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Interested committees:

Title: Draft BS ISO 19677 Guidelines for assessing the adverse impact of wildland fires on the environment and to people through environmental exposure

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Introduction

This draft standard is based on international discussions in which the UK has taken an active part. Your comments on this draft are invited and will assist in the preparation of the consequent standard. Comments submitted will be reviewed by the relevant BSI committee before sending the consensus UK vote and comments to the international secretariat, which will then decide appropriate action on the draft and the comments received.

If the international standard is approved, it is possible the text will be published as an identical British Standard.

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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	(7)
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/ Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

DRAFT INTERNATIONAL STANDARD

ISO/DIS 19677

ISO/TC 92/SC 3

Secretariat: **AFNOR**

Voting begins on:
2017-02-13

Voting terminates on:
2017-05-07

Guidelines for assessing the adverse impact of wildland fires on the environment and to people through environmental exposure

Titre manque

ICS: 13.220.01

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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.

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 19677 was prepared by Technical Committee ISO/TC 92, *Fire safety*, Subcommittee SC 3, *Fire threat to people and environment*.

This second/third/... edition cancels and replaces the first/second/... edition (), [clause(s) / subclause(s) / table(s) / figure(s) / annex(es)] of which [has / have] been technically revised.

Introduction

This International Standard provides guidance on the assessment of the adverse impact of fire effluent from forest, shrubland and grassland fires to the environment and to people through environmental exposure.

The serious consequences of such events have confirmed that the environmental impact of wildland fires is a pressing international issue that urgently needs to be dealt with globally and systematically. This document provides a framework for a common treatment of the environmental impact of wildland fires in answer to this pressing need.

General awareness of the fact that large wildland fires present dramatic and persistent adverse effects on the environment has been accentuated by a number of high impact incidents over the past half century. In [Annex A](#), some recent wildland fire incidents are listed and their environmental impact described.

As relevant quantitative data on environmentally hazardous components of fire effluent cannot routinely be obtained from actual wildland fires, appropriate data may also have to be obtained from prescribed burns, real-scale fire tests and simulations involving physical fire models.

Real-scale wildland fire tests have many limitations. As well as problems regarding repeatability due to variations in weather conditions, slope and vegetation heterogeneity, real-scale fires are often conducted out of the fire season when conditions are vastly different to those occurring during actual fires.

Although real-scale fire tests provide important information concerning the fire dynamics, some measurements can be conducted at laboratory scale. Both real-scale fire tests and laboratory experiments are complementary and necessary.

This International Standard is intended principally for use by the following parties:

Firefighters and investigators

Insurance providers

Environmental regulatory authorities

Civil defence organisations

Public health authorities

Land owners

Guidelines for assessing the adverse impact of wildland fires on the environment and to people through environmental exposure

1 Scope

The primary focus of this International Standard is to present a methodology for assessing the adverse environmental impact of wildland fires and wildland firefighting operations. It includes guidance for incident commanders and other responsible or affected parties when decisions regarding firefighting strategies, tactics, and restoration are made. It does not include specific instruction on compiling and reporting the information needed to assess environmental damage caused by a fire incident, nor does it include specific sampling methodologies and analysis requirements. These topics are the focus of ISO 26367-1 and ISO 26367-2.

This International Standard includes guidance for assessment of air and water pollution; impacts on soils and soil fertility; impacts on wildlife and vegetation; and effects of smoke and gas exposure on firefighters and exposed human populations. It also includes environmental impacts of firefighting activities and environmental impact on the built environment. A secondary focus is to establish guidelines for post-fire mitigation of the adverse impact of wildland fires on the environment.

The wildland fires covered include both natural wildfires and man-initiated fires, including prescribed burning and agricultural fires, but not peat fires nor coal seam fires.

This International Standard is intended to serve as a tool for the development of standard protocols for:

- (i) the assessment of local and remote adverse environmental impacts of wildland fires;
- (ii) the assessment of the effects of smoke and gas exposure on firefighters and exposed human populations.

The Standard does not address fire damage to the built environment; direct acute toxicity issues, which are covered by other ISO standards; nor does it address economic impact. The impact of climate change is discussed in [Annex D](#).

2 Normative references

The following normative documents contain provisions that, through reference in this text, constitute provisions in this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards and Technical Specifications.

ISO 13943, *Fire safety — Vocabulary*

ISO 14050, *Environmental management — Vocabulary*

ISO Guide 64, *Guide for addressing environmental issues in product standards*

ISO 26367-1, *Guidelines for assessing the adverse environmental impact of fire effluents — Part 1: General*

ISO 26367-2, *Guidelines for assessing the adverse environmental impact of fire effluents — Part II: Methodology for compiling data on environmentally significant emissions from fires*