



# Role of Private Party in Single Windows Development

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# Trade Facilitation Value Drivers

## Value drivers

**Clearance speed**

**Cost of trade**

**Security & compliance**

**Productivity**

## Enabling strategies

### Fundamental strategies

1. Disengage payment process from physical transaction
2. Enable and encourage electronic information input and submission
3. Develop public-private partnership models with trading community
4. Integrate internal governance process across relevant departments
5. Enhance collaborative teaming

### Leading practices

6. Adopt a risk management-based compliance approach
7. Implement and/or encourage preclearance and pre-certification programs
8. Integrate revenue collection into industry payment reconciliation processes
9. Implement strategic targeting programs
10. Exploit new technologies to streamline port and clearance procedures
11. Integrated service delivery/whole of government

### Emerging trends

12. Adopt virtual border clearance activities
13. Adopt standardized international payment methods
14. Consolidate and apply all available data to improve interdiction
15. Develop business partner capabilities with key industries
16. Develop new/expand international partnerships
17. Develop public-private information sharing mechanism

A photograph of a road with speed bumps leading to a horizon under a cloudy sky. The road is paved with asphalt and has white dashed lines on the sides. The speed bumps are made of concrete and are arranged in a grid pattern. The sky is filled with white and grey clouds. The overall scene is a metaphor for trade facilitation.

**Trade Facilitation = reducing  
the Speed bumps in the global  
supply chain**

## Integrated **Trade Facilitation** Strategy – including Single Window

- ❑ **Trade Facilitation - Facilitate: to make trade easy or easier**
- ❑ **Fundamental component of trade and economic development strategy (TF in WTO etc)**
- ❑ **Single Window is not an end in itself**
- ❑ **SW is not a technology system!**

- ❑ SW is essentially **a political / organizational / procedural framework** for trade facilitation and export development
- ❑ A call to a **new way of doing business** – based on government – government agency and **government to business partnership** .... for economic development
- ❑ ... that can **provides major economic benefits** to all parties

## Real Focus: Reducing the economic impact of regulatory processes on cross border trade

- **Each additional day of delay (e.g. because of trade logistics procedures) reduces trade by at least 1%**

Source: Simeon Djankov, Caroline Freund, and Cong S. Pham. (2007). *Trading on Time*. Washington, D.C.: World Bank.

- **Direct and Indirect Cost from import/export-related procedures and required documents is **up to 15% of product cost.****

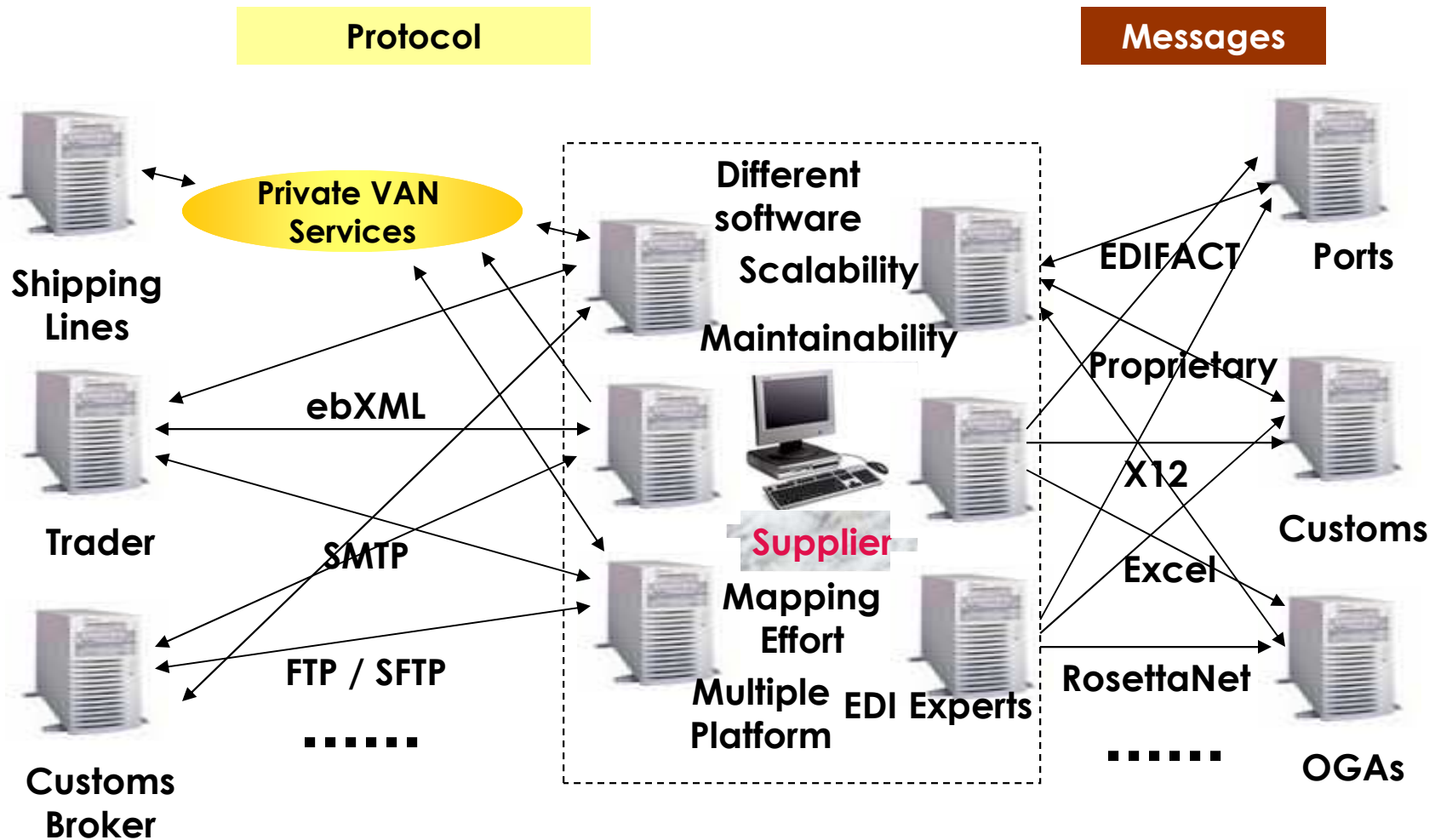
Source: OECD. (2003). *Quantitative Assessment of the Benefits of Trade Facilitation*. Paris: OECD Publications



