

# *From Shipping to Logistics: Trading in the Information Age*

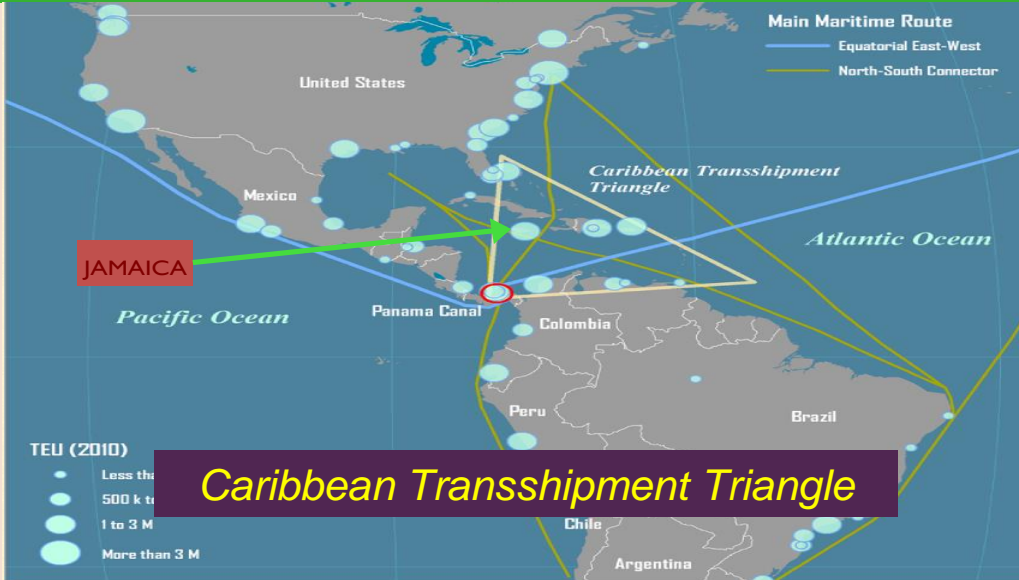
**“How Technology is Facilitating Logistics”**

