INTERNATIONAL STANDARD

ISO 12931

First edition
2012-06-01

Performance criteria for authentication solutions used to combat counterfeiting of material goods

Critères de performance des solutions d'authentification utilisées pour combattre la contrefaçon des biens matériels

Reference number
ISO 12931:2012(E)

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Published in Switzerland

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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 12931 was prepared by Project committee ISO/TC 246, *Anti-counterfeiting tools*.

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Introduction

The quantity and range of counterfeited material goods has been expanding rapidly over a decade, and is now no longer limited to luxury goods. The sale of counterfeit goods is prevalent in many developing countries and is becoming more common in the developed world. Individual manufacturers and rights holders are experiencing an increase in the number of counterfeiting attacks on their material goods. The internet is compounding the problem. These counterfeit goods do not necessarily offer the same guarantees in terms of safety and compliance with environmental measures and regulatory requirements, generating risk for consumers, patients, users and the distribution chain. They cause loss of earnings, job losses, and brand value damage for the companies and rights holders targeted as well as tax losses for governments. Counterfeiting increases the potential for false material good claims and litigation for the companies and distribution supply chain. Counterfeiting of material goods has become one of the major activities of organized crime, both within domestic markets and international trade and smuggling.

In order to prevent counterfeiting from plaguing their business, companies are increasingly using authentication solutions geared to their individual needs. It is important to specify the performance requirements for the solutions designed to support the fight against counterfeiting at both national and international levels. This will nurture greater confidence among consumers, support the security of the supply chain, and help the public authorities devise and implement preventive, deterrent and punitive policies.

Counterfeiting can include but is not limited to

— deceipt of the consumer,

— deceipt of the purchasers of new goods or replacement parts,

— infringement of intellectual property rights, and

— violation of national, regional or international laws.

Counterfeiting can include false claims regarding

— intellectual property rights,

— details of manufacture, and

— trade dress.

Counterfeiting needs to be kept separate from diversion.

The problem of counterfeiting is aggravated by the following factors:

— the market is increasingly global and the material goods are more complex;

— the global movement of material goods is increasing, and may use non-traditional channels.

Therefore it is more difficult for an inspector to recognize the characteristics of any given authentic material good.

Counterfeiting seeks to bypass legal provisions, including guarantees of conformity and quality, designed to enable professionals to release safe material goods onto the market in fair competition. Buyers do not necessarily pay all necessary attention to the material goods they are examining, particularly because of trust, lack of time, the temptation of attractive prices, or simply because they are unfamiliar with the material good itself. The authentication element provides a specific and more reliable method of determining if the item is genuine or a counterfeit good.

Establishing the authenticity of material goods, in other words recognizing whether it is genuine or fake, consists in checking whether the material good reproduces the essential characteristics of the authentic material good to help establish whether or not there has been infringement. The first step, then, required to provide solid ground on which to conduct this challenge, is to establish what these essential characteristics are, in particular the material good’s origin, and then to verify whether the suspect material good being challenged does objectively and concretely present these characteristics.

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If there is any doubt as to the authenticity of a material good, it is the inspectors' role, once they have observed the characteristics of the suspect material good and/or authentication element, to examine whether these characteristics match those of the authentic material good and/or authentication element. The process involved is an essentially technical analysis using experience, authentication elements, authentication tools or a combination of these methods.

This International Standard has been drafted to pinpoint the objectives and boundaries required for industry-wide and services-wide application. This International Standard sets out the performance criteria for purpose-built authentication solutions. These authentication solutions are designed to provide reliable evidence making it easier to assess whether material goods are authentic or counterfeit.

This International Standard aims to integrate the performance requirements for authentication solutions into the material good's life cycle in any situation when required. Authentication is thus positioned as a feature of the material good and services life cycle against counterfeiting.

This International Standard is proposed to be part of a wider framework in related standards in the anti-counterfeiting field wherein the proof that a material good is authentic or counterfeit can be obtained by any means whatsoever, and it was not drafted or designed to define a sole means of authentication.

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Performance criteria for authentication solutions used to combat counterfeiting of material goods

1 Scope

This International Standard specifies performance criteria and evaluation methodology for authentication solutions used to establish material good authenticity throughout the entire material good life cycle. It does not specify how technical solutions achieve these performance criteria.

This International Standard is intended for all types and sizes of organizations that require the ability to validate the authenticity of material goods. It is intended to guide such organizations in the determination of the categories of authentication elements they need to combat those risks, and the criteria for selection of authentication elements that provide those categories, having undertaken a counterfeiting risk analysis. Such authentication elements can be part of the material good itself and/or its packaging. The criteria applies to the material good and/or its packaging.

The performance criteria is considered by organizations in relation to their specific situation.

This International Standard is focused upon the authentication of material goods

— covered by intellectual property rights,

— covered by relevant national or regional regulation,

— with safety and public health implications,

— otherwise with a distinctive identity.

This International Standard focuses on material goods and is not intended to apply to, for example, goods used in the financial sector, official administrative papers, identity documents or to downloadable products.

This International Standard does not apply to technologies or systems designed for the tracking and tracing of material goods. Track and trace on its own is not an authentication solution and is therefore outside the scope of this International Standard.

This International Standard does not deal with economical criteria aiming to correlate performance and costs of the authentication solutions.

Some industries and services may have special regulatory requirements which would require additional functionality to supersede part(s) of this International Standard.

This International Standard is intended to contribute to an organization’s understanding of its authentication needs, possible strategies, and challenges. It is intended to give the organization a set of criteria to analyse, specify and implement its authentication solutions.

The organization will determine the level of security assurance required for the selected authentication solution. The authentication solution provider is expected to comply with the risk and security requirements of the organization.

This International Standard is not intended to constrain the organization’s choice of authentication technologies.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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