

# APEC Guidance for Electronic Commerce (Stage 3): Lessons Learnt of Implementation of APEC Strategies and Actions toward a Cross-Border Paperless Trading Environment

### **Final Report**



APEC Electronic Commerce Steering Group APEC Committee on Trade and Investment

Moscow December, 2010

### APEC PROJECT

Development of APEC Guidance for Electronic Commerce (Stage 3): Lessons Learnt of Implementation of APEC Strategies and Actions toward a Cross-Border Paperless Trading Environment **CTI 53/2009T**:

### Prepared By

Association for Cooperation with Nations of Asia and Pacific Region (Russia) 15, build 8, Yaroslavskaya Street.

Moscow 129366 Russia Tel: +7 (495) 617 4238 Fax: +7 (495) 617 4238

Email: makarycheva53@mail.ru, Ana\_Filichkina@mail.ru

### FOR THE ASIA-PACIFIC ECONOMIC COOPERATION SECRETARIAT

35 Heng Mui Keng Terrace Singapore 119616 Tel: (65) 68919-600 Fax: (65) 68919-690

Email: info@apec.org Website: www.apec.org

© 2010 APEC Secretariat

APEC#210-CT\_01.10

### CONTENT

	1.	LIST OF ABBREVIATIONS	4
	2.	EXECUTIVE SUMMARY	6
	3.	Introduction	.12
	3.1.	PAPERLESS TRADE – INTERNATIONAL ORGANIZATIONS POINTS OF VIEW	.12
	3.2.	PAPERLESS TRADE – APEC POINT OF VIEW. "APEC'S STRATEGIES"	.20
	3.3.	PROJECT BACKGROUND	.24
PAPERL	4. ess Tr	REVIEW OF THE RESULTS OF APEC'S STRATEGIES AND ACTIONS TOWARD A CROSS-BORDER	.27
Tp a DIN	5.	CURRENT STATUS OF APEC'S STRATEGIES AND ACTIONS TOWARD A CROSS-BORDER PAPERLESS	
TRADIN			
	5.1.	APEC ECONOMIES DOMESTIC ENVIRONMENT BRIEF OVERVIEW	.33
TOWARI	6. d a Cr	RECOMMENDATIONS FOR FURTHER IMPLEMENTATION OF THE "APEC'S STRATEGIES AND ACTIO OSS-BORDER PAPERLESS TRADING ENVIRONMENT	
	6.1. Т	HE WORKSHOPS RECOMMENDATIONS:	.44
	6.2. 0	OUTCOMES OF THE PROJECT AND RELATED RECOMMENDATIONS:	.46
	Wor	KSHOPS PROCEEDING	.50
	Th	e First Workshop "Informational Systems for Paperless Trading"	.50
	Th	e Second Workshop "Domestic Paperless Trading Environment"	.56

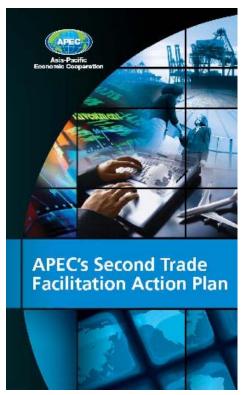
### 1. List of Abbreviations

ACN	Association for Cooperation with Nations of Asia		
	and the Pacific Region		
AQIS	Australian Quarantine and Inspection Service		
APEC	Asia-Pacific Economic Cooperation		
ASEAL	Asia Europe Alliance for Paperless Trade		
ASEAN	Association of Southeast Asian Nations		
B2B	Business-to-Business		
BPI	Business Process Interconnect		
BPA,	Business Pprocesses Analysis,		
C2B	Citizen-to-Business		
C2C	Citizen-to-Citizen		
CA	Certification Authority		
ECO	Electronic Certificate of Origin		
e-SPS	Sanitary and Phyto-Sanitary Certificates		
CTI	[APEC] Committee on Trade and Investment		
e-Commerce	Electronic Commerce		
ECSG	[APEC] E-Commerce Steering Group,		
EDMS	Electronic Document Management Systems		
ISO	International Organization for Standardizations		
ICT	Informational Communication Technologies		
PTS	Paperless Trade Subgroup		
G2B	Government-to-Business		
G2G	Government-to-Government		
GBD	Global Business Dialogue (on Electronic		
	Commerce)		

GST	Goods and Services Tax
GATS	General Agreement of Trade in Service
GATT	General Agreement of Tariff and trade
SAD	Single Administrative Document
PPP	Private-public Partnership
UN/CEFACT	United Nations Centre for Trade Facilitation and
	Electronic Business
WTO	World trade Organization
UN/ESCAPE	United Nations Economic and Social Commission
	for Asia and Pacific
UNECE	United Nations Economic Commission for Europe
UNeDocs	United Nations electronic Trade Documents

### 2. Executive Summary

APEC attaches great importance to trade facilitation. APEC's Bogor Goals and Osaka Action Agenda are basis of the activities in this direction.



Electronic commerce and paperless trade are important drivers and tools of trade and investment liberalization and implementation of APEC Trade Facilitation Action Plan (TFAP) and APEC Investment Facilitation Action Plan (IFAP). E-commerce is one of the APEC priorities since 2004. "APEC's Strategies and Action toward a Cross-Border Paperless Trading Environment" was adopted in Santiago, Chile in September 2004 by Ministers of Foreign Affairs and Trade and is one of the basic documents for ECSG activities as well as for trade facilitation in the whole. The project objective is high-quality and well-timed

implementation of the "APEC's Strategies..." The monitoring of the "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment" implementation is an on-going process for the Paperless Trading Sub-group (PTS) of ECSG. 2010 is the milestone of the document and it is necessary to organize special events to thorough review, analysis and discussions of the intermediate results.

### **Principal conclusions:**

This project APEC Guidance for Electronic Commerce (Stage 3): Lessons Learnt of Implementation of APEC Strategies and Actions toward a Cross-Border Paperless Trading Environment is the logic continuation of two previous projects: "APEC Guidance for electronic Commerce", using the Best Practices of E-Government Procurement Systems (Stage 1, 2006) and "Reference Model of Paperless Trading Hub design and Development" (Stage 2, 2008).

The previous projects executed by the Russian Federation (Stage 1 and Stage 2) were devoted to the technical issues of interoperable framework for e-commerce in APEC region (a reference model that serves to provide insight in the roles and functions that are needed to achieve interoperable framework). This project (Stage 3) covered 12 months and came to the following conclusions:

- I. There are some achievements in the field of e-commerce in every economy: their levels are very different. There is no any common plan with definite steps, which could be used for further co-coordinated "Strategies..." implementations;
- II. The points of view of APEC economies and International organizations related with e-commerce environment are mostly coincided;
- III. "APEC's Strategies..." for further implementation should be includes into the individuals plans of every economy common plan with specific recommendations for every economy, taking into account developing of interoperable platform in APEC region;
- IV. There is a very good example, which cooperates some APEC economies ASEAN Single Window (ASW). It promotes a platform for submission and focuses this decision with Customs encouraging other agencies to communicate in a timely manner with Customs. ASW is developing rapidly, involves new members and should be considered as the best practice in APEC region;

V. Interoperable framework should be developed with the leading role of APEC member economies governments, with strong public-private partnership, actively involving business and service providers.

