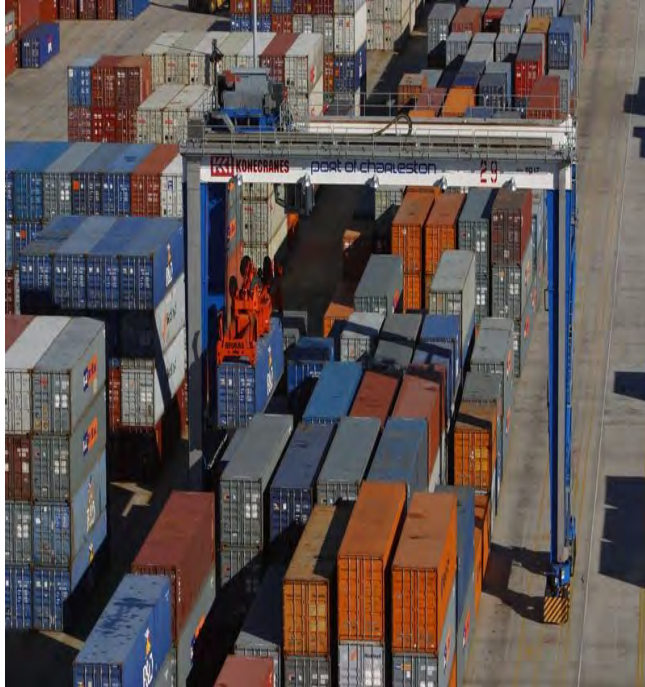


The Single Electronic Window – Singapore's TradeNet – Scope of Services And Pricing Model

*K Sathasivam
Regional Manager
15 July 2009*

- 1. Singapore's Trade Facilitation Journey**
- 2. TradeNet®**
- 3. TradeXchange®**
- 4. Worldwide deployment of Singapore's TradeNet®**
- 5. Business and Pricing Model**

The Singapore Trade Facilitation Journey



Singapore in the early 80s

- among the top 20 trading nations of the world
- world's largest port in terms of gross tonnage and in bunkering activity in 1989
- external trade alone equaled 3.5 times its GDP by 1990

*Source: Harvard Business Review, Singapore TradeNet:
A Tale of One City*

Trade Documentation

- involved multiple commercial parties – traders, shipping lines, freight forwarders, shipping agents etc.
- required multiple agencies' endorsement – TDB, Customs, over 35 Controlling Agencies – many government agencies
- About 10,000 declarations daily in 1987
- Voluminous paper work - 4-20 documents had to be completed for each import/export
- All handled MANUALLY
- Labour intensive
- Time consuming
- Uncertainty

Source: Harvard Business Review, Singapore TradeNet: A Tale of One City



B-G Lee on the transfer of info

THE computerisation of the civil service was part of the national Information Technology (IT) plan, made public by the Acting Trade and Industry Minister, Brigadier-General (Res) Lee Hsien Loong yesterday.

While the original aim of the programme, begun more than five years ago, is to make the civil service more efficient, its role under the plan is to transfer public sector experience in computerisation to the industry.

The minister said, as a first step, more projects under the next five years of the civil service computerisation programme, would be given to private sector.

Ways are now being worked out on how to pass on information systems and technical experience acquired during the initial years of the civil service computerisation to industry.

There are also plans to open up government databases like economic indicators, land use and business information to the public.

The NCI has 300 computer professionals supporting IT government ministries and agencies which have computerised their operations. This includes the education and finance ministries and the Corrupt Practices Investigation Bureau, Auditor-General's Office and Public Service Commission.

The minister also said in his opening speech at the Singapore Informatics '86 fair at the World Trade Centre that an electronic link-up of all trading houses and government agencies like Customs, airport and the Port of Singapore Authority could happen in about two years' time.

Called TradeNet, this trading information system would allow for exchange of information and faster clearing of trading documents, thereby enhancing the international competitiveness of Singapore firms, he said.

The Straits Times 3 December 1986

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The Straits Times
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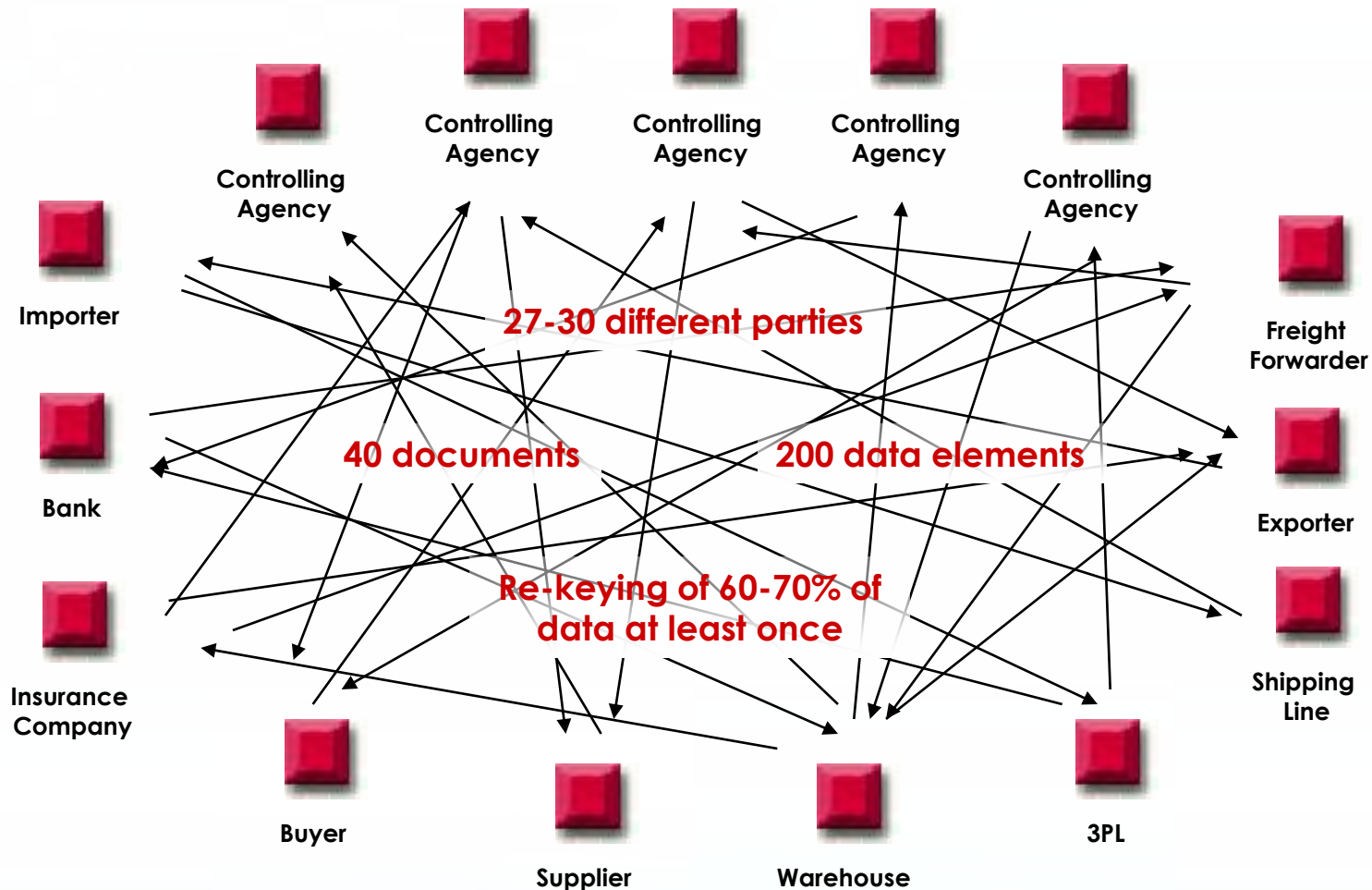
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- Part of National IT Plan
- High Level Government commitment
- Involved private sector
- Incorporated company to run
- Involved intensive trials and tests

