Audio/video, information and communication technology equipment – Part 2: Explanatory information related to IEC 62368-1
FOREWORD

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IEC 62368-2, which is a technical report, has been prepared by subcommittee TC 108: Safety of electronic equipment within the field of audio/video, information technology and communication technology.

This second edition cancels and replaces the first edition published in 2011. This edition constitutes a technical revision.

This second edition updates the first edition of IEC 62368-2 published in 2011 to take into account changes made to IEC 62368-1:2010 as identified in the Foreword of IEC 62368-1:2014.
This Technical Report is informative only. In case of a conflict between IEC 62368-1 and IEC TR 62368-2, the requirements in IEC 62368-1 prevail over this Technical Report.

The text of this technical report is based on the following documents:

<table>
<thead>
<tr>
<th>Enquiry draft</th>
<th>Report on voting</th>
</tr>
</thead>
<tbody>
<tr>
<td>108/540/DTR</td>
<td>108/553/RVC</td>
</tr>
</tbody>
</table>

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

In this standard, the following print types are used:

- notes/explanatory matter: in smaller roman type;
- tables and figures that are included in the rationale have linked fields (shaded in grey if “field shading” is active).

In this standard, "HBSDT" stands for Hazard Based Standard Development Team, which is the Working Group of TC 108 responsible for the development and maintenance of IEC 62368-1.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 62368 series can be found, under the general title Audio/video, information and communication technology equipment, on the IEC website.

In this document, only those subclauses considered to need further background reference information or explanation of their content to benefit the reader are included. Therefore, not all numbered subclauses are cited. Unless otherwise noted, all references are to clauses, subclauses, annexes, figures or tables are located in IEC 62368-1:2014.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

IMPORTANT – The ‘colour inside’ logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.
Clause 0  Principles of this product safety standard

Clause 0 is informational and provides a rationale for the normative clauses of the standard.

0.5.1  General

ISO IEC Guide 51:2014, 6.3.5 states:

“When reducing risks the order of priority shall be as follows:

a) inherently safe design;
b) guards and protective devices;
c) information for end users.

Inherently safe design measures are the first and most important step in the risk reduction process. This is because protective measures inherent to the characteristics of the product or system are likely to remain effective, whereas experience has shown that even well-designed guards and protective devices can fail or be violated and information for use might not be followed.

Guards and protective devices shall be used whenever an inherently safe design measure does not reasonably make it possible either to remove hazards or to sufficiently reduce risks. Complementary protective measures involving additional equipment (for example, emergency stop equipment) might have to be implemented.

The end user has a role to play in the risk reduction procedure by complying with the information provided by the designer/supplier. However, information for use shall not be a substitute for the correct application of inherently safe design measures, guards or complementary protective measures.”

In general, this principle is used in IEC 62368-1. The table below shows a comparison between the hierarchy required in ISO IEC Guide 51 and the hierarchy used in IEC 62368-1:2014:

<table>
<thead>
<tr>
<th>ISO IEC Guide 51</th>
<th>IEC 62368-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) inherently safe design</td>
<td>1. inherently safe design by limiting all energy hazards to class 1</td>
</tr>
<tr>
<td>b) guards and protective devices</td>
<td>2. equipment safeguards</td>
</tr>
<tr>
<td></td>
<td>3. installation safeguards</td>
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<tr>
<td>c) information for end users</td>
<td>4. behavioral safeguards</td>
</tr>
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<td></td>
<td>5. instructional safeguards</td>
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</table>