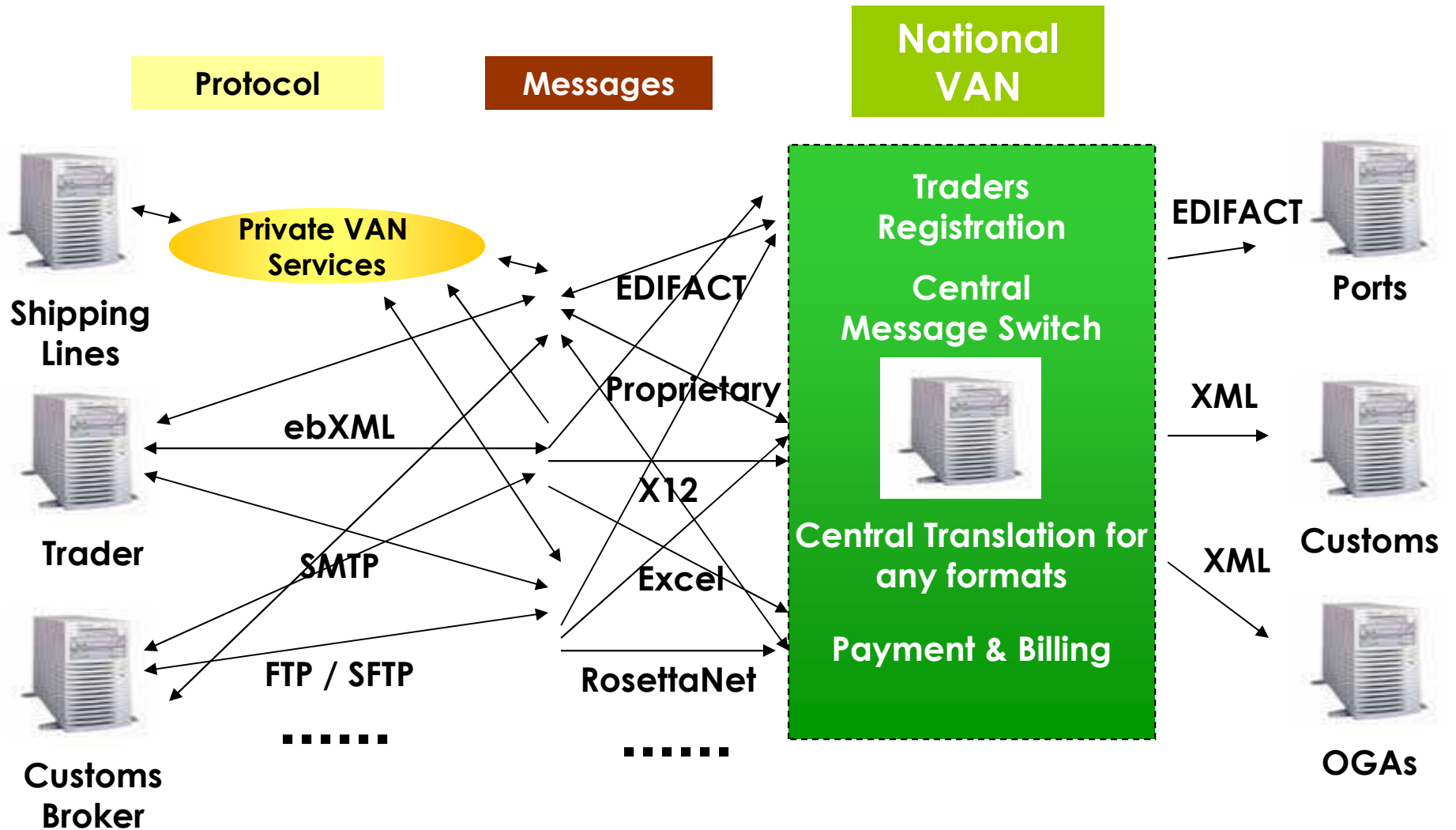
## Single Window / Value Added Network (VAN) Operations




# Without a National VAN - Challenges









Private Party in  
Single Windows –  
Singapore Network  
Services (renamed  
CrimsonLogic)

## 1985

- Severe recession hits Singapore in 1985
- Establishment of a high-powered Economic Committee - chart new strategies to improve its economic competitiveness. Recommends to expedite the use of IT to improve trade competitiveness.

## 1986 - 1987

- Dec 1986, then Minister of Trade & Industry – Mr Lee Hsien Loong publicly announced the TradeNet project, to be completed in two years. A TradeNet Steering Committee was created to oversee the process in 1986.
- The Trade Development Board was given the task of mobilizing the trade community and became the coordinating point among various agencies such as Customs and Excise, Port of Singapore Authority, and Civil Aviation Authority of Singapore.
- TradeNet Initial Investments / Development was funded by the Government – in excess of US\$10M. Jun 1987 – RFP Issued.

## 1988

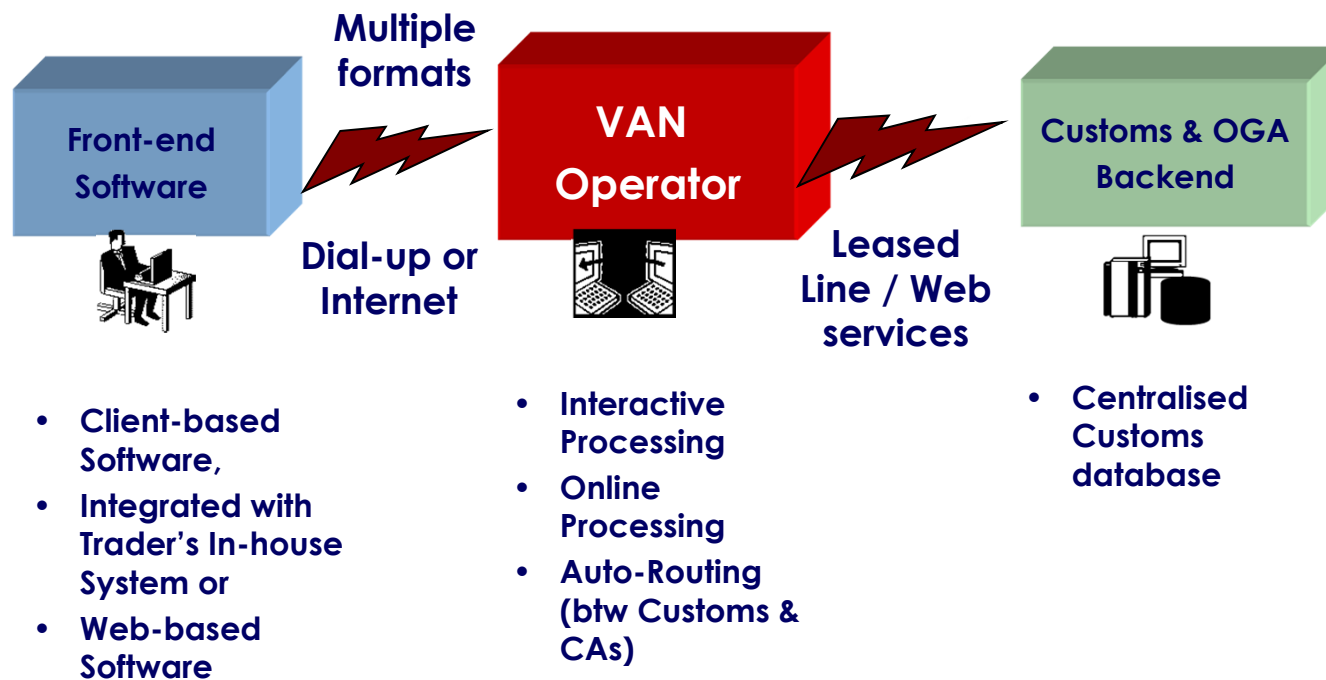
- Singapore Network Services (now CrimsonLogic) was created on 18 Mar 1988 to design, implement and operate the TradeNet system

