Summary of the Maintenance Requirements of BS5839-1: 2002

This summary has been made available to assist readers of the booklet entitled "A Guide to the reduction of false alarms from fire detection and fire alarm systems" published by the Office of the Deputy Prime Minister.

Note 1: BS5839-1, Code of Practice for fire detection and fire alarm system design, installation, commissioning and maintenance, was revised and updated by the British Standards Institution in 2002 and comes fully into force in July 2003. The previous version was published in 1988 and will be formally withdrawn by BSI in July 2003. This summary relates to the 2002 version.

Note 2: This information is provided for the general guidance of fire detection and fire alarm system users. As it is a summary, it omits much of the information included in the clauses listed below. It Is therefore not intended to be a replacement for the detailed recommendations included within BS58391. Copies of BS5839-1 may be obtained from The British Standards Institution who may be contacted by telephone on 020 8996 9000.

Clause 44 Routine testing

Clause 44.1 Commentary

- It is vital for a regular test to be undertaken to ensure that there has not been a major failure of the entire fire detection and fire alarm system that may otherwise go unnoticed.

Clause 44.2 Weekly testing by the user

- Test a manual call point during working hours to cheek that the control panel and alarm sounders operate satisfactorily
- Each week, a different manual call point should be tested
- Voice alarm systems should be tested weekly in accordance with BS5839-8 *Note: If the system is connected to an Alarm Receiving Centre (ARC) for calling the fire brigade, it is very important that the ARC is notified be ore testing commences and when it is complet*

Clause 44.3 Monthly attention by the user

- Testing of any automatically started generator used for the fire detection and fire alarm system
- Inspection of any vented batteries used as a standby power supply for the fire detection and fire alarm system

Clause 45 Inspection and Servicing

Clause 45.1 Commentary

- The inspection and servicing should be undertaken by organisations with the appropriate competence. This can be assured by the use of organisations that are third party certificated, by a UKAS accredited certification body, specifically to carry out inspection and servicing of fire detection and fire alarm systems

Clause 45.2 Quarterly inspection of vented batteries

- Vented batteries should be examined by a person with relevant competence and should be topped up if necessary

Clause 45.3 Periodic inspection and testing

- The period between visits to undertake inspection and service should he based upon a risk assessment but the maximum period between visits should not exceed six months.
- The log book should be inspected

- A visual inspection should be made to check whether structural or occupancy changes have been made that require changes to the fire detection and fire alarm system.
- False alarm records should be checked and relevant action taken if necessary
- Batteries should be checked and tested
- Control panel functions should be checked and tested
- Fire alarm devices should be tested
- Facilities for automatic transmission of alarm signals to an alarm receiving centre (ARC) should be checked after advising the ARC of the proposed actions
- All fault indicators and circuits should be tested and checked
- Printers should be tested
- Other checks and tests recommended by the manufacturer should be carried out.
- Outstanding defects should be reported and the logbook completed and servicing certificate issued.

Clause 45.4 Inspection and test of a system over a 12 month period

- The switch mechanism of every manual call point should be tested
- Every automatic fire detector should be examined and functionally tested. Note: this includes, but is not limited to; smoke detectors, resettable heat detectors, optical beam smoke detectors, aspirating fire detection systems, carbon monoxide fire detectors and flame detectors
- All fire alarm devices (both visual and audible) should be tested
- Certain filament lamps should be replaced
- Radio fire detection and fire alarm system signal strengths should be checked
- Visual inspection of readily accessible cable fixings should be undertaken
- The cause and effect programme should be checked
- The standby power supply capacity should be checked
- Other annual checks and tests recommended by the system component manufacturers should be undertaken
- Outstanding defects should be reported and the servicing certificate issued.

Clause 46.4.4 Recommendations for action to address an unacceptable rate of false alarms

- This Clause recommends that any false alarm investigation and subsequent modifications to the system takes into account the guidance provided in Section 3 of BS5839-12002. Note: Any organisation undertaking false alarm investigations and related remedial work should be able to demonstrate their competence to undertake such work.

Section 3 of BS5839-1:2002

- This section contains comprehensive information on all aspects of limitation of false alarms.
  The measures to limit false alarms are divided into eight groups:
  - Siting and selection of manual call points
  - Selection and siting of automatic fire detectors
  - Selection of system type
  - Protection against electromagnetic interference
  - Performance monitoring of newly commissioned systems
  - Filtering measures
  - System management
  - Regular servicing and maintenance