

PAS 7:2013



BSI Standards Publication

Fire risk management system – Specification



bsi.

...making excellence a habit.™

Publishing and copyright information

The BSI copyright notice displayed in this document indicates when the document was last issued.

© The British Standards Institution 2013.

Published by BSI Standards Limited 2013

ISBN 978 0 580 76476 9

ICS 13.220.10, 91.040.01

No copying without BSI permission except as permitted by copyright law.

Publication history

First published June 2013

Amendments issued since publication

Date	Text affected
-------------	----------------------

Contents

Foreword *iii*

0 Introduction 1

0.1 General 1

0.2 The evolution of PAS 7 1

0.3 The “plan, do, check, act” model 3

0.4 Claims of conformity 4

1 Scope 4

2 Terms and definitions 5

3 Context of the organization 8

3.1 Understanding the organization and its context 8

3.2 Understanding the needs and expectations of interested parties 9

3.3 Legal and regulatory requirements 9

3.4 Determining the scope of the FRMS 9

3.5 Fire risk management system 9

4 Leadership 10

4.1 Leadership and commitment 10

4.2 Policy 10

4.3 Organization roles, responsibilities and authorities 10

5 Planning 11

5.1 Actions to address risks and opportunities 11

5.2 Fire safety objectives and planning to achieve them 11

5.3 Fire risk management strategy 12

6 Support 13

6.1 Resources 13

6.2 Competence 13

6.3 Awareness 14

6.4 Communication 15

6.5 Documented information 15

7 Operation 16

7.1 Operational planning and control 16

7.2 Control of work on site 17

7.3 Maintenance and testing 17

7.4 Fire risk assessment 17

7.5 Incident response communication 17

7.6 Emergency planning 18

8 Performance evaluation 18

8.1 Monitoring, measurement, analysis and evaluation 18

8.2 Internal audit 18

8.3 Management review 19

9 Improvement 20

9.1 Nonconformity and corrective action 20

9.2 Continual improvement 20

Annexes

Annex A (informative) Common requirements with other management systems standards 21

Annex B (informative) Model proforma fire risk management system procedure – Resources and authority 23

Annex C (informative) Model proforma fire risk management system procedure – Training 25

Annex D (informative) Model proforma fire risk management system procedure – Communication 27

Annex E (informative) Model proforma fire risk management system procedure – Hot works 29

Annex F (informative) Model proforma fire risk management system procedure – Maintenance and testing 31

Annex G (informative) Model proforma fire risk management system procedure –
Emergency planning 33

Annex H (informative) Model proforma fire risk management system procedure –
Fire risk management audit 35

Annex I (informative) Sample audit checklist 37

Annex J (informative) Model proforma fire risk management system procedure –
Management review 47

Bibliography 49

List of figures

Figure 1 – Fire risk management “plan, do, check, act” model 3

List of tables

Table A.1 – Common requirements with other risk management standards 21

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv,
pages 1 to 50, an inside back cover and a back cover.

Foreword

This PAS was sponsored by BB7 Fire Risk & Resilience. Its development was facilitated by BSI Standards Limited and is published under licence from The British Standards Institution. It came into effect on 30 June 2013.

Acknowledgement is given to the following organizations involved in the development of this specification as members of the steering group:

- Association of British Certification Bodies (ABCB)
- Association of British Insurers (ABI)
- C. S. Todd & Associates Ltd
- Chief Fire Officers Association (CFOA)
- Fire Sector Federation
- Institution of Fire Engineers (IFE)
- Marsh Insurance
- National Association of Healthcare Fire Officers (NAHFC)

Acknowledgement is also given to the technical authors at BB7 Fire Risk & Resilience and to the members of a wider review panel who were consulted in the development of this PAS as well as the following organizations which participated in the PAS 7 pilot projects that trialled the methodology and test assumptions:

- Avanta
- Hastoe Housing
- The Institute of Cancer Research
- Loughborough University
- NHS North East London & City
- Richmond Housing Partnership
- Royal Marsden Hospital

The British Standards Institution retains ownership and copyright of this PAS. BSI Standards Limited as the publisher of the PAS reserves the right to withdraw or amend the PAS on receipt of authoritative advice that it is appropriate to do so. This PAS will be reviewed at intervals not exceeding two years, and any amendments arising from the review will be published as an amended PAS and publicized in *Update Standards*.