**Logistics Panel - Inaugural Business & Management Conference  
Jamaica - January 8, 2015**

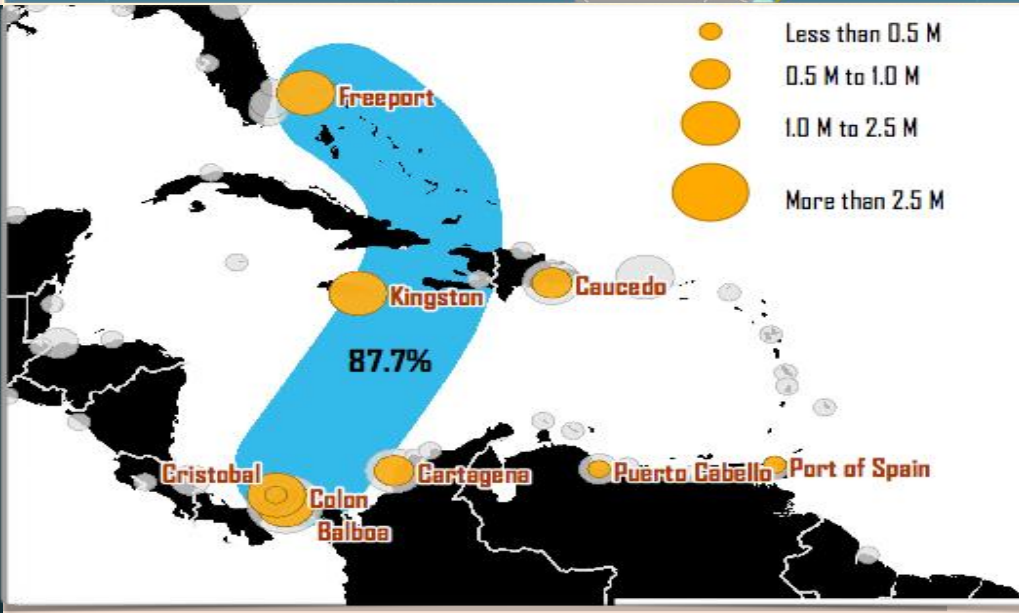


Presented by:  
Mr. Dwain Powell  
Port Authority of Jamaica

# JAMAICA'S LOCATIONAL ADVANTAGES



**Caribbean Transshipment Triangle**

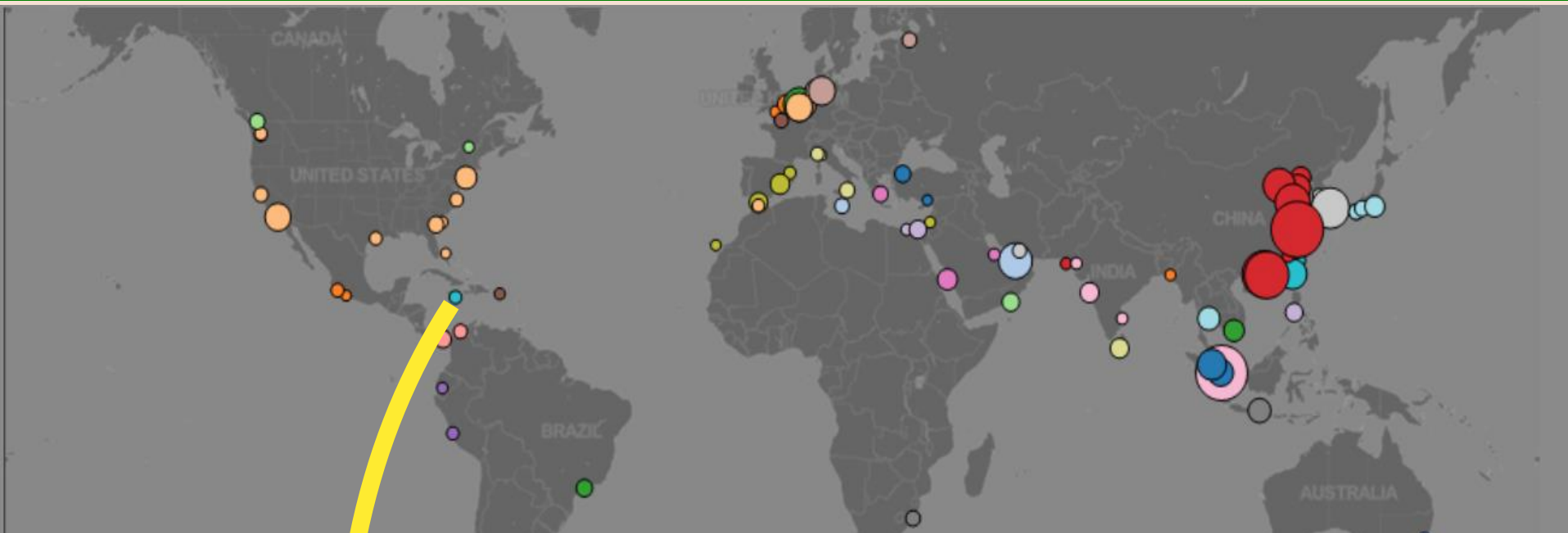


Kingston is the home of Kingston Container Terminal and  
Kingston Wharves Limited