For realizing this project the Association for Cooperation with Nations of Asia and Pacific Region (Russia) has formed a working group of the following persons:

Name	Organization, position	Phone	E-mail
Bogdanova Tatiana	Association for Cooperation with Nations of Asia and Pacific Region, Project Coordinator	+7(495) 617 4238	TatyaBogdanova@yandex.ru
Makarycheva Natalia	Association for Cooperation with Nations of Asia and Pacific Region, President	+7(495) 617 4238	Makarycheva53@mail.ru
Filichkina Anastasia	Association for Cooperation with Nations of Asia and Pacific Region, Project Leader	+7(495) 617 4238	Ana_Filichkina@mail.ru
Kozliakov Sergey	Association for Cooperation with Nations of Asia and Pacific Region, Vice-President	+7(495) 617 4238	KSA-m@mail.ru
Miyasnikov Alexander	Parus Corporation, Analytic	+7(495)797-8992	Miasnikov@list.ru
Sabanov Alexey	Aladdin Security Solutions, Commerce Director	+7(495) 231-3113	ASabanov@aladdin.ru
Murugov Sergey	Russian Joint Stock Company "Top- Cross", General Director	+7 (499) 158-0390	msm@top-cross.ru
Subbotin Sergey	Association for Cooperation with Nations of Asia and Pacific Region, Projects Director	+7(495) 617 4238	Subbotin_s@mail.ru

Name	Organization, position	Phone	E-mail
Domrachev Alexey	Ministry of Telecom and Mass- Communications of the Russian Federation, Department of State Policy of Informatization and IT, Counselor	+7 (499) 503 9744	alekdomrachev@gmail.ru
Potrashkov Vadim	Center of Economic Development, Director	+7 (495) 917 2346)	kor@vapr.ru
Senkevich Oleg	Customs Procedures Department, Federal Customs Agency, Director	+7 (495) 449 8802	N/A
Dimitrov Ilya	E-market Places Association, Executive Director	+7 (495) 589-3360	Ilya@aetp.ru
Homutova Ulyana	Sberbank-AST, Leading expert	+7 (985) 197-2776	UAKhomutova@sberbank- ast.ru
Krasavin Nickolay	Representative of ABAC in Russia	+7 (495) 729-5370	nickolayk@basel.ru
Ivanov Dmirty	Commercial Bank VTB	+7 (495) 783-2102	ivanov@vtb.ru
Davydenko Nadejda	The Russian Raylways	+7 (499) 242-2725	Ndavydenko@rzd-center.ru
Anykiev Artyom	RF Ministry of Economic Development, Project Overseer	+7 (495) 651-75-88	Anykiev @economy.gov.ru

The participants of the working group represented government bodies, business companies, structures of private-governmental partnership, related to providing, executing and developing e-commerce in the Russian Federation and involved in international cooperation in this field.

The working group implemented the project in close cooperation and multilateral interaction.

### 3. Introduction

The project APEC Guidance for Electronic Commerce (Stage 3): Lessons Learnt of Implementation of APEC Strategies and Actions toward a Cross-Border Paperless Trading Environment is the follow-up of two previous projects: "APEC Guidance for electronic Commerce", using the Best Practices of E-Government Procurement Systems (Stage 1, 2006) and "Reference Model of Paperless Trading Hub: Design and Development" (Stage 2, 2008).

These two projects were aimed to help APEC economies Governments to establish friendly conditions for development of National Electronic Commerce and then to integrate them on multi-national global level for paperless trade and another aim of the project was to assist APEC Member Economies to meet free trade and investment liberalization goals.

### 3.1. Paperless Trade – International Organizations Points of View

Fig.1. Performance of APEC Economies

APEC Economies	DB-TAB	LPI	APEC Economies	DB-TAB	LPI
Australia	27	18	New Zealand	26	21
Brunei Darussalam	48	-	Papua New Guinea	89	124
Cana da	38	14	Peru	91	67
Chile	56	49	The Philippines	68	44
People's Republic of China	44	27	Russia	162	94
Hong Kong, China	2	13	Singapore	1	2
Indonesia	45	75	Chinese Taipei	33	20
Japan	17	7	Thailand	12	35
Republic of Korea	8	23	The United States	18	15
Malaysia	35	29	Viet Nam	74	53
Mexico	74	50			

13

**DB: TAB: Doing Business – Trading Across Border,** 

**LPI: Logistics Performance Index** 

### **UN/ESCAP's Support of Paperless Trading.**

In a recent information note by UNECE and UN/ESCAPE, it was again confirmed: "UNeDocs is currently in the final step of approval as an international standard. It is now in an UN/CEFACT implementation and verification phase being carried out in six countries in Europe, North America and Asia-Pacific. After completion of this phase, it will be published as a UN standard. UNECE and UNESCAP have joined their efforts to recommend to Governments that they adopt and implement this standard.

The Asia-Pacific region is one of the richest regions in the setting up of electronic Single Window with almost all sea-linked economies operating such systems. For example, Japan, the Republic of Korea, Singapore, Malaysia and Hong Kong (China) all have such systems already in place. At a sub regional level, the ASEAN Single Window is expected to become operational in 2012. It will enable exchange of trade data among all ten nations of ASEAN.

Adoption of Single Window is vital for landlocked countries, as an electronic data submission and exchange can compensate for distance and remoteness.

A close collaboration between UNECE and UNESCAP in promoting the implementation of UNeDocs plays an important role. Such collaboration can be channeled through the regional network of experts for paperless trade, which is planned under the new joined project between the two UN regional commissions. The network of experts will aim to build a critical mass of expertise for paperless trade in order to implement UNeDocs and other related standards and tools in the Asia-Pacific region. The role of UNECE would be to provide an international

expertise on UNeDocs, while UNESCAP would use its convening power and mobilize the regional expertise to promote the region-wide implementation of this future standard so as to ensure interoperability between trade data exchanged among the individual countries and sub regions."

But in reality there is no evidence that any funded project structure exists for cooperation of APEC, UNECE and UNESCAP in fostering customization of UNeDocs and Single Window standards and realization of roadmap towards Paperless Trade for Asia-Pacific region.

It is clear that you can accelerate and concentrate the development of sound standards set if in parallel a real system using them is developed. That is why we propose the concept of APEC e-Trade Hub. To specify this hub's standards we will use Reference Model.

