Increasing compliance: Electronic monitoring system for production & trade
COMMON FEATURES
Security Features of Banderoles

- Visible (Overt) Security Features

- Invisible (Covert) Security Features
Digital tax stamps

Visible (Overt) Security Features

- Example from Turkey
  - Pink and green colors in 2009 banderole are switching between.
  - “TÜTÜN” (TOBACCO) mark on the tobacco banderole.
When it is controlled with the special filter TAPDK’s logo is seen green on the left window and red on the right window.
Invisible Security Items of Banderole

TURKEY

- Banderoles of tobacco products, alcoholic beverages and beer codes have several invisible security items.
- All invisible security items can only be controlled with field audit mobile.
- The audit mobile connects to the data held on PRA’s data management system (DMS) and check the code across the production information (serial number, code type, date of coding, place of production, etc.) and activation information (activated, not activated, etc.)
# Application of electronic monitoring system

<table>
<thead>
<tr>
<th>Order taken by Govt</th>
<th>Info goes to Govt data center</th>
<th>to other data center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stamps ordered</td>
<td>Stamps produced</td>
<td>Govt data center</td>
</tr>
<tr>
<td></td>
<td>ELECTRONIC INFO GOES Directly from factory to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stamps delivered</td>
<td>Markets Check</td>
</tr>
<tr>
<td>As stamps placed</td>
<td>also monitored</td>
<td>Off to retailer</td>
</tr>
</tbody>
</table>

When requested info sent to Govt

or fake
WHERE is THE INFO GATHERED?

- GOVERNMENT DATA CENTER
- MANUFACTURERS
- INDEPENDENT COMPANIES
WHICH INFO IS TRANSFERRED?

- AGGREGATE – weekly, monthly
- DETAILED INFO as production takes place,
  - PRODUCT TYPE,
  - BRAND NAME,
  - MANUFACTURER,
  - PRODUCTION DATE,
  - PRICE etc.
## Info transferred as production takes place

**Turkey, Brazil**

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Brand</th>
<th>Date &amp; time of production</th>
<th>Production facility</th>
<th>price</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAN A</td>
<td>BRAND A</td>
<td>DAY/TIME/MM/YY</td>
<td>FACTORY X</td>
<td>$2.30</td>
<td></td>
</tr>
<tr>
<td>MAN A</td>
<td>BRAND B</td>
<td>DAY/TIME/MM/YY</td>
<td>FACTORY Y</td>
<td>$3.50</td>
<td></td>
</tr>
<tr>
<td>MAN B</td>
<td>BRAND C</td>
<td>DAY/TIME/MM/YY</td>
<td>FACTORY Z</td>
<td>$2.00</td>
<td></td>
</tr>
<tr>
<td>MAN B</td>
<td>BRAND D</td>
<td>DAY/TIME/MM/YY</td>
<td>FACTORY K</td>
<td>$1.50</td>
<td></td>
</tr>
</tbody>
</table>
Efficient Physical Controls

Examples of countries employing digital stamps by electronic monitoring system

- Implementing countries- objective
  - Malaysia – purely on illicit control
  - Turkey – compliance and illicit control
  - California
  - Canada
  - Brazil- compliance and illicit control
  - Kenya (in process) – compliance and illicit control

- Considering countries
  - Ukraine - compliance
  - Philippines – compliance and illicit control
  - Pakistan – compliance and illicit control
### System Results as of July 2008

<table>
<thead>
<tr>
<th>Comparison Table Jan.-July 2007 vs 2008</th>
<th>2007 Production</th>
<th>2008 Production</th>
<th>Production Declaration Increase (%)</th>
<th>Tax Rev. Increase (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcoholic Beverages January July</td>
<td>38,2 Million litres</td>
<td>56,8 Million litres</td>
<td>49 %</td>
<td>23 %</td>
</tr>
<tr>
<td>Beer</td>
<td>541,4 Million litres</td>
<td>582,9 Million litres</td>
<td>7,7 %</td>
<td>10,2 %</td>
</tr>
<tr>
<td>Tobacco January July</td>
<td>3,065 Million Packs</td>
<td>3,204 Million Packs</td>
<td>4,5 %</td>
<td>16,3 %</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance, Revenue Department, Turkey
Monitoring System in Brazil: Compliance increased

