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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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Safety of intelligent consumer product - Part 3: Risk control

智能消费品安全 第3部分:风险控制

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1 Scope

This document gives the principles for safety risk control of intelligent consumer products and establishes the general process for safety risk control of intelligent consumer products, comprising setting the plan, classified control, tracing risk, and tracking and feedback.

This document applies to the conduct of risk control activities for intelligent consumer products.

2 Normative references

The contents of the following documents constitute indispensable provisions of this document through the normative references made to them in the text. For dated references, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies to this document.

GB/T 39013-2020 Consumer product safety - Guidelines for risk control

GB/T 39112-2020 General rules for safety risk control over the life cycle of consumer products

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 intelligence: The capability of possessing human or human-like characteristics of wisdom. Note: human or human-like characteristics of wisdom are shown in that, in the course of achieving some purpose, there is always one or more processes, or cycles of processes, of perception, decision and execution, within which, through continuous learning, the ability to achieve the purpose and the efficiency and effect with which it is achieved are improved; this document holds that, in embodying human or human-like characteristics of wisdom, the several capabilities and processes of perception, decision, execution and the learning within them are indispensable. [SOURCE: GB/T 28219-2018, 3.1]

3.2 consumer product: A product designed and produced mainly, but not exclusively, for personal use, including the components, parts, accessories, instructions for use and packaging of the product. [SOURCE: GB/T 35248-2017, 2.2]

3.3 risk control: The act of implementing risk management decisions. Note: risk control may include monitoring, re-evaluation and the carrying out of decisions. [SOURCE: GB/T 28803-2012, 3.97]

4 General principles

4.1 Completeness. Over the whole life cycle of the intelligent consumer product, including design, production, packaging, storage and transport, use, recovery and disposal, risk control measures are adopted at every stage.

4.2 Effectiveness. The coordination of the various parts of the intelligent consumer product and of the several stages of the life cycle is taken into account together, so as to ensure that the risk control measures can effectively reduce the risk to within the tolerable range.

4.3 Continuity. Risk control measures are adjusted dynamically according to newly appearing hazards (sources), so as to ensure the continuity of risk control and to respond in good time to new risks that may arise.

4.4 Traceability. The information involved in the risk control measures at each stage of the life cycle of the consumer product is recorded, so that tracing back and analysis can be carried out subsequently.

5 General process

The general process of risk control comprises the steps of setting the plan, classified control, tracing risk, and tracking and feedback. The specific process is shown in Figure 1.

Figure 1 Flow chart of safety risk control for intelligent consumer products

6 Setting the plan

6.1 Preparing the material. On the basis of the laws, regulations, standards and other

material bearing on the intelligent consumer product, and according to the results of hazard (source) identification and risk assessment, the objective, the scope and the risk acceptance criteria of risk control are defined.

6.2 Drawing up the scheme. The risk control scheme may contain the following: the objective, the basis, the scope, the personnel, the risk acceptance criteria, the measures and the feedback of risk control.

6.3 Predicting the effect. A judgement is made of the expected effect of the safety control scheme for the intelligent consumer product, and a fall-back scheme for risk control is prepared, so as to secure the effect of risk control. The cost-benefit and the residual risk of the intelligent consumer product are judged, disposal measures and a contingency plan are set, the control measures are pre-tested, and a table evaluating the expected control effect is drawn up; the effect of the scheme is verified in the course of risk control so that the control scheme can be improved.

7 Classified control

7.1 Physical and chemical hazards (sources). Risk control of the physical and chemical hazards (sources) in intelligent consumer products is carried out in accordance with GB/T 39013-2020 and GB/T 39112-2020.

7.2 Information hazards (sources). Risk control of information hazards (sources) is based on the results of the risk assessment and on the security policy, and corresponding control measures are taken so that the risk is controlled within the tolerable range. Risk control measures for typical information hazards (sources) are given in Annex A.

7.3 Ethical hazards (sources). Risk control of ethical hazards (sources) is based on the relevant requirements of the laws, regulations and standards in force, and is consistent with the core socialist values of present-day society. Risk control measures for typical ethical hazards (sources) are given in Annex A.

8 Tracing risk

8.1 Determining the risk control points. On the basis of the hazard (source) list, the hazards (sources) that give rise to risk are determined; by systematically analysing the characteristics of each stage of the life cycle of the intelligent consumer product and analysing the way in which risk arises and evolves, the risk control points are determined.

8.2 Preparing hazard (source) management documents. A table of the distribution of hazards (sources) over the whole life cycle of the intelligent consumer product is established, and by means of product trees, fault trees and similar methods the distribution of hazards (sources) is compiled into management documents that can be identified and re-used, raising the efficiency and the rigour of risk control.

9 Tracking and feedback

9.1 Recording the results. The state and the process of risk control are recorded and a risk control table is drawn up; the state before control and the test of the effect after control are recorded and compared, and subsequent arrangements are made.

9.2 Correcting the scheme. In the course of tracking and feedback of risk control, the feedback results shall be compared and analysed against the predicted effect at appropriate times; where a deviation in the direction of control is found, or where the progress of control does not meet the requirements, correction shall be made in good time.

9.3 Filing the information. A sound system of records of the consumer product safety risk control process is established, and the records are kept in paper or electronic form; the file mainly includes the following: a) product information; b) the type of intolerable risk, the severity of the harm it causes, and so on; c) the risk control scheme; d) the minutes and the conclusions of the review meeting on the risk control scheme; e) the results of the residual risk assessment; f) other relevant documents.