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Transit Management:
A Technological Perspective

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19 October 2005

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Agenda

- Transit Management Challenges
- IT – An Enabler for TIR Carnet System
- Case Study

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Transit Management Challenges

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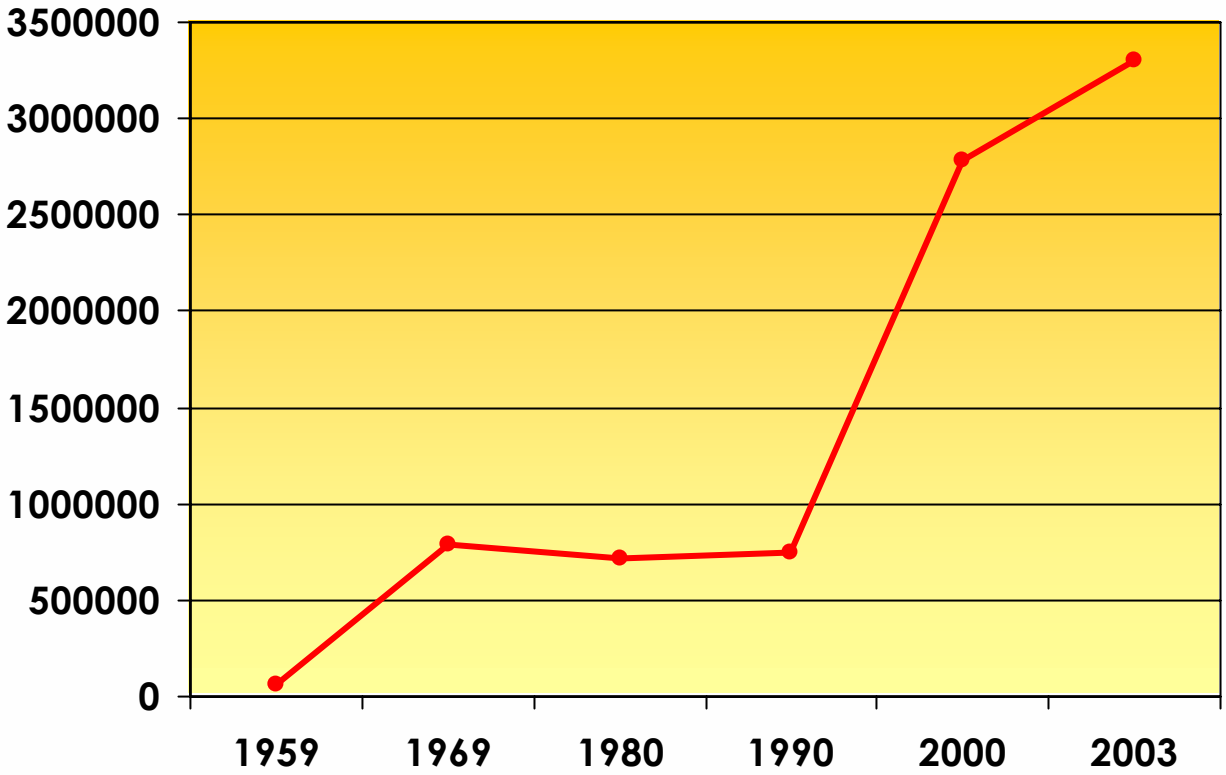
Number of TIR Carnets Issued



Source: UNECE, 2004

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TIR Concerns

Security

- Goods are carried in sealed vehicles or containers which are approved for use by Customs and re-approved every two years

International Guarantee

- Duties and taxes due in case of irregularity are secured by international guarantee throughout the journey

Transit or Customs Delay

- TIR Carnet cargo is subject to fewer delays and enjoys more expeditious delivery
- Allows consignee to respond quickly to questions or problems

Customs Control

- Control measures taken in the country of departure are accepted by countries of transit and destination

Controlled Access

- Access to the TIR system for national issuing and guaranteeing associations and transport operators are given by competent national authorities

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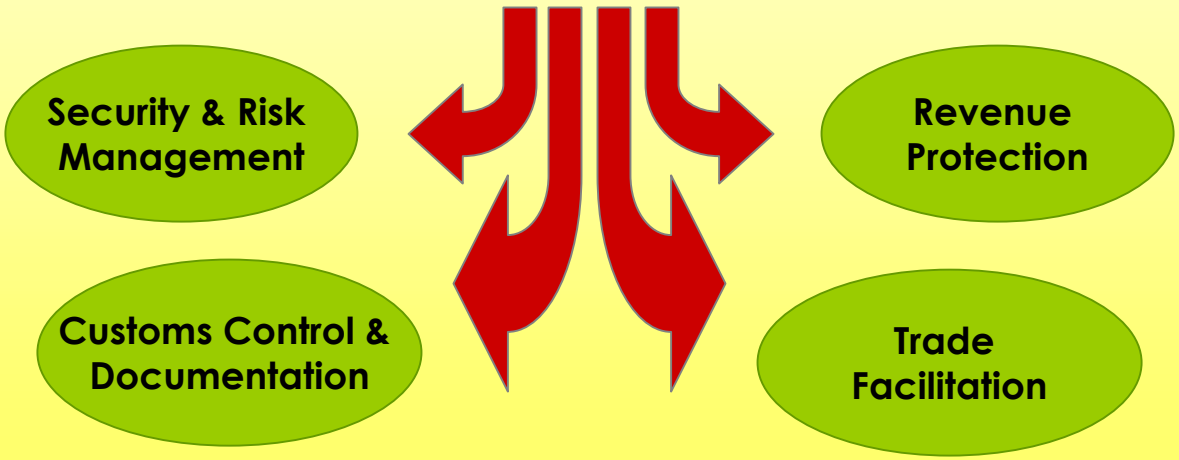
Future State

Leverage on the power of technology as a common computing platform to enable electronic TIR Carnet processes



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IT – An Enabler for Electronic TIR Carnet System

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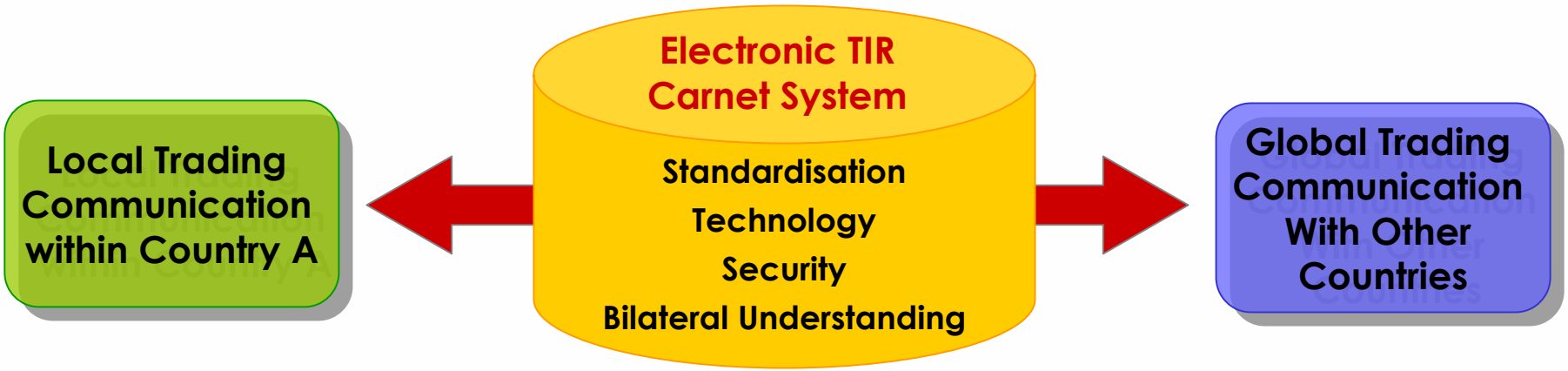
Electronic TIR Carnet System