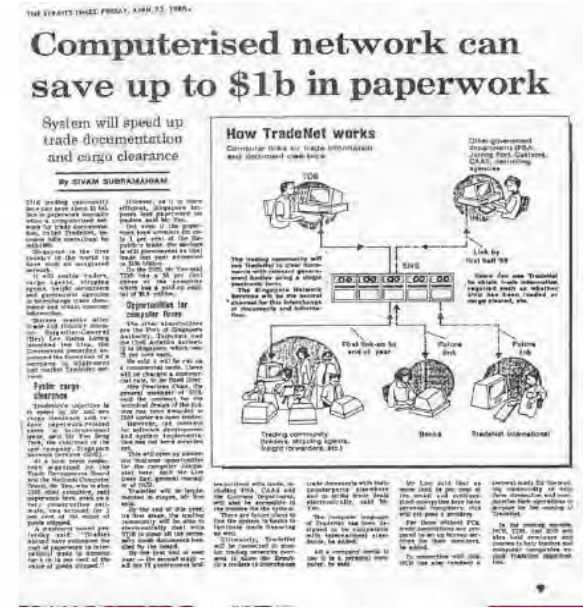
Inefficient Trade Procedures



Too much paperwork • Error prone • High costs of transactions • Diminishing returns to labour

Singapore Trade Facilitation Journey

- **In mid 1980's** - Singapore experienced her 1st recession
- **Government response** - establishment of a high-powered Economic Committee to review the weakness of the Singapore economy and to chart new strategies to improve its economic competitiveness.
- **Recommendation** - to expedite the use of IT to improve trade competitiveness. In 1986, Hong Kong, major competitor, revealed that it was creating a trade oriented EDI system (TradeLink), which further strengthened Singapore's resolve to implement our own TradeNet.
- **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.



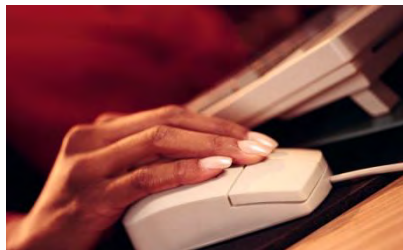


- A TradeNet Steering Committee was created to oversee the process in 1986.
- In Mar 1988, Singapore Network Services Pte Ltd (renamed CrimsonLogic) was created to develop and operate the TradeNet system – world's first Single Electronic Window
- In 1989 – TradeNet was launched

TradeNet[®] Single Electronic Window

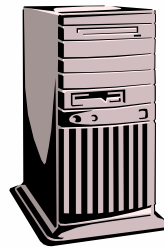
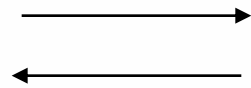
Single point of data entry to achieve a number of completed transactions with the Government

One service with multiple agencies' involvement



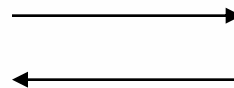
**Traders/Freight
Forwards/Brokers**

Send
electronically



**Single
Electronic
Window**

Approval/
Rejection



Customs / Controlling Agencies

Objectives of Trade Declarations

- Enforce controls laid down by domestic policies and international agreements
- Collect GST and Customs Duties
- Collect Trade Statistics

<p>Commitment at the highest level</p>	<p>Identification of a very senior government official as project champion and a lead agency responsible for the project success. The Minister of Trade and Industry (now PM) provided full support to the TradeNet team.</p>
<p>Setup of multi-stakeholders committees</p>	<p>Co-opt important stakeholders from both public and private sectors as part of the implementation (steering and working) committees chaired by project champion and lead agency</p>
<p>Phased implementation</p>	<p>Developed and implemented an integrated system of limited scale or scope followed by a full-scale or scope implementation</p>
<p>Structure a viable business model</p>	<p>Ensure project success through appropriate Public-Private Partnership model for mutual commitment and risk-taking</p>

- Different degree of Computerization
- Changes in Business Operations

Value Drivers for Trade Facilitation

Value drivers



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

Dec 1986	<ul style="list-style-type: none">■ Formed Executive Committee led by TDB (trade agency)■ Formed Project Committee led by NCB (IT agency)
Feb 1987	<ul style="list-style-type: none">■ Established 3 Working Groups for the sea, air and government sectors
Mar 1988	<ul style="list-style-type: none">■ Completed Technical design specifications■ In Mar 1988, Singapore Network Services Pte Ltd (renamed CrimsonLogic) was created to own and operate the TradeNet® system – world's first Single Electronic Window■ Initiated Public Education Program
Oct 1988	<ul style="list-style-type: none">■ Pilot/Test run of TradeNet
Jan 1989	<ul style="list-style-type: none">■ TradeNet went "Live"



A **holistic eGovt solutions specialist** with deep experience in working with governments to:

- Achieve **national competitiveness** for their nations
- Improve administrative **transparency and efficiency**
- Create positive **spin-offs** for their constituencies (businesses and citizens)

Government-Linked Company Incorporated in March 1988



*An economic agency under
Ministry of Trade & Industry*



Civil Aviation Authority of Singapore



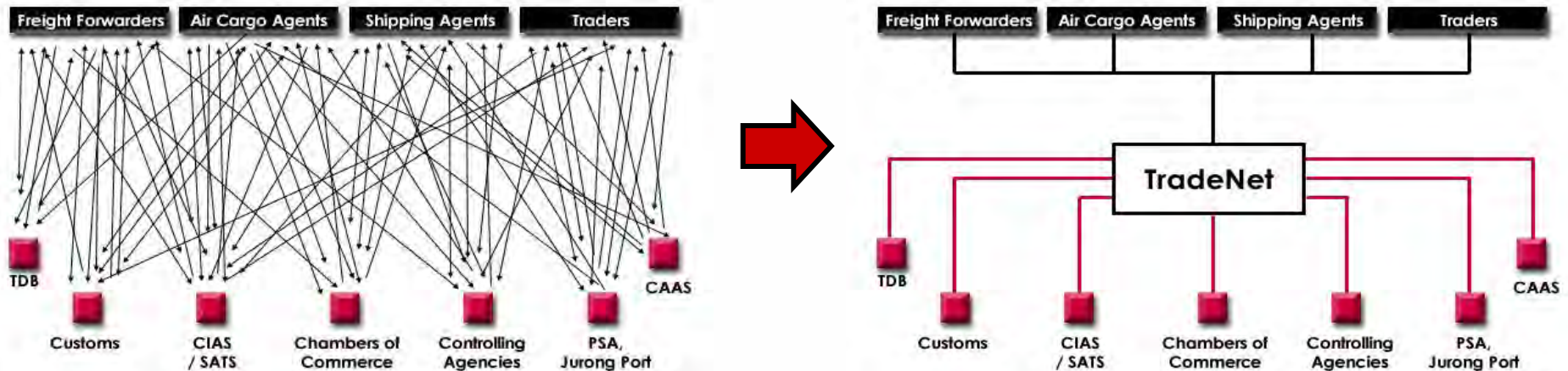
- First Rollout
 - Non-controlled and non-dutiable items
- Subsequent Rollouts
 - Controlled items
 - Dutiable items
 - Certificates of Origin

