Combating counterfeit through global best practices & standards

GS1 India

890 indicates India as country of origin

`8 9 0 1 0 1 6  0 0 0 5 0 8`

- GS1 India is a not-for-profit standards body promoted by the Ministry of Commerce, Govt. of India and Indian Industry

- Board members include representatives from:
  - **Ministry of Commerce**
  - **BIS**
  - **FICCI**
  - **ASSOCHAM**
  - **FIEO**
  - **Spices Board**
  - **CII**
  - **IMC**
  - **IIP**
  - **APEDA**

Representations from all industries

- Affiliated to **GS1**, based in Brussels, Belgium
- Example of true **Govt-Industry collaboration**

GS1 stds

6 billion barcodes are read every day, all over the world

Universally recognized barcode found on virtually every consumer product in the world

© 2008 GS1

Use of GS1 stds in food safety

DEPARTMENT OF HEALTH AND HUMAN SERVICES
U.S. FOOD AND DRUG ADMINISTRATION
CENTER FOR FOOD SAFETY AND APPLIED NUTRITION
Product Tracing Systems for Fresh Produce

Date: October 16, 2008

I mentioned the GS1 standards. These were chosen because they're pretty much universally 1 accepted. They're used in 145 countries, 2 million companies, 25 industries. These are the UPC codes you see on everything. They're the reason you could find the peanut butter. So it makes sense. It's a system that's already in use. It's a system that is accepted.

•**CEN/TC**   Date: 2002-10

•Traceability of fishery products — Specification of the information to be recorded in captured fish distribution chains.

•The method of identifying the units of goods traded is based on the EAN.UCC(GS1) system that is already in use throughout the world. The information is keyed to unique IDs given to the individual trade units (e.g. boxes of fish or cases of products) but the scheme also accommodates trade in logistic units made up of numbers of trade units (e.g. pallets of boxes or cases). Businesses that create logistic units have to label them with a logistic unit ID and also record the IDs of the component trade units.

News & Events

News Releases

Pennsylvania Firm Recalls Frozen Chicken Products For Possible *Salmonella* Contamination

News & Events

- News Releases
  - FSIS Recalls

Congressional and Public Affairs
(202) 720-9113
Roger Sockman

Recall Release

**CLASS I RECALL**

FSIS-RC-004-2009

HEALTH RISK: HIGH

WASHINGTON, Feb. 4, 2009 – The Hain Celestial Group Inc, a West Chester, Penn. firm, is recalling approximately 983,700 pounds of frozen chicken entrees in commerce because they contain peanut products recalled by the Peanut Corporation of America, which is the focus of a U.S. Food and Drug Administration (FDA) investigation, the U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS) announced today.

The following products are subject to recall:

10 ounce cartons of Ethnic Gourmet Chicken Pad Thai, which contains peanut sauce and peanuts as garnish. **UPC code # 18687-70054, lot codes "WC7" and "WC8"**

12 ounce bowls of Trader Ming's Spicy Kung Pao Chicken, which contains crushed and whole peanuts as garnish. UPC code 0379526, lot codes "WC7M" and "WC8"
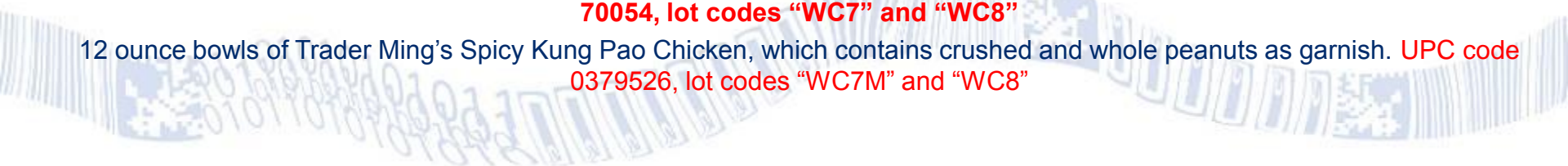
ISO/TC240 – Product recall

Main work item - "Consumer product recall – Guidelines". References GS1 standards.