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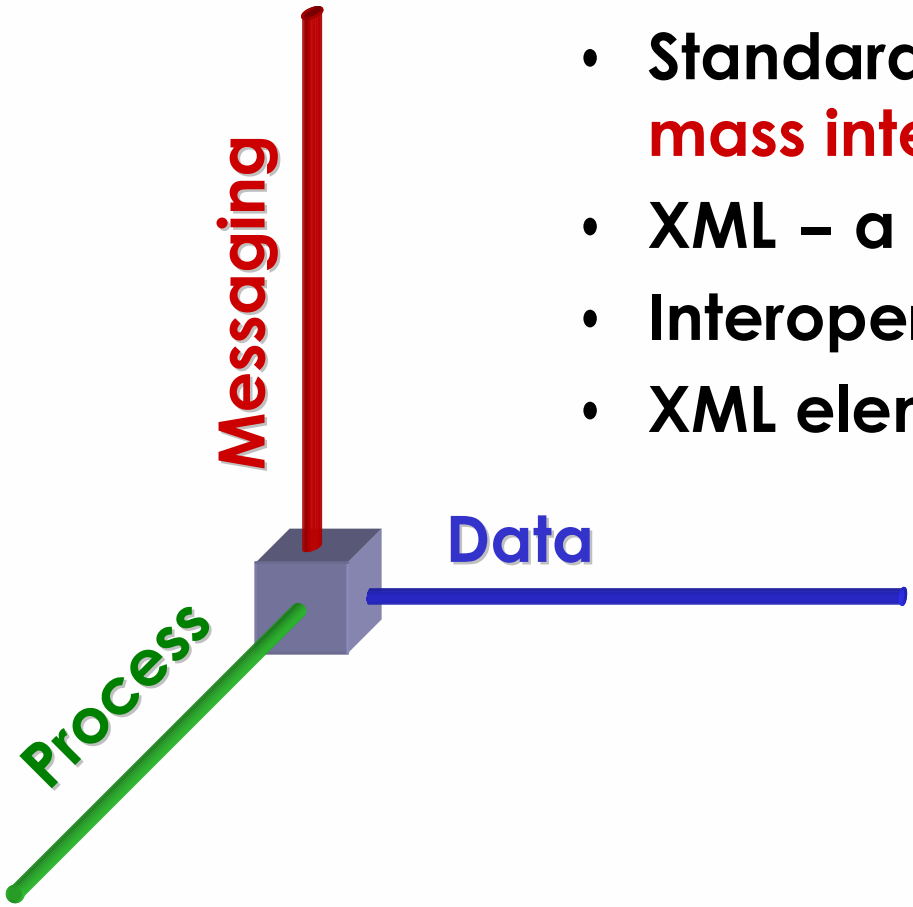
Standardisation



- Standardisation enables mass interoperability / adoption
- XML – a tool for standardisation
- Interoperability guideline
- XML element / schema

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International Trade Standards

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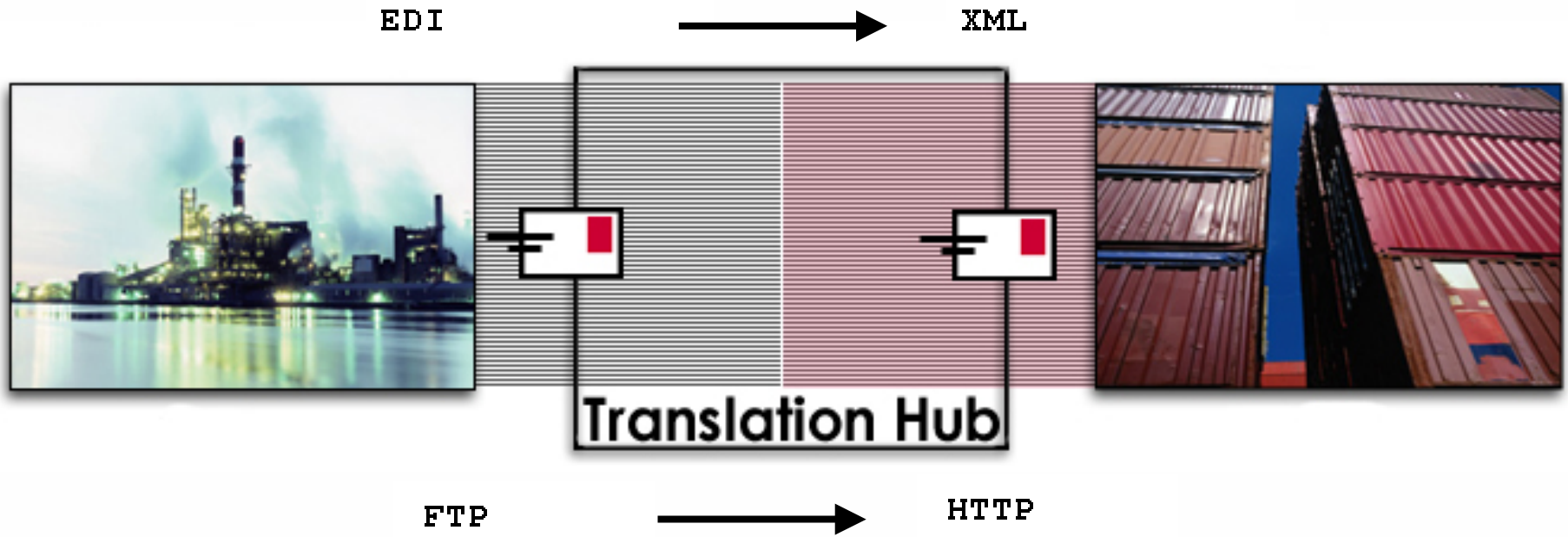
Interoperability

Converts application data from any format to any format in any protocol across industries



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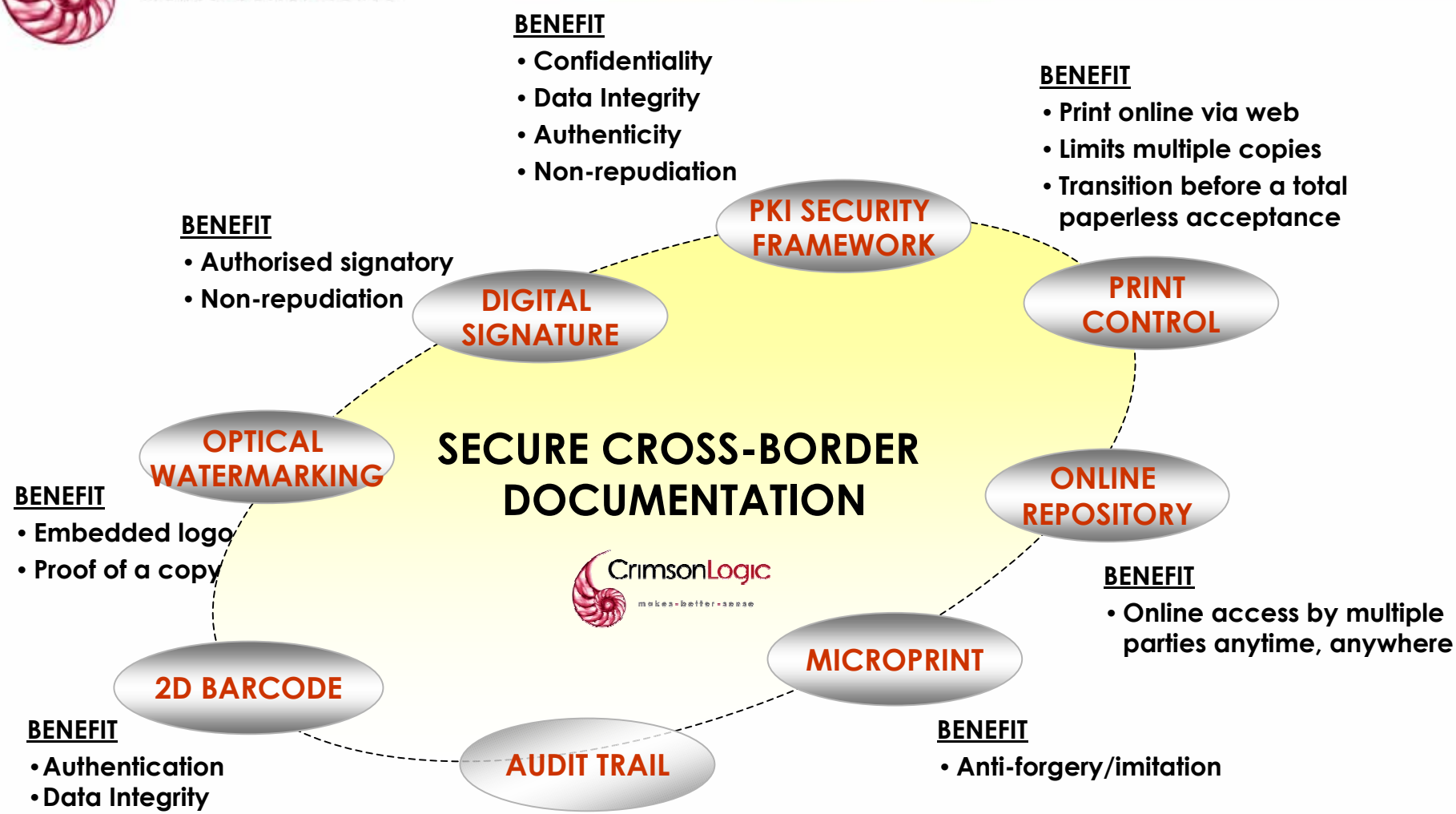
Security



