Asia-Pacific Economic Cooperation

Assessment and Best Practices on Paperless Trading to Facilitate Cross Border Trade in the APEC Region

Section 3: Best Practices on Paperless Trading to Facilitate Cross Border Trade in the APEC Region

**APEC Electronic and Commerce Steering Group
APEC Committee on Trade and Investment**

June 2010

**Best Practices on Paperless Trading to Facilitate
Cross Border Trade in the APEC Region**

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**Best Practices Component of the Project *CTI 01/2009T*
"*Assessment and Best Practices on Paperless Trading to
Facilitate Cross Border Trade in the APEC Region*"**

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Disclaimer

Best Practices on Paperless Trading to Facilitate Cross Border Trade in the APEC Region

1. Introduction

This is the final report of the Best Practices component of the project "Assessment and Best Practices on Paperless Trading to Facilitate Cross Border Trade in APEC Region", set by APEC's Electronic Commerce Steering Group (ECSG) and Paperless Trading Sub-Group (PTS).

2. Background and Objectives

The "Assessment and Best Practices on Paperless Trading to Facilitate Cross Border Trade in APEC Region" project is set within the context of APEC's goals and action plans for trade facilitation and trade transaction costs reduction.

As demand for trade facilitation has been increasing throughout the business community due to the lowering of tariff barriers, more integrated manufacturing process involving different economies, and closer trade ties across the region, APEC has attached great importance to trade facilitation.

In the APEC Blueprint for Action on Electronic Commerce of 1998 Leaders Declaration, Ministers agreed that the role of governments is to promote and facilitate the development and uptake of electronic commerce by promoting the efficient functioning of electronic commerce internationally by aiming, wherever possible, to develop domestic frameworks which are compatible with evolving international norms and practices.

In 2002, APEC Leaders and Ministers adopted the Trade Facilitation Action Plan (TFAP), which aimed to reduce business transaction costs by 5% by 2006. Ministers also approved a Trade Facilitation Menu of Actions and Measures and instructed relevant sub-fora to develop related capacity building, technical assistance and co-operation projects. The four categories for the reform covered the movement of goods, standards, business mobility and electronic commerce.

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At the 14ᵗʰ APEC Economic Leaders' Meeting in Hanoi, VietNam, in November, 2006, the leaders welcomed and endorsed the Hanoi Action Plan to implement the Busan Roadmap towards the Bogor Goals. In this regard, Leaders highlighted that APEC had met the five-percent reduction in trade transaction costs by 2006. Leaders welcomed the framework for the next Trade Facilitation Action Plan, targeting a further reduction of trade transaction costs by five percent in the APEC region by 2010.

This project directly responds to the Blueprint by constructing best practices for paperless trading to facilitate cross-border trade, for inclusion in the APEC reference database, whose provision was endorsed by APEC Ministers in the 1998 Leaders Declaration. The project:
   o Suggests a definition of paperless trading and assesses current state of paperless trading
   o Provides Best Practice Guides for both the Public Sector and private sectors, notably for Small and Medium Business (SMB), adoption of paperless trading practices
   o Identifies factors critical to the success of cross border paperless trading and suggests Key Performance Indicators (KPI's) to assess the level of readiness to commence a paperless trading initiative and KPI's to assess the level of achievement
   o Offers recommendations for consideration by ECSG

3.   Study Method

This project was conducted as shown in the diagram below:

Best Practices on Paperless Trading to Facilitate Cross Border Trade in the APEC Region

