

## **Sprinklers update**

### **Purpose**

For discussion and direction

### **Summary**

This paper provides an update on the continuing activity aimed at promoting the use of sprinklers

### **Recommendations**

Members are asked to:

1. note the report and to raise awareness of the sprinkler week in their own Fire and Rescue Authority; and
2. raise the profile of the Sprinklers One Voice Strategy and to seek to get this strategy formally adopted within fire and rescue authorities where this has not already happened.

### **Action**

Officers will take action as directed.

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## **Sprinklers Update**

### **Background**

1. The Sprinklers Toolkit was launched at the Fire Conference in March 2013. The toolkit provides a basis for coordinated campaigning by fire and rescue authorities. The toolkit contains "One Voice" a sprinkler promotion strategy, news and other information on sprinklers, including a myth busting section.
2. The LGA and CFOA have been working together with the British Sprinklers Association and the British Automatic Fire Sprinklers Association, on supporting fire and rescue authorities in their local campaigns. A sprinklers week is being planned which will provide a focus for coordinated activity.

### **Sprinklers week**

3. The 'sprinklers week' will take place in week commencing 3 February 2014. This will be the first time that coordinated activity on sprinklers has been planned in this manner. The intention is that sprinkler week will be an annual event.
4. The sprinklers week will be preceded by a launch at the House of Commons on 29 January 2014.
5. The aim of the sprinklers week will be to highlight the value of sprinklers in reducing unnecessary damage and protecting people, homes and businesses. The environmental benefits of sprinklers will also be highlighted.
6. In the first year the focus will be on sprinklers in commercial buildings. The messaging will draw on CFOA's business case for sprinklers, the BRE (*Building Research Establishment*) Cost Benefit Analysis on Warehouses and Centre for Economics and Business Research (CEBR) Economic Impact of Commercial Fire. A note of the evidence of the impact fire in commercial buildings and options for local authority action, prepared by BSA is set out in **Appendix A**.
7. CFoA is working through chief fire officers to ensure that all fire and rescue services undertake local activity during the sprinklers week. However, it is key that Fire and Rescue Authority Chairmen and Members publicise the week with their local service and also with local partners.
8. An open letter in support of sprinklers will also be issued with the expectation that this is picked up in the media.
9. The timetable of national media support is outlined below.

27 January 2014	Open letter published
29 January 2014	House of Commons launch
3 February 2014	Tailored trade media releases
4 February 2014	Full coverage round-up placed on CFOA campaigns section with remarks on uptake from industry leaders

10. The media approach will be managed largely through CFoA and the BSA.

### **One voice**

11. One voice is the national sprinkler promotion strategy which is central to the sprinklers toolkit. The one-voice strategy sets out position statements on sprinklers in schools, residential homes and sheltered accommodation, domestic premises, new developments, refurbished buildings and preventing damage to the environment. The strategy is attached at appendix B. It is important that all fire and rescue authorities are behind this strategy and that it is formally adopted by all.

### **Next steps**

12. Members are asked to:

- 12.1. note the report and to raise awareness of the sprinkler week in their own Fire and Rescue Authority; and
- 12.2. raise the profile of the Sprinklers One Voice Strategy and to seek to get this strategy formally adopted within fire and rescue authorities where this has not already happened.

**THE IMPACT OF FIRES IN INDUSTRIAL AND COMMERCIAL BUILDINGS (prepared by BSA)**

The ABI has documented that the cost of fires in ICBs in 2008 was £865 million and has forecast that UK businesses will lose £10bn between 2010 and 2020 because of fire. However, work being undertaken by the BRE indicates that the true economic, environmental and societal costs of fires in ICBs are significantly greater. These costs are borne by the public purse at both the national and local level. This is because:

- Many SMEs never recover from a large fire
- Larger businesses often consolidate operations in other plants in the UK or abroad after a major fire resulting in job losses
- Fires impact businesses up and down the supply chain – further impacting productivity and jobs
- Job losses impact communities emotionally and financially
- Fires cause transport disruption (rail and road), residential evacuations and school closures
- Up to 350,000 tonnes of CO<sub>2</sub> a year are emitted because of fires in ICBs
- More than 9 billion litres of water are needlessly used by UK Fire and Rescue Services (FRS) each year to extinguish fires. If these fires had occurred in sprinklered buildings, only 4.4 million litres per year (0.2%) would be used
- Fires in ICBs always create air pollution and FRS water run-off often contaminates water courses
- Fires in ICBs create unnecessary waste and use of resources to rebuild destroyed property
- Large fires in recycling centres are increasing – air pollution and ground water contamination are a particular concern with these fires.

Fortunately, very few deaths or injuries result because of fires in ICBs because the Fire Safety provisions of the Building Regulations are designed to ensure safe evacuation.

**FIRES IN ICBs ARE BECOMING MORE DESTRUCTIVE**

By the time the FRS arrive at a fire in an ICB, the fire will usually have taken hold. Because evolving FRS risk management policies have led to fire fighting tactics becoming more defensive, often the result is that the building and its contents will be severely or totally destroyed in the event of a fire. These fires place avoidable pressures onto the FRSs in the face of cuts.

