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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/TR 16732-2 was prepared by Technical Committee ISO/TC 92, *Fire safety*, Subcommittee SC 4, *Fire safety engineering*.

ISO/TR 16732 consists of the following parts, under the general title *Fire safety engineering — Fire risk assessment*:

— *Part 1: General*

— *Part 2: Example of an office building* [Technical Report]

— *Part 3: Example of an industrial property* [Technical Report]

Introduction

This part of ISO/TR 16732 is an example of the application of ISO 16732-1, prepared in the format of ISO 16732-1. It includes only those sections of ISO 16732-1 that describe steps in the fire risk assessment procedure. It preserves the numbering of sections in ISO 16732-1 and so omits numbered sections for which there is no text or information for this example.

This part of ISO/TR 16732 is intended to illustrate the implementation of the steps of fire risk assessment, as defined in ISO 16732-1. Some steps are well illustrated by the example, and others are not well illustrated. The text of this part of ISO/TR 16732 indicates where the example is strongest.

Fire Safety Engineering — Fire risk assessment —

Part 2:
Example of an office building

1 Scope

This part of ISO/TR 16732 is an example of the application of ISO 16732-1, prepared in the format of ISO 16732-1. It is intended to illustrate the implementation of the steps of fire risk assessment, as defined in ISO 16732-1.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 16732-1:2012, *Fire safety engineering — Fire risk assessment — Part 1: General*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 16732-1 apply.

4 Applicability of fire risk assessment

This example was conducted to support a policy analysis of alternative national courses of action for fire safety for a class of properties. This situation qualified under several of the circumstances cited in Clause 4 of ISO 16732-1:2012. A wide range of scenarios was deemed to be necessary. There were multiple fire safety goals which made it inappropriate to use a short list of scenarios to represent all scenarios. The objectives were stated in risk terms such as expected annual losses.

5 Overview of fire risk management

Clause 5 of ISO 16732-1:2012, including Figure 1, is not reproduced here; it is not part of the calculations.

6 Steps in fire risk estimation

Risk assessment is preceded by two steps: establishment of a context, including the fire safety objectives to be met, the subjects of the fire risk assessment to be performed and related facts or assumptions; and identification of the various hazards to be assessed.

6.1 Overview of fire risk estimation

Figure 1 describes the sequence of steps involved in fire risk estimation.