Study Method

```
Paperless              Questionnaire              Prepare &
Trade Material         Responses                  Circulate
                       10 Economy;                Questionnaire
                       14 Private Sector

Interim Update +       Review                     Interviews with
Draft Best Practices   and Analysis               Respondents and
                                                  Practitioners

                       Review &
                       Feedback in                Further
                       Symposium                  Interviews
                                                  Respondents &
                                                  Practitioners

Solicit Feedback       Consolidate
and Consensus          Draft Final Report

                       Final Report for
                       ECSG
                       Consideration
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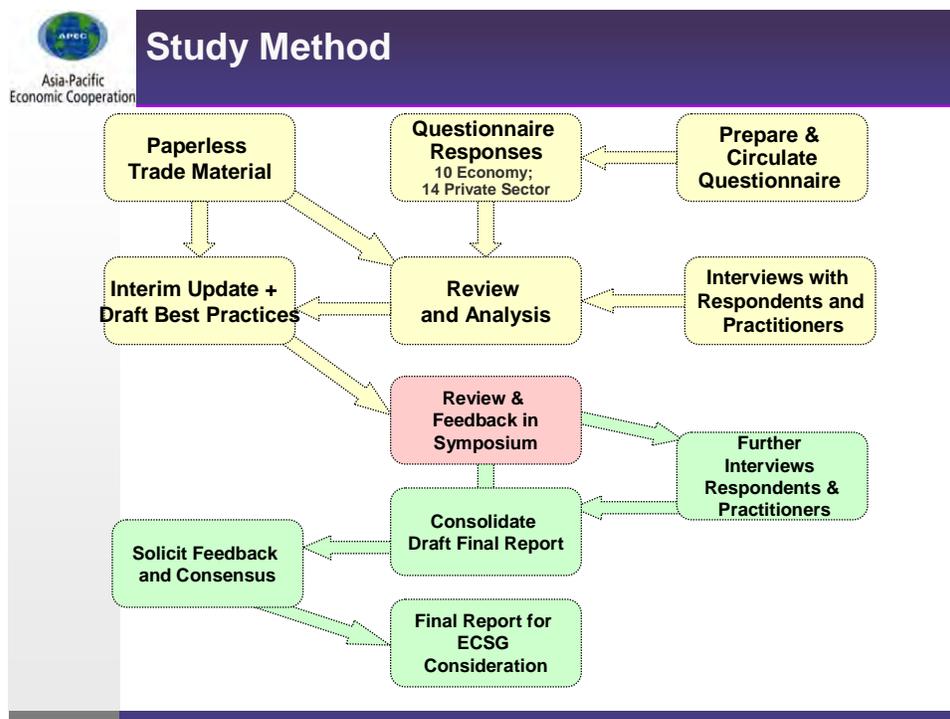
i. A Paperless Trading questionnaire was prepared and responses solicited and consolidated from APEC member economies as well as Government linked B2G service providers and commercial organizations.

ii. A brief survey was done of the very substantial material available on Paperless Trading, both within APEC and generally.

iii. Interviews were conducted, with a focus particularly on commercial organizations, as there are already a number of published case studies available related to Government organizations and Government linked B2G service providers.

iv. An Interim Report was prepared and input solicited during the joint Beijing – Taipei Symposium September 14-18, 2009.

v. This Final Report was produced, consolidating input and further analysis for submission to the ECSG for consideration.

It is to be noted that the conclusions drawn are based on the questionnaire responses, a quick review of the available material, as well as, significantly,

discussions with people having deep experience in paperless trading. The scope and related funding of the project has precluded the opportunity to conduct extensive "paperless trading" surveys, for example, of APEC commercial organizations, and the conclusions and recommendations should take this into consideration.

This project also aimed to capitalize upon the wealth of paperless trading material available, notably within the UN and APEC. In particular, the *APEC Assessment Report on Paperless Trading (2005)* provides a comprehensive review of various aspects of paperless trading in various APEC economies and its development level assessment graph has been widely quoted. *The APEC Single Window Development Report 2007 - Working Toward the Implementation of Single Window within APEC Economies*, provides very useful information on Single Window developments, a critical component of Paperless Trading. The final report "Reducing trade transactions cost in APEC economies by 5% - progress with achieving the goals of TFAP II" dated October 27, 2009 to the APEC Policy Support Unit, known hereafter as the "Report on *Reducing trade transactions cost"*, has also been referenced. However as it notes, there is "a paucity of information" that inhibits an objective measurement of trade transaction costs, and within that context, a measurement of the extent of Paperless Trading.

4. Definition of Paperless Trading

To-date there does not appear to be a universally accepted definition of "Paperless Trading". Two definitions from APEC literature are:

a) "*The activities of trade data exchange that are conducted in electronic form. It refers to the various participants in the trade chain that have used the means of information technologies to realize the standard business data transmission and processing between the participants and the application systems, in order to complete the whole process of transaction for the trading activities*".
   [Source: APEC Assessment Report on Paperless Trading (2005)]

b) "*A significant instrument in the process of international trade that integrates the business behavior of trading partners with the*

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accomplishment of government functions by way of information technology and standardized rules for the purpose of realizing the electronic data exchange (EDI) between the trade administration departments of the government, enterprises and value-adding service providers and thus stimulating trade development."

[Source: APEC Research Report on Paperless Trading Capacity Building and Intellectual Property Protection (2007)]

Indeed, the ECSG Friends of the Chair currently have an action item "Review of the definition and scope of Paperless Trading".

In the APEC context of Trade Facilitation, Trade Single Windows, and Trade Transaction Cost reduction, we will define "trading" as all the activities within the scope of the Buy-Ship-Pay model outlined by the UNCEFACT Recommendation 18.

Taking essential points from the two "paperless trading" definitions above, and *for the purposes of this Report only*, we will define **"*paperless trading*"** as **"the electronic exchange of structured information *between computer application systems,* or *between computer application systems and people*, related to the execution of activities involving separate entities or parties in the scope of the Buy-Ship-Pay model as outlined in UNCEFACT Recommendation 18"**.

This is shown pictorially in the diagram below, with the graph showing the public sector responses to their perceptions of what Paperless Trading covers.

Paperless Trading Definition

Buy → Ship → Pay

"*Paperless Trading*" is the electronic exchange of structured information *between ICT applications,* or *between ICT applications and people*, related to the execution of activities involving separate entities in the scope of the Buy-Ship-Pay model as outlined in UNCEFACT Recommendation 18.

Member Economies — bar chart: B2G, B2B, B2C, G2G, C2C, Others (scale 0–6)
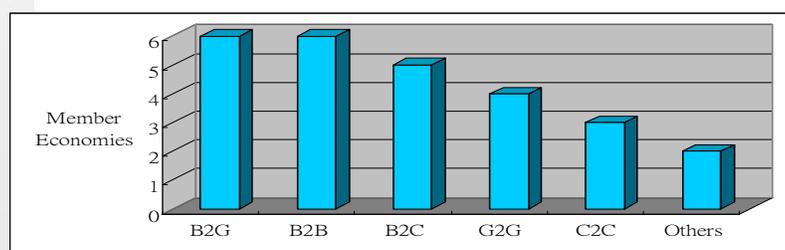
The term "structured information" is used deliberately, and, in-line with definition (a) above, is used to indicate that the information exchanged can be understood directly by a computer application without human intervention, and therefore implies, for example, that a scanned or "pdf" format of an order sent by fax or email, that then needs to re-keyed is not "paperless trading". This constraint is included in light of the objectives of paperless trading which are primarily to streamline processes, avoid double entry of information and improve efficiency, not just to go electronic for the sake of it.

The scope of the definition is also expanded beyond that implied by definition (b) above, to include the complete activities in the supply chain, not just activities that involve Government and related counterparties.

5. Objectives and Benefits of Paperless Trading

Paperless trading has a number of specific objectives and beneficial outcomes including:

a) Reduction of trade transaction processing times and associated delays such as for purchase order processing and management, border clearance, transportation and logistics arrangements, and settlement.

b) Improvement of data quality and reduction of errors, through reduced double handling

c) Reduction of workload through reduced double handling and reduced error and problem management

d) Reduction of inventory carrying costs and improvement in inventory turnaround, through faster order–to-receipt processing and improved certainty of delivery from greater visibility

e) Improved cash flow and reduced working capital needs and therefore financing costs, through faster, more predictable settlement

f) Direct reduction of service fees associated with trade transaction administration through this being conducted more efficiently.

These are clearly very similar to the Single Window objectives and benefits and highlight some of the areas where Trade Transaction Costs can be reduced.

6. Characteristics of Paperless Trading Projects

Based on analysis of various case studies and the questionnaire response, some characteristics of Paperless Trading projects are outlined below to help understand the associated complexity and challenges.

a) Paperless Trading projects always involve multiple parties. These may include the
   i. Various policy arms of government involved in trade, health, security and international relations
   ii. Multitude of Government agencies that may be involved in the implementation and enforcement of trade, health and security policy
   iii. Industry associations and chambers of commerce related to trade
   iv. Various industry sectors, including importers and exporters; manufacturers; forwarders, third party logistics providers and customs

brokers; carriers for ocean, air, rail, road and river; inspection organizations, banks and insurance

b) To achieve many of the benefits of Single Windows, it is often necessary to harmonize and simplify cross functional and cross party business processes. It is needed, therefore, not only to forge consensus amongst multiple parties but very frequently to forge consensus amongst different units or departments within each organization as well.

c) The use of "paper" documents is often enshrined in legislation, requiring detailed, complex study and long timeframes to change the affected legislation. Even if legislation is not required to be changed, either due to genuine concern on the security and legality of electronic documents, or due to an unwillingness to embrace change, such concerns are often exaggerated. Questions like "Can it be confirmed that there will never be any security or legal issues with electronic exchange of government documents?" may be difficult to address.

d) Implementation of an electronic Paperless Trading system requires the establishment of a Paperless Trading technical platform, and the application of specific, somewhat complicated Information and Communications Technology (ICT) to seamlessly integrate disparate applications – those of various government agencies and as well as the general trading community. To do this, necessitates agreement on terminology of specific data items, communication protocols to use and data structure specifications and transformations.

e) The optimal entity or organization to drive the implementation and community adoption, as well as to manage the ongoing operations, needs to be decided.

f) For cross border exchanges, with parties and business in different economies, different legal jurisdictions and speaking different languages, the above complexities will just be magnified.

g) In summary, Paperless Trading implementations may necessitate major changes in the established way of "doing things". To successfully implement a Single Window, requires effective planning, coordination, consensus building amongst diverse stakeholders, marketing and trust.

7. Questionnaire Responses

The questionnaire comprised several sections:
- General questions on Paperless Trading
- Questions related to the most important *local* Paperless Trading Case Study
- Questions related to the most important *Cross Border* Paperless Trading Case Study

The focus of the questionnaire was on specific characteristics of implemented Paperless Trading projects for local and cross border situations, from both a public sector perspective and a commercial private sector perspective.

From the Public Sector, nine economies returned completed responses and from the Private Sector, thirteen. Amongst the Private Sector were four Government linked service providers, three commercial service providers, four traders/retailers, manufacturers and two logistics companies.

Appendix E compiles the public sector case study responses, and Appendix F compiles the private sector case study responses.

Below are some highlights of the analysis of the responses.

7.1 Success Criteria for Paperless Trading (Public Sector)

In the first part of the survey, an open ended question was asked "What do you think are the success criteria for a Paperless Trading project". The public sector responses are graphed below. Note "Top Level" refers to having top level support and commitment or political will. Note that in the following "Hong Kong, China" is abbreviated to "HK":

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Responses to Q3 Success Criteria
(Open ended - Public Sector)

As part of the questions on the case studies, respondents were asked to rank in importance a list of pre-defined critical success factors. The weighted responses were:

Public Sector Weighted Responses to Critical Success Factors
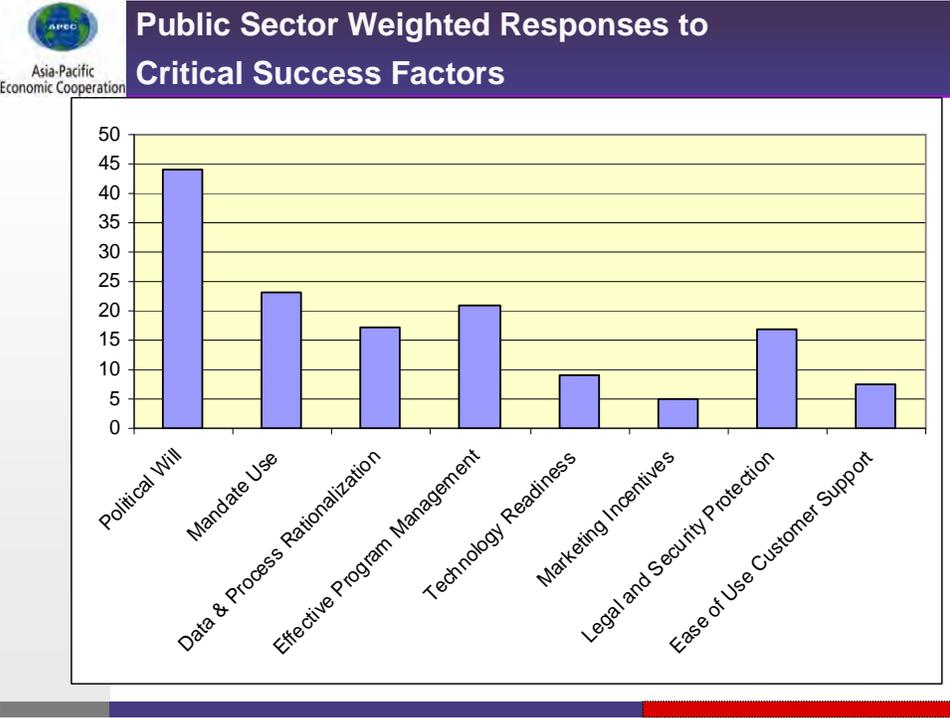
7.2   Success Criteria for Paperless Trading (Private Sector)

In the first part of the survey, an open ended question was asked "What do you think are the success criteria for a Paperless Trading project?". The private sector responses are graphed below. Note that CSP means Commercial Service Provider, GSP Government-linked service provider, MFG means manufacturer, and LSP Logistics Service Provider.
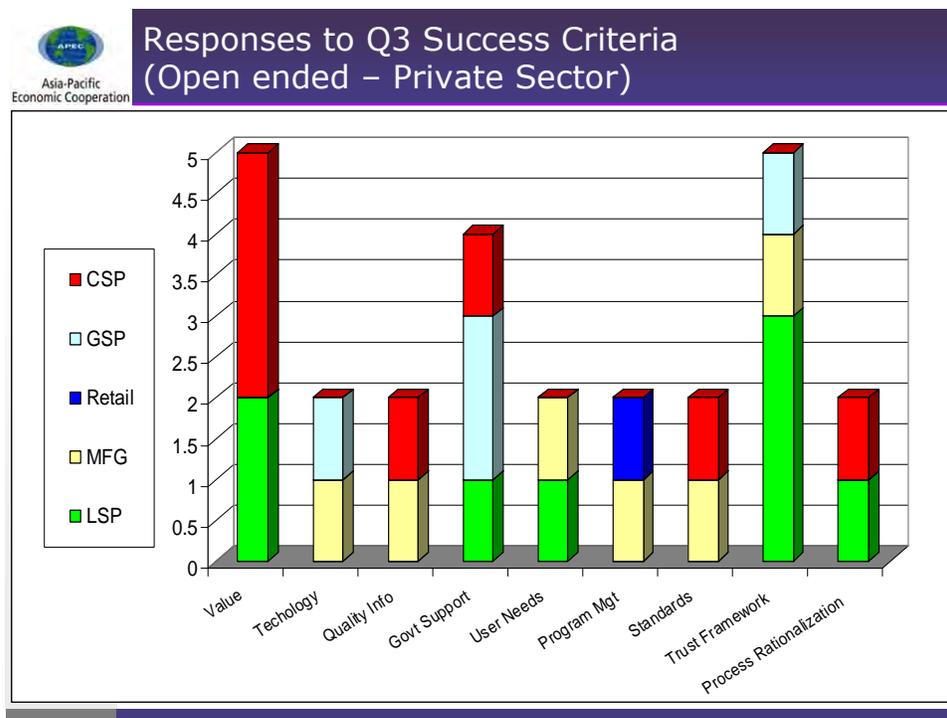
Responses to Q3 Success Criteria
(Open ended – Private Sector)

As part of the questions on the case studies, respondents were asked to rank in importance a list of pre-defined critical success factors. The weighted responses were:

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Private Sector Weighted Responses to Critical Success Factors
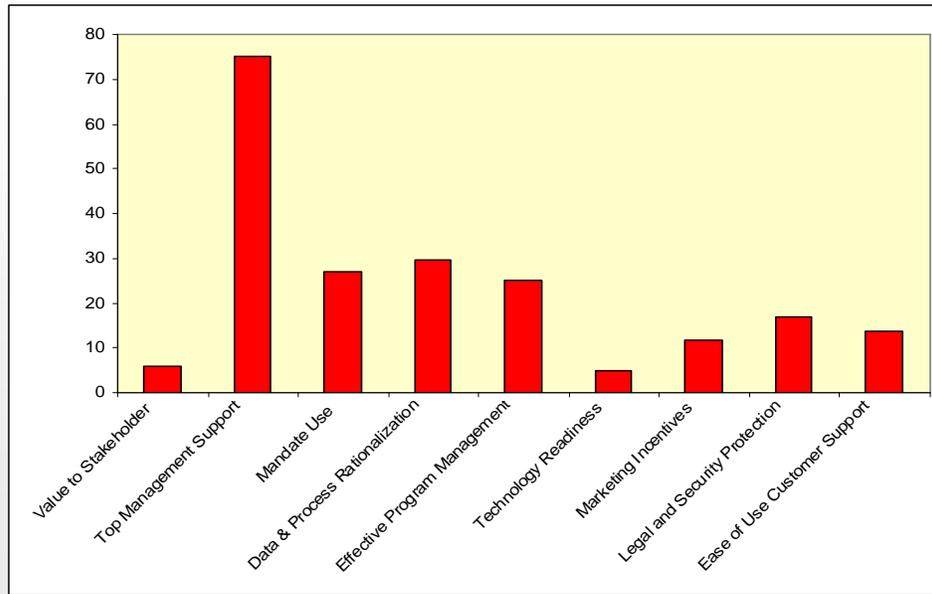
7.3 Value of Paperless Trading (Public Sector)

Public sector respondents were asked to identify the specific value of Paperless Trading for Government. Note that in the following "Hong Kong, China" is abbreviated to "HK":

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Responses to Q4 - Paperless Trading Values for Government (Open ended – Public Sector)
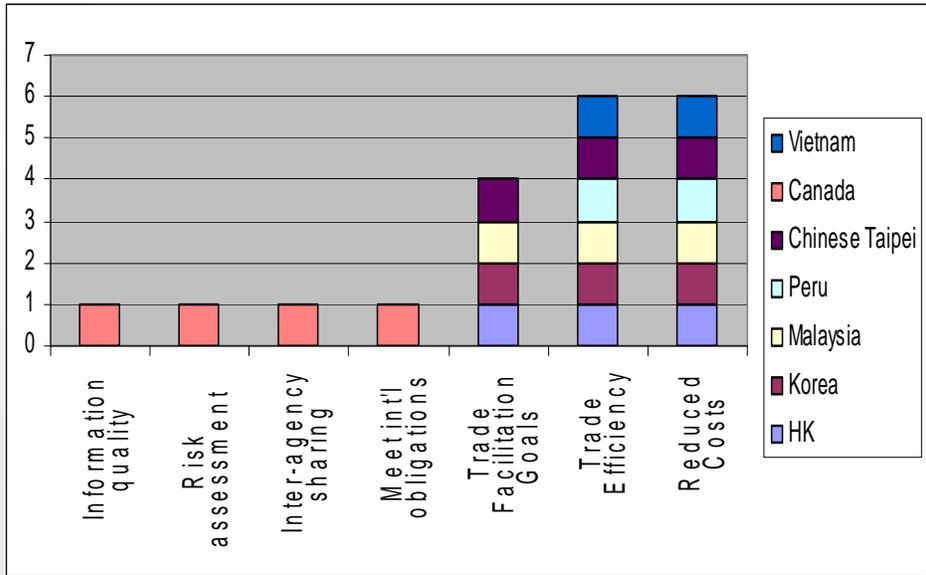
And the value for the Community from the Public sector perspective:

Responses to Q4 - Paperless Trading Value for Community (Open ended – Public Sector)
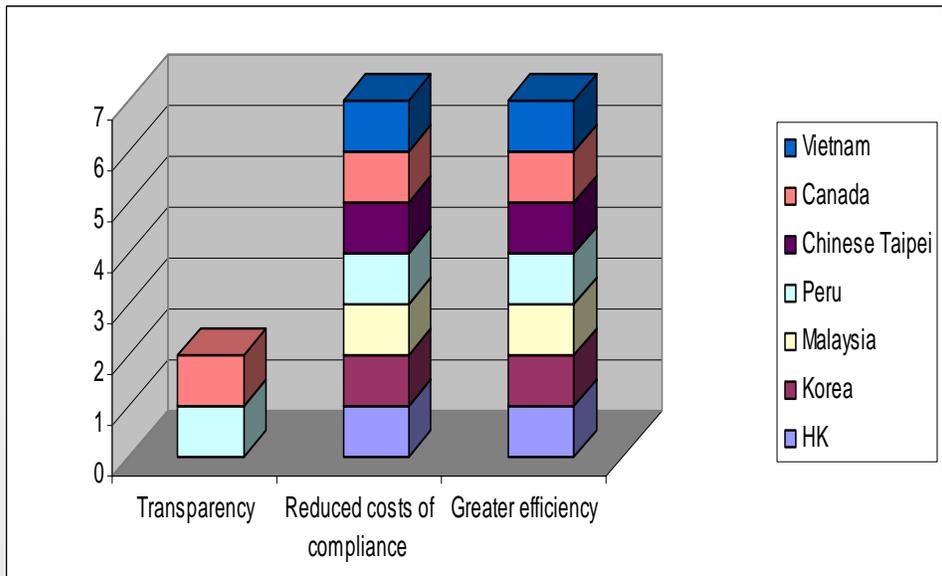
7.5   Obstacles to Paperless Trading

Based on the questionnaire responses (Question 24 and 46), the following is a summary of the perceived obstacles and the suggested ways to address them

Asia-Pacific Economic Cooperation	**Obstacles to Cross Border Paperless Exchange of Regulatory Documents – Public Sector**
Obstacle	**To Address**
Negotiations between Governments take a long time	Use Best Practice of previous projects as guideline for future projects
Forging consensus with stakeholders	Appropriate Government structure Top down mediation role (Political Will)
Process complexity	Plan for data and process rationalization
Creating an Integrated Platform	Strategic Plans Government funding
Slow Community Take-up	Marketing Awareness & Incentives Business Value Mandate Use, where practical

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Obstacles to Paperless Trade Implementation – Private Sector

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Obstacle	To Address
Unclear scope and requirements with urgent schedule	Rapid iterative development approach with proactive directly communicating team
Forging consensus with stakeholders	Top Management Support
Direct Integration with large organizations	Data standardization Top management negotiations Business Value
Diverse standards for same data for different Government authorities	Encourage use of standards eg. WCO data model
Slow Community Take-up Slow User Acceptance	Marketing & Incentives Business Value / Benefit Ease of Use; Training

8. Sector Analysis of Paperless Trading Status

In order to propose improvements to expand paperless trading amongst APEC Member economies, it would be useful to have a clear picture of the current status by sector.

The Participants in Paperless Trading in broad terms may be summarized as:

a) Buyer – who purchases the goods. Typical documents issued are purchase orders to the buyer and payment instructions to the buyer's bank to pay the seller. The Buyer or the Buyer's agent (such as the Logistics Service Provider) also applies for customs import clearance and approval / certification for the import

b) Seller – who supplies and sells the goods. Typical documents issued are Advanced Shipping Notices to the Buyer or Logistics Service Providers, advising goods are ready for shipment, Packing Lists with specific details of goods shipped, and Commercial Invoices to the Buyer specifying amount to be paid. The seller also makes the Shipment Bookings and Shipping Order with the Logistics Service Provider. The seller or the Seller's agent (such as the Logistics Service Provider) also applies for customs export clearance and approval / certification for the export

c) Inspection Organizations – to inspect goods before dispatch or upon delivery prior to acceptance, and will issue and inspection certificate, that is often a pre-condition for payment

d) Insurance Institutions – to insure the cargo from destination to origin. Insurance companies, often Government backed, may also offer export credit insurance

e) Logistics Service Providers (LSP) – including forwarders, customs brokers, 3PL's – who are often appointed by the buyer to organize the complete delivery from the seller to the buyer, and may provide other value added services such as coordinating customs clearance process, packaging, seller/supplier management, purchase order management, inventory management, consolidation and distribution etc. The LSP appointed by the Buyer may engage an agent in the Seller's economy to act on their behalf. The LSP plays a key coordination role in the

cross border trading process, and processes a significant portion of the documents.

f) Carriers (Local) – mostly trucks, and some rail and river transport, often organized by the Logistic Service Providers, to actually deliver the goods from the seller's factory(ies) or warehouse(s) to the "origin" cargo terminals / distribution centers, and from the "destination" cargo terminals to the buyer's specified location(s)

g) Carriers (Cross Border) – as distinct from Logistics Service Providers – including ocean, air, rail, river, and truck carriers to deliver the goods, cross border from the "origin" cargo terminal to the "destination" cargo terminal

h) Terminals – for air cargo, ocean cargo, rail terminals, river terminals, truck depots and distribution centers. For simplicity, warehouses are included in this classification

i) Banks (Cross Border Settlement) – for cross border settlement

j) Banks (Local Payments) – for payment of local trade services

k) Customs Departments – for clearance of goods and collection of associated duties and excise, for export from and import into an economy

l) Other Government Agencies (Approval) – for approval of export from and import into an economy

m) Other Government Agencies (Certification) – for certification of export or import, such as Certificates of Origin and Phyto-sanitary Certificates

As indicated in Section 3 above, quantitative measurements of the extent of paperless trading for the various sectors involved in the supply chain do not seem to be available, particularly for each APEC member economy.

A holistic assessment, however, of the relative paperless trading capability of the various sectors as shown in the diagram below, indicates that multinationals including buyers and sellers, multinational forwarders, air and ocean carriers and the associated terminals are relatively well advanced, as are Customs, and Banks, particularly for local payments. There is now an APEC focus on improving the integration and paperless capability of other government agencies and there are various paperless initiatives for cross border settlement.

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For example, note below the percentages of Customs Declarations reported electronically.

Customs declarations electronically reported
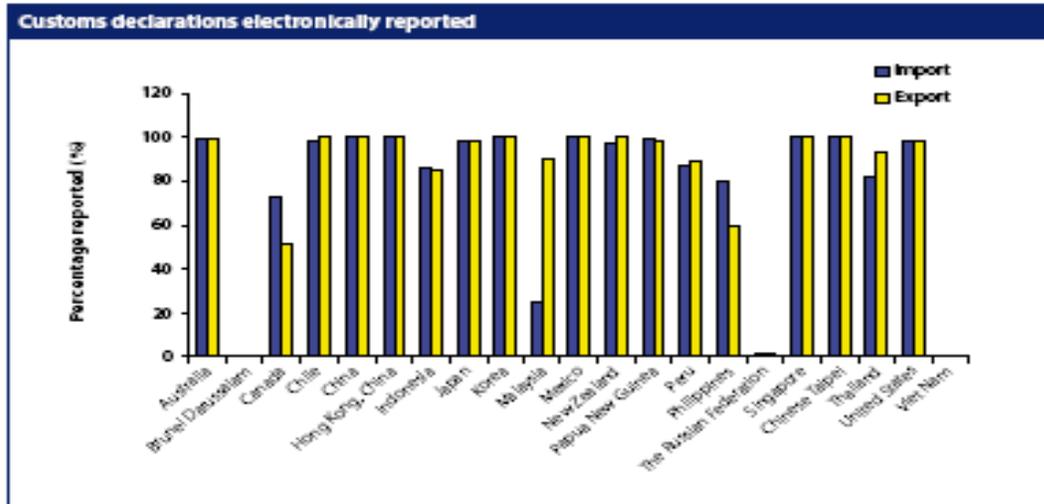
Percentage of Customs imports and exports declarations electronically reported by Economies.

Source: The APEC Single Window Development Report 2007 - Working Towards the Implementation of Single Window within APEC Economies

However, the holistic assessment indicates, in general, SME forwarders, who play a hub role in the international supply chain, and SME buyers and sellers, may need a priority focus in raising their cross border paperless trading capability.

Best Practices on Paperless Trading to Facilitate Cross Border Trade in the APEC Region

Holistic Assessment of Current Paperless Trading Capability

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Legend
Advanced
Progressing
Needs work
Priority
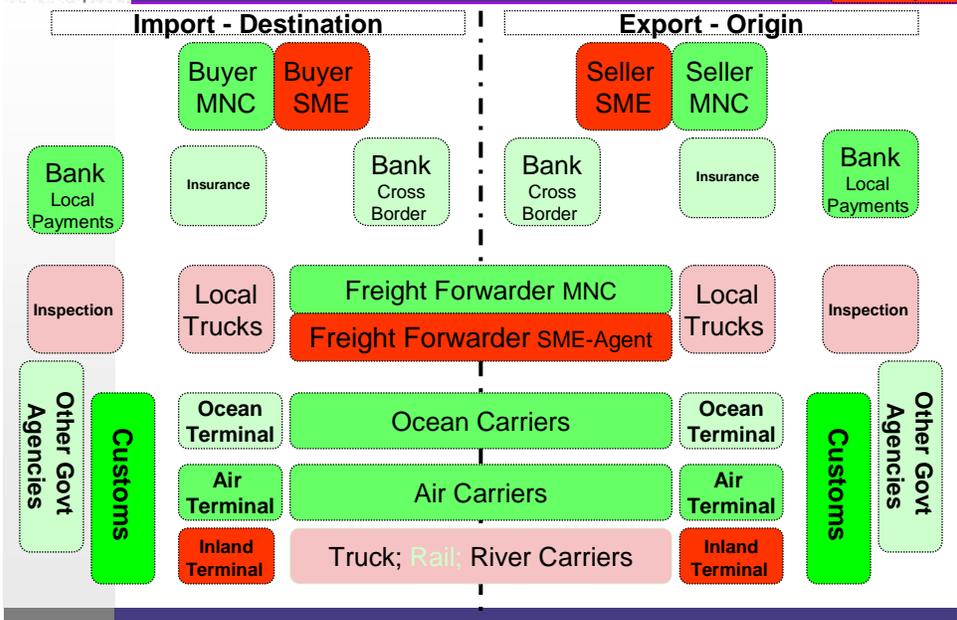
Import - Destination

Buyer MNC	Buyer SME

Bank Local Payments	Insurance	Bank Cross Border

Inspection	Local Trucks	Freight Forwarder MNC
		Freight Forwarder SME-Agent

Other Govt Agencies	Customs	Ocean Terminal	Ocean Carriers
		Air Terminal	Air Carriers
		Inland Terminal	Truck; Rail; River Carriers

Export - Origin

Seller SME	Seller MNC

Bank Cross Border	Insurance	Bank Local Payments

Local Trucks	Inspection

Ocean Terminal	Customs	Other Govt Agencies
Air Terminal		
Inland Terminal		

9.   Best Practice Guidelines

Key outputs from the project are two Best Practice guidelines and a Paperless Trading Readiness Assessment Template as outlined below:

Best Practices for the Paperless Exchange of Cross Border Regulatory Documents included as Appendix A.

Many APEC Member economies have implemented, or are implementing, an electronic Single Window or similar, and there are a number of best practice guidelines and analyses available to assist Economies, including UNCEFACT Recommendation 33

More than ten APEC Member Economies, capitalizing upon the infrastructure of their electronic Single windows or similar, are pursuing initiatives related to the paperless cross border exchange of regulatory documents, which are in line with the APEC goal of further reductions in trade transaction costs. However, there does not appear to be APEC guidelines that focus specifically on paperless exchange of cross border regulatory documents.

This best practice guideline is designed to assist Government and trade in the planning and implementation of projects related to the Paperless Exchange of Cross Border Regulatory Documents. It includes an overview of the main issues to be addressed, together with practical steps to be taken, critical success factors and key performance indicators (KPI), and notably headline points to consider if Economy – Economy agreements are required for the paperless exchange of regulatory documents. It has been prepared by analyzing the best practices of similar projects that have already been implemented, notably the cross border exchange of electronic Certificates of Origin (e-CO), so that Economies planning similar initiatives can replicate the successful models which are appropriate to their situation, adopt a best practice approach, and lower the risk of costly mistakes.

Paperless Trading Best Practices (Private Sector) included as Appendix B

**Best Practices on Paperless Trading to Facilitate
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As indicated above, multinationals, have been conducting paperless trade for many years, often utilizing UNCEFACT's EDI standards and associated recommendations. However, a holistic assessment indicates SME forwarders, who play a hub role in the international supply chain, and SME buyers and sellers, may need a priority focus in raising their cross border paperless trading capability.

Accordingly, this best practice guideline is designed to assist the trade in the planning and implementation of commercial Paperless Trading projects. It includes an overview of the main issues to be addressed, together with practical steps to be taken, and critical success factors. It has been prepared by analyzing the best practices of similar projects that have already been implemented by both large and small private sector organizations, so that companies can learn from the successful models, adopt a best practice approach applicable to their situation, and lower the risk of costly mistakes.

Paperless Trading Readiness Assessment Template included as Appendix C

To assist the public and private sectors to objectively consider their readiness to embark on a paperless trading initiative, an Excel *Paperless Trading Assessment* template has been prepared together with a guide on its use. It includes key factors to consider, with the facility to assign a weighting to each factor applicable to the initiative under consideration, together with an assessment of the readiness level (from 0 to 7) for that factor. It is by nature somewhat subjective, but encourages a disciplined approach to analyze the various factors, and where needed put in place measures to address deficiencies.

Over time it may also be used to establish reference benchmarks for various categories of paperless trading projects.

10. Recommendations

Recommendations from the project are outlined below.

Recommendation 1:

Best Practices on Paperless Trading to Facilitate Cross Border Trade in the APEC Region

APEC adopt the Appendix A 'Best Practices for the Paperless Exchange of Cross Border Regulatory Documents' as a framework for reference by APEC Member Economy Public Sectors (B2G and G2G)

Recommendation 2:

APEC adopt the Appendix B 'Paperless Trading Best Practices (Private Sector)' as a framework for reference by APEC Member Economy Private Sector for Paperless Trading (cross border B2B and B2G)

Recommendation 3:

APEC make reference to the Appendix C Paperless Trading Readiness Assessment Template to assist APEC Member Economy Public and Private Sectors to assess Paperless Trading initiatives

Recommendation 4:

Suggest APEC member economies to consider the KPIs in Appendix D as an alternative or addition to those specified in the "Report on *Reducing trade transactions cost"*

Recommendation 5:

Request APEC to establish a framework for the consistent research of the cost contribution of each process and sector to the Trade Transaction Cost plus the estimated cost reduction that may be achieved through paperless trading

In order to have a quantitative basis for assigning priorities, it would be very helpful to have a framework to estimate the cost contribution of each process and sector to the Trade Transaction Cost together with the cost reduction that may be achieved through paperless trading in each process and sector.

Recommendation 6:

Request APEC to Conduct a Survey on Paperless Trading readiness of, and adoption by SME dominated sectors in APEC member economies

Following on from the holistic assessment of the Paperless Trading capability of the various sectors involved in the international supply chain, and the framework for the analysis of the cost contribution of the supply chain processes and sectors to trade transaction costs, as suggested in

**Best Practices on Paperless Trading to Facilitate
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Recommendation 5, it would be very useful to have an objective assessment of the capability of SMEs to conduct paperless trading amongst APEC economies, to confirm the priority that should be accorded.

The survey would be targeted for each sector in those APEC member economies interested in supporting the survey, and comprise simple check boxes covering the extent of paperless adoption for sector-specific processes and documents, and areas that should be addressed to improve their readiness.

Recommendation 7:
Request APEC undertake a Paperless Trading Capacity Building program (training, awareness raising, technical assistance) for SMEs in member economies

If Recommendation 6 indicates SMEs should be accorded priority, this Recommendation suggests a Capacity Building program organized, through the appropriate business associations representing sellers/buyers and associations representing forwarders in those APEC member economies who are supportive of the program. The program may utilize, amongst other tools, the Guideline in Recommendation 2 and the Readiness Assessment Template in Recommendation 3, and may follow a train-the-trainer approach.

Recommendation 8:
To promote interoperability amongst APEC Certification Authorities, it is suggested APEC initiate discussions with existing and upcoming working models on mutual recognition framework with a view to establishing a reference model by APEC.

A key factor in cross border paperless trading is the trust between the parties in different economies to accept the validity and authenticity of the cross border electronic documents being exchanged. The PAA Legal and Mutual Recognition Framework is a working example which is intended to provide trust in the cross border exchange of electronic documents. Reference to this framework may help promote interoperability amongst Certification Authorities in APEC member economies, and thus help promote trust in the cross border exchange of electronic documents.

**Best Practices on Paperless Trading to Facilitate
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Appendix A: Best Practices for Paperless Exchange of Cross Border Regulatory Documents

Appendix: B Best Practices for Paperless Trading (Private Sector)

Appendix C Paperless Trading Assessment Template Guide

Appendix D Paperless Trading Economy-Level KPIs

Appendix E Public Sector Questionnaires

Appendix F Private Sector Questionnaires

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Appendix A

Best Practices for the
Paperless Exchange of Cross Border Regulatory Documents

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Appendix A: Best Practices for the Paperless Exchange of Cross Border Regulatory Documents

1.   Introduction

Many APEC Member economies have implemented, or are implementing, an electronic Single Window or similar. Capitalizing upon this, there are a number of initiatives amongst APEC Member economies related to the paperless cross border exchange of regulatory documents, which are in line with the APEC goal of further reductions in trade transaction costs.

This document is designed to assist the public sector and the trading community in the planning and implementation of projects related to the Paperless Exchange of Cross Border Regulatory Documents (hereafter referred to in this document, for simplicity, as "Regulatory Cross Border Paperless" projects). It includes an overview of the main issues to be addressed, together with practical steps to be taken, critical success factors and key performance indicators (KPI). It has been prepared by analyzing the best practices of similar projects that have already been implemented, notably the cross border exchange of electronic Certificates of Origin (e-CO), so that Economies planning similar initiatives can replicate the successful models, adopt a best practice approach, and lower the risk of costly mistakes.

2.   Characteristics of Regulatory Cross Border Paperless Exchange

Some characteristics of Regulatory Cross Border Paperless projects are outlined below to help understand the associated complexity and challenges.

2.1   Scope of the Paperless Exchange of Cross Border Regulatory Documents

With Single Window or similar system implementations, clearance of goods is facilitated not only by the submission of paperless customs declarations, but increasingly also by the submission of paperless *local* license and permit applications, the approval of which is integrated with the Customs processes.

The motivation of the Regulatory Cross Border Paperless projects to date has primarily been to expand this concept of facilitating customs clearance by integrating paperless certificates from the *exporting economy,* with the *importing economy* clearance processes.

Example documents are:
o **Certificate of Origin (CO)** – to certify where the goods are "mostly" made, primarily for the purposes of duty calculation and sometimes for determining what health regulations may apply and for cargo control, safety purposes. Chambers of Commerce are often authorized to issue CO's.

Appendix A: Best Practices for the Paperless Exchange of Cross Border Regulatory Documents

- o **Common Effective Preferential Tariff (CEPT) Form D** – used within the Asean Free Trade Area (AFTA) for preferential tariffs, and are usually issued by Governments agencies directly. .
- o **Phytosanitary Certificate** – is an official document issued by the plant protection organization of the exporting economy to the plant protection organization of the importing economy. It certifies that the plants or plant products covered by the certificate have been inspected according to appropriate procedures and are considered to be free from pests and that they are considered to conform with the current phytosanitary regulations of the importing economy. With the current concerns over health and food safety and the viral spread of disease, there is great interest in facilitating the movement of safe agricultural commodities.
- o **Customs Invoice -** Extended form of commercial invoice required by customs in which the exporter states the description, quantity and selling price, freight, insurance, and packing costs, terms of delivery and payment, weight and/or volume of the goods for the purpose of determining customs import value at the port of destination.

On the Exporting side, parties involved may include:
- o Agencies authorized to represent the Economy in negotiations on cross border paperless trade
- o The departments or ministries that authorize the certificate issuing agency (where applicable)
- o Certificate/document issuing agencies – e.g. Chambers of Commerce, plant protection authority; agriculture department, or inspection department
- o Customs (possibly)
- o Forwarders (possibly)
- o Exporters
- o Where applicable, B2G Service Providers, authorized to operate B2G electronic services by the Authorities.

On the Importing side, parties involved may include:
- o Agencies authorized to represent the Economy in negotiations on cross border paperless trade
- o Plant protection authorities, agriculture department, or inspection department
- o Customs
- o Forwarders (possibly)
- o Importers
- o Where applicable, B2G Service Providers, authorized to operate B2G electronic services by the Authorities

With the diverse parties involved, forging consensus may be a difficult task.

In the e-CO exchange project between Chinese Taipei and Korea, the time from when the project was first conceptualized to implementation was three years, mostly related to the negotiation between the two Authorities. Clearance time for commodities covered by the CO have been reduced from 2 days to 10 minutes and submission time to importing customs for the CO reduced from between 2 – 4 weeks to also just 10 minutes. On each

transaction the exporter saves US$40, US$20 for the stamp from the Chinese Taipei Mission in Korea, and US$20 for the courier.

2.2 Economy-Economy agreements

Bilateral, or in some cases, multilateral understandings or agreements are likely to be required between the responsible authorities of the economies involved in the paperless exchange. In the e-CO exchange between Chinese Taipei and Korea for example, a Memorandum of Understanding (MoU) has been signed. The pilot of the CEPT Form D exchange between Malaysia and Indonesia is being conducted within the context of the multilateral Association of South East Asian Nations (ASEAN) Single Window initiative.

Given the ground breaking nature of the initiatives, the experience to-date has been that the negotiation between the authorities has been very lengthy.

In order to facilitate the negotiation process, Attachment A includes headline points that may be considered for inclusion in any such agreement.

2.3 Legal Recognition of Cross Border Paperless Exchange of Regulatory Documents

Several aspects related to legal protection for the Paperless Exchange of Cross Border Regulatory documents, that may be given consideration, are highlighted below.

i. Legislation in participating economies giving electronic documents and digital/electronic signatures, the same legal status as their paper counterparts. An issue for some Authorities has been that legislation, some of it complicated, explicitly states or implicitly assumes that trade documents submitted to the Authority would be on paper. In the past ten years there has been significant progress in addressing this, but as shown in some of the projects studied, there may still be legislative issues to accept paperless regulatory documents from outside the jurisdiction.

ii. An identity authentication and authorization scheme, *accepted by the participants*, such that the originator / signer of an electronic document can be conclusively identified by the recipient, and non-repudiation of origin assured.

iii. A mutual recognition scheme where electronic documents signed in one jurisdiction are recognized as legally binding in another jurisdiction. Associated with this, a mutual recognition or cross certification scheme, where digital certificates, for example those issued according to Public Key Infrastructure standards, issued in one jurisdiction or by a specified Certification Authority are accepted as valid in another jurisdiction. The Pan Asian E-Commerce Alliance (www.paa.net) has such a scheme.

iv. A dispute resolution process with a common issue being to determine in which jurisdiction and under whose laws disputes associated with the electronic nature of the transaction should be resolved. Note that disputes over the cross border transaction itself have been resolved successfully (or not!) for hundreds of years.

v.   Liability and associated limits to be set in case of errors or negligence in the electronic aspect of the information exchanged. Note again that all parties conducting business (suppliers, trade service providers, customers, and even governments), accept a level of liability, although naturally those in a position to do so, disclaim as much liability as legally permissible.

In the case of the Korea – Chinese Taipei e-CO exchange project, these points were addressed largely through the Pan Asian e-Commerce Alliance's legal and mutual certificate recognition framework, and the electronic transaction laws of the respective economies. UNCITRAL[1] also has model laws for the recognition of electronic signatures relevant to paperless cross border trading.

3.   Steps to Implement Regulatory Cross Border Paperless Projects

Implementing a Regulatory Cross Border Paperless project is a significant undertaking, involving many stakeholders and requiring commitment from many players in both government and business. It is essential, therefore, that a systematic approach be adopted from the outset. Some of the key steps involved are discussed briefly below. However, the implementation approach will likely be heavily influenced by the political, social and cultural conditions and traditions in the economies involved. *UNCEFACT's Recommendation 33 Supplementary Guidelines (Section 5 Annex B),* may also be referenced and the principles adapted to the Regulatory Cross Border Paperless project.

Developing the Initial Concept for the Regulatory Cross Border Paperless project:
The idea of a Regulatory Cross Border Paperless project will often be triggered by informal discussions between two or more economies who are keen to further their trade facilitation goals and reduce trade transaction costs. Concrete work on the project may start with the preparation of a joint concept or briefing paper based on preliminary research, most probably jointly prepared by the lead governmental authorities or agencies, or private organizations likely to be heavily involved in the eventual implementation of the project.

Making the Initial Decision to Examine the Feasibility of a Regulatory Cross Border Paperless project: In the framework of an open partnership between government and trade *between the economies involved*, a meeting would typically be organized for high-level representatives from all relevant trade related organizations, and governmental authorities and agencies *from the economies involved* to discuss the Regulatory Cross Border Paperless project concept (or concept paper). The object of such a meeting is to get agreement on the project concept and to launch a feasibility study that would include a detailed needs analysis and technological assessment. Prior to this meeting taking place there will, of course, be similar meetings within each economy to confirm its interest to examine the feasibility of such a project, and to assign roles for the next stage, notably

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1 http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/2001Model_signatures.html

the agency or authority will take the lead in negotiating the bilateral or multilateral agreement between the economies.

Presuming a positive decision is reached to proceed with the feasibility study, the meeting should establish a <u>Joint Project Management Group</u> made up of senior representatives of the key agencies *from the economies involved* that would be directly involved in implementing and utilizing the Regulatory Cross Border Paperless project. The meeting should also establish a <u>Joint Task Force</u> with appropriate technical and managerial representatives of key agencies and the private sector in order to carry out the organizational and implementation work required for the project. In addition, each economy may establish or utilize its own project management structure to steer (<u>Internal Project Management Group</u>) and manage (<u>Internal Task Force</u>) the implementation of its side of the joint project. Both of these may include private sector representatives to help ground the initiative in commercial realities, and to help ensure community understanding and commitment

Agreement between Economies
Once a decision is reached amongst the economies involved to proceed with the Feasibility Study, discussions should commence on the bilateral or multilateral agreement between the economies involved, if required, to implement the Regulatory Cross Border Paperless project. As indicated in Section 2(b) above, Attachment A includes headline points that may be considered for inclusion in any such agreement. The progress of the negotiations may be monitored by the Joint Management Group.

Undertaking the Feasibility Study: The feasibility study is a key element of the overall Regulatory Cross Border Paperless project development. *Each economy* would conduct its own Feasibility Study to support its *own request* for funds and resources to implement the project. The study should determine the potential scope of the Regulatory Cross Border Paperless project, the level and nature of demand, possible scenarios for implementation (including possible phases of implementation), potential for and nature of a pilot implementation, the cost of implementation under the different scenarios, other resources required (human, technical, etc), potential benefits and risks, time frame, implementation and management strategy.

Consideration of the Feasibility Study Report: The findings of the feasibility study should be considered and approved (or otherwise) by the Internal Task Force and eventually submitted for consideration by the Internal Project Management Group. Sufficient time should be allowed for this process, as it is essential to have the maximum input and agreement before the report is finalized. Following approval by all economies of their own Feasibility Studies, there should be confirmation by the Joint Task Force and the Joint Project Management Group with agreement on the (common) preferred Regulatory Cross Border Paperless project option and the accompanying implementation scenario and plan chosen. This should then be presented to the wider government and trade community, in the most practical way, by each economy individually to gain commitment from all stakeholders involved in the Regulatory Cross Border Paperless project.

Implementation: Whether a pilot, phased or full implementation approach is chosen, it is essential to initiate a clear project management approach throughout the project implementation. The project management plan, which must be formally agreed by both the Joint Project Management Group and Joint Task Force, should contain a set of clearly defined interrelated tasks and event milestones that can assist both the Joint and Internal Task Forces and the Joint and Internal Project Management Group to plan, execute, monitor, evaluate, and adjust the project implementation

4.   Critical Success Factors

The successful introduction and implementation of a Regulatory Cross Border Paperless project concept depends to a considerable extent on certain pre-conditions and success factors that vary from economy to economy and from project to project. This section lists some of the success factors gleaned from a review of the operation and development of Regulatory Cross Border Paperless projects in various economies. The list of factors is not arranged in any particular order, as the situation in different member economies and areas of operation can vary considerably. It is noted that although several of the points have already been mentioned they are repeated here for completeness and emphasis.

