



FRAMEWORK CONVENTION
ALLIANCE
BUILDING SUPPORT FOR TOBACCO CONTROL

Marking, coding and tracing of tobacco products

Leuven, 4 September 2008

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Cigarette packaging

- **A pack contains generally 20 cigarettes**
- **A carton contains generally 10 packs or 200 cigarettes**
- **A master case contains generally 50 cartons or 10.000 cigarettes**

Tracking

Tracking refers to the ability of competent authorities to systematically monitor the movement of tobacco products from the place of manufacture, through the distribution chain, to the intended market of retail sale, making sure all relevant duties and taxes have been paid.

Tracing

Tracing refers to the ability of competent authorities, on the occasion of an audit or a seizure of a genuine product, to recreate the route taken by a tobacco product from the place of manufacture, through the distribution chain, to the point where the product has been diverted into illegal trade channels

Authentication

Authentication refers to the verification process whether a product is genuine or counterfeit.

Verification technology

Verification technologies enable enforcement officials to distinguish legal from illegal products immediately by simply scanning the products.

Malaysia

Diamond MY

marks printed with security ink on all domestic cigarettes in Malaysia



Digital tax stamps

Digital tax stamps are tax stamps with unique and digital codes which enable the authentication of the tax stamps and the tracking of the status of legally issued tax stamps electronically.

California:

A security excise stamp combined with covert, coded data

California Tobacco Tax Stamp Program

- The State of California is increasing enforcement of counterfeit tax stamped cigarettes.
- This program's cornerstone is the launch of a high security tax stamp on all cigarettes distributed within California.
- Retailers are 100% responsible for verifying their inventory contains legitimate tax stamped cigarettes.
- The only way to ensure that you have legitimate tax stamped cigarettes is to scan them with SICPA's handheld verification unit.



Form 10
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TRUST, BUT VERIFY

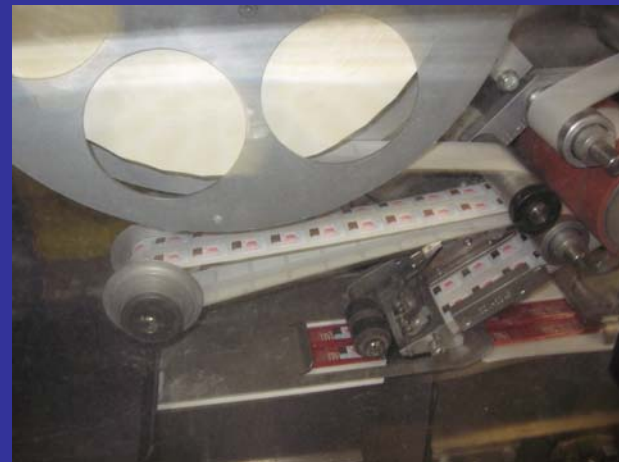
*Protect Your
Tobacco Sales
From Getting Burned*

Information about California's
Tobacco Tax Stamp Program:

- New Laws
- How to Protect Yourself
- Verification Unit
- How to Order



Tax stamps in California



High tech tax stamps with a unique code using invisible ink



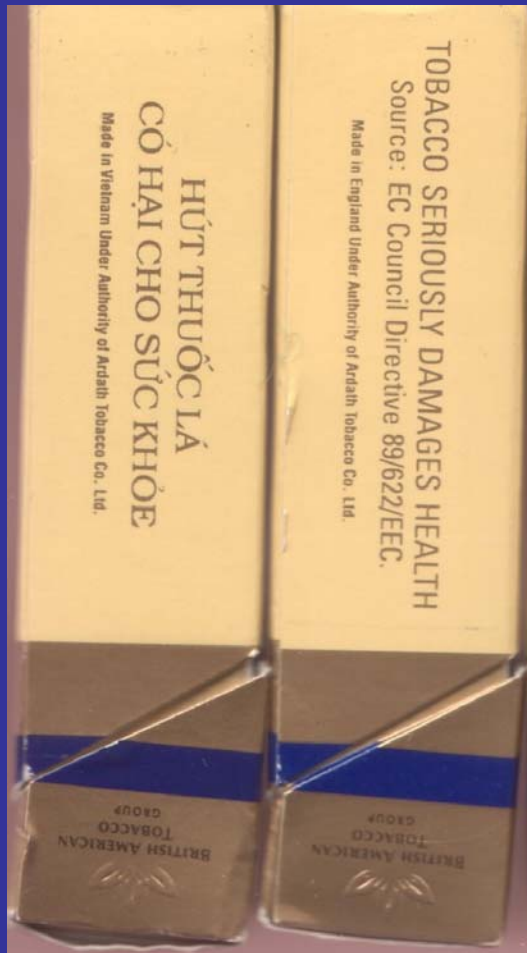
Codes are activated in the factories in Brazil



