](#)

8.8 Taking into account the current funding position and expectations placed on all USAR hosting services, BFRS should implement an in Service USAR Canine

capability. The preference from a financial and experience perspective would be to ideally recruit from the existing USAR trained personnel.

8.9 By purchasing a suitable vehicle, and selecting a dog handler from existing operational staff.

8.10 Capital expenditure funded through new appliance underspend

8.11 Revenue expenditure funded through identified underspends, within current USAR budgets, reallocated to canine cost centre and current MOU budget, once this ceases.

If recommended option, 8.10 and 8.11 is approved, the costs would be:

£35,000 to £36,500 to set up with vehicle & equipment

£8,500 annual running costs

## **9. References**

USAR Concept of Operations Master Document V2.0

USAR Search Dog Guidance Final Document

USAR Canine agreement