### Current activities of UNESCAP are:

- working out the Guide for Simplification of Trade Procedures (published Dec. 2009);
- working out the Data Harmonization Guide (Early 2010);
- holding of national workshops on Single Window and BPA, Mongolia;
- holding of workshop on Trade Facilitation & BPA Training;
- Mongolia Single Window Master Plan Peer Review (Oct. 2010)
- online Working Groups & Databases
- Asia Pacific Trade Facilitation Forum
- shearing of knowledge's:
  - ✓ UNNExT Brief Series
  - ✓ Online Working Groups & Databases
  - ✓ Asia Pacific Trade Facilitation Forum

### UN/CEFACT's Support of Paperless Trading.

The United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) continues its mission to improve the ability to exchange products and services among countries. It has developed and maintained a series of more than 30 recommendations and standards, which are used worldwide to simplify and harmonize trade procedures and information flows. Many of these are now international standards of the International Organization for Standardization (ISO).

Recommendation 1, for instance, the United Nations Layout Key for Trade Documents, is international standard for international trade documents at the moment. It is the basis for many key trade documents such as the European Union's Single Administrative Document (SAD). Other examples of its application include:

- Freight Forwarding Instruction FIATA (International Federation of Freight Forwarders' Associations)
- Dangerous Goods Declaration UNECE (United Nations Economic Commission for Europe)
- Goods Declaration for Export (revised Kyoto Convention) WCO (World Customs Organization)

Another example, Recommendation 25, the UN/EDIFACT Standard, is the international standard for Electronic Data Interchange. It is used throughout the commercial and administrative world. Complementing this standard there is a variety of recommendations on codes for use in international trade, such as:

- Code for Trade and Transport Locations (Recommendation 16)
- Codes for Modes of Transport (Recommendation 19)
- Code for Representation of Names of Countries (Recommendation 3).

The recommendations also cover more general aspects of trade facilitation implementation, such as:

- Recommendation 4 on National Trade Facilitation Organs outlines an approach to setting up a consultative mechanism between trade and government for implementing trade facilitation measures and instruments
- Recommendation 18 on Facilitation Measures related to International Trade
   Procedures proposes a series of measures that could by taken by
   Governments and business for the facilitation of trade transactions.

The latest recommendation, Recommendation 33, offers Guidelines on establishing a "Single Window" facility. Setting up Single Windows is one of the new approaches to trade facilitation that can provide extensive benefits to both Governments and trade.

UN/CEFACT Recommendation 33 on Single Window recommends to Governments and trade to establish a single window whereby trade-related information and/or documents need to be submitted only once at a single entry point. The Recommendation also recommends that the single window is to be established in a public/private sector partnership and that participating agencies coordinate their respective controls through the single window.

A Single Window is a facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export, and transit-related regulatory requirements. If information is electronic, individual data elements should only be submitted once. In addition, participating authorities and agencies should coordinate their controls through the Single Window. It may provide facilities for payment of relevant duties, taxes and fees. In practical terms, it aims to expedite and simplify information flows between trade and government and to bring meaningful gains to all parties involved in cross-border trade. The Single Window is generally

managed by a lead agency, usually Customs, enabling the appropriate governmental authorities to access relevant information.

The implementation and operation of a Single Window will vary from country to country depending on legal, political and organizational issues. For this kind of activity there is necessary to define the leading agency, which will manage, control and coordinate the Single Window implementation.

The lead agency must be a very strong organization with the necessary vision, authority (legal), political backing, financial and human resources and interfaces to other key organizations. In some cases, because of their pivotal role, the information and documentation they receive and their key position at borders, In some economies, most of all with leading role of the government, customs or port authorities can be the agency best suited to lead a Single Window development and implementation. They can also be the 'entrance' points to receive and coordinate the flow of information related to the fulfillment of all cross-border regulatory requirements. In developed economies with the high level of cooperation between the government and private sector it is quite reasonable to define privet sector organization as leading organization in transboarder ecommerce development.

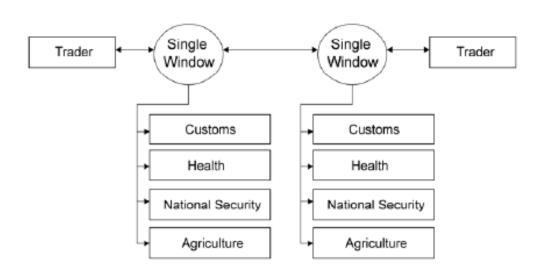


Fig. 2. Interaction of National Single Windows.

### WTO's Support of Paperless Trading.

A fundamental structural change affecting services trade is the proliferation of Internet use, with the number of users said to be doubling every year. In contrast to some 4.5 million in 1991, there were over 500 million users by the end of 2000. Encryption technologies to address data security concerns have advanced sufficiently for online sales to accelerate.

The rapid changes in information technology and telecommunications have resulted in a virtually borderless global economy allowing any service that can be digitized and transmitted electronically to be produced and delivered anywhere in the world. Electronic commerce may thus prove a "great equalizer" that helps to reduce, even eliminate, distance-related barriers to trade, but it can also exacerbate a so-called "digital divide" vis-à-vis countries with infrastructural deficiencies. For regions presently without Internet access, going "on-line" can make the difference between international market integration or increasing marginalization.

The Internet provides a low-cost, highly efficient way to approach potential customers all over the world. It will have multiple influences on trade flows and, possibly, trade negotiations. One of the biggest challenges is creating a regulatory environment for e-business and e-trade that is responsive to the rapid changes in technology. E-governance initiatives and comprehensive IT development strategies can help to build familiarity among policy makers and trade negotiators.

The Doha Declaration has continued the moratorium not to impose customs duties on electronic transmissions (document WT/MIN(01)/DEC/1, para.34). Debate continues on whether some products, which can be delivered both on a physical carrier and in purely electronic form (e.g., computer software), should best be classified as services or goods. The classification of such transactions determines whether GATT or GATS applies, with potentially important implications for WTO Members' legal obligations in the areas concerned.

The second WTO Ministerial Conference in 1998 had adopted a Declaration on Global Electronic Commerce "to establish a comprehensive work program to examine all trade-related issues relating to global electronic commerce, taking into account the economic, financial, and development needs of developing countries." Discussions in relation to GATS have focused on the idea of maintaining the integrity of the GATS definition of trade in services (Article I:2), which does not rule out any technological means by which the services may be supplied.

GATS provisions may be relevant, at least indirectly, to many concerns surrounding the formulation of e-commerce/Internet law and policy. For example, the general exceptions (Article XIV) may actually govern most measures designed to deal with on-line privacy protection, illegal or illicit content, cyber crime and fraud, enforcement of contracts, consumer protection, and taxation. Governments may even resort to measures that are otherwise inconsistent with GATS obligations — bearing in mind that disciplines on the use of the exception are built into the provision itself. Specifically, such measures must be "necessary" to meet the

objective concerned (i.e. the stated objective cannot effectively be met without resort to inconsistent measures), they may not discriminate unjustifiably against particular countries, and may not be used as disguised trade restrictions (i.e. used as a "back door" means to protect markets).