1

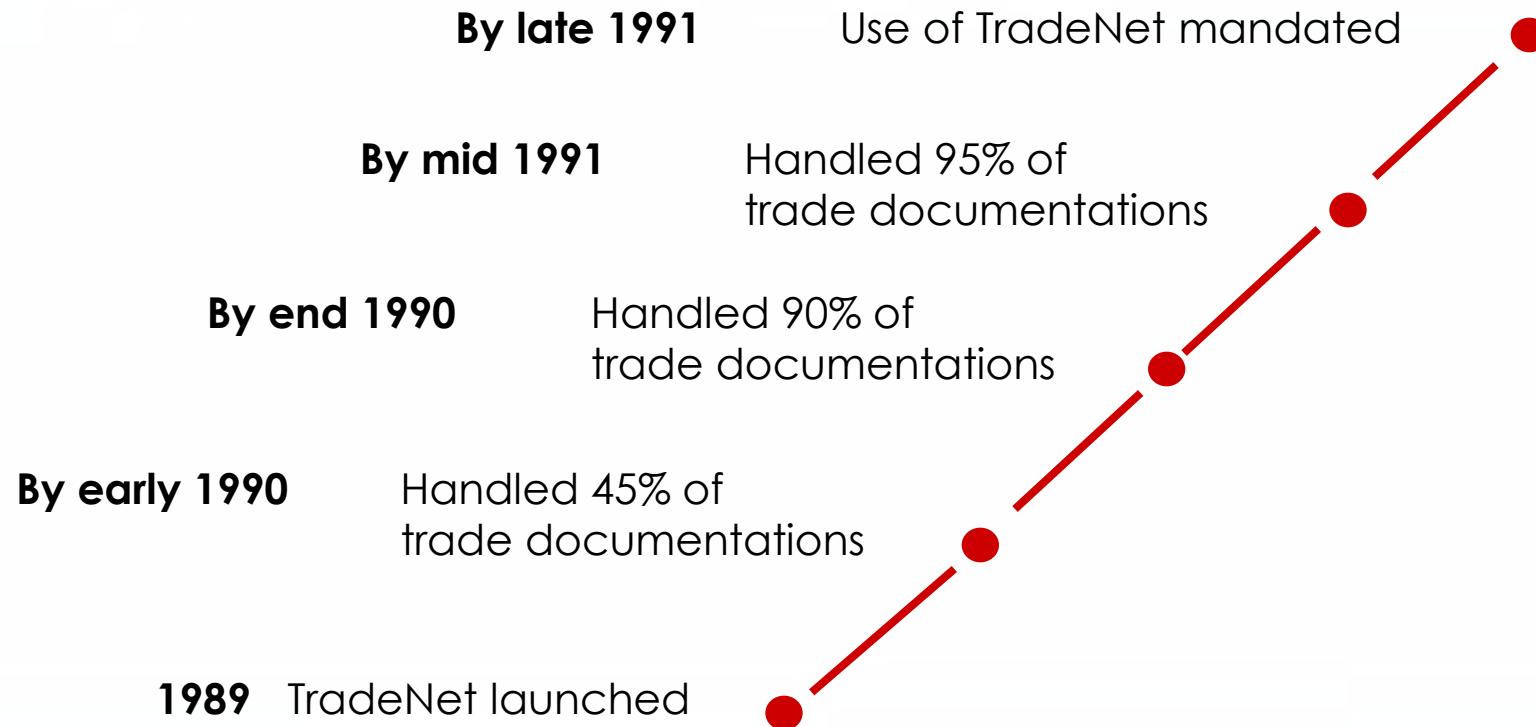
- ☑ eForm
- ☑ Submission
- ☑ Interface
- ☑ Process

Launched in 1989 as the world's first nationwide trade clearance system

A nationwide electronic trade documentation system which allows the trading community to submit permit applications electronically to the relevant government bodies for processing and approval



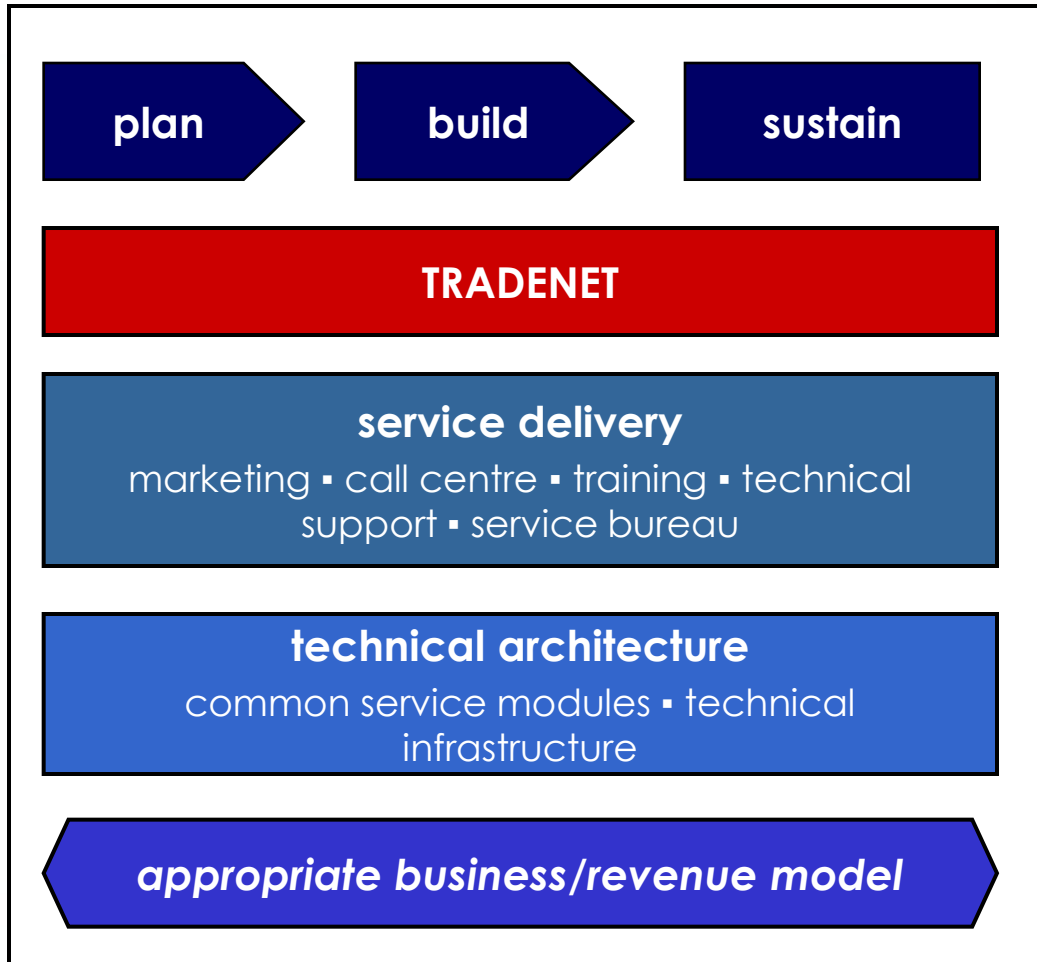
35 controlling units • 7,000+ business rules • 12,000 users • 30,000 – 40,000 trade declarations



1990	Version 1.4
1991	Version 1.5
1992	Version 1.6
1994	Version 1.7 (GST)
1996	Version 1.8 (1996 WCO HS Amendments)
1999	Version 2.0 (Y2K; UN/EDIFACT; Internet)
2003	Version 3.1 (2003 AHTN HS Amendments)
2007	Version 4.0

**Keep up with policy changes • Implement technological advances •
Improve user-friendliness**

Implementation model of TradeNet



an end-to-end approach to ensure long-term project success



ensure usage of TradeNet and its satisfaction from customers through various marketing and support services



ensure a common service platform and a scalable infrastructure



create a win-win private-public partnership proposition to ensure success

A strategic service design focus on viability and sustainability

Characteristics	Previous Manual process	TradeNet
Submission of document	Via expensive dispatch clerks/ couriers	Submit and retrieve Electronically from comfort of office (or home)
Time of submission	Within office hours	Available 24 hrs X 7 days
Trips per controlling agency per document	At least 2 trips or more	No trips required
Copies of document	Multiple copies	Single copy
Turnaround time for approval	From 4 hours to 2-7 days	Within 10 minutes
Dutiable goods handling	Separate documents for customs processing	Same electronic document routed to customs for processing
Controlled goods Handling	Separate documents sent to different controlling agencies for processing	Same electronic document routed to controlling agencies for processing
Customs duties collection	By cheque	Automatic bank account deduction

Source: APEC Economies - Breaking down the barriers (modified)

Operational efficiency

- ① Process efficiency
- ① Cost savings (materials, time, manpower)

Transparency of government services

- ① Accurate, prompt provision of information and collection of fees
- ① Quality public service

National competitiveness

- ① Improve business operating environment
- ① Increase FDI & trade
- ① Local capability building and knowledge transfer
- ① IT savvy business community

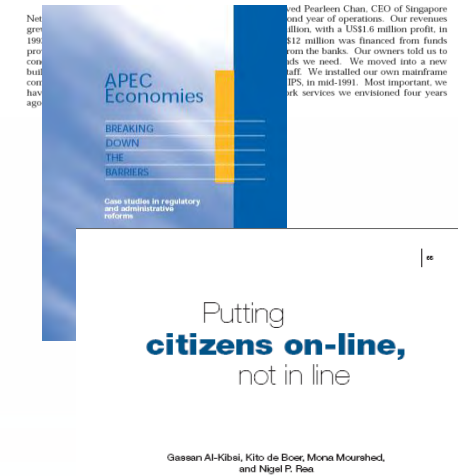
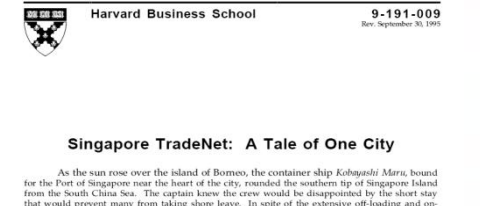
- Clear mandate from Government
- Driven by appointed Lead Agency
- Dedicated committees and Working Groups with various Agencies
- Public – Private Partnership (PPP)
- Participation of Private Sectors
- Pilots and Tests
- Education
- Proper Legal Framework

Harvard Business School: Singapore TradeNet: A Tale of One City: “Describe the development of TradeNet for Singapore to position itself for leadership as the port of preference in the Pacific Rim”

APEC Economies: Breaking down the barrier “... revolutionised the trade documentation process in Singapore ... identified as one of the strategic national information systems that have enhanced the economy’s international competitiveness.”

