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Safety aspects — Guidelines for child safety in standards and other specifications

Aspects liés à la sécurité — Principes directeurs pour la sécurité des enfants dans les normes et autres spécifications

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) are worldwide federations of national standards bodies (ISO member bodies and IEC national committees). The work of preparing International Standards is normally carried out through ISO and IEC 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 or IEC, also take part in the work. ISO collaborates closely with IEC on all matters of electrotechnical standardization.

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

Draft Guides adopted by the responsible Committee or Group are circulated to the member bodies for voting. Publication as a Guide 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 and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC Guide 50 was prepared by a Joint Working Group of the ISO Committee on Consumer Policy (COPOLCO) and the IEC Advisory Committee on Safety (ACOS). This third edition cancels and replaces the second edition (ISO/IEC Guide 50:2002), which has been technically revised.

The main changes compared with the second edition are as follows:

— close alignment of the title and scope with the title and scope of ISO/IEC Guide 51;

— additional clarification that ISO/IEC Guide 50 is intended for standards developers, but that it can also be used by other stakeholders;

— expansion of Clause 5 outlining the relationship between child development, behaviour and unintentional harm;

— new structure of Clause 7 on hazards, and inclusion of new hazards that were not included in the previous edition;

— addition of new Clause 8 dealing with the adequacy of safeguards.

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Introduction

0.1 Intended users of this Guide

This Guide provides guidance to those developing and revising standards, specifications and similar publications. However, it contains important information that can be useful as background information for, amongst others, designers, architects, manufacturers, service providers, educators, communicators and policy makers.

This Guide provides useful information for auditors and safety inspectors in the absence of a specific standard.

0.2 The reason for this Guide

Preventing injuries is a shared responsibility. The challenge is to develop products, including manufactured articles, including their packaging, processes, structures, installations, services, built environments or a combination of any of these which minimize the potential for causing deaths or serious injuries to children. A significant aspect of this challenge is to balance safety with the need of children to explore a stimulating environment and learn. Injury prevention can be addressed through design, engineering, manufacturing controls, legislation, education and raising awareness.

0.3 Relevance of child safety

Child safety is a major concern for society, because child and adolescent injuries are a major cause of death and disability in most countries. The joint WHO/UNICEF *World Report on Child Injury Prevention* [26] identifies unintentional injury as the leading cause of death for children over the age of 5. More than 830 000 children die each year from road traffic crashes, drowning, burns, falls and poisoning.

Children are born into an adult world, without experience or appreciation of risk, but with a natural desire to explore. They can use products or interact with environments in ways not necessarily intended, which are not necessarily regarded as “misuse”. Consequently, the potential for injury is particularly great during childhood. Supervision might not always prevent or minimize significant injury. Therefore, additional injury prevention strategies are often necessary.

Intervention strategies aimed at protecting children recognize that children are not little adults. Children’s susceptibility to injury and the nature of their injuries differ from those of adults. Such intervention strategies ideally also consider reasonably foreseeable use of products or surroundings. Children interact with them in ways that reflect characteristics of child behaviour, which will vary according to the child’s age and level of development. Intervention strategies intended to protect children therefore often differ from those intended to protect adults.

0.4 Role of standards

Standards can play a key role in reducing and preventing injury because they have the unique potential to:

— draw on technical expertise for design, manufacturing controls and testing,

— specify critical safety requirements, and

— inform through provisions for instructions, warnings, illustrations, symbols, etc.

NOTE In this Guide, the term “standard” includes other ISO/IEC publications, e.g. Technical Specifications and Guides.

0.5 Structure of this Guide

This Guide provides additional information to ISO/IEC Guide 51. Whereas ISO/IEC Guide 51 provides a structured approach to risk reduction within a general safety context, this Guide focuses on the

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relationships between child development and harm from unintentional injury, and provides advice on addressing hazards that children might encounter. This Guide is structured as follows:

a) Clause 4 describes a general approach to child safety, including the principles for a systematic way to address hazards;

b) Clause 5 covers the relationship between child development and behaviour and unintentional injury, including children's anthropometry (see 5.1.2), motor (see 5.1.3), physiological (see 5.1.4) and cognitive (see 5.1.5) development, and exploration strategies (see 5.1.6); the importance of applying knowledge of child development to preventing harm is covered in 5.2; children's development age compared with chronological age is covered in 5.3;

c) Clause 6 covers the relevance of the child's physical and social environments and special considerations relating to the child's sleeping environment;

d) Clause 7 describes hazards to which children might be exposed during their use of, or interaction with, a product, along with specific suggestions for addressing those hazards;

e) Clause 8 describes a structured means of considering the adequacy of safeguards.

In addition, Annex A contains a checklist for assessing a standard. It provides an overview of hazards, potential injuries and structured approaches to solutions. However, it is essential that it be read in conjunction with the main body of this Guide, as it only gives a few examples of structured approaches. Annex B lists some information on injury databases.

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Safety aspects — Guidelines for child safety in standards and other specifications

1 Scope

This Guide provides guidance to experts who develop and revise standards, specifications and similar publications. It aims to address potential sources of bodily harm to children from products that they use, or with which they are likely to come into contact, even if not specifically intended for children.

This Guide does not provide guidance on the prevention of intentional harm (e.g. child abuse) or non-physical forms of harm, such as psychological harm (e.g. intimidation).

This Guide does not address the economic consequences of the above.

NOTE The term “product” is defined in 3.5.

2 Normative references

There are no normative references.

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