The role of the WTO, and GATS, will be to ensure that the broad economic advantages of multilateral rules and obligations will accrue to electronic supplies, just as they do to other forms of trade. Judging by some of the negotiating proposals (e.g. on telecom and computer services) submitted thus far by both developed and developing country Members, there is a widely held view that GATS bindings can be used to strengthen countries' capacity to take advantage of e-commerce and narrow the digital divide. In addition to telecom and computer services, financial payments services, advertising services, and delivery services have also been mentioned as components of an e-commerce enabling "infrastructure". Various professional services and IT services, "back-office" services in particular, as well as education and health services are among the potential beneficiaries in developing countries of improved e-commerce and Internet capacity. For other than the WTO may be equipped to deal with technical issues such as authentication, encryption, internet governance and domain names or cultural and human resource issues such as encouragement of diversity in local and linguistic content, computer literacy, and education

### 3.2. Paperless Trade – APEC Point of View. "APEC's Strategies...'

APEC attaches great importance to trade facilitation. In order to meet APEC's Bogor Goals for free and open trade and investment in Asia-Pacific, APEC Member Economies follow the strategic roadmap as agreed by APEC Economic Leaders in Osaka, Japan, 1995 (updated in 2002). This roadmap is

known as the Osaka Action Agenda and proposed project supports the implementation of the following General Principles provided in this Agenda, like non-discrimination - reductions in barriers to trade achieved through APEC are available to all APEC member economies as well as to non-APEC economies;

The main APEC trade facilitation document of nowadays is the second APEC Trade Facilitation Action Plan. Electronic commerce and paperless trading are important drivers and tools of implementation of APEC Trade Facilitation Action Plan (TFAP) and APEC Investment Facilitation Action Plan (IFAP).

TFAP was adopted by APEC Leaders and Ministers in 2002, and later it was transformed to TFAP II, endorsed in Cairns, Australia in 2007. The Trade Facilitation Menu of Action and Measures includes special section for electronic commerce. The objectives of the second Trade Facilitation Plan for ECSG are as follows:

- to eliminate obstacles for constituents in the global trade flow by identifying, addressing and alleviating identifying barriers and out-ofdate practices,
- to build constituent confidence in e-commerce by streamlining processes and removing obstacles.

So, e-commerce as important driver and tool of trade and investment is APEC priority since 2004. "APEC's Strategies and Action toward a Cross-Border Paperless Trading Environment" (later – "APEC's Strategies …") was adopted in Santiago, Chile in September 2004 by Ministers of Foreign Affairs and Trade.

According to the "APEC's Strategies ..." the environment for cross-border paperless trade requires the establishment of an interoperable framework for transmitting information in

- > trade administration,
- > customs clearance,

- international transportation and
- inancial settlement.

The framework includes business processes, common data models, message standards and a platform for message exchange. The establishment of such a framework will deal with issues in legal, technical and procedural areas.

The "APEC's Strategies..." have the following milestones:

- ✓ 2006: As a part of the APEC Trade Facilitation Action Plan, interested member economies implement ECO and e-SPS Pathfinders for the cross-border transmission of electronic certificates of origin and electronic sanitary and phyto-sanitary certificates.
- ✓ 2010: Most member economies establish a domestic paperless trading environment and implement pilots for the cross-border electronic transmission of customs clearance data.
- ✓ 2020: APEC establishes a comprehensive paperless trading environment that enables the electronic transmission of trade related information across the region.

Osaka Action Agenda requires regular revision of any strategic documents: "As Action Plans are of a rolling nature, revision of these will be conducted through a progressive and dynamic mechanism established by the consultation process and reviews, with the results thereof being reflected in the continuing voluntary improvement" and the project is dedicated to such kind of revision: to review, analysis and discuss "APEC's Strategies..." implementation intermediate results and recommendation for further implementation.

As demand for trade facilitation has been increasing throughout the business community due to the lowing 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 2002, APEC Leaders and Ministers adopted the Trade Facilitation Action Plan (TFAP), which aims to

reduce business transaction costs by 5% in 2006. Ministers also approved a Trade Facilitation Menu of Actions and Measures and instructed relevant sub-fora to develop related capacity building and technical assistance or cooperation projects. The four categories for the reform cover the movement of goods, standards, business mobility and electronic commerce.

In its report to APEC Leaders in 2003, the APEC Business Advisory Council (ABAC) recommended APEC "implement paperless trading through the development of a single window system that covers all import and export-related procedures." Member economies have demonstrated the strong willingness to achieve this goal, with many undertaking internal analyses of their trading systems and several implementing domestic paperless trading environments. In addition, several pilot projects based on the Pathfinders were initiated among APEC economies.

Plurilateral e-commerce alliances have been formed within the APEC region. The advance in ICT technology and the widespread use of the Internet, especially broadband, is assisting the process. In September 2003, Chinese Taipei, together with Australia; Hong Kong, China; Japan; and Singapore, hosted the APEC Paperless Trading Symposium. The Symposium discussed the current impediments and the development of cross-border paperless trading, and considered pilot projects and capacity building initiatives to accelerate the progress to establish a paperless trading environment within APEC.

Following the 2003 APEC Paperless Trading Symposium, China hosted the first Electronic Commerce Business Alliance Seminar in June 2004 and called for closer collaboration among business society to achieve the APEC paperless trading goal. Thailand hosted the APEC Symposium on ebXML for Paperless Trading and collaborative e-Business in June 2004 and urged harmonization on technical issues with other international organizations and among member economies.

Furthermore, there was adopted the decision of the implementation of the Electronic Certificate of Origin (ECO) Pathfinder and the Electronic Sanitary and Phyto-Sanitary Certificates (e-SPS)

Pathfinder has been putting in progress.

### 3.3. Project Background

Remind, that project is the third stage of long-term ECSG activity: Stage 1 was implemented in 2006, Stage 2 was realized in 2008 and we use the deliverables of all the Stages and valuable of this report.

The main purpose of project is the high-quality and well-timed implementation of the "APEC's Strategies and Action toward a Cross-Border Paperless Trading Environment". In the framework of the project's objectives there are tree main tasks:

- to identify the current status of goals of the "APEC's Strategies and Action toward a Cross-Border Paperless Trading Environment" achievement;
- to review the results (pilot e-commerce systems at first), policies, programs and individual plans of the "APEC's Strategies and Action toward a Cross-Border Paperless Trading Environment" implementation;
- to develop recommendations for further implementation of the "APEC's Strategies and Action toward a Cross-Border Paperless Trading Environment".

For archiving of the project's goals, in the framework of the project there were organized two workshops: The first one "Information Systems for Paperless trading" was held in Seoul (Korea), 31 May – 1 June, 2010; the second one "Domestic Paperless Trading environment", was held in Vladivostok (Russia), 21-22 of October, 2010.

The project team worked under the project in close cooperation and assistance of APEC Member economies.