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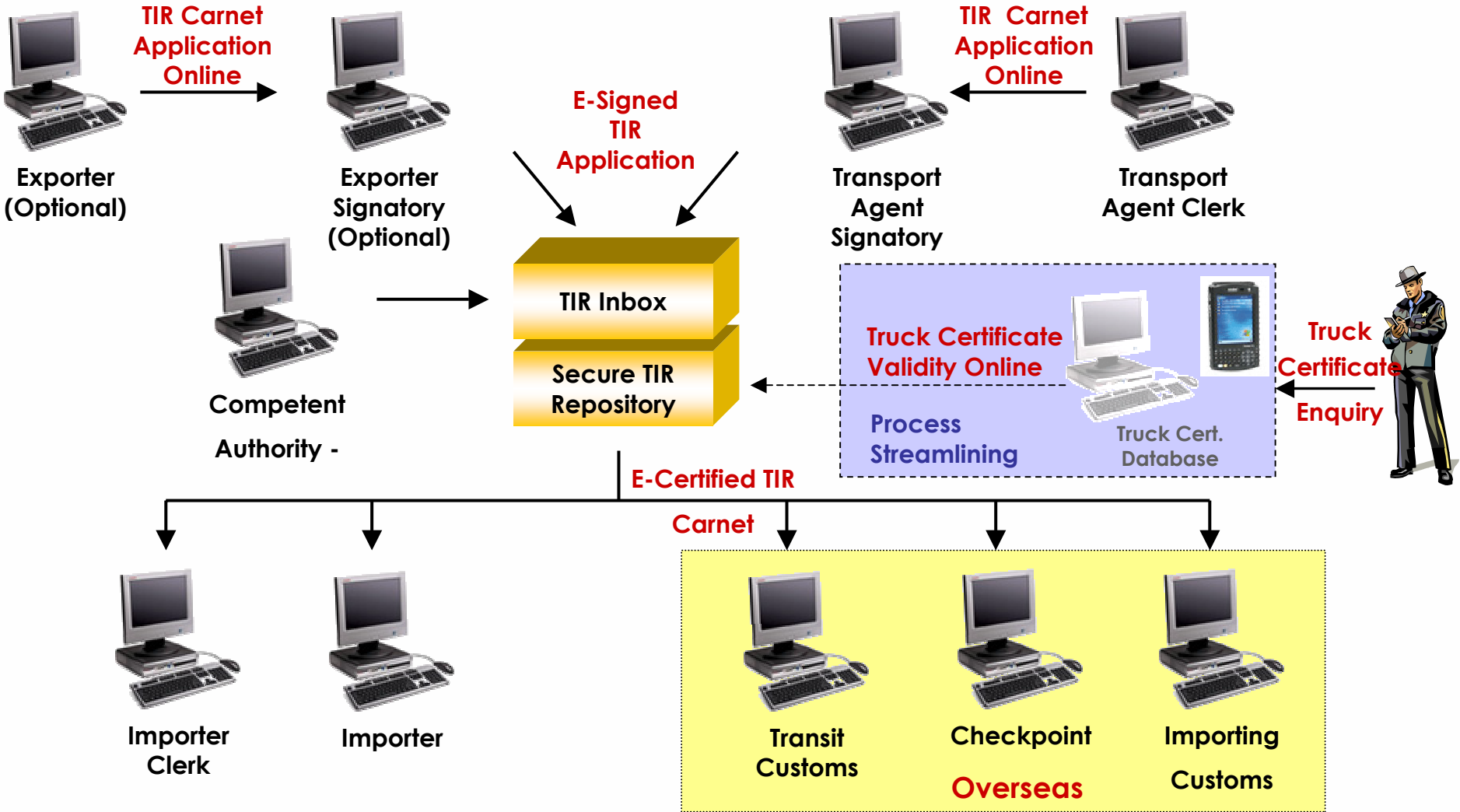
Electronic TIR Carnet Design



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TIR Carnet System Functions

- **Electronic application** of TIR Carnet
- **Online approval and certification**
- **Secure printing** of original TIR Carnet
- **Anytime, anywhere access** to TIR Carnet
- **Automatic** TIR truck certificate **validity check**
- TIR Carnet **verification at checkpoint** using PDA

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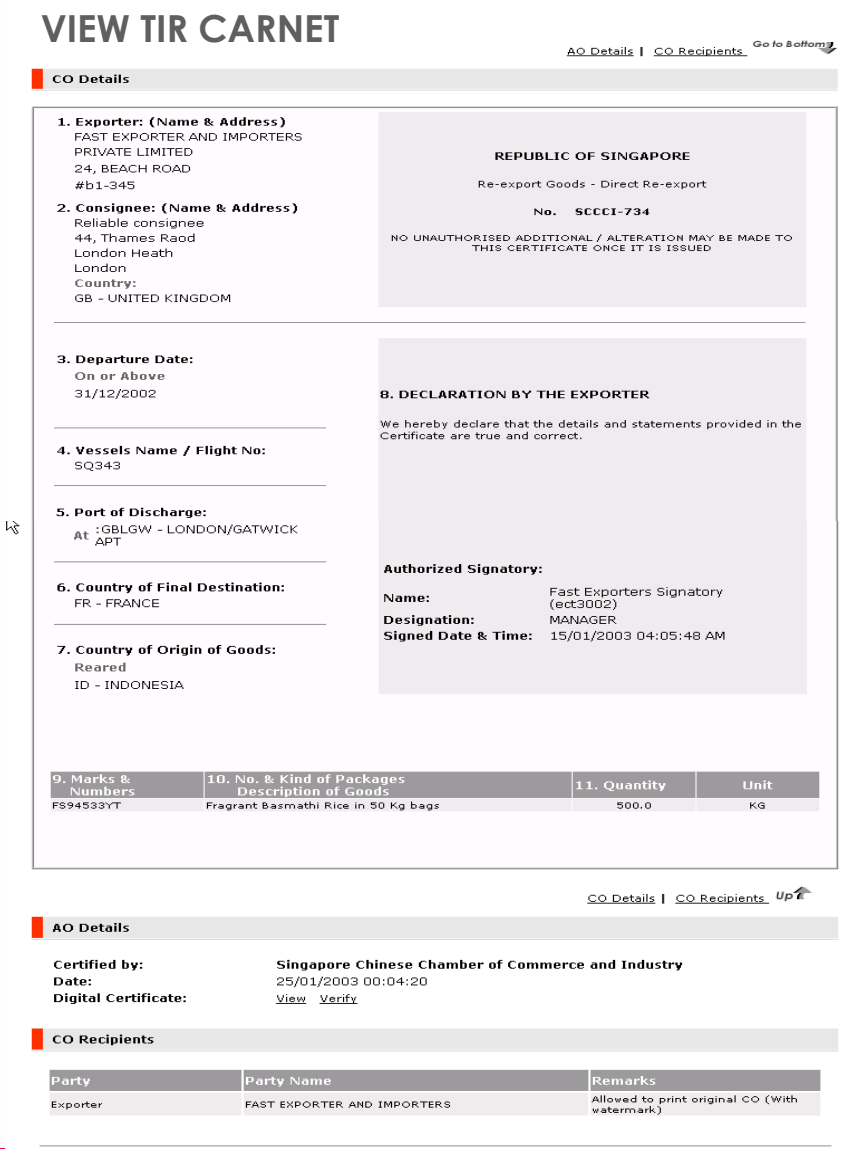
Work Flow