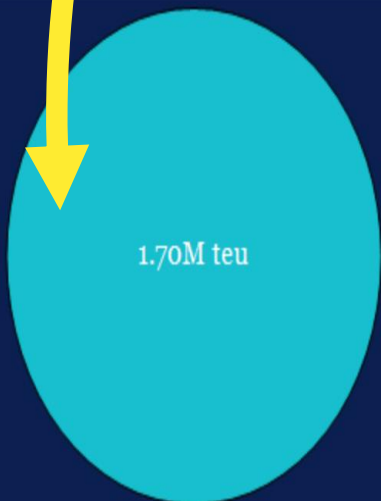
**THE PORT OF KINGSTON**

# GLOBAL CONTEXT: TOP 100 GLOBAL PORTS (2013)



**#79: Kingston**  
Jamaica

Rank change: Up  
Previous rank: 82



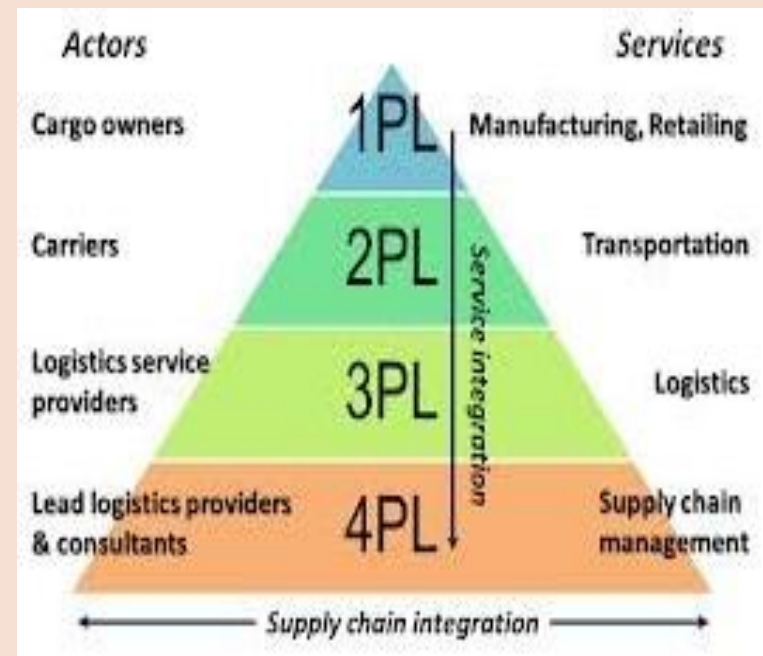
Top 10: South America & Caribbean

	2013	Port	Country	2013 annual throughput	2012 annual throughput	Annual % change
1	38	Santos	Brazil	3,445,879	3,171,685	8.6%
2	40	Colon	Panama	3,356,060	3,518,672	-4.6%
3	45	Balboa	Panama	3,063,910	3,251,139	-5.8%
4	68	Manzanillo	Mexico	2,118,186	1,992,176	6.3%
5	71	Cartagena	Colombia	2,014,451	2,201,063	-8.5%
6	75	Callao	Peru	1,855,010	1,812,114	2.4%
7	79	Kingston	Jamaica	1,704,109	1,546,943	10.2%
8	81	Buenos Aires	Argentina	1,651,000	1,656,000	-0.3%
9	87	Guayaquil	Ecuador	1,517,910	1,448,687	4.8%
10	94	Freeport	Bahamas	1,400,000	1,200,000	16.7%

Source: Lloyd's List Intelligence, Nov 2013

# Market Outlook

- **Demand for Logistics Services:**
- The growing demand for logistics services represents a major opportunity for container ports. In response to this trend, container ports around the world have been developing logistics centres to provide value added services which will result in increased cargo volumes.
- Manufacturers and logistics providers have been showing increased interest in Latin America and the Caribbean as potential locations for logistics activities. The increase in cargo volumes in the Central American and Caribbean region which is anticipated upon completion of the Panama Canal Expansion program will also create opportunities for logistics business.



# Jamaica - Major Initiatives

- Modernization of Customs
- Acquisition of a Port Community System
- Development of a Logistics Hub
- Privatization of Kingston Container Terminal

# Overview

- **A Port Community System (PCS):**
  - is a neutral and open electronic platform enabling intelligent and secure exchange of information between public and private stakeholders in order to improve the competitive position of the sea and air ports' communities.
  - optimises, manages and automates port and logistics processes through a single submission of data and connecting transport and logistics chains
- It is a single window for the ports of Jamaica as it is shared, set up, organized and used by firms in the same sector – in this case, a port community. A PCS optimizes, manages and automates smooth port and logistics processes through a single submission of data and by connecting transport and logistics chains.
- The PCS implementation is an opportunity to substantially encourage and promote more efficient and effective trading practices, while reducing the cost of doing business; therefore marketing/positioning Jamaica as a global logistics hub for the region. This will be critical for Jamaica to take advantage of the 2015 Completion of the Panama Canal Expansion project.