# This project directly responds to the priorities set by APEC Leaders and Ministers.

It continues and develops the following ECSG projects

- APEC Symposium on the Assessment and Benchmark of Paperless Trading;
- Development of "APEC Guidance for Electronic Commerce," using the Best Practices of E-government Procurement Systems;
- Assessment and Best Practices on Paperless Trading to Facilitate Cross-Border Trade in APEC Region;

So, the project directly contributes to "APEC's Strategies..." implementation by holding vital supplementary activities to regular PTS and ECSG meetings, which will provide reference data and indirectly – in TFAP II implementation.

The main beneficiaries of the project are:

Policymakers in the trade area in APEC economies. The high quality and well-timed implementation of the "APEC's Strategies and Action toward a Cross-Border Paperless Trading Environment" improves domestic paperless trading environment, including standards and security providing.

Trade business, including financial, logistic and service companies. The high quality and well-timed implementation of the "APEC's Strategies ..."

provides for businesspersons many economical results in cross-border trade, including cost / time reduction, simplifications of procedures.

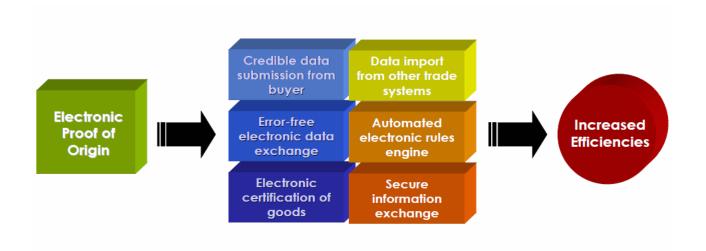
ICT developers and services providers. The high quality and well-timed implementation of the "APEC's Strategies ..." provides a new growth of business applications and appropriate services providing markets.

Community of APEC economies. The high quality and well-timed implementation of the "APEC's Strategies ..." provides expansion of cross-border trade and additional economic benefits in the crisis, the gender-equal conditions in APEC economies.

# 4. Review of the Results of APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment

For defining the results of "APEC's Strategies..." there were analyzed different informational sources, like: APEC documents, UN/CEFACT and UN/ESCAP materials, and open sources, two APEC workshops, which were organized in the framework of the project execution, APEC expert's cooperation, and other sources.

Fig.3. Objectives of Electronic Certificate of Origin



#### Rationale:

To introduce electronic transmission of e-SPS certificates among APEC economies, ultimately seeking to replace paper certificates.

### **Objectives 2006**

- ✓ To consolidate E-cert usage in countries already engaged in trials and/or adopted
- ✓ To expand the uptake of E-cert usage amongst APEC member economies
- ✓ To achieve ratification of the E-cert message and data standard by UN

✓ To continue to encourage and support other countries in the development and uptake of E-cert technology

### **Deliverables 2006**

These activities/strategies are in APEC endorsed E-cert Implementation Plan:

- Provide technical advice and supporting of the series of E-cert trials during March to July for meat shipments amongst a cluster of trading partners: Australia, New Zealand, Singapore, Canada, and USA.
- Provide technical advice and support to economies export inspection and quarantine import authorities to trial E-cert on as needed basis.
- Share lessons from E-cert trials utilizing APEC website and amongst members of the electronic certification practitioners' network during April to August.
- Australia/New Zealand co-chair UNCEFACT E-cert Ratification Project Team 8-12 March, Bonn, Germany to begin processes required to set the international standard for E-cert message structure and data content.
- Continue to raise awareness about the benefits of electronic certification, focusing on E-cert, in relevant forums.
- Brief APEC working groups (ACTWG, ECSC) on progress, including presentation to ECSC in February, Chile.
- Secure funding for regional capability building workshops June, and manage design and delivery late 2004.

### Other APEC Fora

Provide updates to sub-fora.

### **Outcomes, Communication & Benefits**

Need to engage Banks through ABAC on what/how they will accept from their customers instead of paper export documents, as some documents impact on payment approvals and cycle times. ABAC members commit to a forward program to promote benefits of e-Trade and e-Government at export industry and

government forums – focusing on Pathfinders benefits and current uptake. APEC ministers identify 1 or 2 more clusters of trading partners and encourage then to trial E-cert as another Pathfinder demonstration model.

#### **Current Status**

The uptake of E-cert trials and adoption are determined by importing countries, generally on a commodity-by-commodity basis. Economies currently trialing include: Indonesia (meat and horticulture). USA is technically still a trial partner but suspended trials in order to upgrade their IT infrastructure and systems. It is expected that the trial would resume in the near future.

Economies currently adopted include Singapore (meat) and Canada (meat).

Mexico is ready to resume a trial for meat and dairy in the near future. Whilst Australia has provided a work plan for China that outlines the formation of a working group to determine both countries' readiness to trial E-cert.

Numerous other countries, particularly in the Asia-Pacific region, have expressed interest in E-cert and several presentations were made. However, uptake of the Australian system is so far limited to the above.

Korea and Thailand have developed their own E-cert systems (AQIS contributed to the development of the Korean system). They have announced a readiness to commence trialing and have requested Australia to participate as a trial import partner. AQIS imports are looking into Australia's E-cert response as a receiving country.

A limited trial is currently being planned to commence in the near future for New Zealand seafood to the Port of Melbourne.

### **CTI Priority Pathfinders**

A new promotional campaign is currently being planned to achieve objectives outlined above. This is in the early stages and priorities have not yet been set, other than adhering to the general objective of focusing on major trading partners ahead of minor ones. Whilst uptake to date has been quite modest, it is expected to gather momentum as more countries improve their electronic capabilities and the benefits of this form of certificate transmission are realized and communicated out to

others. It is probably unrealistic, however, to expect that all APEC members will adopt E-cert or that it will ever fully replace hard copy paper certificates in many instances. The implementation period for the E-cert initiative was always intended to be on going and, given that some countries have fully adopted E-cert, there is now a dependency, which must continue to be serviced.

You can see on the Fig. 4 very good example of the scheme of the ECO workflow between Korea and Chinese Taipei. It is achieved secured cross-border ECO exchange between two economies through transborder service providers KINET (awarding authority is KCCI (Korean Chamber of Commerce and Industry) and Trade VAN (awarding authority is Ministry of Finance of Chinese Taipei). This system, realized with strong partnership between government and private sector, suppose that all the parties, involved into transborder supply chain, in every stage sign, approve and confirm ECO with guarantee of trust and security.