IBM’s Robert M Howe “It is estimated that TradeNet saves Singapore traders around US\$1 billion per year.”

McKinsey Quarterly: Putting citizens online, not in line “A few years ago, for example, obtaining an import or export license in Singapore required applicants to fill out 21 different forms and then wait 15 to 20 days for 23 government agencies to process the request. But since the government launched TradeNet, applicants have had to submit only one online form, and they receive a license as soon as 15 seconds later.”

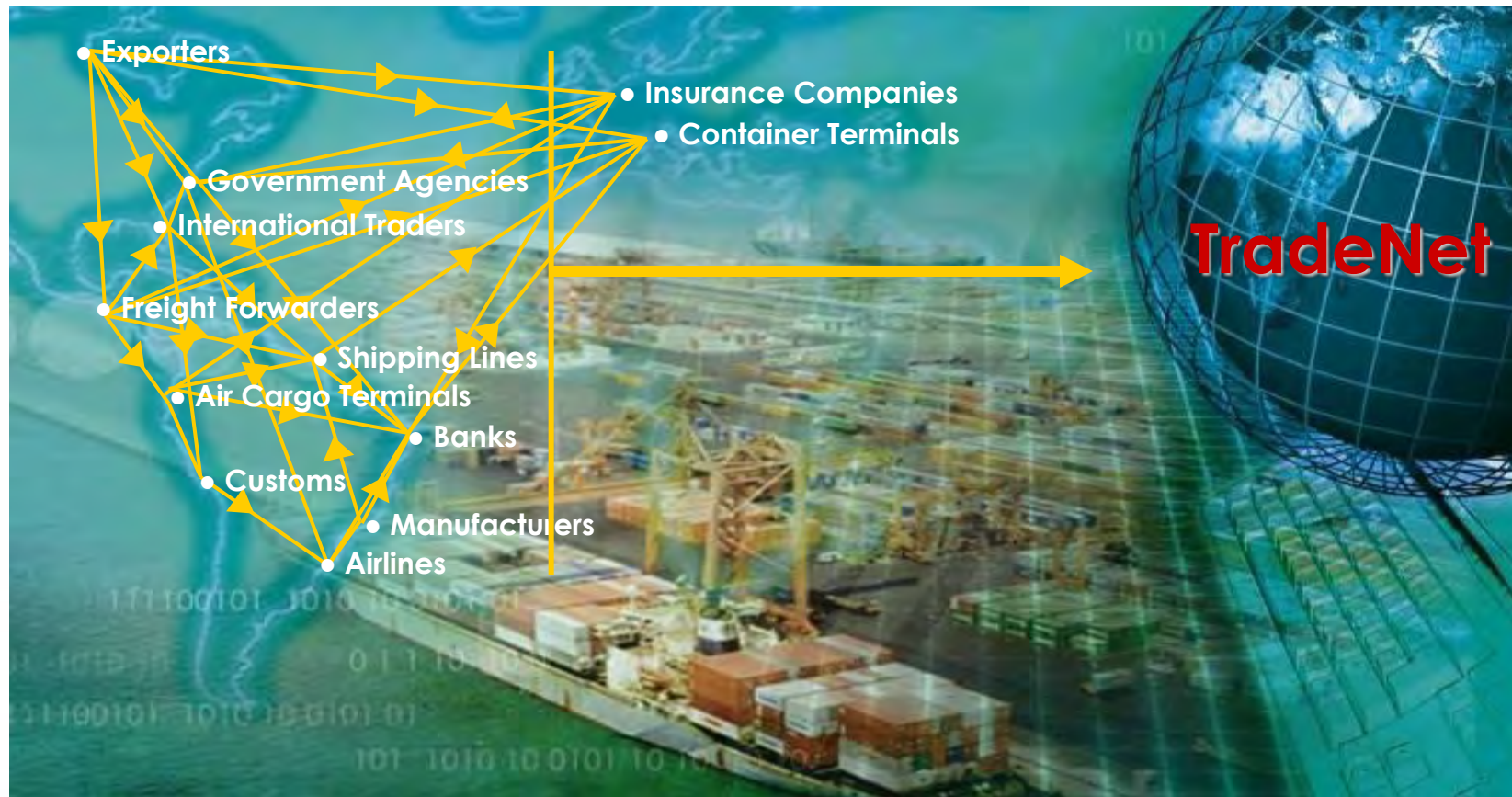


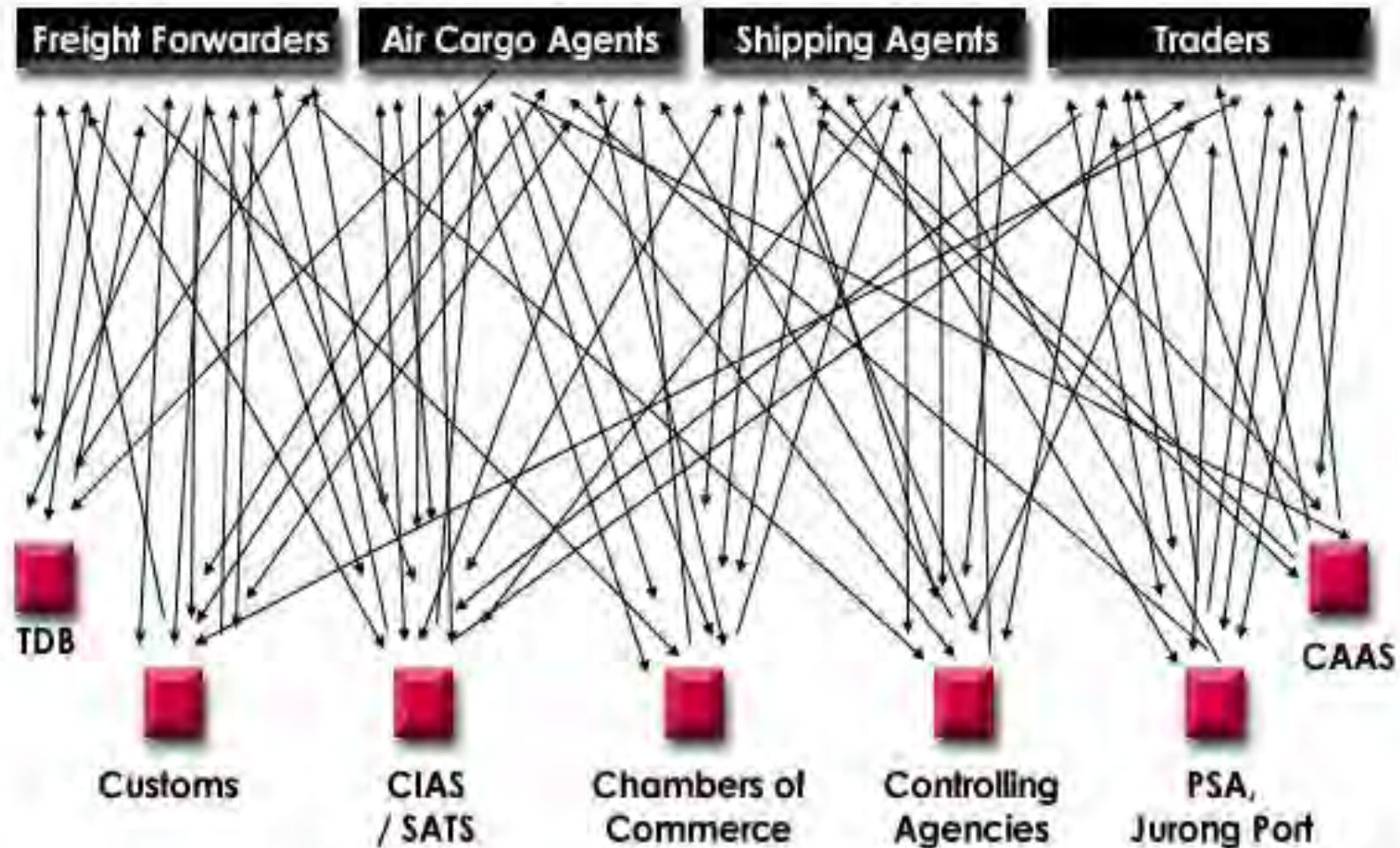
Singapore’s TradeNet: The most studied national trade clearance system

