

Single Window Experiences *Hong Kong*

United Nations Development Account Project (4th Tranche)

Interregional partnership for promoting trade as an engine of growth through knowledge management and information and communication technologies

UNECE/UNESCAP Workshop on United Nations electronic Documents (UNeDocs) for Single Window Facilities in Asia and the Pacific

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Agenda

- ▼ **Global Industry Directions**
- ▼ **Case Study – Hong Kong**
- ▼ **“Single Window” Considerations**



The Macro Economic Drive Globally

- ▼ *Upward spiral of cross border trade and globalization – low cost sourcing*
- ▼ Trend towards “immediate” response to market demand
- ▼ *Supply Chain Integrity*
- ▼ “Green” trading, manufacturing, and logistics
- ▼ Reduction in regulatory and bureaucratic inhibitors to cross border trade
- ▼ *Increased competitiveness and cost reduction*



LEADING THE NEWS

Huge firms to press suppliers over climate

P&G, others to join in pushing factories for emissions data

By JANE SPENCER

HONG KONG—A group of multinational companies is embarking on a campaign to encourage their suppliers to report greenhouse-gas emissions, pressuring thousands of vendors and factories to show they are taking steps to battle climate change.

At least six of the world's largest companies, including Procter & Gamble Co., Unilever PLC, Tesco PLC and Nestlé SA, will announce today that they are banding together to press their suppliers to release data about their carbon emissions and climate-change-mitigation strategies. The move affects plants churning out everything from T-shirts to cocoa beans to razors.

The effort comes amid growing concern that stricter climate-change legislation could radically

drive up costs for businesses. Many U.S. companies are betting that federal climate-change legislation—which could include taxes or caps on emitting greenhouse gases—is inevitable in the next several years.

Global leaders are gearing up to hammer out a new international treaty on climate change to succeed the Kyoto Protocol, which will expire in 2012. Rising energy costs associated with stiffer regulations could affect companies all along the supply chain, so some are taking steps now to curb upstream costs.

"Everybody who uses energy will be impacted if energy prices go up, from the oil wells through the farms and factories, all the way through the retailers to our consumers," says Bill Greggs, an associate director in P&G's global sustainability group.

In addition to keeping an eye on the bottom line, companies are also touting their environmental strategies as a marketing tool, as consumers become more aware of climate change.

The companies in the new group, called the Supply Chain Leadership Coalition, could eventually use the in-

formation to evaluate suppliers, setting off competition between suppliers to show their green credentials. The group, which also includes Imperial Tobacco Group PLC and Cadbury Schweppes PLC, was formed in partnership with the Carbon Disclosure Project, a London-based non-profit organization that publishes data on the carbon "footprints"—an estimate of the amount of carbon dioxide emitted in business operations—of many of the world's largest companies. The CDP will survey the suppliers about their carbon emissions on behalf of the companies.

The announcement comes just two weeks after Wal-Mart Stores Inc. announced similar plans to begin asking suppliers for data on their energy efficiency, in partnership with the CDP. Wal-Mart has started monitoring emissions at 25 to 30 companies that collectively supply seven products: DVDs, toothpaste, soap, milk, beer, vacuum cleaners and soft drinks.

The new initiatives are a sign that the battle to curb emissions is beginning to affect the little-known factories in the developing

world that crank out cheap goods for consumers around the world. China, for example, is about to pass the U.S. as the world's largest emitter of carbon dioxide. But about 30% of China's carbon emissions come from manufacturing goods that are exported, according to Glen Peters of the Norwegian University of Science and Technology. Most of the nation's factories get their power from heavily polluting coal-fired power plants.

"There is no doubt that there are huge quantities of emissions stemming from Asia," says Paul Dickinson, chief executive of the Carbon Disclosure Project. "The finished goods are being exported to the West, and this is giving a very distorted picture of greenhouse-gas emissions."

While many companies in the U.S. and Europe now measure their own carbon footprints, most look only at direct emissions, such as the energy consumed by lighting in their stores or the trucks that deliver their goods. Academics and emissions experts say that can create a flawed picture because far more carbon is emitted

in the process of manufacturing goods than simply in distributing and selling them.

In any given individual product, such as a sneaker sold at a retailer, more than 85% of the emissions released in the process of making the shoe occur along the supply chain, long before it hits the store shelves, says Christopher Weber, a researcher in the Civil and Environmental Engineering Department at Carnegie Mellon University in Pittsburgh.