# PCS: Project Stakeholders Interaction





# Objectives

- The objective of the PCS is to provide a single window portal which inter-alia will:
- Allow the integration of information from various systems, and give community members (including Customs, truckers, brokers/freight forwarders, importers/exporters, terminal operators and trade agencies) access to pertinent data while enhancing the efficiency and effectiveness of their interactions.
- Secure the supply chain with cargo ***Tracking and Tracing*** while ensuring confidentiality and accountability.
- Lower business costs for the trading community with the innovative use of, and ***rationalization of the business processes and practices***.
- Be a critical element in the ***GOJ's Logistic Hub Project***
- Assist in the improvement of Jamaica's international rankings with the ***Doing Business*** and ***Logistic Performance Index*** reports.

**Process Analysis: Import and export lead times could be reduced by implementing paperless flows and improving procedures**

## **Gap analysis of the site assessment. Main findings:**

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- **Manual processes predominantly.**
- **Excessive document lodging, transfer from one person to another.**
- **Processing times within import and export processes lengthy.**
- **Partial implementation of electronic messages.**
- **Procedures cannot be anticipated.**
- **Lack of standardization in electronic exchanges.**
- **Differences in processes across locations and stakeholders.**
- **Lack of interconnection of IT applications.**
- **Lack of visibility and track & trace information.**

## Issues on sharing container logistics information

To solve the issues on container logistics; it is required that Companies must share information efficiently and electronically.

Problem  
(1)

It is difficult to share the information among container logistics related parties



Outcome  
(1)

The essential information can be shared among related parties by using a PCS



Problem  
(2)

There is a huge volume of inquiries to the terminal operations daily



Outcome  
(2)

A PCS drastically eases the burdens on terminal operators!



Problem  
(3)

Troubles at the gate lead to an increase in congestion



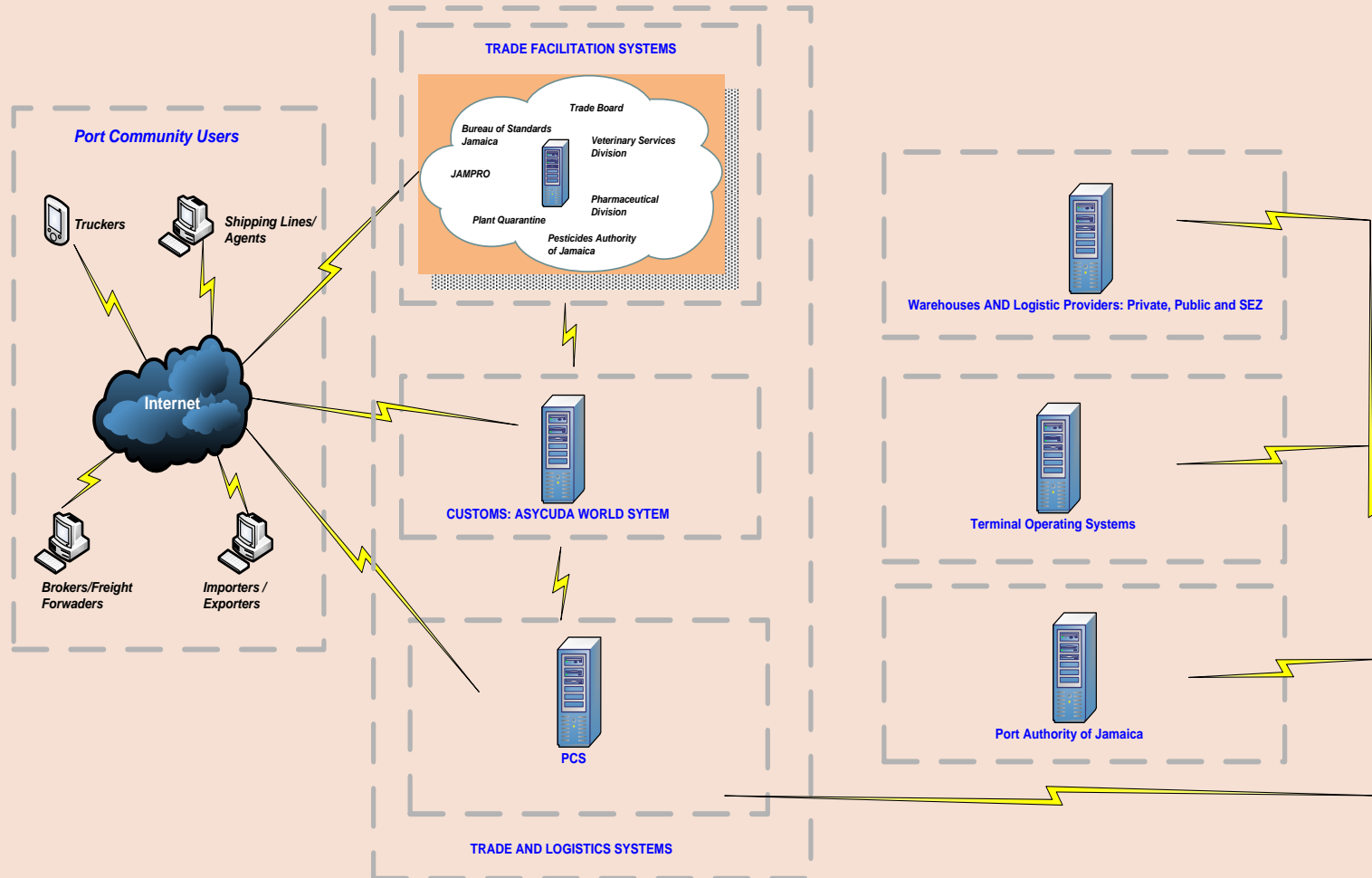
Outcome  
(3)