VIEW TIR CARNET

AO Details | CO Recipients Go to Bottom

CO Details

1. Exporter: (Name & Address)
FAST EXPORTER AND IMPORTERS
PRIVATE LIMITED
24, BEACH ROAD
#b1-345

2. Consignee: (Name & Address)
Reliable consignee
44, Thames Raod
London Heath
London
Country:
GB - UNITED KINGDOM

REPUBLIC OF SINGAPORE

Re-export Goods - Direct Re-export

No. SCCCI-734

NO UNAUTHORISED ADDITIONAL / ALTERATION MAY BE MADE TO THIS CERTIFICATE ONCE IT IS ISSUED

3. Departure Date:
On or Above
31/12/2002

4. Vessels Name / Flight No:
SQ343

5. Port of Discharge:
At :GBLGW - LONDON/GATWICK APT

6. Country of Final Destination:
FR - FRANCE

7. Country of Origin of Goods:
Reared
ID - INDONESIA

8. DECLARATION BY THE EXPORTER

We hereby declare that the details and statements provided in the Certificate are true and correct.

Authorized Signatory:

Name: Fast Exporters Signatory (ect3002)
Designation: MANAGER
Signed Date & Time: 15/01/2003 04:05:48 AM

9. Marks & Numbers	10. No. & Kind of Packages Description of Goods	11. Quantity	Unit
FS94533YT	Fragrant Basmathi Rice in 50 Kg bags	500.0	KG

CO Details | CO Recipients Up

AO Details

Certified by: Singapore Chinese Chamber of Commerce and Industry
Date: 25/01/2003 00:04:20
Digital Certificate: View Verify

CO Recipients

Party	Party Name	Remarks
Exporter	FAST EXPORTER AND IMPORTERS	Allowed to print original CO (With watermark)

- View TIR Carnet online
  - Controlled access to various stakeholders
  - Archived copies available

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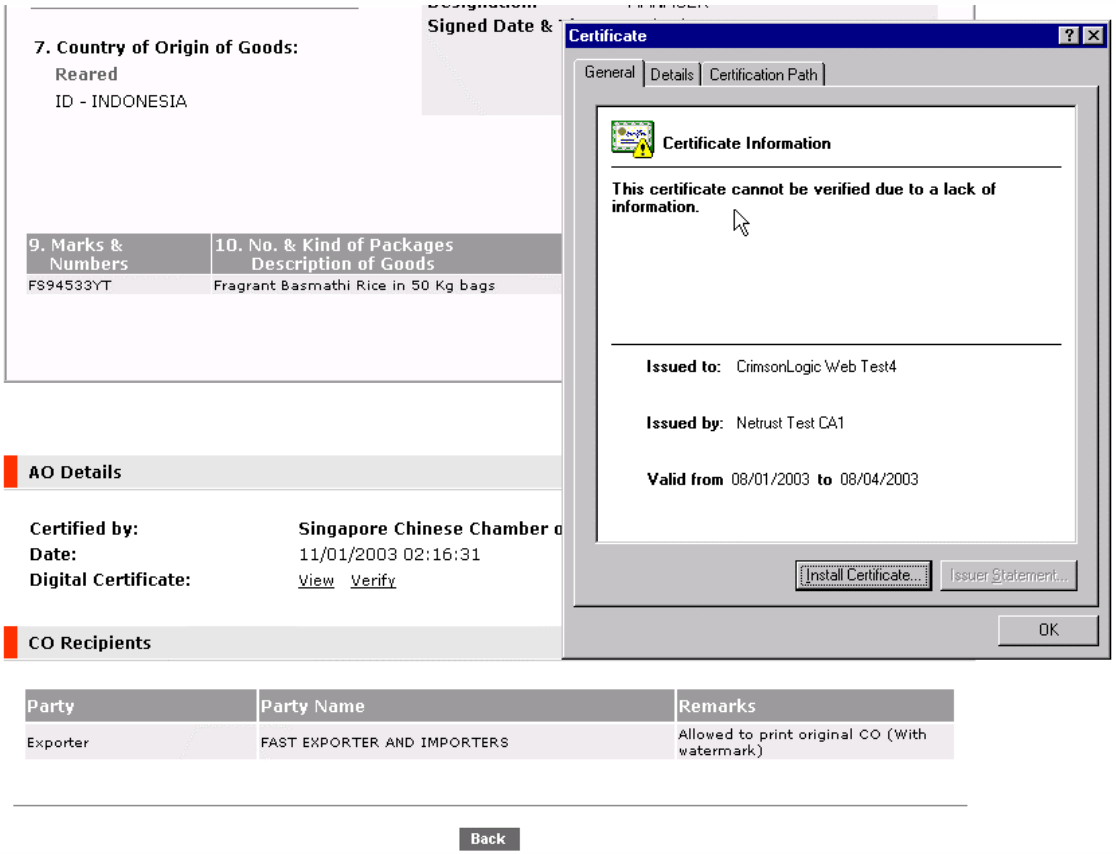
Secure