Unilever aims to curb emissions in its agricultural and chemical supply chains. The company says collaborating with competitors will reduce the burden on suppliers by offering them a unified set of requests.

Cadbury Schweppes is one of a number of European companies trying to label individual products with carbon-emissions data. Cadbury is trying to figure out how much carbon is released in the process of making a Dairy Milk chocolate bar, from the dairy farm through the factory. Eventually, the company plans to stamp the bars with a carbon footprint number, alongside the calorie count.

Procter & Gamble

Unilever

Nestle

Walmart

Cadbury's

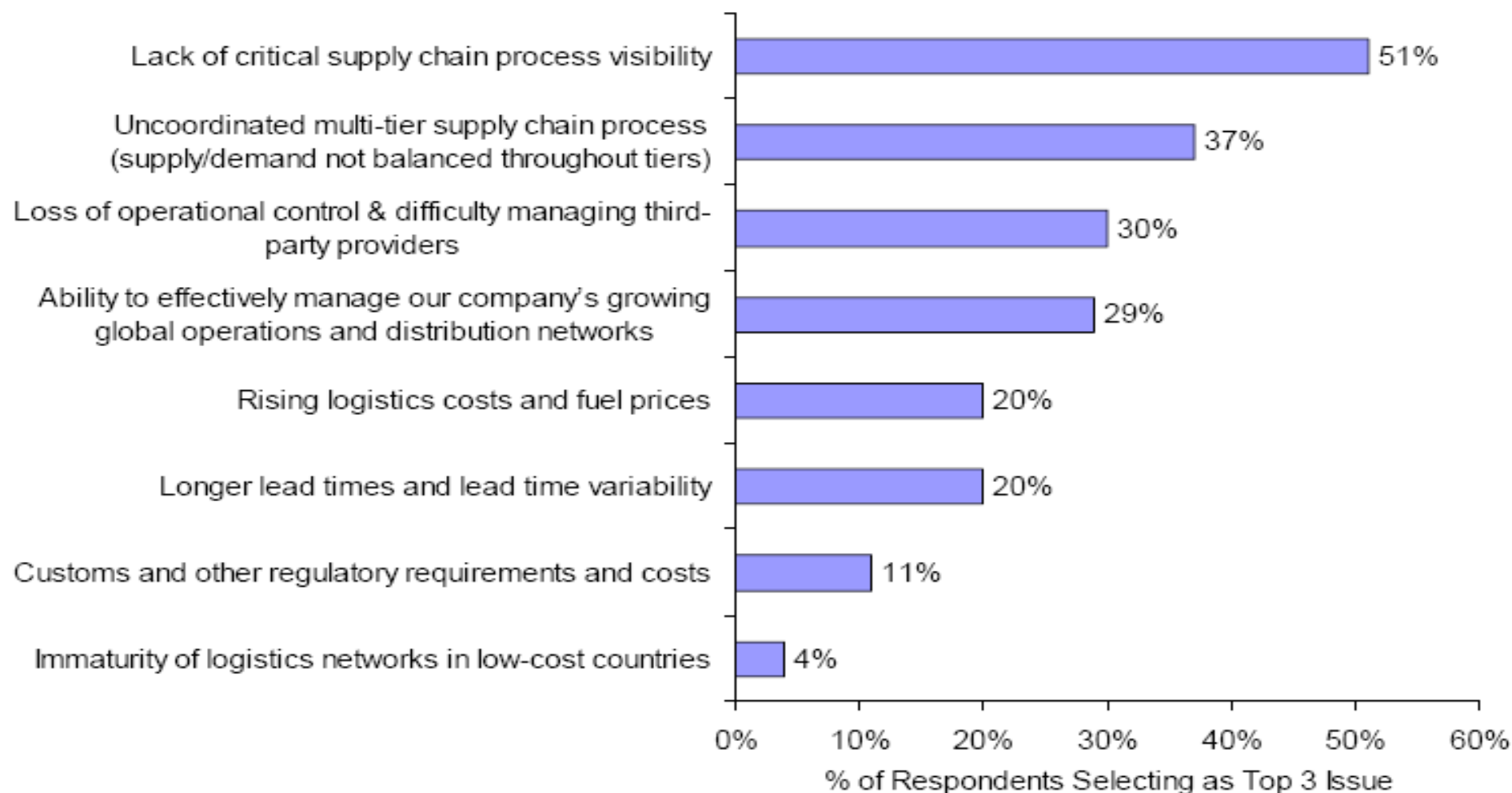
Imperial Tobacco

Tesco

- ▼ *Competing on Supply and Value Chains*
 - ▼ *Partner focus rather than internal*
- ▼ “Timely” market and supplier visibility – process focus
- ▼ *Managing extended, complex, distributed supply chains*
- ▼ Cross Department Process Management focus versus “silo” Department focus