ISO/TC247 - Fraud countermeasures and controls

Work item - "Anti-counterfeiting track and trace method using unique identifier numbering".   References GS1 stds.

The method of identifying the units of goods traded is based on the EAN.UCC system that is already in use throughout the world. The information is keyed to unique IDs given to the individual trade units (e.g. boxes of fish or cases of products) but the scheme also accommodates trade in logistic units made up of numbers of trade units (e.g. pallets of boxes or cases). Businesses that create logistic units have to label them with a logistic unit ID and also record the IDs of the component trade units.

2. Canadian Food Traceability Data Standard (CFTDS)

Development of a National Traceability Standard

In July 2003, a number of industry associations came together as a result of the mounting regulatory and market pressures in Canada and internationally for food traceability. Their objective was to develop a program to identify the minimum industry requirements for a national all-product, whole-chain food traceability (tracking and tracing) standard based on the globally recognized GS1 (formerly EAN.UCC) system. (The GS1 System standardizes various supply chain solutions for more efficient business among trading partners.)

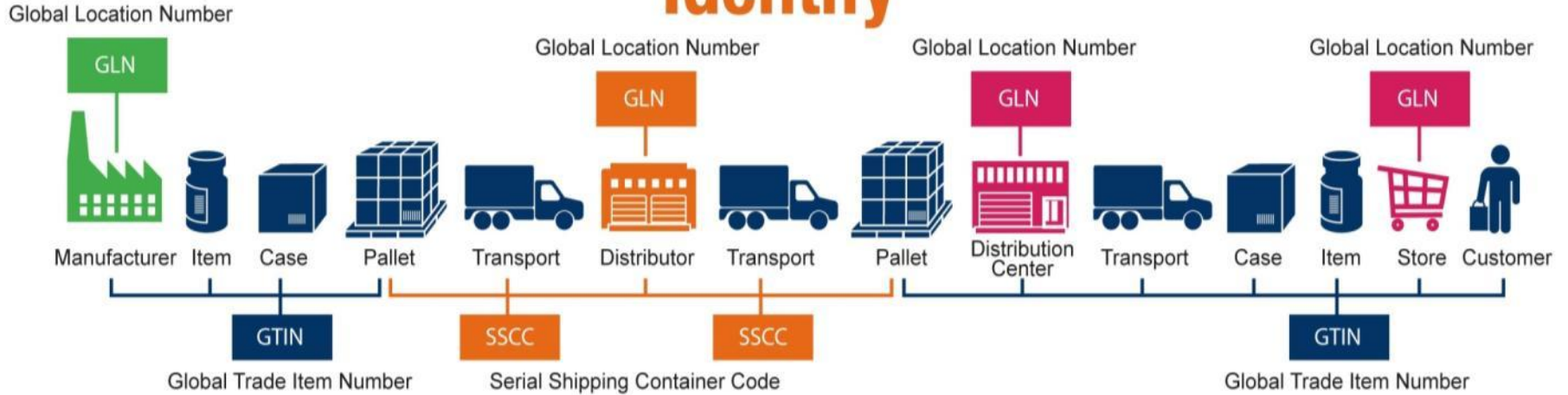*The name for this initiative is Can-Trace.*

GS1 involvement with multilateral organisations

- Working with OECD on consumer product safety thru proposed OECD global portal on product recalls.

- Working with APEC/ABAC on supply chain visibility and food safety

- Working with Asean workgroup on Consumer Protection (ACCP) for recalled/banned products planned thru rapid alert system and information exchange.

- MOU with WCO on cross-border trade facilitation and security. Pilot undertaken in 2009 which demonstrated successfully on use of GS1 stds in Customs processes for supplies inspection and clearance.