- Authenticity
  - Digital Certificates included
- Security
  - PKI used

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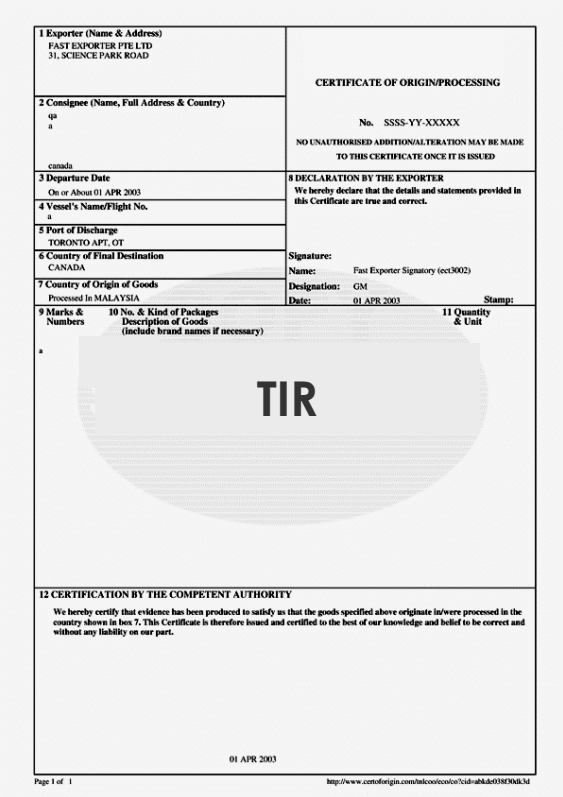
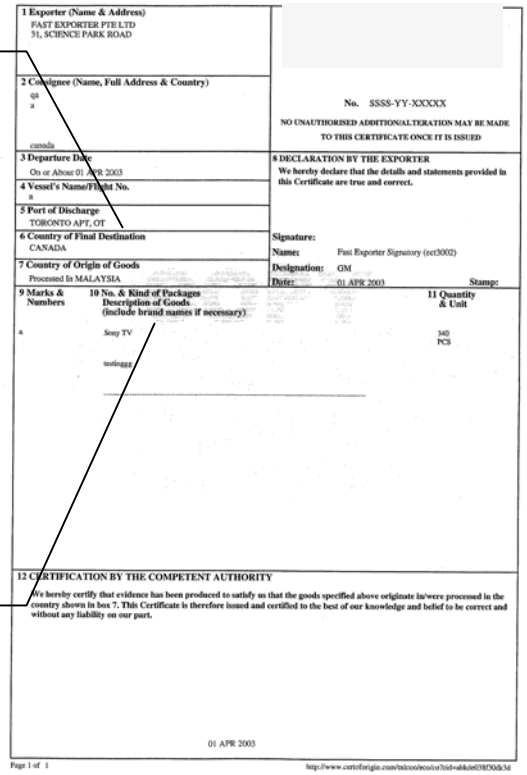
TIR Physical Document Security



Original Document

Invisible watermark "COPY" will appear after photocopied

Visible watermark will deteriorate



Photocopy of Original Document

Watermarking Technology

- Protects printed document from unauthorised copying
- Allows for a transition state before a total paperless acceptance

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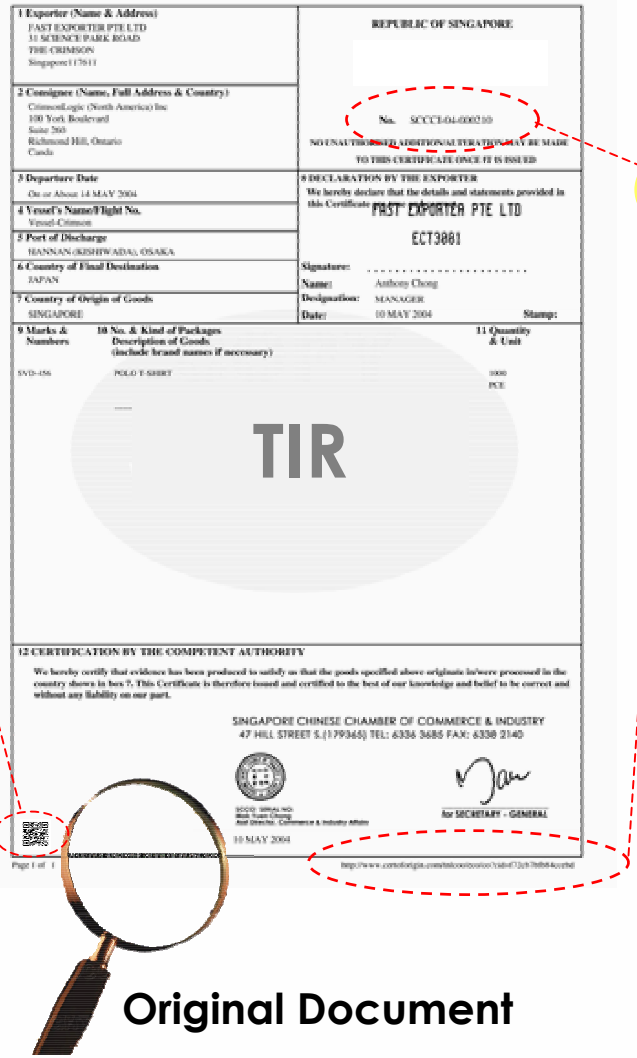
TIR Physical Document Security

2D Barcode

Microprint

RADIANTRUSTMICROCODE

SECRETSERIALNUMBER



Original Document

Online Verification

No. TIR-04-000210

cid=f72cb7bfb84ccebd

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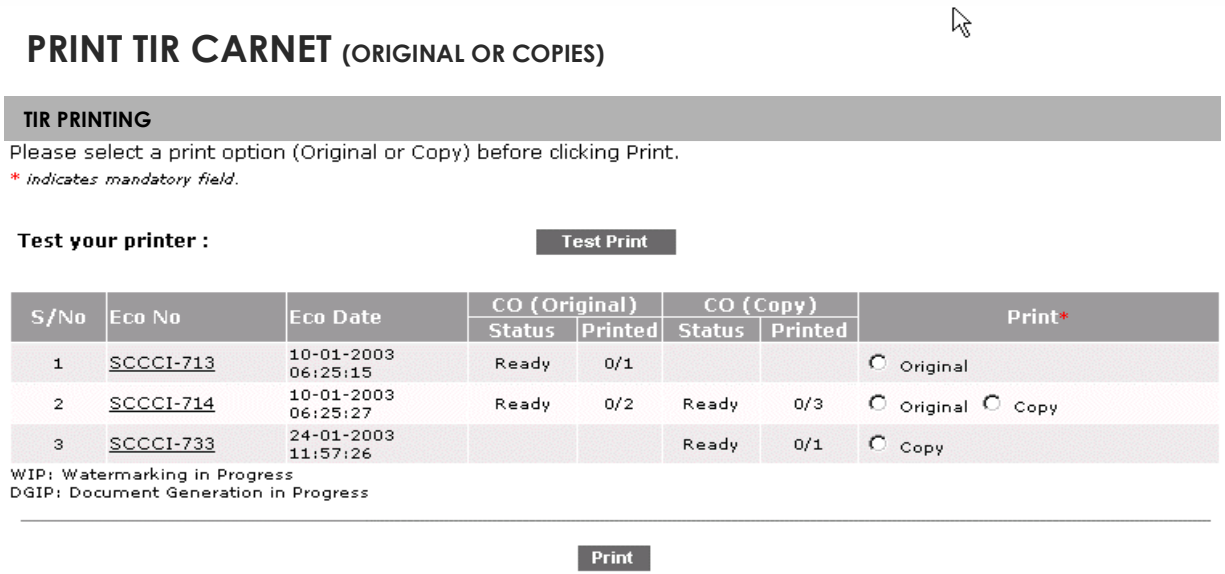
Print Control



PRINT TIR CARNET (ORIGINAL OR COPIES)

TIR PRINTING

Please select a print option (Original or Copy) before clicking Print.