Figure 1: Top Areas of Concern for Global Supply Chain



Source: [AberdeenGroup](#), June 2006

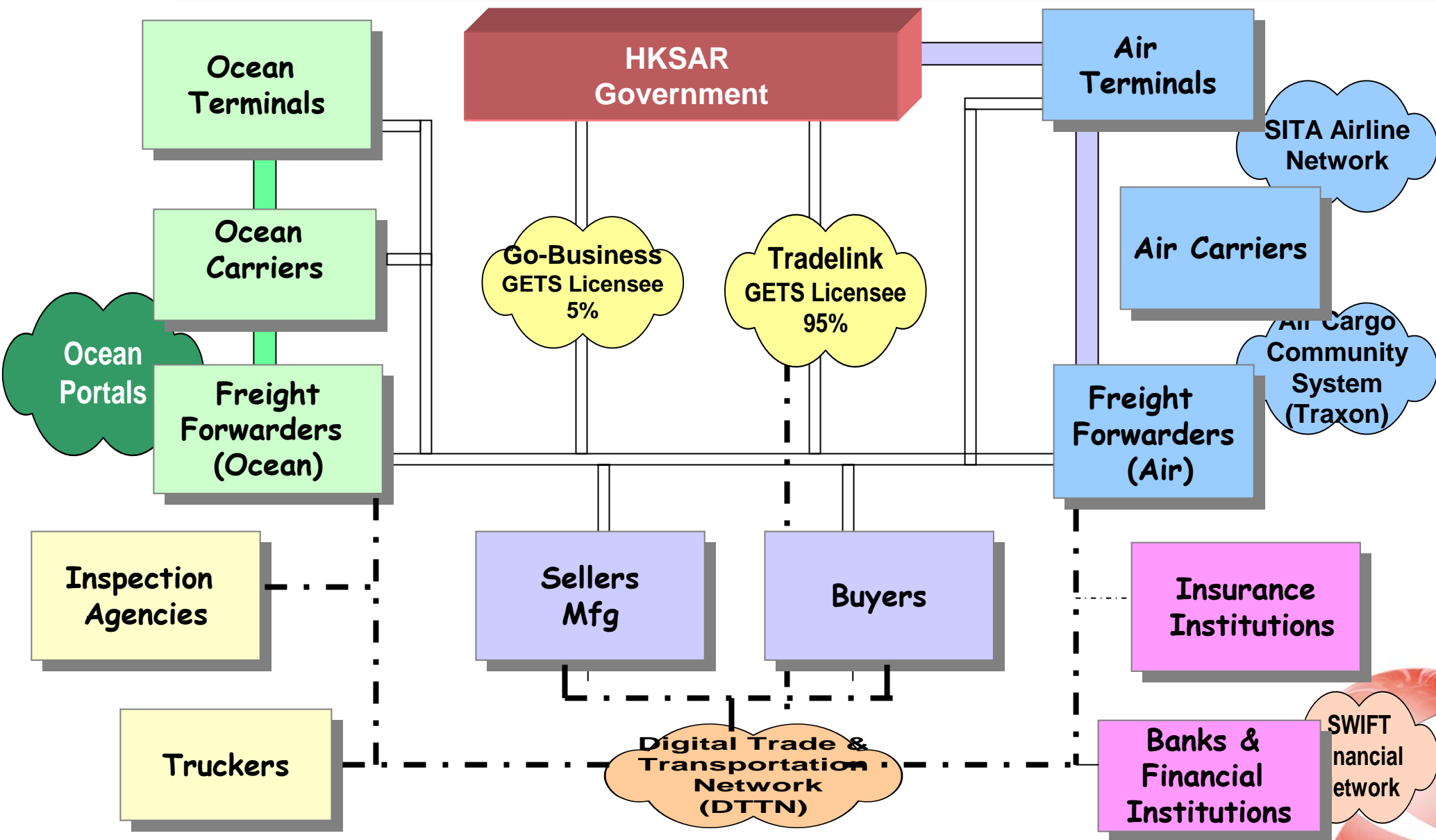
Case Study – Hong Kong

Business to Government

Business to Business



The Hong Kong “Single Windows” e-Trade and e-Logistics Networks



The Hong Kong Evolution

Government Single Window to Community Single Window

Air Cargo Clearance System (Customs)
Ocean Terminals ↔ Carriers (Private)
Air Cargo Community System (Private)

