BS ISO 22382:2018

BSI Standards Publication

Security and resilience — Authenticity, integrity and trust for products and documents — Guidelines for the content, security, issuance and examination of excise tax stamps

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National foreword

This British Standard is the UK implementation of ISO 22382:2018.

The UK participation in its preparation was entrusted to Technical Committee SSM/1, Societal security management.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Published by BSI Standards Limited 2018

ISBN 978 0 580 98804 2

ICS 03.100.01

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2018.

Amendments/corrigenda issued since publication

Date	Text affected

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INTERNATIONAL STANDARD

ISO 22382

First edition
2018-10

Security and resilience — Authenticity, integrity and trust for products and documents — Guidelines for the content, security, issuance and examination of excise tax stamps

Sécurité et résilience — Authenticité, intégrité et confiance pour les produits et les documents — Lignes directrices relatives au contenu, à la sécurité, à l'émission et à l'examen des timbres fiscaux représentatifs de droits d'accise

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 292, *Security and resilience.*

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

The purpose of this document is to assist tax authorities to enhance compliance with excise tax regulations by implementing new, or improving existing, excise tax stamps and associated issuance systems. This document provides guidance for tax stamp procurement, construction, security, issuance and examination.

As an indirect tax, excise duties are an effective way for national, state or provincial governments to raise revenue. As they are most commonly applied to tobacco and alcoholic consumer products they also serve the purpose of discouraging consumption of these health-endangering products. Several countries, however, are extending the use of excise taxes and therefore tax stamps to other fast-moving consumer goods (FMCG), such as soft drinks, entertainment software and more. As the range of taxed goods expands, it becomes more important that tax stamps match best practice in the field.

Because consumers often seek to buy cheaper, un-taxed or under-taxed goods, the supply of such goods attracts criminal activity with the goal of tax avoidance, often leading to products that may be dangerous to consumer health.

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Security and resilience — Authenticity, integrity and trust for products and documents — Guidelines for the content, security, issuance and examination of excise tax stamps

1 Scope

This document gives guidelines for the content, security, issuance and examination of physical tax stamps and marks used to indicate that the required excise duty or other applicable taxes identified with an item have been paid and to signify that the item is legitimately on the intended market.

Specifically, this document gives guidance on:

— defining the functions of a tax stamp;

— identifying and consulting with stakeholders;

— planning the procurement process and selection of suppliers;

— the design and construction of tax stamps;

— the overt and covert security features that provide protection of the tax stamp;

— the finishing and application processes for the tax stamp;

— security of the tax stamp supply chain;

— serialization and unique identifier (UID) codes for tax stamps;

— examination of tax stamps;

— monitoring and assessing tax stamp performance.

This document is applicable only to tax stamps that are physical in nature and apparent to the human senses of sight (with the aid of a revealing tool if necessary) or touch, applied to a consumer good or its packaging and which allow material authentication. When the term “authentication” is used in this document, it refers only to the authentication of the tax stamp, not to the product on which the tax stamp is affixed.

This document does not apply to systems or procedures that an issuing authority has in place to control and monitor its excise revenue collection, except by reference to them where they have an impact on the design or specification of tax stamps.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 22300, *Security and resilience — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 22300 and the following apply.

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ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
activation
stage in production or use of a *tax stamp* (3.11) when *applicable taxes* (3.4) become due

Note 1 to entry: Activation of the *unique identifier* (3.14), if used, can be separate from activation of the tax stamp.

3.2
adhesive
chemical mixture that bonds two materials together

Note 1 to entry: "Adhesive" can also be referred to as "glue".

Note 2 to entry: It can be enabled by heat, pressure or chemistry.

3.3
alteration
intentional attempt to change an authentic item or the data contained within or on an item by chemical, abrasive or other techniques

Note 1 to entry: In this document, an "item" is a *tax stamp* (3.11).

3.4
applicable tax
excise and other revenue tax on products as defined within national, state, provincial or local law

3.5
authentication
process of corroborating an entity or attributes with a specified or understood level of assurance

Note 1 to entry: In this document, an "entity" is a *tax stamp* (3.11).

Note 2 to entry: The phrase "specified or understood level of assurance" acknowledges that it is impossible to achieve absolute certainty in authenticating any item. The degree of certainty varies with the type of authentication solutions used, the training and motivation of the examiner and the equipment available to them. For example, the level of authentication assurance achieved is very different between a consumer and a forensic laboratory.