**AUTOMATIC FIRE SPRINKLER SYSTEMS**

When a fire starts in a building protected by AFSS, the AFSS will control or extinguish fire before the FRS arrive – the business is usually back up and running (within hours) with minimal cost and disruption. AFSS are the only fire protection systems which actively control or extinguish fires.

## WHY ARE SO FEW ICBs IN THE UK PROTECTED BY AFSS?

### 1. Current UK Regulation

- Approved Document B (Fire Safety) of the Building Regulations stipulates that only new single-storey ICBs >20,000m<sup>2</sup> should be fitted with AFSS. Moreover, ADB is a guidance document. The threshold for new single-storey retail premises is 2,000m<sup>2</sup>. These thresholds are a consequence of Government fire safety policy being based solely on life safety impacts of fires.
- Regulatory comparisons  
Regulated requirements for AFSS in ICBs in other countries are: Austria: 1,800m<sup>2</sup>; Belgium: 5,000m<sup>2</sup>; Denmark: 2,000m<sup>2</sup>-5,000m<sup>2</sup> (dependent upon fire load); France: 3,000m<sup>2</sup>; Germany: 1,800m<sup>2</sup>; the Netherlands: 1,000m<sup>2</sup>; Norway: 800m<sup>2</sup>; and Spain 2,000m<sup>2</sup>.

### 2. The Build Process

- Developers are unlikely to fit AFSS in ICBs smaller than 20,000m<sup>2</sup> because they do not believe the cost can be recouped in the rental price.
- Many business owners and their architects/chartered surveyors do not build AFSS into designs because they do not consider fully the impact a fire will have on the building and the business, because of a lack of knowledge about AFSS, and because their knowledge of the design flexibilities available if AFSS are installed (which can even reduce costs) is limited.
- Fire Engineers win business by providing a service to allow an ICB to meet fire safety regulatory at the lowest cost. The designs may allow savings for the build, but they do not consider the building-life costs which would include the impact on and costs to the business if the building is subsequently damaged or destroyed in a fire. Moreover, often, they do not know the end user or use of the building and so purely design systems based on an empty shell.
- Many insurers do not actively promote AFSS because it is a very competitive market.
- FRS consultation on new builds occurs at the latter stages of a build when it is too late to change the design to incorporate AFSS.
- Consequence: generally only the largest businesses – which have the resources to implement robust risk management strategies – will ensure that they operate in premises with AFSS. These businesses instruct their architects and fire engineers to install AFSS into new builds, will only lease buildings with AFSS or will retrofit.

### 3. Repeal of the Local Acts

- As a part of the Red Tape Challenge, the Government repealed the Fire safety provisions of the Local Acts at the beginning of 2013. The Local Acts allowed affected Councils to require AFSS in ICBs larger than 7000m<sup>3</sup>. The Local Acts were generally in areas with high density warehousing. The BSA is already aware of enquiries about decommissioning existing AFSS.

## EVIDENCE OF THE EFFICACY OF AFSS

The BSA is aware of 59 sprinkler stops in ICBs since February 2012. In each case a large fire was prevented and there was minimal impact on the business concerned. AFSS have a 98% reliability rate. Large fires in ICBs create costs which are borne by national and local finances. The BSA therefore hopes that Local Authorities recognise that it is in their interest to help reduce the number of large ICB fires. The most effective way to do so is to ensure that more ICBs in their areas are protected from fire with AFSS.

## OPTIONS FOR LOCAL GOVERNMENT ACTION

Local Authorities can to help achieve this objective because Councillors and Council staff have direct and regular contact with the people who determine the design of ICBs: business owners, developers, architects and chartered surveyors. Councillors are therefore in a unique position to help convince these audiences of the benefits of AFSS installation in ICBs by:

### 1. Using the planning process

- At the County and District level, structural policies detailed in Development Plans / Design Guides / Local Plans can make specific reference to the economic, environmental and community benefits of preventing large ICB fires and can state explicitly that the Council / District Council therefore promotes the installation of AFSS in ICBs.
- At District Council level, Councillors with responsibility for planning can take political decisions to direct their planning officers to always bring the issue of fire prevention, business resilience and AFSS into pre-application discussions with planning applicants.
- These actions should increase AFSS installation because they will help business owners, developers, architects and chartered surveyors consider the benefits of property and business protection alongside life safety, and inform them about the efficacy and benefits of AFSS, before a building design has been drafted. This should improve the chance that the eventual building will be protected from fire with an AFSS.

### 2. Using LEPs and Chambers of Commerce

- Councillors with responsibility for Economic Development and Resilience can facilitate contact between the BSA and local LEPs and Chamber of Commerce as the BSA will accept all opportunities to speak directly to the business community about business resilience, fire prevention and AFSS. This action should increase AFSS installation because it will ensure that more business owners understand the business resilience benefits of fire protection with AFSS.