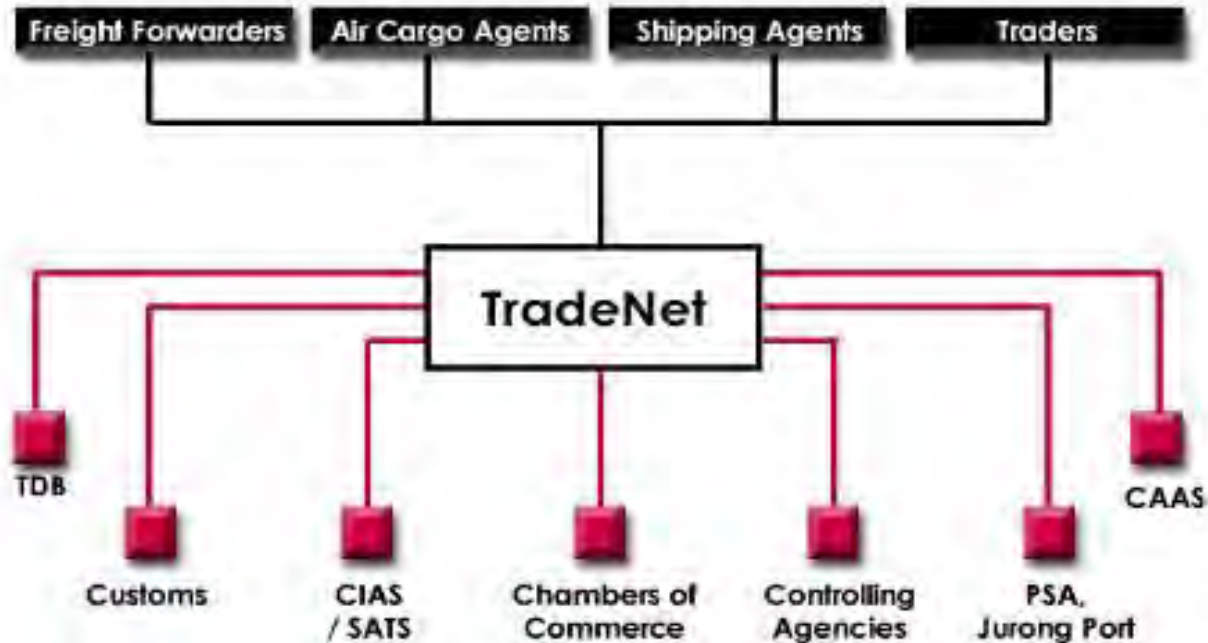


The Singapore TradeNet

World's first nationwide electronic trade clearance system Integrates 35 controlling units' requirements







- World's first nationwide trade documentation system
- Integrates ALL 35 controlling units' requirements and processing rules (about 7,000+)
- Processes 100% of all trade declarations
- Fees computed automatically and collected via interbank direct-debit facilities

Characteristics	Previous Manual process	TradeNet
Processing time/permit	4hrs to 2 – 7 days	1 min or less
Submission of document	Multiple Submission	Single document through a single interface
Number of documents	3 – 35 documents	1 document
Trade documentation fees	S\$10 per document	S\$2.88

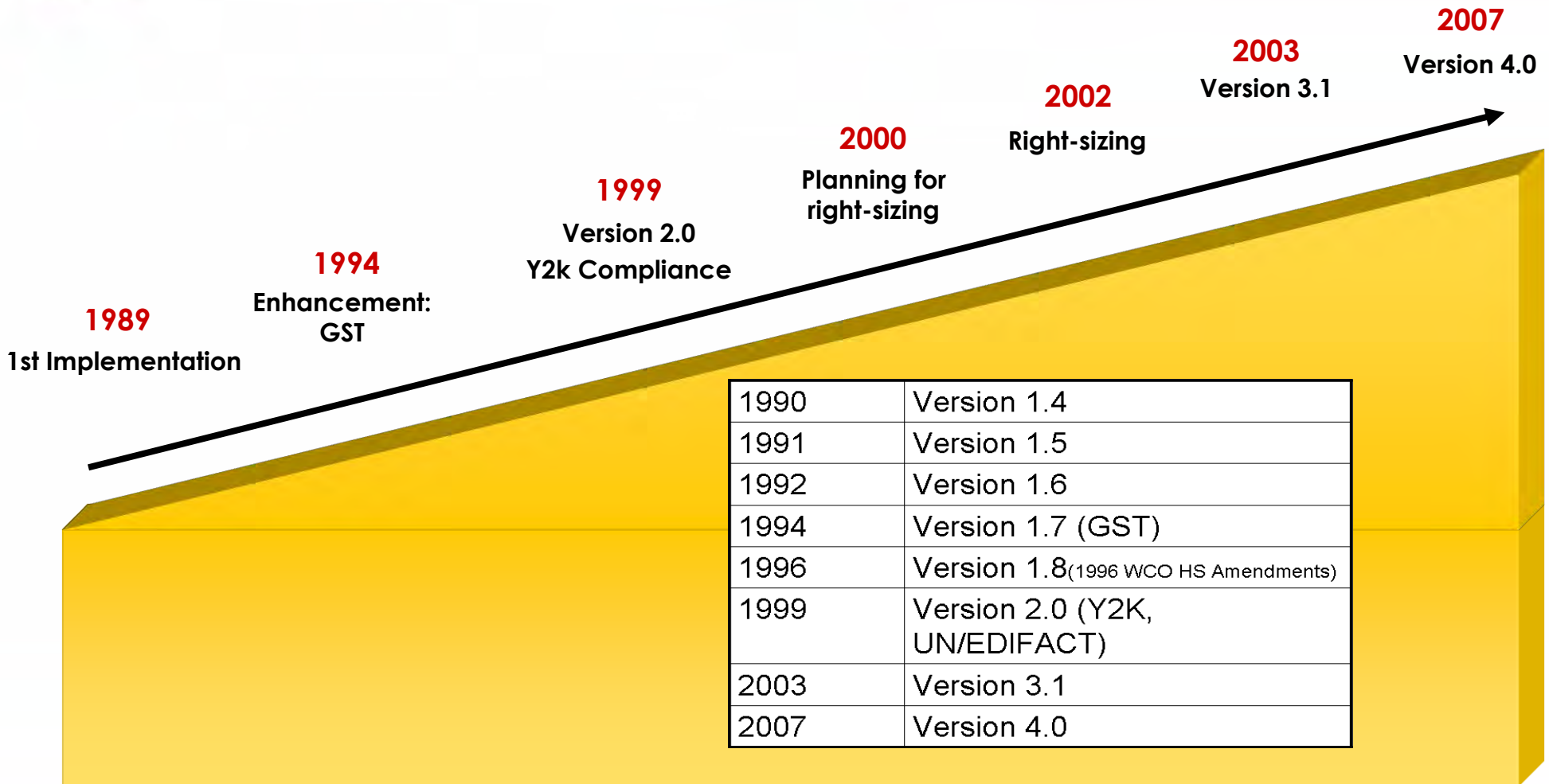
Source: APEC Economies - Breaking down the barriers (modified)

- More than 8,000 users from 2,600 subscribers
- About 30,000 declarations per day
- More than 9 million declarations annually
- Total trade > \$700b

