



DEVON & SOMERSET FIRE & RESCUE AUTHORITY

REPORT REFERENCE NO.	CSCPC/10/6
MEETING	COMMUNITY SAFETY & CORPORATE PLANNING COMMITTEE
DATE OF MEETING	6 SEPTEMBER 2010
SUBJECT OF REPORT	EMERGENCY RESPONSE STANDARDS (NON-DOMESTIC FIRES & ENTRAPMENTS (NON-ROAD TRAFFIC COLLISIONS)) – OUTCOME OF THE PILOT
LEAD OFFICER	Assistant Chief Fire Officer, Service Delivery Support
RECOMMENDATIONS	<p>Based on the outcome of the pilot, it is recommended to the Devon and Somerset Fire and Rescue Authority that:</p> <ul style="list-style-type: none"> (a) The ERS should be amended to discount false alarms and state that they are recorded for confirmed fires only; (b) The measures for non-domestic premises should be calculated for personnel originally mobilised to the incident by Fire Control, although the standard should remain the same; (c) The standards for non-domestic premises be adopted subject to the minor alterations as set out above; (d) The measures for entrapments should read person(s) trapped and not 1 person trapped; (e) The ERS for entrapments be split into major and minor based on the definitions and experience currently used by Control Room Operators; (f) Guidance be developed to ensure to enable an appropriate differentiation to be made between a major and minor entrapment; (g) In order to provide validity to these new standards and to ensure appropriate opportunity to review the changes recommended for entrapments, it is further recommended that the pilot for entrapments be extended for a further period of three months.

EXECUTIVE SUMMARY	Following the decision to approve and introduce new emergency response standards for house fires and road traffic collisions, it was recognised that the Service is called to attend many different types of emergency incident for which there is also a need to set response standards. It was further agreed to pilot new emergency response standards for non-domestic fires & entrapments (non-road traffic collisions). This report provides details of the standards that were piloted, information on the outcome of the pilot, lessons learned and observations from the pilot and makes recommendations based on the pilot.
RESOURCE IMPLICATIONS	None
EQUALITY IMPACT ASSESSMENT	
APPENDICES	N/A
LIST OF BACKGROUND PAPERS	N/A

1. **INTRODUCTION**

- 1.1 Last year the Service approved and introduced new emergency response standards for house fires and road traffic collisions. However, it was recognised that the Service is called to attend many different types of emergency incident for which there is also a need to set response standards.
- 1.2 The corporate plan 2010/11 – 2012/13 stated that to achieve success in Goal 1 it should be able to demonstrate that a response strategy is provided to emergency incidents that meets local response standards and ensures firefighter and public safety. To achieve this, the plan stated that the Service will complete the work on adopting locally risk assessed emergency response standards and the areas for development were recognised as follows:
- To pilot new emergency response standards for non-domestic fires
 - To pilot new emergency response standards for entrapments
- 1.3 The work on the house fires and road traffic collision standards in 2007/08 laid effective foundations for recommending the proposed standards for non-domestic fires and entrapments. Implementation of these proposals will reduce the variation of pre-determined attendance standards and resource levels currently in use. Under current resource distribution and deployment processes there will be no lessening in the level of service provision and in some cases a potential for a small increase.

2. **THE NEW EMERGENCY RESPONSE STANDARDS FOR FIRES IN NON-DOMESTIC PREMISES AND ENTRAPMENTS**

Non-Domestic Fires

- 2.1 Non-domestic fires are defined in two categories, residential risk and commercial/non-residential risk. In this context residential risk does not include domestic dwellings. In considering non-domestic buildings it must be borne in mind that this title covers a wide range of buildings from hotels through to public lavatories, and therefore represents a broad range of risk. In addition, with Devon and Somerset being fundamentally rural counties, there is a large predominance of agricultural buildings which are unoccupied for the majority of the time.
- 2.2 The sparsity of the counties' population and access problems mean that even with a significant increase in funding and redistribution of resources it would not be cost effective, or provide the community with value for money, to endeavour to meet the 10-minute attendance time set for domestic dwelling fires for all agricultural buildings and all non-domestic buildings.
- 2.3 It is also unlikely that fires in agricultural buildings present a significant life risk. The real impact on such buildings would best be made by proactive work, which would have a greater impact on life and environmental safety. Whilst life risk may be lower, it should still form a fundamental element of our planning, as when life is threatened, the survival times remain the same and the 10-minute thresholds established for domestic dwelling fires should remain the benchmark for our initial attendance.

Non-domestic Fires - Proposed Standards

- 2.4 The proposed response standards are presented as Reactive and Proactive. The reactive response standard is how we will react with the mobilisation of resources to an incident. The proactive response standard is how we will be proactive in working to prevent an incident occurring in the first place. These standards will ensure the most appropriate provision of vehicles and equipment will be available to respond to ensure firefighter and public safety.