GS1 stds usage in global supply chains

GS1 stds - applications

Manufacturer — Item — Case — Pallet — Transport — Distributor — Transport — Pallet — Distribution Center — Transport — Case — Item — Store — Customer

Efficiency
Visibility
Safety
Collaboration
Sustainability
Transparency

Reduce Cost
Anti Counterfeit
Optimize Assets

Enhance Security
Global Standards
Recall

© 2008 GS1

PepsiCo Seeking More Use of Recall Exchange

Michael Garry

Jun. 7, 2012

LAS VEGAS — The number of suppliers now participating in the Rapid Recall Exchange — the Web-based recall notification network — has reached about 900, while the number of retailers is at about 100, said Jeff Brazell, senior manager, ebusiness capabilities, customer supply chain integration, PepsiCo, which is seeking more retail participation.

The number of retailers represents about 85% of grocery all-commodity-volume, noted Brazell, who discussed the RRE and PepsiCo's use of it Wednesday at a session here at the GS1 Connect Conference, sponsored by GS1 US, Lawrenceville, N.J. The participation of suppliers has increased by about 300 from one year ago, but the level of retail participation has remained about the same. "We're looking for more adoption of the Rapid Recall Exchange tool," said Brazell. "That's why I'm doing this speech."

Because PepsiCo can't reach all retailers in recall notifications with the RRE, the company uses it "in parallel" with press releases and letters and emails, he added. Last

India

Anti-counterfeiting strategy

A multi-layered approach

- Secure:
    - Product and packaging
    - Movement of products through the supply chain
    - Business transactions

    Maintaining universal and uniform electronic pedigree across all supply chain stakeholders

- Ensure appropriate regulations and enforcement.
- Increase penalties
- Heighten vigilance and awareness
- Increase int'l collaboration

The introduction of a unique identification for products will enable **authentication and traceability systems which will make more difficult** for counterfeiters to intrude into legitimate supply chain

Comprehensive Approach Is Needed

Supply Chain Standards

Track and Trace and Pedigree

Anti-Counterfeiting

Product/Package Security and Authentication

Interoperability
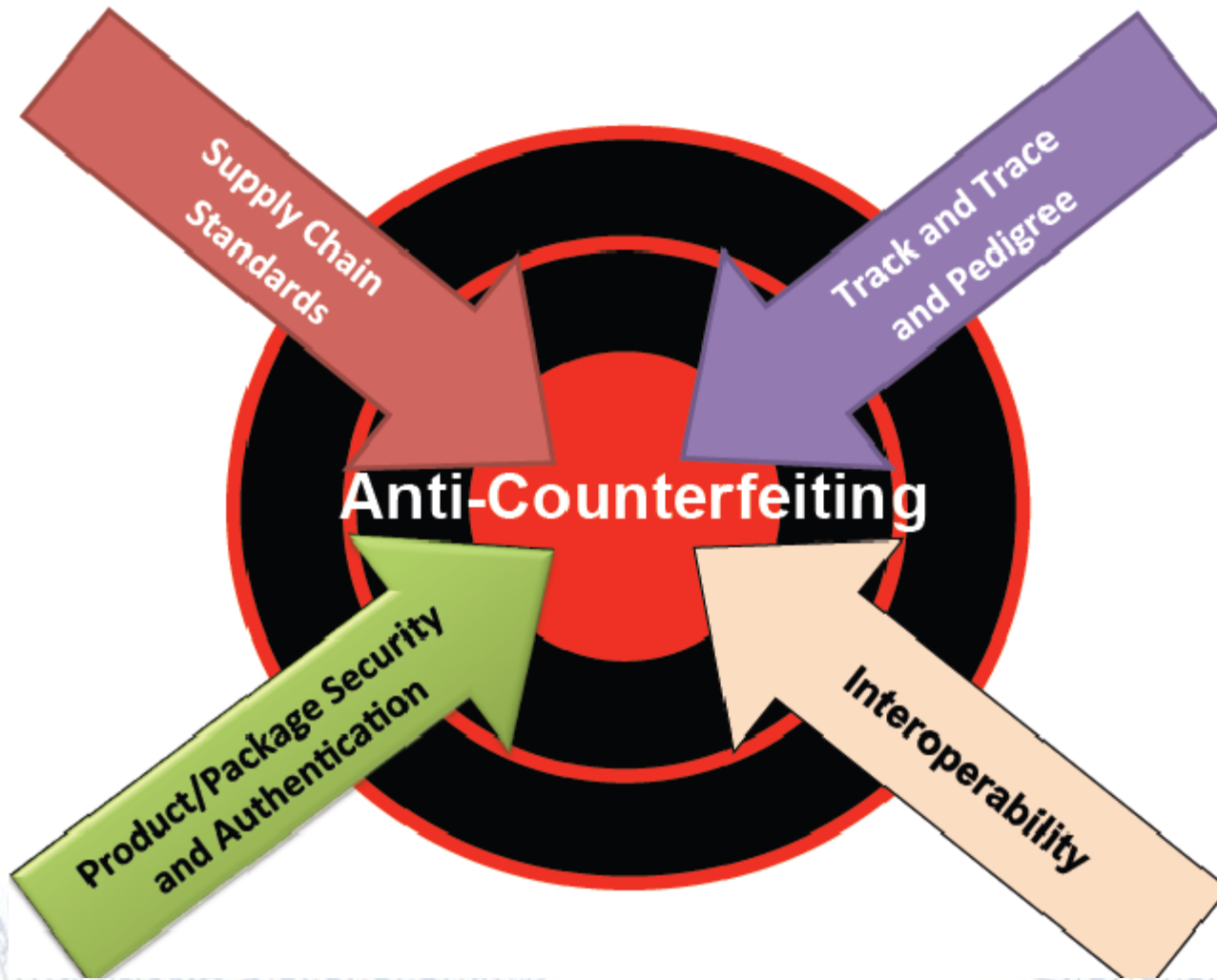
Combating counterfeiting