A PCS provides the ability to manage logistical operations efficiently

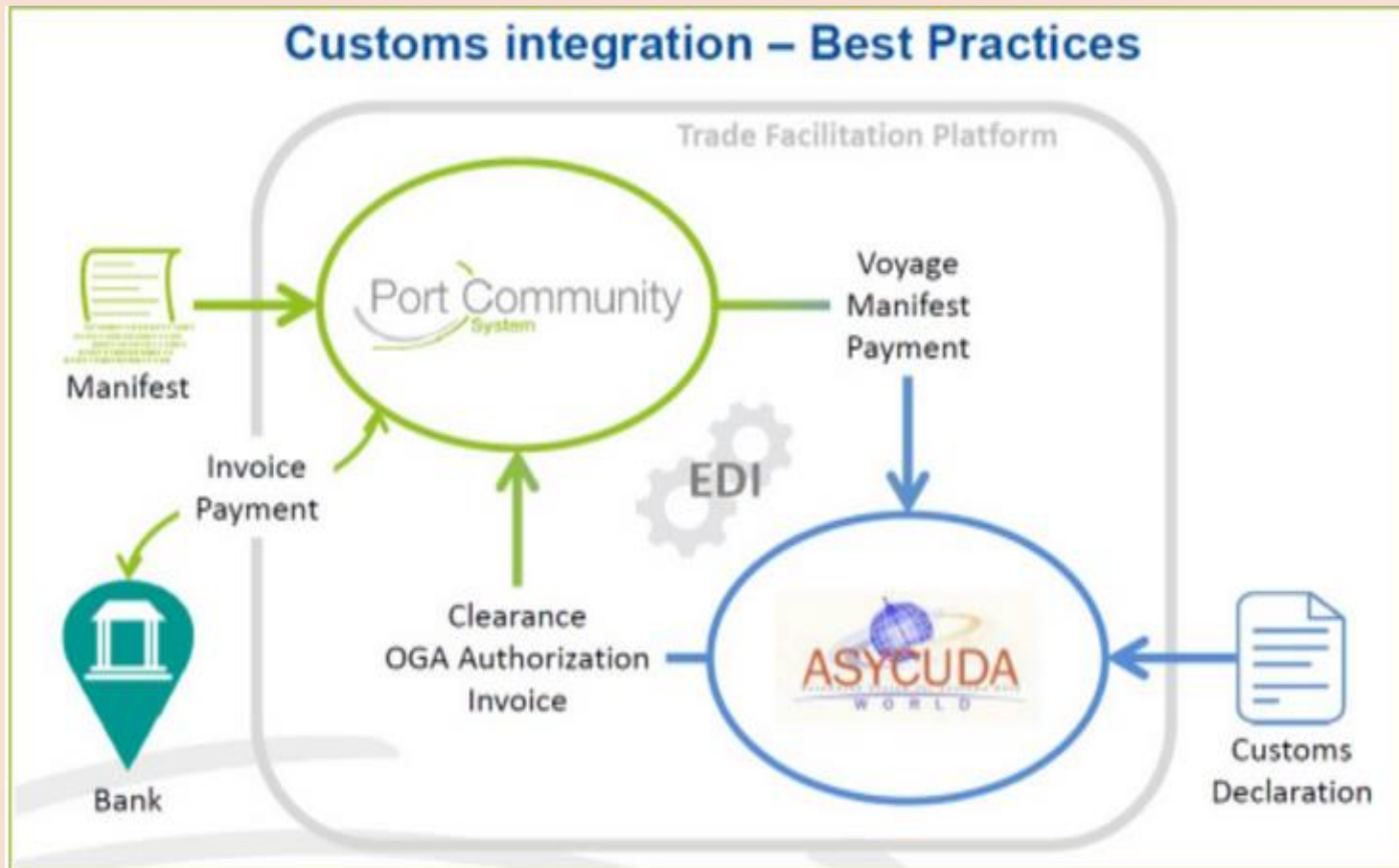


# Jamaica PCS Schema Overview

JAMAICA PCS TRADE FACILITATION SCHEMA OVERVIEW – OCTOBER 2014



# PCS - CUSTOMS INTEGRATION



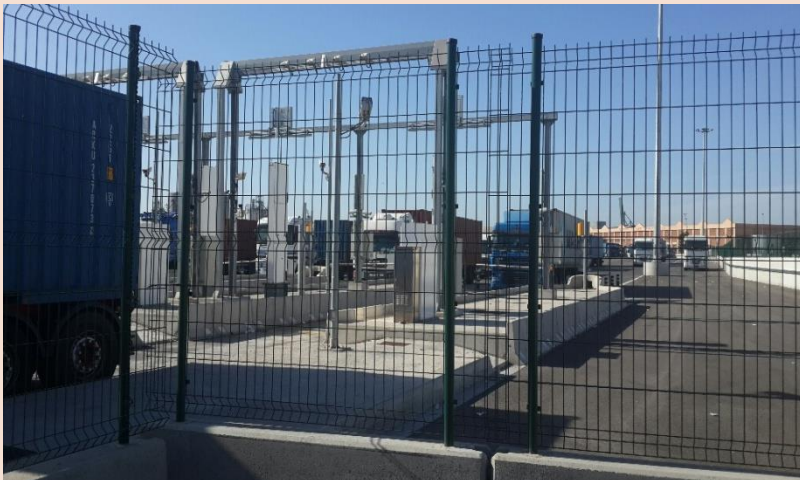
# PCS Major Components

- Message Broker
- Web Interface
- Vessel calls and scheduling
- **Electronic Gate Passes**
- Haulage Bookings
- Hazardous cargo reporting
- Manifest processing
- Container management including discharge, release and tracking
- Export bookings
- Transhipment
- Inspections
- Bonded warehouse
- Business intelligence and reporting