Proactive Response Standard

PREMISES LOCATION	ACTION
All non-domestic premises	Application of the DSFRS Targeting of Enforcement Activity policy

Reactive Response Standard

INCIDENT TYPE & LOCATION	1st ATTENDANCE	FULL	NO OF PERSONNEL
Residential (non-domestic) premises e.g. hotels, sheltered accommodation etc	10mins	13mins	9
Residential (non-domestic) buildings where we are unable to make first attendance time of 10 minutes	-	-	12
Non-domestic premises confirmed fire e.g. shops, factories	10mins	15mins	9
Non Domestic premises fire where we are unable to make first attendance time of 10 minutes	-	-	12
Prescribed attendance due to specific risk	No change to existing prescribed attendance		

Entrapments (excluding Road Traffic Collisions)

- 2.5 With the potential exception of traffic management, the factors affecting the effective management of an entrapment are very similar to the management of a road traffic collision (RTC) extrication. Therefore it would appear to be appropriate to carry forward the reactive response standards for RTCs. The numbers of personnel dispatched to RTCs takes into account the potential for the fire and rescue service having to carry out traffic management activities in order to create a safe working environment.
- 2.6 Unless the entrapment takes place on or in close proximity to a roadway these additional duties will not be required, therefore a lower number of personnel can be considered. In the planning assumptions used for RTCs two personnel were included for the performance of additional duties potentially required. Therefore six personnel may be sufficient for entrapments not on the roadway. Where the entrapment is on or in close proximity to a road the response standards for single and dual carriageway roads should be used. However, it is even more difficult to define a proactive response standard for entrapments as the variety is extremely wide.

- 2.7 Entrapments in machinery are often a result of a failing of the safety/guarding systems within plant and machinery, which is the enforcement domain of the Health and Safety Executive. Therefore, the most significant potential for proactive work would appear to lie in partnership working with other agencies. Entrapments (excluding Road Traffic Collisions) - Proposed Standards
The standards are for entrapments in machinery or the collapse of structures or stacked objects. These standards will ensure the most appropriate provision of vehicles and equipment will be available to respond to ensure firefighter and public safety.

INCIDENT TYPE & LOCATION	1st ATTENDANCE	FULL	CREW
Entrapment, off road (1 person trapped)	15mins	18mins	6
Entrapment, excluding road traffic collision on a single carriageway (1 person trapped)	15mins	18mins	8
Entrapment, excluding road traffic collision on a Dual Carriageway e.g. incident involving highway maintenance / construction	15mins	18mins	10

3. **PILOT AND IMPLEMENTATION OF EMERGENCY RESPONSE STANDARDS FOR FIRES IN NON-DOMESTIC PREMISES AND ENTRAPMENTS**

- 3.1 The emergency response standards for non-domestic premises and entrapments have been subject to a six month trial during 2010/11, which commenced on 1st March 2010. It was proposed in the corporate plan 2010/11 – 2012/13 that pending the successful evaluation of the pilot the Authority will be invited to consider formal adoption of the standards.

The Pilot

- 3.2 The pilot commenced on the 1st March 2010 and, as it had previously been agreed, ran for a period of six months. Essentially during the pilot, appliances were mobilised to incidents as per current policies and the performance, against the new emergency response standards was measured. However, for non-domestic premises, there was an arrangement put in place to notify Control Room Operators of premises outside of the 10 minute area, which prompted the mobilisation of an additional appliance in line with these new ERS. No other special arrangements were put in place for entrapments as these were treated in much the same way as RTCs, i.e. there is potentially no fixed locations for such incidents.

Outcome of the Pilot

3.3 In terms of performance (from the 1st March 2010 to the 31st August 2010*) the outcome is based on the percentage of occasions that the standard was met as set out below:

Incident Type and Location	1 st attendance in 10 Minutes (Includes those where only 1 appliance is in attendance)	Full Attendance (9 Crew) in 13 minutes
Non Domestic - Residential (confirmed fire only) e.g. hotels, sheltered accommodation etc. (Inside 10 minute area)	90% (18 out of 20)	71% (12 out of 17)
		Full Attendance (12 Crew)
Non-Domestic - Residential (confirmed fire only) where we are unable to make first attendance time of 10 minutes (Outside 10 minute area)	-	83% (5 out of 6)
		Full Attendance (9 Crew) in 15 minutes
Non Domestic - Non Residential (confirmed fire only) e.g. shops, factories – Does NOT include BARN FIRES (Inside 10 minutes)	85% (66 out of 78)	78% (54 out of 69)
		Full Attendance (12 Crew)
Non Domestic – Non Residential (confirmed fire only) where we are unable to make first attendance time of 10 minutes (Outside 10 minutes)	-	89% (25 out of 28)

Incident Type and Location	1 st Attendance in 15 minutes (Includes those where only 1 appliance is in attendance)	Full Attendance (6 Crew) in 18 minutes
Entrapments (person(s) trapped)	85% (52 out of 61)	33% (20 out of 61)
Entrapment, excluding road traffic collision on a single carriageway (person(s) trapped)	no data available**	no data available**
Entrapment, excluding road traffic collision on a Dual Carriageway e.g. incident involving highway maintenance / construction (person(s) trapped)	no data available**	no data available**

* at present this table only includes data up to 31st July and will be amended to include the data up to 31st August when this is available

** no incidents of this type have occurred throughout the duration of the pilot

Observations/Lessons Learnt from the Pilot

3.4 When recording performance against the standards, experience from the standards set for Domestic Dwellings and RTCs has been considered.