3.6
direct marking
applying a *tax stamp* (3.11) directly onto the product container through the use of laser marking or printing with inks or other markers that adhere to the material of the container

3.7
illicit product
taxable consumer product made available to the market to avoid the payment of all or part of the due *applicable taxes* (3.4)

Note 1 to entry: As part of the risk assessment, *tax authorities* (3.10) should refer to legislation and regulations in their jurisdictions to ascertain what qualifies as an illicit product.

Note 2 to entry: Illicit products could include illegally manufactured, adulterated, re-filled, smuggled or illegal re-imported products.

3.8
substrate
material that a *tax stamp* (3.11) is made of when it is produced away from the site of the *tax stamp applier* (3.12)

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3.9
tamper evident
ability to reveal that an item has been compromised

Note 1 to entry: In this document, an "item" refers to a *tax stamp* (3.11).

3.10
tax authority
government (national, provincial, state or local) agency that has responsibility for the collection of *applicable taxes* (3.4) and for the specification and design of *tax stamps* (3.11)

Note 1 to entry: The tax authority might be an independent agency or part of customs, the ministry of finance or other revenue authority.

3.11
tax stamp
visible stamp, label or mark placed on certain types of consumer goods to show that the applicable excise tax has been paid

Note 1 to entry: It can be in the form of a label, closure seal, indicia or mark applied to the product, the package or container of the taxable item.

Note 2 to entry: Tax stamps are a tool within a government's system for the collection and protection of *applicable taxes* (3.4).

Note 3 to entry: *Substrate* (3.8)-based tax stamps are also referred to as "tax seals" and "tax banderols" (sometimes spelled "banderoles").

3.12
tax stamp applier
entity that applies a *tax stamp* (3.11) to a taxable product

Note 1 to entry: The application can be done by *direct marking* (3.6) or by applying a *substrate* (3.8)-based tax stamp.

Note 2 to entry: A tax stamp applier is usually a manufacturer, packager or importer of a taxable product or products, or a tax stamp supplier that is also responsible for reporting the application of the tax stamp to the *tax authority* (3.10), with information about the product it is affixed to if and when required by the tax authority.

3.13
tax stamp stakeholder
entity with a stake in the implementation, enforcement and use of a *tax stamp* (3.11) system

3.14
unique identifier
UID
code that represents a single and specific set of attributes that are related to an object or class of objects during its life within a particular domain and scope of an object identification system

Note 1 to entry: ISO 22300 defines "object" and "identification".

4 Process overview

The tax authority should regularly review its tax stamp programmes, including security, legislation and enforcement, to identify any weaknesses in the tax stamp itself or in the procedures for production, issuance, activation, application and examination. The tax authority should have a standby tax stamp design that can quickly be put into production in the event that this review or enforcement activity reveals fraudulent production or use of the tax stamps in use.

NOTE Issuing a new tax stamp design is the quickest way to make fraudulent tax stamps obsolete.

Figure 1 summarizes the process recommended in this document.