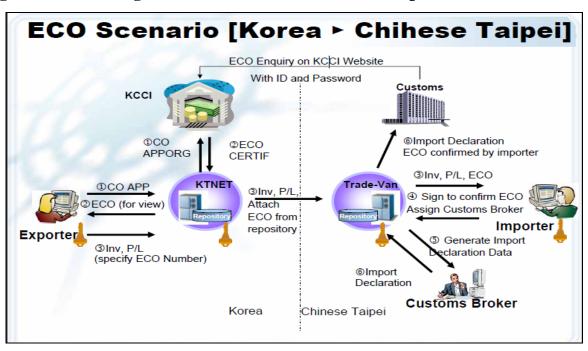


Fig. 4 ECO exchange between Korea and Chinese Taipei

Table 1. Status of ECO and e-SPS in APEC economies

APEC Member	e-SRS	ECO	Cooperation
Economy			_
U.S.A.	+	+	Australia, Canada, New Zealand,
			Japan, Singapore
Canada	+	+	Australia, USA, New Zealand,
			Japan
Mexico	-	+	N/A
Viet-Nam	-	+	Korea
China	+	+	Korea, ASEAN
Singapore	+	+	Korea, China, U.S.A.
Korea	+	+	Chinese Taipei, ASEAN
Peru	-	+	N/A
Papua New Guinea	N/A	N/A	N/A
Australia	+	+	Canada, New Zealand, Japan,
			USA
Brunei Darussalam	N/A	N/A	N/A
Chile	+	+	N/A
Chinese Taipei	N/A	N/A	ASEAN, Korea
Indonesia	+	+	ASEAN
Japan	+	+	Korea, USA
Malaysia	+	+	ASEAN, Korea, China, Japan
New Zealand	+	+	Australia, Canada, USA
Peru	+	+	N/A
The Philippines	+	+	ASEAN, Chinese Taipei
The Russian	-	-	-
Federation			
Thailand	+	+	ASEAN

## 5. Current Status of APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment

The 2010 is a milestone to establish a domestic paperless trading environment and implement pilots for the cross-border electronic transmission of customs clearance data. The best way to achieve these goals is to implement National Single Window (NSW), which will include all the kind of services, mentioned above and to enhance the role of government and private-public partnership in the field of e-commerce.

For defining "APEC's Strategies..." implementation, the project team worked out the questionnaires for APEC Member economies. Unfortunately, we didn't get responds from all the Member economies. Therefore, the lists of the results are not exactly completed.

International Trade Custom | Financial administration clearance transportation settlement Informationnsmitting Business processes Common data model Message standards Platform for message exchange Interoperable framework Technical Procedural Legal

Fig.5. Expected Result of the "APEC's Strategies ..." Implementation

### 5.1. APEC Economies Domestic Environment Brief Overview

Table 2. E-documents in APEC economies (Public-private partnership)

Economy	Laws or Acts	Economy	Laws or Acts
	Archives Act (1983)		Law of Digital
			Signatures and
Australia	Evidence Act (1995)	Peru	Certificates.
	Electronic Transactions		Law No. 27269
	Act (1999)		(2000)
	Law No. 19,799 on		E-Commerce
Chile	electronic signatures and	Philippines	relevant laws or
	electronic records (2004)		acts exist
			Federal Law
China	E-signature Law (2005)	Russia	No.149-FZ
			(2007)
			Electronic
			Signature Act
			(2001)
			Regulations
			Governing
	Information and	Chinese	Company
Indonesia	Electronic Transaction		Registration and
	Law (2008)	Taipei	Recognition,
			Regulations
			Governing the
			Application of
			Business
			Registration

Korea	Public Record Administration Law (2000)  e-Trade Facilitation Act (2003)  Framework Act on Electronic Commerce (1999)  Act on Promotion of Information and- Communications Network Utilization and Information Protection (2001)  Electronic Transaction Framework Law (1999)  Provision on electronic Bill of Lading in the Commercial Law (2008)  Electronic Signature Law (1999)	Thailand	Electronic Transactions Act (2001)
	Electronic Signature Law (1999)  Electronic Government Law (2001)		Law on
Malaysia	Digital Signature Act (1997)  E-Government Activities Act (2007)	Viet Nam	Electronic Transactions (2005)  Law on Information Technology (2006)
Mexico	Related legal acts exist		

	Public Sector	Private Sector
Chile	Public Procurement System Inland Revenue Import and Export Permits	·Finance: Electronic transfer ·Medical Service: implemented e- authentication for medical appointments
	E-port: G2G connections connections (Transaction Pr (Auxiliary Support Platform	(Data Exchange Platform), B2G rocessing Platform), B2B connections
Indonesia	· Electronic Procurement  Electronic Data Interchange(EDI) Indonesia National Single Window(INSW)	E-banking, E-Reservation, and E-Transaction
Korea	<ul> <li>Paperless Trade/ Customs</li> <li>Paperless Civil Affairs</li> <li>Administration</li> <li>Paperless Loan Application</li> </ul>	facilitating the use of e-documents in storing, exchanging, and authenticating
	for SMEs  Paperless Immigration services  Paperless application for University Admission	
	Electronic Supply Chain Management and Warehouse Management.  Public Sector	
Malaysi a	· ·	ngle Window (e-Declare, e- rential Certificate of Origin, e-
Philippi nes	· Electronic Filing and Payment System	Securities and Exchange Commission Report

	(eFPS), Short Messaging Services (SMS), Accredited Agent Banks (AABs)  • e2m-Customs Project		
Mexico	Mexican Official Standard (NOM-151-SCFI-2002)		
Peru	E-customs Declaration, E-Payment of Taxes, E-banking, E-flight ticket		
Chinese Taipei	E-Government Portal, Government Inline Procurement, Online company name's reservation application system, Online company reservation Information System, Trade facilitation Plan (Nest case)		
Thailan d	e-Customs system		
Viet Nam	ECoSys: Export and Import Department to manage, Electronic certificate		

At present, half of the economies use e-document in document exchange among ministries or issuance of document for public administration. The usage of e-document in public sectors is expected to be on a steady rise with increased technical cooperation. In private sectors, groupware system or Electronic Document Management Systems (EDMS) is employed in seven economies: Chile, China, Korea, Peru, Philippines, Chinese Taipei, and Viet Nam.

Many of the member economies' government possess a legal-structure to control and/or promote e-documents. Eight member economies have rules on electronic documents and five member economies regulate the effects of e-documents/records. Chile, Indonesia, Korea, Philippines and Viet Nam have installed policies to facilitate the use of e-documents.