This PAS is not to be regarded as a British Standard. It will be withdrawn upon publication of its content in, or as, a British Standard.

Relationship with other publications

This PAS has been prepared in line with ISO guidance contained in the Consolidated ISO Supplement to the ISO Directives, Part 1 (Procedures specific to ISO), *Annex SL (normative) Proposals for management system standards, Guidance on the development process and structure of an MSS SL.8, Appendix 3 (normative) High level structure, identical core text, common terms and core definitions*.

Information about this document

Certification. Users of this PAS are advised to consider the desirability of third-party certification of conformity with this PAS. Appropriate conformity attestation arrangements are described in BS EN ISO/IEC 17021. Users seeking assistance in identifying appropriate conformity assessment bodies or schemes may ask BSI to forward their enquiries to the relevant trade association.

Please note that there is no legal obligation to adopt the requirements of this PAS – it is a voluntary document.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element. The word “should” is used to express recommendations, the word “may” is used to express permissibility and the word “can” is used to express possibility, e.g. a consequence of an action or an event.

Spelling conforms to *The Shorter Oxford English Dictionary*. If a word has more than one spelling, the first spelling in the dictionary is used.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a PAS cannot confer immunity from legal obligations.

Particular attention is drawn to the following legislation:

- Regulatory Reform (Fire Safety) Order 2005 [1];
- Fire (Scotland) Act 2005 [2];
- Fire Safety (Scotland) Regulations 2006 [3];
- Fire and Rescue Services (Northern Ireland) Order 2006 [4];
- Fire Safety Regulations (Northern Ireland) 2010 [5].

References are made throughout this PAS to legislation and guidance applicable in the UK. However, it is recognized that the standard might be used outside the UK and, in such circumstances, users of the PAS need to be aware of the legislative requirements and sources of further information applicable in their own countries.

0 Introduction

0.1 General

Current fire safety legislation and guidance is based on risk and focuses on individual premises and facilities. It is less specific about managing this risk from fire at an organizational level. In many cases, the person(s) with duties under legislation might be part of a larger organization with multiple sites and facilities with common working practices and procedures. This can present challenges with regard to translating fire safety policy into effective strategies throughout the organization, where fire safety is unlikely to be the key driver.

Although fire safety legislation provides a legal instrument to prosecute if it is perceived that inadequate fire safety management in an organization has resulted in an offence under relevant legislation, there is no definitive guidance that dictates minimum standards, functions and accessibility of fire safety management information across a corporate entity or multiplesite organization.

PAS 7 presents requirements for an organizational fire risk management system (FRMS). The system can be applied in organizations that operate on multiple sites, separate management divisions within an organization, or individual premises within a single entity.

A documented FRMS provides a means of demonstrating that fire safety policy is translated into action to ensure that the fire risk to people and the business are reduced as far as reasonably practicable while ensuring that the legislative requirements are met. The extent of the management system should be proportionate to the level of risk arising from the organization's activities and subsequent level of assurance sought. It should be noted that an organization's risk tolerance (that is its readiness to bear risk, after risk treatment, in order to achieve its objectives) can be limited by legal or regulatory requirements.

Documentation of the FRMS and its processes will provide an auditable trail that demonstrates an organization's commitment to fire risk management and legislative compliance. This should not result in undue bureaucracy.

0.2 The evolution of PAS 7

0.2.1 General

PAS 7 has developed against a backdrop of an evolving fire safety landscape. These developments include:

- a) an increase in the proliferation of fire-engineered complexes and buildings;
- b) the emergence of methods of modern construction;
- c) building design freedoms based on assumed management standards (in accordance with BS 9999:2008 management levels);
- d) Regulation 38 (on fire safety information) of the Building Regulations 2010 – (England and Wales only) [6];
- e) Lead Authority Partnership Schemes (LAPS);
- f) fire service audit and enforcement procedures;
- g) evolving interpretation of fire safety legislation.

There is a correlation between all of the above and fire safety management based on the assumption that the organization understands what the fire safety management requirements are for the areas of their concern.

PAS 7 can be adopted by any organization wanting to implement a formal procedure to reduce the risks to life (of employees, customers and the general public), property, assets and the environment that are associated with fire in the working environment.