Product Serialization

- unique product serial numbering (SGTIN), valid serial numbers are reported by using EPCIS Remote Interface

Track & Trace

- Detecting grey market activities and helping in product recalls thru on-demand track &t race and reporting capabilities (using EPCIS standards)

Content Management

- Content management capabilities for content push to the mobile phone application for product information,

Product Authentication

- Combat counterfeits using a global, cross- sectional database for product information

GS1 stds facilitate efficient collaboration thru improved communication between the brand owner and all the actors of the fight:

- Public enforcing bodies (custom officers)
- Private enforcing bodies
- Commercial partners
- Customers

How does it work?

1 ► The examiner logs onto the **IsThatGenuine** network, and scans the inspected product's barcode.

► A first check of the GS1 barcode validity is effected.

2 ► The examiner then obtains the brand owner's contact details and gains access to the brand's anti-counterfeiting service.

► If he/she is authorized by the brand, he/she then has access to the checking method to be used.

Brand X, Y, Z protection service

brand **X**

brand **Y**

brand **Z**

IsThatGenuine network

IsThatGenuine network

GS1 infrastructure

Examiner A, B, C point of access

examiner **A**

examiner **B**

examiner **C**
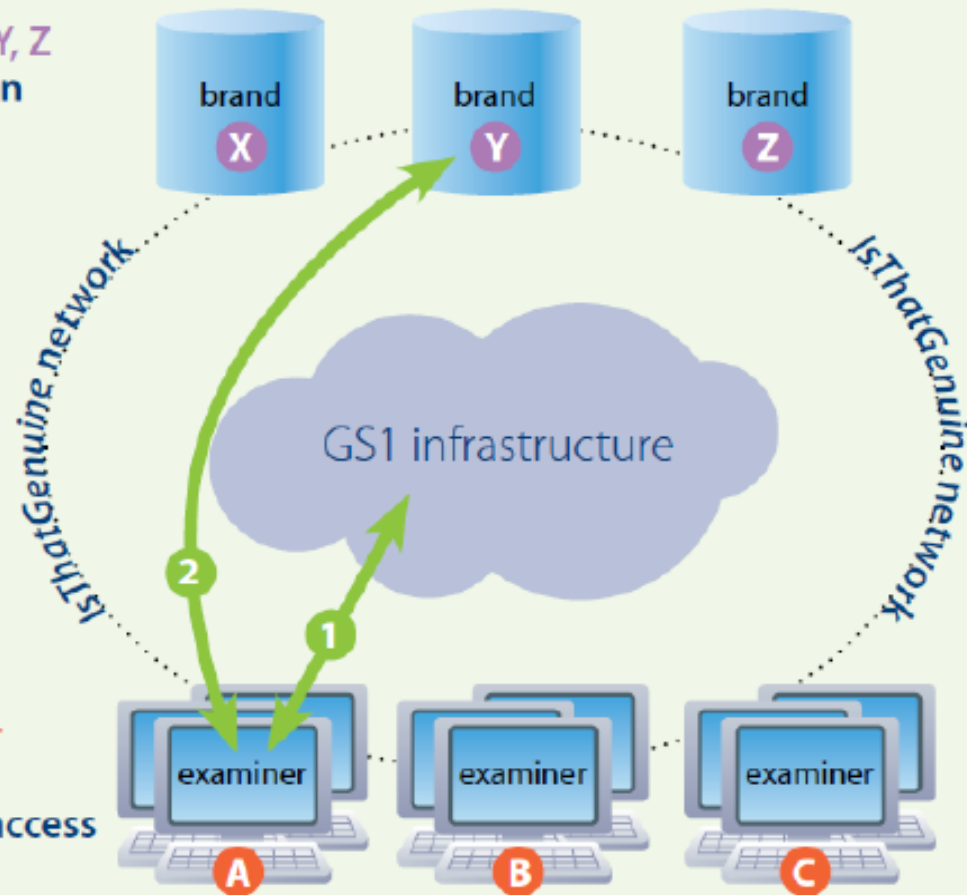
Data matrix coding proposal derived from GS1 standards
(EAN 128 syntax with Application Identifiers; Data matrix ECC200)

Manufacturer Product Code (GTIN or NTIN)	14 digits
Unique Serial Number (randomized)	up to 20 alpha-numeric characters
Expiry Date	6 digits (YYMMDD)
Batch Number	up to 20 alpha-numeric characters

+ minimum requirements on quality of randomisation

Example:

GTIN:	(01)09876543210982
Batch:	(10)A1C2E3G4I5
Expiry:	(17)140531
S/N:	(21)12345AZRQF1234567890

Specifications provided in EFPIA's
"European Pack Coding Guidelines"