# China The Customs Office of China has made every effort to promote the Integrated Clearance Project, establishing and capitalizing on a liaison and coordination mechanism for paperless port management. The accomplishment of the "E-Port" project in 1999, which is characterized by the application of online verifications of foreign exchange declaration documents, marked the realization of cross-departmental data exchange among different port authorities and online verifications of declarations. Chile Chile began using e-documents around 2001. The rate of usage differs from field to field, with almost 90% of taxing processes being conducted electronically, while health sectors employ such means less than 10% of the time. Although e-documents are gaining more popularity, e-document policies are still in their infancy and require further development. **Indonesia** The custom office of Indonesia started the use of electronic data interchange (EDI) in the beginning of 1997 through the implementation of comprehensive EDI in Tanjung Priok Port and Soekarno-Hatta Airport. The EDI system usage also entered into retail supply chain services in the beginning of 1999. The Indonesia EDI system is based on international standard UN/EDIFACT - Electronic Data Interchange for Administration, Commerce and Transport. Currently the EDI system and its network have been progressively used for international and export import trading including inter-agency online verification. Malaysia Malaysian government has established important strategic tools, and has improved its delivery systems to meet the demand of paperless business environment. Electronic trade facilitation initiatives are in effect through Malaysian National

	Single Window that handles electronic submissions of import	
	or export permits, certificates and customs declarations.	
Korea	Korea is currently in a transition period shifting from a paper-	
	based business environment to a paperless business	
	environment, while maintaining dual means of record-	
	keeping/document archiving. Paperless system is widely	
	applied in public and private sectors that include trade and	
	customs, civil affairs administration, finance, immigration,	
	education, and manufacturing.	
Russia	Russian Ministry of Economic Development has established a	
	nine-year plan, entitled 'Electronic Russia (2001-2010)'	
	seeking to deliver more government services online.	
	'Electronic Russia' focuses on four key areas of: Regulatory	
	environment and institutional framework, Internet	
	infrastructure, e-Government, and e-Education. The main	
	objective of 'Electronic Russia' is to increase the efficiency of	
	the economy and empower the government with ICT	
	applications.	
	At this moment the new plan is adopted in the Russian	
	Federation – "Informational society – 2011-2018", which	
	includes the matters, related to e-government and e-commerce.	
Philippines	The Philippines recognizes the high-growth potential of ICT	
	and e-commerce. Use of e-documents or e-commerce got a	
	jumpstart when the RA 8792, E-Commerce Act of 2000 (ECA),	
	entitled "An Act Providing for the Recognition and Use of	
	Electronic Commercial and Non-Commercial Transactions and	
	Documents.	
	Penalties for Unlawful Use thereof and for Other Purposes",	

was legislated in June 14, 2000. The law gives legal recognition of electronic data messages, electronic documents, and electronic signatures and allows the establishment of contracts in electronic forms. It also promotes e-commerce in Philippines, particularly in business-to-business business-to-consumer transactions, for better facilitation and enhancement of business relations and consumers' choice to locate and purchase products online. Peru has relevant authorities under the government that support modernization and decentralization, handling administration of the Main Portal of the Peruvian government and leading the Committee on Development of Information Society - CODESI. The Ministry of the Economy works on the following action lines under its Digital Economy Program for the purpose of boosting the use of IT in Mexico: Develop a digital culture for consumers, promote outsourcing of IT services, and promote online transactions in different areas. The economy's National Development Plan 2007-2012, which includes the implementation of the Government Digital Agenda, also seeks to improve its digital regulations, management and processes. Viet Nam Since 1997, paperless environment has improved a great deal due to the growing popularity of Internet. Viet Nam is making an effort to create and boost paperless business environment with a focus on more energetic and extensive e-commerce. While the government has also tried to improve the paperless environment in public sectors through numerous projects, implementations there have come at a slow pace and demands

for domestic and international initiatives are still high.

Peru

Mexico

Thailand	The Thai Customs Department set up the Information	
	Technology Master Plan for the Fiscal Years 2002-2005,	
	seeking to deal with the economic and international trade	
	expansions and to enhance the efficiency of Customs	
	administration in accordance with the international standard.	
	Following this plan, the Thai Customs Department	
	implemented e-Customs system for both import and export in	
	July 2008 and processes importer/exporter declarations	
	electronically.	
Chinese	According to the survey, about 68% of the population use	
Taipei	computers and close to 46% of the population use the Internet	
	in Chinese Taipei. Use of paperless systems is active both in	
	public and in private sectors and the economy plans to provide	
	services through communication networks such as mobile	
	commerce.	

"Domestic Environment" includes appropriate national goals, legal basis, regulatory framework, data models, standards, methodologies, human resources, technical infrastructure, information systems, which provide paperless interactions of government bodies (Trade Administration, Customs, Licensing and Certification Authorities, etc.), and business (trading companies, logistics, finance, service providers, etc.). All these points in relation with "APEC's Strategies..." goals and objectives covers the development and implementation of Single Window facilities has focused on the importance of technical "interoperability" across borders.

The reasons for this are obvious, at least in terms of using a country's Single Window facility for

efficient cross-border trade transactions with Single Window facilities in other countries. Work in

this area has grown in various organizations. For example, UN/CEFACT is developing Recommendation 34 (Recommendation and Guidelines on Single Window Data Harmonization) based on the need to establish data harmonization methodology at the national, regional, and international levels. However, it is only recently that the necessity for creating an enabling legal infrastructure has emerged as an important element for the success of a Single Window facility at the national level and, to the extent possible, for a harmonized legal infrastructure at the regional and international levels. Further, harmonization of the legal framework for purposes of operating a Single Window across borders, particularly if the system is ICT-based, often requires review of other aspects of the legal environment for the "supply chains" and other relevant stakeholders served by the Single Window.

And as is inevitably the case for assessing and developing the legal framework for the Single

Window, the technology choices that are made for the Single Window facility can directly affect

the choices and/or alternatives for structuring the appropriate legal framework for the Single Window. As noted above, this is the area in which is important to consider issues related to the intersection of law and technology.

# According to the UN/CEFACT Recommendation 33, a Single Window facility should allow:

Parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export, and transit related regulatory requirements. If information is electronic, then individual data elements should only be submitted once.

✓ The sharing of all information in respect of international trade transactions, which is supported by a legal framework that provides privacy and security in the exchange of information.

- ✓ The addition of facilities to provide trade related government information and receive payment of duties and other charges.
- ✓ Such a single entry point to disseminate, or provide access to, the relevant information to participating governmental authorities or authorized agencies
- ✓ Co-ordination of the controls and inspections of the various governmental authorities.

Fig. 5. Necessary E-commerce Aspects in APEC Economies

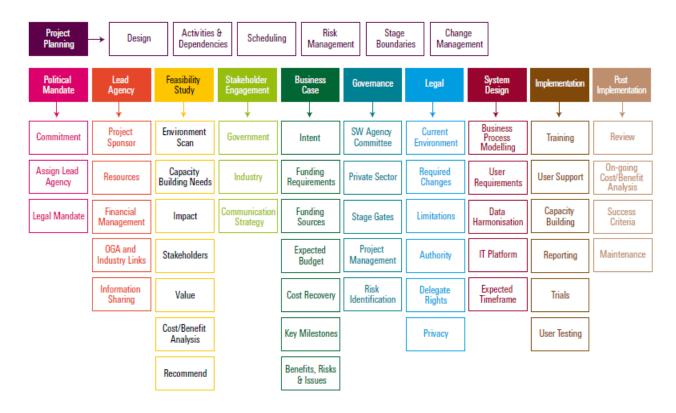


Fig. 6. Status of Implementation of the Single Window in APEC Economies
Has your economy already started to develop a Single Window?