**Single Government
e-Trade Service
Provider (Tradelink)**



**Single Government
e-Trade Service
Provider
(Tradelink)**



**Two Government
e-Trade Service
Providers (Tradelink,
Go-Business)**



**Digital Trade & Transportation
Network (DTTN)
+ Two Government e-Trade Service
Providers**



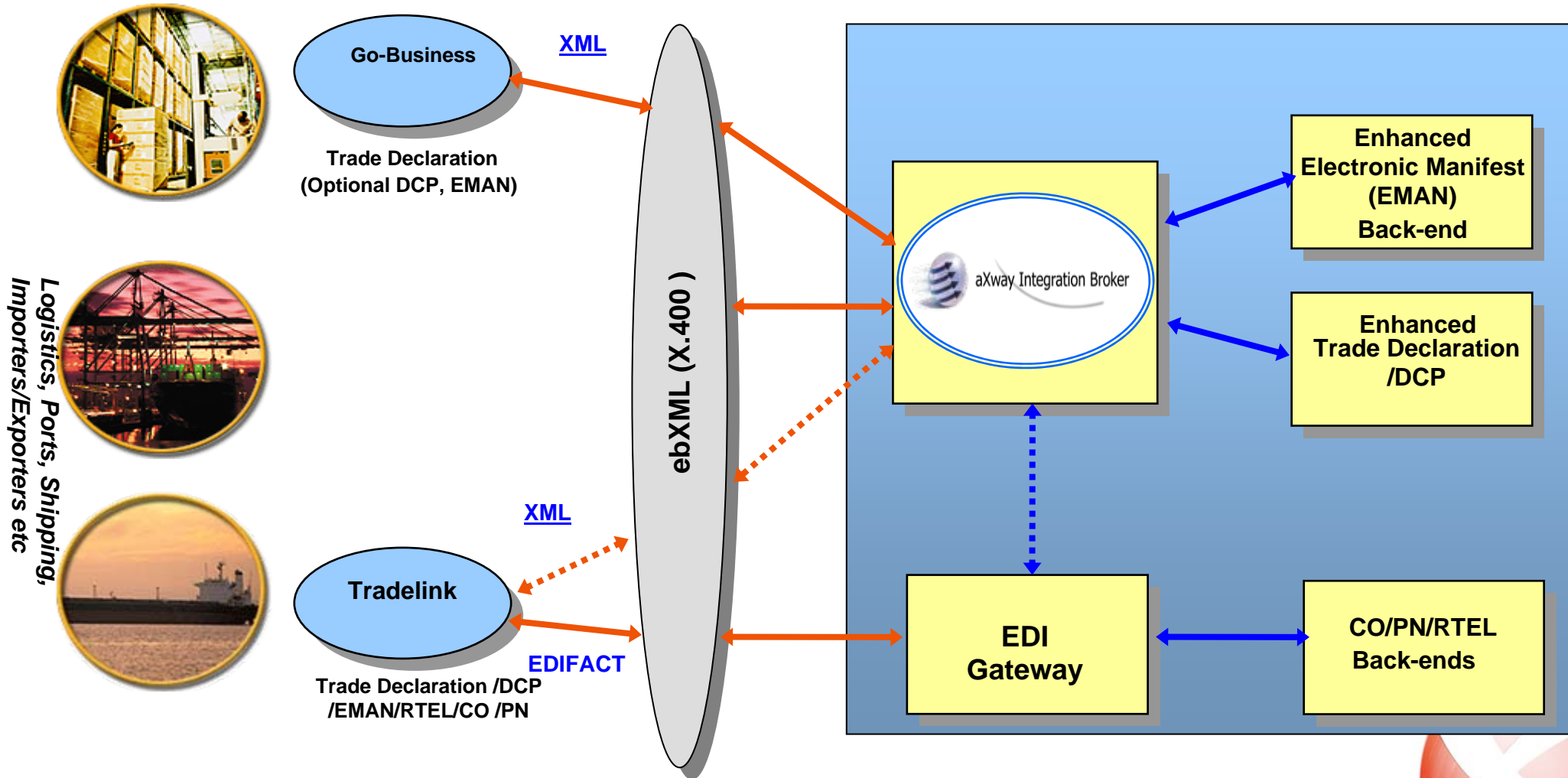
1997

2000

2004

2006

Government / Service Provider Architecture



Hong Kong's SAR Government Framework to Promote Electronic (Trade) Documents

- ▼ Import-Export Ordinance changed (~1994) to allow electronic submission / digital signature of specified **Government** trade documents
- ▼ *Stake in Tradelink (42%) (~1994)*
- ▼ Electronic submission of trade declarations mandated (2000)
- ▼ *Electronic Transactions Ordinance (2000)*
- ▼ LogsCouncil (public – private sector advisory body) to advise Government on logistics policy (2002)
- ▼ *Operating Agreement with and 21% stake in DTTN Limited (2006)*



