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**Validation method for fire gas  
analysis —**

**Part 3:  
Considerations related to  
interlaboratory trials**

*Méthode de validation pour l'analyse des effluents du feu —  
Partie 3: Considerations relatives aux essais inter laboratoires  
avec les analyses chimiques des effluents du feu*

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## Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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

A list of all parts in the ISO 12828 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

The reduction of human tenability from fire effluent has long been recognized as a major cause of injury and death in fire. The composition and concentration of the effluent from a large fire are also clearly key factors in determining the potential for harm to the environment. The harmful components of fire effluent can be determined from both large-and small-scale tests of materials and finished products. Equations have been developed for quantifying the effects of the effluent components for example to estimate the available safe escape time (ASET)<sup>[1]</sup>. Related documents are also being developed in ISO/TC 92/SC 3 which deal with environmental threats from fire effluent.

These advances in fire science and fire safety engineering have led to an increasing demand for quantitative measurements of the chemical components of the fire effluent. Characterizing these measurements is described in ISO 12828-2. Comparing results from one laboratory to another and giving a global confidence in any measurement technique, independently from the user and the conditions of use, are described in this document.

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