## 1989

- TradeNet was launched in Jan 1989

## Operational concept of the Value Added Service (VAS) by SNS

- The trading community user shall utilize a application interface to submit their information data. This date shall then be translated into the established standards – EDIFACT and processed. The billing for the transaction is then accompanied. Payment is done electronically.
- SNS is responsible for the translation, processing, billing and payment collection.
- The fees are apportioned into statutory & transaction fee. The statutory fee is passed to the government while the transaction fee is retained by SNS.





## Singapore Network Services (SNS) – renamed CrimsonLogic in 2000)

- SNS was set up in 1988 as a state owned enterprise primarily to spearhead the adoption of Electronic Data Interchange (EDI) in the late 80s in Singapore, starting with a trade related EDI project – TradeNet
- Renamed to CrimsonLogic Pte Ltd in 2000

## VAN Contract

- Initial Award in 1989 - to design, implement and operate the TradeNet EDI on behalf on Singapore Government
- 2<sup>nd</sup> award – 10-year (2008 – 2017) contract to operate TradeNet & TradeXchange

## Staff

- Employees: > 700



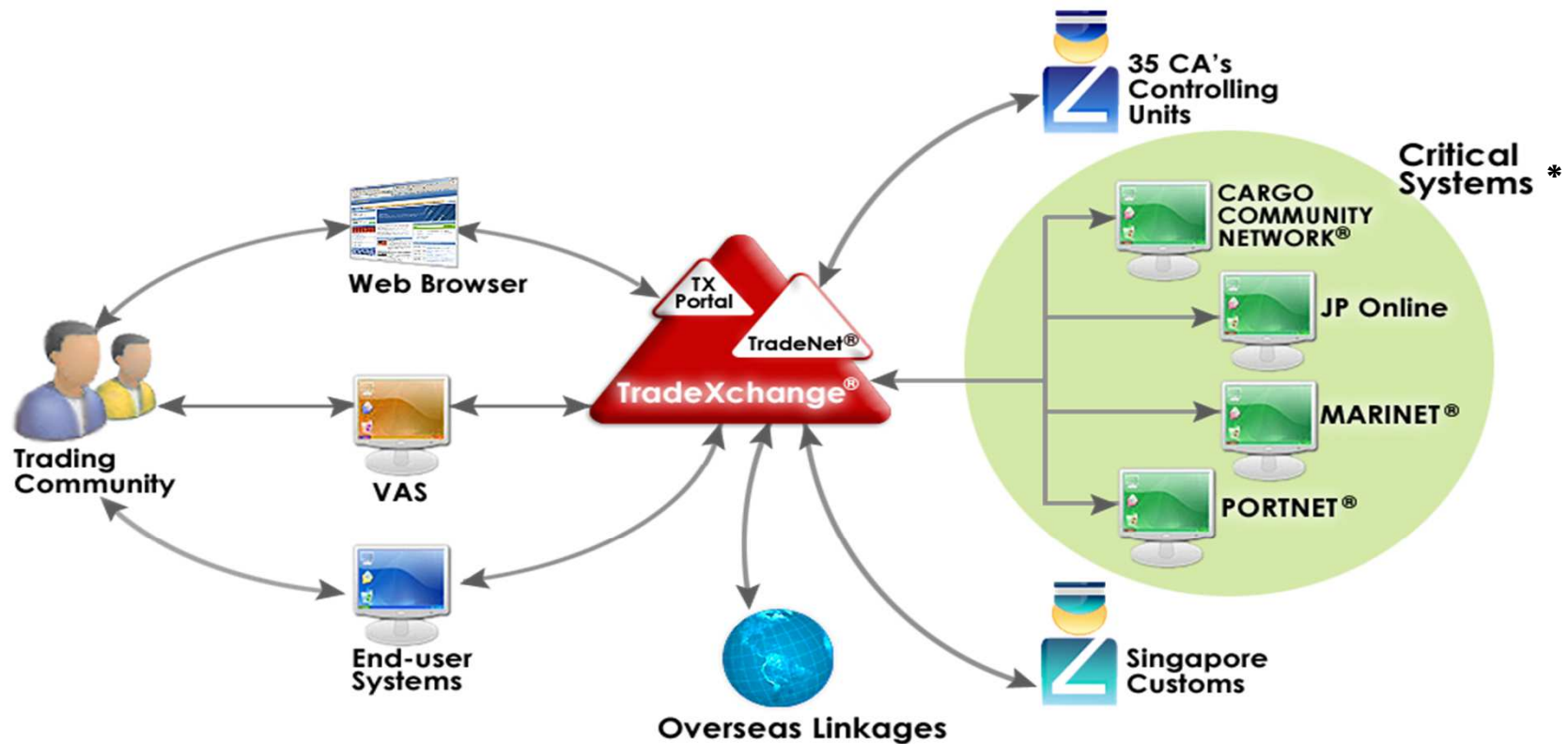
## Limitations of TradeNet

- TradeNet only facilitated business-to-government transactions only
- Users have to access disparate, stand-alone systems to perform trade transactions
- Threat of regional competition

## The response... TradeXchange®

- A neutral national trade platform for information exchange between commercial entities and government
- Rolled in Oct /Nov 2007
- Potential no. of users: 90,000 registered traders in Singapore

Today, TradeNet has evolved to TradeExchange which incorporate the latest TradeNet 4.0



**TradeXchange® - A neutral and secure trade platform to facilitate connectivity for the trade and logistics community**





# Current TradeXchange® Value Add Services

TradeXchange incorporates a number of **Value Added Services** to enable the trading community that connect to TradeXchange® to deposit, extract, transmit and exchange trade information.

## Overseas Highway Manifest

Electronic submission of advanced manifest data to United States (AMS), Canada (ACI) and Australia (CMR).