Tradelink Highlights

- ▼ **Original 7 year monopoly franchise (1997 - 2003) for Government trade documents, extended as a license for 2004 - 2009**
 - ▼ All documents digitally signed & encrypted for open network transmission, using Recognized Digi-Sign Certification Service's certificates
 - ▼ Network of 28 service centers for paper to electronic conversion in association with Chambers of Commerce and some banks
- ▼ **Tradelink listed on the Main Board of the Hong Kong Stock Exchange on October 28, 2005.**
- ▼ **The HKSAR Government retains a 16% stake. Other shareholders:**
 - ▼ Terminal Operators
 - ▼ Industry Associations (Forwarders; Shippers)
 - ▼ China Resources
 - ▼ Airline
 - ▼ Textile Industry



- ▼ **Customers pay Service provider charges and Government charges**
 - ▼ Mostly through direct debit
- ▼ **Service Provider pays Government charges the next day, collects from customer according to credit terms (e.g monthly)**
 - ▼ Service providers may collect a deposit from customers to offset risk
- ▼ **Example Service Provider charges for Government trade documents**
 - ▼ Trade Declaration ~ HK\$8-12 per document
 - ▼ Certificate of Origin ~HK\$15 per document
 - ▼ Manifest ~ HK\$15 ~ HK\$30 per document



Digital Trade and Transportation Network (DTTN)

Highlights

▸



The Vision of the Digital Trade & Transportation Network

*A Government-endorsed low cost **shared** community platform intended to allow any company to reduce its costs and improve its efficiency by interconnecting with its trade, logistics, & finance partners using a digital link.*

- ▼ *Neutral, Open, Secure, Non-Exclusive, Transparent state-of-the-art electronic document exchange platform*
- ▼ **Facilitate trade, transportation & financial information flow and service integration through commonly adopted interconnections locally and regionally**
- ▼ *Support over 80 major documents related to trade, logistics, & finance*
- ▼ **Stimulate innovative value added logistics & financial services**
- ▼ *Promote SME e-business adoption*



DTTN Institutional Framework

- ▼ “Digital Trade & Transportation Network Limited” intended ownership:
 - ▼ 51% by Tradelink
 - ▼ 21% by Government
 - ▼ 28% by industry associations

- ▼ Operating Agreement - to assure a **neutral** and **community focused** DTTN operating framework signed with Government

- ▼ Launched January 2006



DTTN – Key Features

- ▼ Provides **reliable and secure** (e.g. encryption, digital signatures) document transformation and delivery of **electronic documents**
- ▼ **Any-to-Any Document Transformation**
 - ▼ Converts sender's document structure, no matter what format, to the DTTN canonical format, and then converts DTTN canonical format to recipient's structure, no matter what format
- ▼ Stores data online for 2 years and offline for 7 years
- ▼ Provides a comprehensive document exchange infrastructure so that the SME's can integrate with local and global supply chains without them having to make that investment in the document exchange infrastructure
- ▼ Is not permitted to provide value added services



DTTN Canonical Document Structure

Over 80 major documents related to trade, logistics and finance for both import and export business processes, have been developed in XML following the UBL methodology and endorsed by the DTTN Standards Advisory Group

▼ **Purchase Process**

purchase / sales order, order confirmation

▼ **Preparing Products for Delivery**

packing list / advanced shipping notice (ASN), commercial invoice, inspection certificate, insurance certificate

▼ **Local & Overseas Transportation**

booking form, shipping order, master / house waybill for sea and air, cargo receipt, transport set, equipment interchange receipt, delivery / release order

▼ **Goods Status**

cargo / shipment arrival notice, delivery status

▼ **Settlement Process**

letter of credit, company guarantee, bill of exchange, L/C collection letter, document arrival notice together with the L/C supporting documents