Point-of-Dispense model sets out modalities for pack verification

efpia

Pharma Manufacturer

Wholesaler

Wholesaler

Pharmacist/ Hospital

Patient

Product Flow

Unique Randomized Serialization

2D Data Matrix on 2nd pack

Verification

✓ ✗ **Verification**

Dispensing

Data Transfer

Medicines Serialization Repository
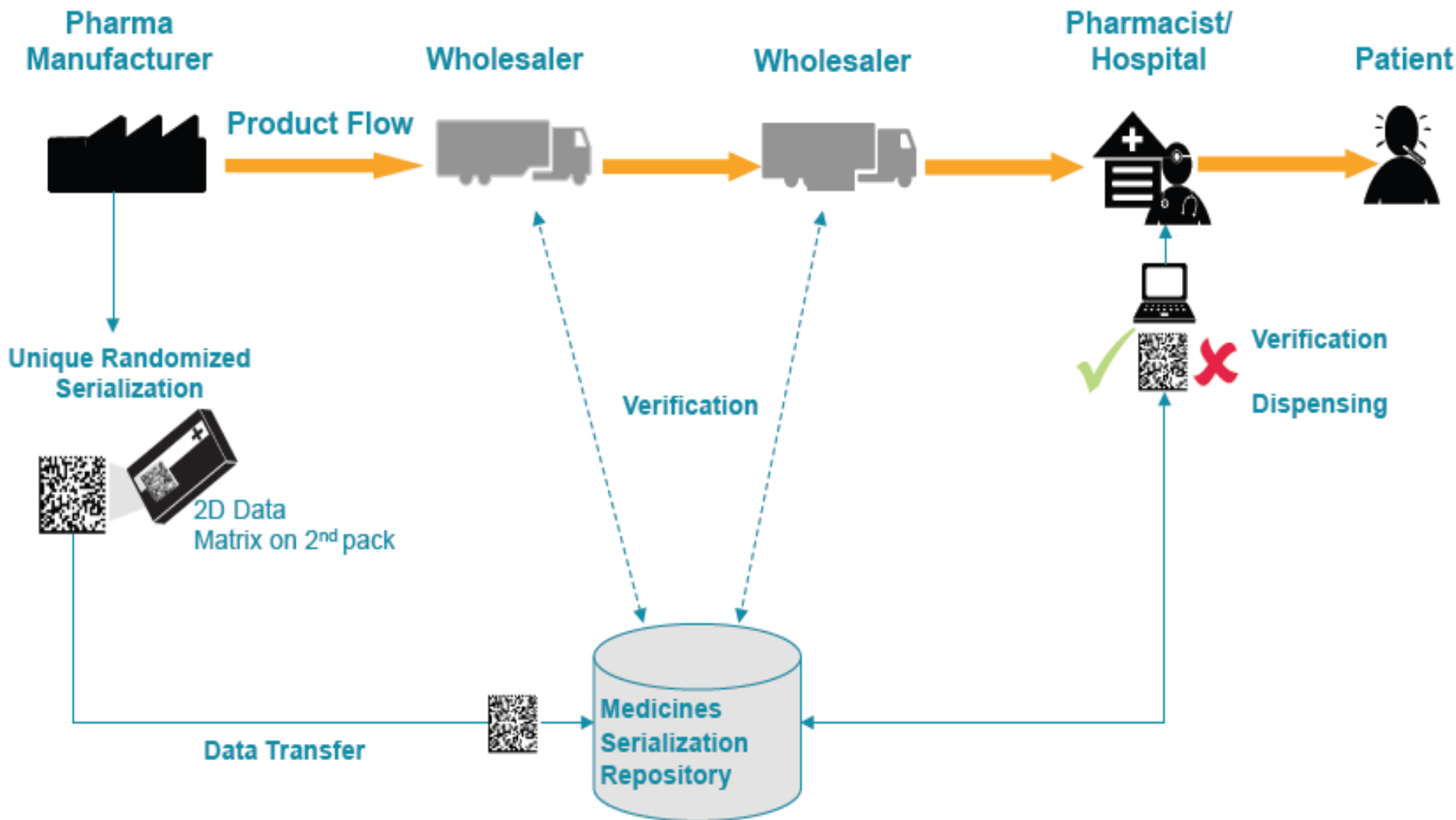
Support of key stakeholders for Point-of-Dispense verification in place