## Overseas Highway Customs

Sending of data electronically for customs clearance in Malaysia, Taiwan, Korea, Macau, Shanghai, Hong Kong, Philippines, Thailand, Canada and Australia.

## Shipping Line linkages

Connectivity to Intra & GT Nexus for the sending and receiving relevant messages to and from shipping lines (Booking, Draft BL, Status).

## IMS PortNet/CCN

Connectivity to Portnet and CCN for vessel/flight schedules and status.

## RAE RosettaNet Automated Enablement

Connects major industry players to their customers and suppliers for the exchange of commercial documents such as purchase order, packing list and invoice.

## Trade Declaration

Access for trade declaration submissions and permit information.

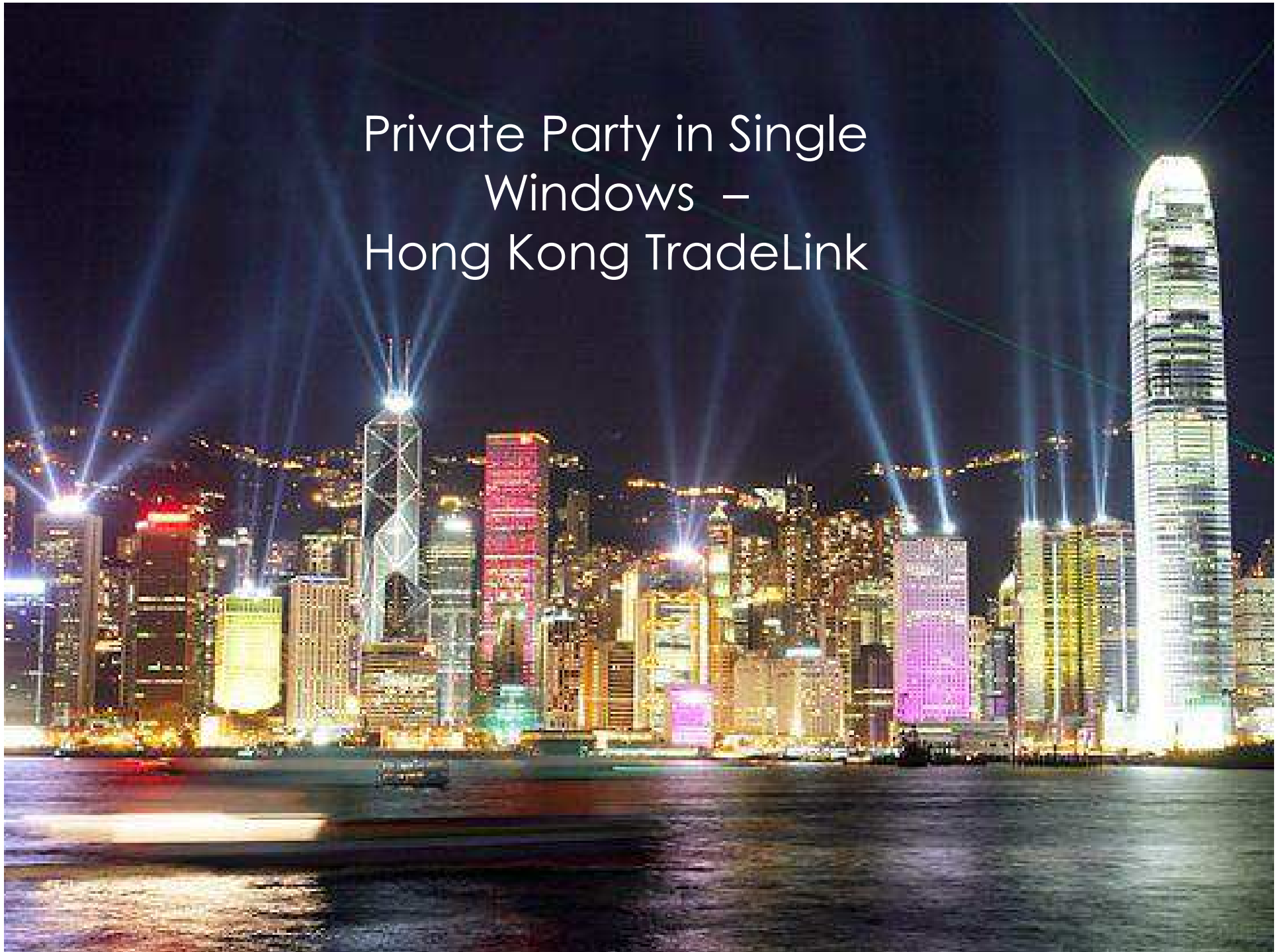
## Direct Procurement eMessaging

Electronically submit electronic purchase orders, invoices, packing lists, delivery forecasts to key suppliers via multiple protocols and electronic formats using TradeXchange as a centralised electronic exchange

## Salient points on VAN in Singapore

- **Government support is Key** – the Van Operator – SNS is a state owned enterprise, with all of its shares owned by government statutory boards
- **Mandated electronic trade documentation** – Government mandated 100% trade submission at the very beginning in 1988.
- **Concept of outsourcing worked very well** – In outsourcing the operations and maintenance of TradeNet to SNS, it removes the burden of hefty IT investments and maintenance for the Government. This also ensures that the trading community enjoys the full services support provided by SNS at a level mandated by the Government
- **Continual Upgrade** – With the support and maintenance fees collected, it enables TradeNet to be constantly upgraded and is now expanded to TradeXchange.

Private Party in Single  
Windows –  
Hong Kong TradeLink



## 1984

- HOTLINE (Hong Kong Trade Local and International Network) Project - HOTLINE interconnected computers between organizations so that common data for trade transactions.
- The project failed due to lack of support from leading business of Hong Kong, China and the Government of Hong Kong

## 1988

- Tradelink established - to grasp full economic benefit and enhancing the productivity and competitiveness of import/export trading community of Hong Kong, China  
Tradelink Electronic Commerce Ltd. was established by eleven leading organizations in Hong Kong
- The Government's involvement was limited in the initial stage – it was not a shareholder of Tradelink, but had committed itself to 10 per cent of Tradelink's funding.

## 1992

- Community Electronic Trading Service (CETS) conceived.
- After many false starts, Tradelink came to realize that the only way to achieve its objective would be through Government involvement.
- Under the CETS's agreement, the Government became the largest single shareholder in Tradelink, acquiring 48 per cent of its total stake.

## 1993-1995

- CETS Project delay due to financial difficulties. Tradelink run into a financial crisis.

## 1996

- In order to avoid bankruptcy, Tradelink applied for financial support from the Financial Committee of the Legislative Council
- Financial Committee of the Legislative Council approved the injection of a HK\$ 425 million loan to Tradelink on 31 May 1996.