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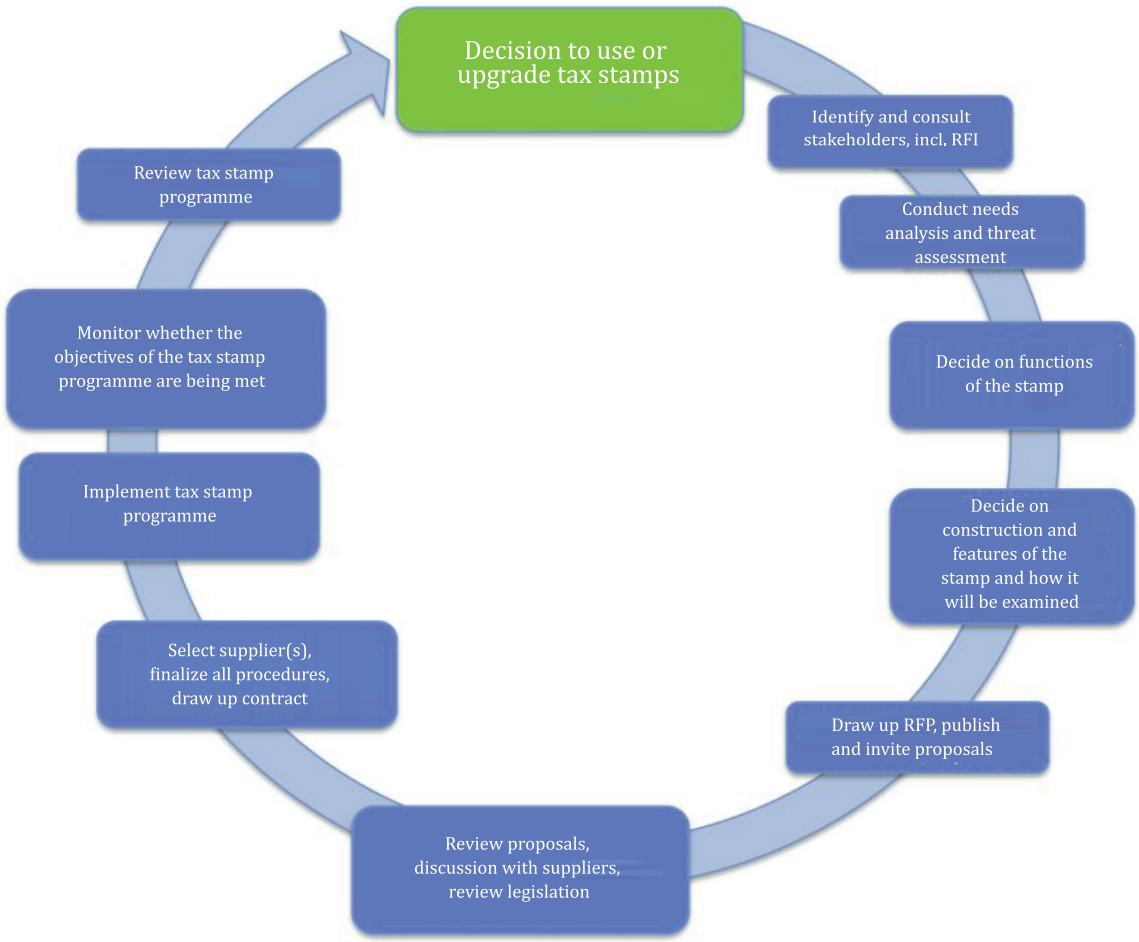

Figure 1 — Tax stamp procurement and review process

5 Identify and consult stakeholders

The tax authority should identify and consult with all relevant tax stamp stakeholders in identifying functions and drawing up specifications for a tax stamp. Relevant tax stamp stakeholders will vary across jurisdictions and may include the following.

— **Manufacturers** of taxable goods that produce and package finished goods subject to taxation. Depending on local circumstances and tax systems, manufacturers could order, receive and apply tax stamps to finished goods. A manufacturer can also act as the local distributor.

— The **trademark holder** that owns the trademark in the taxable goods. This is often the same entity as the manufacturer but not always.

— **Importers of taxable goods** that import part- or wholly-finished goods subject to taxation and that are responsible for the payment of applicable taxes and fees. The importer may order, receive and apply tax stamps to finished goods.

— **Distributors or wholesalers of taxable goods** that bring the taxable products from a warehouse or port to the local market and that could be responsible for paying taxes to the domestic tax authority and applying the tax stamp on these products.

— **Retailers of taxable goods** responsible for procuring the taxable goods through the legal supply chain to sell to a consumer and that are required to verify the presence of the tax stamp.

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— **Tax stamp providers,** which can be one or more organizations that provide tax stamps and examination tools to the tax authority, law enforcement agencies and other authorities as determined by the tax stamp authority to enable efficient tax collection and protect against fraud.

NOTE A tax stamp provider can also supply or specify application and other equipment for handling the tax stamps. It could provide only the physical tax stamp or whole systems, which can include IT systems, serialization, activation, direct marking and coding systems.

— **Law enforcement agencies** that provide regulatory and criminal enforcement of the applicable laws. These agencies may include customs, revenue police, national police, defence forces, coastguards, border-control, security services, prosecution services, financial auditing authority, health officials and others.

— **Consumers** who are the end-user of a taxable product, consulted by the tax authorities through representative consumer groups and not as individuals when seeking input from the public.

6 Functions of a tax stamp

6.1 Overview

When determining the specification for the physical nature of tax stamps it will issue, the tax authority should first consider the functions that it requires the tax stamp to fulfil, e.g. whether the tax stamps will serve any functions in addition to the tax collection function, and the implications of these functions for their construction and design. Whatever function or functions the tax stamp is to fulfil, the tax authority should ensure that the tax stamp can be authenticated as genuine and that counterfeit, altered, tampered with or otherwise fraudulent tax stamps can be detected.

The tax authority should consider the possibilities described in 6.2 to 6.4.