Bar codes

Barcodes can also be used for tracking purposes. Parcel delivery services use such systems and can locate a package at all times during its delivery

Existing bar codes on cigarette packs



Bar Codes and Data Matrix Codes

- One-dimensional Bar codes
- Data matrix codes are difficult to counterfeit and enables individual identity for each marked item



**Bar
Codes**



**Data
Matrix™**

Radio-frequency identification (RFID)

Radio-frequency identification (RFID) systems are made up of readers and “smart tags”—microchips attached to antennas. When the tag nears a reader, it broadcasts the information contained in its chip.

EU-PMI agreement

PMI marks all Packs or Cartons with embossed codes containing information on:

- (a) the date of manufacture,**
- (b) the manufacturing facility**
- (c) the machine of manufacture**
- (d) the production shift**

EU-PMI agreement

PMI marks Master Cases with unique, machine scannable barcode labels

(1) First Purchaser name and order number,

(2) Shipment date,

(3) Destination of shipment,

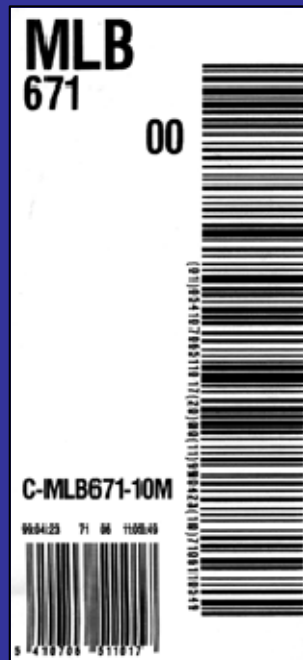
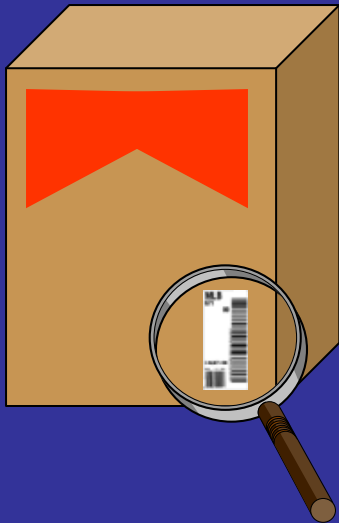
(4) Point of departure from the final factory or warehouse,

(5) The consignee to whom the product was shipped

(6) The Intended Market of Retail Sale.

PMI Master case barcode

- Each shipping case is uniquely identified by EAN-128 barcode
- This barcode provides the following information :



Product Barcode (GTIN-14)

+ Product Variant

+ Date (YYMMDD)

+ Production Center

+ Case Packer No.

+ Time (HHMMSS)

PMI Master cases



Code Verification System

Check a Code

Code to Check

JGR S8D 3XJ B4R

City of purchase

Call Type

Customer

Check



- In place in Germany, Peru



PMI carton matrix barcode



The key issues

- Unique identification of the product
- Verification of the authenticity
- Transmit secure info at each stage of the supply chain in an effective and standardised way. (scanning, radio frequency, manual uploading)

The key issues

The need for secure standards:

- Who, where and when was the product manufactured?
- What was the intended market of final destination?
- Who was the first purchaser?
- Who are the successive buyers?
- Where was the product diverted?

Conclusion

- ✓ **Governmental requirements for identification and traceability of tobacco products will intensify over the coming years.**
- ✓ **The FCTC is best option to regulate the coding at international level.**
- ✓ **The coding technology is evolving very quickly.**
- ✓ **The challenge in the tobacco sector is that the coding should apply to the 290 billion cigarette packs.**