## 1997

- HK's Import-Export Ordinance changed in 1997 to allow electronic submission / digital signature of specified Government trade documents and provide for Service Centres.
- Other shareholders had regained confidence in Tradelink and more capital was injected into the company. Subsequently reducing the Government's shareholding to 45 per cent.

## 2000 (31 March)

- Electronic submission of trade declarations mandated in 2000.

Source : "Experience on e-Commerce of Hong Kong, China " - Assoc Prof Kichan Nam, Sogang University, Nov 2002

## TradeLink Electronic Commerce Limited



- Incorporated in 1988 as a JV – shareholders – banks; container terminal operators, air cargo terminal operator ; trade associations & Hong Kong Government

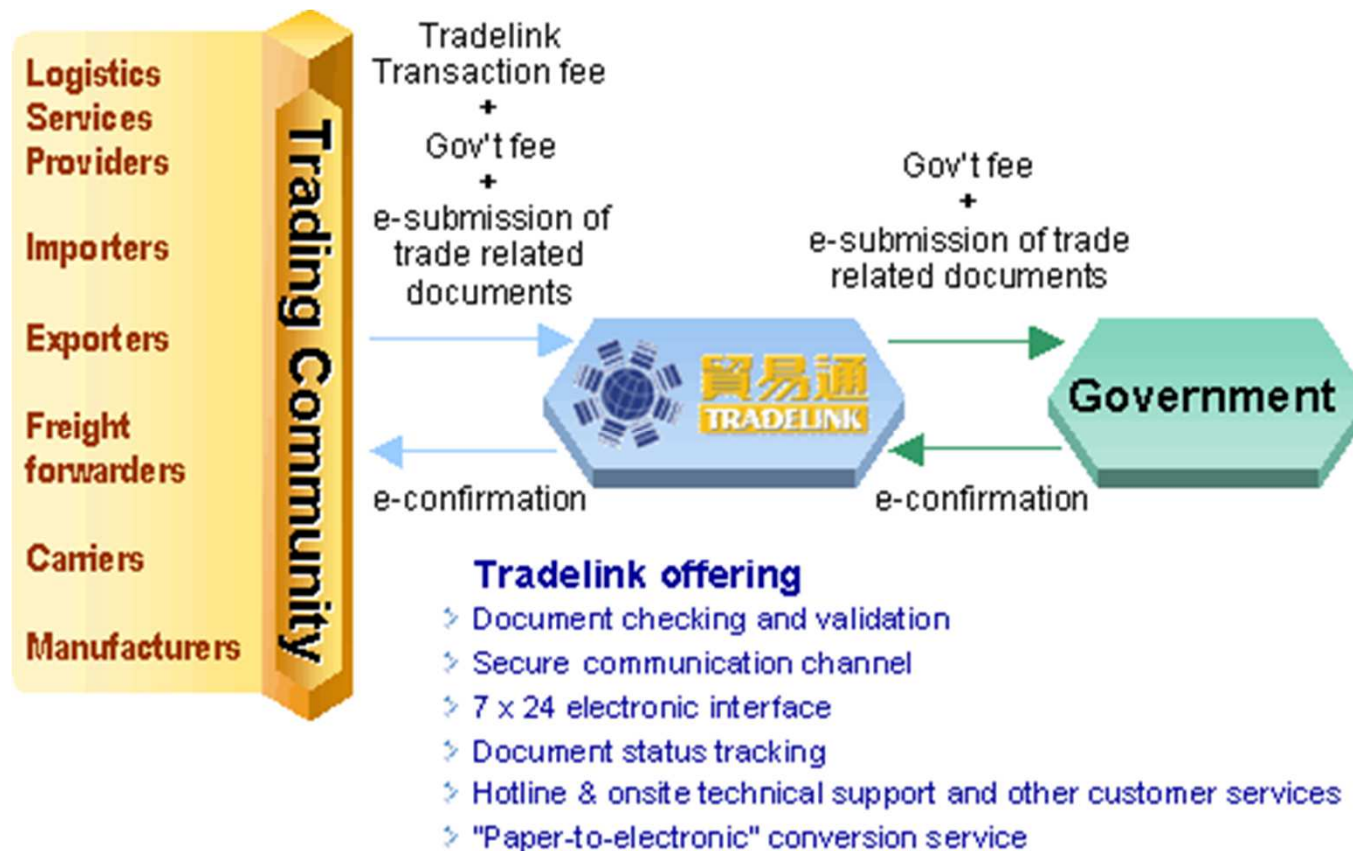
## VAN Contract

- 1st Govt Electronic Trading Service contract - 7 year exclusive franchise to Tradelink(1997-2003). Monopoly ended in 2004.
- 2nd contract for 2004 -2009, with two VANs - TradeLink (95% mkt share) and Global e-Trading Services Limited (5% mkt share).
- 3rd contract (2010 – 2016) with three VANs - Tradelink , Global e-Trading Services &Brio Electronic Commerce Limited

## Staff

- Employees: > 300

## ■ Operations of TradeLink VAN service for HK Govt Electronic Trading Service





## TradeLink VAS service for HK Govt Electronic Trading Service

| Services  | Details   |
|---|---|
| <b>Import or Export Declaration (TDEC)</b>                            | <ul style="list-style-type: none"> <li>• e-lodgment of import or export declaration with Customs</li> </ul>   |
| <b>Production Notification (PN)</b>                                   | <ul style="list-style-type: none"> <li>• e-lodgment of notification to the Trade &amp; Industry Department about cut-and-sewn garments manufactured in HK</li> </ul>  |
| <b>Certificate of Origin (CO)</b>                                     | <ul style="list-style-type: none"> <li>• e-application for CO to the Trade &amp; Industry Department or other government approved organisations</li> </ul>  |
| <b>Dutiable Commodities Permit (DCP)</b>                              | <ul style="list-style-type: none"> <li>• e-application for DCP to Customs for import, export, manufacturing or storage of dutiable commodities</li> </ul>   |
| <b>Electronic Cargo Manifest (EMAN) (excluding road mode)</b>         | <ul style="list-style-type: none"> <li>• e-submission of manifests for air, rail, water cargo to the Census Department and the Trade &amp; Industry Department</li> <li>• e-receipt of notice / voucher from Customs and e-communication with other government departments</li> </ul> |
| <b>Notifications under Textiles Trader Registration Scheme (TTRS)</b> | <ul style="list-style-type: none"> <li>• e-submission of notification to the Trade &amp; Industry Department for textile trading under TTRS</li> </ul>  |

## Salient points on VAN in Hong Kong

- **Government support is Key** – the crucial turning point was when the Govt of HK took a controlling stake in TradeLink, and awarded an initial 7-year exclusive franchise.
- **Mandated electronic trade documentation** – after a series of starts & stops, the Government finally mandated 100% trade submission only in 2000, although the electronic trade documentation initiative started in 1988
- **Introduction of Competition** – TradeLink's 7 year exclusive franchise of the GETS ended in 2004. From 2004 – 2009, operating out of a 2 VAN operator mode, the market share was TradeLink – 95% ; Global e-Trading Services Limited (5% mkt share). The new contract from 2010 – 2016 was awarded to 3 operators including the existing 2 operator.