- 100% of customs declarations processed and approved via TradeNet®
- 100% of the payment collections are made electronically through Inter-Bank deductions
- 90% of permits processed within 10 minutes

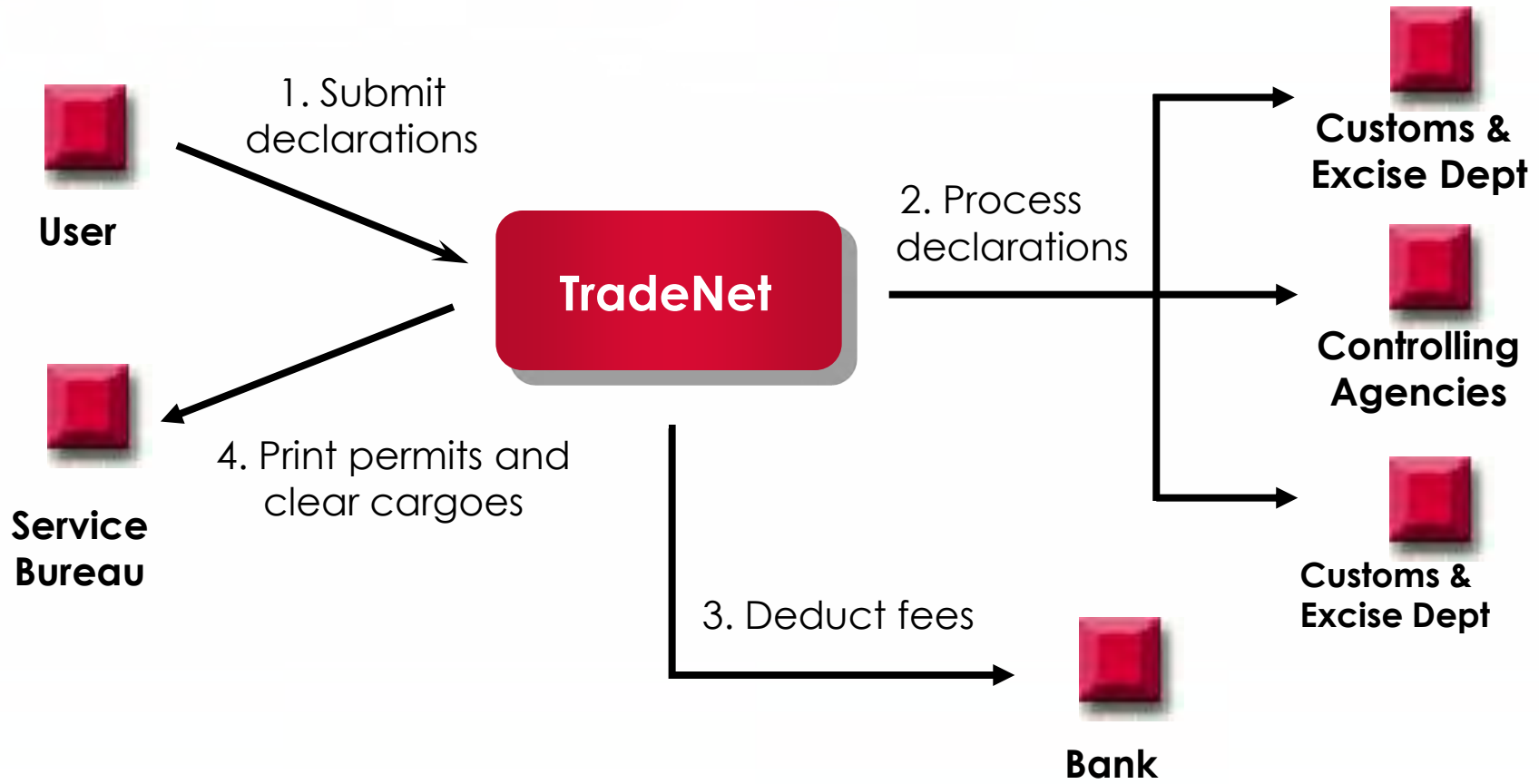
- **Technology refresh**
 - Alignment with global technical standards
 - Use of XML in addition to UN/EDIFACT

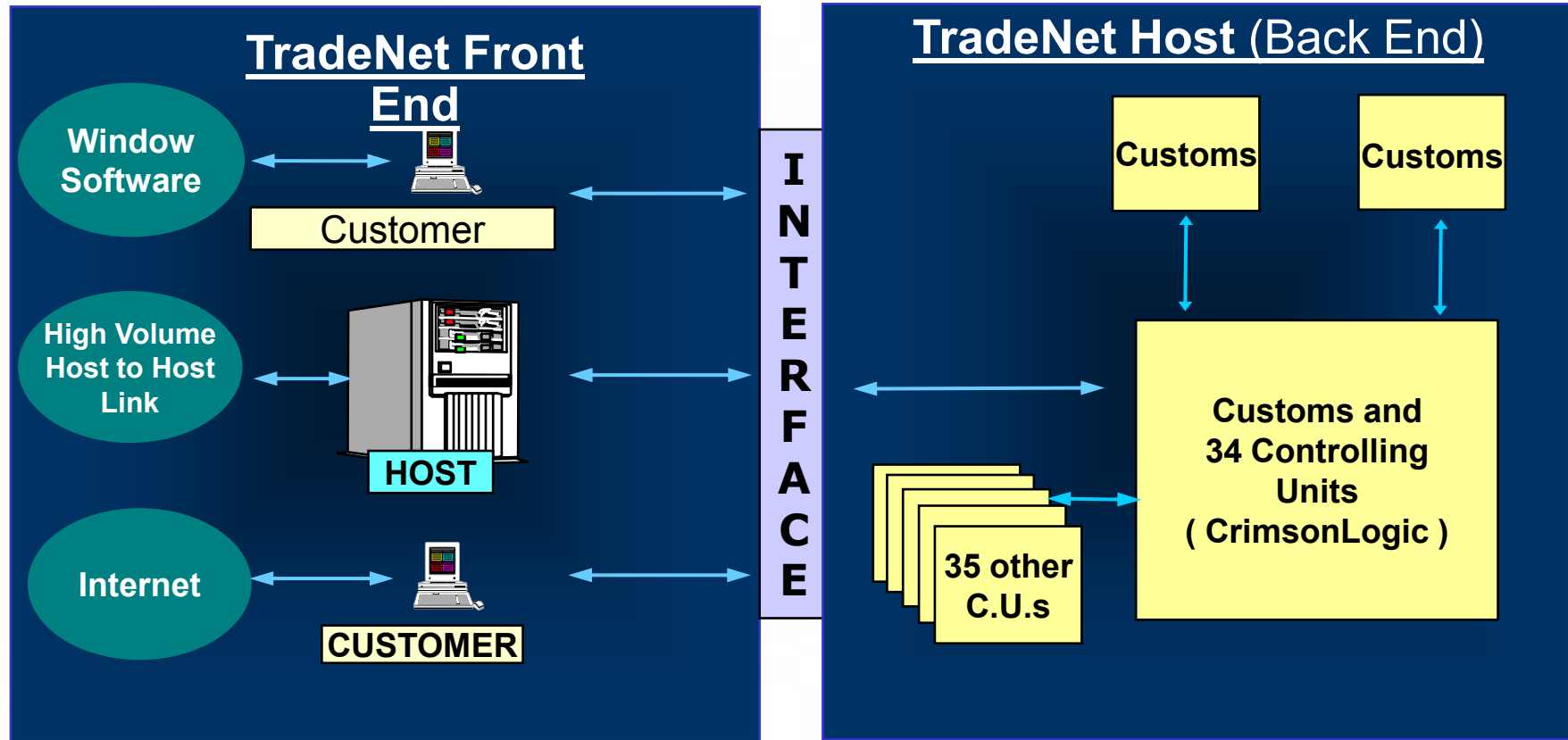
TradeNet Development – 1989 to 2007





How TradeNet Works





- **Internet Declaration System** offered by Government
 - Access via TradeNet® id



How to apply for Permits?

