

<b>Title of Report:</b>	<b>Scrutiny review into the installation of automatic fire suppression systems in Council buildings.</b>
<b>Report to be considered by:</b>	Overview and Scrutiny Management Commission
<b>Date of Meeting:</b>	2 <sup>nd</sup> November 2010

**Purpose of Report:** To outline the results of the investigation into the need for a policy for the installation of automatic fire suppression systems in Council buildings.

**Recommended Action:** That the Overview and Scrutiny Management Commission endorses the recommendations for the consideration of the Executive.

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# Executive Report

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## 1. Introduction

1.1 In January 2010 the Overview and Scrutiny Management Commission received a suggested topic for a scrutiny review to discuss whether a policy is needed for the installation of automatic fire suppression systems (fire sprinklers) in Council buildings. The Commission approved the topic for the Safer Select Committee to carry out.

## 2. Terms of Reference

2.1 The terms of reference were to review the Council's current approach to the installation of automatic fire suppression systems in Council buildings and to consider whether implementation of a policy to prescribe activity would be beneficial. The review would include investigation of the costs associated with installation, and national advice and practice.

2.2 Advice would be sought from the Royal Berkshire Fire and Rescue Service and Council officers in order to inform the review.

## 3. Background and context

3.1 On 1 March 2007 the Department for Children, Schools and Families (DCSF) announced the new policy on sprinklers and their value as a measure against the risk of fire and arson. All new schools would be expected to have automatic fire suppression systems installed except in a few low risk schools. The DCSF expects a risk analysis to always be carried out and new schools being planned that score medium or high risk using the risk analysis tool would have sprinklers fitted.

3.2 Currently, West Berkshire Council undertakes a fire risk assessment on school projects to establish the need to install automatic fire suppression systems. There is no current policy for other Council buildings.

3.3 The fire service encourages the installation of automatic fire suppression systems on the basis that they can detect and extinguish fire, protecting both occupants and property.

3.4 Fire sprinkler systems should be seen in the context of other available fire protection measures.

## 4. Methodology

4.1 The review was conducted by the Safer Select Committee working with Council officers and representatives of the Royal Berkshire Fire and Rescue Service and Authority.

4.2 The Committee held meetings as outlined below:

Meeting date	Meeting focus
6 <sup>th</sup> April 2010	Agreement of review subject and scope. Information received regarding:

	<ul style="list-style-type: none"> <li>▪ Background information explaining the purpose of the review;</li> <li>▪ Fire Service video viewed.</li> </ul>
5 <sup>th</sup> July 2010	<p>Information received regarding:</p> <ul style="list-style-type: none"> <li>• Current practices</li> <li>• Financial implications</li> <li>• National guidance</li> </ul> <p>Consideration of recommendations.</p>
20 <sup>th</sup> September 2010	Agreement of final recommendations.

4.3 The minutes of each meeting are shown at Appendices A to C respectively.

4.4 A report drafted by West Berkshire Council's Property Development Manager is shown at appendix D.

4.5 The Committee additionally visited two local sites (the Kennet Centre and Sainsbury's supermarket) to view the visible components of an installed automatic fire suppression system in particular the water storage and pumping facilities required.

## 5. Acknowledgements and thanks

5.1 The Chairman and Members of the Committee would like to acknowledge and thank all those who supported and gave evidence to the review.

## 6. Findings

6.1 The findings of the task group are outlined below.

### Benefits

- a. The role of automatic fire suppression systems in extinguishing a fire was demonstrated to the Committee to be extremely effective in saving both lives and property. A London review of the effectiveness of fire sprinkler systems demonstrated that:
  - (a) 84% of fires were contained or extinguished by sprinklers;
  - (b) Where sprinklers were unsuccessful, this was due to water supply failure, insufficient heat to activate the sprinklers, or fires in unsprinklered areas;
  - (c) In five cases, the sprinklers failed to activate.
- b. Where automatic fire suppression systems are installed, and this decision is taken prior to the building being designed, more freedom is afforded to the design options for the building. For example larger room sizes may be considered, and regulations around exit routes from the building are relaxed.

## Risks

- c. It was agreed that automatic fire suppression systems would be particularly beneficial in residential care homes where it is likely that residents would be less able to be evacuated quickly, and so sprinkler systems could play a key role in saving lives as well as property. Schools, in contrast, have effective fire procedures to evacuate pupils so the greatest risk would be to property and continuity of education.
- d. West Berkshire is a low risk area for fires, with just three significant fires in the last seven years.

## Costs

- e. There isn't expected to be any financial benefit through a reduction in insurance premiums. The Council has a low premium already, which is offset by a high excess. However the Committee are aware of significant savings achieved by other local authorities.
- f. The cost of installing automatic fire suppression systems varies significantly from project to project and may be anywhere between 2.3% and 15% of the project cost. This is dependent on a number of factors including:
  - (a) The size of the project
  - (b) Local requirements (for example, whether sprinklers can be fed from mains supply or whether water storage is required)
  - (c) Planning constraints (for example where water storage needs to be located)
- g. The maintenance costs for fire sprinkler systems also vary from project to project, and may cost between £500 and £5000 per annum, however good maintenance would enable the system to achieve a life span of up to 50 years.
- h. The Committee rejected the possibility of considering retrofitting automatic fire suppression systems in existing buildings due to the extreme disruption and anticipated significant cost. However if significant refurbishment was taking place then the installation of automatic fire suppression systems should be considered.

## 7. Conclusions

7.1 The Committee agreed that the benefits of an automatic fire suppression system outweighed other fire detection and suppression systems in the preservation of life and property, and the reduction in disruption after a fire.

7.2 However the Committee acknowledged that the cost of installation is significant and, whilst it should be the presumed course of action, it must also be viewed in conjunction with the risk and effect of a fire occurring.

7.3 The Committee further recognised the example that the Council could set to developers by installing automatic fire suppression systems, and the opportunity that may arise to encourage others to follow the same course of action.

## **8. Recommendations**

8.1 The Select Committee recommends that:

- a. The Head of Property and Public Protection develop a policy in relation to the installation of automatic fire suppression systems in all new buildings and buildings undergoing major refurbishment within the Council's property portfolio.
- b. The basis of establishing the need to install automatic fire suppression systems is to be a fire risk assessment, the same or similar to that currently used for school projects. The risk assessment process should include the ability to recognise the comparative savings that would be achievable with the installation of such a system, for example through altered building design or the use of different materials.
- c. The policy is to indicate an assumption that automatic fire suppression systems will be installed unless the completed risk assessment provides sufficient argument against.
- d. The policy is to state that consideration be given early in the design stages of a project as to where the components of an automatic fire suppression system would be located in order to reduce installation costs.
- e. Further discussion be held with the Council's property insurers with the aim of achieving further savings.

## **Appendices**

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Appendix A – Minutes of the Safer Select Committee meeting held on 6<sup>th</sup> April 2010

Appendix B – Minutes of the Safer Select Committee meeting held on 5<sup>th</sup> July 2010

Appendix C – Minutes of the Safer Select Committee meeting held on 20<sup>th</sup> September 2010

Appendix D – Report to the Safer Select Committee entitled Sprinklers in Schools and other Council Buildings.

Appendix E - EIA