* *indicates mandatory field.*

Test your printer : Test Print

S/No	Eco No	Eco Date	CO (Original)		CO (Copy)		Print*
			Status	Printed	Status	Printed	
1	SCCCI-713	10-01-2003 06:25:15	Ready	0/1			Original
2	SCCCI-714	10-01-2003 06:25:27	Ready	0/2	Ready	0/3	Original Copy
3	SCCCI-733	24-01-2003 11:57:26			Ready	0/1	Copy

WIP: Watermarking in Progress
DGIP: Document Generation in Progress

Print

- Remote Printing
  - Print control functions included to limit copies
  - Printing can be used as an intermediary prior to pure electronic acceptance
  - Watermarking included

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Case Study

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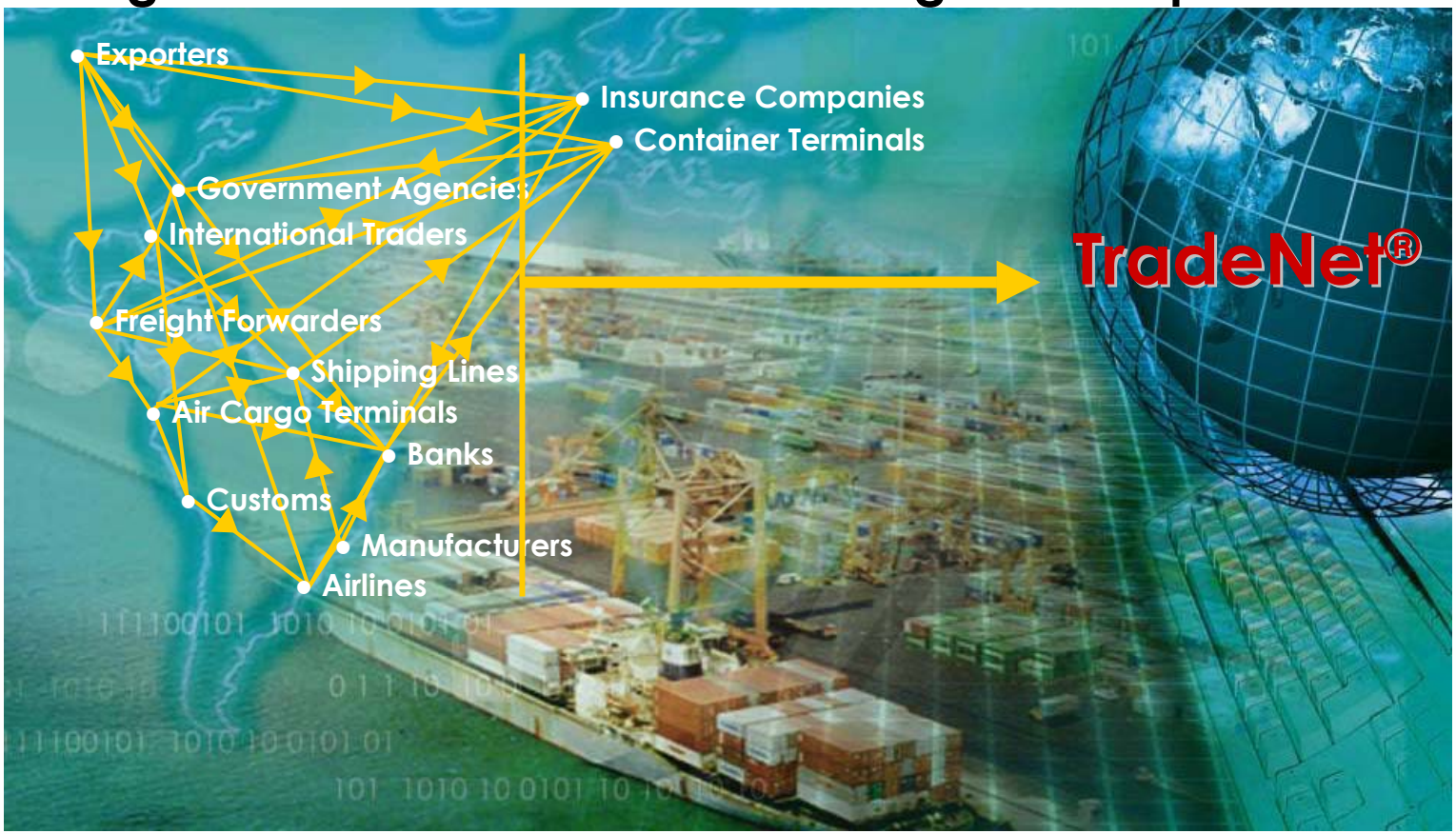
TradeNet® Singapore

(Developed and Operated by CrimsonLogic)

CrimsonLogic developed the World's first nationwide electronic trade clearance system

Integrates 35 Government controlling units' requirements



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TradePalette – Collaboration Hub for the Trade & Logistics Community

End-to-End Collaboration and Visibility

Intelligent Data Share (Multiple Data Sources)

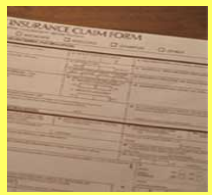
TradePalette

Procurement

Inventory Visibility

Freight

Finance


Insurance

Certificate of Origin

Permits & Licences

Payment Settlement

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Cross-Border Collaboration

Canada

CBSA/CFIA

USA

Mexico

America

Importers / Exporters / Buyers / Sellers /
Custom brokers/ Logistics Providers/Customs

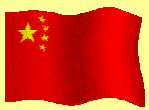
TradePalette

Asia

Europe

Australia

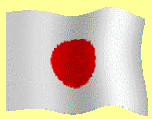
AQIS/ACS



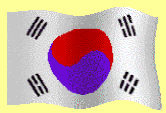
China

Chinese Taipei

Hong Kong SAR



Japan



Korea

Malaysia

Macau SAR

Philippines

Singapore

Thailand

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Singapore-Malaysia

Cross-Border Exchange

Importers / Exporters / Buyers / Sellers /
Custom brokers/ Logistics Providers

Singapore
Customs

TradePalette

eDeclare

Malaysia
Customs

Exchange of trade-related documents conducted electronically across border over a secured infrastructure

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Cross-Border Exchange

Benefits

- **Single Electronic Gateway**
  - Logistics Partners
  - Multiple Customs
- **Increased Efficiency & Accuracy**
  - Data reusability
  - Reduce data entry error
  - Reduce turnaround time
- **High Accessibility**
  - Anytime, anywhere access
- **Save costs of managing export documentation**
  - Cuts repetitive data entry
  - No need for hardware or software investment
  - Simple and easy to use application
- **Ideal even if TIR Conventions are not applied**

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Cross-Border Exchange

TradePalette

eDeclare

Fields that are shared between the 2 declarations:

- Job Number
- Transport Mode
- Local Trading Partner - Name, Address, ROC
- Overseas Trader - Name, Address
- Entry Port
- Loading Port
- Voyage No, Ocean BL, House BL, Arrival Date, Vessel ID, Vessel Name
- Vehicle No
- Packaging - Quantity, Type
- Invoice - Invoice no, Invoice date, Invoice Value, Currency
- Declaration Item - Origin, Declared, Unit, Amount, Description
- Container/Marking - -Container no, Marks & Nos