- Government closed 3 manufacturing facilities due to tax evasion and avoidance
- Tax revenue increased as tax authority verified the level of taxable production level.
PROCESS OF SETTING UP MONITORING SYSTEM
How to establish a monitoring system?
Example by Turkey

- Government opens a public tender.
- Winning company and the tax authority can issue working contract for a fixed period – etc. 5 years.
- The firm can be held responsible for
  - Operation of banderole printing facilities
  - Installation the banderole activation system on mass production lines in production facilities of tobacco manufacturers
  - Distribution of the banderols to manufacturers
  - Monitoring the operation of the system and intervening for system failures and informing tax authority
  - Providing required information to the tax administration by transferring data about production of cigarettes.
Cost of Monitoring System
Based on evidence from Turkish application

- Total cost of the system was divided total production volume of tobacco and alcohol products within 5 years.
- Then the cost of system has been recovered from the banderoles price (sophisticated stamps).
  - The cost of the system for a pack of 20 cigarettes in 5 years was US$0.10
    - The cost is adjusted by Producer Price Index each year.

<table>
<thead>
<tr>
<th>Types of Banderole</th>
<th>Cost in USD per 1000 units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco products</td>
<td>$5</td>
</tr>
<tr>
<td>Alcoholic beverages</td>
<td>$27</td>
</tr>
</tbody>
</table>
The system entered into force without putting any additional burden over the manufacturers of tobacco and alcoholic beverages.

- System applied 181 activation lines in 210 facilities,

Firm set up the banderole printing center at the place that was identified by the Administration,

Tax authority received 500 units of mobile supervision devices,

Firm established banderole and code application facilities at 3 customs that were identified by the Administration

Firm brought and applied the system softwares.

Firm printed and sold banderoles to all manufacturers of tobacco and alcohol for five years.
How does monitoring work?  
**Turkey example**

In general: in the production line and importation: banderoles apply

- **MANUFACTURER**
  - Manufactured
    - How many packs,
    - From which brand,
    - From which retail price

- **DISTRIBUTER**
  - Sold to distributors
    - How many packs,
    - From which brand,
    - From which retail price

- **RETAILER**
  - Sold to retailers
    - How many packs,
    - From which brand,
    - From which retail price

- **Bandrol system specification**
- **Sale to distributors:** Filing for tax purposes
- **Logistics:** subjected to control (banderole and tax)
- **Sale to retailer:** filing to regulatory body
- **Subjected to control (banderole and tax)**
Banderol Produce Process

*Turkey example*

- **Order Collection from Producers & Importers**
- **Government Printer**
- **Tekel Packing**
- **SECURITY PRINTER**
- **Banderol Personalization, Coding & Packing, Delivery**
System of scanning and activation for tobacco lines

*Turkey example*

Source: Ministry of Finance, Turkey
SCANNING and ACTIVATION SYSTEM for Alcohol

Source: Ministry of Finance, Turkey
Pre-activated Banderols

• Small Producers
  • Pre-activated banderols are applied by producers manually

• Importers
  • Option 1: Imported goods can be labeled in the specialized custom facilities (İstanbul, İzmir, Mersin) right after custom clearance
  • Option 2: Importer can send the pre-activated banderols to the producer
Banderole Crimes

Those who provide or engage in the sale or shipment of the products

- with no banderoles,
- with counterfeit banderoles
- with improper banderoles

shall be punished with deprivation of liberty from 2 to 5 years and fiscal fine equal to 5000 working days.
Best Practices for Administration of Monitoring System

- Monitor and gather data as the production takes place
- Ensure data repository by the tax authority
- Analyze the data
  - Tax authority should monitor the production and produce monthly analysis.
- Impose:
  - Strong penalties or
  - Criminal sanctions for:
    - producing or possessing counterfeit stamps and
    - for persons who deal in illicit products.
- Make it an offence for:
  - A retailer or
  - Wholesaler to possess tobacco products that do not bear authentic stamps.
- Have the authority to revoke the operating licenses of
  - Retailers and wholesalers who are repeat offenders.