4.1 Political Commitment

The existence of strong political commitment on the part of both government and business to implement a Regulatory Cross Border Paperless project is seen as one of the most critical factors for its successful introduction primarily because of the need to drive consensus and resolve issues amongst diverse stakeholders. The availability of resources and willingness to resolve complex issues is often directly related to the level of political will and commitment to the project. Establishing the necessary political will and commitment is the foundation stone upon which all the other success factors have to rest.

Achieving this political commitment requires proper dissemination of clear and impartial information on objectives, implications, benefits and possible obstacles in the establishment of the Regulatory Cross Border Paperless project.

For government projects, a tangible result of political commitment is the establishment of an effective governance mechanism for coordination amongst Government agencies. This normally involves the appointment of a lead agency to drive the project forward, and the establishment of a steering committee, comprising all related government agencies and chaired by a senior Minister, sometimes even the Prime Minister.

4.2 Comprehensive Legal Environment

Establishing the necessary, comprehensive, predictable legal environment is a pre-requisite for Regulatory Cross Border Paperless project implementations. Related laws and legal restrictions must be identified and carefully analyzed. For example, changes in

legislation can sometimes be required in order to facilitate and secure electronic data submission/exchange and/ or an electronic signature system. Further, restrictions concerning the sharing of information among authorities and agencies, as well as organizational arrangements for the operation of a Regulatory Cross Border Paperless project, may need to be overcome. Also, the legal issues involved in delegating power and authority to a lead agency need to be examined.

4.3 Demonstrated Value to Stakeholders

Directly related to achieving the requisite political will and commitment is the need for a clear understanding of the value the project will bring to each of the key stakeholders and participants. This value may include significant contribution towards:

i.   Achieving trade facilitation goals for policy makers

ii.   Achieving goals for faster clearance times for Customs and related agencies

iii.   Reduction in Government administration costs for the involved agencies

iv.   Reduction in clearance and other business process execution times, reduction in time to hold inventory, avoidance of storage penalties, reduction of storage cost, faster corrections, and working capital requirements for business participants.

v.   Direct reduction in administration costs for business participants.

vi. Improved visibility leading to greater efficiency for the trade.

For example, in the e-CO exchange project between Chinese Taipei and Korea, clearance time for commodities covered by the CO were reduced from 2 days to 10 minutes and submission and processing time for the CO reduced from between 2 – 4 weeks to also just 10 minutes. On each transaction the exporter saves US$40, US$20 for the stamp from the Chinese Taipei Mission in Korea, and US$20 for the courier of the paper documents from Korea to Chinese Taipei.

It is important to emphasize that the benefits of Paperless Trading accrue to both governments and the community, with often the greater benefits accruing to the community. As such, inclusion of business-to-business as well as business-to-government business processes and associated functionality may significantly increase the value to the private sector stakeholders and participants.

4.4 Effective Program Management

Effective Program Management, is seen as a crucial success factor particularly because of the extensive collaboration required in driving the Regulatory Cross Border Paperless project to a successful conclusion. This includes:

i.   The establishment of a program organization structure (i.e. Joint and Internal Project Management Group referred to in Section 3) led by the committed top executive(s) in the lead agency or authority with key stakeholders active in their defined roles. This group steers the initiation and implementation of the project, to ensure funds and the right resources are made available, to mediate and forge consensus, and to resolve stakeholder conflict issues speedily. The leader must have the appropriate political support, legal authority, human and financial resources, and links with the business community. As indicated under Political Commitment, this is particularly important for the coordination amongst various Government agencies.

ii. The establishment of a proper communication mechanism for keeping all stakeholders informed on project goals, objectives, targets, progress (and difficulties) creates trust and avoids the type of misunderstanding that can lead to the undoing of an otherwise good project. Within this context, it is extremely important to handle stakeholders' expectations properly, and it is worth remembering the business adage of promising less and delivering more (rather than the other way round). It is also important to remember that stakeholders often do not expect miracles: solving simple practical problems can generate significant goodwill to carry the project through difficult patches along the development path.

iii. The establishment of a simple and disciplined change and issue management and escalation procedure, which is understood and followed by all project participants. This helps to avoid a common cause of project delays and missed objectives – unresolved issues or unapproved changes in scope.

iv. The establishment of a risk assessment and mitigation framework

4.5 Process Harmonization

For Regulatory Cross Border Paperless projects there are frequently opportunities to simplify the processes because of a lack of integration between the processes executed by the various participants in the process, and the possibility to share information in a common, securely, accessed cross border repository.

Process harmonization including optimization, rationalization and process integration is seen as key by almost all paperless projects implemented – without this step, the benefits to the stakeholders may be much reduced.

Analysis of the business processes involved in the scope of the Regulatory Cross Border Paperless project, with a view to simplification, optimization, rationalization / re-engineering and seamless integration should be considered to be undertaken as a core part of the Feasibility Study with a preliminary analysis done during the initial concept study.

During the analysis, a data harmonization exercise and consideration of appropriate international standards will also likely be beneficial and is a natural part of the business process analysis.   There are a number of general methodologies available for business process analysis including the APEC Project on Data Harmonization towards Single Window Paperless Environment (APEC ECSG 05/2008T – September 2009).

A common result of the business process rationalization and integration exercise, is the identification of substantial benefits through more <u>seamless integration of disparate ICT applications</u>, and to provide <u>end-to-end process monitoring and KPI tracking</u> across these different systems; for example those used by Customs and those used by certificate issuing agencies. This ICT integration exercise may be time-consuming, and should be identified early in the Feasibility Study so as to allow sufficient time for planning, funding and implementation.

4.6 Promotion and Marketing

Promotion and marketing of a Regulatory Cross Border Paperless project is very important and should be carefully planned. The promotion campaign should involve representatives from all the key government and trade stakeholders in the system, as these parties can provide valuable information on the expectations of the user community and help to direct the promotion and marketing messages. A clear implementation timetable should be established and promoted at the earliest possible stage, as this will assist in the marketing of the project and will help potential users to plan their related operations and investments according to this schedule. Marketing should clearly identify the benefits and cost savings as well as specific points relating to the increased efficiency derived from the implementation of Regulatory Cross Border Paperless project operation.

Consideration may also be given to offering incentives to promote adoption by the business community, which is a common strategy in the projects reviewed. These may include

i.   Offering periods of free trial

ii. Early bird offers at reduced rates

iii. Government subsidies to the business community to offset the cost of IT system changes

4.7 Public Private Partnership (PPP)

As implied throughout this guideline, cooperation between the public and private sector is essential to success in Paperless Trading projects involving Governments. The nature of the cooperation will depend on the specific situation in the economies involved.

In the Korea – Chinese Taipei e-CO cooperation, the commercially operated Government-linked PPP Service Providers and the framework of the PAA, which is an

association of mostly Government linked PPP service providers were instrumental in the successful implementation.

In other economies less structured public – private cooperation models may be applicable.

4.8 Other Factors

Other key factors to consider are included in UNCEFACT's Recommendation 33 Guidelines Section 8, and cover:

i.   Establishment of Clear Project Boundaries and Objectives

ii. User Friendliness and Accessibility

iii. International Standards and Recommendations

iv. Identification of Possible Obstacles

v.   Financial Model

vi. Technical Readiness

5. Key Performance Indicators (KPI)

The key performance indicators are separated into

- o Direct KPIs - those that directly measure the paperless take-up, and
- o Indirect KPIs - those that measure the business or process benefits of the paperless project

The indirect KPIs are the more important, but generally are more difficult to measure, and are more difficult to quantify the contribution to the KPI from the introduction of the Regulatory Cross Border Paperless system.

5.1 Direct KPIs

	Key Performance Indicator	Formula	How to Measure
1	Export Community Take-up % and Numbers at defined periods	Number of Organizations active in the export side of the Regulatory Cross Border Paperless system (e.g. Exporters or their agents, Forwarders etc – depends on the process) * 100 / total number of organizations involved in the "paper" process and the paperless process.	The Certificate Issuing agency is likely to track the total size of the community, as they will need to register in order for the certificates to be issued. The operator involved in the Regulatory Cross Border Paperless system should track know the exact number of active participants. This may be measured at half yearly or annual intervals.
2	Import Community Take-up % and Numbers at defined periods.	Number of Organizations active in the import side of the Regulatory Cross Border Paperless system (e.g. Importers or their agents, Forwarders etc – depends on the process) * 100 / total number of organizations involved in the "paper" process and the paperless process.	Customs is likely to track the exact number of importers involved in importing commodities covered by the certificates or documents in the scope of the project. The operator involved in the Regulatory Cross Border Paperless system should track the exact number of active participants.

			This may be measured at half yearly or annual intervals.
3	Paperless Document Take-Up% and Volume at defined periods	Number of paperless document * 100 / Total number of documents	The Certificate Issuing agency should track the total documents issued The operator involved in the Regulatory Cross Border Paperless system should track the exact number of paperless documents. This may be measured at half yearly or annual intervals, and cross checked between the export and import side.
4	Paperless Document (with paper supporting documents) % share and volume for all document types in scope. That is, where paper is used as support for paperless documents for legal reasons or operational convenience	Number of paperless documents which still require paper supporting documents * 100 / Total number of documents Paper supporting documents may be required because legislation requires paper documents still to be submitted or for operational reason – for example to cross check a certificate or commercial invoice, but the computer system cannot process those types of documents.	Based on the total number of documents in (3) above, estimate the total number of documents and document types within the project scope that still require paper documents support paper. Calculate the number of paperless documents that require paper supporting documents, based on the paperless documents from (3) above, and the estimate of the ratio that requires paper supporting documents
5	Error % at defined periods including where available the error % before implementation of the Paperless Trading System	Number of paperless documents queried or in error * 100 / Total number of paperless documents	The operators involved in the Regulatory Cross Border Paperless system should track the exact number of paperless documents and the rejection or query rate. This may be measured at half yearly or annual intervals, and cross checked between the export and import side. Ideally, it is also useful to measure the

			improvement compared to the error rate prior to the implementation of the Paperless Trading system, if this is available.

5.2   Indirect KPIs

	Key Performance Indicator	Formula	How to Measure
1	Average and Maximum Process Time for Customs Clearance, Permit/License/Certificate Application and Approval For defined periods (e.g. for one month; six months)	The average and maximum time of all process executions, for the defined period for the process in question. The time for process execution will be from the deemed start time for the process to the deemed completion time. A key process to measure is from the time the first application for import (or export) is received to the time when the goods are approved to leave the controlled area.	This will depend on the process and the systems employed. The WCO Time Release Survey methodology may be used for a sampling of customs clearance time. In some systems this may be able to be measured automatically. If a new system is being implemented it is recommended to be able to measure the end-to-end process times automatically

There are other useful items such as workload reduction, cost savings, and cash flow improvement, which may be measured if desired. However these are difficult to measure automatically on an ongoing basis and may be done as the result of a post implementation audit. It is recommended to focus on just a few KPIs and measure these comprehensively.

Attachment A: Items to Consider in Agreements between Economies for

the Paperless Exchange of Cross Border Regulatory Documents

1.   Definitions

Include definitions of the key terms such as

a) Project or Scope definition. For example, for the exchange of Certificates of Origin (CO), the project "**eCO Exchange Project**" may be defined as "*A project to facilitate the exchange of eCO between the territories of the Parties to simplify the customs clearance process and to promote cross-border paperless trading*".

a) **Entities** involved in the exchange. This will be dependent on the nature of the business process, the actual agencies involved and the administrative structure of the authorities in the each economy. For example for the exchange of a Certificate of Origin (CO), the entities may include:
   - o   the **Parties** (**agency or ministry)** who are the designated official representative of each economy for the purposes of the agreement
   - o   the a**gency** who represents an economy in an overseas location to, amongst other activities, facilitate processing of CO's
   - o   the **certificate issuing bodies** who are responsible for issuing the CO in each economy, such as the Chamber of Commerce
   - o   the entities who are responsible for the electronic processing of the paperless exchange. In some economies, these may be **Customs Service Providers** and in others may be Customs directly.
   - o   the **e-CO import processing agency** responsible for processing the e-CO for import clearance, most likely Customs.

b) **Documents** to be exchanged. For example, the CO may be defined as "*A specific form identifying the goods, in which the authority or body empowered to issue the CO certifies expressly that the goods to which the certificate relates to, originate in a specific area*". The e-CO may be defined as "*The electronic form of the CO*"

c) **Authorized Digital Certificates** – definition of the digital certificates

2.   Terms of Agreement

Aspects to consider for the core terms of the agreement include:

a) agreement to exchange cross-border electronic documents (*e.g. e-CO*) to facilitate the specified process (*e.g. customs clearance process*);
b) agreement that the validity of the electronic document (e.g. e-CO) is equivalent to that of the paper document (paper CO)
c) allow option to mandate the electronic documents, or still allow their paper form

d) confirmation that the issuing agencies of the electronic documents (e.g. e-CO) are authorized to do so by their respective ministries;

e) agree that the issued electronic documents must be transmitted via the specified means and with the specified security.;

f) agree to mutually recognize the Digital Certificates issued by the Recognized Certification Authorities (*e.g. Certification Authorities recognized under the Pan Asian e-Commerce Alliance Mutual recognition Scheme*) in the jurisdiction of the other Party, as proof of authenticity on a mutual basis

g) reserve the right to verify the authenticity of the contents and origin of the electronic documents (*e.g. e-CO*) and the country of origin in accordance with the Party's respective domestic laws and regulations; and

h) agree to offer a website for the other Party and their designated representatives to make online enquiries regarding the status and content of the electronic documents (e.g. e-CO).

Appendix B

Best Practices for Paperless Trading (Private Sector)

The project team gratefully acknowledges the use of the UNCEFACT Recommendation 33 which have been referenced and adapted, particularly in Section 3 and 4.

Appendix B   Best Practices for Cross Border Paperless Trading (Private Sector)

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Appendix B   Best Practices for Cross Border Paperless Trading (Private Sector)

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Appendix B   Best Practices for Cross Border Paperless Trading (Private Sector)

1.   Introduction

Cross Border Paperless Trading has been implemented and used since the 1980's by multinationals and their global partners. With the explosion in the last decade of the Internet and mobile communications, and their almost universal use in most major cities, and the expansion in trade and globalization, paperless trading is not only a tool to dramatically reduce administration costs and improve efficiency, it is increasingly becoming, at the SME level, mandatory in order to compete.

What we mean by Cross Border Paperless Trading is the electronic exchange of structured documents related to cross border trade, between computer application systems, or between computer application systems and people, without the need for paper. The key point is streamlined processing so that data does not have to be manually re-entered – so that for example, emailing a scanned invoice that has to then be keyed in to the recipient's ICT application, is not strictly classed as Paperless Trading - although it certainly does avoid the delays of the paper mail system. On the other hand, guidelines are not needed on how to do that.

This document is designed to give interested private sector organizations, including Small and Medium sized Enterprises (SMEs) in the APEC region, an outline of the benefits and characteristics of Cross Border Paperless Trading, simple implementation steps to consider in a Paperless Trading project, and some factors that have been found by others to be critical to their success. Also included are simple Key Performance Indicators (KPI) to assess the level of achievement.

This document is not intended to be a comprehensive systems development methodology, nor to replace the approaches that are currently used. Rather, based on others' experiences, it aims to give some hints to increase the likelihood of success and reduce the chance of costly mistakes.

2.   Drivers of Paperless Trading Projects

Paperless trading has shown to achieve a number of direct specific benefits including:
a) Reduction of trade transaction processing times and associated delays such as for purchase order processing and management; border clearance, transportation and logistics arrangements, and settlement.
b) Improvement of data quality and reduction of errors, through reduced double handling
c) Reduction of workload through reduced double handling and reduced error and problem management
d) Reduction of inventory carrying costs and improvement in inventory turnaround, through faster order–to-receipt processing and improved certainty of delivery from greater visibility

e) Improved cash flow and reduced working capital needs and therefore financing costs, through faster, more predictable settlement

f) Direct reduction of service fees associated with trade transaction administration through this being conducted more efficiently.

g) Opportunity for additional revenue with the same work force, due to greater efficiency

h) Reduction of the carbon footprint for environmental protection

i) Government initiatives to encourage private sectors' take up in paperless trading

Particularly due to the improvement in Customs clearance times, APEC member economies view these benefits as key drivers of trade growth and trade facilitators. This in turn helps to drive economic growth. Accordingly, most APEC member economies have implemented or are in the process of implementing electronic "Single Windows" where the trade community, is able to, or in some cases, is required to, submit paperless customs declarations and permit / license / certificate applications to the appropriate Government agency.

Commercial organizations involved in cross border trade, including SMEs, may adopt Paperless Trading because:

i.   Governments require this for Government trade documents

ii. A key customer(s) requires this
   o As a supplier, in order to win business from some customers, paperless trading with that customer is a pre-requisite.
   o Forwarders and other categories of Logistics Service Providers, are often required to provide comprehensive on-line end-to-end visibility of order fulfillment, supplier delivery status and inventory, in order to win the actual forwarding / logistics business.

iii. Some or all of the benefits identified above (a-g) justify a self-initiated Paperless Trading project

iv. Paperless Trading is considered to be part of the necessary infrastructure to do business, in the same way as telephones, fax, PC's and back office computers etc.

Even if the adoption of Paperless Trading is driven by external pressure, such as in (i) and (ii) above, many of the observations in this guideline apply. That may also be an opportunity to consider the company's overall strategy towards Paperless Trading.

3.   Steps to Implement Paperless Trading Projects

Paperless Trading involves multiple parties, often with multiple units or departments. They may need to collaborate in the streamlining of cross-functional and cross-party business processes, and in the application and interoperability of specific, somewhat complicated Information Technology (IT). It almost always necessitates changes in the established way of "doing things", and may also involve parties in different economies, and different jurisdictions who speak different languages.

Appendix B   Best Practices for Cross Border Paperless Trading (Private Sector)

In other words, Paperless Trading initiatives can be complex and challenging, and a systematic approach should be adopted from the outset. Some of the key steps involved are discussed briefly below.

Initiation: Whatever the trigger for the Paperless Trading project, be it regulatory compliance, the demand of a key customer, or internally motivated, Top Management should endorse the assignment of resources to assess the feasibility of the project, because it is probable that the project will have a strategic impact on the company. To facilitate endorsement, it is common for a short written summary to be prepared outlining the project objectives and scope, and resources and time required for the feasibility study. At this time a project oversight structure should be put in place, for example a Steering Committee, to guide and monitor progress and resolve issues. This structure may be as simple or as sophisticated as suits the organization and the scope of the project.

Feasibility Study: Includes a clearly defined scope, assessment of the "as-is" situation, a definition of the desired "to-be" situation, a cost-benefit analysis and an outline plan for implementation.

The **"as-is"** assessment includes an analysis of the current processes and parties involved, the associated issues and opportunities for improvement, and an assessment of the current Information and Communications Technology (ICT) functionality and capability. It may also include an assessment of the parties' capability and willingness to collaborate in the paperless trading project – particularly related to their ICT systems capability to directly exchange electronic documents – that is, their Business to Business Integration (B2Bi) capability.

The **"to-be"** definition includes the improved or simplified business processes, with the specific qualitative benefits and business value expected to accrue to the key participants, a definition of the requirements for the ICT functionality, and, if relevant, the requirements for B2Bi, and secure community management. It may also include requirements for end-to-end process audit trails, and associated KPI service level monitoring and analysis.

The **plan for implementation** may include selection of the technology and the approach for the ICT development, the proposed phases for implementation to manage risk and garner benefits and confidence early, the marketing and community adoption approach, the target milestones, and incremental resources required for implementation and ongoing operations and support. Approaches to drive community adoption are included in the section on Critical Success Factors.

An Excel template is available with this guideline to assist with a very simplified **cost benefit analysis**.

Prior to proceeding with the implementation plan, Top Management must endorse the Feasibility Study, with any of their required revisions.

Appendix B   Best Practices for Cross Border Paperless Trading
(Private Sector)

Implementation:

Whether a pilot, phased or full implementation approach is chosen, a clear project management approach is essential. The project management plan, endorsed by the Steering Committee if relevant should contain a simple set of clearly defined interrelated tasks and event milestones that can assist to plan, execute, monitor, evaluate, and adjust the project implementation.

Technology options include self-development, out-sourced development, or use of a Software as a Service (SaaS) provider. If self development is chosen, ensure the right skills are available or appropriate training programs are planned. B2Bi skills are somewhat different to application programming skills and include business process and data analysis expertise, knowledge of standards for network communication protocols and message structure, and interoperability and integration. The SaaS option has the advantage of pay-as-you-go and a smaller up-front investment, at the cost of less control and likely reduced flexibility. If external technology providers are sought, ensure there is a transparent process for requesting proposals, evaluation and selection.

The on-boarding and ongoing community management of a technologically diverse set of business partners is often underestimated – get buy-in of business partners early with an effective marketing program, use a standard on-boarding procedure and start interoperability testing early.

4.   Critical Success Factors

The successful introduction and implementation of Paperless Trading projects depends to a considerable extent on certain pre-conditions and business conditions that vary from economy to economy, company to company and even project to project. This section lists some of the success factors gleaned from a review of the operation and development of Paperless Trading projects in various companies, some of which may be applicable for your situation.

4.1 Top Management Commitment

The existence of strong top management commitment to implement a Paperless Trading project is seen as one of the most critical factors for its success. This is primarily because of the need to drive consensus, change business practices and resolve issues amongst the different departments and where necessary put in the necessary effort to get buy-in from business partners. The availability of the right resources and willingness to resolve complex issues is often directly related to the level of senior executive commitment to the project.

Top management commitment is almost always the base upon which all the other success factors rest. Getting top management commitment requires the clear communication of an objective understanding of the objectives, implications, benefits and possible obstacles in the setting up and operating the Paperless Trading project.

Appendix B   Best Practices for Cross Border Paperless Trading
(Private Sector)

4.2 Value to Stakeholders

Directly related to top management committing to the project, is the need for a clear understanding of the value to your company and in most cases to your business partners. Example values are shown in Section 2, which can also translate into:

i.   Getting new customers or keeping existing customers

ii. Being more efficient and be able to grow your business with the same staff and cost base.

iii. Direct improvement in gross margins through reduced costs from suppliers.

iv. Ability to implement ongoing improvement programs by measurement of core service levels in real time (e.g. % of on-time deliveries; % of errors) and assessing performance against benchmarks

A simple template for assessing the business values and associated implementation costs is available together with this Guideline.

4.3 Driving Community Adoption

A common strategy to drive community adoption indicated in the case studies, is for the "hub" or driver to **mandate** use by its trading community.

In one case, the "customer" required a "Paperless Trading" system be implemented as a condition of an forwarder winning the logistics business for that customer. This customer also required all its suppliers to use the forwarders' paperless trading system.

If "mandating" use is not an option, the "marketing" program to recruit and on-board business partners is very important and should be carefully planned. A clear implementation timetable should be established and promoted at the earliest possible stage, as this will assist in the marketing of the project and will help potential users to plan their related operations and investments according to this schedule. Marketing should clearly identify the benefits and cost savings as well as specific points relating to the increased efficiency derived from the implementation Paperless Trading.

Consideration may also be given to offering incentives to promote adoption. In some economies, the Government may offer subsidies to promote paperless trading, for example to offset the cost of IT system changes. These should be investigated.

4.3 Effective Program Management

Appendix B   Best Practices for Cross Border Paperless Trading
(Private Sector)

Effective Program Management, is seen as a crucial success factor particularly because of the extensive collaboration and oversight required in driving the Paperless Trading project to a successful conclusion. This includes:

i.   For larger organizations, a Steering Committee may be setup, comprising the CEO and relevant department heads, and sometimes even business partners. This group steers the initiation and implementation of the project, to ensure funds and the right resources are made available, to forge consensus, and to resolve conflicts.

   For smaller organizations, a clear escalation channel or process where top management is informed of progress and can help to resolve issues speedily, may be sufficient.

ii. An appropriate communication mechanism for keeping the stakeholders informed on project goals, objectives, targets, progress (and difficulties) creates trust and avoids the type of misunderstanding that can lead to the undoing of an otherwise good project. "Promising less and delivering more" (rather than the other way round) is a good principle. Stakeholders often do not expect miracles: solving simple practical problems can generate significant goodwill to carry the project through difficult patches along the development path.

iii. A simple and disciplined change and issue management and escalation procedure, which is understood and followed by all project participants. This helps to avoid a common cause of project delays and missed objectives – unresolved issues or unapproved changes in scope.

iv. A risk assessment and mitigation framework

v.   A project team structure appropriate to the size and nature of the project. A mid-sized forwarder had great success building a state-of-the-art purchase order management system, with just a hands-on project manager, who was also able to the business analysis and functional design, and two keen young programmers. With a clear architecture established early on, and open communication and mutual trust, in two months they were able to iteratively develop and test the system with a minimum of redundant documentation. This Paperless Trading System helped the company secure the logistics business of a Fortune 500 company.

vi. A phased implementation approach may help in realizing benefits earlier and encourage faster community adoption. The return on investment in the beginning phases together with the experience and knowledge gained, may also be used to assist the later phases.

4.4 Process Harmonization

For Paperless Trading projects there are frequently opportunities to simplify and harmonize the processes because of a lack of integration between the processes executed by the various parties, and the possibility to share information in a common, securely, accessed cross border repository.

Appendix B   Best Practices for Cross Border Paperless Trading
(Private Sector)

Process harmonization, optimization, rationalization and process integration are seen as key by almost all paperless projects implemented – without this step, the benefits to the stakeholders may be much reduced.

Analysis of the business processes involved in the scope of the Paperless Trading project, with a view to simplification, optimization, rationalization / re-engineering and seamless integration should be considered to be undertaken as a core part of the "As-Is" assessment. A data harmonization exercise and consideration of appropriate international standards may also likely be beneficial and is a natural part of the business process analysis. There are a number of general methodologies available for business process analysis including the APEC Project on Data Harmonization towards Single Window Paperless Environment (APEC ECSG 05/2008T – September 2009).

A common result of the business process rationalization and integration exercise, is the identification of substantial benefits through more seamless integration of disparate ICT applications, and to provide end-to-end process monitoring and KPI tracking across these different systems. This ICT integration exercise may be time-consuming, and should be identified early in the Feasibility Study so as to allow sufficient time for planning, funding and implementation.

4.5 Legally-enabling Environment

Some companies are concerned about the legal enforceability of electronic documents, and others much less so. It is beyond the scope of this document to provide legal advice, but the following outlines some of the legal aspects involved with cross paperless trading.

i.   Most APEC Member economies have passed legislation giving electronic documents and digital/electronic signatures, the same legal status as their paper counterparts. An issue for some Authorities has been that legislation, some of it complicated, explicitly states or implicitly assumes that trade documents submitted to the Authority would be on paper. In the past ten years there has been significant progress in addressing this, but as shown in some of the projects studied, there may still be legislative issues to accept "paperless" for all trade documents.

ii. An identity authentication and authorization scheme, *accepted by the participants*, is a fundamental component in comprehensive legal and security frameworks for paperless cross border trading. This is so that the originator / signer of an electronic document can be conclusively identified by the recipient, and non-repudiation of origin assured.

iii. A mutual recognition scheme is helpful where electronic documents signed in one jurisdiction are recognized as legally binding in another jurisdiction. Associated with this, a mutual recognition or cross certification scheme is required, where digital certificates, for example those issued according to Public Key Infrastructure standards, issued in one jurisdiction or by a specified Certification Authority are accepted as

valid in another jurisdiction. The Pan Asian E-Commerce Alliance (www.paa.net) has such a scheme.

iv. A dispute resolution process needs to be specified, with a common issue being to determine in which jurisdiction and under whose laws disputes associated with the electronic nature of the transaction should be resolved. Note that disputes over the cross border transaction itself have been resolved successfully (or not!) for hundreds of years.

v. Liability and associated limits may need to be set in case of errors or negligence in the electronic aspect of the information exchanged. Note again that all parties conducting business (suppliers, trade service providers, customers, and even governments), accept a level of liability, although naturally those in a position to do so, disclaim as much liability as legally permissible.

Based on the Paperless Trading projects studies, differing strengths of legal assurance appear to be accepted.

o In one example, a medium-sized forwarder implemented a Paperless Trading project for a US customer with suppliers in China, Hong Kong and Chinese Taipei, with just a simple email advising the suppliers to use the new system.

o In another, all participants were required to sign a document agreeing to accept the electronic document as equivalent to its paper counterpart.

o In a third example, the participants adopted the Pan Asian E-commerce Alliance Legal framework and Mutual Certification Authority Recognition scheme, which addresses the points (ii) – (v) above.

Appendix B   Best Practices for Cross Border Paperless Trading (Private Sector)

5.   Key Performance Indicators (KPI)

Simple key performance indicators to assess the level of achievement, are separated into

- o Direct KPIs - those that directly measure the paperless take-up, and
- o Indirect KPIs - those that measure the business or process benefits of the paperless project

The indirect KPIs are the more important, but generally are more difficult to measure, and are more difficult to quantify the contribution to the KPI due to the introduction of the Paperless Trading system.

5.1   Direct KPIs

	Key Performance Indicator	Formula	How to Measure
1	Community Take-up % and Numbers at defined periods	Number of Organizations active in the Paperless Trading system (e.g. Exporters or their agents, Forwarders etc – depends on the process) * 100 / total number of organizations involved in the "paper" process and the paperless process.	As a hub organization, the target community size will be known The paperless trading computer system should measure active community size automatically. This may be measured and reported monthly.
2	Paperless Document Take-Up%, Numbers, Value and Volume at defined periods	Number of paperless documents * 100 / Total number of documents	A guess can be made of the number of paper documents, and the related trade volume and value, for example based on the number of consignments, orders or shipments etc.

			The paperless trading system should count the paperless document numbers, and associated trade volumes and value automatically. This take-up % may be measured and reported monthly, and the paperless volumes daily
3	Electronic Document % share (Paper support) for all document types in scope − paper used as support for legal reasons or operational convenience	Number of paperless documents which still require paper supporting documents * 100 / Total number of documents Paper supporting documents may be required because legislation requires paper documents still to be submitted or for operational reason – for example to cross check a certificate or commercial invoice, but the computer system cannot process those types of documents.	Estimate number of paper documents types and volume; Count electronic Documents from systems and assign estimate on number of paper document support This may be measured monthly
4	Error % at defined periods including where available the error % before implementation of the Paperless Trading System	Number of paperless documents queried or in error * 100 / Total number of paperless documents	The Paperless Trading computer system should track the exact number of paperless documents and the rejection or query rate. This may be measured at half yearly or annual intervals. Ideally, it is also useful to measure the improvement compared to the error rate prior to the implementation of the Paperless Trading system, if this is available.

Appendix B   Best Practices for Cross Border Paperless Trading (Private Sector)

5.2   Indirect KPIs

	Key Performance Indicator	Formula	How to Measure
1	**Internal Rate of Return (IRR)** for Key Stakeholders including • Workload cost Reduction • Inventory Level reduction • Working Capital Reduction • Service Fees Reduction • Revenue Improvement • Costs incurred versus Costs Planned	This is the measured according to the definition of internal rate of return (that is, the IRR of an investment is the interest rate at which the costs of the investment lead to the benefits of the investment. That is, it is the interest rate at which the net present value of the investment is zero. In addition, the change between the before and after implementation in each of the benefit and cost factors listed should be measured.	Measurement of the Internal Rate of Return is ideally done for defined period (e.g. one year, two years after implementation) through post-implementation audits to objectively assess the benefits actually achieved and actual costs expended. It is sometimes difficult to attribute the actual achievements and expenditures solely to the implementation of a paperless trading project as the environment changes over time and many other factors come into play.
2	**Service Level Improvements** Average and Maximum Over (or Under) Achievement of customer Service Levels versus	Achievement of Customer Service Levels is actual deliverable time less customer required deliverable time. e.g. delivery performance service level = actual delivery date – purchase order delivery date.	The system should be able to measure these and report daily or monthly with an alert if the required service level is in danger of not being achieved.

customer required service levels within a defined period		

Appendix C

Paperless Trading Assessment and IRR Template Guideline

Appendix C: Paperless Trading Assessment and IRR Template Guideline

1.   Introduction

To assist the public and private sectors to objectively consider the state of readiness to embark on a paperless trading initiative, or to assess the state of a Paperless Trading project which is already underway, the included Excel *Paperless Trading Assessment* template and *the Internal Rate of Return (IRR)* template may be used.

