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## **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*



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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

- deceit of the consumer,
- deceit 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.