Non-Domestic Premises

- Calls to all false Alarms should be discounted unless further information is received confirming a fire. This also reflects current Service policy in respect of attendance at AFAs.

Therefore it is recommended that the ERS should be amended to discount false alarms and state that they are recorded for confirmed fires only.

- The pilot has showed that in some cases the actions of the incident commander on the initial attending appliance, based on his/her initial assessment of the incident, could have a bearing on whether the full attendance arrives at the incident. For example, whilst the initial call may have been to a fire, which would attract the full attendance as set out in the ERS, the initial Incident Commander may feel that he/she has sufficient resources to deal with the incident and may therefore send the on-coming appliance(s) back before they arrived at the incident. This would clearly constitute a failure.

Therefore it is recommended that the measures for non-domestic premises should be calculated for personnel originally mobilised to the incident by Fire Control, although the standard should remain the same.

It is recommended that the standards for non-domestic premises be adopted subject to the minor alterations as set out above.

Entrapments

- The original standards make reference to one person trapped and it is recognised that, on occasions, there may be more than one person at these types of incident.

Therefore it is recommended that the measures for entrapments should read person(s) trapped and not 1 person trapped.

- For entrapments off-road, the ERS is for a single appliance in 15mins and the full attendance in 18mins. The full attendance is one appliance and a crew of 6. In the majority of cases, appliances will only mobilise with a crew of up to five and therefore this requires an automatic mobilisation of two appliances, irrespective of the incident type. The current appliance mobilising policy differentiates between major and minor entrapments, with a major entrapment attracting two appliances and a minor entrapment, one appliance. The decision as to whether the incident is classed as major or minor is based on caller interrogation by, and the experience of the Control Room Operators. The piloted ERS do not differentiate between major and minor and therefore would require, in most cases, the automatic mobilisation of two appliances.
- It is questionable therefore whether this is both an efficient and effective use of resources. Evidence from the pilot, suggests that where appliances have been mobilised based on the current mobilising policy, resources have been sufficient to meet the needs of the incident.

Therefore it is recommended that the ERS for entrapments be split into major and minor based on the definitions and experience currently used by Control Room Operators.

It is also recommended that guidance be developed to ensure an appropriate differentiation to be made between a major and minor entrapment.

To provide validity to the proposed amendments to the entrapments standards and to ensure appropriate opportunity for review and stakeholder comment, it is further recommended that the pilot for entrapments be extended for a further period of three months using the following standards:

INCIDENT TYPE & LOCATION	1 st ATTENDANCE	FULL	CREW
Entrapment - minor, off road (person(s) trapped)	15mins	-	5
Entrapment - major, off road (person(s) trapped)	15mins	18mins	6

The standards for entrapments on single and dual carriageway roads (excluding RTCs) would remain the same.

4. **CONCLUSIONS**

- 4.1 During the pilot there were regular reviews of the performance based on the new standards. As stated earlier, experience from the previous ERS for domestic dwellings and RTCs was considered and this enabled the performance to be measured based on a number of different scenarios, whilst not altering the standard. This experience and some of the changes to the measures form the basis of the recommendations that have been made.
- 4.2 The performance, with the exception of the full attendance to entrapments is good and compares favourably with the Service's current performance against the existing ERS for domestic dwellings and RTCs. The suggested recommendations for the changes to entrapments should see an improvement in the performance in respect of the full attendance to entrapments and this will be monitored should agreement be reached to extend the pilot for entrapments.

5. **RECOMMENDATIONS**

- 5.1 Based on the outcome of the pilot, it is recommended to the Devon and Somerset Fire and Rescue Authority that:
- (a) The ERS should be amended to discount false alarms and state that they are recorded for confirmed fires only
 - (b) The measures for non-domestic premises should be calculated for personnel originally mobilised to the incident by Fire Control, although the standard should remain the same
 - (c) The standards for non-domestic premises be adopted subject to the minor alterations as set out above
 - (d) The measures for entrapments should read person(s) trapped and not 1 person trapped
 - (e) The ERS for entrapments be split into major and minor based on the definitions and experience currently used by Control Room Operators
 - (f) Guidance be developed to ensure to enable an appropriate differentiation to be made between a major and minor entrapment
 - (g) In order to provide validity to these new standards and to ensure appropriate opportunity to review the changes recommended for entrapments, it is further recommended that the pilot for entrapments be extended for a further period of three months

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