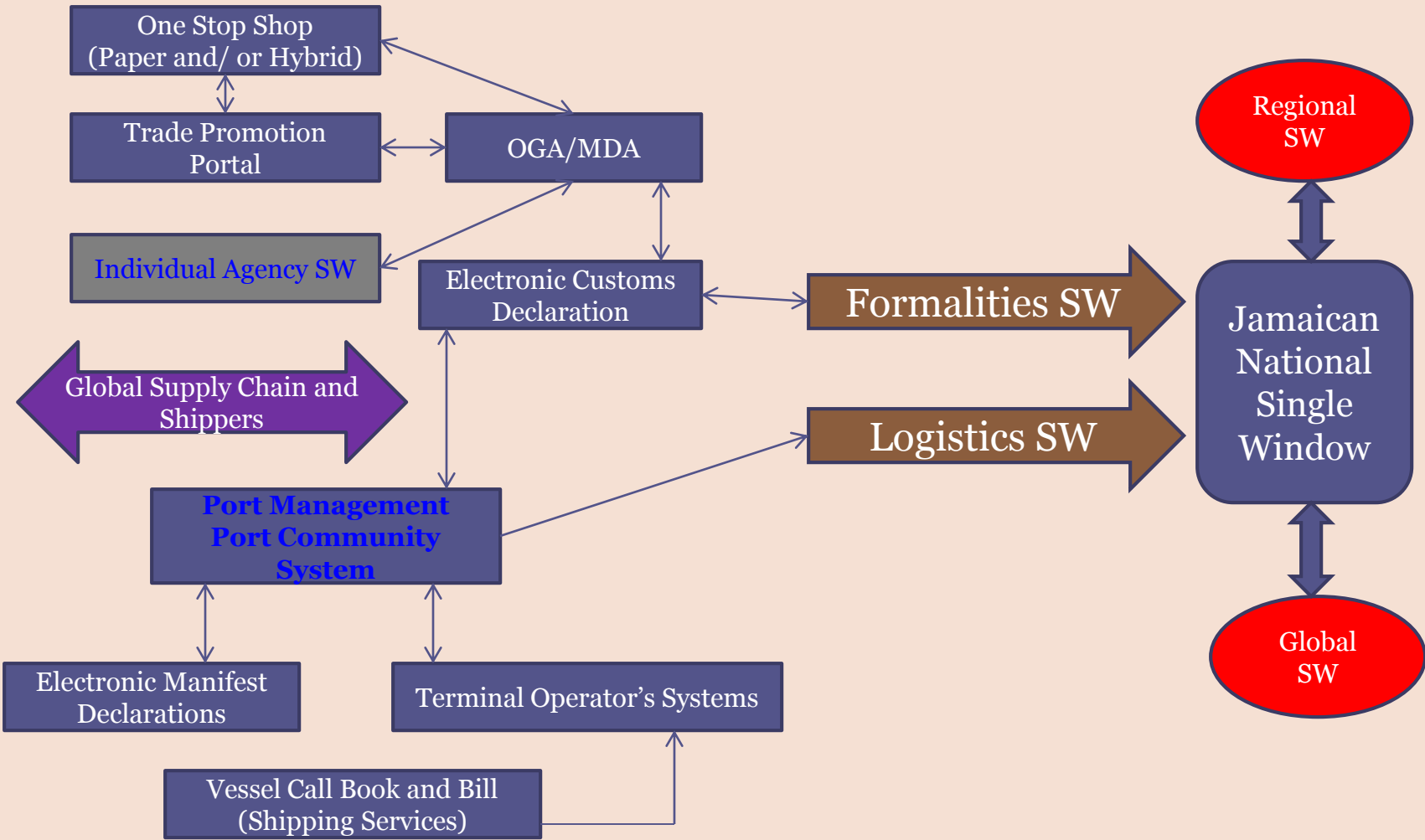
# Electronic Gates at Ports

- **TERMINAL OPERATIONS**
- Automated Gates (**Paperless Transactions**): Based on integration with the PCS, Customs and Terminals; and PCS functionality provided to the Haulier/Trucking Companies.

