

ISO 22382 for Tax Stamps: Recommendations for Security Managers

Astrid Mitchell

International Tax Stamp Association

Intergraf – 20 March 2018



18 Members



Active Role in Developing Tax Stamp Standard

ISO/TC 292: Security and resilience

WG4: Authenticity, integrity and trust for products and documents



ISO/CD 22382 (ex 19998)

Guidelines for the content, security, issuance and examination of excise tax stamps

The ISO 22382 Editorial Group

Ian Lancaster, Project Leader	Reconnaissance	UK
Michael O'Neil	NASPO	USA
Richard Ward	NASPO	USA
Yoichi Iga	Japan Institute of Standards	Japan
Graham Whitehead	Standards Council of Canada	Canada
Francis Goossens	Thomas Greg & Sons	Colombia
Ruggero Milanese then Christophe Renard	SICPA	Switzerland
Steffen Zimmermann	RDMA	Germany
Wolfgang Klasen, Convenor WG 4	Siemens	Germany
Im Wook Park	Korean Police	S Korea
Walter Fumy	Bundesdruckerei	Germany
Marietta Ulrich-Horn	Securikett	Austria
Joachim Koerner	Leonhard Kurz	Germany
Zbigniew Sagan	Advanced Track & Trace	France
Françoise Daniel	SURYS	France
Alex Klein	Canadian Banknote	Canada
Rob Stierman	KBA NotaSys	Switzerland
John Colledge	Consultant	USA
Ladislav Janco	GS1 Slovakia	Slovakia

General Scope of Standard

- *Guidance* as opposed to *compliance*
- Reflects evolving role of tax stamps and their multiple functions
- Emphasises additional role of substrate-based stamps as tamper-evident solution
- Covers substrate-based or directly marked tax stamps
- Does *not* cover digital-only stamps or systems
- Strongly encourages unique identifying codes
- Holistic approach

Tax Stamps Like These...



Objectives for Revenue Agencies

- Guide revenue agencies in making tax stamps and associated issuance/collection systems more resistant to fraud by combining physical and digital security elements
- Thus to reduce smuggling, counterfeiting and other fraud
- And so generate higher tax revenues...
- And reduce risk to public from fraudulent goods
- Also help governments to support policy enforcement along distribution channels

**The more secure the tax stamp, the better
it delivers the above**

Objectives for Suppliers

- Establish common terminology for tax stamps and systems
- Establish common approaches to specifying tax stamps
- Achieve economies of scale
- Facilitate a focus for R&D
- Improve understanding by revenue agencies and so facilitate promotion and sales
- Grow the market by providing reassurance and ‘comfort’ to revenue agencies
- Promote technology that offers value-added solution for high-security tax stamps

Timing

- Current draft being voted by national standards bodies
- Ballot closes 29 March
- Votes so far received point to finalisation end April
- With aim to publish by autumn 2018 latest

Let's Delve a Bit Deeper



Scope in More Detail

- Terminology
- Stakeholders to be consulted in specifying stamps
- Functions of stamps
- Procurement process
- Construction and security features
- Finishing and application
- Supply and distribution security
- Issuance and activation systems
- Serialisation and unique identifiers
- Examination
- Monitoring and Testing

Some Referenced Standards

- ISO 12931 Performance criteria for authentication solutions in the field of material goods (systematic revision started last week, project ISO 22383)
- ISO 14298 Graphic technology – Management of security printing processes
- ISO 16678 Guidelines for interoperable object identification and related authentication systems to deter counterfeiting and illicit trade
- ISO/DIS 22381 Guidelines for establishing interoperability among object identification systems to deter counterfeiting and illicit trade
- ISO/IEC 16022 Data Matrix Codes
- GS1 Global Traceability Standard

Specific recommendations of interest to security printers



Issuing RFIs and RFPs

- Use RFI as first step in open procurement process
- Followed up with RFP giving suppliers leeway to propose optimum solutions

Selecting Suppliers

- Consult with stakeholders such as government organisations familiar with document securities
- Ensure suppliers and sub-contractors comply with security risk assessment
- Ensure suppliers comply with standards for secure production, transportation and destruction of security materials

Design and Artwork Rights

Two options:

- Tax authority is assigned copyright in artwork and final stamp design
- Creator retains copyright but uses design only on instruction from tax authority