Challenges of "seeing" the complex global supply chain today

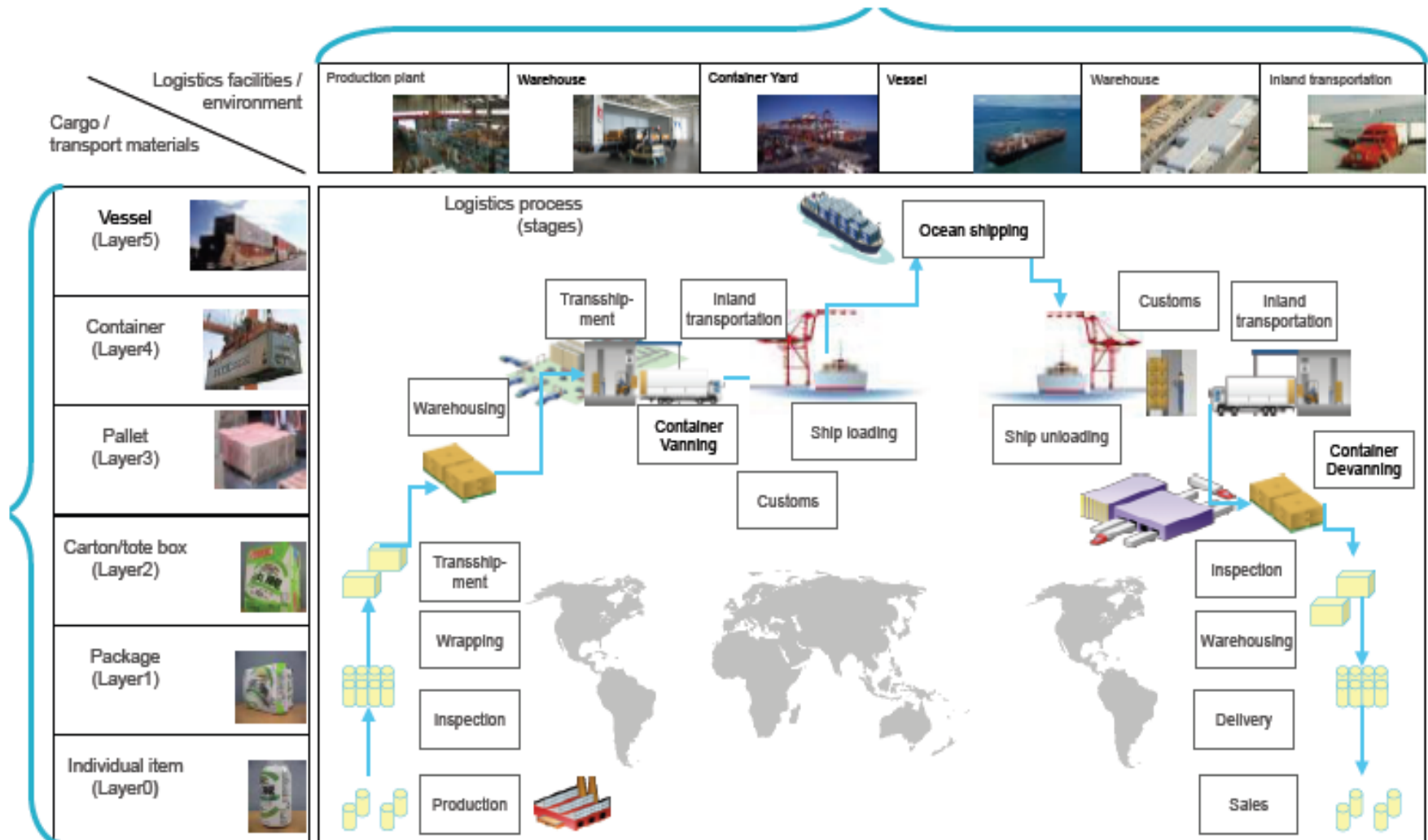Common standard for data sharing amongst supply chain stakeholders is required e.g. EPCIS

Standardized codification is needed for the granularity of the goods transported

Logistics facilities / environment

Cargo / transport materials

| Production plant | Warehouse | Container Yard | Vessel | Warehouse | Inland transportation |

Cargo / transport materials layers:

- Vessel (Layer5)
- Container (Layer4)
- Pallet (Layer3)
- Carton/tote box (Layer2)
- Package (Layer1)
- Individual item (Layer0)

Logistics process (stages):

- Production
- Inspection
- Wrapping
- Transshipment
- Warehousing
- Container Vanning
- Customs
- Transshipment
- Inland transportation
- Ship loading
- Ocean shipping
- Ship unloading
- Customs
- Inland transportation
- Container Devanning
- Inspection
- Warehousing
- Delivery
- Sales

METI Research on the Value of Visibility

○ Establishment of a visibility platform to share cargo-movement information between entities involved in the supply chain will have the following effects.

■ Reduction in consolidated stocks

- lead-time to be reduced by **1.1 days** on average

- consolidated stocks to be reduced

  by **1.6 days' worth of stock** on average

■ Reduction in workload

- The number of inquiries and associated workload will be reduced by the establishment of a visibility platform:

  · exporting workloads to be reduced by **9%~30%**

  · importing workloads to be reduced by **10%~25%**

- Shippers and forwarders can expect a **30%~60%** reduction in the work that has not yet been automated.

To this end, Asian countries are championing SCV......