The Paperless Trading Assessment template includes critical success factors to consider, with the intention that a weighting (out of 100) may be assigned to each factor applicable to the initiative under consideration, together with an assessment of the readiness level (from 0 to 7) for that factor. It is by nature somewhat subjective, but encourages a disciplined approach to analyze the various factors, and where needed put in place measures to address deficiencies.

The template recognizes that the critical success factors themselves and the weighting to assign to these factors will be different from project to project and from economy to economy. It also recognizes that the critical success factors may change depending upon the stage of the project – for example when a cross border Government led paperless trading initiative is first conceived, the critical success factors may be the political commitment within the senior levels of Government to secure the necessary funding and forge a consensus between various government departments and the trading community to initiate a formal project with committed schedules etc. Once the project is underway with a strong programme management structure in place, critical success factors may include a strong marketing and promotion programme to ensure the community buys in to the value the project may bring.

The template includes two sheets the "*Paperless Trading Assessment*" and the "*IRR Template*". While cells intended to be changed are highlighted in yellow, additional rows and factors can be added to suit the situation.

Appendix C: Paperless Trading Assessment and IRR Template Guideline

2. **Guide to "Paperless Trading Assessment" Sheet**

As a brief guide on the use of the "Paperless Trading Assessment" sheet:

i. Save a copy of the file with a meaningful name related to the project being assessed e.g. "*eCO Project - Peru and Mexico- Assessment V0.01 2009-09-30.xls*"

ii. Record the project name and stage of the project in the cells shown (E1)

iii. Review the weightings (column F5-F90 – yellow highlights only) of each of the critical success factors and revise according to their importance for the project and the specific stage in the project. Some factors may have a weighting of zero if they are considered insignificant for the project or the stage within the project. The total of the weighting should total 100% (cell F3), and some trial and error may be necessary to adjust the weightings of the factors

iv. Review the state of readiness or achievement of each factor and give an assessment (cell E5-E90 – yellow highlights only) on a scale of 0 to 7, with 7 being the highest, most positive rating. Most of the factors have a description explaining the nature of the factor and guidance on the assessment score.

v. It will also be useful to include an explanatory comment against each factor (cell H5-H90)

vi. Upon input of the assessment (cells E5-E90), the "Weighted Assessment" is automatically calculated (cells G5-G90 – highlighted in turquoise), as is the total Weighted Assessment for all the factors (cell G2)

3. **Guide to "IRR Template" Sheet**

The IRR Template is a much simplified cost/benefit analysis worksheet. Those who commonly do cost / benefit analysis, will find this template quite basic as it does not include tax and depreciation considerations. However it is designed to encourage an analysis of the benefits of a Paperless Trading project and the associated costs, and to determine a high level, objective view of the value to the stakeholders.

The "IRR Template" sheet includes four main components:

Appendix C: Paperless Trading Assessment and IRR Template Guideline

- o Project name (cell D1) and the year the project starts (cell J3)
- o Revenue and savings items (benefits)
- o One time and recurring cost items (costs)
- o Cash flow (benefits less costs) over 5 years and the Internal Rate of Return

Within the benefit and cost items, is:

a) Description of the items – these are provided as suggestions to consider when analyzing the benefits and the costs
b) Parameter based formulas to calculate the benefit and cost in money terms (e.g. $) and the annual increase or decrease of that item. These formulas include a provision for a base unit or volume (e.g. 6,000 days of work currently done at $300 per day) together with a parameter to specify a percentage saving on the base (e.g. 10%) and the annual increase % expected over the next five years. The yellow highlighted cells are those to be changed.
c) Calculated benefit / cost for the start year and over the next five years – these need not be changed

The Cash flow and the Internal Rate of Return are calculated in the spreadsheet and need not be changed. A project with an Internal Rate of Return of over 15% and positive cumulative cash flow (row 40) after 3-4 years is considered to be attractive.

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Assessment of Level of Readiness for Paperless Trading Projects

		<Project Name - economies involved> - Project stage

50		80%	Total Assessment
91	100%	100%	Total Maximum Score

Critical Success Factors	Assessment	Weighting	Weighted Assessment	Explanation
1 **Demonstrated Value for Key Stakeholders**	7	14%	14%	
Fundamental to the success is the identification and communication of the value the Paperless Trading project will bring to each of the key stakeholders. A concrete measure of the value of a Paperless Project is the Internal Rate of Return (IRR) , which measures the incremental financial return of benefits (income) over costs for a defined period. However for some projects, for example infrastructure projects, it is difficult to measure the returns, as they may affect the whole economy or organization. A simplified IRR template is available to do a high-level calculation to encourage thinking about the benefits and the costs and to have a **7 = "Internal Rate of Return" (IRR) over 5 years is more than 40% above the increase of the Consumer Price Index (CPI)** **5 = IRR around 30%; 3 = IRR around 20%; 2=IRR around 10%** **1 = Infrastructure project where the IRR cannot / will not be calculated.**				
2 **Political / Executive Commitment, Top Management Support**	7	14%	14%	
Political Will or Top Management support is often cited as the key success factor in Paperless Trading projects primarily because of the need to drive consensus amongst diverse stakeholders. It is good practice to establish a structure in which the top executive (e.g. Prime Minister or Cabinet Minister or their delegate, for Government projects; or CEO or similiar for the Private Sector) steers the initiation and implementation of the project, to ensure funds and the right resources are made available, to mediate and forge **7 = Assured of Complete Top Level Support including funding and resource availability; 0 = There is no top level support**				

3	Driver for Community Adoption	7	20%	20%	
	Successful paperless trading projects are characterised by a very large proportion of the target community being active users, with similarly a large proportion of the target documents being "paperless". Because adopting paperless trading practises often requires process change across a number of organizational units, and the related technolgy changes may be costly, a				
	7=Mandated by Government **5=Mandated by Key Hub with a loss of revenue and/or revenue opportunity for those partners who cannot / choose not to comply** for Key Players in Target Community; Attractive Incentives such as Free Trial; Government Subsidy **1= Trends (others do it, so I do it)** **0= No discerible overriding business driver**				

4	Comprehensive Legal Framework	5	5%	4%	
	For the Government, and purists, all participants in a Paperless Trading project should be covered by mutually enforceable electronic transaction laws, and privacy laws, such as for data and personal information that complements the underlying business transaction, with comprehensive digital identity management (e.g. issued by Government recognized Certification Authorities); mutual recongition between different jurisdictions, all electronic transactions digitally signed and encrypted; clear liability limits * Changes in legislation can sometimes be required in order to facilitate electronic data submission/exchange and/ or an electronic signature system.* * At the other end of the scale, in some commercial communities the paperless exchange of information is seen as an efficient operations tool to complement the physical business and personal relationships, and comprehensive security and legal protection for electronic transaction is*				
	7= All participants covered by a mutually enforceable electronic transaction law and ICT security framework that complements the underlying business transactions; relevant legislation has been considered and if necessary changed to accommodate the specific paperless service.				

5= Participants in different economies are covered by different electronic transaction laws that each individually complements the underlying business transaction. Participants agree to conduct business electronically for example by contract with security appropriate to the sensitivity of the transactions **1=There is no understanding of the legal protection for electronic transactions and only minimal security is implemented**				

5	**Operating Model and Public Private Partnership**	5	4%	3%	
	Cooperation between the public and private sector is almost always essential to success in Paperless Trading projects involving the community and Governments. The nature of the cooperation will depend on the specific situation in the economies involved. Pariticularly in Asia there has been success with a structured Public Private Partnership (PPP) model, where government, sometimes together with the private sector, establishes a company to be operated on commercial principles with the mission to operate Business to Government electronic document services. The government will usually take significant initial stake and will often give preferentail treament to this company for example through monopoly licenses or limited competition. Government will also establish an agency to oversee the progress of this company in achieving the government's **7= Government and the Private Sector cooperate strongly in support of paperless trading through PPP service providers company structures or through other engagaement models that ensure both the community and government are actively involved in driving paperless traing forwarder, within the legal constraints of the** **1=There is very little formal or informal cooperation between the public and private sectors to promote paperless trading.**				

6	**Technology Readiness**				
	In many economies technology and service providers' readiness is no longer an issue. However it is still a pre-requiste and can still be an issue outside of the major cities, for example in remote ports, border control points or the trucking sector. Therefore it is important to consider the target community sector by sector and location by location, carefully.				

#	Item	Score	%	%
6	*Telecoms/Internet Infrastucture*	1	2%	0%
	All participants in the target community have access to Broadband Internet or mobile Internet at "afforable" prices - relate to commonly used ratio e.g. 10 Big 7 = All have such acess; 0 = No access			
6	*Computer Ownership by Target Community*	7	2%	2%
	7=All in community have PC's; 0=None in the community have PC's			
6	*B2Bi Technology Readiness of Target Community*	1	2%	0%
	7 = All in target community have B2Bi Capability; 0 = none have B2Bi capability			
6	*Availability of Proven Paperless Trading Platform*	1	2%	0%
	7 = Proven paperless trading platform available ; 0 = none available			
7	**Effective Program Management**	7	14%	14%
	Effective Program Management, and particularly proactive communciation amongst stakeholders, is seen as a crucial success factor particularly because of the extent of collaboration required in Paperless trading projects. *Characteristics of effective program management include:* *Program oversight structure that includes steering committee (Project Management Group) led by the Top Executive with strong links to the key stakeholders to provide fiunding, skilled resources and the comittment to resolve issues. It should also include a Task Force to* **Clearly defined scope, objectives / goals and comprehensive requirements relevant to the scale of the project are defined** *Comprehensive approach to collaboration and communication amongst* *Proven, experienced project manager* *Known, proven skills of key project team members* *Phased implementation* *Effective change management and issue management and escalation process* *Effective team building skills to "create a team" suitable for the project. eg. iterative development* *7 = High score in all aspects; 0 = low score in all aspects*			
8	**Process Harmonization**	3	8%	3%

Many of the benefits of Paperless Trading accrue, not only from the "Paperless" part, but also due to simplifying the process, seamlessly integrating multiple processes and parties, removing redundancies, sharing data amongst different parties, in different economies through a common repository. This business process re-engineering and analysis is often accompanied by a data harmonization exercise which further simplifies processes and information structures. Adoption of international data structure standards facilate this process and also simplify interoperability and integration between the ICT applications of the different participants in

7 = Business Process Analysis is done or planned by skilled resources and significant efficiencies in the end-to-end intergated processed identified. Use of International data structure standards have been considered and will be useful for

0 = No consideration has been given to business process re-engineering or process

9	Promotion and Marketing	3	7%	3%	

A comprehensive promotion and marketing program is often required to promote adoption of the paperless trading system by the target community. Characteristics of this program may include
     series of awareness seminars followed by workshops and training sessions for stakeholders
     Government incentives to offset ICT paperless trading adoption and other costs
     early-bird promotions/incentives to encourage early adoption
     periods of free trial
     free usage of the electronic system

7 = A comprehensive promotion and marketing program, relevant to the specifc context of the specific Paperless Trading project, that has considered the above characteristics and more, has been put in place

0 = No consideration has been given to a comprehensive promotion and marketing

10	Ease of Use; Training; Support	3	6%	3%	
	While ease of use is often a given in today's world of intuitive software, insufficient attention to ease-of-use and ease with which ICT applications can be interconnected or interoperated, can severely and adversely affect trasnaction take-up by the community. Similarly, even for the simplest systems comprehensive training should be conducted, and comprehensive customer support made available with the aim to satisfy customers with the *7 = Ease of use has been or will be included as a key design criteria, and a comprehensive training program and support structure with sufficient and skilled resources, relevant to the specific context of the Paperless Trading project, is* *0 = No consideration has been given to ease of use or to a comprehensive training and support program*				

Appendix D

Economy Level
Paperless Trading Key Performance Indicators (KPIs)

Appendix D: Economy Level Paperless Trading Key Performance Indicators (KPIs)

1.   Introduction

This appendix suggests Paperless Trading economy level Key Performance Indicators (KPIs) that APEC member economies may consider as alternatives or additions to those specified in the report " July 2009 Component I – Assessment of Current KPIs, Recommended Additional KPIs and Proposed Methodology for Measuring the Targeted *(Trade Transaction)* Costs Reduction".

Simple key performance indicators to assess the level of achievement, are separated into

- o Direct KPIs - those that directly measure the paperless take-up, and
- o Indirect KPIs - those that measure the business or process benefits of the paperless project

The indirect KPIs are the more important, but generally are more difficult to measure. It is also often difficult to quantify the contribution of the Paperless Trading system from the achievement specific KPI.

2.   Direct KPIs

	Key Performance Indicator	Formula	How to Measure
1	Community Take-up % and Numbers at defined periods	Number of Organizations active in the Paperless Trading system (e.g. Exporters or their agents, Forwarders etc – depends on the process) * 100 / total number of organizations involved in the "paper" process and the paperless process.	The Government agencies will be able to assess the size of the community related to the Government initiatives being assessed. The operators involved in Government paperless projects will track the exact number of active paperless participants. For the private sector, the relevant business associations for each sector may be able to estimate the total size of the community. A regular survey done by the business association, using statistical techniques may be able to assess

			the commercial take-up of paperless trading covering government and purely commercial projects. This may be measured annually or once every two years.
2	Paperless Document Take-Up% and Volume at defined periods	Number of paperless document (government + commercial) * 100 / Total number of documents (government + commercial)	Estimate number of paper documents types and number **in scope** to get total market size; The operators involved in documents exchanged with Government will track the exact number of paperless documents, while Government may be able to assess the paper documents still being used. A survey done by the business association, using statistical techniques will be able to assess the commercial take-up of paperless trading covering government and purely commercial projects. This may be measured annually or once every two years.
3	Paperless Document (with paper supporting documents) % share and volume for all document types in scope.	Number of paperless documents which still require paper supporting documents * 100 / Total number of documents Paper supporting documents may be required because legislation requires paper documents still to be submitted or for operational reason – for example to cross check a certificate or commercial invoice, but the computer system cannot process those types of documents.	Based on the total number of documents in (3) above, estimate the total number of documents and document types within the project scope that still require paper documents support paper. Calculate the number of paperless documents that require paper supporting documents, based on the paperless documents from (3) above, and the estimate of the ratio that requires paper supporting documents This may be measured annually or once every two years.
4	Paperless Trade Volume and	Calculated as estimated % of electronic document share of total of Government	The trade volume and trade value will be known from Government statistics and/or the WTO.

	Value	and commercial documents *X* Trade Volume and Trade Value respectively	To estimate the trade volume and trade volume handled "paperless", estimate the total number of trade documents, government and commercial, processed by the economy, and then the paperless share of this. A more precise method may be to estimate the total trade documents for each sector (e.g. air, ocean, land, payments etc) and estimate the paperless share in each sector and then base on the trade volume and value of each mode, calculate the paperless trade volume and value.
5	Error % at defined periods and Volume (Government transactions only)	Number of paperless documents queried or in error * 100 / Total number of paperless documents	The operators involved in the Government Paperless system will know the exact number of paperless documents and the rejection or query rate. It is unlikely reliable information can be provided by the private sector. This may be measured annually or once every two years.

3.   Indirect KPIs

	Key Performance Indicator	Formula	How to Measure
1	Average and Maximum Process Time. For example, for Customs Clearance, Permit/License/ Certificate Application and Approval for defined periods (e.g. for one month; six months)	The average and maximum time of all process executions, for the defined period for the process in question. The time for process execution will be from the deemed start time for the process to the deemed completion time. A key process to measure is may be from the time the first application for import (or export) is received to the time when the goods leave the controlled area.	This will depend on the process and the systems employed. The WCO Time Release Survey methodology may be used for a sampling of customs clearance time. In some systems this may be able to be measured automatically. If a new system is being implemented it is recommended to be able to measure the end-to-end process times automatically

There are other useful items such as workload reduction, cost savings, and cash flow improvement, but as these are difficult to measure and are difficult to quantify the attribution of the introduction of Paperless Trading at the economy level, it is recommended to focus on just a few KPIs and measure these comprehensively.

Appendix E

Public Sector Responses – Case Studies

Table of Contents

1. CANADA

SECTION 2 - Best Practices of Paperless Trading Projects
This part of the questionnaire will collect and analyze the case studies of paperless trading implementation in depth to identify the critical success factors and key performance indexes for the best practice of a paperless trading project.

Definition: Paperless trading project refers to a project that is implemented to facilitate the exchange of international trade related information.

Part 1: Understanding of a paperless trading project

Question 1   In your opinion, what's your perception of a paperless trading project? (multiple choices)

G2G information/documents exchange   B2B information/documents exchange

B2G information/documents exchange   B2C information/documents exchange

C2C information/documents exchange   Others, pls. state_____

Question 2   How important do you think is paperless trading project?

Very important   Important   No comment

Not important   Least important

Question 3   What do you think are the criteria to succeed in a paperless trading project?

- Better Coordinated Border Management or CBM is important to succeed in a paperless project. It involves better coordination, communication and cooperation between the various border agencies and regulatory authorities.
- The Canadian model is the following: a single agency is responsible for Customs, immigration, intelligence and enforcement, as well as food, animal and plant inspection, but solely with authority at the ports of entry.

A strong governance structure and senior level commitment are critical
o   Early, ongoing engagement with all stakeholders is key
o   Clearly defined approach to resolving issues is central to maintaining support and momentum
o   Comprehensive approach to funding is essential

Take time to define requirements
   Needs Assessments of OGDs should address:
o   Current Situation
o   Future State
o   Readiness to proceed

Ensure policy foundation in place
o   A comprehensive legislative and regulatory review is an important first step to ensure necessary foundation is in place to support ability to require, use and share electronic trade data.

Obtain stakeholder buy-in as soon as possible
o   Meaningful, strong support from all parties is required
o   OGDs, trade, international institutions, etc.
o   Early and ongoing consultations and cooperation with OGDs and the trade community is crucial as program requirements are being defined and cost estimates are being established.
o   CBSA invested significantly in working closely with OGDs to assess their requirements and capacity to adopt Single Window Framework
o   This work helped identify a few "early adopters" for us to work with, as others seek funding and legislative amendments

Question 4   What do you think is the value proposition of a paperless trading project?

Value for government:
o   Improved consistency, quality and timeliness of trade information
o   More rigorous risk assessment of cargo prior to arrival
o   Strengthened inter-agency information sharing
o   Better ability to meet international obligations

Value for trade community:
o   Greater consistency, transparency and predictability in government processes
o   Reduced costs of compliance
o   Faster border clearance times

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the ***local*** paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

1. The Single Window Initiative (currently in Analysis and Design Phase) will be used to answer questions 6-24.

2.

3.

Most successful project:

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)

Please state the stakeholders of this project and briefly explain the roles they play. |

Example: Customs broker – assist the shipper to declare customs declaration.

1. 43 programs, representing 10 departments/agencies led by the CBSA are actively engaged in the Single Window Initiative: Canadian Food Inspection Agency, Canadian Nuclear Safety Commission, Fisheries and Oceans Canada, Foreign Affairs and International Trade Canada, Environment Canada, Health Canada, Industry Canada, Natural Resources Canada, Public Health Agency of Canada, Transport Canada.

2. Trade chain participants (importers, customs brokers, freight forwarders)

3. International organizations and initiatives

o   World Customs Organization (WCO)
o   Asia-Pacific Economic Cooperation (APEC)

4. U.S. CBP – International Trade Data System (ITDS)

Question 7	How long is the development and Implementation time of this project?

< 6 months	6 months to 1 year	1 to 2 years
2 to 3 years	3 to 5 years	> 5 years

Question 8 Budget from:	Where is the budget from and how much is it for this project? The 2005 Budget allocated funding to: Advance Interdepartmental Reporting Initiative (AIRI) ($14.8M total over 5 years) which encompasses the OGD Single Window Initiative and the Interdepartmental Marine Conveyance Initiative (IMCI)) The MC provided **$9.98M plus $2.5M ongoing for the OGD SWI** USD _____
Question 9	What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain) The OGD SWI will integrate the reporting needs of OGDs into existing customs reporting processes in order to eliminate paper reporting for OGDs to the extent possible
Question 10	Please explain the scenario ***before*** the paperless trading project is implemented and the process ***after*** the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project. Final project architecture has yet to be decided.
Question 11	Please state the documents being exchanged in this project and the standards you adopt.

Appendix E – Public Sector Responses – Case Studies

Documents: Standards:

1. _____   WCO Data Model V3

2. _____   UNEDIFACT Standard

3. _____   ANSI

                                              Others TBD

Question 12   Please explain the business model of this project.

The business model for the OGD SWI is currently being defined.

Question 13   Who are the owner, developer and operator of this project?

Owner: Government of Canada   Developer: Government of Canada   Operator: Government of Canada

Question 14   Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users.

N/A – project under development

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
_____	_____	_____	
_____	_____	_____	_____ months/years
_____	_____	_____	_____ months/years
			_____ months/years

Question 15   If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	___N _	
Do you think you can reduce the project cost?	_N/A___	

Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.

_N/A___

Time:

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23 Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance   **Items**

Most Critical	Political will
	Mandate use
	Incentives to attract users' adoption
Critical	Process simplification
Critical	Process reengineering
Most Critical	Thorough communication among stakeholders
Most Critical	Data harmonization
Most Critical	Adoption of international document standards

	Free trial
	Free usage
	Security protection (use of encryption, PKI, digital signature etc.)
Critical	Attentive customer support and full training program
Critical	Promotion and marketing
Important	Early bird program to encourage early adoption
	Full integration of the process
	Coverage of Internet and bandwidth
	Ease of use application
	Others. Please state: _____

Question 24   Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

This information is unavailable until the OGD SWI project approaches implementation phase.

Obstacles/Challenges:	**Strategies:**	**Methods/Action Plans:**
1.		
2.		
3.		

2. HONG KONG, CHINA

Question 1   In your opinion, what's your perception of a paperless trading project? (multiple choices)

G2G information/documents exchange   B2B information/documents exchange

B2G information/documents exchange   B2C information/documents exchange

C2C information/documents exchange   Others, pls. state_____

Question 2   How important do you think is paperless trading project?

Very important   Important   No comment

Not important   Least important

Question 3   What do you think are the criteria to succeed in a paperless trading project?

Criteria include:

- create a regulatory environment such as establishing related legislation for paperless trading and strong government support;

- formulate standards for paperless trading;

- conduct consultation with stakeholders.

Question 4   What do you think is the value proposition of a paperless trading project?

Paperless trading is an important element of trade facilitation. Both the Government and traders will benefit in term of trade efficiency and cost reduction from the success of paperless trading project.

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the ***local*** paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

Most successful project: Government Electronic Trading Services (GETS)

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)
	Please state the stakeholders of this project and briefly explain the roles they play.

Example: Customs broker – assist the shipper to declare customs declaration.

GETS is the provision of electronic services to enable the trading community to submit certain trade-related documents to the Government electronically. The documents include Import and Export Declaration (TDEC), Dutiable Commodities Permit (DCP), Cargo Manifest (EMAN), Certificate of Origin (CO), Production Notification (PN) and Textiles Notification under the Textiles Trader Registration Scheme (TTRS).

Stakeholders involved in GETS are (i) traders and carriers – submit trade documents to the Government, (ii) service providers – provide front-end electronic service to the traders and carriers, and (iiI) the relevant departments in the Government.

Question 7	How long is the development and Implementation time of this project?

< 6 months	6 months to 1 year	1 to 2 years
2 to 3 years	3 to 5 years	> 5 years

Question 8	Where is the budget from and how much is it for this project?

We do not know the whole budget because the front-end services are developed by private service providers who recoup their investments by charging traders of using the services.

Question 9	What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

The project includes two parts – the back-end computer systems and the front-end services. The Government developed its back-end computer systems to support the processing of trade-related documents. Service providers in the private sector have been engaged in providing the front-end services (comprising the technical solutions, customer services and training support) to the traders.

Question 10	Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

[BEFORE]

Illustration:

Taking one of the documents, TDEC, as an example, importers/exporters submit TDEC in paper form to the Government.

[AFTER]

Illustration:

The electronic submission of TDEC was launched in April 1997 and made mandatory on 1 April 2000. TDEC must be submitted electronically through front-end service providers.

Differences:

Traders or carriers have to pay fees to the service provider for the use of front-end service. But they no longer need to print and arrange for the delivery of hard copies of the relevant trade documents to the government departments concerned, and it also saves queuing and waiting time for submission of the trade-related documents in person and hence improve the efficiency of their workflow. Electronic submission also saves manpower by using and reusing the electronic data, traders may also enjoy longer service hours and thus the chance of late penalties is reduced. Using electronic service also saves storage space, and enables better file management and records keeping.

Question 11	Please state the documents being exchanged in this project and the standards you adopt.

Documents:

Import/Export Declaration, Dutiable Commodities Permit, Cargo Manifest, Certificate of Origin, Production Notification and Textiles Notification under the Textiles Trader Registration Scheme

Standards:

ISO/IEC 10646, UTF-8, ebXML message service, MIME, XML, XSD, SOAP, TCP/IP, IP SEC, HTTP, SMTP, FTP, PKI, SSL, ISO 3166-1 Country Code, ISO 4217 Currency Code, UN/ECE Trade Facilitation Recommendation No.16, No.19, No.20 and No.21, IATA Airline Coding Directory, and Hong Kong, China Harmonized System Code _

Question 12	Please explain the business model of this project.

The service providers are appointed by the Government to provide GETS front-end services. They recoup their investment in the development and operation of the front-end system by levying service charges on users of their services. Traders or carriers submit the trade documents electronically on their computer systems at their offices to a service provider's front-end system. If traders or carriers cannot manage this, they may also submit the trade document in paper form to a conversion centre operated by the service provider, and the staff in the centre will input the data on the paper trade document into its front-end computer system.

The service provider, upon receiving the electronic data, confirms the identity of the sender, validates the data, consolidates data from several parties where necessary, collects Government charges for trade document and transmits the data to the Government's back-end computer systems. Upon receiving the data from the service provider, the Government processes the data and shares the necessary information among the relevant departments for the purposes of cargo clearance, compilation of trade statistics or import and export licensing control.

Question 13	Who are the owner, developer and operator of this project?

Owner:	Developer:	Operator:
Front-end system – service provider	Front-end system – service provider	Front-end system – service provider
Back-end system – Government	Back-end system – Government	Back-end system – Government

Question 14	Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users.

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
Around 64,000	Traders and carriers	N/A	By 2006

Question 15	If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	No	
Do you think you can reduce the project cost?	No	
Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.	No	

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 16	How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Tasks: For example : processing time for dutiable commodities permit applications

BEFORE time: 2 days

AFTER time: 0.5 day

Question 17	How much cost saving has the project brought you? Please indicate various costs in details.

For Government, the benefits are :
- Reduction in consumables and stores
- Savings in rental space which would otherwise be used for paper document storage

Question 18   How much human resource saving has the project brought you?

Staff savings through streamlining of work and elimination of certain manual processes.

Question 19   How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed? N/A

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

_____ documents/forms simplified

_____ documents/forms removed

_____ data elements harmonized

Question 20   Did the project bring you more revenue? If yes, how much?

Yes, as a result of better detection of non-lodgement of trader declarations and import and export statements for dutiable commodities.

Question 21   Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

Yes, such as reduction in paper cost.

Question 22   Please state other synergies or intangible benefits after the implementation of this project.

Intangible benefits include:
- Reduction in time for compilation and preparation of management information reports
- Achieving high accuracy checking by automated cross matching of data to eliminate human error
- Facilitation of information transfer and sharing between and within departments

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23   Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance		Items
	2	Political will
	2	Mandate use
	1	Incentives to attract users' adoption
	2	Process simplification
	2	Process reengineering
	1	Thorough communication among stakeholders
	2	Data harmonization
	2	Adoption of international document standards
	3	Free trial
		Free usage
	2	Security protection (use of encryption, PKI, digital signature etc.)
	3	Attentive customer support and full training program
	3	Promotion and marketing
		Early bird program to encourage

early adoption

2   Full integration of the process

2   Coverage of Internet and bandwidth

3   Ease of use application

Others.   Please   state:
_____

Question 24   Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:	Strategies:	Methods/Action Plans:
Readiness of the users for full migration from paper form to electronic form	Consultation	Closely liaised with the users, conducting joint testing and free trial, with a view to agreeing a timetable for migration. Allowed a reasonable transition period during which either paper or electronic form was acceptable.

3. KOREA

SECTION 2 - Best Practices of Paperless Trading Projects
This part of the questionnaire will collect and analyze the case studies of paperless trading implementation in depth to identify the critical success factors and key performance indexes for the best practice of a paperless trading project.

Definition: Paperless trading project refers to a project that is implemented to facilitate the exchange of international trade related information.

Part 1: Understanding of a paperless trading project

Question 1   In your opinion, what's your perception of a paperless trading project? (multiple choices)

  G2G information/documents exchange   **B2B information/documents exchange**

  B2G information/documents exchange   **B2C information/documents exchange**

  C2C information/documents exchange   Others, pls. state_____

Question 2   How important do you think is paperless trading project?

  Very important   Important   No comment

  Not important   Least important

Question 3   What do you think are the criteria to succeed in a paperless trading project?

1. Logistics and customs area
2. Area of authorizations for trade
3. L/C and other financial related area

Question 4   What do you think is the value proposition of a paperless trading project?

1. Realizing cost reduction overall areas of trading
2. Giving more efficiency (Time Saving, No Paper Documents)
3. Offering easier way for cross border trading

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5   Please list out the *local* paperless trading projects that you have

implemented in your economy and select the most successful one in your opinion.

1. e-L/C(Letter of Credit)

2. Manifest Consolidation System(MFCS) and Cargo Tracking Service

3. Licensing and Approval Service for Export and Import

4. e-Trade Document Circulation System

5. e-B/L & e-Nego

Most successful project: Every project is successful and is related to others

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)
	Please state the stakeholders of this project and briefly explain the roles they play.

1. Banks and Korea Financial Transaction and Clearings Institute(KFTC)

2. Logistics companies and Korea Customs Service(KCS)

3. Licensing Agencies, KCS and Trading companies

4. Shipping companies and Trading companies

Question 7	How long is the development and Implementation time of this project?

< 6 months	6 months to 1 year	1 to 2 years
2 to 3 years	3 to 5 years	**> 5 years**

Question 8	Where is the budget from and how much is it for this project?

Budget from: Government and Private Sector   USD Over 20 Mil.

Question 9	What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

Diagram:
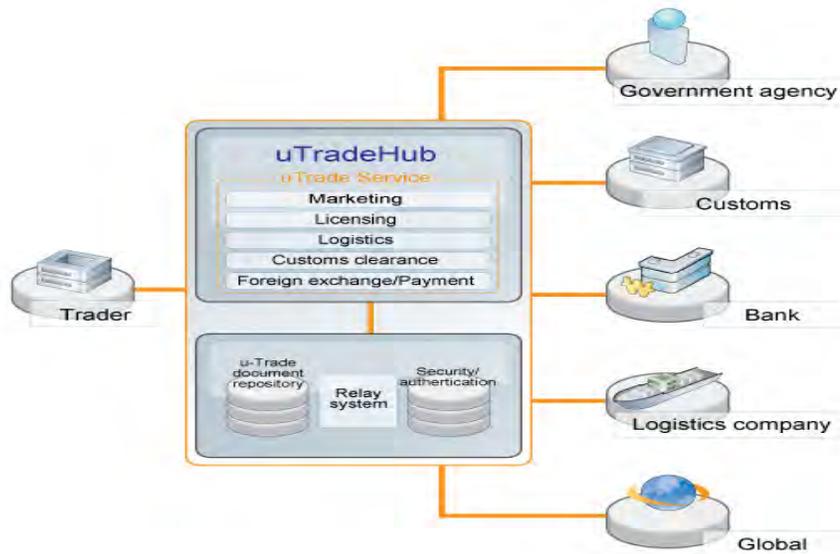
Illustration: The aim of the project is by single signing on to one entry point, users can utilize various functions for processing their trade procedures from marketing to financial settlement.

| **Question 10** | Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project. |

Example: uTradeHub Service of Korea
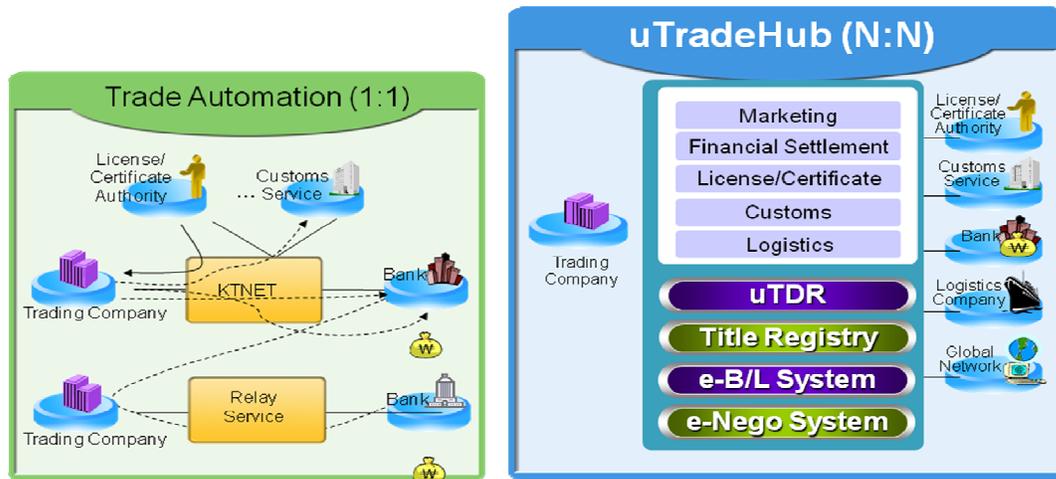
Illustration: It was 1:1 Trade Automation Service mainly based on VAN/EDI protocol in 1990's of Korea. Trading companies and other trade relevant agencies and banks were connected separately and individually. uTradeHub, as an web based national e-trade service, offers users free access to the system and makes them enjoy more various and powerful functions for international trade than ever before.

Differences:

Users can enjoy one-stop e-Trade service by once logging on uTradeHub wesite. Trade company who has an internet access can always utilize the services. There are no needs for the costs of data or system integration. In uTradeHub, we established electronic trade document repository (e-TDR) for recycle users' e-documents repeatedly.

Question 11	Please state the documents being exchanged in this project and the standards you adopt.

All documents circulating in the e-Trade service are designed by international standard referred in question no. 6

Category	Generated by the traders	Issued by other related parties
Documents	• **Bill of Exchange** • **Commercial Invoice** • **Packing List** • **Negotiation Application** • **Negotiation Claim Application**	• **Letter of Credit** • **Bill of Lading** • **Insurance Policy** • **Certificate of Origin** • **Customs Clearance Permit**

Question 12	Please explain the business model of this project.

Korean Government (MKE: Ministry of Knowledge Economy) takes in charge of the whole project. KITA supports the project by its man-power and matching budget. System is now operated by KTNET, subsidiary of KITA. Some profits are created by the operation of the system, but the profits are reused for operating and upgrading the system. e-Trade is wholly non-profit public service in Korea.

Question 13	Who are the owner, developer and operator of this project?

Owner: Government
(Ministry Knowledge Economy)

Developer: System Integrators
 in Korea

Operator: KTNET

Question 14	Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of

<div align="center">users.</div>

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
Over 12 thousand _____ _____	Overall trade relevant__ _____	_____ _____ _____	___5_____years _____ months/years _____ months/years

Question 15	If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	___Y	
Do you think you can reduce the project cost?	___Y	
Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.	___Y Time:	

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 16	How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Example

Tasks: Negotiation approval

BEFORE time: 2-3 days   **AFTER** time: within one day

Time saving can be vary in terms of individual documents for e-Negotiation

Question 17	How much cost saving has the project brought you? Please indicate various costs in details.

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

Never been evaluated.

Question 18   How much human resource saving has the project brought you?

_____

_____

_____

Never been evaluated.

Question 19   How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

Types of Business	Documents Number	Elements Total		non-Standardized Data Set	Standardized Data Set (Re-usable elements)
Trade Related	25 Documents		**Perform Data Harmonization** →→→		
Foreign Exchange & Finance Related	57 Documents				
Land Carriage Related	6 Documents	about 7000 elements		about 700 elements	about 2700 elements
Insurance on Cargo Related	8 Documents				
Customs Clearance Related	6 Documents				
the others	20 Documents				

Question 20   Did the project bring you more revenue? If yes, how much?

It has been implemented as non-profit public business

Question 21   Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

Never been evaluated

Question 22   Please state other synergies or intangible benefits after the implementation of this project.

Cost reduction: $4.3 Bil/Year