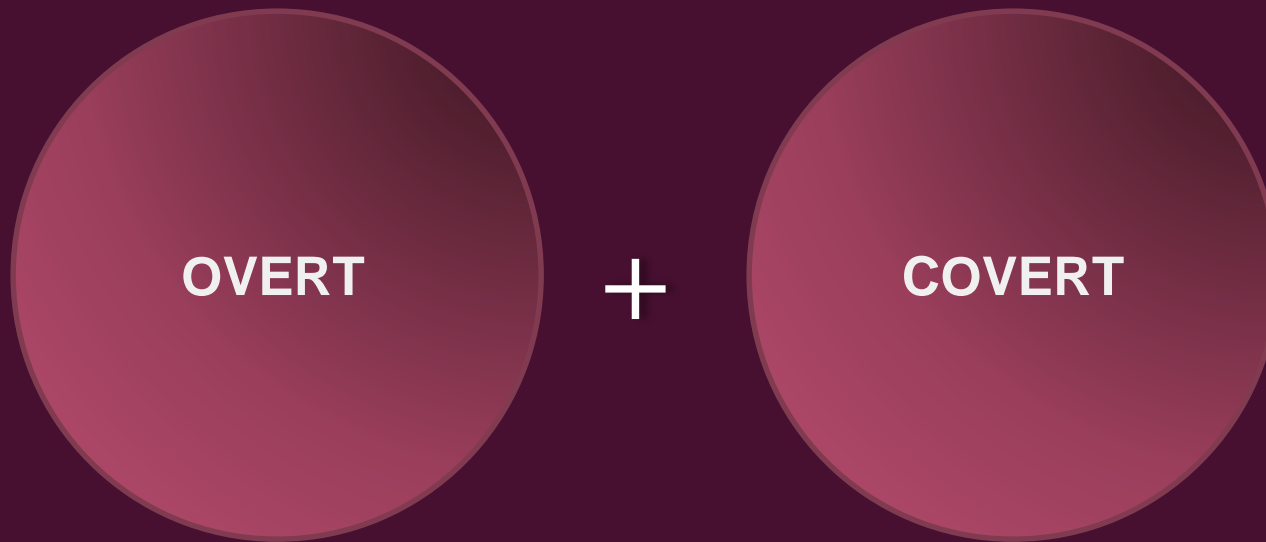
Best Practice Security Printing Techniques

- Graphical security designs
- Complexity in design and printing process
- Combination of printing tools and methods
- Registration of different parts of design within tight tolerances
- Use of specialist techniques difficult for criminals to source

Common Printing Methods

Name	Characteristics
Offset	Most common method for tax stamps but vulnerable to counterfeit
Intaglio	Complex process, not widely available
Screen	Used to apply optical effect inks
Flexo	Comparable to offset, brings more ink to paper
Inkjet	Most suitable for applying UID to tax stamps
Digital	Refers to printing from digital image

Authentication Features



Overt and Covert Features

Overt	Covert
Printed as part of graphic design	Graphic features
Security inks	Holograms and other DOVIDs
Holograms and other DOVIDs	Taggants
Lenticular laminates	Fingerprinting
	Copy-sensitive codes

Authentication Features



Authentication Features

- Use combination of specific and layered security made up of physical and digital features

**STANDALONE CODES CANNOT
PROVIDE AUTHENTICATION**

Direct Marking

What's good about direct marking:

- Enables high-speed printing of tax serial number
- Allows serial number or code to be destroyed when item opened
- Doesn't require application of substrate-based tax stamp
- Can contain material security (inks)

BUT:

- Does NOT offer variety of authentication features built into substrate-based tax stamp
- Raises risk of multiple use of single unique identifier if inappropriate ink used

Tax Stamp Production Security

- Ensure suppliers are or have to access to authorised security printers according to specific criteria

Tax authorities may:

- Inspect suppliers' premises
- Verify supplier is certified according to appropriate standards such as ISO 9001, ISO 14298 / ANSI-NASPO

Unique Identifiers

- Each stamp should carry UID/serial number
- Tax authority should determine with supplier how UID will be applied:
 - During stamp production process
 - By stamp issuer as confirmation of tax payment against which stamp is issued
 - At point of application to product
 - Pre-printed by stamp manufacturer and activated on line

Examination

- Consider how and by whom stamps will be examined:
 - Number of samples to be examined
 - Examination experience
 - Familiarity with stamp security features
 - Access to training and examination tools
- Consumers can be given option to authenticate stamps with smartphone or digital device

Role of Security Printers and Security Managers

- Obviously, you have role as supplier (or potential supplier) of tax stamps
- If necessary, in partnership with a supplier providing other components required to deliver full solution/system
- Make your experience, knowledge and expertise available to tax authority:
 - RFP should allow you to propose what you believe to be best solution to meet authority's requirements
 - If you are selected, build a relationship of trust and openness with authority
 - So they recognise your value to them – listen to you, turn to you
 - Work with you in event of suspect stamps.

Find Out More at the Tax Stamp Forum

RECONNAISSANCE
**TAX
STAMP
FORUM™**

7–9 May 2018
Nairobi, Kenya