- ★ Select by **Message** and **Declaration** Type
- ★ Generally defined by **movement of goods**
- ★ Whether or not **payment** is involved

IN • PAYMENT
• NON-PAYMENT

OUT (with or without CO)

**TRANSHIPMENT /
MOVEMENT**

CO (standalone application)

- **Copy** of approved permit declared on your behalf
- **Self-printing** of electronic true copy of permit
- **Self-printing** of Permit Listing

TRANSHIPMENT / MOVEMENT

THRU TRANSHIPMENT WITHIN SAME FTZ

THRU TRANSHIPMENT WITH INTER-GATEWAY MOVEMENT

INTER-GATEWAY MOVEMENT

REMOVAL

BLANKET REMOVAL

CO

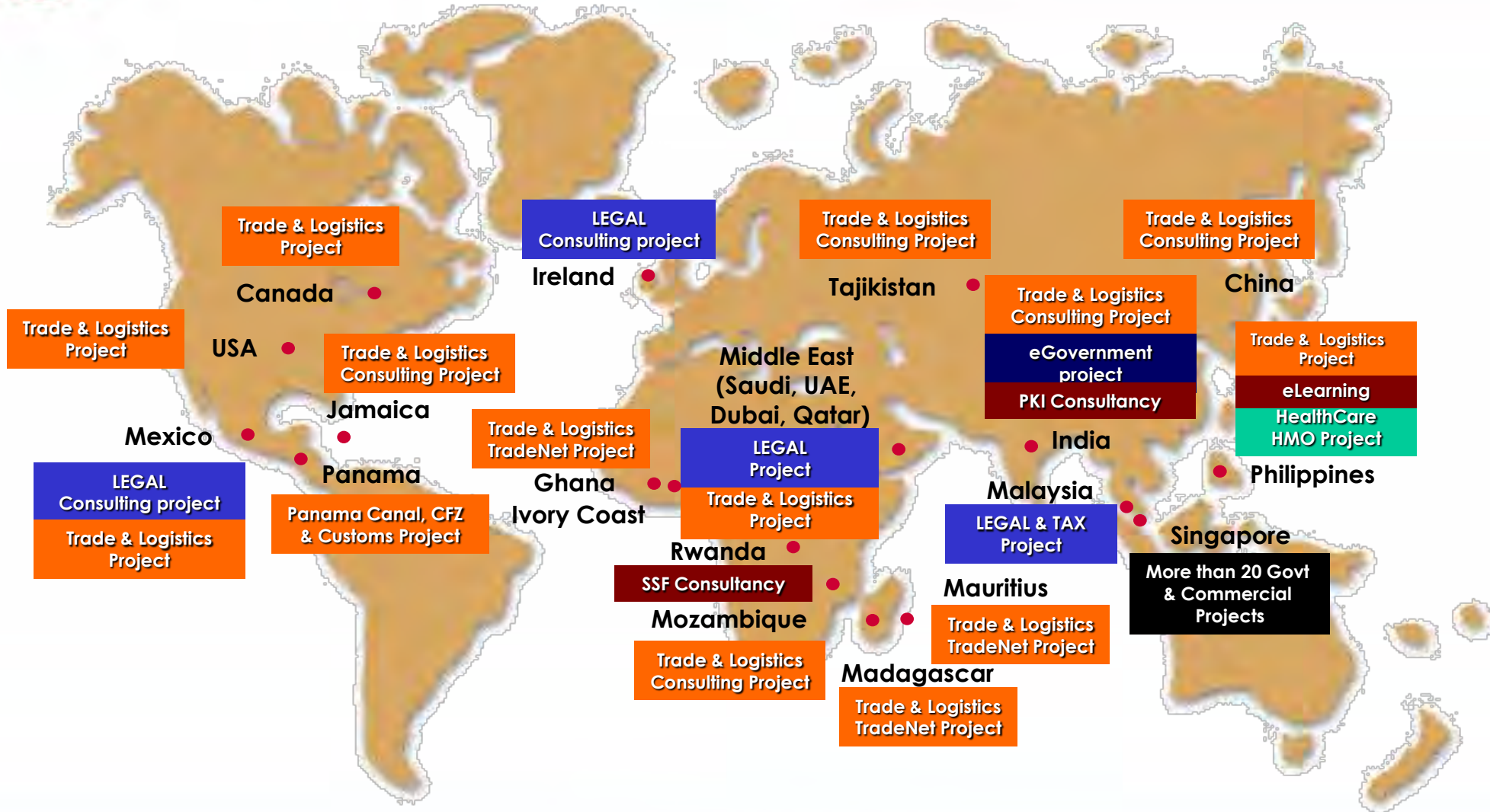
CERTIFICATE OF ORIGIN

- May be submitted **jointly** with outward application or separately as a CO application
- If only CO is applied, you are still required to apply for separate outward application if not done so earlier
- CO applications may be submitted for **controlled items** to be processed jointly by SC and CAs

CrimsonLogic develops and operates 5 National Single Windows :

- **Singapore TradeNet / TradeXchange – 1989**
- **Mauritius TradeNet – 1994**
- **Ghana Community Network (GCNet) – 2000**
- **Saudi Arabia (SaudiEDI) – 2004**
- **Madagascar Community Network (GasyNet) – 2008**
- **Ivory Coast TradeNet System - 2008**

Country	Project	Implemented	Business Model
Singapore	TradeNet / TradeXchange	1989	PPP
Mauritius	Mauritius TradeNet	1994	PPP
Ghana	Ghana Community Network	2000	PPP
Panama	Automated Data Collection System (Panama Canal Authority)	2004	Self Funded
	Colon Free Zone(CFZ)	2008	Self Funded
	Panama Customs	2008	World Bank / IADB
Saudi Arabia	SaudiEDI	2005	Build-Operate-Transfer
India	Port Community System (IndianPort Association)	2007	Self Funded
Madagascar	Madagascar (GASYNET)	2008	PPP
Ivory Coast	Ivory Coast TradeNet	2008	PPP
Mozambique	Mozambique TradeNet	On-going	PPP
Qatar	Qatar Customs Clearance Single Window	On-going	Self Funded



- Incorporated in April 1994
- Operated by Mauritius Network Services Ltd; a joint venture by Maurinet Investments Ltd and CrimsonLogic
- Provide electronic transmission of documents between the Customs & Excise Department, Freight Forwarders, Shipping Agents, Customs Brokers, The Cargo Handling Corporation, The Ministry of Commerce, Freeport Operators and Importers/Exporters



	Before Mauritius TradeNet	After Mauritius TradeNet
Processing time/permit	1 – 3 days	15 minutes
Documents	Multiple documents	Single document



Background paper prepared for the World Development Report 2005

Tradenet in Ghana
Best Practice of the Use of Information Technology

Luc De Wulf*

Draft, January 28, 2004

Abstract

Even since the Singapore WTO meeting in 1996, trade facilitation has attracted major attention in international trade discussions and negotiations. That trade facilitation was a 02 Fall WTO Summit in Cancun is only one recent illustration see trade facilitation, together with policies that reduce trade help countries to better integrate into the world economy and a prospects. The achievements of Singapore in speeding up-necting most members of the trading community into a single l the attention of a number of observers. The experience has as, and Ghana has recently moved towards introducing the key so its own trading community. This Note briefly describes the pore TradeNet, how it came about and what lessons it contains a to facilitate trade transactions. Then the Ghana experience is



- Incorporated in Nov 2000
- Mandated by Ministry of Trade and Industry to implement and manage the GCNet system
- To develop and operate a customized electronic system for processing trade and customs documents, recording the results of this validation and processing, and its related duty and tax payment

	Before GCNet	After GCNet
Reduction in number of manual steps	12 steps	3 steps
Number of documents	12 docs	1 doc
Customs clearance time - airport	3 days	4 hours
Customs clearance time – seaport	7 days	2 – 3 days



- **TradeNet facilitated business-to-government transactions only**
- **Users still have to access some disparate, stand-alone systems to perform trade transactions**
- **Increasing threat of regional competition**



TradeXchange, Integrated IT Platform for Trade



- TradeNet[®] facilitated business-to-government transactions only
- Users still have to access some disparate, stand-alone systems to perform trade transactions
- Increasing threat of regional competition



