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BSI Standards Publication

**Assessing and managing flood risk in
development — Code of practice**

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Summary of pages

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Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 December 2017. It was prepared by Technical Committee CB/501, *Flood risk and watercourses*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 8533:2011, which is withdrawn.

Relationship with other publications

This British Standard is complementary to BS EN 752 which covers drain and sewer systems outside buildings.

Information about this document

This British Standard complements existing statutory regulations and guidance to help the user prepare a comprehensive flood risk assessment that can be used for the purposes of planning and deciding upon appropriate flood mitigation measures.

Use of this document

As a code of practice, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

It has been assumed in the preparation of this British Standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

Presentational conventions

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

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 of this standard. The word “may” is used in the text to express permissibility, e.g. as an alternative to the primary recommendation of the clause. The word “can” is used to express possibility, e.g. a consequence of an action or an event.

Notes and commentaries are provided throughout the text of this standard. Notes give references and additional information that are important but do not form part of the recommendations. Commentaries give background information.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

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 British Standard cannot confer immunity from legal obligations.

Particular attention is drawn to the following specific regulations:

- the Reservoirs Act 1975 [1];
- the Flood and Water Management Act 2010 [2];
- the Flood Risk Management (Scotland) Act 2009 [3];
- the Reservoirs (Scotland) Act 2011 [4];
- the Water Environment (Controlled Activities) (Scotland) Regulations 2011 [5];
- the Town and Country Planning Act 1990 [6]; and
- the Building Regulations 2010 [7].

Introduction

This British Standard has been created to help the user to analyse the flood risk of a particular site and to guide the selection of appropriate risk management solutions.

This standard is applicable after the need to carry out a flood risk assessment has been established.

NOTE In Wales, a flood risk assessment is known as a "flood consequence assessment" and has the same meaning. For the purposes of this document, the term flood risk assessment is used.

A flood risk assessment seeks to assess the probability (likelihood) of a flood event occurring and the potential adverse consequences of that event. Flood risk can arise from many sources, including rivers, the sea, surface water run-off, heavy rainfall, groundwater and artificial sources (e.g. sewers, canals, reservoirs). The assessment also needs to pay due regard to the effects of a changing climate over the lifetime of the development.

1 Scope

This British Standard gives recommendations and guidance on the appropriate assessment and management of flood risk in developments.

It is intended to provide practical assistance for understanding and dealing with the flood risk associated with a proposed development.

NOTE Intended users include developers and their consultants, designers, planning authorities, water companies, land drainage authorities, internal drainage boards, and other regulatory bodies.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this British Standard, the following terms and definitions apply.

3.1 annual exceedance probability (AEP)

probability of a flooding event being exceeded in any year

NOTE For example, a 1% AEP flood event has a 1% probability of being exceeded within any year. The use of AEP is preferred over other terminology, such as return period (e.g. 1 in 100 year event), which has incorrectly been associated with a regular occurrence rather than an average recurrence interval.

3.2 development

building, engineering, mining or other operations, in, on, over or under land, or the making of any material change in the use of a building or other land

3.3 flood extent

area covered by water during a flood event that is usually dry

3.4 flood risk

combination of the probability of a flood event and of the potential adverse consequences for human health, the environment, cultural heritage and economic activity associated with a flood event