● Cost reduction through trade
Automation: $ 2.5 Bil/Year
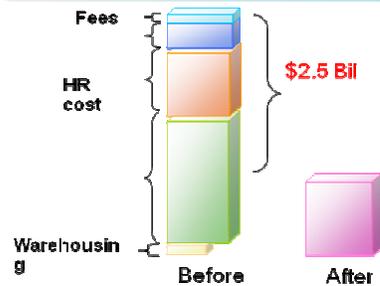
● Additional cost reduction effect
With uTradeHub : $ 1.8 Bil/Year

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23 Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the Items importance

1   Political will

2   Mandate use

5   Incentives to attract users' adoption

Process simplification

Process reengineering

Thorough communication among stakeholders

Data harmonization

Adoption of international document standards

Free trial

Free usage

Security protection (use of encryption, PKI, digital signature etc.)

Attentive customer support and full training program

Promotion and marketing

Early bird program to encourage early adoption

3   Full integration of the process

Coverage of Internet and bandwidth

4   Ease of use application

Others.   Please   state:
_____

Question 24   Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

<u>Obstacles/Challenges:</u>	<u>Strategies:</u>	<u>Methods/Action Plans:</u>
1. Coordination for the conflict among related authorization		• Long-time dialog • Governmental Willing to set the conflict
2. Difficulty in changing potential user's mind		• Consistent marketing and incentive giving • Make the system better and easier for using
3. System integration and networking of various authorization		• Improving solutions for networking • Set national

standards

Part 5: Illustration of *cross border* implementation of paperless trading project(s)

Question 25	Please list out the ***cross border*** paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

1. e-C/O exchange

2. e-Nego Pilot

3. e-Docs exchange in PAA network

Most successful project: 1, 2(not completed) & 3

Question 26	With which member economy have you implemented the above project(s)?

1. e-C/O exchange: Chinese Taipei

2. e-Nego Pilot: PRC, Japan

3. e-Docs exchange in PAA network: Chinese Taipei, PRC, Japan, and etc

Question 27	(The following questions refer to the most successful ***cross border*** paperless trading project that you have identified in question 22.)
	Please state the stakeholders of this project and briefly explain the roles they play.

1. e-C/O exchange: Customs, Chamber of Commerce

2. e-Nego Pilot: Banks and shipping lines

3. e-Docs exchange in PAA network: Logistics companies and trading companies

Question 28	How long is the development and

Implementation time of this project?

< 6 months   6 months to 1   1 to 2 years
                                                              year

2 to 3 years   3 to 5 years   > 5 years

Question 29   Where is the budget from and how
                                         much is it for this project?

Budget from: Government and other public sectors   USD

                                                                              Over 15 Mil._____

Question 30   What's the scope of this project?
                                         Please elaborate. (you may attach a
                                         scenario diagram to explain)

● e-Nego Pilot Case
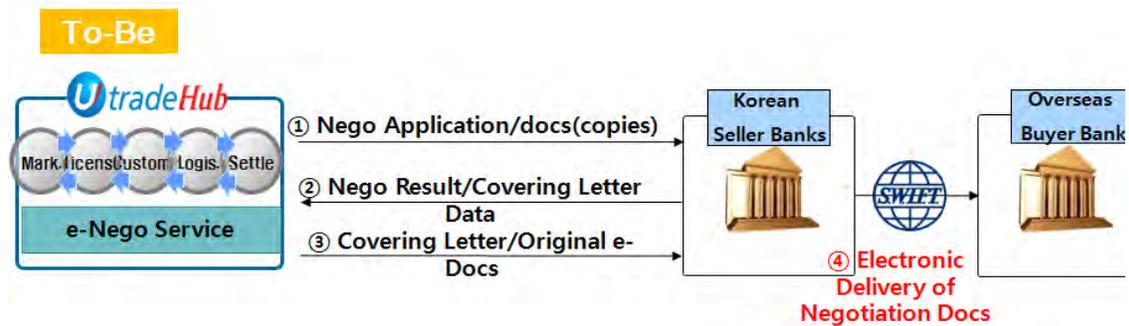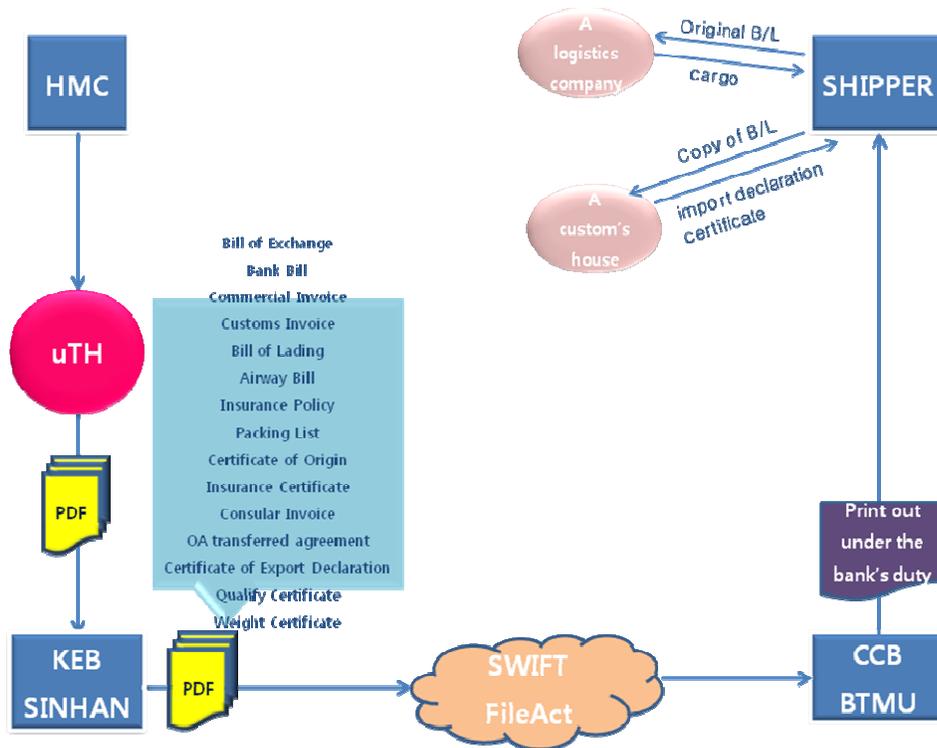
Bill of Exchange
Bank Bill
Commercial Invoice
Customs Invoice
Bill of Lading
Airway Bill
Insurance Policy
Packing List
Certificate of Origin
Insurance Certificate
Consular Invoice
OA transferred agreement
Certificate of Export Declaration
Qualify Certificate
Weight Certificate

| Question 31 | Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project. |
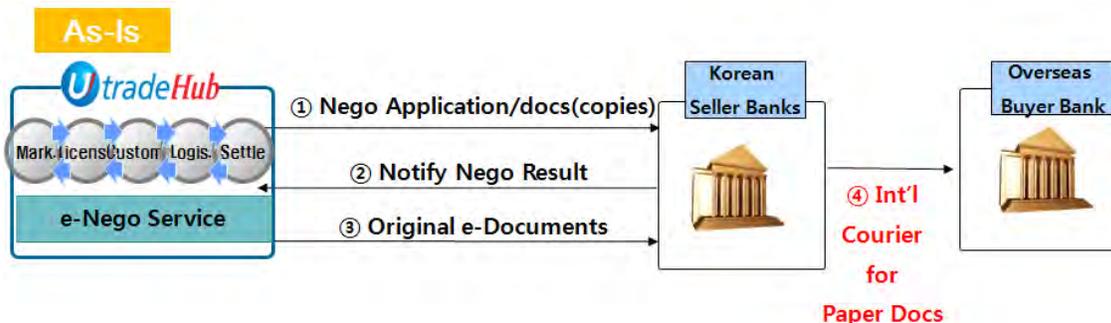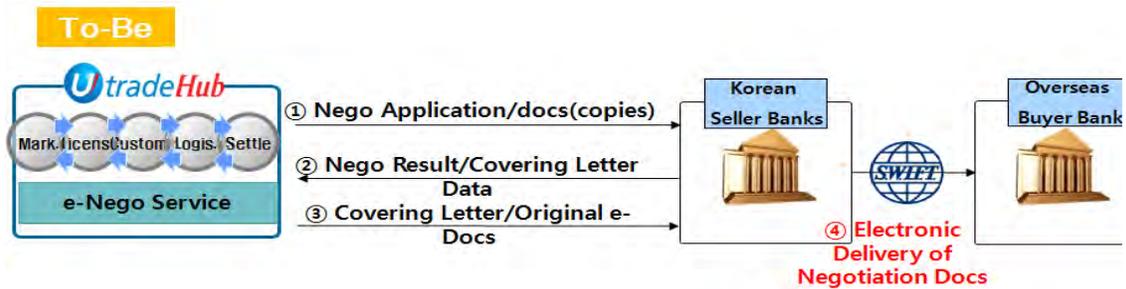
○ The domestic bank (negotiating bank) currently has to print out the negotiation documents from uTradeHub and forward them overseas via international express courier, but FileAct will enable electronic forwarding of such documents overseas.

○ The following tasks that the domestic negotiating bank handles offline after the evaluation of the negotiation document will be processed online at uTradeHub.
   - Drawing up of the bank's cover letter
   - Endorsement by the bank

○ The domestic bank will not have to print the documents out, but the overseas bank will have to do so.

Question 32	Please state the documents being exchanged in this project.

		Present	Planned
Cover Letter	How	Drawn up offline	Drawn up at uTradeHub (online)
	Who	Domestic negotiating bank	Upon domestic negotiating bank's request, automatically drawn up at uTradeHub
Endorsement (bill of exchange, bill of lading, and insurance policy)	How	Endorse hardcopy documents (offline)	Electronically endorsed at uTradeHub
	Who	Domestic negotiating bank	Upon domestic negotiating bank's request, automatically executed at uTradeHub
Printing out of negotiation documents		Domestic bank	Foreign bank

Question 33   Please state the documents being exchanged in this project and the document standards you adopt.

Documents: Standards:

1. All docuents for Negotiation   PDF_____

2. _____   _____

3. _____   _____

Question 34   Please explain the business model of this project.

This is global cooperation model, not for revenue or other profits

Question 35   Who are the owner, developer and operator of this project?

Owner: Developer: Operator:

This is global cooperation model, not for revenue or other profits

Question 36

Please state the number of users and the industries they belong to in this project. Also please state how long your project spent to get to this number of users.

● e-Nego Pilot Case

Number of users:

_____20_____

_____

_____

Industries:

_banking, shipping, trading insurance__

_____

Time spent to get to this number of users:

____1.5_____years

_____ months/years

_____ months/years

Question 37

If you were to start the project all over again, what's your comments in regards to the below items?

Items: Yes/No   How? (Methods)

Do you think you can shorten the project implementation time?

__Y__

Do you think you can reduce the project cost?

___Y_

Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.

___Y

Time:

Part 6: Value Propositions of the above project(s)

Question 38

How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Tasks: Delivery of negotiation documents

BEFORE time: _____5-7_____   minutes   hours   days   weeks   months

AFTER time: _____Real time_____   minutes   hours   days   weeks   months

Question 39   How much cost saving has the project brought you? Please indicate various costs in details.

(currency: _____) $_____ for _____
(currency: _____) $_____ for _____
(currency: _____) $_____ for _____

Too complicated to state as this format. More information can be available through the contact point at the end of this questionnaire.

Question 40   How much human resource saving has the project brought you?

Never been evaluated

Question 41   How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

_____ documents/forms simplified

_____ documents/forms removed

_____ data elements harmonized

Question 42   Did the project bring you more revenue? If yes, how much?

This is global cooperation model, not for revenue or other profits

Question 43   Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

Question 44   Please state other synergies or intangible benefits after the implementation of this project.

Expected Outcomes from Cooperation(e-Negotiation)

uTradeHub

○ Increased efficiency of uTradeHub e-negotiation service is expected to encourage much greater us of the service by both domestic and foreign banks.
○ Since SWIFT, an existing inter-bank communications system, is used, e-negotiation documents can be sent and received even between countries at very different stages of development of e-trade, creating a golden opportunity for a Korean type of e-negotiation system to proliferate globally.

Traders (Exporters)

○ Ability to electronically send and receive major negotiation documents saves time and reduces costs.
○ Especially great benefits are expected with such neighboring countries as China and Japan since they will be no longer experience delays in arrival of the negotiation documents following the arrival of cargo.
○ Reduced overdue charges
○ No risk of losing important documents such as the bill of lading and insurance papers.

Banks

○ As the delivery of the negotiation documents is dramatically accelerated, it takes much less time to collect the money from the overseas bank.
○ Reduced overdue charges thanks to speedy collection of the proceeds.
○ Better customer service thanks to reduction in overdue charges incurred by traders

Part 7: Critical Success Factors of the above project(s) and Lessons Learnt

Our answers for Q 45.-Q 46 are same as Q 23 –Q 24 above

4. MALAYSIA

SECTION 2 - Best Practices of Paperless Trading Projects
This part of the questionnaire will collect and analyze the case studies of paperless trading implementation in depth to identify the critical success factors and key performance indexes for the best practice of a paperless trading project.

Definition: Paperless trading project refers to a project that is implemented to facilitate the exchange of international trade related information.

Part 1: Understanding of a paperless trading project

Question 1   In your opinion, what's your perception of a paperless trading project? (multiple choices)

<mark>G2G information/documents exchange</mark>   <mark>B2B information/documents exchange</mark>

<mark>B2G information/documents exchange</mark>   <mark>B2C information/documents exchange</mark>

C2C information/documents exchange   Others, pls. state <mark>G2C and G2B</mark>

Question 2   How important do you think is paperless trading project?

Very important   <mark>**Important**</mark>   No comment

Not important   Least important

Question 3   What do you think are the criteria to succeed in a paperless trading project?

<mark>**Common Integration between players, awareness , good support of infrastructure and having trusted environment**</mark>

Question 4   What do you think is the value proposition of a paperless trading project?

<mark>**Reduce cost, increase efficiency, convenience, easy and increase volume and value of trade.**</mark>

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the ***local*** paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

i.   National Single Window project

ii.   SMK-DagangNet System

Most successful project: **National Single Window project**

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)
	Please state the stakeholders of this project and briefly explain the roles they play.

Example: Customs broker – assist the shipper to declare customs declaration.

1. **National Single Window – Online application for import/export permit, Customs Declaration (e-declare), Manifest (e-Manifest) and Preferential Certificate of Origin (e-PCO) and payment of Customs duty.**

2. **Benefits Customs and Permit Issuing Agencies as it is a cheaper option rather than manual and the public as it is faster, convenient and more efficient.**

Question 7	How long is the development and Implementation time of this project?

< 6 months   6 months to 1 year   **1 to 2 years**

2 to 3 years   3 to 5 years   > 5 years

Question 8	Where is the budget from and how much is it for this project?

Budget from: <mark>NOT APPLICABLE</mark>   USD <mark>NOT APPLICABLE</mark>

Question 9	What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

Diagram:
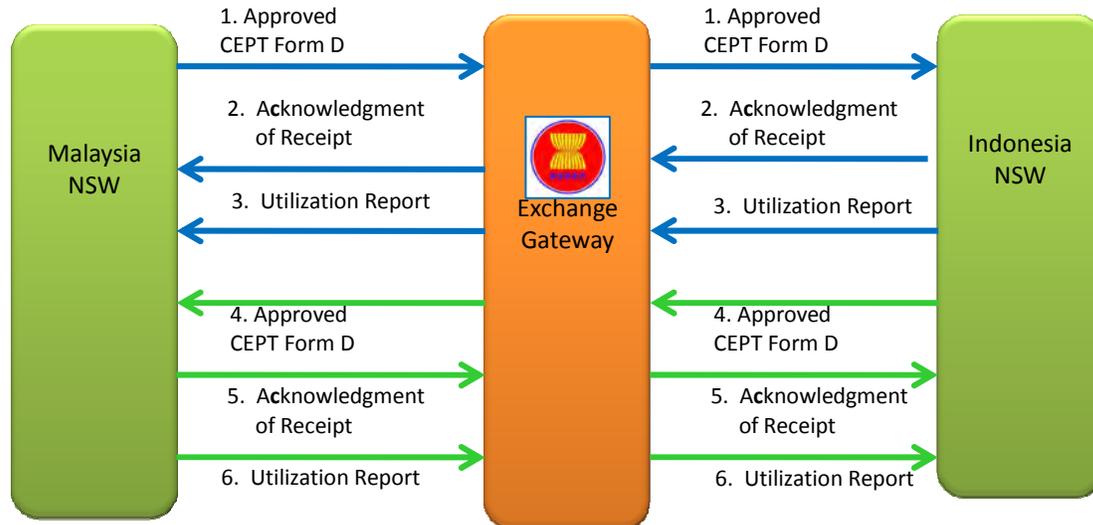
Illustration:

The ASW Pilot Project involves the electronic exchange of CEPT Form D between Malaysia and Indonesia.

Malaysia to Indonesia

- 乙、 **Under the pilot project, Malaysia will send a copy of approved CEPT Form D data using Malaysia NSW to the ASW Gateway which will pass this data on to Indonesia NSW,**

- 丙、 **Indonesia NSW will route the data to Indonesia Customs for their processing, and**

- 丁、 **An Utilisation Report on the usage of the CEPT and tariff concessions will be issued by Indonesia Customs.**

Indonesia to Malaysia

- 戊、 **Indonesia will send a copy of approved CEPT Form D data using Indonesia NSW to the ASW Gateway which will pass this data on to Malaysia NSW,**

- 己、 **Malaysia NSW will route the data to Malaysia Customs for their processing, and**

- 庚、 **An Utilisation Report on the usage of the CEPT and tariff concessions will be issued by Malaysia Customs.**

Question 10

Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

Business process reengineering for Customs and Permit Issuing Agencies (PIAs):

辛、   **reduce time taken for processing**

壬、   **cost reduce**

癸、   **agencies become more efficient**

Before	After
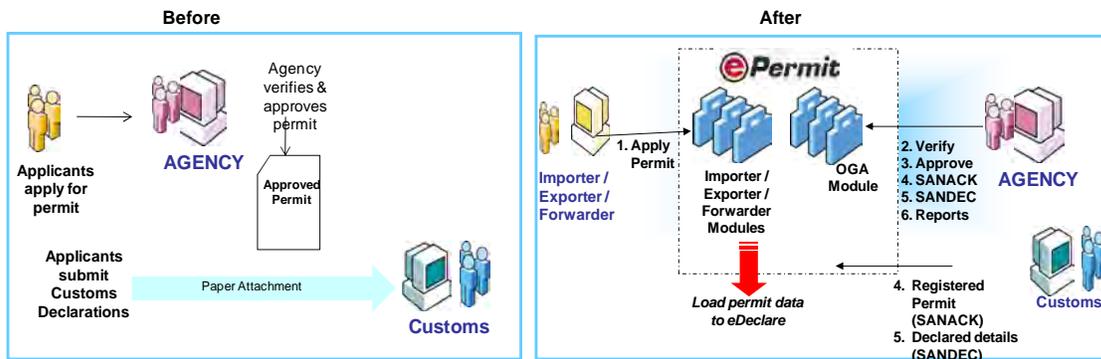
Proposed Process Flow
1. Applicants apply for permit via the Internet
2. Agency verifies permit
3 Agency approves permit
4. Agency receives registered permit details from KDRM
5. Agency receives declaration details from KDRM
6. Agency generates permit reports

Illustration:

1. **Application of permit will be done over the OGA counter**
2. **OGA requires at least 2 working days for approval**
3. **Applicant to come and collect the approved permit at OGA counter**
4. **Applicant will submit approved permit form to Customs**

Illustration:

1. **Application through Online System**
2. **Approval will be done immediately**
3. **Applicant will monitor permit approval via Internet and hard copy is not required to be printed out**
4. **Submission of permit to Customs via electronic**

Differences:

1. **Submission of permit application**
2. **OGA processing time (approval time)**
3. **Submission of approved permit to Customs**

Question 11	Please state the documents being exchanged in this project and the standards you adopt.

Documents:

1. **Permit Application Form**
2. _____
3. _____

Standards:

UN/EDIFACT , XML

_____
_____

Question 12	Please explain the business model of this project.

The NSW system is owned by the Government. DagangNet Technologies Sdn. Bhd. is the developer and operator and is allowed to charge service fees to users under privatisation concept to cover the investment for developing and operation of system.

Question 13	Who are the owner, developer and operator of this project?

==Owner:Government==   ==Developer:DNT==   ==Operator: DNT==

Question 14	Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users.
	==NOT APPLICABLE==

Number of users: Industries: Market Share: Time spent to get to this number of users:

_____   _____   _____

_____   _____   _____   _____ months/years

_____   **_____**   _____   _____ months/years

_____ months/years

Question 15	If you were to start the project all over again, what's your comments in regards to the below items?
	==NOT APPLICABLE==

Items: Yes/No   How? (Methods)

Do you think you can shorten the project implementation time?

Do you think you can reduce the project cost?

Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.   ____

Time:

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 16   How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Example:

Tasks: To apply for a certificate of origin

BEFORE time: 2 days   **AFTER** time: 10 minutes

Tasks: **To apply for permit application and getting approval from OGA**

BEFORE time: **2 working days**   minutes   hours   days   weeks   months

AFTER time: **15 minutes**   minutes   hours   days   weeks   months

Question 17   How much cost saving has the project brought you? Please indicate various costs in details.

Example: US$30 traffic and labor cost to apply the permit or CO at the OGAs' offices

(currency: MYR) $ 30 / trip for traveling costs to OGA office

         (petrol, toll, parking)

(currency: MYR) $ 30 / day for labor cost

         (hire a runner to do the job)

Question 18   How much human resource saving has the project brought you?

         NOT APPLICABLE

Example: 0.5 operator/month

_____

_____

_____

Question 19   How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

==The project has simplified the processes of getting approval at OGA, for example before implementation requires 3 level of approval, after implementation only requires 2 level of approval==

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

_____ documents/forms simplified

_____ documents/forms removed

_____ data elements harmonized

Question 20   Did the project bring you more revenue? If yes, how much?

==NOT APPLICABLE==

Question 21   Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

==NOT APPLICABLE==

Question 22   Please state other synergies or intangible benefits after the implementation of this project.

==Change of mind set, peace of mind and may operate from home/office==

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23   Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance   Items

==14==	Political will
==1==	Mandate use
==10==	Incentives to attract users' adoption
==8==	Process simplification
==7==	Process reengineering
==9==	Thorough communication among

stakeholders

5   Data harmonization

6   Adoption of international document standards

11   Free trial

Free usage

2   Security protection (use of encryption, PKI, digital signature etc.)

12   Attentive customer support and full training program

15   Promotion and marketing

Early bird program to encourage early adoption

13   Full integration of the process

4   Coverage of Internet and bandwidth

3   Ease of use application

Others.   Please   state:
_____

Question 24   Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:	Strategies:	Methods/Action Plans:
Examples: Hard to change users' behavior	Provide incentives to users	Subsidize the cost for software upgrade
1. To bring on board the 23 PIA's to connect to the NSW	Get mandate from Government	Consultation to inform the benefits of the system to PIA's
2. To get buy-in from users to use the system	Awareness Programmes	Several awareness programmes were held nationwide to inform

==with users==   ==the users of the NSW
system and its benefits==

Part 5: Illustration of *cross border* implementation of paperless trading project(s)

Question 25	Please list out the ***cross border*** paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

1. ==ASW Pilot Project for electronic exchange of CEPT Form D==
2.
3.

Most successful project: ==ASW Pilot Project for electronic exchange of CEPT Form D==

Question 26	With which member economy have you implemented the above project(s)?

1. ==Indonesia==
2.
3.

Question 27	(The following questions refer to the most successful ***cross border*** paperless trading project that you have identified in question 25.)
	Please state the stakeholders of this project and briefly explain the roles they play.

Example: Customs broker – assist the shipper to declare customs declaration.

1. MITI process and approve the CEPT Form D electronically for Malaysia and pass to Malaysia NSW

2. Malaysia NSW – receive Data and pass to ASW Gateway

3. Indonesia NSW – receive Data from ASW Gateway and pass to Customs Indonesia.

4. Customs Indonesia – receive Data from Indonesia NSW and issues Acknowledgement Receipt

5. Ministry of Trade, Indonesia – process CEPT Form D electronically for Indonesia and transit to Indonesia NSW

6. Customs Malaysia – receive CEPT Form D from Malaysia NSW and issue Acknowledgement Receipt

Question 28	How long is the development and Implementation time of this project?

< 6 months	6 months to 1 year	**1 to 2 years**
2 to 3 years	3 to 5 years	> 5 years

Question 29	Where is the budget from and how much is it for this project?

NOT APPLICABLE

Budget from: USD

_____

Question 30	What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

Diagram:
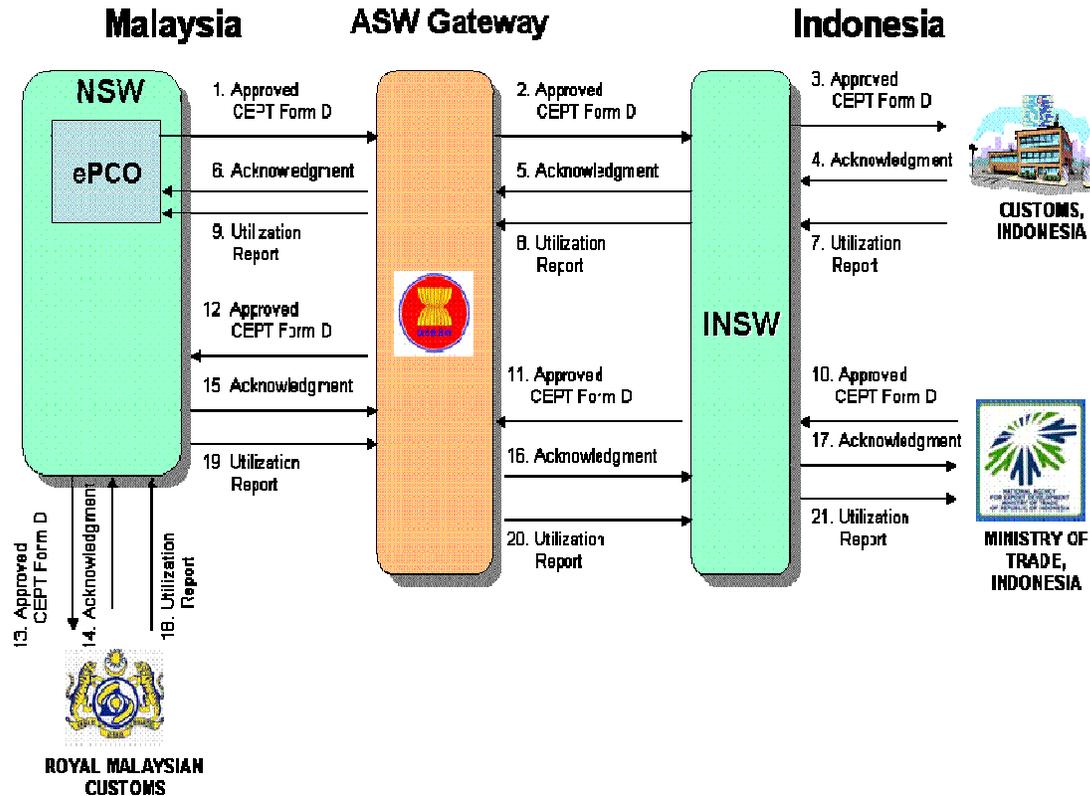
Illustration:

The following explains business process flow of MITI sends approved CEPT Form D to Indonesian Customs and to receive Utilization Report via ASW Gateway (ASW GW).

1. Through electronic Preferential Certificate of Origin (ePCO), MITI approve the CEPT Form D sent by Exporter. The approved CEPT Form D data is extracted from ePCO and sent in ASW message format to ASW GW.

2. ASW GW route the approved CEPT Form D data to Indonesian NSW (INSW).

3. INSW route the approved CEPT Form D data to Indonesian Customs.

4. 5. & 6. Indonesian Customs generate and send Acknowledgment to MITI via INSW, ASW GW and Malaysian NSW.

7. Indonesian Customs generate and send the Utilization Report to INSW

8. INSW transmit the Utilization Report to ASW GW

9. ASW GW route the Utilization Report to MITI via Malaysia NSW

|	
Question 31	Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

Paperless project for the exchange of CEPT Form D between 2 countries are not implemented yet. Perhaps it will be rationalised after 6 months of Pilot Implementation successful.

Question 32	Please state the documents being exchanged in this project.

CEPT Form D

Question 33	Please state the documents being exchanged in this project and the document standards you adopt.

Documents: Standards:

1. CEPT Form D   **XML**

2. _____   _____

3. _____   _____

Question 34	Please explain the business model of this project.

For Malaysia, the system is develop and operated by private sector and owned by Government

Question 35	Who are the owner, developer and operator of this project?

Owner: Government   **Developer: DNT**   **Operator: DNT**

Question 36   Please state the number of users and the industries they belong to in this project. Also please state how long your project spent to get to this number of users.

NOT APPLICABLE

Number of users: Industries: Time spent to get to this number of users:

_____   _____

_____   _____   _____ months/years

_____   _____ months/years

_____   _____ months/years

Question 37   If you were to start the project all over again, what's your comments in regards to the below items?

NOT APPLICABLE

Items: Yes/No   How? (Methods)

Do you think you can shorten the project implementation time?

Do you think you can reduce the project cost?

____

Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.   ____
                                                Time:

Part 6: Value Propositions of the above project(s)

Question 38   How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been

implemented.

<mark>**NOT APPLICABLE due to not fully operationalise**</mark>

Question 39 How much cost saving has the project brought you? Please indicate various costs in details.

<mark>**NOT APPLICABLE due to not fully operationalise**</mark>

Example: US$ 20 for getting a stamp from the Mission Office

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

Question 40 How much human resource saving has the project brought you?

<mark>**NOT APPLICABLE due to not fully operationalise**</mark>

Question 41 How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

<mark>**The project involves with the Pilot Project of exchanging the approved information of CEPT Form D for both countries. Thus, no documents or forms has been simplified and removed.**</mark>

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

_____ documents/forms simplified

_____ documents/forms removed

_____ data elements harmonized

Question 42 Did the project bring you more revenue? If yes, how much?

<mark>**NOT APPLICABLE**</mark>

Question 43 Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

<mark>**YES but figures are unavailable**</mark>

> **Question 44**   Please state other synergies or intangible benefits after the implementation of this project.

<mark>**Change of mind set, peace of mind and may operate from home/office**</mark>

Part 7: Critical Success Factors of the above project(s) and Lessons Learnt

> **Question 45**   Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance

Items

<mark>**14**</mark>	Political will
<mark>**1**</mark>	Mandate use
<mark>**10**</mark>	Incentives to attract users' adoption
<mark>**8**</mark>	Process simplification
<mark>**7**</mark>	Process reengineering
<mark>**9**</mark>	Thorough communication among stakeholders
<mark>**5**</mark>	Data harmonization
<mark>**6**</mark>	Adoption of international document standards

11	Free trial
	Free usage
2	Security protection (use of encryption, PKI, digital signature etc.)
12	Attentive customer support and full training program
15	Promotion and marketing
	Early bird program to encourage early adoption
13	Full integration of the process
4	Coverage of Internet and bandwidth
3	Ease of use application
	Others. Please state:
	_____

Question 46   Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

NOT APPLICABLE

Obstacles/Challenges:	**Strategies:**	**Methods/Action Plans:**
1.		
2.		
3.		

5. PERU

SECTION 2 - Best Practices of Paperless Trading Projects
This part of the questionnaire will collect and analyze the case studies of paperless trading implementation in depth to identify the critical success factors and key performance indexes for the best practice of a paperless trading project.

Definition: Paperless trading project refers to a project that is implemented to facilitate the exchange of international trade related information.

Part 1: Understanding of a paperless trading project

Question 1   In your opinion, what's your perception of a paperless trading project? (multiple choices)

x G2G information/documents exchange   x B2B information/documents exchange

x B2G information/documents exchange   x B2C information/documents exchange

x C2C information/documents exchange   Others, pls. state_____

Question 2   How important do you think is paperless trading project?

x Very important   Important   No comment

Not important   Least important

Question 3   What do you think are the criteria to succeed in a paperless trading project?

High-level government support

Adoption of standards recognized internationally.

Question 4   What do you think is the value proposition of a paperless trading project?

Reduce cost and time of transaction. Allow the traceability and audit of the government.

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the *local* paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

1. **International Trade Single Window (Most successful)**

2. **New Customs Clearance**

Most successful project:

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)
	Please state the stakeholders of this project and briefly explain the roles they play.

1. Importers, Exporters – allow them to fulfill all import, export, and transit-related regulatory requirements.

2. Customs broker – allow them to fulfill all import, export, and transit-related regulatory requirements on behalf of importers and exporters

3. Warehouses – allow them to confirm the release authorization of goods.

For further information, please visit: http://www.proyectovuce.pe/MainEN.aspx

Question 7	How long is the development and Implementation time of this project?

< 6 months   6 months to 1   1 to 2 years
year

2 to 3 years   **X** 3 to 5 years   > 5 years

Question 8	Where is the budget from and how much is it for this project?

Budget from: USD _____n.a._____

Question 9	What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

Diagram:
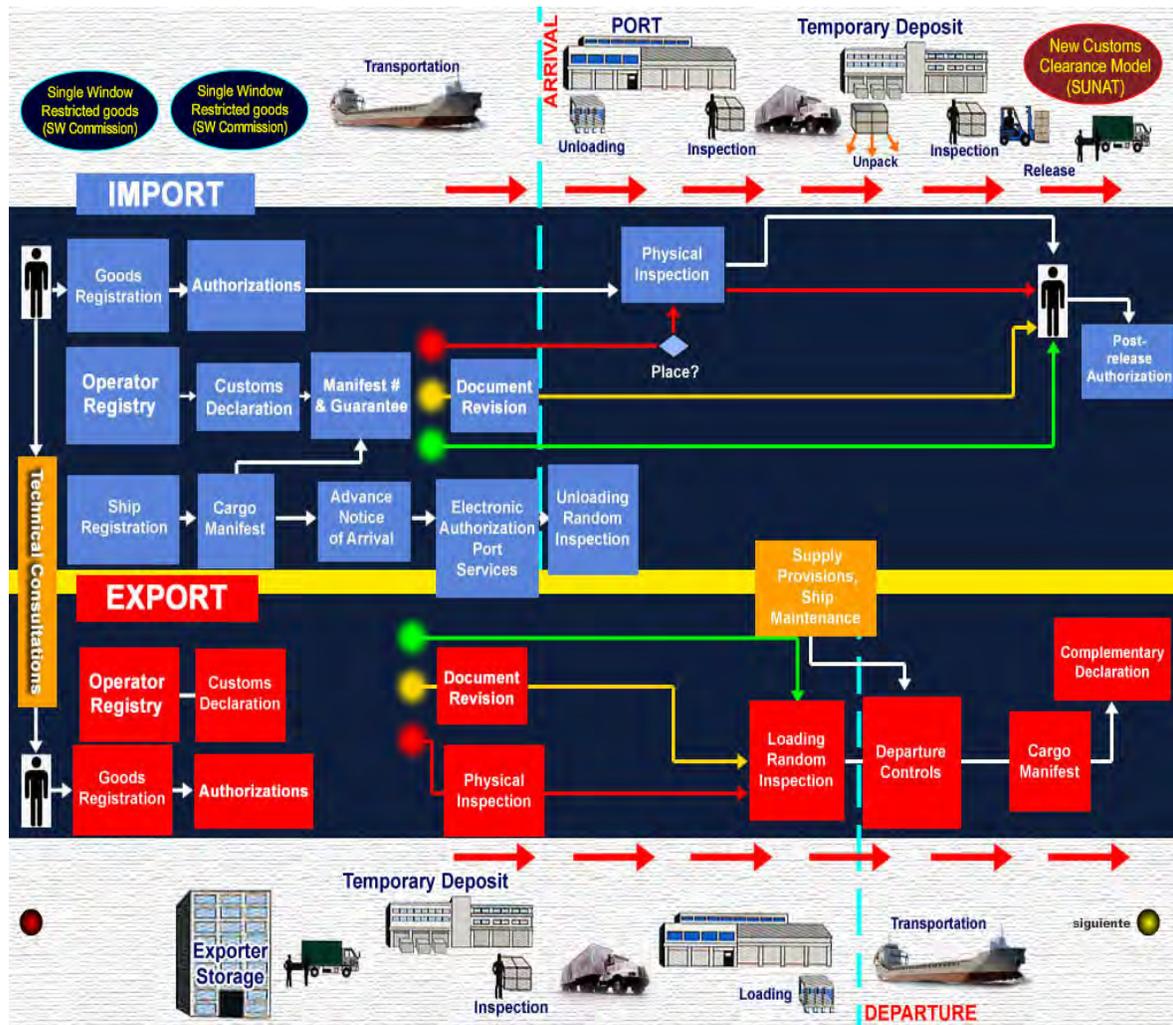
Illustration:

- **Process of Customs Community integrated**
- **Acceptance of electronic documents**
- **Standardized forms for requesting authorizations**
- **One Portal of Single Window for requesting authorizations, online information and monitoring**
- **Authorizations online as is possible**
- **Unique platform for electronic payment utilizing the private banks and embedded taxes**
- **Share information and eliminate unnecessary requirements**

Question 10

Please explain the scenario **before** the paperless trading project is implemented and the process **after** the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

[BEFORE]
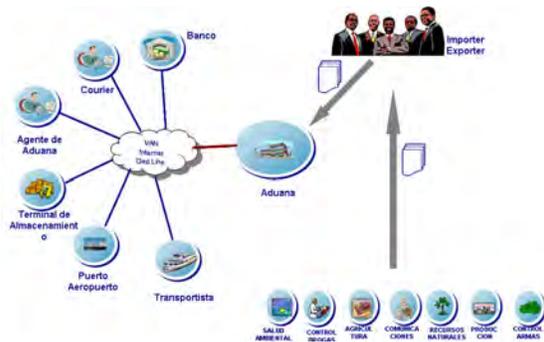
Illustration:

- **Documents presented by paper forms to OGAs**

- **Customs Administration integrated with International Trade Operators (B2G)**

[AFTER]
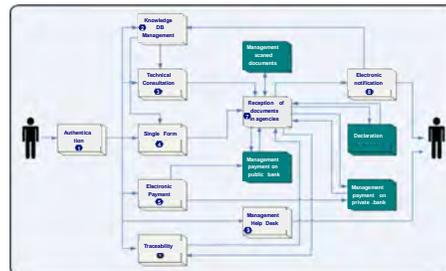
Illustration:

- **Integrated electronic service (B2G), including OGAs**

- **Electronic notification**

- **Electronic payment**

Differences:

- **Acceptance of e- documents (b2G and G2_,**

- **Integrated service**

- **Reduction of cost and time**

Question 11	Please state the documents being exchanged in this project and the standards you adopt.

Documents: Standards:

1. Customs Declaration_____   WCO DM_____

2. Cargo Manifest_____   UN CCL / CCTS_____

3. OGAs Licenses, Certifications_____   _____

Question 12	Please explain the business model of this project.

At the beginning we are planning to provide this service without cost.

Question 13	Who are the owner, developer and operator of this project?

Owner: Developer: Operator:

Peruvian Government is owner, developer and is under evaluation the Operator

Question 14	Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users.

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
_____	_____	_____	_____ months/years
_____	_____	_____	_____ months/years
_____	_____	_____	_____ months/years

Question 15	If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	**_Yes___**	
Do you think you can reduce the project cost?	**_No___**	
Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.	____ Time:	

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23   Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance

	Items
1	Political will
6	Mandate use
	Incentives to attract users' adoption
2	Process simplification
2	Process reengineering
7	Thorough communication among stakeholders
3	Data harmonization
3	Adoption of international document standards
8	Free trial
5	Free usage
5	Security protection (use of encryption, PKI, digital signature etc.)

9   Attentive customer support and full training program

9   Promotion and marketing

9   Early bird program to encourage early adoption

4   Full integration of the process

10   Coverage of Internet and bandwidth

6   Ease of use application

Others. Please state: _____

Question 24 Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:	Strategies:	Methods/Action Plans:
1. Hard to convince OGAs	**Provide incentives and obligations**	• **Mandatory Law** • **Provide them hardware and training** • **Approval of additional budget for them**

2

Part 5: Illustration of *cross border* implementation of paperless trading project(s)

Question 25 Please list out the ***cross border*** paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

Electronic Commerce Chapters of FTA recently negotiated and in force between Peru and their main trade partners (for example, Canada-Peru FTA, United States-Peru FTA) include provisions establishing that each Party shall endeavour to make trade administration documents available to the public in electronic form and to accept trade administration documents submitted electronically as the legal equivalent of the paper version of such documents..

Most successful project:

6. RUSSIA

SECTION 2 - Best Practices of Paperless Trading Projects
This part of the questionnaire will collect and analyze the case studies of paperless trading implementation in depth to identify the critical success factors and key performance indexes for the best practice of a paperless trading project.

Definition: Paperless trading project refers to a project that is implemented to facilitate the exchange of international trade related information.

Part 1: Understanding of a paperless trading project

Question 1   In your opinion, what's your perception of a paperless trading project? (multiple choices)

G2G information/documents exchange   B2B information/documents exchange

==B2G information/documents exchange==   B2C information/documents exchange

C2C information/documents exchange   Others, pls. state_____

Question 2   How important do you think is paperless trading project?

Very important   ==Important==   No comment

Not important   Least important

Question 3   What do you think are the criteria to succeed in a paperless trading project?

Develop federal program and get proper governmental foundation (finance) for paperless trading development

Question 4   What do you think is the value proposition of a paperless trading project?

7. CHINESE TAIPEI

SECTION 2 - Best Practices of Paperless Trading Projects
This part of the questionnaire will collect and analyze the case studies of paperless trading implementation in depth to identify the critical success factors and key performance indexes for the best practice of a paperless trading project.

Definition: Paperless trading project refers to a project that is implemented to facilitate the exchange of international trade related information.

Part 1: Understanding of a paperless trading project

Question 1 In your opinion, what's your perception of a paperless trading project? (multiple choices)

☑G2G information/documents exchange   ☑B2B information/documents exchange

☑B2G information/documents exchange   ☑B2C information/documents exchange

C2C information/documents exchange   Others, pls. state_____

Question 2 How important do you think is paperless trading project?

☑Very important   Important   No comment

Not important   Least important

Question 3 What do you think are the criteria to succeed in a paperless trading project?

- To obtain high-level support.
- To deliver simple, transparent and effective trading processes for traders.
- To balance and optimize the twin goals of trade facilitation and security
- To implement an integrated system that allows all parties to lodge information with single entry point to save the application time and cost.

Question 4 What do you think is the value proposition of a paperless trading project?

- Integration - Integrating licensing and customs clearance operations by driving trade processes simplification and reengineering.
- Streamlining & Simplifying - Streamlining processes and eliminating required attachment documents.
- Cost/Time Saving
- Commitment to Environmental Protection
- Competiveness Improvement

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the ***local*** paperless trading projects that you have implem**ented in your** economy and select the most successful one in your opinion.

1. **Trade Facilitation Program**

Most successful project: **Trade Facilitation Program**

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)
	Please state the stakeholders of this project and briefly explain the roles they play.

Example: Customs broker – assist the shipper to declare customs declaration.

1. Importer, Exporter & Freight Forwarder

2. Customs Broker, Inspect & Quarantine Broker

3. Licensing Government Agencies

4. Customs

Question 7	How long is the development and Implementation time of this project?

 < 6 months   6 months to 1   1 to 2 years
                          year

 2 to 3 years   3 to 5 years   ☑ > 5 years

Question 8	Where is the budget from and how much is it for this project?

Budget from: Trade Authority (Bureau of   USD 29.4 Million
Foreign Trade, MOEA)

Question 9	What's the scope of this project? Please elaborate. (you may attach a

scenario diagram to explain)

Diagram:
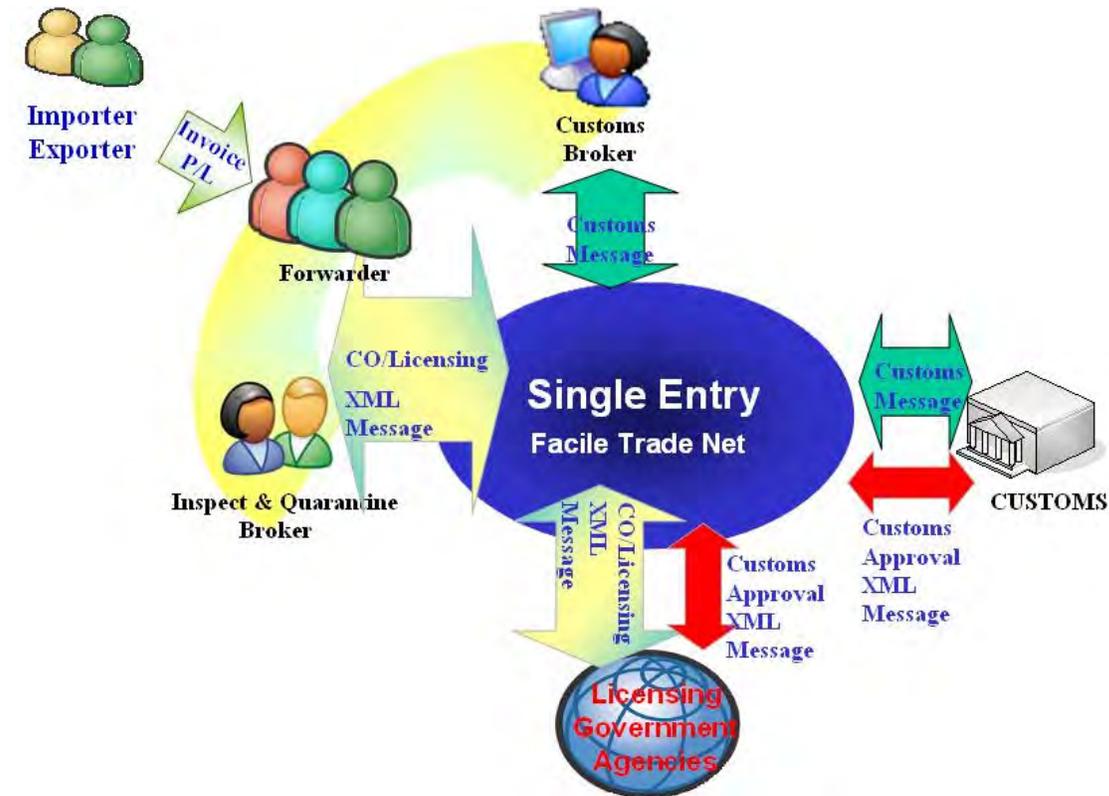
Illustration:

1. Forwarder/Inspect & Quarantine Broker on behalf of Importer/Exporter apply for CO or permit

2. Licensing government agency processes the applications and keeps the status

3. Customs broker on behalf of Importer/Exporter submits declaration to customs for cargo clearance

4. Customs request on-line mapping of the permit or CO against the customs declaration.

5. Licensing government agency processes the mapping and send result to customs

6. Cargo released from customs for a positive mapping result.

| **Question 10** | Please explain the scenario ***before*** the paperless trading project is implemented and the process ***after*** the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process |

reengineering that has been taken place to realize the project.

FTNET (Facile Trade Net) of Chinese Taipei

[BEFORE]

[AFTER]

Illustration: Before FTNET was implemented, although the customs brokers can submit customs declaration online via the Customs VAN, they had to go to the Customs or OGA's offices in person to supplement the paper CO or permit.

Illustration: After FTNET was implemented, the customs community can apply for permit or CO online. Between Customs and OGAs, there's a compliance check to map on-line the permit or CO against the customs declaration. If the mapping is matched, the cargo will be released immediately on-line.

Differences:

After the FTNET was implemented and introduced to the customs and trade community, they enjoy the conveniences of applying for the permit or CO online. Quoting the users, 'We use more internet than road now.' The foreign trade community in Chinese Taipei can now complete the necessary regulatory required document submission online.

Question 11	Please state the documents being exchanged in this project and the standards you adopt.

Documents:

1. Permit Application / Response

2. Certificate of Origin Application / Response

3. CO or Permit/Declaration Mapping Request / Response

Standards:

Partially Compliant with UN/CEFACT, WCO DM, and UNeDocs.

Question 12	Please explain the business model of this project.

The Chinese Taipei government subsidized early implementers to encourage early take-ups. The earlier the users adopted the service, the more incentives they enjoyed. After the early stage, the users have to pay for the service to support the service operation. Based on the market mechanism, users can choose one of the two service providers of FTNET.

Question 13	Who are the owner, developer and operator of this project? This project was developed by using PPP (Public Private Partnership) model. The owner, developer, and operator can be regarded as cooperated by the government and private sectors.

Owner: Bureau of Foreign Trade (BOFT)	Developer: BOFT, OGA's, Institute for Information Industry, Application Service Provide (TradeVan and Universal EC) and Software Companies.	Operator: BOFT, OGA's TradeVan and Universal EC.

Question 14	Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users.

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
1300	Customs Broker/Forwarder	76%	12 months
40	Quarantine Inspection Broker	3%	12 months
360	Importer/Exporter	21%	12 months

Question 15	If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	NA	

Do you think you can reduce the project cost?

NA

Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.

NA

Time:

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 16 How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope *before and after* ** the project has been implemented.

1. Tasks: **Inspection process**

    BEFORE time: 3 days   **AFTER** time: **1 ½ days**

2. Tasks: **Inspection (food)**

    BEFORE time: 4 days   **AFTER** time: **2 days**

3. Tasks: **Quarantine process**

    BEFORE time: 3~7 days   **AFTER** time: **1 1/3 days**

Question 17 How much cost saving has the project brought you? Please indicate various costs in details.

(currency: TWD) $ 5.22 Billion in Process Simplification

(currency: TWD) $ 4.39 Billion in B2G/G2G eCommerce

(currency: TWD) $ 7.7 Million in Paper Saving

Question 18 How much human resource saving has the project brought you?

Example: 0.5 operator/month

Saving Operation Time: 17.664 Millions hours (Manpower Hours) (From Mar. 14,2005 to May 31, 2009)

✓ Time of data entry, print, and delivery：

  3.732 Millions*4hrs = 14.928 Million hours

✓ For Licensing Agencies (Bureau of Foreign, Bureau of Standards, Metrology and Inspection, Bureau of Animal and Plant Health Inspection, Bureau of Energy, and National Treasury Agency)：2.531 Millions hours

Integrating licensing and clearance information by electronic document comparison caused the rise of simplified customs procedure C1(no paper check and no physical inspection) rate：615 thousand*20min. = 205 thousand hours = 0.205 Million hours

Question 19   How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

BEFORE Documents Types: 120   **AFTER** Documents Types: 61

59 documents/forms removed

550 data elements harmonized

Question 20   Did the project bring you more revenue? If yes, how much?

NA

Question 21   Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

NA

Question 22   Please state other synergies or intangible benefits after the implementation of this project.

1.The regulations of 1310 commodity items eliminated

2.45 regulations revised

3.7daysX24hrs. service for license and inspection applications

4.“use more internet, use road traffic less”, saving from social cost--priceless

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23   Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think

relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance | **Items**

1	Political will
	Mandate use
5	Incentives to attract users' adoption
4	Process simplification
	Process reengineering
2	Thorough communication among stakeholders
9	Data harmonization
	Adoption of international document standards
10	Free trial
	Free usage
	Security protection (use of encryption, PKI, digital signature etc.)
8	Attentive customer support and full training program
6	Promotion and marketing
7	Early bird program to encourage early adoption
3	Full integration of the process
	Coverage of Internet and bandwidth
	Ease of use application
	Others. Please state: _____

Question 24 Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you

used to overcome them.

Obstacles/Challenges:	Strategies:	Methods/Action Plans:
Examples: Hard to change users' behavior	Provide incentives to users	Subsidize the cost for software upgrade
1. How to balance and optimize the both goals of trade facilitation and security	a "top-down" commitment to reform	Strong political will at top level to ensure demand-driven design and implementation.
2. How to simplify a complex set of licensing documents	Transparency and co-operation between public and private sector under the working groups.	Identify, harmonize and standardize document formats, data content and definitions.
3. How to implement an integrated platform that allows all parties to lodge information with single entry point.	Adopt the market mechanism to provide better service and lower cost for traders.	Establish a "single entry" for the traders via the two service providers for trade/customs community.

Part 5: Illustration of *cross border* implementation of paperless trading project(s)

Question 25	Please list out the ***cross border*** paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

1. Electronic Certificate of Origin Exchange between Chinese Taipei and Korea

2.

3.

Most successful project: Electronic Certificate of Origin Exchange between Chinese Taipei and Korea

Question 26	With which member economy have you implemented the above project(s)?

1. Korea

2.

3.

| | Question 27 | (The following questions refer to the most successful **cross border** paperless trading project that you have identified in question 25.) |
| | | Please state the stakeholders of this project and briefly explain the roles they play. |

Example: Customs broker – assist the shipper to declare customs declaration.

1. Korean Exporters – apply CO of Korea

2. Chinese Taipei Importers – receive CO from Korea

3. Customs Brokers – submit import customs declaration to Chinese Taipei with ECO number stated on the declaration

4. Chinese Taipei Customs – receive CO and import customs declaration from importers and customs brokers

5. Korean Chamber of Commerce/Bureau of Foreign Trade, Chinese Taipei – issue ECO

6. Trade-Van – Chinese Taipei's customs service provider

7. KTNET – Korea's customs service provider

| | Question 28 | How long is the development and Implementation time of this project? |

| < 6 months | 6 months to 1 year | 1 to 2 years |
| 2 to 3 years | ☑ 3 to 5 years (including negotiation and system development) | > 5 years |

| | Question 29 | Where is the budget from and how much is it for this project? |

Budget from: public and private sectors

USD
N/A_____

Question 30 What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

Diagram:
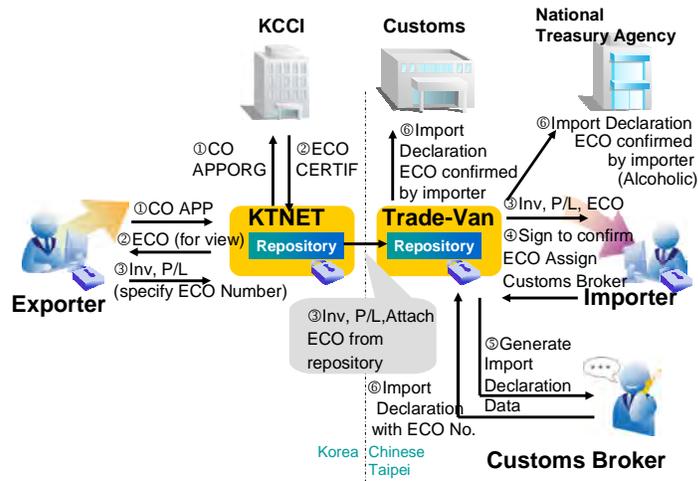
Illustration:

The cross border ECO exchange project is implemented, the Korean exporters will no longer need to get the stamp from the Taipei Mission Office in Korea as the secure interconnectivity between KCCI of Korea and Chinese Taipei Customs via the Customs VANs guarantees the authenticity of the ECO. The Korean exporters can easily send the ECO via KTNET of Korea to Trade-Van of Chinese Taipei, who will later deliver the ECO to the Chinese Taipei importers. Paper CO no longer exists.

Question 31 Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

Example: ECO exchange between Chinese Taipei and Korea

[BEFORE]
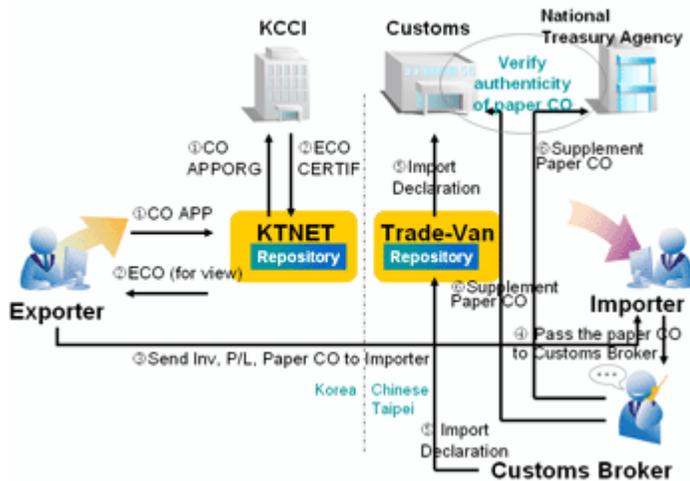
Illustration:

Before the cross border ECO (electronic certificate of origin) exchange project was implemented, the exporters in Korea had to print out the CO and send it over to Chinese Taipei importers via courier express. In order to guarantee the authenticity of the CO, it's required by Chinese Taipei Customs that the Korean exporters would have to get a stamp from the Taipei Mission Office in Korea. This stamp costs the exporters US$20.

[AFTER]
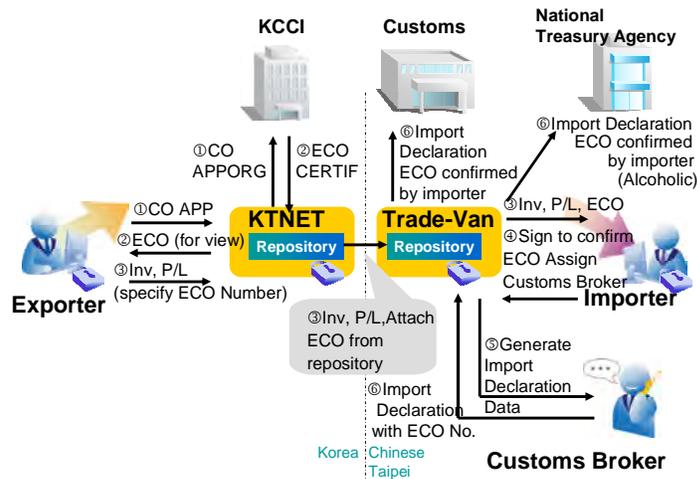