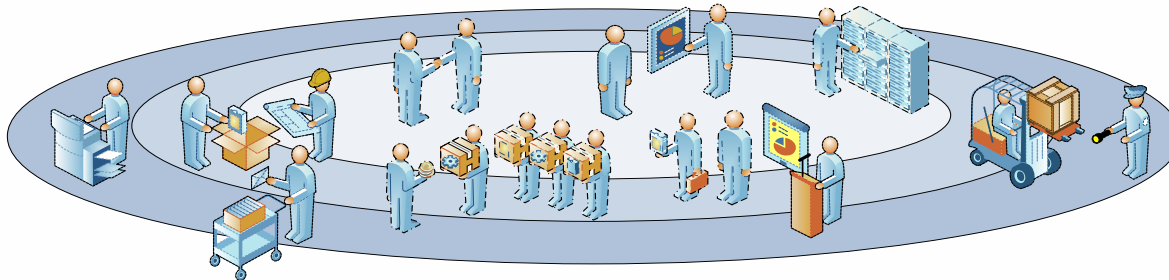
The Next Generation TradeNet - TradeXchange

The response... **Ti TRADEXCHANGE™**

- **Neutral IT platform to provide seamless interconnectivity among commercial and regulatory systems to facilitate the flow of goods within, through and out of Singapore for the trade and logistics businesses to serve the 21st century and beyond**
- **The new TradeNet® Ver 4.0 is a core application of Tradexchange™**
- **Estimated savings: about USD 48 million over 10 years**
- **Roll-out: Oct / Nov 2007**
- **Prospective no. of users: 90,000**

To Increase SMEs' Competitiveness & Capabilities

To provide a low-cost Community Platform For Trade and Logistics



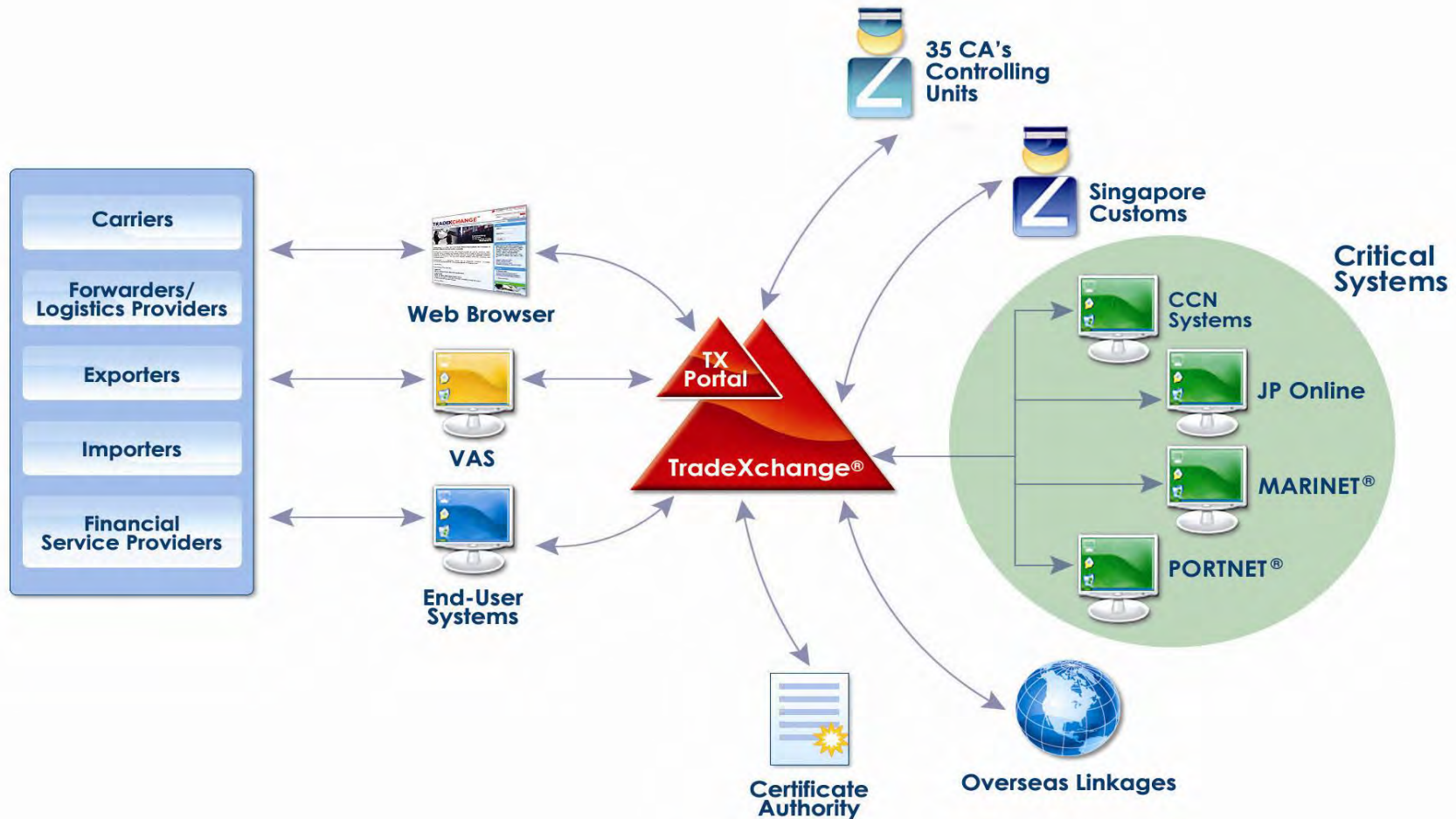
Facilitate Logistics Hubbing for MNCs

To promote a vibrant Trade Software Provider industry

Expected Outcomes

Global Integrated Logistics Hub

Spin-off Industries



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.

Title Registry

Facilitates secured registration and transfer of the Title of goods and allows secured access to the Title record as needed in the export/import trade process.

PPP (Public Private Partnership) Singapore TradeNet

- Singapore Government (Public)
- CrimsonLogic Pte Ltd(Private)

Fees

- **Government Pays:**
 - A one-time and an annual recurring fee
- **CrimsonLogic pays for:**
 - Investment of the Infrastructure
 - Operation and Maintenance of the System

- **Subscription Fee**
 - One-time registration Fee
 - Monthly Account ID Fee
 - Monthly User ID Fee
- **Transaction fee**
 - charged on a per declaration basis

- Revenue with Government is shared only on the transactional revenue
- CrimsonLogic collects the Fees from the users and then remits Government's share

- **The Government has mandated the use of TradeNet for all declaration of all cargo moving in and out of Singapore.**

- **Government**
 - Owner and Regulator of the System
- **CrimsonLogic**
 - Builds and Operates the System for 10 years

TradeNet Fees

S/N	Item Description	Price (\$\$)	UOM
1a	Messaging fees	\$0.18	Per declaration (regardless of message size) OR \$0.18 Per kb for interchange with > 1 declarations being submitted in the same interchange
1b	Processing fees	\$1.80	Per declaration (regardless of message size)
1c	Permit Statutory fees	\$0.90	Per declaration
1d	Cert Statutory fees	\$4.00	Per declaration

S/N	Item Description	Price (S\$)	UOM
1e	CRP Controlling Agency Permit Fees	\$40	Per CRP licence
1f	AEB Controlling Agency Permit Fees	\$20	Per AEB licence Maximum of 5 licences allowed per declaration

S/N	Item Description	Price (\$\$)	UOM
	Additional Fees		
2a	Permit retrieval from archive [Self Retrieval request via Web portal]	\$15	Per permit retrieval Applicable for : Certified True Copy (CTC) Permit generation Permit Listing This fee will be charged in addition to the account & user ID fees. This fee will be charged in multiple of the number of permits request to be retrieved.
2b	Permit retrieval from archive [Bulk Retrieval Job] Non-Public Sector Users	\$900	Per Man-day

S/N	Item Description	Price (\$\$)	UOM
3a	Additional Services - Non-Public Sector Users - VAS Providers	\$900	Per Man-day
4a	Additional Data Storage (Includes DR) [Real time with quick Response: SAN storage and Fibre Channel]	\$1,144	Per GB Per Annum
4b	Additional Data Storage (Includes DR) [Near time with near-online Response: SATA storage]	\$260	Per GB Per Annum



Thank you

Visit us at www.crimsonlogic.com

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mobile : +65 9788 2187

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