- Hong Kong : e-Logistics Supply Chain Visibility with EPCIS

- Japan : Supply chain visibility initiatives

- Malaysia: Malaysian Customs Security & Trade Facilitation System using E-Seals & EPCIS

- Taiwan : The Container Movement Security Project

Global Wine Supply Chain Visibility

- First FREE wine port since 2008 duty exemption policy
- World's largest wine auction centre
- 2010 Import: USD 858 million, 37M liters
  - About 90% is red wine import
  - Local consumption 81%
  - China re-export 19%
  - Major wine import countries : France, Australia, Chile, US,
- Increasing demand for premium / fine wine &quality guarantee
- Supply chain visibility varied from vineyards
- Pilot project with GS1 Italy to realize wine supply chain visibility from vineyards to stores with RFID tagging & EPCIS for data exchange.

Global Wine Supply Chain Visibility Pilot

EPC Data Interchange / Event Query

| Italy EPCIS | Hong Kong EPCIS |

Order Fulfilled

Place the order

Event Upload

Event Upload

Event Upload

Event Upload

Event Upload

Event Upload

Tag 3

Tag 2

Finished Goods Distributor

Finished Goods Distributor

Vineyard warehouse

Dispatch

European Port

Hong Kong Port

HK wine cellar warehouse

Retail

The Benefits : End-to-End Supply Chain Visibility From Source to Store

✓ 100% visibility of the inventory flow achieved (4 Pallets => 339 cases => 2,034 bottles tagged)

✓ AIDC via RFID enable 100% data accuracy and hence minimize human errors

✓ Real time and round the clock product flow & business events information along the value chain is available

✓ Better logistics arrangement can be made with information available at all times

Objective of APEC Initiative – Enhancing Transport, Logistics & Digital Connectivity

- In 2009, APEC Ministers supported trade logistics reform through **enhanced supply chain connectivity**

- In 2010, a project on SCV was initiated to enhance transport, logistics & digital connectivity through using information and communication technologies network which can automatically and **in real time share information on the movement of freight** between logistics enterprises, ports, and shippers using internationally standardized RFID, freight management codes, etc.

Asia-Pacific Economic Cooperation

Results and Way Forward

Royal Malaysian Customs Department

- Time saving average of **47 minutes** per container with auto-clearance which is about **9 times** more efficient than manual process.
- **Solved hanging K8** forms issues (incomplete and non-tally transactions)
- Higher security and better visibility within the supply chain which is inline with World Customs Organization (WCO) SAFE Framework of Standards (FOS)
- **Faster container movements** enable better trade facilitations that increase trade volume and improve economy in the country.
- Making Malaysia the leader in **logistic and trading hub** in the region.

Going Forward. . .

- To commercialize by 1st half of 2012 and progressively extending to all 200 customs checkpoints and 600 bonded warehouses nationwide by 2013.

- To work collaboratively with regional customs in promoting security and fast clearance of containers based on sharing of cross border information through regional EPCIS platform

Driving Momentum Together

Visibility

Tracking

- Where are my objects?

Tracing

- Where were my objects last Tuesday afternoon?

Pedigree

- Which parties were involved?
- Where has my object been along the way?

Authentication

- Are my objects likely genuine?

Protecting Indian pharma industry against int'l counterfeits

- Around $2.16 million worth of anti-malarial drugs bearing 'Made in India' labels were seized by the Nigerian authorities.

- The labels indicated that the drugs were manufactured in India, but later on it revealed that they had been exported from China.

- African markets alleged that Indian generic drugs to be spurious or counterfeit.

To Protect pharma exports against int'l counterfeits, The Indian Directorate General of Foreign Trade (DGFT) in its battle against counterfeit drugs, issued a notification on Jan'11, making it mandatory for all pharmaceutical and even biological (like vaccines) companies to affix barcodes on their export products to track and trace their stock across the entire supply chain.

Summary

Global standards adoption helps to:

- ✓ Boosts business confidence & drive growth
- ✓ Reduce costs & drive supply chain efficiencies
- ✓ Enhances Traceability & Recall of unsafe products
- ✓ Enables Interoperability between all stakeholders
- ✓ Drives supply chain visibility & improved transparency
- ✓ Combat counterfeiting
- ✓ Anti-smuggling

Thank You

rmathur@gs1india.org

www.gs1india.org

www.gs1.org