## Private Party in Single Windows – Mauritius Network Services

## 1992 - 1993

- Following the recommendation to increase the use of IT by the World Bank in 1992, studies were initiated in November 1993 to examine the feasibility of implementing an electronic network that facilitates existing trade documentation process.
- This system would be modeled after the successful TradeNet System in Singapore was selected.
- Following detailed studies and intensive industry discussions, it was evident that a Value-Added Network (VAN) operator needed to be set up to operate the TradeNet and other IT Communications services.
- The VAN would be a tripartite joint venture company involving public and private sector representatives and a foreign technical partner. It would also operate autonomously and has to be self sustainable in the long run. After carefully examining the costs and benefits of such a proposition, the decision to set up Mauritius Network Services (MNS) to operate Mauritius' strategic IT Communications Infrastructure was made.

## 1994

- Mauritius Network Services Limited was incorporated on 15th, April 1994.
- Its shareholders are : 60% MauriNet Investment Ltd (holding company for state-related organizations and Mauritius Chamber of Commerce) & 40% CrimsonLogic

## 1994

- TradeNet Phase 1 Operational on 28th July, 1994 for the transmission of Approved Non-verification declarations from Customs to Freight Stations for Delivery of Goods. This phase would be obsolete with Phase 3 fully operational.

## 1995

- TradeNet Phase 2 Operational on 5th Jan 1995 for the Submission of Manifests from Shipping, Clearing & Forwarding Agents to Customs.

## 1997

- The Customs Mgt System & TradeNet Phase 3 is Operational on 28th July, 1997
- Submission of declarations from traders to Customs and receiving response from Customs for Goods Delivery.

## 2000

- TradeNet Phase 4 Operational on 11th July, 2000 - Submission of Form 28 for the transfer of containers.
- TradeNet Phase 5 Operational on 11th December, 2000 - Submission of Import and Export Permits.

## 2006

- TradeNet Phase 6 Operational on 1st August, 2006 - Submission of EUR1 certificates.

## Mauritius Network Services Ltd.

- Incorporated in 1994 as joint venture between Mauritian public and private sector interests and CrimsonLogic as a technical foreign partner providing know-how and experience
- Shareholders of Mauritius Network Services Ltd. are: Maurinet Investments Ltd. (60% of equity) & CrimsonLogic (40%)
- Maurinet Investments Ltd - 53% held by 4 Mauritian public bodies, and 47% held by the Chamber of Commerce & Industry



## VAN Contract

- Exclusive franchise to build and operate the Mauritius TradeNet
- Activities financed from 2 sources:
  - a software single-user licence of \$1300 at the outset
  - a service fee of USD5 per declaration sent thru' MNS

## Staff

- Employees: ~ 50

## Mauritius TradeNet VAS service

| Services   | Details  |
|--|--|
| <b>Import or Export Permits</b>                              | <ul style="list-style-type: none"> <li>• Electronic submission of applications, issue of Import Permits. Processing and approval of declarations to Customs within a 15-minute timeframe</li> </ul>        |
| <b>Cargo Manifest</b>  | <ul style="list-style-type: none"> <li>• Access to air and sea cargo manifests, ships' arrivals and departures, movement of containers, etc.</li> <li>• Notice of release of consignments</li> </ul>       |
| <b>Electronic submission of returns and payment of taxes</b> | <ul style="list-style-type: none"> <li>• Electronic submission of returns and payment of taxes to the Mauritius Revenue Authority, and contributions to the Ministry of Social Security.</li> </ul>        |
| <b>Companies and Business Registration Service</b>           | <ul style="list-style-type: none"> <li>• Provide a web-based portal that allows businesses to register companies, file statutory returns, pay yearly fees, and search for business information.</li> </ul> |
| <b>Certificate of Origin (CO)</b>                            | <ul style="list-style-type: none"> <li>• Provides a single window facility for the application and delivery of Certificates of Origin</li> </ul>   |



## Salient points on VAN in Mauritius

- **Government support is Key** – State owned enterprise including the Ministry of Finance took a stake in MNS TradeNet, and awarded an exclusive concession to operate the TradeNet on behalf of the Government.
- **Mandated electronic trade documentation** – Government finally mandated 100% import & export permit submission thru' TradeNet operated by MNS
- **Sustainability of MNS as Operator** – MNS is set up to be self-sustainable right from the start. MNS share value multiplied by eight since 1994. Yearly dividends = ± 90% of funds invested



## Case Study of VAN – The Ghana Community Network (GCNET)

## 1998

- A number of reviews, including those of the World Bank, IMF suggested that for the policy reforms to include in improvement of the operational efficiency of front line agencies like Customs, Immigration, Port authorities and the Investment Promotion Council, which were front line agencies for facilitating investment flows.
- The Government of Ghana decided to launch the Ghana Gateway project. After official delegations visited Singapore, Mauritius they were particularly fascinated by the TradeNet there.

## 2000

- Ghana TradeNet was established to provide a fully integrated network for various operators to interact with Customs in the processing of imports and export consignments to and from Ghana.
- GCNet incorporated in Nov 2000, with public & private shareholders: Customs, Ecobank, Ghana Commercial Bank, Ghana Shippers' Council, SGS
- Mandated by Ministry of Trade and Industry to implement and manage the GCNet system
- 2 Systems deployed TradeNet (EDI) and GCMS (Ghana Customs Management System) with network interfacing and operational support

## 2002

- The first production Customs declaration was processed in November 2002.