6.2 Core function — Revenue collection

As a statement of tax liability or receipt, a tax stamp may fulfil many functions. The revenue tax authority should identify all the functions it requires of the tax stamp. Possibilities include:

— creating the tax liability at the tax stamp's point of issue or application to the taxable product;

— being a receipt for the payment of applicable taxes;

— validating the tax-paid status of goods in the supply chain;

— identifying non- or reduced-tax-paid goods in the supply chain;

— enabling the revenue authority to monitor or (where necessary) control the production or importation of taxable goods through the number of tax stamps issued to the organization that applies them.

6.3 Tracking, tracing and monitoring

It is recommended that the tax authority develop a track and trace system for tax stamps that allows it to find when, where and by which entity the tax stamp was applied on the product. The tax authority should use information about the product's origin and the route by which it reached the point where it is being examined to identify suspicious or criminal activity in the supply chain.

The tax authority should consider the consequential requirements to implement and make effective supply chain monitoring and tax stamp tracking if these functions are to be undertaken. These requirements may include:

— the UID to be applied to the tax stamp (see Clause 11) or an alternative method of identifying and tracking each item;

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— monitoring stations or monitoring staff at points in the supply chain to record information about the location of the product and the tax stamp on it;

— the secure storage and handling of the data that is captured from this monitoring;

— the analysis of data and sharing it with law enforcement agencies, manufacturers or distributors and other relevant stakeholders.

NOTE Tracking is monitoring an item through a supply chain, while tracing is the ability to check where an item has been (see ISO 12931). This is also sometimes referred to as "traceability".

Figure 2 provides an example of how track and trace can be useful for monitoring tax stamps in the supply chain.

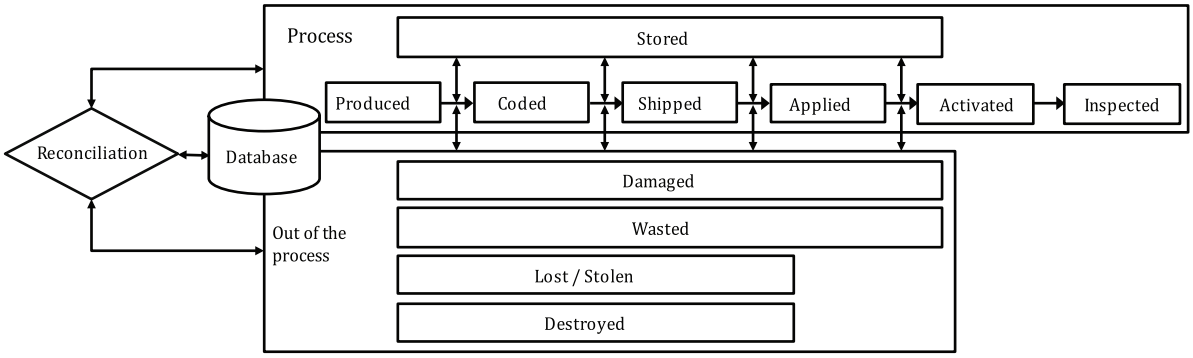

Figure 2 — An example of a process of track and trace and reconciliation for tax stamps

Tax authorities should consider opportunities for interaction with other fiscal domains (outlined in ISO 22381) and other stakeholders, as appropriate.

6.4 Possible additional functions

The tax authority should consider the other functions a tax stamp can serve that are not directly related to the tax collection and tax enforcement function in consultation with other stakeholders, particularly other government agencies.

Other functions might include:

— **consumer reassurance** by means of a tamper-evident substrate-based tax stamp (see 8.4), which cannot be removed from the taxable product without being destroyed, making it more probable that an item bearing a tax stamp is legitimate;

— tax stamps can facilitate **legislative compliance** where local, national or supra-national legislation or other regulations require tracking and tracing for certain products.

It is, however, acknowledged that there is also a chance that an item affixed with a tax stamp could be illicit. As a result, authorities should be cautious in adopting or communicating the consumer confidence function of tax stamps when the tax stamp serves other functions that are not directly related to the tax collection and tax enforcement function. This serves to avoid any potential liabilities should a citizen be harmed by a product bearing a tax stamp.

7 Procurement process

7.1 Preliminaries

The tax authority or agency purchasing tax stamps should ensure that the procurement process is open, transparent and meets the sustainability objectives in ISO 20400. Where more than one organization is involved in the supply of tax stamps or for the whole tax stamp programme, or if the supplier contract

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