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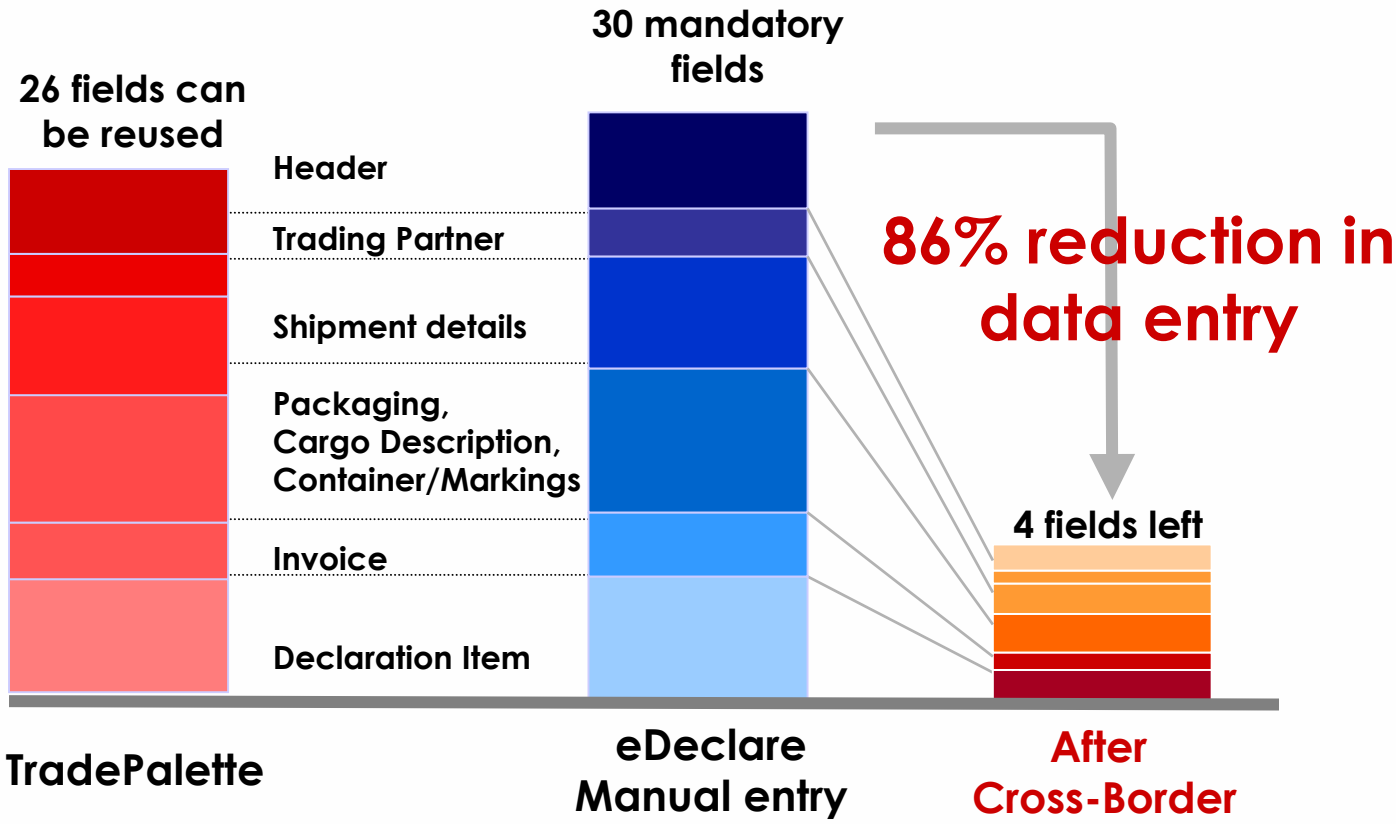
Cross-Border Exchange



- ✓ Dramatically reduces data entry
- ✓ Minimises data errors with data re-use
- ✓ Speeds up the permit processing

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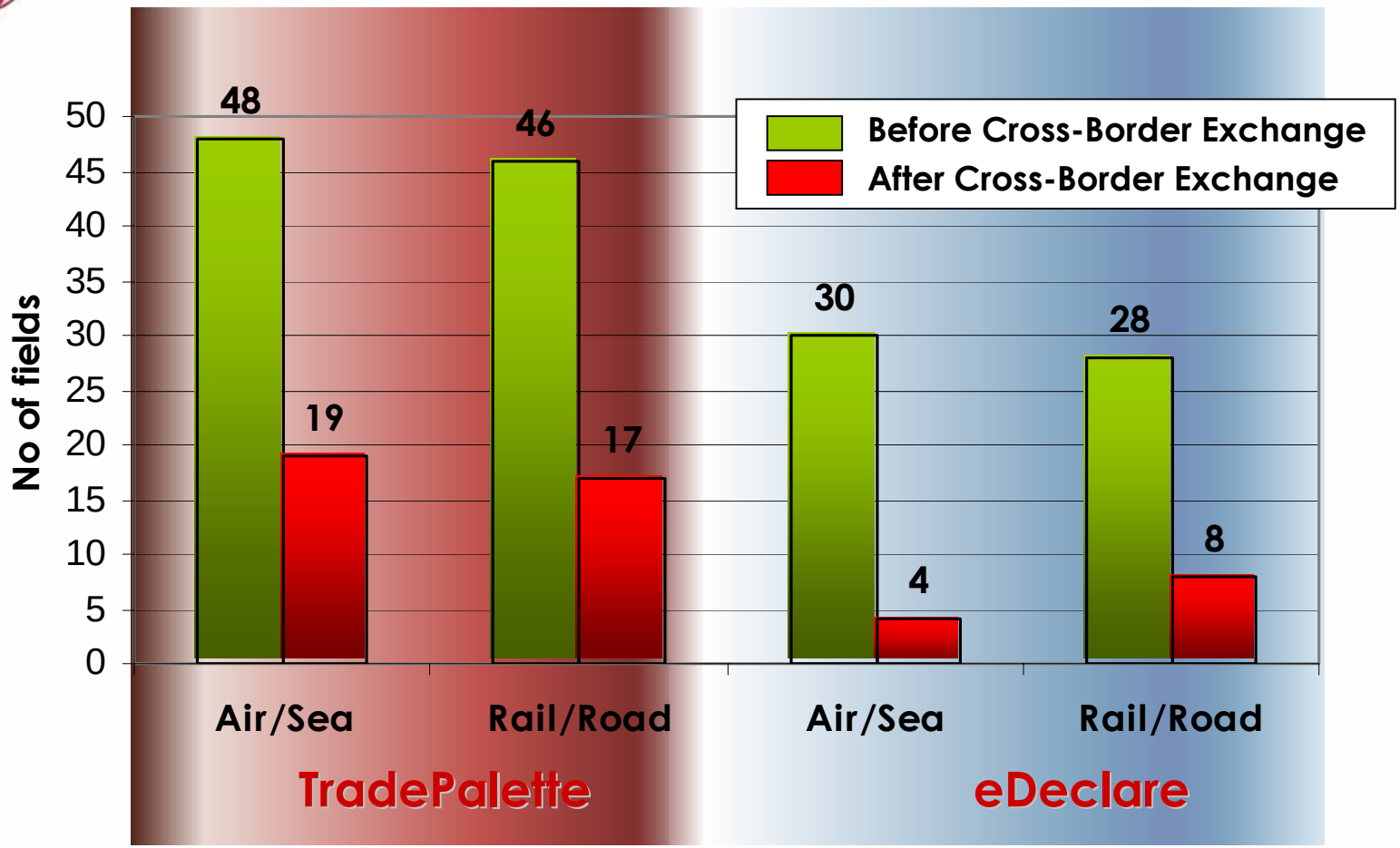
Cross-Border Exchange