▼ **On-Line Payment for Local Trade Services**

local trade services invoice, payment instruction / confirmation



DTTN Business Model

- ▼ **Low Cost Community Infrastructure**
- ▼ **HK\$2.50 ceiling for each successfully transformed and delivered document**
- ▼ **Initial connectivity, annual & customization fees may apply**



“Single Window”

Definitions

Key Drivers and Issues

Capacity Building Approaches



“Single Window” Definitions

▼ UN/CEFACT Recommendation 33

- ▼ “parties to lodge standardized information and documents with a single entry point to fulfill all export, import and transit related regulatory requirements” – ***implies a Single Window to Government** so that the party need only lodge through one channel to Government, no matter how many government departments and agencies are involved.*

▼ Community Single Window (Electronic)

- ▼ A single channel through which a party involved in trade, logistics or finance, may “collaborate” with all its business partners, including the same channel for its interactions with Government.

▼ “Single” Window or Channel (Electronic)

- ▼ A Window or Channel may be considered “Single” even if there are multiple physical channels or options (e.g. multiple service providers), provided that a party may “collaborate” using any one of these multiple windows without change to the collaboration (communications / document exchange) protocol it uses.



Key Drivers for *Government and Community* Single Window Networks

▼ Government

- ▼ Macro economic efficiency
- ▼ Competition [economic; political] with other economies
- ▼ Government administration efficiency and cost/budget reduction

▼ Community

- ▼ Operational efficiency
- ▼ Competition [local, overseas]
- ▼ Mandated [Government; Partners-local; global]

▼ Service Providers (Business to Government; Business to Business)

- ▼ Revenue, Profitability
- ▼ Support Government and Community objectives
- ▼ “Loss-leader” for value added services



Key Issues for Government and Community “Single Windows”

▼ Government

- ▼ Consensus on Single Window consolidated action plan, amongst ministries, departments and stakeholders
- ▼ Institutional and legislative framework
- ▼ Business Model that encourages (or mandates) community support while meeting Government budget constraints

▼ Community

- ▼ Operational changes / complexity with part electronic / part manual
- ▼ Business Model with clear savings with minimum upfront costs
- ▼ Technology integration for “e-logistics” ready services

▼ Service Providers

- ▼ Business model that encourages community take-up while meeting profitability targets
- ▼ Operations and technical execution capability
- ▼ Technology stability and ability to adapt to multiple community demands and technology changes



Lessons Learned for Government and Community Single Windows (1/2)

- ▼ Published program for compulsory electronic submission
- ▼ Selection of Government e-trade documents by phases
 - ▼ *Simplicity*
 - ▼ *Benefits to community and to Government*
 - *Positive Price differential for electronic submission*
 - *Correlation to commercial documents*
 - ▼ *Implementation ease*
- ▼ Provision of cost effective software options
 - ▼ Simple input, **very quick response**, robust
 - ▼ *Integrated with commercial logistics software*
 - *Data inheritance - commercial and Government documents*
 - *E-Business-enabled with robust document exchange*
 - ▼ Attractive pricing for users and IT provider



Lessons Learned for Government and Community Single Windows (2/2)

- ▼ Provision of conveniently located service centers
 - ▼ Paper-to-electronic conversion at a price premium e.g. in association with Chambers of Commerce
 - ▼ helps Government to receive 100% electronic submission and thereby achieve efficiency targets
- ▼ Gateway to Government operational departments
 - ▼ By Service Providers [helps to push community take-up] or Government Gateway [can be provided “free” to community – e.g. Australia; US Customs have implemented this]
- ▼ **Accept a variety of document structures and protocols to facilitate community take-up and integration with Government department legacy systems**



“Single Window” Options

- ▼ **Virtual Single Window (e.g. Pan Asian E-Commerce Alliance (PAA))**
 - ▼ Establishment of standard Collaboration Profiles (communication / document exchange), used to transact with (theoretically) all parties
- ▼ **“Expanded e-Government Service Provider” Model**
(*Expanded UNCEFACT Recommendation 33*)
 - ▼ Government “encouraged” expansion of E-Government Service Providers to provide complete document exchange infrastructure, (and value added services) for all supply chain processes, notably for the SME’s.
- ▼ **“Mix ‘N Match” Community “Single Window” (e.g. Hong Kong)**
 - ▼ *Multiple “Government Electronic Trade Service Provider” Licensees (private sector, Government shareholding) who may conduct B2B*
 - ▼ *Community B2B Document Exchange Service Provider closely associated with dominant e-Government Service Provider (Government shareholding)*
 - ▼ *Value Added service providers and industry networks (private sector)*



Thank you