## Ghana Community Network (GCNet)

- was Incorporated in Nov 2000 as a JV company :
  - SGS (60%)
  - Customs Excise and Preventive Service CEPS (20%)
  - Ghana Shippers Council (10%)
  - 2 local banks (5% each)

## VAN Contract

- Exclusive mandate by Ministry of Trade and Industry to implement and manage the GCNet system

## Staff

- Initial 70 employees (including Network, Systems, IT Security, Ops Support, Call Centre, Training Depts)

## Ghana GCNet VAS service

| Services                        | Details   |
|---------------------------------|---|
| <b>Import or Export Permits</b> | <ul style="list-style-type: none"> <li>• Electronic submission of Customs by Clearing Agents or Self-Declarants.</li> <li>• Translation &amp; Electronic transmission of Customs clearance approvals in format acceptable by Terminal Operators</li> </ul>  |
| <b>Cargo Manifest</b>           | <ul style="list-style-type: none"> <li>• Electronic submission of Master Manifests by Shipping Agents and Airlines and translation in format acceptable by Ports &amp; Customs</li> <li>• Electronic submission of House Manifests by Forwarding Agents / Consolidators.</li> </ul>                                       |
| <b>Electronic payment</b>       | <ul style="list-style-type: none"> <li>• Payment of Duties &amp; Taxes confirmed electronically by the banks.</li> </ul>  |
| <b>Other Trade Services</b>     | <ul style="list-style-type: none"> <li>• Electronic transmission of Delivery Orders from Shipping Agents to Terminal Operators</li> <li>• Integrated system for the sharing of files between Customs Officers</li> <li>• Transfer of electronic messages between Customs, Traders and other parties concerned.</li> </ul> |

## Salient points on VAN in Ghana

- **Government support is Key** – An Inter- Ministerial Gateway Oversight Committee was set up to oversee the this ambitious initiative.
- **PPP Model that worked** – a new company – GCNet was created and charged with the implementation of both the TradeNet and the Ghana Customs Management System (GCMS). This company was given a de facto Build Own and Operate (BOO) contract. GCNet anchored the reforms and ensured continuity and focus to the reform objectives during a period of political transition, and when no other local organization had the wherewithal to effect such a drastic transformation of trade and Customs procedures.
- **Seamless integration between the Single Window & Customs Backend** – Ghana also adopted the Customs Management System that was designed for smooth interfacing with the TradeNet system



Operating & Supporting  
Single Windows –  
**The Public-Private  
Partnership Way**





# Many Examples of PPP in the region

- Singapore - CrimsonLogic
- Taiwan – TradeVAN
- Korea – KNet
- Japan - NACCS
- Hong Kong – TradeLink
- Ghana - GCNet
- Mauritius – Mauritius Network Services
- Madagascar - GasyNet



## SW / VAN Operators in Asia Pacific

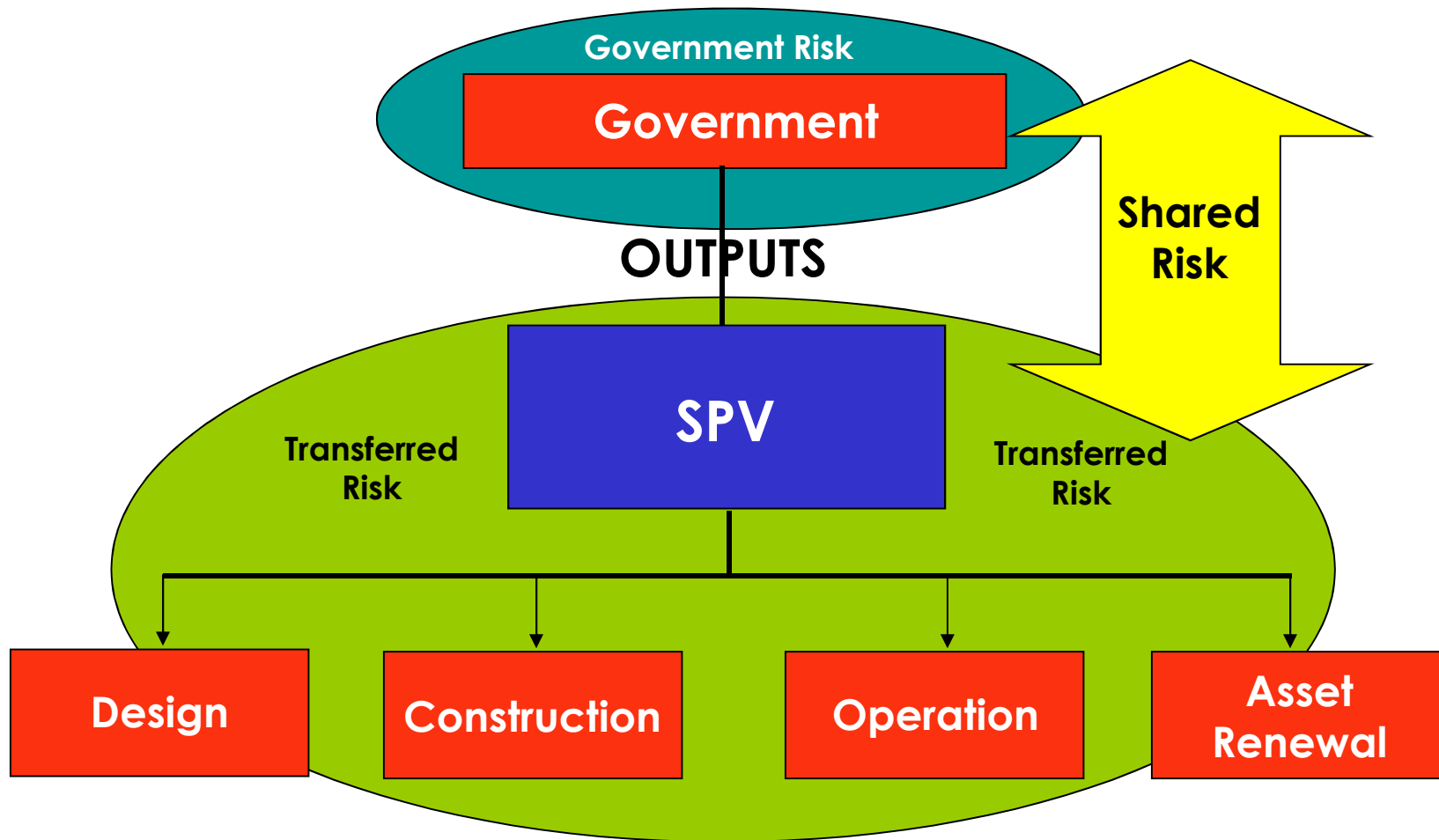
| <b>Country</b> | <b>Name of SW Operator</b>                       | <b>Awarding Authority</b>                |
|----------------|--|--|
| Singapore      | CrimsonLogic                                     | Singapore Customs                        |
| Hong Kong      | TradeLink  | Commerce and Economic Development Bureau |
| Ghana          | Ghana Community Network Services Limited (GCNet) | Customs Excise and Preventive Services   |
| Mauritius      | Mauritius TradeNet System (MNS)                  | Ministry of Finance                      |
| Taiwan         | TradeVAN   | Ministry of Finance                      |
| Korea          | KNet   | Korean Customs Administration            |
| Japan          | Nippon Automated Cargo Clearance System (NACCS)  | Ministry of Finance                      |