0.2.2 Operational implications arising from building design

Legislation and most nationally accepted codes and standards offer minimum requirements that are “life safety” focused, and the property and construction sector has become accustomed to this level of protection. However many organizations view their premises as assets and have well defined “property protection” and “mission continuity” or “environmental, economic and social sustainability” objectives.

Fire safety management is a key aspect in controlling the risk to people, property and the environment from the destructive effects of fire in all buildings and should be considered at the design stage when developing the fire strategy. There is an increased emphasis on fire safety management due to the proliferation of fire-engineered buildings.

Such buildings may involve additional management considerations. For example, an enhanced fire safety management system, above and beyond the legal minimum compliance level, can be specified in a holistic way, and considered by approving authorities as a key component of the overall fire strategy. In addition an enhanced level of management can ensure robust procedures are put in place to support a specific fire-engineered solution, for example, the assumption that the fire load within the building will not exceed a prescribed limit.

The concept of enhanced management systems, audit and certification is not new. PD 7974-6:2004 recommends that its highest management system level should be subject to third-party certification.

Similarly BS 9999 refers to the need for fire safety management. It defines three “management levels” with level 1 giving the highest level of management.

0.2.3 Fire risk management in the built environment

Once constructed, those responsible for managing occupied buildings in England and Wales must comply with the requirements of the Regulatory Reform (Fire Safety) Order 2005 [1] and equivalent legislation in Scotland [2,3] and Northern Ireland [4,5]. The completion of a fire risk assessment is a requirement of the legislation, but this is only the start of satisfying these requirements. It is critical that the findings of the fire risk assessment are acted upon and that the significant findings of the assessment (and the assessment itself) are kept up to date. For example, a fire risk assessor could highlight a number of critical failings in a building but, unless the management have the resource, motivation and method to correct these, the assessment has no effect on the improvement of fire safety.

Since the introduction of the Regulatory Reform (Fire Safety) Order [1] and equivalent legislation in Scotland [2,3] and Northern Ireland [4,5], fire and rescue service enforcement activity has progressively increased with a wide range of prosecutions across a wide range of occupancies and building types. A common factor in many prosecutions is the lack of fire safety management with regard to specific buildings that, in a number of cases, can be seen as organizational failures. The report of the Fatal Accident Inquiry into the Rosepark care home fire [7], which resulted in the deaths of 14 residents in 2004, concluded:

“The deficiencies in the management of fire safety at Rosepark contributed to the deaths in that a number of key circumstances would have been quite different if there had been an adequate system of fire safety management”.

This is consistent with findings of multiple fatality fire inquiries in the past 50 years. It can be a symptom of a failure of an inconsistent or haphazard fire risk management system.

0.3 The “plan, do, check, act” model

PAS 7 applies the “plan, do, check, act” (PDCA) model to implementing, maintaining and improving an FRMS. The basis of the approach is shown in Figure 1, which sets out the requirements of the FRMS in the context of the PDCA model, and is also briefly described as follows:

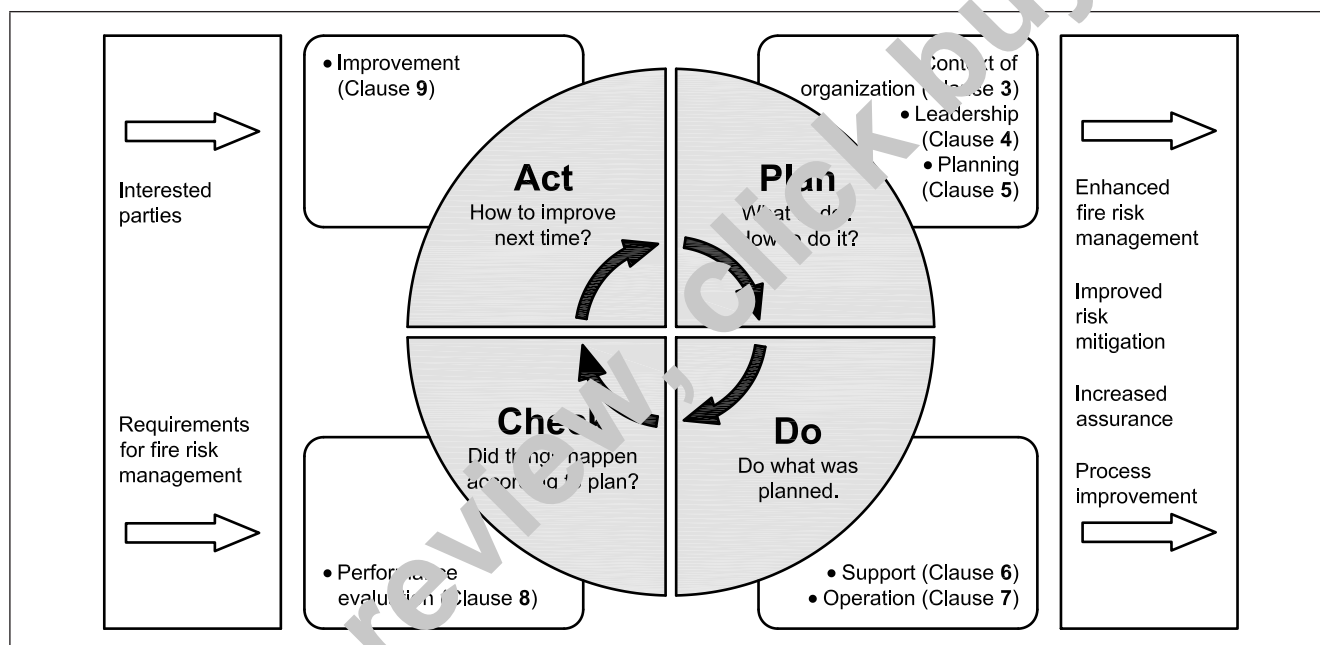
Plan: establish the objectives and processes necessary to deliver results in accordance with the organization’s fire policy.

Do: implement the processes.

Check: monitor and measure processes against fire policy, strategic objectives, legal and other requirements, and report the results.

Act: take actions to improve fire risk management performance continually.

Figure 1 Fire risk management “plan, do, check, act” model



Application of the PDCA model ensures consistency with other risk management systems, such as:

- BS EN ISO 22301, *Societal security – Business continuity management system – Requirements*
- BS OHSAS 18001, *Occupational health and safety management systems – Requirements*
- BS ISO 31000, *Risk management – Principles and guidelines*
- BS ISO/IEC 27001, *Information technology – Security techniques – Information security management systems – Requirements.*

PAS 7 specifies requirements for integrating fire safety as a management system approach. It can be implemented with reference to BS 9999:2008, Clause 8, which defines a number of management levels and management factors to be used in assessing fire safety management. These factors are present within the

requirements of this PAS and an organization might choose to generate new procedures for some or all of them.

The level of the FRMS (i.e. the extent of documentation and resources devoted to it) depends on a number of factors, such as the scope of the system, the size of an organization and the nature of its activities, products and services, and organizational culture.

0.4 Claims of conformity

An organization can claim that its FRMS conforms to PAS 7. A claim of conformity can be made on the basis of:

- a) a first-party conformity assessment performed by the organization itself (self-assessment);
- b) a second-party conformity assessment performed by, for example, a trade association; or
- c) a third-party conformity assessment performed by an organization, such as a certification body, that is independent of both the organization responsible for the FRMS and, for example, a trade association.

1 Scope

This PAS specifies the requirements for a fire risk management system (FRMS).

The system can be applied in:

- a) organizations that operate on multiple sites;
- b) separate management divisions within an organization; or
- c) individual premises within a single organization.

It can accommodate diverse geographical, cultural and social conditions.

The requirements of the PAS provide a framework for the management levels contained within BS 5839 to provide a measurable assessment of the factors that can be fed into the risk profile for a specific building to allow design freedoms that might otherwise be unobtainable.

PAS 7 is applicable to any organization that wishes to:

- 1) establish a formal FRMS to minimize risks to life, property, business continuity and the environment from the threat of fire which arises as a result of its activities;
- 2) implement, maintain and continually improve an FRMS;
- 3) assure itself of its conformity with its stated fire policy and strategy.

It is not the intent of this PAS to prescribe how to meet its requirements but for an organization to do so itself in a manner that is appropriate to its needs and the needs of interested parties. These needs are shaped by legal, regulatory, organizational and industry requirements, the products and services, the processes employed, the size and structure of the organization, and the requirements of its interested parties.