Average 70% Cost Savings

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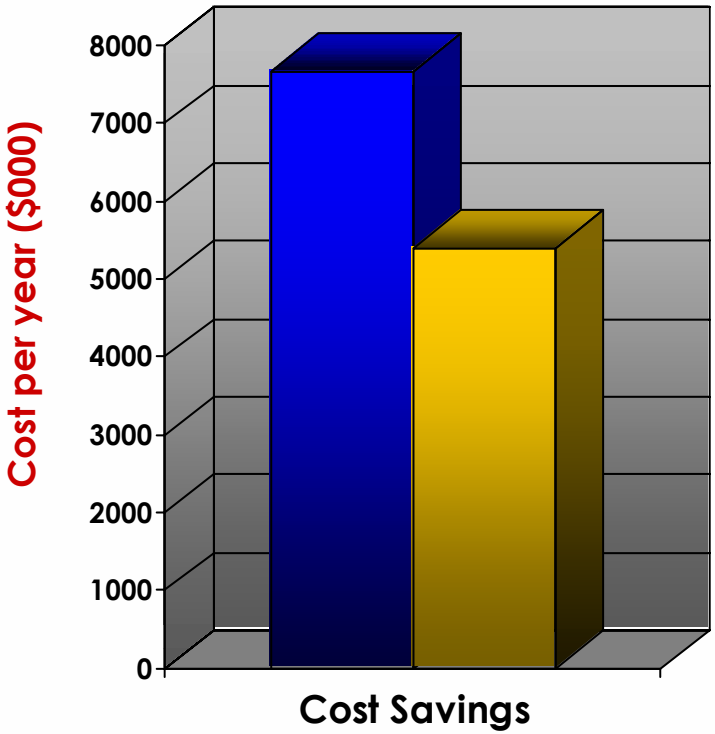
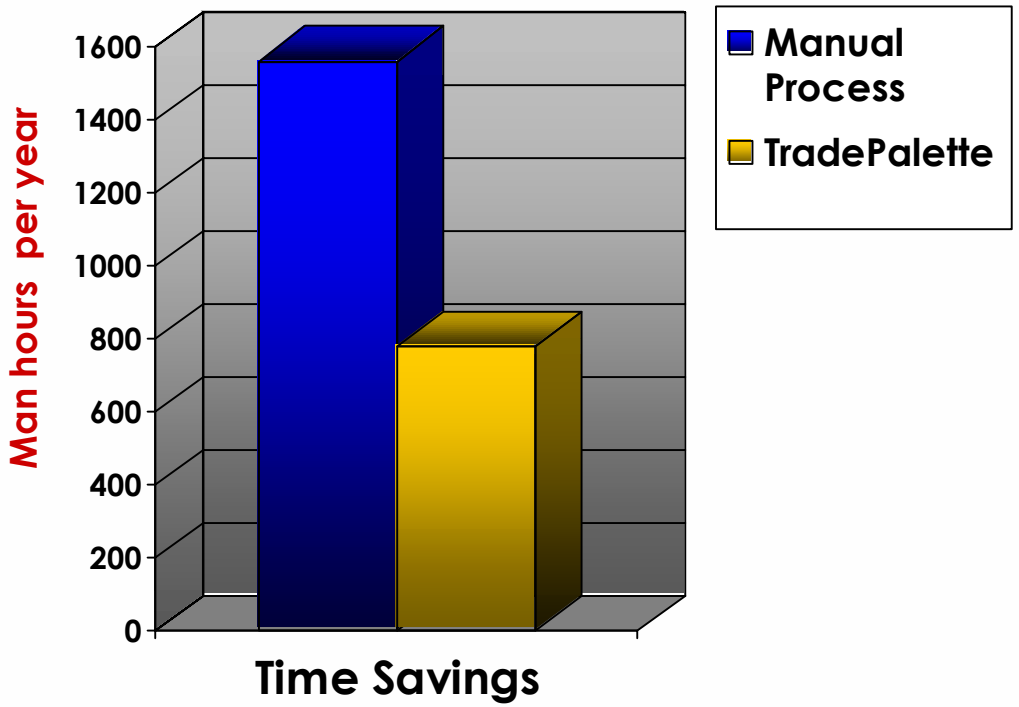
Cross-Border Exchange

TradePalette Cross-border Case Study



Procurement expense fell by 30%



Document processing time dropped by 50%

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United States-Canada Border Crossing

Automated Commercial Environment

- All cargo bound for US must electronically report to CBP **1 hour prior to reaching first port**
- **Transponder** on **truck** windscreen will trigger look-up of carriers with pre-filled manifest record
- Expedites release process

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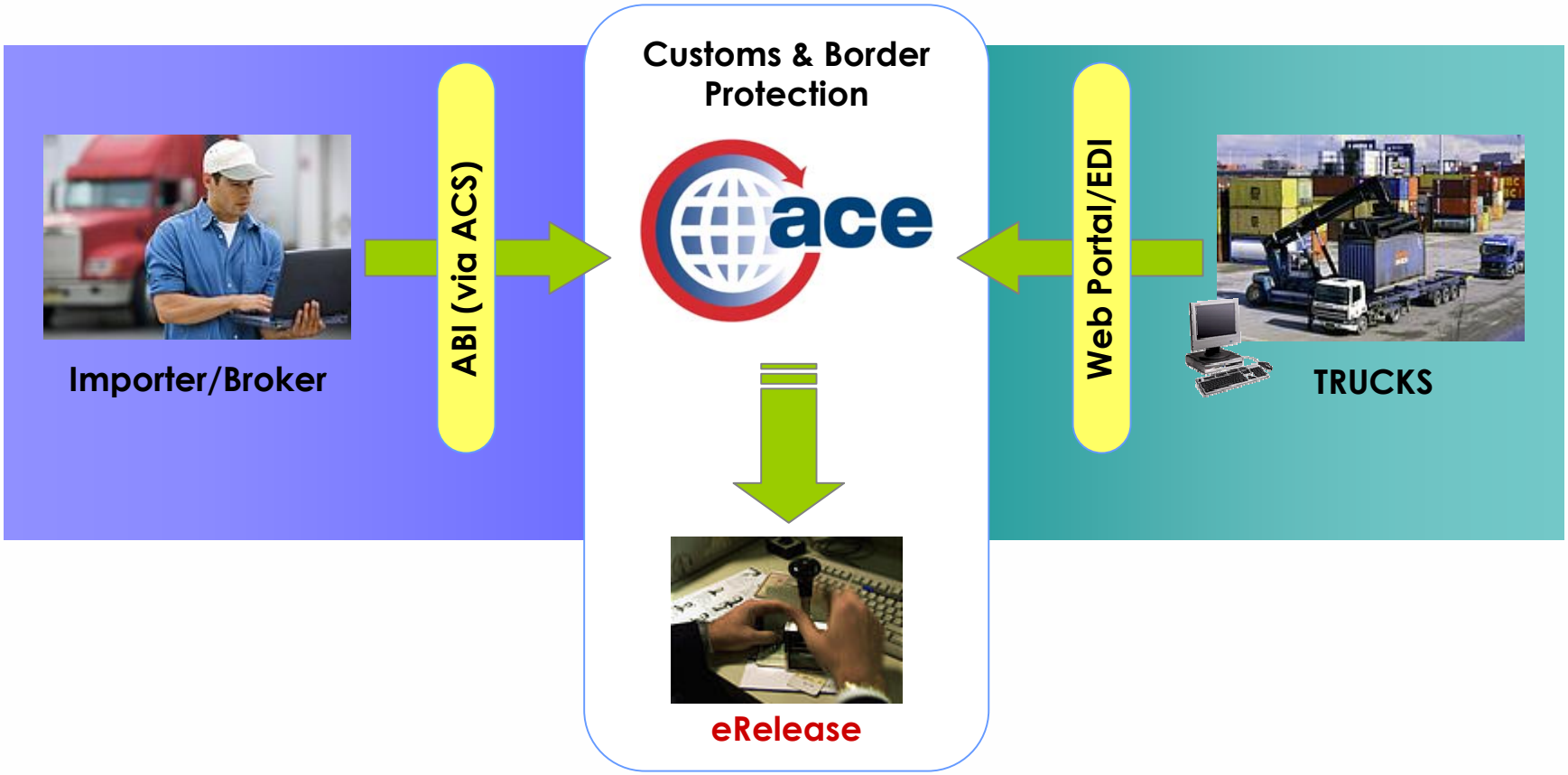
Automated Commercial Environment



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Automated Commercial Environment

Benefits

- **More Efficiency**
  - Streamlined processes and data integration
  - Email alerts for incoming messages
  - Reduce turnaround time
- **Improved Data Accuracy**
  - Minimised data re-entry
  - System validation
- **High Accessibility**
  - Anytime, anywhere access via Web Portal
  - Fax-to-EDI service
  - Update sent to driver via wireless technology (future phase)

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Similar Applications Exists

CrimsonLogic provides connectivity into US Automated Commercial Environment

CrimsonLogic leads the way in Asia for connectivity to US and Canadian Customs Systems

Singapore, 13 June 2005 - Leading IT solutions provider, CrimsonLogic, today announced that it is the leader in Asia to be accredited by the US Customs and Border Protection (CBP) to provide connectivity into the US Automated Commercial Environment (ACE). The company's Canadian office was approved last week by CBP to enable trucks to provide pre-arrival information before entering any of the 91 land border crossings.

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Thank You

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