## Objective of PPP:

**RISK TAKEN BY PARTY BEST PLACED TO MANAGE IT**

- **Optimal risk transfer will enhance Vfm**
- **Excessive risk transfer – cost increase, and unbankable in extremes**

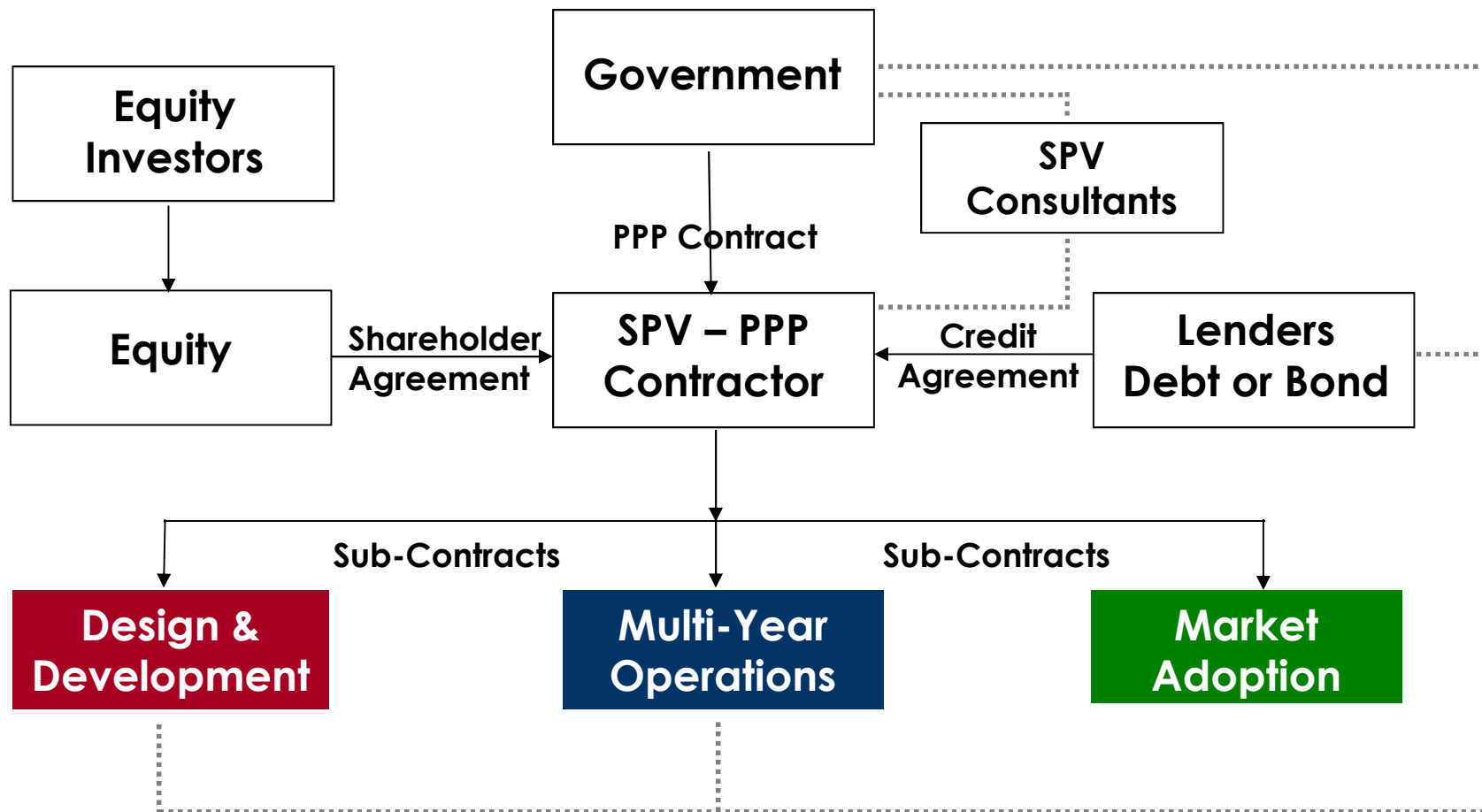
## Risk Allocation – Typical PPP Model



# Contractual Arrangement for SW Operations



## Structuring a PPP Contract – Typical Special Purpose Vehicle (SPV) Structure



1. **Strong private sector partnership and cooperation for trade facilitation**
2. **Public sector realism for what the private sector can deliver – *allowing VANs to provide the value added services, which public sector is unable to provide***
3. **Private sector empathy for what the public sector is seeking – *greater service levels at lower cost***



## Successful delivery of PPPs for Single Window

### Critical Success Factors include:

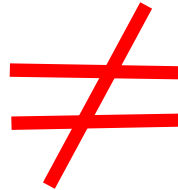
- Coordinated, realistic, efficient approach to procurement
- Commitment from politicians, civil servants and the private sector
- Public sector realism for what the private sector can deliver
- Private sector empathy for what the public sector is seeking
- Legal framework consistent with procurement and project needs

**NEW SKILLS NEEDED BY PUBLIC AND PRIVATE SECTORS**



Suggestions  
for way  
forward

Trade Facilitation



All about Technology

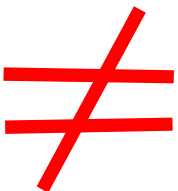
Trade Facilitation



All about People



- Technology is only a TOOL
- Need change in mind-set
- Need change in policies/procedures
- Need change in behaviours

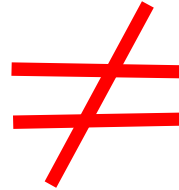
Trade Facilitation  Electronizing Manual Processes

Trade Facilitation  Improving Processes



- Rubbish in, Rubbish out
- Leverage on IT to achieve more streamlined processes that are not possible before

Trade Facilitation



Single Window to All Services

Trade Facilitation



Integrate Related Services



- Customer-oriented perspective
- Over-centralization is a fad
- Over-centralization destroys value

- **Focus on the end game – trade facilitation for export and economic development**
- **Establish an Implementation Plan – with SMART objectives .. and benchmarks ...and a High Level (inclusive) Steering Committee ... with a strong review mechanism**

- **Step by step approach – initial gains and longer term gains**
- **Simplify – automate - integrate**
- **Use of International Standards**
- **Leadership and partnership – think win-win**



- **Establishing a Single Window is not a panacea to solving all trade facilitation issues**
  - **New ways for doing business**
  - **Change mind-sets**
  - **Political will**
  
- **Single Window implies a “Whole of-Government” / “Connected Government”**
  - **Integrating Customs and all Govt Agencies involved in trade regulatory requirements**
  - **G2G / B2G**

Thank you

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