Illustration: After the cross border ECO exchange project is implemented, the Korean exporters will no longer need to get the stamp from the Taipei Mission Office in Korea as the secure interconnectivity between KCCI of Korea and Chinese Taipei Customs via the Customs VANs guarantees the authenticity of the ECO. The Korean exporters can easily send the ECO via KTNET of Korea to Trade-Van of Chinese Taipei, who will later deliver the ECO to the Chinese Taipei importers. Paper CO no longer exists.

Differences: The cross border ECO exchange project between Korea and Chinese Taipei helps reduce the international trading costs for the Korean exporters and Chinese Taipei importers. This project eliminates the paper CO transmitted across Korea and Chinese Taipei.

Question 32	Please state the documents being exchanged in this project.

Electronic Certificate of Origin (cross border)

Import Customs Declaration (local)

Question 33	Please state the documents being exchanged in this project and the document standards you adopt.

Documents: Standards:

1. ECO_____   UBL_____

2. _____   _____

3. _____   _____

Question 34	Please explain the business model of this project.

The users pay the transaction fee to deliver cross border ECO.

Question 35	Who are the owner, developer and operator of this project?

Owner: Customs Service Providers for cross border ECO system

Local customs for ECO receiving system

Korean Chamber of Commerce and BOFT for ECO issuance system

Developer: Customs Service Providers for cross border ECO system

Local customs for ECO receiving system

Korean Chamber of Commerce and BOFT for ECO issuance system

Operator: Customs Service Providers for cross border ECO system

Local customs for ECO receiving system

Korean Chamber of Commerce and BOFT for ECO issuance system

Question 36	Please state the number of users and the industries they belong to in this project. Also please state how long your project spent to get to this number of users.

Number of users:	Industries:	Time spent to get to this number of users:

Number of users:

5 Korean exporters

7 Chinese Taipei importers

 (from April – July 2009)____

_____

_____

Industries:

Int'l   Trading

_____

_____

_____

Time spent to get to this number of users:

3 months

_____ months/years

_____ months/years

Question 37	If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	_Yes___	Full support and commitment of both governments
Do you think you can reduce the project cost?	_Yes_	If the cross border mutual agreement to implement the project could be obtained in shorter timeframe
Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.	_Yes___ Time: 1 month	A service launching seminar

Part 6: Value Propositions of the above project(s)

Question 38	How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Tasks: To submit CO to Chinese Taipei Customs and get released

BEFORE time: 2 weeks-1 month (30%), 2 days (70%)

AFTER time: 10 minutes

Question 39	How much cost saving has the project brought you? Please indicate various costs in details.

US$ 20 for getting a stamp from the Taipei Mission Office in Korea

(currency: _US____) $__15___ for ___sending the CO and other documents via courier express

(currency: US____) $___15_____ for _sending the CO back to Korea for verification if there's doubt_____

Question 40	How much human resource saving has the project brought you?

Example: 0.5 operator/month

  Approximately 0.5 operator/month (estimated)

Question 41	How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

BEFORE Documents Types: **AFTER** Documents Types: 1 (from
 _1_____   paper CO to eCO)_

___0_____ documents/forms simplified

___0_____ documents/forms removed

___1_____ data elements harmonized

Question 42	Did the project bring you more revenue? If yes, how much?

No. But faster and more secure transaction.

Question 43	Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

The project reduces inventory cost for the importers as we speed up the import customs clearance procedures, we can shorten the order to delivery time.

In addition, as the Customs releases the cargo faster with ECO, the warehouse fee waiting for customs clearance could be reduced.

Question 44	Please state other synergies or intangible benefits after the implementation of this project.

The project ensures the authenticity of the CO by end to end secure connectivity and hence reduces the cost of getting a stamp from Taipei Mission Office in Korea to prove the authenticity of the CO. Also the project speeds up the import customs clearance time and assure faster pick-up of the cargo. Before the project was implemented, the importers will need to wait for 2 weeks to 1 month for the customs to send the CO back and forth to prove its authenticity. If the importer wants to pick up the cargo before the verification process is completed, the importer needs to pay 2.5 times the value of the cargo as bond.

Part 7: Critical Success Factors of the above project(s) and Lessons Learnt

| **Question 45** | Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical) |

Pls. put numbers to indicate the importance | **Items**

1	Political will
	Mandate use
4	Incentives to attract users' adoption
	Process simplification
5	Process reengineering
	Thorough communication among stakeholders
	Data harmonization
	Adoption of international document standards
	Free trial
	Free usage
3	Security protection (use of encryption, PKI, digital signature etc.)
	Attentive customer support and full training program
6	Promotion and marketing

<table>
<tr><td>7</td><td>Early bird program to encourage early adoption</td></tr>
<tr><td>2</td><td>Full integration of the process</td></tr>
<tr><td></td><td>Coverage of Internet and bandwidth</td></tr>
<tr><td>8</td><td>Ease of use application</td></tr>
<tr><td></td><td>Others. Please state: _____</td></tr>
</table>

Question 46   Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:	Strategies:	Methods/Action Plans:
Examples: Hard to change users' behavior	Provide incentives to users	Subsidize the cost for software upgrade
1. Government to government negotiation took long time	Leverage on APEC platform for discussion	Start with APEC member economies, duplicate the successful model
2.		
3.		

8. THAILAND

SECTION 2 - Best Practices of Paperless Trading Projects

This part of the questionnaire will collect and analyze the case studies of paperless trading implementation in depth to identify the critical success factors and key performance indexes for the best practice of a paperless trading project.

Definition: Paperless trading project refers to a project that is implemented to facilitate the exchange of international trade related information.

Part 1: Understanding of a paperless trading project

Question 1   In your opinion, what's your perception of a paperless trading project? (multiple choices)

/G2G information/documents exchange   /B2B information/documents exchange

/B2G information/documents exchange   B2C information/documents exchange

C2C information/documents exchange   Others, pls. state_____

Question 2   How important do you think is paperless trading project?

Very important   /Important   No comment

Not important   Least important

Question 3   What do you think are the criteria to succeed in a paperless trading project?

11、   Strong and Continuous Government Policy

12、   Fund for information Computer Technology

13、   Collaborated of concern organization

Question 4   What do you think is the value proposition of a paperless trading project?

International Standard

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the ***local*** paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

1. e-Export
2. e-Import
3. e-Licensing

Most successful project: All

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.) Please state the stakeholders of this project and briefly explain the roles they play.

Example: Customs broker – assist the shipper to declare customs declaration.

1. Importer/Exporter/Customs Broker declare customs declaration
2. Shipper/Freight Forwarder declare manifest
3. Banks declare debit/credit advise
4. Other Government Agency declare license/certificate

Question 7	How long is the development and Implementation time of this project?

< 6 months   6 months to 1 year   1 to 2 years

2 to 3 years   ⁄3 to 5 years   > 5 years

Question 8	Where is the budget from and how much is it for this project?

Budget from: Thai Government   USD ____~12 Million**_____

Question 9	What's the scope of this project? Please elaborate. (you may attach a

scenario diagram to explain)

Diagram:

Illustration:

|	
Question 10	Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.
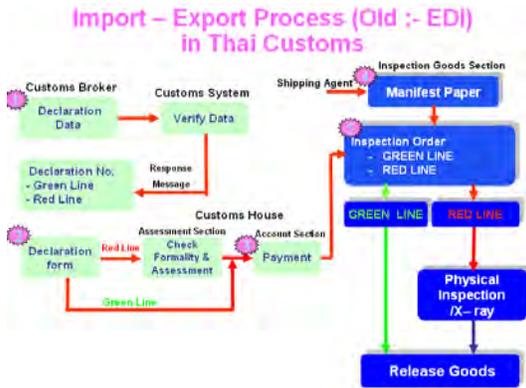
[BEFORE]

[AFTER]
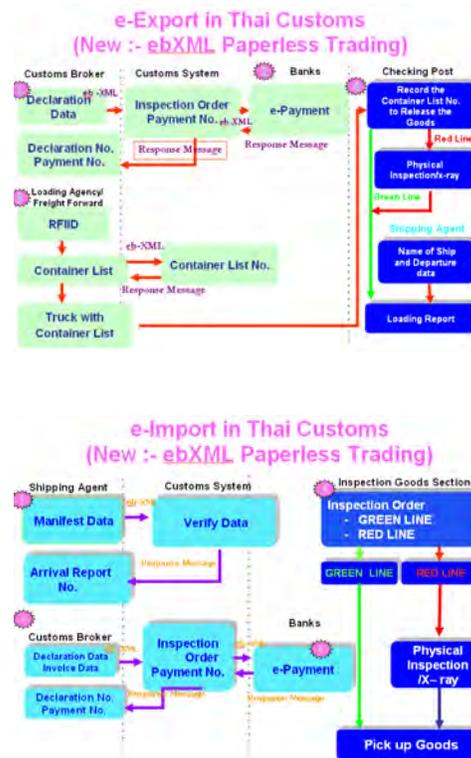
Illustration: Before e-Customs was implemented, the Customs Broker can submit customs declaration (by EDIFACT Standard) online via the Customs VAN.However they had to go to the Customs House to supplement the declaration and invoice paper

Illustration: After e-Customs Paperless Trading has been implemented, the Customs Broker has still to submit invoice data and customs declaration data ,but also shipping agent is required to forward manifest data online via the Customs VAN. Customs does facilitate cargo clearance by providing One Stop Service at inspection section (without invoice and declaration paper).

Differences: Traders like the e-Customs Paperless Trading system because they can send eb-XML standard data everytime, everyday online via Customs VAN without submittaly the paper of invoice/declaration/manifest to Customs House and concerned OGA.

Question 11	Please state the documents being exchanged in this project and the

standards you adopt.

Documents:	Standards:
1. Declaration (Control, Detail)_____	_eb-XML_____
2. Vessel / Flight Schedule Message_____	_eb-XML_____
3. Container Operator Message	_eb-XML
4. Master /House Sea Cargo	eb-XML
5. Air Cargo Manifest (Header/Detail)	eb-XML
6. Air Way Bill (Header/Detail)_____	eb-XML_____

Question 12   Please explain the business model of this project.

Thai Customs has issued the rules and regulations about the procedures and formality of e-Customs Paperless Trading. Thai Customs has also settle the plan to implement it step by step (e-Export prior e-Import; Air, Sea, Land in order) which started on January 2007 and complete all ports on July 2008, In this duration time we still have manually process parallel to the e-Customs

Question 13   Who are the owner, developer and operator of this project?

Owner: Thai Customs   Developer: Turn Key by Private Company   Operator: Thai Customs

Question 14   Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users.

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
_____	_____	_____	
_____	_____	_____	_____ months/years
_____	_____	_____	_____ months/years
			_____ months/years

Question 15   If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	_No___	
Do you think you can reduce the project cost?	_No___	
Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.	_No___ Time:	

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 16 How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Tasks: _To check declaration data and payment_____

BEFORE time: ___2_____   minutes /hours   days   weeks   months

AFTER time: _____30_____ / minutes   hours   days   weeks   months

Tasks: _Inspection goods_____

BEFORE time: ___1_____   minutes /hours   days   weeks   months

AFTER time: _____30_____ / minutes   hours   days   weeks   months

Question 17 How much cost saving has the project brought you? Please indicate various costs in details.

Example: US$30 traffic and labor cost to apply the permit or CO at the OGAs' offices

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

No data

Question 18 How much human resource saving has the project brought you?

_____No data_____

_____

_____

Question 19   How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

_____-_____ documents/forms simplified

declaration/manifest_____ documents/forms removed

certificate/license forms_____ data elements harmonized

Question 20   Did the project bring you more revenue? If yes, how much?

No

Question 21   Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

No

Question 22   Please state other synergies or intangible benefits after the implementation of this project.

After Thai Customs has implemented e-Customs the investigation of World Bank in year 2009 stated Thailand has been promoted from the 51th to 10th rank in the topic Trading Across Border and from the 15th to 13th rank in the topic Doing Business.

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23   Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance Items

1	Political will
12	Mandate use
5	Incentives to attract users' adoption

11	Process simplification
2	Process reengineering
8	Thorough communication among stakeholders
4	Data harmonization
3	Adoption of international document standards
13	Free trial
14	Free usage
7	Security protection (use of encryption, PKI, digital signature etc.)
15	Attentive customer support and full training program
9	Promotion and marketing
16	Early bird program to encourage early adoption
6	Full integration of the process
10	Coverage of Internet and bandwidth
17	Ease of use application
	Others. Please state: _____

Question 24 Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:	Strategies:	Methods/Action Plans:
1.Hard to educate traders to know in new process (eb-xml standard,electronic signature)	**Publice Relation/**	**-Join with software house to set up trading program and let them to closely advise to the trader**

		-Set e-Customs seminar for traders in each region of Thailand
2.To settle CA organization	**Provide CA (Certificate Authority)**	**Wave CA register fee for one year.**

3.

Part 5: Illustration of *cross border* implementation of paperless trading project(s)

Question 25	Please list out the ***cross border*** paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

1. National Single Window (Project is in the procurement process and expected to be start in 2010.)

2.

3.

Most successful project:

Question 26	With which member economy have you implemented the above project(s)?

1. ASEAN Single Window

2. Other Countries

3.

Question 27	(The following questions refer to the most successful ***cross border*** paperless trading project that you have identified in question 22.)
	Please state the stakeholders of this project and briefly explain the roles they play.

Appendix E – Public Sector Responses – Case Studies

1. Importer/Exporter/Customs Broker declare customs declaration
2. Shipper/Freight Forwarder declare manifest
3. Other Government Agency declare license / Certificate
4. Other Countries declare Country Origin Document (CO)

| **Question 28** | How long is the development and Implementation time of this project? |

| < 6 months | 6 months to 1 year | 1 to 2 years |

| 2 to 3 years | 3 to 5 years | > 5 years |

| **Question 29** | Where is the budget from and how much is it for this project? |

Budget from: USD   _~
                                                     ~11**Million_____

| **Question 30** | What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain) |

Diagram:
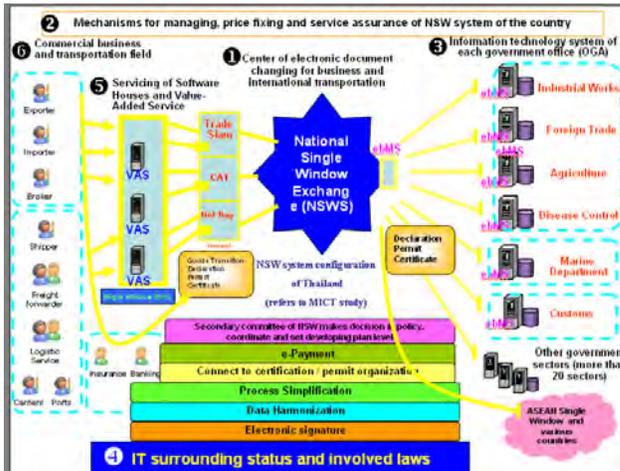
Illustration:

| **Question 31** | Please explain the scenario *before* the paperless trading project is |

Question 31-46 No Data (Project is in the procurement process)

implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

9. VIETNAM

SECTION 2 - Best Practices of Paperless Trading Projects
This part of the questionnaire will collect and analyze the case studies of paperless trading implementation in depth to identify the critical success factors and key performance indexes for the best practice of a paperless trading project.

Definition: Paperless trading project refers to a project that is implemented to facilitate the exchange of international trade related information.

Part 1: Understanding of a paperless trading project
Question 1   In your opinion, what's your perception of a paperless trading project? (multiple choices)

☑G2G information/documents exchange   ☑B2B information/documents exchange

☑B2G information/documents exchange   B2C information/documents exchange

C2C information/documents exchange   Others, pls. state_____

Question 2   How important do you think is paperless trading project?

☑ Very important   Important   No comment

Not important   Least important

Question 3   What do you think are the criteria to succeed in a paperless trading project?

Political will

Question 4   What do you think is the value proposition of a paperless trading project?

Costs and time saving

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the ***local*** paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

1.e-Customs project

2.The project of Electronic certificate of origin system (eCoSys)

3. Automatic Import Licensing Systems project.

Most successful project: The project of Electronic certificate of origin system (eCoSys)

Question 6 .	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)
	Please state the stakeholders of this project and briefly explain the roles they play.

Example: Customs broker – assist the shipper to declare customs declaration.
1.: Vietnam e-Commerce and Information Technology Agency

Fulfils the state management functions in terms of e-commerce, development and application of information technology serving the state management of Ministry of Industry and Trade

2. Exporters

Using eCoSys to apply for C/O online

3.

4.

Question 7	How long is the development and Implementation time of this project?

| < 6 months | 6 months to 1 year | 1 to 2 years |

| 2 to 3 years | ☒ 3 to 5 years | > 5 years |

Question 8	Where is the budget from and how much is it for this project?

Budget from: Government

| **Question 9** | What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain) |

Diagram:

Vietnam e-Commerce and Information Technology Agency
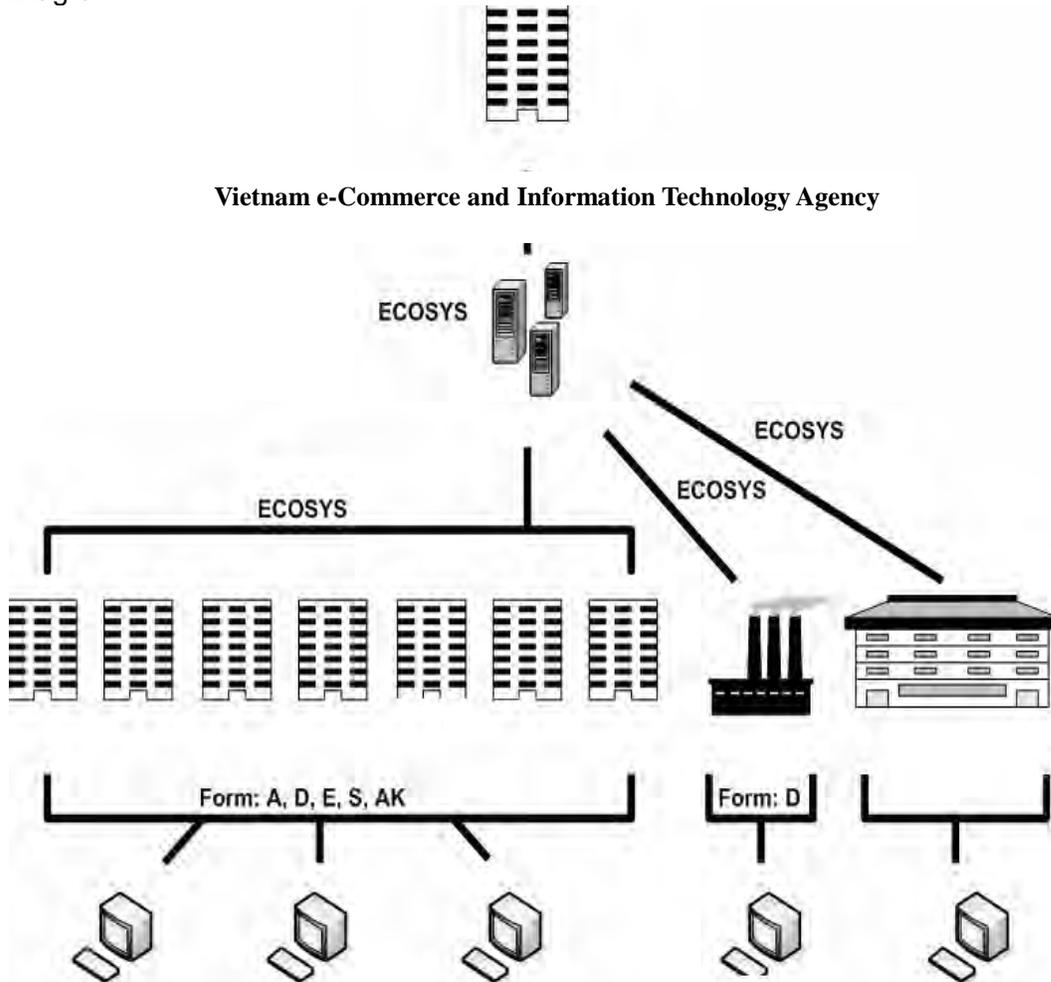
Illustration: This project enables:

• The enterprises to apply for C/O online 24 / 7, at any convenient place and time

• The administrative agencies to manage, make report based on C/O statistics quickly and accurately

Question 10	Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

[BEFORE]

Enterprises had to come to C/O issuing agency's office to submit C/O application dossier which is accepted only in administrative hours. In the case of error dossier, enterprises had to come back and redo the applying procedure from the starting point. Therefore, the custom clearance was lengthened which caused bad effects on enterprises' trading activities

[AFTER]

Enterprises could apply for C/O online at any convenient place where has internet access. By logging in the system through account and password assigned by E-commerce and Information Technology Agency, enterprises are able to transfer C/O application form to the C/O insuring agency. The agency will check the information on electronic form and then give feedback to enterprises. If the application is approved, enterprises will be granted C/O in paper form as soon as the legal paper dossier is submitted.

Differences: eCosys simplifies C/O applying procedure, therefore, it helps enterprises to save time, human resource. As the result, they are able to reduce input costs, leading to lowering price, increasing their competitiveness. Besides, with function of providing information, eCosys helps government officers quickly have statistics on exported goods to assist trade administration, particularly in the negotiations and settling dispute with foreign countries.

Question 11	Please state the documents being exchanged in this project and the standards you adopt.

Documents: Standards:

1. certificate of origin_____   _EID_____

2. _____   _____

3. _____   _____

| | Question 12 | Please explain the business model of this project. |

The government subsidizes the enterprises for using eCoSys. The enterprises only have to purchase the smartcard containing digital signature to guarantee the security of e-form sending via Internet

| | Question 13 | Who are the owner, developer and operator of this project? |

| Owner: E-commerce and Information Technology Agency | Developer: E-commerce and Information Technology Agency | Operator: E-commerce and Information Technology Agency |

| | Question 14 | Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users. |

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
-More than 1000 enterprises	_____	_____	From 2006 to August 2009
-16 Regional Export and Import Offices.	_____	_____	From 2006 to August 2009
	━━━━━━	_____	
-37 Management Departments of Industrial Zone			From 2006 to August 2009

| | Question 15 | If you were to start the project all over again, what's your comments in regards to the below items? |

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	_Yes___	Employ the foreign technical and managing experts who have experiments on implementing electronic certificate of origin system
Do you think you can reduce the project cost?	__No__	
Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.	_Yes___ Time: 2 years	Have a well-incentives for users

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 16 How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Tasks: applying for certificate of origin_____

BEFORE time: at least 2 days_____   minutes   hours   days   weeks   months

AFTER time: in few hours_____   minutes   hours   days   weeks   months

Question 17 How much cost saving has the project brought you? Please indicate various costs in details.

Question 18 How much human resource saving has the project brought you?

1 operator/month _____

_____

_____

Question 19 How many documents/forms have you simplified or eliminated
8 Forms from this project? How many data elements that are double input have been removed? None

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

_____ documents/forms simplified

_____ documents/forms removed

_____ data elements harmonized

Question 20 Did the project bring you more revenue? If yes, how much? No

Question 21 Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate. No

Question 22 Please state other synergies or intangible benefits after the implementation of this project.

-Increasing the trust of enterprises in the administrative agencies

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23 Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance   **Items**

1	Political will
5	Mandate use
6	Incentives to attract users' adoption
4	Process simplification
7	Process reengineering
14	Thorough communication among stakeholders
11	Data harmonization
12	Adoption of international document standards

15	Free trial
16	Free usage
2	Security protection (use of encryption, PKI, digital signature etc.)
10	Attentive customer support and full training program
9	Promotion and marketing
13	Early bird program to encourage early adoption
9	Full integration of the process
3	Coverage of Internet and bandwidth
8	Ease of use application
	Others. Please state: _____

Question 24   Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:	Strategies:	Methods/Action Plans:
1. IT skills of enterprises located far from the business centres are still weak.	Implementing the project through 3phases, from narrow scope to large scope to gather feedback to develop the systems	Subsidize the cost for using the systems
2. Propagandizing, training enterprises to use eCosys in nation- scale requires a lot of human resource and money	Organize the workshop, training courses about eCosys	

3. Internet is unstable

Part 5: Illustration of *cross border* implementation of paperless trading project(s)

Question 25	Please list out the ***cross border*** paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

1. Vietnam - USA Electronic Visa Information System for exports of textile and garment to the USA (this project was finished in 2007)

2. Vietnam is preparing for the implementation of the National Single Window

Most successful project: Vietnam - USA Electronic Visa Information System for exports of textile and garment to the USA

Question 26	With which member economy have you implemented the above project(s)?

1. USA

2.

3.

Question 27	(The following questions refer to the most successful ***cross border*** paperless trading project that you have identified in question 22.)
	Please state the stakeholders of this project and briefly explain the roles they play.

.

1.

2.

3.

4.

Question 28

How long is the development and Implementation time of this project?

< 6 months

☑ 6 months to 1 year

1 to 2 years

2 to 3 years

3 to 5 years

> 5 years

Question 29

Where is the budget from and how much is it for this project?

Budget from: The Government

Question 30

What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

Diagram:
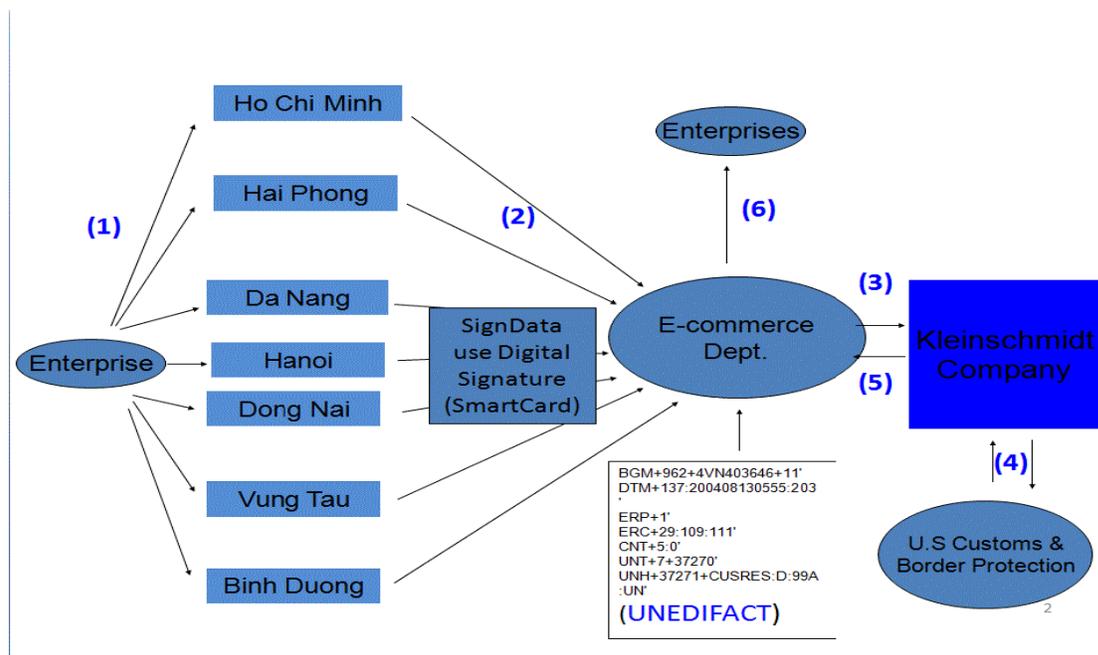
Illustration:

- Management of visa granted
- All data related to visa to be transacted to MOIT with highest credibility
- Enterprises can apply for visa online.

Question 31

Please explain the scenario *before* the

paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

[BEFORE]

Before implementing ELVIS system, It took enterprises from 2 to 3 days to apply for visa. In case of error, it is difficult to correct, cancel visa

[AFTER]

After implementing ELVIS system, enterprise could easily apply for electronic visa, reduce costs and time for enterprise in applying for visa

Differences: With ELVIS system, the enterprise are able to complete the process for applying visa for textile and garment quicker and easier

| **Question 32** | Please state the documents being exchanged in this project. |

| **Question 33** | Please state the documents being exchanged in this project and the document standards you adopt. |

Documents: Standards:

1. _____   _____

2. _____   _____

3. _____   _____

| **Question 34** | Please explain the business model of this project. |

| **Question 35** | Who are the owner, developer and operator of this project? |

Owner: Developer: Operator:

| | |
| **Question 36** | Please state the number of users and the industries they belong to in this project. Also please state how long your project spent to get to this number of users. |

Number of users: Industries: Time spent to get to this
                                                                      number of users:

_____   _____   _____ months/years

_____   _____   _____ months/years

_____   _____   _____ months/years

| | |
| **Question 37** | If you were to start the project all over again, what's your comments in regards to the below items? |

Items: Yes/No   How? (Methods)

Do you think you can shorten the project
implementation time?
                                                          __Yes__

Do you think you can reduce the project cost?

                                                          _No___

Do you think you can recruit the above-   Have   more   attractive
mentioned number of users in a shorter time   incentive policy
frame? If yes, please state the time needed.   _Yes___

                                                          Time:

Part 6: Value Propositions of the above project(s)

| | |
| **Question 38** | How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented. |

Tasks: _____

BEFORE time: _____   minutes   hours   days   weeks   months

AFTER time: _____   minutes   hours   days   weeks   months

| | |
| **Question 39** | How much cost saving has the project brought |

you? Please indicate various costs in details.

Example: US$ 20 for getting a stamp from the Mission Office

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

Question 40   How much human resource saving has the project brought you?

Example: 0.5 operator/month

_____

Question 41   How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

_____ documents/forms simplified

_____ documents/forms removed

_____ data elements harmonized

Question 42   Did the project bring you more revenue? If yes, how much?

Question 43   Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

Question 44   Please state other synergies or intangible benefits after the implementation of this project.

Foundation for administrative reform

Part 7: Critical Success Factors of the above project(s) and Lessons Learnt

| **Question 45** | Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical) |

Pls. put numbers to indicate the importance   **Items**

1	Political will
7	Mandate use
6	Incentives to attract users' adoption
2	Process simplification
16	Process reengineering
17	Thorough communication among stakeholders
5	Data harmonization
13	Adoption of international document standards
14	Free trial
15	Free usage
3	Security protection (use of encryption, PKI, digital signature etc.)
10	Attentive customer support and full training program
12	Promotion and marketing
9	Early bird program to encourage early adoption
8	Full integration of the process
11	Coverage of Internet and bandwidth
4	Ease of use application
	Others. Please state: _____

Question 46   Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges: **Strategies:**   **Methods/Action Plans:**

1. Internet is unstable

2. IT skills of enterprises located far from business centre are weak

3.

Appendix F

Private Sector Responses – Case Studies

Table of Contents

1. Trader-1

SECTION 2 - Best Practices of Paperless Trading Projects
This part of the questionnaire will collect and analyze the case studies of paperless trading implementation to identify the critical success factors and key performance indexes of the best practices for paperless trading projects.

Definition: Paperless trading project refers to a project that is implemented to facilitate the electronic exchange of international trade related information, without the need for paper documents.

Part 1: Understanding of a paperless trading project

Question 1 In your opinion, what's your perception of a paperless trading project? (multiple choices)

G2G information/documents exchange	Y B2B information/documents exchange
B2G information/documents exchange	B2C information/documents exchange
C2C information/documents exchange	Others, pls. state_____

Question 2 Please rank the importance of paperless trading projects to the success of your economy in facilitating trade or in the ability of your organization to compete?

Y Very important	Important	No comment
Not important	Least important	

Question 3 What do you think are the criteria to succeed in a paperless trading project?

1. stable EDI system

2. complete information is delivered

Question 4 What do you think is the value proposition of a paperless trading project?

1. real time and manpower saving

2. environmentally correct

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the **local** paperless trading projects that you have implemented in your economy and identify the most successful one in your opinion.

1.

2.

3.

Most successful project:

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)
	Please state the stakeholders of this project and briefly explain the roles they play.

.

1. ASUS logistics management dept who is in charge of international transportation including cusotms/ air&sea&truck/ VAT filing and thing like this

2.

3.

4.

Question 7	How long was the development and Implementation time of this project?

Y < 6 months   6 months to 1   1 to 2 years
                                       year

  2 to 3 years   3 to 5 years   > 5 years

Question 9	What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

Diagram:

Illustration: e-doc is only part of e-logistics system which including e-e-RFQ, e-tracking, e-billing, e-claim,,,etc. All transportation information is shown in elogistics system

Question 10	Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

[BEFORE]   [AFTER]

Illustration: Illustration:

Differences: **before:** hard copy of doc should be delivered by express or attached with cargo for customs clearance. It may be missed or dirty.

after: all doc was send by EDI. It's easy to file

Question 11	Please state the documents being exchanged in this project and the

standards adopted.

Documents: Standards:

1. _____ invoice_____   _____

2. ___PACKING_____   _____

3. _____   _____

        Question 12   Please explain the business model of this project.

goods delivered from factory--> forwarders download doc from elogistics system and forward to overseas branch office-->cargo arrived destination--> overseas finish customs clearance

Owner: Developer: Operator:

        Question 14   Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users.

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
____100___	ELECTRONIC_____	_____	__1 YEAR_____ months/years
_____	_____	_____	_____ months/years
_____		_____	_____ months/years

        Question 15   If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	__YES__	

Do you think you can reduce the project cost?

   ___YES_

Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.

   _NO___

Time:

2.   GSP-1

SECTION 2 - Best Practices of Paperless Trading Projects

Question 1   In your opinion, what's your perception of a paperless trading project?

☑ G2G information/documents exchange   ☑ B2B information/documents exchange
☑ B2G information/documents exchange   ☐ B2C information/documents exchange
☐ C2C information/documents exchange   ☐ Others, pls. state

Question 2   How important do you think is paperless trading project?

☐ Very important
◉ Important
☐ No comment
☐ Not important
☐ Least important

Question 3   What do you think are the **criteria to succeed** in a paperless trading project?

It must be supported by government, Need colaboration among Government agency

Question 4   What do you think is the **value proposition** of a paperless trading project?

Improve Trade and logistic procedure

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5   Please list out the *local* paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

1. E-customs
2. E-manifest
3.
Most successful project: 1

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)
	Please state the stakeholders of this project and briefly explain the roles they play.

1. Thai Customs Department - Define Policy and approve
2. Customs broker - assist the shipper to declare customs declaration
3. Gate way Provider - Provide paperless system

Question 7	How long is the development and Implementation time of this project?

- ◯ > 6 months
- ◉ 6 months to 1 year
- ◯ 1 to 2 years
- ◯ 2 to 3 years
- ◯ 3 to 5 years
- ◯ > 5 years

Question 8	Who funded the project and for how much?

Budget from: Own Company   USD:

Question 9	What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

N/A

Question 10	Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

Differences: Better cost save, better simplified process, high reliable data, better speed up.

Question 11	Please state the documents being exchanged in this project and the standards adopted.

Documents:

1. ___INV_____
2. __PO_____
3. __ASN_____

Standards:

1. Modified own EDIFACT format
2. own format
3. Modified own EDIFACT format

Question 12	Please explain the business model of this project.

Cost saving & high reliable process for Buy - Distribution - Payment

Question 13	Who are the owner, developer and operator of this project?

Owner: Company CEO

Developer: Company staff and a IT solution company

Operator: Company staff

Question 14	Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users.

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
_____	1.Customs broker	_____	_____ months/years
_____	2.Manufacturing company	_____	_____ months/years
_____	3.Transportation company	_____	_____ months/years

	Question 15	If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	_yes___	Experience Applied and Pre-analysis
Do you think you can reduce the project cost?	_yes___	Experience Applied and appropriate staff
Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.	yes ____ Time:	

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 16   How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Tasks: ____ good for time saving of various procedures

BEFORE time: _____   minutes   hours   days   weeks   months

AFTER time: _____   minutes   hours   days   weeks   months

Question 17   How much cost saving has the project brought you? Please indicate various costs in details.

(currency: _____) $_____ for ___N/A_____

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

Question 18   How much human resource saving has the project brought you?

good human resource saving

_____N/A

_____

Question 19   How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

____Various_____ documents/forms simplified

_____ some of supporting___ documents/forms removed

_____ data elements harmonized

Question 20   Did the project bring you more revenue? If yes, how much?

profit from cost saving

Question 21   Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

Better effectiveness for inventory cost and turnover

Question 22   Please state other synergies or intangible benefits after the implementation of this project.

less re-input data and re-process

Part 8: Other Comments/Recommendations

Please provide any other comments or recommendations here.

1. Questions are too required elaborate information
2. Our detailed information are top secret, then cannot share with outside of our company group
3. Some questions require numbering the priority, but there are same level priority exist
4. Some questions require monetary amount, but value of money and value of various cost which are quite different in various economies, so it's no use

3.   Trader-2

SECTION 2 - Best Practices of Paperless Trading Projects

Question 1   In your opinion, what's your perception of a paperless trading project?

G2G information/documents exchange   ▮B2B information/documents exchange

B2G information/documents exchange   B2C information/documents exchange

C2C information/documents exchange   Others, pls. state_____

Question 2   Please rank the importance of paperless trading projects to the success of your economy in facilitating trade or in the ability of your organization to compete?

▮Very important   Important   No comment

Not important   Least important

Question 3   What do you think are the criteria to succeed in a paperless trading project?

High process standard

Question 4   What do you think is the value proposition of a paperless trading project?

Effectiveness in environment friendly

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5   Please list out the **local** paperless trading projects that you have implemented in your economy and identify the most successful one in your opinion.

1.New product notification

2.Marketing notification

3.Electronic payment

Most successful project:1

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.) Please state the stakeholders of this project and briefly explain the roles they play.

1. Shippers: product information notice

2. Procurement: product audit process

3. Staff: Product information transmission

Question 7	How long was the development and Implementation time of this project?

< 6 months   ▮ 6 months to 1   1 to 2 years
                 year

2 to 3 years   3 to 5 years   > 5 years

Question 8	Who funded the project and for how much?

Budget from: USD _____

Question 9	What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

Diagram:

Illustration:

| **Question 10** | Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project. |

:N/A

[BEFORE]   [AFTER]

Illustration: Illustration:

Differences:

| **Question 11** | Please state the documents being exchanged in this project and the standards adopted. |

Documents: Standards:

1. _____   _____

2. _____   _____

3. _____   _____

N/A

          Question 12   Please explain the business model
of this project.

SCM Model

          Question 13   Who are the owner, developer and
operator of this project?

Owner: Developer: Operator:

N/A

          Question 14   Please state the number of users
and the industries they belong to in
this project and the market share.
Also please state how long your
project spent to get to this number of
users.

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
_____	_____	_____	_____ months/years
_____	_____	_____	_____ months/years
_____	_____	_____	_____ months/years

N/A

          Question 15   If you were to start the project all
over again, what's your comments in
regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	_no___	

Do you think you can reduce the project cost?

No_____

| Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed. | —yes—
Time: | When the structure is completed spend some time to learn about the structure |

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 16 How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Tasks: C/O

BEFORE time: 3_____   minutes   hours   days   weeks   months

AFTER time: __2_____   minutes   hours   days   weeks   months

Question 17 How much cost saving has the project brought you? Please indicate various costs in details.

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

N/A

Question 18 How much human resource saving has the project brought you?

_____

_____

_____

N/A

Question 19 How many documents/forms have you simplified or eliminated from this project? How many data elements that are double

input have been removed?

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

_____ documents/forms simplified

_marketing notifications_____documents/forms removed

_____ data elements harmonized

Question 20   Did the project bring you more revenue? If yes, how much?

N/A

Question 21   Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

N/A

Question 22   Please state other synergies or intangible benefits after the implementation of this project.

Faster time and efficiency reduce paper usage and filing

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23   Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance   Items

☐ Top management support

☐ Mandate use

Incentives to attract users' adoption

☐ Process simplification

Process reengineering

☐ Thorough communication among stakeholders

☐ Data harmonization

Adoption of international document

standards

Free trial

Free usage

Security protection (use of encryption, PKI, digital signature etc.)

Attentive customer support and full training program

Promotion and marketing

Early bird program to encourage early adoption

Full integration of the process

Coverage of Internet and bandwidth

Ease of use application

Others. Please state: _____

Question 24 Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:	Strategies:	Methods/Action Plans:
1.change user behaviors	set standards	ease of application and consistency
2.		
3.		

4. GSP-2

SECTION 2 - Best Practices of Paperless Trading Projects
This part of the questionnaire will collect and analyze the case studies of paperless trading implementation to identify the critical success factors and key performance indexes of the best practices for paperless trading projects.

Definition: Paperless trading project refers to a project that is implemented to facilitate the electronic exchange of international trade related information, without the need for paper documents.

Part 1: Understanding of a paperless trading project

Question 1   In your opinion, what's your perception of a paperless trading project? (multiple choices)

Y G2G information/documents exchange   Y B2B information/documents exchange

Y B2G information/documents exchange   B2C information/documents exchange

C2C information/documents exchange   Others, pls. state_____

Question 2   Please rank the importance of paperless trading projects to the success of your economy in facilitating trade or in the ability of your organization to compete?

y Very important   Important   No comment

Not important   Least important

Question 3   What do you think are the criteria to succeed in a paperless trading project?

Single electronic Window (Govt, OGA and Trading Communities)

Automated Cargo Clearance System

Question 4   What do you think is the value proposition of a paperless trading project?

Minimise documents and authorisation to waste time and trouble

- Unified Procedures to ensure coordination among traders and governments

- Minimise subjectivity in control and release of goods

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the ***local*** paperless trading projects that you have implemented in your economy and identify the most successful one in your opinion.

1.TradeNet

2.TradeXchage

3.

Most successful project: .TradeNet

Question 7	How long was the development and Implementation time of this project?

  < 6 months   6 months to 1   1 to 2 years
                                        year

Y   2 to 3 years   3 to 5 years   > 5 years

Question 8	Who funded the project and for how much? government

Budget from: USD _____

5. GSP-3

SECTION 2 - Best Practices of Paperless Trading Projects
This part of the questionnaire will collect and analyze the case studies of paperless trading implementation to identify the critical success factors and key performance indexes of the best practices for paperless trading projects.

Definition: Paperless trading project refers to a project that is implemented to facilitate the electronic exchange of international trade related information, without the need for paper documents.

Part 1: Understanding of a paperless trading project

Question 1 In your opinion, what's your perception of a paperless trading project? (multiple choices)