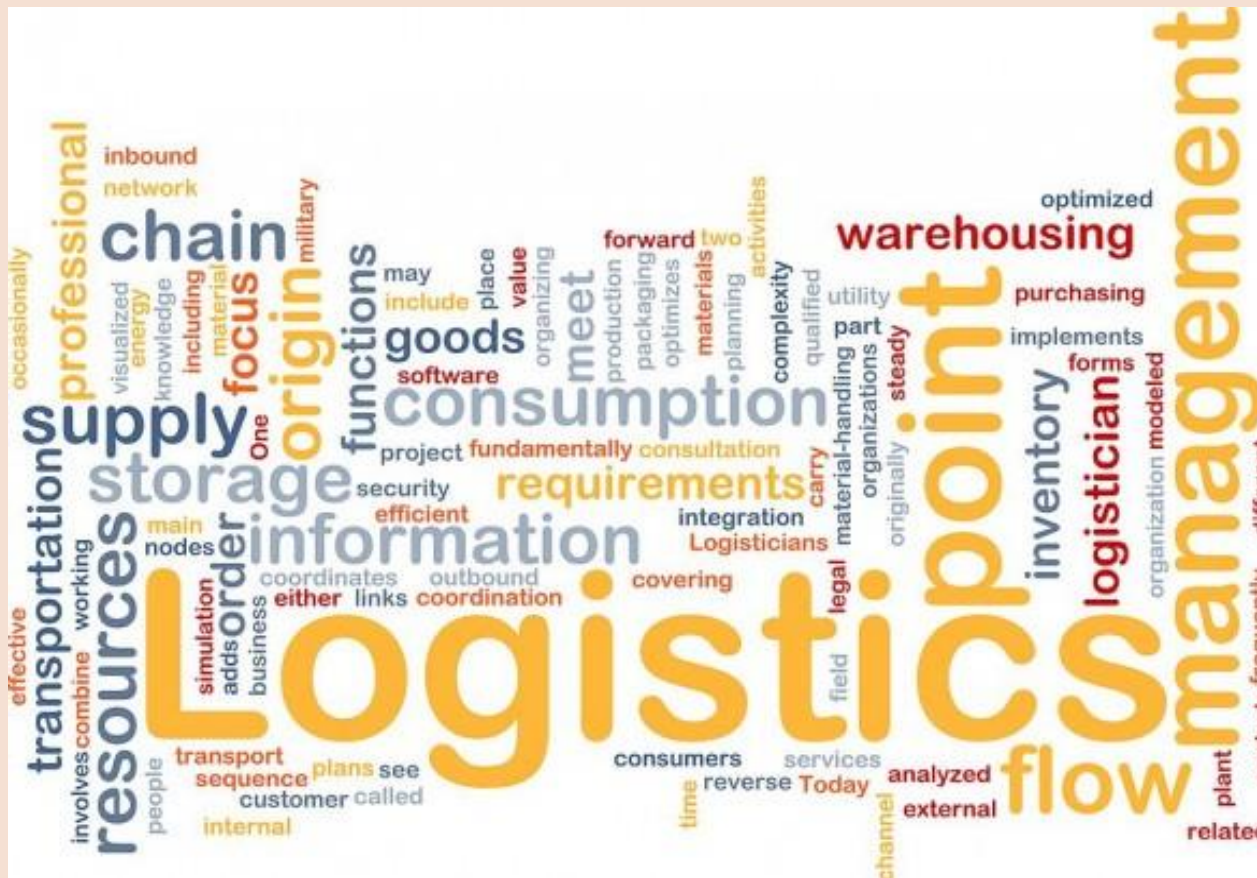




# Road Map for a Collaborative Jamaican National Single Window



# Private Sector ICT Logistics Solutions



# Cargo Management

- A **supply chain** is a system of organizations, people, activities, information, and resources involved in moving a product or service from supplier to customer.
- *Supply chain management* (**SCM**) deals with linking the organizations within the supply chain in order to meet demand across the chain as efficiently as possible.
- **Logistics** is the management of the flow of goods between the point of origin and the point of consumption in order to meet some requirements, of customers or corporations.
- Logistics management is the part of supply chain management that plans, implements, and controls the efficient, effective, forward, and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customer's requirements.

# Big Data Supply Chain Initiatives

## Shippers report a variety of technologies/systems/tools for Big Data supply chain initiatives



Source: 18th Annual Third-Party Logistics Study, Capgemini Consulting

# Functional Technologies

- **Automated quality control systems**
- **Automatic identification technologies (AIT):**
  - **Bar-coding technology:**
  - **Radio frequency (RF) technologies:**
  - **Biometric identification system:**
  - **Video and audio identification systems**
- **Customer Relationships Management (CRM) systems**
- **Internet-based logistics systems**
- **Manufacturing execution systems (MES)**
- **Order Management Systems (OMS)**
- **Transportation management systems (TMS)**
- **Warehouse management systems (WMS) or inventory tracking systems**

# Integrative Technologies

- **Enterprise resource planning (ERP) systems**
- **Internet or web-based applications and strategies**
  - **SOA (Service-Oriented Architecture) services/systems**
  - **Cloud computing**
  - **SaaS (Software-as-a-Service)**
  - **Infrastructure-as-a-Service (IaaS)**
  - **Platform-as-a-service (PaaS)**
  - **A3 (Anytime, Anywhere Availability) and mobile devices**

# Important Elements for Cargo Logistics Improvement in Jamaica

- Stakeholder/community buy in and involvement
- Reengineering/optimizing of processes
- Develop a Strategic Road Map
- Relationship between government entities and private entities
- Continuous Investments in BPR, Human Resources and ICT

# Thank You

## Questions/Suggestions ?