☐ G2G information/documents exchange

☐ B2B information/documents exchange

☐ B2G information/documents exchange

☐ B2C information/documents exchange

☐ C2C information/documents exchange

☐ Others, pls. state_____

Question 2 Please rank the importance of paperless trading projects to the success of your economy in facilitating trade or in the ability of your organization to compete?

Very important   ☐ Important   No comment

Not important   Least important

Question 3 What do you think are the criteria to succeed in a paperless trading project?

Government mandate

Question 4   What do you think is the value proposition of a paperless trading project?

Readiness of legal framework

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the ***local*** paperless trading projects that you have implemented in your economy and identify the most successful one in your opinion.

1. national single window (NSW)

2.

3.

Most successful project: 1

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)
	Please state the stakeholders of this project and briefly explain the roles they play.

1. MOF - lead agency for NSW
2. MITI - Lead Agency for ASEAN single Window (ASW)
3. Customs

| | **Question 7** | How long was the development and Implementation time of this project? |

< 6 months   6 months to 1   1 to 2 years
year

2 to 3 years   3 to 5 years   > 5 years

| | **Question 8** | Who funded the project and for how much? |

Budget from: private funded initiative   USD _____

| | **Question 9** | What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain) |

Diagram: N/A

Illustration: electronic Customs declaration, manifest, import/export permits, duty payment and Preferential CO

| | **Question 10** | Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are |

> encouraged to elaborate the process reengineering that has been taken place to realize the project.

Differences:
 1. paperless for import'export permit for cargo clearance
2. reduce number of trip to OGA for processing of paper permits
3. reduce number of trip to MITI for collection of CO
4. faster processing time for permit, CO and Customs declarations

| **Question 11** | Please state the documents being exchanged in this project and the standards adopted. |

Documents:

1. customs declaration

2. import/export permit

3. Duty payment

Standards:

1. UN/EDIFACT

2. UN/EDIFACT

3. UN/EDIFACT

| **Question 12** | Please explain the business model of this project. |

N/A

| **Question 13** | Who are the owner, developer and operator of this project? |

Owner: Gov of MY   Developer: Dagang Net   Operator: Dagang Net

| **Question 14** | Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of |

users.

N/A

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
_____	_____		
_____	_____	_____ _	_____ months/years
_____	_____	_____ _	_____ months/years
		_____ _	_____ months/years

Question 15	If you were to start the project all over again, what's your comments in regards to the below items?
	N/A

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	____	
Do you think you can reduce the project cost?	____	
Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.	____ Time:	

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23	Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the Items importance

1	Political will
2	Mandate use
3	Incentives to attract users' adoption
4	Process simplification
5	Process reengineering
10	Thorough communication among stakeholders
11	Data harmonization
	Adoption of international document standards
	Free trial
	Free usage
	Security protection (use of encryption, PKI, digital signature etc.)
	Attentive customer support and full training program
12	Promotion and marketing
	Early bird program to encourage early adoption
9	Full integration of the process
7	Coverage of Internet and bandwidth
8	Ease of use application

Others.   Please   state:
_____
___

Question 24   Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges: **Strategies:**   **Methods/Action Plans:**

1. change of legacy system   1. provide hosted solution

2. Nation wide roll-put plan   2. planning with OGA and customs

Part 5: Illustration of *cross border* implementation of paperless trading project(s)

Question 25   Please list out the ***cross border*** paperless trading projects that you have implemented in your economy and identfiy the most successful one in your opinion.

1. Exchange of Preferential CO with Indonesia

Most successful project: 1

Question 26   With which member economy have you implemented the above project(s)?

1. Indonesia

2.

3.

| Question 27 | (The following questions refer to the most successful ***cross border*** paperless trading project that you have identified in question 22.) |
| | Please state the stakeholders of this project and briefly explain the roles they play. |

1. exchange of PCO - supported by both Governments

| Question 28 | How long is the development and Implementation time of this project? |

<mark>☐</mark> < 6 months   6 months to 1 year   1 to 2 years

2 to 3 years   3 to 5 years   > 5 years

| Question 29 | Who funded the project and for how much? |

Budget from: N/A   USD

                                          _____

| Question 30 | What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain) |

Illustration: exchange of preferential CO of issuing agencies and customs of both countries.

Question 31		Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

Question 32		Please state the documents being exchanged in this project.

preferential co

Question 33		Please state the documents being exchanged in this project and the document standards you adopt.

Documents: Standards:

1. prefertial co   1.XML

2.   2.

3. _____

Question 34		Please explain the business model of this project.

N/A

Question 35		Who are the owner, developer and operator of this project?

Owner:N/A   Developer: Operator:

Question 36   Please state the number of users and the industries they belong to in this project. Also please state how long your project spent to get to this number of users.

N/A

Number of users: Industries: Time spent to get to this number of users:

_____   _____   _____

_____   _____   months/years

_____   _____   _____

                                                         months/years

                                                         _____

                                                         months/years

Question 37   If you were to start the project all over again, what's your comments in regards to the below items?

Items: Yes/No   How? (Methods)

Do you think you can shorten the project implementation time?
                                               ____

Do you think you can reduce the project cost?   .

                                               ____

Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.   ____
                                               Time:

6.   Trader-3

SECTION 2 - Best Practices of Paperless Trading Projects
This part of the questionnaire will collect and analyze the case studies of paperless trading implementation to identify the critical success factors and key performance indexes of the best practices for paperless trading projects.

Definition: Paperless trading project refers to a project that is implemented to facilitate the electronic exchange of international trade related information, without the need for paper documents.

Part 1: Understanding of a paperless trading project

Question 1   In your opinion, what's your perception of a paperless trading project? (multiple choices)

y G2G information/documents exchange   y B2B information/documents exchange

y B2G information/documents exchange   B2C information/documents exchange

C2C information/documents exchange   Others, pls. state_____

Question 2   Please rank the importance of paperless trading projects to the success of your economy in facilitating trade or in the ability of your organization to compete?

Y   Very important   Important   No comment

Not important   Least important

Question 3   What do you think are the criteria to succeed in a paperless trading project?

1.To get concret user needs

2. To surefooted project management (cost, schedule, risk, internal education for the system operation and maintenance)

3. The system fuction should be developed by user's operational view

4. The system fuction should be worked in compliance with trading related law

5. The project manager should understand in future of adopted various standards and technical matter

Question 4   What do you think is the value proposition of a paperless trading project?

1. Should be best simplified procedure of a trading and a customs

2. Should be high-reliable data which related a procedure and a process

3. As the resolved preconditions, Governmental leadership to companies and a resolution against the obstructive law

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the *local* paperless trading projects that you have implemented in your economy and identify the most successful one in your opinion.

1. Export & Import Management project

2. Inventory Management project

3. Account Management project

Most successful project: Export & Import Management project

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)
	Please state the stakeholders of this project and briefly explain the roles they play.

1. Export Import dept. - Management & Process as their responsible job in the company

2. Customs broker - Assist us to declare customs declaration

3.

4.

| **Question 7** | How long was the development and Implementation time of this project? |

| < 6 months | Y   6 months to 1 year   1 to 2 years |

| 2 to 3 years | 3 to 5 years   > 5 years |

| **Question 8** | Who funded the project and for how much? |

Budget from: Own company   USD _____

| **Question 10** | Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project. |

Differences: Better cost save, better simplified process, high reliable data, better speed up.

| **Question 11** | Please state the documents being exchanged in this project and the |

standards adopted.

Documents: Standards:

1. ____INV_____   Modified   own   EDIFACT
                                                          format_____
2. ____PO_____
                                                          _____ Own format_____
3. _____ASN_____
                                                          __ Modified own EDIFACT
                                                          format _____

> **Question 12**   Please explain the business model
>   of this project.

Cost saving & high reliable process for Buy - Distribution - Payment

> **Question 13**   Who are the owner, developer and
>   operator of this project?

Owner: Company CEO   Developer: Company staff and   Operator:
                                        an IT solution company   Company staff

> **Question 14**   Please state the number of users
>   and the industries they belong to in
>   this project and the market share.
>   Also please state how long your
>   project spent to get to this number of
>   users.

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
_____	1.Customs broker	_____	_____ months/years
_____	2.Manufacturing company	_____	_____ months/years
_____	3.Transportation Company	_____	_____ months/years

> **Question 15**   If you were to start the project all
>   over again, what's your comments in
>   regards to the below items?

Items: Yes/No   How? (Methods)

Do you think you can shorten the project implementation time?

___Y_   Experience Applied and Pre-analysis

Do you think you can reduce the project cost?

___Y_   Experience Applied and appropriate staff

Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.

___Y_

Time:

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 18   How much human resource saving has the project brought you?

_____ good human resource saving_____

_____

_____

Question 19   How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

_____ various_____ documents/forms simplified

_____ some of supporting_____ documents/forms removed

_____ some _____ data elements harmonized

Question 20   Did the project bring you more revenue? If yes, how much?

profit from cost saving

Question 21 Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

Better effectiveness for a inventory cost and turnover

Question 22 Please state other synergies or intangible benefits after the implementation of this project.

less re-input data and re-process

Part 8: Other Comments/Recommendations

Please provide any other comments or recommendations here.

 1. Questions are too required elaborate information

2. Our detailed information are top secret, then can not share with outside of our company group

3. Some questions require numbering the priority, but there are same level priority exist

4. Some questions require monetary amount, but value of a money and value of various cost which are quite different in various economies, so it's no use

7.   CSP-1

Section 2 Best Practices of Paperless Trading Projects

This part of the questionnaire will collect and analyze the case studies of paperless trading implementation to identify the critical success factors and key performance indexes of the best practices for paperless trading projects.

Definition: Paperless trading project refers to a project that is implemented to facilitate the electronic exchange of international trade related information, without the need for paper documents.

Part 1: Understanding of a paperless trading project

Question 1 In your opinion, what's your perception of a paperless trading project? (multiple choices)

☑ G2G information/documents exchange ☑ B2B information/documents exchange

☑ B2G information/documents exchange ☑ B2C information/documents exchange

☑ C2C information/documents exchange ☐ Others, pls. state

Question 2   Please rank the importance of paperless trading projects to the success of your economy in facilitating trade or in the ability of your organization to compete?

■Very important   Important   No comment

 Not important   Least important

Question 3   What do you think are the criteria to succeed in a paperless trading project?

The participation level of concerned parties and messages quality

Question 4   What do you think is the value proposition of a paperless trading project?

Message exchange within a second (time saving).

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the ***local*** paperless trading projects that you have implemented in your economy and identify the most successful one in your opinion.

1. e-Freight Project

2.

3.

Most successful project: 1

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.) Please state the stakeholders of this project and briefly explain the roles they play.

.

1. Airlines - Receive the electronic data from Forwarders like FWB, FHL (CUSEXP data in Hong Kong, China), etc

2. Agents sending out e-documents to airlines

3.

4.

Question 7	How long was the development and Implementation time of this project?

< 6 months	6 months to 1 year	1 to 2 years
2 to 3 years	3 to 5 years	> 5 years

Question 8   Who funded the project and for how much?

Budget from: GLSHK   USD _____

Question 9   What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

Diagram: N/A

Illustration: A few airlines and agents are doing the pilot run at the moment.

Question 10   Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

Differences: 13 documents will send via e-channel and e-pouch

Question 11   Please state the documents being exchanged in this project and the standards adopted.

Documents: Standards:

1. FWB   _____

2. FHL (CUSEXP in Hong Kong, China)   _____

3. Flight Manifest   _____

Question 12	Please explain the business model of this project.

electronic data exchange via e-platform

Question 13	Who are the owner, developer and operator of this project?

Owner: GLSHK   Developer: GLSHK   Operator: GLSHK

Question 14	Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users.

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
_____	Airlines	_____	2-3 years months/years
_____	_____	_____	_____ months/years
_____	_____	_____	_____ months/years

Question 15	If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	_no___	
Do you think you can reduce the project cost?	__no__	

Do you think you can recruit the above-   no
mentioned number of users in a shorter
time frame? If yes, please state the time   _____
needed.   Time:

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 16   How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Tasks: EDI data exchange

BEFORE time: _____   minutes   hours   days   weeks   months

AFTER time: _____   minutes   hours   days   weeks   months

Question 17   How much cost saving has the project brought you? Please indicate various costs in details.

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

Question 18   How much human resource saving has the project brought you?

2 Operators/month

Question 19   How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

_____ documents/forms simplified

_____ documents/forms removed

_____ data elements harmonized

Question 20   Did the project bring you more revenue? If yes, how much?

N/A

Question 21   Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

N/A

Question 22   Please state other synergies or intangible benefits after the implementation of this project.

Save manpower in input data and time in data exchange

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23   Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance   Items

1	Political will
2	Mandate use
	Incentives to attract users' adoption
3	Process simplification
	Process reengineering
4	Thorough communication among stakeholders
	Data harmonization
6	Adoption of international document standards

Free trial

Free usage

Security protection (use of encryption, PKI, digital signature etc.)

Attentive customer support and full training program

Promotion and marketing

Early bird program to encourage early adoption

Full integration of the process

Coverage of Internet and bandwidth

5 Ease of use application

Others. Please state: _____

Question 24 Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:	**Strategies:**	**Methods/Action Plans:**
1. Acceptance of the users	1. Provide demonstration to show the benefit of the project	1. Presentation and product training

Part 5: Illustration of *cross border* implementation of paperless trading project(s)

Question 25 Please list out the ***cross border*** paperless trading projects that you

have implemented in your economy and identfiy the most successful one in your opinion.

1. Ezyfreight
2. Ezycustoms
3. Ezypost

Most successful project:1

| | **Question 26** | With which member economy have you implemented the above project(s)? |

1. Airlines and Forwarders

2. Airlines and Custom Authorities

3. Airlines and Post Offices

| | **Question 27** | (The following questions refer to the most successful ***cross border*** paperless trading project that you have identified in question 22.) |

Please state the stakeholders of this project and briefly explain the roles they play.

1. Airlines - sending custom declaration information

2. Customs - accept and reply the electronic data

| | **Question 28** | How long is the development and Implementation time of this project? |

< 6 months YES   6 months to 1   1 to 2 years
                              year

2 to 3 years   ☐ 3 to 5 years   > 5 years

| **Question 29** | Who funded the project and for how much? |

Budget from: GLSHK   USD

_____

| **Question 30** | What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain) |

N/A

| **Question 31** | Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project. |

N/A

| **Question 32** | Please state the documents being exchanged in this project. |

FWB, FHL, Flight manifest and Flight status information

| **Question 33** | Please state the documents being exchanged in this project and the document standards you adopt. |

Documents: Standards:

1. FWB

2. FHL

3. Flight Status

| **Question 34** | Please explain the business model of this project. |

.

| **Question 35** | Who are the owner, developer and operator of this project? |

Owner: GLSHK   Developer: GLSHK   Operator: GLSHK

| **Question 36** | Please state the number of users and the industries they belong to in this project. Also please state how long your project spent to get to this number of users. |

Number of users: Industries: Time spent to get to this number of users:

_____   _____   _____ months/years

_____   _____   _____ months/years

_____   _____   _____ months/years

| **Question 37** | If you were to start the project all over again, what's your comments in regards to the below items? |

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	No_____	
Do you think you can reduce the project cost?	No_____	.
Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.	_NO___ Time:	

Part 6: Value Propositions of the above project(s)

| **Question 38** | How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented. |

Tasks: _____

BEFORE time: _____   minutes   hours   days   weeks   months

AFTER time: _____   minutes   hours   days   weeks   months

Question 39	How much cost saving has the project brought you? Please indicate various costs in details.

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

Question 40	How much human resource saving has the project brought you?

N/A

_____

Question 41	How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

5_____ documents/forms simplified

_____ documents/forms removed

_____ data elements harmonized

Question 42	Did the project bring you more revenue? If yes, how much?

N/A

Question 43	Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

N/A

| **Question 44** | Please state other synergies or intangible benefits after the implementation of this project. |

Time saving and improve the message quality.

Part 7: Critical Success Factors of the above project(s) and Lessons Learnt

| **Question 45** | Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical) |

Pls. put numbers to indicate the importance	Items
1	Political will
2	Mandate use
	Incentives to attract users' adoption
	Process simplification
3	Process reengineering
4	Thorough communication among stakeholders
	Data harmonization
	Adoption of international document standards
	Free trial
	Free usage
	Security protection (use of encryption, PKI, digital signature etc.)
6	Attentive customer support and full training program
	Promotion and marketing
	Early bird program to encourage early adoption

5   Full integration of the process

Coverage of Internet and bandwidth

Ease of use application

Others. Please state:

Question 46	Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

<u>**Obstacles/Challenges:**</u>	<u>**Strategies:**</u>	<u>**Methods/Action Plans:**</u>
1. Different requirement for various custom authority	Try to adapt the change in the system	Make use of WCO standard

8. Trader-4

SECTION 2 - Best Practices of Paperless Trading Projects
This part of the questionnaire will collect and analyze the case studies of paperless trading implementation to identify the critical success factors and key performance indexes of the best practices for paperless trading projects.

Definition: Paperless trading project refers to a project that is implemented to facilitate the electronic exchange of international trade related information, without the need for paper documents.

Part 1: Understanding of a paperless trading project

Question 1 In your opinion, what's your perception of a paperless trading project? (multiple choices)

Y G2G information/documents exchange   Y B2B information/documents exchange

Y B2G information/documents exchange   Y   B2C information/documents exchange

 C2C information/documents exchange

 Others, pls. state_____

Question 2 Please rank the importance of paperless trading projects to the success of your economy in facilitating trade or in the ability of your organization to compete?

Y Very imp   Important   No comment

 Not important   Least important

Question 3 What do you think are the criteria to succeed in a paperless trading project?

1. all current regulation could be translated properly to paperless project.

2. a proper system of electronic signature or electronic identification could be accepted by different government.

3. information security

Question 4 What do you think is the value proposition of a paperless trading project?

1.Unified programming language (ex. EDI, XML) is necessary due to different system in different country.

2. Unified document forms in cross border trade are considerable due to different regulation in different country.

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the ***local*** paperless trading projects that you have implemented in your economy and identify the most successful one in your opinion.

1. Customs declaration system (EDI)

2. Maritime transport network portal

3.

Most successful project: Customs declaration system (EDI)

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)
	Please state the stakeholders of this project and briefly explain the roles they play.

1. Shipping Agency - assist carrier to submit manifest for customs declaration.

2. Shipping Agency - assist ship owner to apply enter, sailing and working permission.

3.

4.

Question 7	How long was the development and Implementation time of this project?

< 6 months	6 months to 1 year	1 to 2 years
2 to 3 years	3 to 5 years Y	> 5 years

Question 8	Who funded the project and for how much?

Budget from: Government   USD _____

Question 9	What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

Diagram:

Illustration: The system is part of a modern port operational environment to increase distribution flow, promote efficiency process, and spur further development of Taiwan's logistics management capabilities.

Question 10	Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

[BEFORE]   [AFTER]

Illustration: Illustration:

Differences: Before using typewriter and face to face applying, now using keyboard and EDI transmission applying.

| **Question 11** | Please state the documents being exchanged in this project and the standards adopted. |

Documents: Standards:

1. _____Manifest_____   _____
2. ___Bill of Lading___   _____
3. _____   _____

| **Question 12** | Please explain the business model of this project. |

B2G

| **Question 13** | Who are the owner, developer and operator of this project? |

Owner:Government   Developer:Trade-van   Operator:Trade-van

| **Question 14** | Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users. |

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
___hundreds_____ __	_Shipping and trade_____ __	____100%__ _____	_____ months/years
_____	_____	_____	_____ months/years
_____		_____	_____ months/years

Question 15   If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	__y__	
Do you think you can reduce the project cost?	__N0	
Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.	__Y__ Time:	

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 16   How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Tasks: ____To submit manifest_____

BEFORE time: ___2-6_____   minutes y   hours   days   weeks   months

AFTER time: ____15_____ y   minutes   hours   days   weeks   months

Question 17   How much cost saving has the project brought you? Please indicate various costs in details.

E

(currency: __NTD___) $___100_____ for _____submit one voyage manifest_____

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

Question 19 How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

BEFORE Documents Types: Manifest and B/L_____   **AFTER** Documents Types: Manifest_____

1_____ documents/forms simplified

1_____ documents/forms removed

_____ data elements harmonized

Question 20 Did the project bring you more revenue? If yes, how much?

0

Question 21 Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

Increase our inventory cost. New system, new equipment, new technical staff, increase communication, training and maintain cost.

Question 22 Please state other synergies or intangible benefits after the implementation of this project.

Saving time and reducing typo.

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23 Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the Items importance

4	Political will
15	Mandate use
14	Incentives to attract users' adoption
5	Process simplification
13	Process reengineering
12	Thorough communication among stakeholders
6	Data harmonization
2	Adoption of international document standards
10	Free trial
9	Free usage
3	Security protection (use of encryption, PKI, digital signature etc.)
11	Attentive customer support and full training program
16	Promotion and marketing
17	Early bird program to encourage early adoption
1	Full integration of the process
8	Coverage of Internet and bandwidth
7	Ease of use application
	Others.　　Please　　state: _____

Question 24　Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:　　**Strategies:**　　**Methods/Action Plans:**

Examples: Hard to change users' behavior	Provide incentives to users	Subsidize the cost for software upgrade
1. Hard to change users' behavior	**force**	
2.Software high cost and unstable		**Subsidize the cost for software upgrade**
3.		

Part 5: Illustration of *cross border* implementation of paperless trading project(s)

Question 25	Please list out the ***cross border*** paperless trading projects that you have implemented in your economy and identfiy the most successful one in your opinion.

1.Hyundai Merchant Marine System

2.EUKOR Car Carrier ECLIP Marine System

3.DA Desk Marine System

Most successful project: 1

Question 26	With which member economy have you implemented the above project(s)?

1. Korea

2.

3.

Question 27	(The following questions refer to the most successful ***cross border*** paperless trading project that you have identified in question 22.)
	Please state the stakeholders of this project and briefly explain the roles they play.

1. Shipping Agency-assist the ship operating in each area

2. \

3..

4.

Question 28	How long is the development and Implementation time of this project?	

< 6 months   6 months to 1   1 to 2 years
                                       year

2 to 3 years   3 to 5 years   Y   > 5 years

Question 29   Who funded the project and for how much?

Budget from: Hyundai Merchant Marine   USDNA_____
                                                  ___

Question 30   What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

Diagram:

Illustration: For marine transit, booking space, ships' information, cargo's information, submit manifest, issue B/L, etc.

Question 31   Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

[BEFORE]   [AFTER]

Illustration: Illustration:

Differences: Saving paper document air mail fee

	Question 32	Please state the documents being exchanged in this project.

Manifest, B/L

	Question 33	Please state the documents being exchanged in this project and the document standards you adopt.

Documents: Standards:

1. cargo information   Manifest _____

2.   B/L_____

3. _____   _____

	Question 34	Please explain the business model of this project.

B2B & B2G

	Question 35	Who are the owner, developer and operator of this project?

Owner: Hyundai Merchant Marine   Developer: Hyundai   Operator: Hyundai
                                        Merchang Marine   Merchant Marine

<table>
<tr><td>**Question 37**</td><td>If you were to start the project all over again, what's your comments in regards to the below items?</td></tr>
</table>

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	NO___	
Do you think you can reduce the project cost?	No____	
Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.	___No_ Time:	

Part 6: Value Propositions of the above project(s)

Question 38	How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Tasks: _To submit manifest to Customs and get approved_____

BEFORE time: ___2-6 hours_   minutes y hours   days   weeks   months

AFTER time: _____15 mins__ y   minutes   hours   days   weeks   months

Question 44	Please state other synergies or intangible benefits after the implementation of this project.

Enhance the information transmission efficiency from one to another sea ports. System has been developed by headquarters and been used worldwide.

Part 7: Critical Success Factors of the above project(s) and Lessons Learnt

Question 45	Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance	**Items**	
	1	Top Management support
	13	Mandate use
	15	Incentives to attract users' adoption
	4	Process simplification
	14	Process reengineering
	7	Thorough communication among stakeholders
	6	Data harmonization
	8	Adoption of international document standards
	3	Free trial
	2	Free usage
	9	Security protection (use of encryption, PKI, digital signature etc.)
	5	Attentive customer support and full training program
	17	Promotion and marketing
	16	Early bird program to encourage early adoption
	10	Full integration of the process
	11	Coverage of Internet and bandwidth
	12	Ease of use application
		Others. Please state:

Question 46	Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:	**Strategies:**	**Methods/Action Plans:**

1. Hard to change users'   <u>force</u>
behavior

2.

3.

Part 8: Other Comments/Recommendations

Please provide any other comments or recommendations here.

9.   LSP-1

Part 5: Illustration of *cross border* implementation of paperless trading project(s)

Question 25	Please list out the ***cross border*** paperless trading projects that you have implemented in your economy and identfiy the most successful one in your opinion.

1**. Implementation of an Order Management System (OMS) for an internationally renowned footwear multinational corporation (MNC) which interconnects its Asia suppliers, local buying office and overseas offices together**

2.

3.

Most successful project:

Question 26	With which member economy have you implemented the above project(s)?

1. USA, Europe, Taiwan, China and Hong Kong, China

2.

3.

Question 27	(The following questions refer to the most successful ***cross border*** paperless trading project that you have identified in question 22.)
	Please state the stakeholders of this project and briefly explain the roles they play.

.

1. The headquarter of footwear MNC in US which has the ultimate objective of streamlining its entire supply chain and order management process and importantly possesses the "buying" power is the key driver.

2. Our company, as the nominated logistic service provider, assisting the footwear MNC to implement the project also plays a crucial role.

3. The satisfaction of the buying office in China which is executing the daily operation and facing directly the suppliers is also of paramount importance.

4. Last but not least, the buy-in from the suppliers is also crucial for the long term success.

| **Question 28** | How long is the development and Implementation time of this project? |

| < 6 months **YES** | 6 months to 1 year | 1 to 2 years |

| 2 to 3 years | 3 to 5 years | > 5 years |

| **Question 29** | Who funded the project and for how much? |

Budget from: USD

The footwear MNC through the patronage of the company's logistic services ———————————————

| **Question 30** | What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain) |

Diagram:
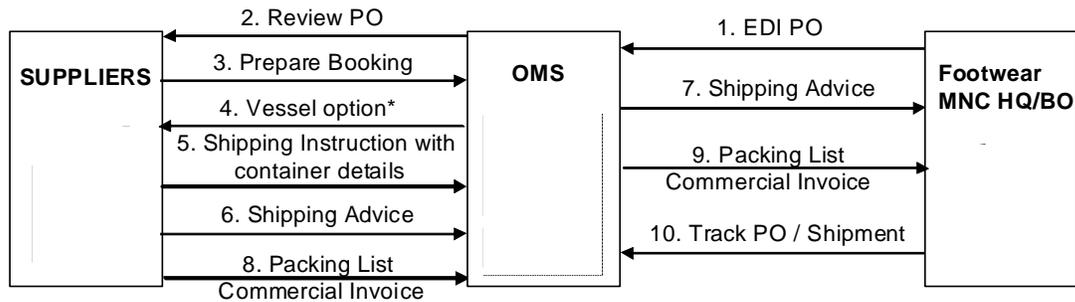
Illustration:

1. **The Footwear MNC sends electronic PO to the suppliers via the OMS**
2. **The Suppliers review it over a web front end**
3. **The Suppliers prepare a booking over the platform**
4. **And receives the vessel option from our company**
5. **The Suppliers then furnish the shipping instruction with container and PO details**
6. **And sends the shipping advice to the buying office for review**
7. **The Buying Office (BO) in turn forwards it to the overseas offices (the electronic information would ultimately be imported into the ERP for tracking)**
8. **The Suppliers create the Packing List and Commercial Invoice based on the data from the Shipping Instruction and PO.**
9. **These documents are then sent to the Buying Office for review and ultimately sent to the overseas offices**
10. **The PO data merged with the shipment information provides visibility for all parties at all stages**

Phase 1 covers the PO, booking, shipping instructions and PO tracking. Shipping Advice, Packing List and Commercial Invoice are added in Phase 2.

Question 31	Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

[BEFORE]

There was a similar system but it was merely used as a system to generate paper document for the manual process.

[AFTER]

The ultimate objective is to allow the footwear MNC to take the electronic data directly into the system to save the error prone data entry process.

By adopting a common system for the preparation of shipping advice, packing list and commercial invoice, the data inconsistency among these documents are minimized; and thereby reducing the related human resources in cross checking these documents.

Illustration:

Illustration:

Differences:

As stated above

Question 32	Please state the documents being exchanged in this project.

Please refer to information under Question 30

Question 33	Please state the documents being exchanged in this project and the document standards you adopt.

Documents: Standards:

1. **PO**   **ANSI X12**_____

2. All other documents   **XML**

3. _____   _____

Question 34	Please explain the business model of

this project.

Our company, the logistics service provider, offers this as a value added service to the footwear MNC. This is a key factor in securing the business. And this is justified by the sizeable shipment volume and thus revenue.

Question 35	Who are the owner, developer and operator of this project?

Owner: **The footwear MNC**   Developer: **Our Company**   Operator: **Our Company**

Question 36	Please state the number of users and the industries they belong to in this project. Also please state how long your project spent to get to this number of users.

Number of users:

Around 40 suppliers companies
_____
_____
_____

Industries:

Footwear_____
___
_____
_____

Time spent to get to this number of users:

Estimated to be 2 months for all suppliers (still ongoing)
_____ months/years
_____ months/years
_____ months/years

Question 37	If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	**No**____	**The two phases were implemented in an extremely tight schedule. However, the additional of 1 (and not more) developer would have been helpful.**
Do you think you can reduce the project cost?	**No**____	**The project was implemented with very light resources.**

Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.
_____
Time:

There is actually no recruitment process as such. It is more like an instruction from the footwear MNC for the suppliers to follow.

Part 6: Value Propositions of the above project(s)

Question 38	How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Not yet carried out detailed analysis on this

Tasks: _____

BEFORE time: _____   minutes   hours   days   weeks   months

AFTER time: _____   minutes   hours   days   weeks   months

Question 39	How much cost saving has the project brought you? Please indicate various costs in details.

Not yet carried out detailed analysis on this

 (currency: _____) $_____ for _____

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

Question 40	How much human resource saving has the project brought you?

Not yet carried out detailed analysis on this

_____

Question 41	How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

5_____ documents/forms simplified

_____ documents/forms removed

_____ data elements harmonized

Question 42	Did the project bring you more revenue? If yes, how much?

Yes, by securing the business from the footwear MNC for a long term basis.

For the footwear MNC, the information flow also helps streamline its operation. By having the information quicker and more accurately, the oversea offices would be able to plan for the delivery more efficiently and thereby increasing the inventory turnover.

Question 43	Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

See under Question 42

Question 44	Please state other synergies or intangible benefits after the implementation of this project.

In future, the electronic data could also be made use of by the overseas logistics company for customs clearance.

Part 7: Critical Success Factors of the above project(s) and Lessons Learnt

Question 45	Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance **Items**

	Political will
2	Mandate use
3	Incentives to attract users' adoption
7	Process simplification

8	Process reengineering
4	Thorough communication among stakeholders
	Data harmonization
	Adoption of international document standards
NA	Free trial
NA	Free usage
	Security protection (use of encryption, PKI, digital signature etc.)
10	Attentive customer support and full training program
NA	Promotion and marketing
NA	Early bird program to encourage early adoption
5	Full integration of the process
9	Coverage of Internet and bandwidth
6	Ease of use application
1	Others. Please state: **Creating business value**

Question 46   Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:	**Strategies:**	**Methods/Action Plans:**
1. Short implementation timeframe and unclear requirements and scope		**Rapid implementation through iterations of prototypes.** **Forming a small team consisting of the key developers and a person with multiple roles of business analyst / project manager. Let**

them communicate directly and jointly work out the system design.

2.

3.

Part 8: Other Comments/Recommendations

Please provide any other comments or recommendations here.

It would be helpful, especially for smaller companies such as ourselves if a simple paper on the best way to implement Paperless Trading could be made available – things to watch out for, what do right to make it successful etc.

Security in our business is not much of a concern – there is generally a strong relationship between suppliers, customers and logistics service providers, so the on-line (or paper) documents are just confirmation of what is actually happening physically – so any discrepancies will immediate raise serious questions.

10. CSP-2

This questionnaire has been addressed by the Managing Director of Applied Electronic Commerce. An Australian based company addressing cross border 'paper free' trade facilitation at the global level.

The Case study of the movements of wine 'Paper Free' from Australia to Europe (Ireland) 'Project Eureka' can be found at www.aecommerce.com.au

For the roles held at National & International level by AEC's MD to global support for establishment of the foundations and promotion of eCommerce please refer to www.aecommerce.com.au.

The premise of my response to the questionnaire is that matters directly related to Governments and legislation related to electronic signatures etc only tackles an obvious but minor challenge facing society globally at it moves to adopt paper free trade facilitation.

When we talk about paper less, or paper free we are in fact specifying an environment of computer to computer.

By eliminating the human element and intuitive ability to interpret from incomplete or out of sequence events, we immediately impose the need for common understanding and application of process and data meaning, cross border.

Examples exist of large global corporations establishing their own end-to-end supply chain capability where the definition of process and data is the IP of these organizations. Airfreight (Pay for services) corporations are the leaders.

Earlier examples were established using UN/EDIFACT EDI messages, but in these instances, large corporations, eg. GMH Walmart defined the process and data of supply to themselves, and all suppliers were obliged to spend significant money on an ongoing basis linking into these major proprietary supply chains.

Paper Free trade facilitation as it is currently deemed required and to be available at SME and developing economies level implies no capital expenditure, no specialized software, just a pay for service internet based eCommerce environment.

The APEC Electronic Commerce Steering Group Handbook for Data Harmonization and Core-Component-Based Electronic Message

Development Draft 3.1 January 19, 2009 is a significant foundational contribution toward such global adoption of eCommerce.

It is organizations such as UN/CEFACT, and the WCO that are attempting to bring such order and understanding to the processes and data of international trade.
UN/CEFACT, upon which AFACT is heavily reliant, is a seriously under resourced body of UNECE. Under resourced at funding, management and technical resources level.

The Australian Government Australia Customs and Border Protection Service through its work on 'Enhanced Trade Solutions' has just released the following 4 reports which indicate the significant progress made by Australia in communicating electronically at the border, but these reports also highlight that the basic and prime inhibitor to eCommerce uptake relates to the state of non readiness of the private sector on an end-to-end supply chain basis.
Ref www.customs.gov.au   for reports:
  - **Authorised Economic Operator Pilot Project Report**
  - **Time Release Study 2007**
  - **Customs to Customs Data Exchnage Proof of Concept Report**
  - **Enhanced Trade Solutions 2015/**

Section 1 of the questionnaire is not for a private company to complete on an international document. Answers to section 1 should be sought by APEC through formal government channels ie DFAT.

SECTION 2 - Best Practices of Paperless Trading Projects
This part of the questionnaire will collect and analyze the case studies of paperless trading implementation in depth to identify the critical success factors and key performance indexes for the best practice of a paperless trading project.

Definition: Paperless trading project refers to a project that is implemented to facilitate the exchange of international trade related information.

Part 1: Understanding of a paperless trading project

Question 1   In your opinion, what's your perception of a paperless trading project? (multiple choices)

Y G2G information/documents exchange   **Y** B2B information/documents exchange

Y B2G information/documents exchange   B2C information/documents exchange

  C2C information/documents exchange   Others, pls. state_____

Question 2   How important do you think is paperless trading project?

Y Very important   Important   No comment

 Not important   Least important

Question 3   What do you think are the criteria to succeed in a paperless trading project?

Identification and engagement of an end to end supply chain and commitment of the supply chain sector national industry level body to engage.

This involves participants at the export and import countries

The end-to end processes and document/data workflow 'as-is' must be identified.

This must be harmonised to international open global standards such as available from UN/CEFACT WCO.

The supply chain sector 'to-be' process and data exchange to be defined.

Interfaces to authorities such as Customs – both ends must be identified and established – in many cases this is the simplest task as most Customs in the developed economy are reasonably advanced with paper free support.

Question 4   What do you think is the value proposition of a paperless trading project?

Ultimately paperless trade before it can be implemented will have forced harmonisation, simplification and standardisation of international supply chains thus allowing developing economies and SME's to engage in global trade at an affordable level.

Today – large corporations with locked in supply chains already enjoy paper-free trade basically using EDI and Value added networks (VANS)

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the *local* paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

1. Customs Integrated Cargo System

2. AU wine to EU pilot "Eureka" Note: Pilot only – Ramp-up between AU & IE has just commenced.

3. Aspects of Port management

Most successful project: I can only discuss the 'Eureka' project

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)
	Please state the stakeholders of this project and briefly explain the roles they play.

1. Customs ICS has enabled paper free –computer to computer access to export & import declarations

2. Eureka interfaces to AU Customs ICS for EDN via Tradegate or via Freight Forwarders would have license to Customs approved software.

3.

4.

Question 7	How long is the development and Implementation time of this project?

< 6 months		6 months to 1 year	1 to 2 years
2 to 3 years		**Y** 3 to 5 years	> 5 years

Question 8	Where is the budget from and how much is it for this project?

The EU eTEN funding 2006 called by tender for the development of a Web based cross border trade facilitation service suited to SME's

The tendered Project 'Clearview' involving 5 EU countries

was won and delivered by the Tradefacilitate.com Company based in Ireland.

Project 'Eureka' was supported by additional funding to EU funds contributed by Tradefacilitate.com IE and AEC AU.

Budget from: USD _____**The budgets are in the order of USD Millions, but relate to complete industry sectors, cross border at national level__- What is being attempted is the biggest change in international trade in 400 years. The budgets are expended predominantly on the non ICT component of these projects.ie change management within industry sectors to move from paper based to paper-free automated web based applications. _____**

Question 9 What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

Project scope based on UN/CEFACT Interantional Supply Chain Buy/Ship/Pay reference model.

Buyer & seller identified and freight forwarders identified

Intermediaries identified, Insurance, Banks etc

Authorities identified Customs (National wine authority -in the case of Eureka)

Full workflow and data/forms interchange identified across all entities (actors).

Process mapped to EU initiated WEB2 based paper-free cross border trade facilitation service

Refer to the 'Eureka' case study at www.aecommerce.com.au

Diagram: **Addition of the 'paper-free' internet based information service overlayed with the traditional physical movements and related paper-based service.   The 2nd Diagram shows the private sector cross border workflow between traders.**
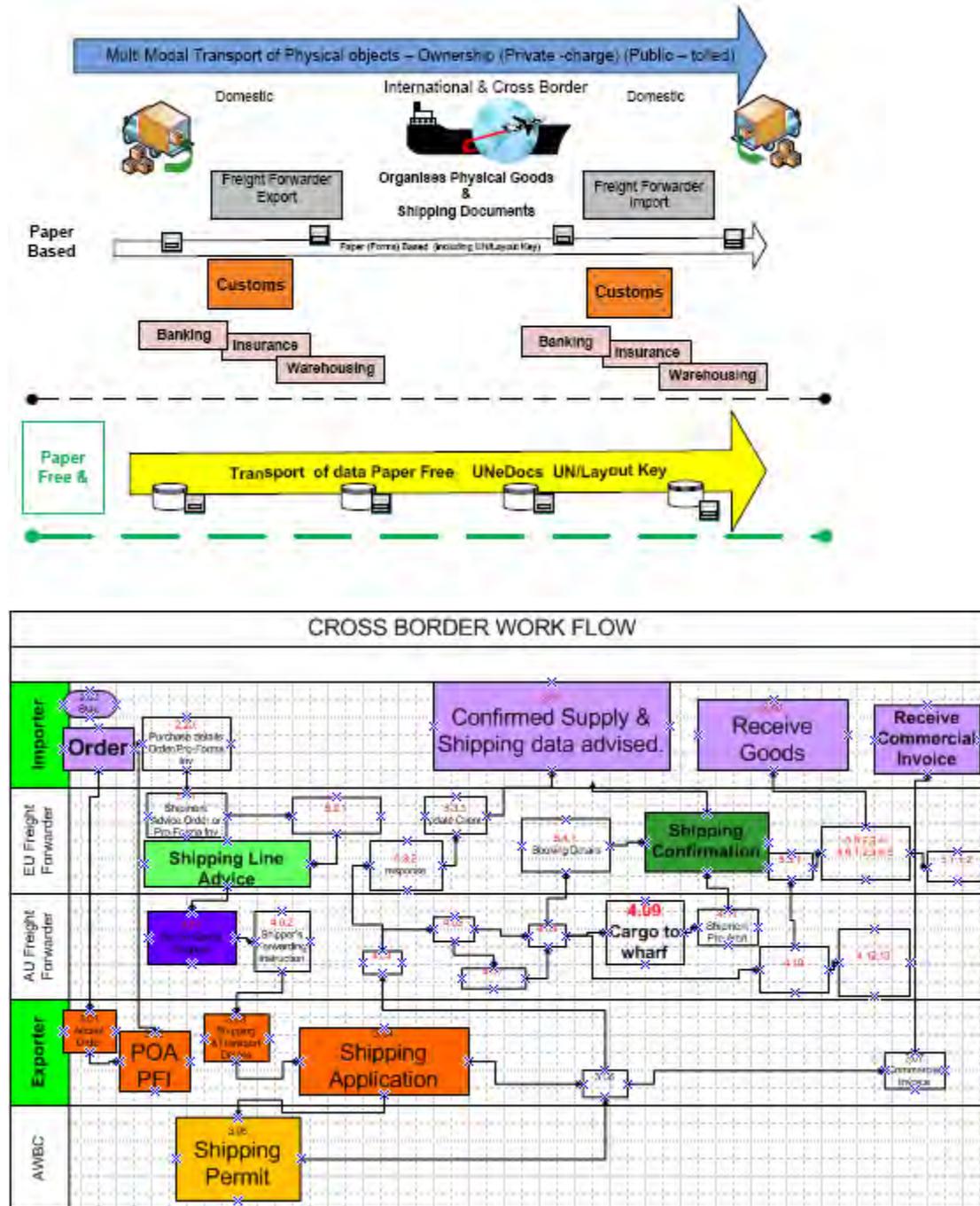
Illustration:

Questi on 10	Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

[BEFORE]

Project 'Eureka'
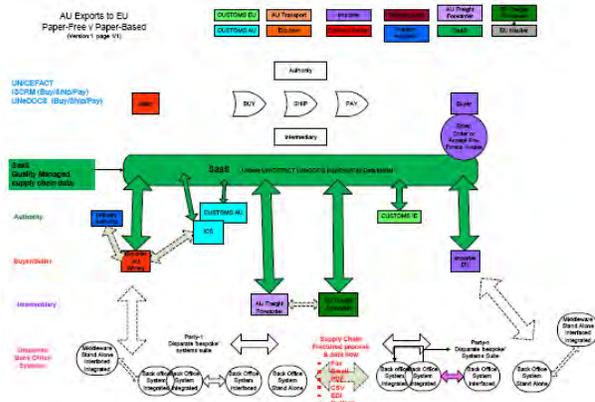
Before: **is the loose interfacing between disparate back office systems and the reliance on phone/fax/email, & PDF email attachment.**

[AFTER]

Ref the (GREEN) WEB2 platform capturing and passing data through the supply chain and simple clean interfaces between trader back office systems, Customs, etc.

After: shows a WEB2 collaborative shared environment where the trade data is progressively included at the apporopriate points in the shared workflow, This overcomes constant rekeying of data (ref statistics in the 1st. Para of the 'Eureka' case study, Enables validated and quality timely data, and is sufficient to render equivalent paper docts if required during the start-up transition stages.

Differences:

Question 11	Please state the documents being exchanged in this project and the standards you adopt.

Documents:

1. _____

2. _____

3. _____

Standards:

_____

_____

_____

Question 12	Please explain the business model

of this project.

At this point in time business models such as the example are required.

The existing work has been undertaken by the private sector and demonstrated that WEB2 based cross border 'paper-free' trade facilitation is possible.

It will now be up to Countries, Governments, Industry sectors, initiatives such as UNESCAP UN/NExT to develop the environment where business models attractive to both SME's and the private sector providers of paper-free trade facilitation can achieve both business & national benefits.

Question 13	Who are the owner, developer and operator of this project?

Owner: Developer: Operator:

Tradefacilitate Ltd Ireland   **TF IE**   **TF IE**

Question 14	Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users.

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
>100 engaging in phase1 rollout_____	**__Wine_____**	**_____N/a_____**	**__1st month of operation_____**

Question 15	If you were to start the project all over again, what's your comments in regards to the below items?

Items: Yes/No   How? (Methods)

Do you think you can shorten the project implementation time?

__These projects have 2 implementation times. Development & Engagement.

Successful Engagement requires Govt to mandate paper free in national policy supported by political will & private Industry participation and backing to shorten implementation time & assist viability short term._

Do you think you can reduce the project cost?

The project cost of future projects is able to be reduced as a Method & template has been developed as part projects 'Clearview & Eureka" and is now replicable such that one is not starting from a zero base of validation or application deployment.

Also developed and delivered a repeatable template and IP that will enable repeat projects at decreasing development cost.

Project'Eurek' also provides insight and evidence of the need for Govt & Indusyry support to SME trader communities. ___

Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.

_Yes – but the onus is primarily on the participants to be encouraged by public and private cohesion on support for paper free trade and its importance in global trade .A stark reality is a non embrace of same by key stakeholders is an inability to trade to the terms and conditions mandated

EU, USA, China and the WTO, and the WCO safe framework which 173 customs authorities (including EU US) signed up in 2006.

Time:

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 16 How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

The Owner of the Gurdies Winery The exporter in the shipments of wine paper-free advised that his business saved 16 man hours per month based on 5 overseas shipments per month.

He also confirmed his management advantage of no longer having to be physically near the fax, and able to work off emailed notifications of actions required.

A greek wine exporter (Semelli) claimed 1 hour admin time saved pre shipment with the receiving freight forwarder (Celtic) claiming 105 minutes per trade.

Where interfaces can be implemented, lag time of receiving information by fax is eliminated.

Question 17 How much cost saving has the project brought you? Please indicate various costs in details.

Celtic say they have validated losing money on docs , semelli and gurdies etc

AU Wine exporters being introduced to the WEB2 'paper-free' trade facilitation indicate potential significant costs reductions in reducing dependence on legacy non integrated and costly to own and operate older systems

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

Question 18 How much human resource saving has the project brought you?

__**2.0 operator days per month based on 5 shipments per month**

_____

_____

Question 19 How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input   have   been   removed?

Refer to the APEC handbook related to the use of

UNeDOCS as an example of the significant reduction in forms and data elements possible. The APEC handbook relates to Thailand Rice.

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

_____ documents/forms simplified

_____ documents/forms removed

_____ data elements harmonized

Question 20   Did the project bring you more revenue? If yes, how much?

Yes to be determined, but given the paper-free WEB2 based nature of the service it is now possible to market online direct to overseas customers.

Use of Paper-Free is a business compliance cost saving strategic growth decision, not just a short term costs cutting initiative.

Question 21   Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

Question 22   Please state other synergies or intangible benefits after the implementation of this project.

Getting export trade documentation into a EU sanctioned, open standards based WEB2 service has brought online and at reduced cost Insurance, Bank Financing, Electronic Brochureware, onl;ine compliance certification all online and available.

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23   Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the Items importance

1 Political will for public sector and politicians & save money for sme's

1 Mandate use

2 Incentives to attract users' adoption

3 Process simplification

3 Process reengineering

1 Thorough communication among stakeholders

3 Data harmonization

1 Adoption of international document standards

4 Free trial

4 Free usage

2 Security protection (use of encryption, PKI, digital signature etc.)

1 Attentive customer support and full training program

3 Promotion and marketing

1 Early bird program to encourage early adoption

4 Full integration of the process

2 Coverage of Internet and bandwidth

1 Ease of use application

 Others. Please state:
 _____

Question 24 Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:	**Strategies:**	**Methods/Action Plans:**
Examples: Hard to change users' behavior	Provide incentives to users	Subsidize the cost for software upgrade

1. **Endorse all of the above.**

2.

3.

Part 5: Illustration of *cross border* implementation of paperless trading project(s)

Question 25	Please list out the ***cross border*** paperless trading projects that you have implemented in your economy and select the most successful one in your opinion.

1**. EU intra**

2.**EU Oz**

3. **EU Africa**

Most successful project:

Question 26	With which member economy have you implemented the above project(s)?

1**. EU validated and funded so its pan European for competitive imports and exports**

2. **Ethiopia**

3.

Question 27	(The following questions refer to the most successful ***cross border*** paperless trading project that you have identified in question 22.)
	Please state the stakeholders of this project and briefly explain the roles they play.

1. **Buyers and sellers in intra and external EU trade are now interfacing to EU customs authorities on paperfree thus reducing costs and adhering ot compliance issue**

2. **Customs Authorities in EU have an interface for traders at no cost and by default an improved verification system on exports and know advance what is coming in and how much revenue they will collect on duties pre loading approval**

3.

4.

| | Question 28 | How long is the development and Implementation time of this project? |

< 6 months   6 months to 1   1 to 2 years
                         year

2 to 3 years   3 to 5 years   > 5 years

| | Question 29 | Where is the budget from and how much is it for this project? |

Budget from: **NA**   USD

_____

11.   CSP-3

Part 1: Understanding of a paperless trading project

Question 1	In your opinion, what's your perception of a paperless trading project? (multiple choices)		
	☑ G2G information/documents exchange		☑ B2B information/documents exchange
	☑ B2G information/documents exchange		☐ B2C information/documents exchange
	☐ C2C information/documents exchange		☐ Others, pls. state

Question 2	Please rank the importance of paperless trading projects to the success of your economy in facilitating trade or in the ability of your organization to compete?
	◉ Very important
	◯ Important
	◯ No comment
	◯ Not important
	◯ Least important

Question 3	What do you think are the criteria to succeed in a paperless trading project?
	1. Commitment by receiving entity to accept data for processing 2. Commitment by sending entity to transmit data not documents 3. Clear business benefits 4. Government and business support

Question 4	What do you think is the value proposition of a paperless trading project?
	1. Improved information exchange leading to lower costs, faster clearance of goods, less stock in the pipeline.

Part 2: Illustration of domestic implementation of paperless trading project(s)

Question 5	Please list out the local paperless trading projects that your company have implemented and select the most successful one in your opinion.
	1. Electronic delivery orders from shipping lines to importers/forwarders
	2. Pre-Receival Advices from exporters to container terminal operators
	3.
	Most successful project: ◉ 1 ◯ 2 ◯ 3

| Question 6 | (The following questions refer to the most successful paperless trading project that you have |

	identified in question 5.) Please state the stakeholders of this project and briefly explain the roles they play.
	• Example:Customs broker - assist the shipper to declare customs declaration.
	1. Shipping lines - cargo carrier and issuer of delivery order
	2. Importerforwarder - receiver of delivery order
	3.

Question 7	**How long was the development and Implementation time of this project?**
	○ < 6 months
	● 6 months to 1 year
	○ 1 to 2 years
	○ 2 to 3 years
	○ 3 to 5 years
	○ > 5 years

Question 8	**Who funded the project and for how much?**
	Budget from: Tradegate Development Fund USD $250,000

Question 9	**What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)**
	Diagram:
	Illustration:

Question 10	**Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the differences. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.**
	Differences:

Question 11	**Please state the documents being exchanged in this project and the standards adopted.**
	Documents: / Standards:
	1. Import delivery order / 1. UN/EDIFACT IFCSUM
	2. Payment Instruction / 2. APCA DE File
	3. / 3.

Question 12	**Please explain the business model of this project.**
Question 13	**Who are the owner, developer and operator of this project?**
	Owner: Tradegate Developer: Max eCommerce/T Operator: Tradegate
Question 14	**Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users.**

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
300+	Importers, customs	50 per cent	9 years

Question 15	**If you were to start the project all over again, what's your comments in regards to the below items?**

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	◉ Yes ◯ No	
Do you think you can reduce the project cost?	◯ Yes ◉ No	
Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.	◉ Yes ◯ No Time: 2-3 years	

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 16	**How much time saving has the project brought you?** **Please compare the time needed to complete the tasks as specified in the** **project scope _before and after_ the project has been implemented.**
	• Example: • Tasks: To apply for a certificate of origin

- **BEFOR**E time: 2 days   **AFTER** time: 10 minutes

Tasks: | Arrange courier to pick up and deliver delivery order |

BEFORE time: ◯ minutes ⬤ hours ◯ days ◯ weeks ◯ months

| 2 |

AFTER time: ⬤ minutes ◯ hours ◯ days ◯ weeks ◯ months

| 1 |

| Question 17 | How much cost saving has the project brought you? Please indicate various costs in details. |

- Example: US$ 20 for getting a stamp from the Mission Office

currency: | AUD | $ | 100 | for | reduced courier |

currency: | | $ | | for | |

currency: | | $ | | for | |

| Question 18 | How much human resource saving has the project brought you? |

- Example: 0.5 operator/month

| N/A |

| Question 19 | How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed? |

BEFORE Documents Types: | 1 | **AFTER** Documents Types: | 1 |

| | documents/forms simplified

| | ddocuments/forms removed

| | data elements harmonized

| Question 20 | Did the project bring you more revenue? If yes, how much? |

| Yes. $AUS250,000 per annum |

| Question 21 | Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate. |

| NO |

Question 22	Please state other synergies or intangible benefits after the implementation of this project.

Enables additional reduction in paper transactions on downstream processes and ability to provide great

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23 Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance	Items
1	Top management support
14	Mandate use
15	Incentives to attract users' adoption
2	Process simplification
3	Process reengineering
4	Thorough communication among stakeholders
7	Data harmonization
5	Adoption of international document standards
17	Free trial
18	Free usage
16	Security protection (use of encryption, PKI, digital signature etc.)
8	Attentive customer support and full training program
6	Promotion and marketing
13	Early bird program to encourage early adoption
12	Full integration of the process
11	Coverage of Internet and bandwidth
9	Ease of use application
	Others please state:

Question 24 Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:	Strategies:	Methods/Action Plans:
Examples: Hard to change users' behavior	Provide incentives to users	Subsidize the cost for software upgrade
1. Getting shipping lines to change glob	Allow sufficient time	

2.		
3.		

12. GSP-4

SECTION 2 - Best Practices of Paperless Trading Projects

Question 1 In your opinion, what's your perception of a paperless trading project?

G2G information/documents exchange   B2B information/documents exchange

B2G information/documents exchange   B2C information/documents exchange

C2C information/documents exchange   Others, pls. state_____

Question 2 Please rank the importance of paperless trading projects to the success of your economy in facilitating trade or in the ability of your organization to compete?

Very important   Important   No comment

Not important   Least important

Question 3 What do you think are the criteria to succeed in a paperless trading project?

1. Information security
2. Credibility
3. Mutual recognition among trading companies

Question 4 What do you think is the value proposition of a paperless trading project?

reduction of paper consumption and no re-keying needed

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5 Please list out the *local* paperless trading projects that you have implemented in your economy and identify the most successful one in your opinion.

Appendix F – Private Sector Responses – Case Studies

1. Compal logistics program
2. KWEC Global Logistics System
3.

Most successful project: 2

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)
	Please state the stakeholders of this project and briefly explain the roles they play.

1. Exporters/cost of production
2. Custom brokers
3. Assist exporters in declarations
4. Forwarders shipping of exported goods

Question 7	How long was the development and Implementation time of this project?
< 6 months	6 months to 1 year ▮ 1 to 2 years
2 to 3 years	3 to 5 years > 5 years

Question 8	Who funded the project and for how much?
Budget from: Provided by the company	USD 100,000_____

Question 9	What's the scope of this project?

Please elaborate. (you may attach a scenario diagram to explain)

Diagram:
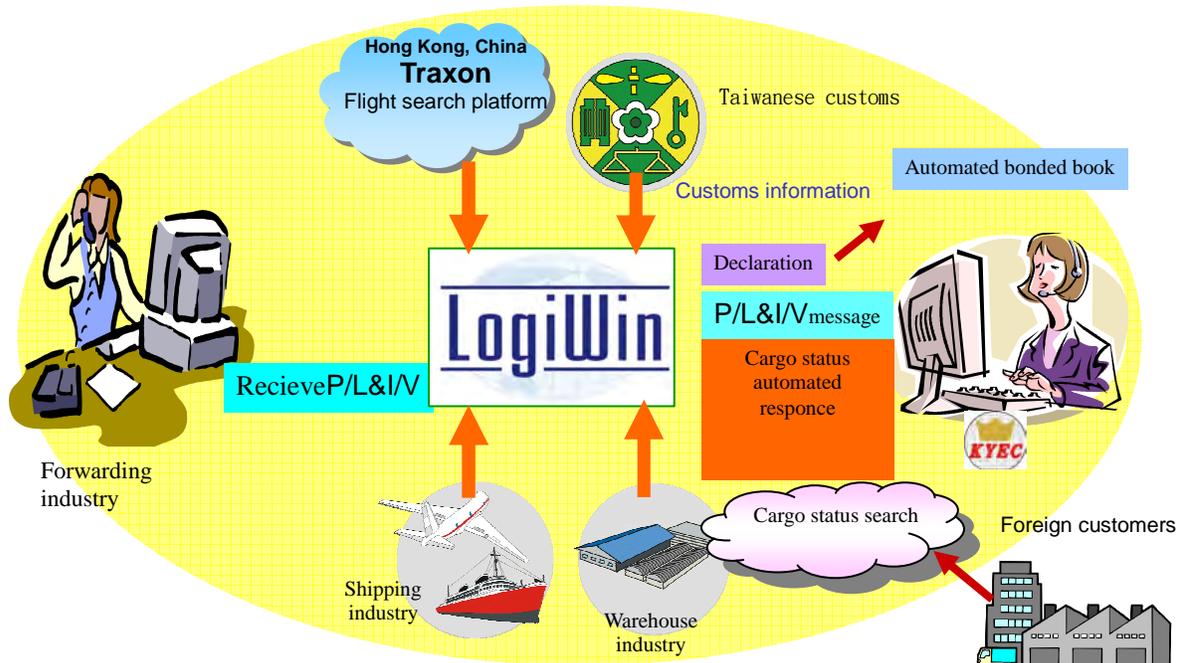
Clients: receive overseas orders
Suppliers: they can forecast production capability
forwarders: Arrange shipping, send it to the customer, import export E-documents

| **Question 10** | Please explain the scenario ***before*** the paperless trading project is implemented and the process ***after*** the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project. |

1.)   Low margin error
        No re-keying needed for export documents
        A faster working speed

2.)   Online error checking immediate correction, reduction in human resource cost, Communication cost saving.

3.)   Reduction in export documents task from 2 hours to 5 hours

4.)   Immediate information availability to overseas customers

Question 11	Please state the documents being exchanged in this project and the standards adopted.

Documents: Standards:

1. Invoice   CTINB

2. Packing lists

3. E-declaration

Question 12	Please explain the business model of this project.

Exporters receive orders from foreign costumers and then the forwarding industry will send the finished products to the place of delivery, specified by the overseas costumers.

Question 13	Who are the owner, developer and operator of this project?

Owner: KYEC   Developer: Trade-Van   Operator: Trade-Van

Question 14	Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users.

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
300	Seal and Semiconductors testing industry	20%	1.5 years
			_____ months/years
			_____ months/years

Question 15

If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	No ———	Better communication and coordination between suppliers and the forwarding industry.
Do you think you can reduce the project cost?	No ———	
Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.	Yes ——— Time: 1 year	Look for an integration and better cooperation between suppliers and forwarders.

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 16 How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Tasks: Export documents

BEFORE time: 2 hours___   minutes   hours   days   weeks   months

AFTER time: 30 mins. __   minutes   hours   days   weeks   months

Question 17 How much cost saving has the project brought you? Please indicate various costs in details.

(currency: NTD) $75,000 for customs declaration

(currency: NTD) $3,500 for Exceptions handling

(currency: NTD) $22,000 for Communications

Question 18 How much human resource saving has the project brought you?

5 persons/month

_____

_____

Question 19 How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

BEFORE Documents Types: **AFTER** Documents Types: _____

Packing and Invoice   documents/forms simplified

Shipping Instruction   documents/forms removed

Customs declaration form   data elements harmonized

Question 20 Did the project bring you more revenue? If yes, how much?

No.

Question 21 Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

Yes.

There was NTD $12,000 saved from inventory turnover.

Question 22 Please state other synergies or intangible benefits after the implementation of this project.

	Description	Before	After

customer order delivery ratio	delivery of volume and date according to specification by customer = order delivery	92%	98%
on-time delivery ratio	LSP to meet requirements of shipment delivery = shipment delivery	85%	98%

Target	Benefits
Managers	• Upgrade customer service, option for long-term logistics partner, lower cost and logistics risk. • Reduces fax, telephone, mail and human resource cost. • E-customs clearance, assists in tax returns, avoids legal problems. • Effective space management, strengthens competitiveness, controls cargo status, transparent and clear messaging.
Users	• avoids re-keying • reduces input errors • faster customs clearance • guarantees documents reliability • prevents documents misplacing
Customs broker/Forwarder	Higher customer satisfaction, faster domestic and overseas customs clearance

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23 Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the Items importance

1	Top management support
17	Mandate use
2	Incentives to attract users' adoption

4	Process simplification
8	Process reengineering
3	Thorough communication among stakeholders
9	Data harmonization
12	Adoption of international document standards
15	Free trial
16	Free usage
5	Security protection (use of encryption, PKI, digital signature etc.)
6	Attentive customer support and full training program
18	Promotion and marketing
7	Early bird program to encourage early adoption
10	Full integration of the process
14	Coverage of Internet and bandwidth
13	Ease of use application
	Others. Please state: _____

Question 24 Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:	Strategies:	Methods/Action Plans:
1. Original users' model	Internal top management support and	The industries should be upgraded electronically

external
partnership
cooperation

2.

3.

Part 5: Illustration of *cross border* implementation of paperless trading project(s)

Question 25	Please list out the ***cross border*** paperless trading projects that you have implemented in your economy and identfiy the most successful one in your opinion.

1. Inventec BCD plan

2. Twinheads B plan

3.

Most successful project:
Inventec BCD plan

Question 26	With which member economy have you implemented the above project(s)?

1. England
2. United States
3. People's Republic of China

Question 27	(The following questions refer to the most successful ***cross border*** paperless trading project that you have identified in question 22.)
	Please state the stakeholders of this project and briefly explain the roles they play.

1. Exporters: A lower cost of production and for semi manufacture goods.
2. Customs broker: Assistance in export related customs declaration

3. Forwarders: Export shipment
4. Overseas customers: receiving export order
5. Bank: Online payment and assist suppliers within more efficient financing.

Question 28	How long is the development and Implementation time of this project?

< 6 months   6 months to 1   Y   1 to 2 years
                                                   year

2 to 3 years   3 to 5 years   > 5 years

Question 29	Who funded the project and for how much?

Budget from: USD 3,000,000.00_____

Question 30	What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain)

Diagram:
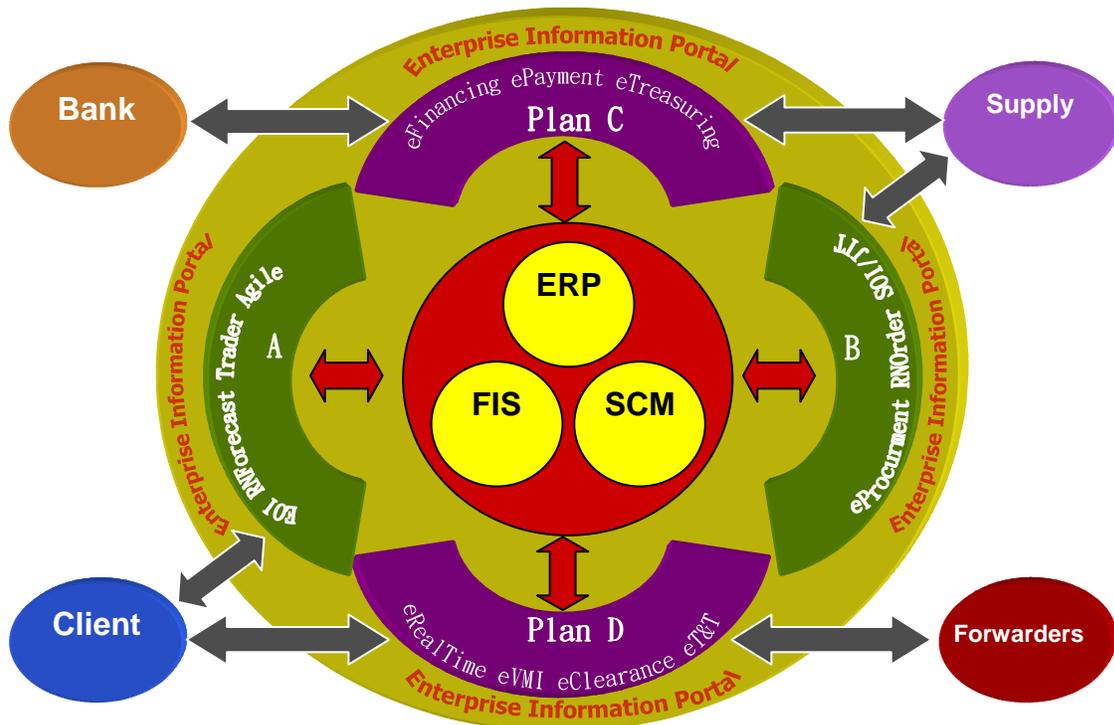
Explanation:

1. Client: receives orders from overseas customer
2. Suppliers: forecasting of production capability.
3. Forwarders: They arrange shipment delivery to customer and use electronic import documents
4. .Bank: Online payment and assists to supplier with a faster financing service

.

Question 31	Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

Differences:

1. Mail and fax overseas orders are now changed into messages (EDI, XML, etc)
2. Suppliers orders change from fax method to web method
3. Customs brokers and forwarders: Hand made registries are now change into a automated approach
4. Online banking services

| **Question 32** | Please state the documents being exchanged in this project. |

Documents:
- invoice,
- packing
- CO

Standards:
CTINV

| **Question 33** | Please state the documents being exchanged in this project and the document standards you adopt. |

Documents:

1. Preferential CO

2.

3. _____

Standards:

XML _____

_____

| **Question 34** | Please explain the business model of this project. |

First domestic producers receive orders from overseas costumers then it is passed on to the suppliers where it is processed in the production line, when the good are finished they are handled by the forwarders that deliver the finish goods to the indicated destination by the overseas customers.

| **Question 35** | Who are the owner, developer and operator of this project? |

Owner:

Inventec
     Inventec

Developer:

Operator:

Trade-Van

Question 36

Please state the number of users and the industries they belong to in this project. Also please state how long your project spent to get to this number of users.

Number of users:	Industries:	Time spent to get to this number of users
1,500_____	Notebook industry_____	2 years
_____		_____ months/years
_____	_____	_____ months/years
	_____	

Question 37

If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	_No___	
Do you think you can reduce the project cost?	_No___	
Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.	_No___ Time:	

Part 6: Value Propositions of the above project(s)

Question 38

How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Tasks: __ acceptance delivery of order _____

BEFORE time: _2 hours___   minutes   hours   days   weeks   months

AFTER time: 15 mins._____   minutes   hours   days   weeks   months

Question 39	How much cost saving has the project brought you? Please indicate various costs in details.

(currency: __NTD_) $250,000_____ for Customs declaration form_____

(currency: __NTD_) $17,000_____ for __Exceptions handlings____

(currency: __NTD_) $ 52,000_____ for Communications_____

Question 40	How much human resource saving has the project brought you?

10 persons per month_____

Question 41	How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

BEFORE Documents Types: _____   **AFTER** Documents Types: _____

Packing, invoice_____ documents/forms simplified

Shipping instructions_____ documents/forms removed

Customs declaration_____ data elements harmonized

Question 42	Did the project bring you more revenue? If yes, how much?

It did not bring any extra revenue

Question 43	Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

inventory cost saved by 26,000 NTD

Question 44   Please state other synergies or intangible benefits after the implementation of this project.

Part 7: Critical Success Factors of the above project(s) and Lessons Learnt

Question 45   Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance   **Items**

	Items
	Political will
1	Mandate use
8	Incentives to attract users' adoption
9	Process simplification
5	Process reengineering
6	Thorough communication among stakeholders
2	Data harmonization
10	Adoption of international document standards
7	Free trial
16	Free usage
17	Security protection (use of encryption, PKI, digital signature etc.)
11	Attentive customer support and full training program
12	Promotion and marketing
15	Early bird program to encourage early adoption
18	Full integration of the process

13   Coverage of Internet and bandwidth

4   Ease of use application

Others. Please state: Creating business value

Question 46	Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

<u>**Obstacles/Challenges:**</u>	<u>**Strategies:**</u>	<u>**Methods/Action Plans:**</u>
1. Export and imports logistics	Change the commerce process to BPR	Change the LSP and suppliers internal messaging systems and a unified use of it.
2. situation analysi		
3. task processes analysis		

13. LSP-2

SECTION 2 - Best Practices of Paperless Trading Projects
This part of the questionnaire will collect and analyze the case studies of paperless trading implementation to identify the critical success factors and key performance indexes of the best practices for paperless trading projects.

Definition: Paperless trading project refers to a project that is implemented to facilitate the electronic exchange of international trade related information, without the need for paper documents.

Part 1: Understanding of a paperless trading project

Question 1 In your opinion, what's your perception of a paperless trading project? (multiple choices)

Y   G2G information/documents exchange

Y   B2B information/documents exchange

 B2G information/documents exchange

Y   B2C information/documents exchange

Y   C2C information/documents exchange

 Others, pls. state_____

Question 2 Please rank the importance of paperless trading projects to the success of your economy in facilitating trade or in the ability of your organization to compete?

Y Very important   Important   No comment

 Not important   Least important

Question 3 What do you think are the criteria to succeed in a paperless trading project?

Government support / Regulations design / Enterprise motivation

Question 4 What do you think is the value proposition of a paperless trading project?

All valuable business products.

Part 2: Illustration of *domestic* implementation of paperless trading project(s)

Question 5	Please list out the ***local*** paperless trading projects that you have implemented in your economy and identify the most successful one in your opinion.

1. . Countrywide Documents imaging system

2International documents imaging system

3.

Most successful project: International documents imaging system

Question 6	(The following questions refer to the most successful paperless trading project that you have identified in question 5.)
	Please state the stakeholders of this project and briefly explain the roles they play.

Example: Customs broker – assist the shipper to declare customs declaration.

1. Destination Customs broker department - assist international shipment process import country Customs clearance

2. Countrywide documents imaging - Assist Export shipper documents transfer

3.

4.

Question 7	How long was the development and Implementation time of this project?

  < 6 months   6 months to 1   1 to 2 years
                                       year

  2 to 3 years   3 to 5 years   Y   > 5 years

Question 8	Who funded the project and for how much?

Budget from: UPS Corporate office   USD _____NA_____

Question 9	What's the scope of this project? Please elaborate. (you may attach a

scenario diagram to explain)

Diagram: Worldwide destination implemented

Illustration:

Question 10	Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project.

[BEFORE]   [AFTER]

Illustration: Illustration:

Differences: cost saving and on time to catch necessary documents when needed.

Question 11	Please state the documents being

exchanged in this project and the standards adopted.

Documents:

1. automatically selection from system _

2. _____

3. _____

Standards:

_fax   and   need   to store_____

_____

_____

Question 12	Please explain the business model of this project.

Automatically selection from system or down load when needed.

Question 13	Who are the owner, developer and operator of this project?

Owner:corporate   Developer:corporate   Operator: worldwide countries

Question 14	Please state the number of users and the industries they belong to in this project and the market share. Also please state how long your project spent to get to this number of users.

Number of users:	Industries:	Market Share:	Time spent to get to this number of users:
__more than 200 countries	_____	_____	__6 months_ months/years
_____	_____	_____	_____ months/years
_____	_____	_____	_____ months/years

Question 15	If you were to start the project all over again, what's your comments in regards to the below items?

Items:	Yes/No	How? (Methods)
Do you think you can shorten the project implementation time?	__N _	

Do you think you can reduce the project cost?

__N__

Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.

__N__

Time:

Part 3: The below questions are to understand the Value Propositions of the above project.

Question 16   How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented.

Tasks: To apply import shipment invoice _____

BEFORE time: _____30_____ Y   minutes   hours   days   weeks   months

AFTER time: _____2_____ Y   minutes   hours   days   weeks   months

Question 17   How much cost saving has the project brought you? Please indicate various costs in details.

(currency: ___NTD__) $_____650000_____   for _____for import and export shipment documents process

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

Question 18   How much human resource saving has the project brought you?

Example: 0.5 operator/month

_____ 2 operator / monthly _____

_____

_____

Question 19   How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed?

BEFORE Documents Types: __fax_   **AFTER** Documents Types: _imaging_

_____ documents/forms simplified

_____ documents/forms removed

_____ data elements harmonized

Question 20   Did the project bring you more revenue? If yes, how much?

operation cost saving. NTD 650,000 yearly

Part 4: Critical Success Factors of the above project(s) and Lessons Learnt

Question 23   Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance   **Items**

1	Top Management
	Mandate use
	Incentives to attract users' adoption
2	Process simplification
3	Process reengineering
	Thorough communication among stakeholders
5	Data harmonization
4	Adoption of international document standards
6	Free trial
	Free usage

Security protection (use of encryption, PKI, digital signature etc.)

Attentive customer support and full training program

Promotion and marketing

Early bird program to encourage early adoption

Full integration of the process

Coverage of Internet and bandwidth

7   Ease of use application

Others.   Please   state:
_____

Question 24   Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

Obstacles/Challenges:	Strategies:	Methods/Action Plans:
Examples: Hard to change users' behavior	Provide incentives to users	Subsidize the cost for software upgrade
1. Government regulation	**Provide project and process SOP**	**Invited governments officer and provided process procedure**
2.local customs broker	**Communicated**	**government regulations revised.**
3.		

Part 5: Illustration of *cross border* implementation of paperless trading project(s)

Question 25   Please list out the ***cross border*** paperless trading projects that you have implemented in your economy and identfiy the most successful one in

your opinion.

1. Imaging export document into system and select by destination operation when needed. 2.

3.

Most successful project:

Question 26	With which member economy have you implemented the above project(s)?

1. More than 200 countries or areas

2.

3.

Question 27	(The following questions refer to the most successful ***cross border*** paperless trading project that you have identified in question 22.)
	Please state the stakeholders of this project and briefly explain the roles they play.

1. Import Customs broker - destination Customs declaration preparation before shipment arrival

2. \

3..

4.

Question 28	How long is the development and Implementation time of this project?

< 6 months   6 months to 1 year   1 to 2 years

2 to 3 years   3 to 5 years   Y   > 5 years

Question 29	Who funded the project and for how much?

Budget from: Corporate   USDNA_____ ___

| **Question 30** | What's the scope of this project? Please elaborate. (you may attach a scenario diagram to explain) |

Diagram: Worldwide UPS import sites

Illustration:

| **Question 31** | Please explain the scenario *before* the paperless trading project is implemented and the process *after* the implementation. You may use two diagrams or flow charts to explain the **differences**. You are encouraged to elaborate the process reengineering that has been taken place to realize the project. |

[BEFORE]   [AFTER]

Illustration: Illustration:

Differences: Imaging into UPS imaging system

| **Question 32** | Please state the documents being exchanged in this project. |

Daily more than 7000 pieces

Question 33	Please state the documents being exchanged in this project and the document standards you adopt.	

Documents: Standards:

1. export shipment invoice and packing   export shipment invoice and

2.   packing _____

3. _____   _____

Question 34	Please explain the business model of this project.

Imaging to replace fax machine

Question 35	Who are the owner, developer and operator of this project?

Owner: Corporate   Developer: Operator: UPS
                                                corporate   destination sites

Question 36	Please state the number of users and the industries they belong to in this project. Also please state how long your project spent to get to this number of users.

Number of users: Industries: Time spent to get to this
                                                                 number of users:
200 _____   _____
                                                                 NIL   _____
_____   _____   months/years

_____   _____   _____ months/years

                                                                 _____ months/years

Question 37	If you were to start the project all over again, what's your comments in regards to the below items?

Items: Yes/No   How? (Methods)

Do you think you can shorten the project
implementation time?
                                                  NO___

Do you think you can reduce the project cost?

                                                  No____

Do you think you can recruit the above-mentioned number of users in a shorter time frame? If yes, please state the time needed.

___No_

Time:

Part 6: Value Propositions of the above project(s)

| **Question 38** | How much time saving has the project brought you? Please compare the time needed to complete **the tasks as specified in the project scope _before and after_** the project has been implemented. |

Tasks: _____

BEFORE time: ___120_____y   minutes   hours   days   weeks   months

AFTER time: _____40_____ y   minutes   hours   days   weeks   months

| **Question 39** | How much cost saving has the project brought you? Please indicate various costs in details. |

(currency: __NTD___) $_____650000_____ for _____Yearly_____

(currency: _____) $_____ for _____

(currency: _____) $_____ for _____

| **Question 40** | How much human resource saving has the project brought you? |

2 operator / month

_____

| **Question 41** | How many documents/forms have you simplified or eliminated from this project? How many data elements that are double input have been removed? |

BEFORE Documents Types: invoice **AFTER** Documents Types:invoice

_____   _____

Daily average 7000 pieces_____ documents/forms simplified

_____ documents/forms removed

_____ data elements harmonized

Question 42   Did the project bring you more revenue? If yes, how much?

Yes, NT$ 650000 / yearly

Question 43   Did the project reduce your inventory cost or increase your inventory turnover? If yes, pls. elaborate.

Yes, all file been an electronic file no warehouse to store the paper.

Question 44   Please state other synergies or intangible benefits after the implementation of this project.

History data check

Part 7: Critical Success Factors of the above project(s) and Lessons Learnt

Question 45   Please choose and prioritize the critical success factors to succeed in the above project. Please put numeric indexes in the boxes you think relevant to your project. (multiple entry, 1=most critical)

Pls. put numbers to indicate the importance   **Items**

1	Top Management support
	Mandate use
	Incentives to attract users' adoption
2	Process simplification
	Process reengineering
	Thorough communication among stakeholders
3	Data harmonization
4	Adoption of international document standards
	Free trial
	Free usage

5   Security protection (use of encryption, PKI, digital signature etc.)

Attentive customer support and full training program

Promotion and marketing

Early bird program to encourage early adoption

Full integration of the process

Coverage of Internet and bandwidth

Ease of use application

Others. Please state:

Question 46   Please share with us your lessons learnt in this project. You may share with us the Obstacles and Challenges you encountered in this project and the Strategies and Methods you used to overcome them.

<u>Obstacles/Challenges:</u>	<u>Strategies:</u>	<u>Methods/Action Plans:</u>
1. Government regulations did not set up	<u>suggest to revise regulations</u>	raise formal documents to government and processing
2.		
3.		