Have not started to implement a Single Window	Have started to develop a Single Window	Already operating a Single Window
Brunei Darussalam	Australia	Canada
Hong Kong, China	Peru	Chile
Indonesia	Philippines	China
Malaysia	The Russian Federation	Japan
Mexico	Chinese Taipei	Korea
New Zealand	Thailand	Singapore
Papua New Guinea	United States	
	Viet Nam	

## 6. Recommendations for Further Implementation of the "APEC's Strategies and Action toward a Cross-Border Paperless Trading Environment

# 6.1. The Workshops recommendations:

Within the project implementation, the project team worked out the following recommendations concerning "APEC's Strategies..." further implementation:

#### In the framework of APEC:

- to foster bi- and multilateral paperless trading pilot projects among APEC
   Member economies;
- 2. to recommend to PTS to determine, consider and circulate the relevant best practices on a regular basis through the APEC Information Management Portal (AIMP);
- 3. to recommend to PTS to work closely with the Expert's Committee of the APEC e-Commerce Business Alliance;
- 4. to continue the information exchange and share respective works in timely manner between APEC fora, including Agricultural Technical Cooperation Working Group, Telecommunications and Information Working Group, Sub-Committee on Customs Procedures to gain synergy on the cross-cutting agenda without duplication;
- 5. to recommend that PTS identify the best practices for standardization of data elements used for conducting cross border exchange of information

- (for example, standardization of data elements for conducting cross border e-CO exchange);
- 6. to create strong ties between Member economies to share knowledge, technical information and documentation about common problems;
- 7. to establish an APEC virtual forum, where any member could post questions, comments, problems about their implementation, so everyone can help.
- 8. to consider the lessons learnt of ASEAN Single Window project as well as national Single Window systems in ASEAN Member States to share the experience and enhance the APEC approaches on these issues;
- 9. to thorough consider the model of Pan-Asian E-commerce Alliance as a sample of interoperability framework on private sector;
- 10.to enhance the collaboration of ECSG with TELWG and SCCP as well as ABAC and ICT service providers;
- 11.to involve UN/CEFACT in ECSG activities to share the information and promote the available international standards usage.

#### In every APEC economy:

- to encourage the APEC Member economies' government bodies to create/enhance their paperless trading information system infrastructure, first of all, by establishing/enhancing the appropriate policy and legal framework;
- 2. to welcome public private partnerships in paperless trading information system development;
- 3. to assess the current templates of plans and reports within APEC with the view of coming up with suggestions to further enhance information exchange and experience sharing among the different APEC for aand member economies;

- 4. to admit that "Domestic Environment" includes appropriate national goals, legal basis, regulatory framework, data models, standards, methodologies, human resources, technical infrastructure, information systems, which provide paperless interactions of government bodies (Trade Administration, Customs, Licensing and Certification Authorities, etc.), and business (trading companies, logistics, finance, service providers, etc.);
- 5. to consider paperless trade environment and interoperability issues in context of different levels: service providers, government bodies, economies, regions / world as well as technical / data interoperability;
- 6. to encourage the APEC Member economies' government bodies to establish the close collaboration between agencies to create the holistic and transparent regulatory framework for the domestic paperless trading environment;
- 7. to collect case studies, identify the best practices, develop guidance on the way to formulate, develop and implement policy directions, legal base and regulatory framework on paperless trading;
- 8. to harmonize standards and data models of paperless trade;
- 9. to enhance the electronic commerce to the electronic services sphere as well (e-medicine, e-education, e-auction)

# 6.2. Outcomes of the Project and Related Recommendations:

The experience of "APEC's Strategies..." implementation in APEC economies indicated a big digital gap in APEC region, between APEC economiessome of them have built National Single Window (NSW corresponds with stage 4 "Integrated national platform" of "UN's 5 stages for realizing paperless trade"),

some economies have not and they are not ready for integration with others. For implementation of "APEC's Strategies", the first group's main task is international integration. For the second group it is development and completion of NSW.

To achieve the milestone of year 2020 "APEC establishes a comprehensive paperless trading environment that enables the electronic transmission of trade related information across the region" APEC economies have to implement pilots for the cross-border electronic transmission of customs clearance data. It means that in 2020 every economy should implement the National Single Window system.

National Single Window implementation, in turn, supposes that the objectives of "APEC's Strategies..." of 2010 – "to establish a domestic paperless trading environment and implement pilots for the cross-border electronic transmission of customs clearance data" will be applied to all the economies in the APEC region.

There are tree ways to achieve these goals:

- 1. Every economy develops its own domestic paperless platform, and then establishes cooperation with other participants of cross-border ecommerce. The main point in this case is to harmonize all the data, procedures and processes with the same environment of the other economies. In this case economies should take into consideration the recommendations, model laws (UNCITRAL Model Law on Electronic Commerce (1996), UNCITRAL Model Law on Electronic Signatures (2001), and standards provided by International organizations (Rec. 33 UN/CEFACT), trust and safety (Trusted Third Party technology, for example) dedicated to the cross-border e-commerce development and related issues.
- 2. Developing economies take a decision to integrate with existing developed informational systems of advanced economies, recognize the effectiveness to use the experience of advanced economies. In this

case, the most optimal way from our point of view, there should be to enhance collaboration between governments, providing mutual penetration of existing informational systems services, functions and possibilities. As an example, we can mention Korean U-Trade Hub and its "creator" – the service provider KTNET. At the moment the scope of KTNET activity in the field of SW implementation covers several APEC and non-APEC economies. The ASEAN Single Window is developing rapidly and actively involves new participants, mostly from APEC member economies. The definite possibility to facilitate trade by enhancing the economical integration, cooperating with SW of other economies could be a powerful stimulus to develop the own environment according to assumed international rules.

3. An economy analyzes the existing technologies, laws, systems and cases, which are in operation in advanced economies and builds on the basis of this experience its own solutions, taking into account particularities of all the specific of this economy.

There are also several recommendations, which could be useful to provide for further implementation of the "APEC's Strategies..." within the APEC region.

- o For better cooperation in the APEC region on the issues concerning the establishment of the paperless trading environment it is recommended to reflect in the working plans of the group and subgroup clear defined stages, covering all the points of e-commerce. This plan should be worked out taking into account the chosen way, described above. As "APEC's Strategies..." contains clear objectives and milestones for APEC region in general, there should be a point in the Plan about "APEC's Strategies..." implementation in every economy.
- o Taking into account the new STI Action Plan, rapidly developing initiative of Supply Chain Connectivity and considering the

- CTI53/2009T project results it is recommended to continue and enhance activities of the "APEC's Strategies" implementation with the focus on data harmonization in all the related fora: ECSG, SCCP, TPTWG, TELWG, SCSC.
- O A very important role belongs to the public-private partnership (PPP). Engagement of all the interested parties: government authorities and agencies, commercial companies, service providers, non-commercial organizations and others, will provide investments and use different level in e-commerce facilitation. Application of PPP mechanisms is capable to provide opportunity to realize socially significant projects as soon as possible. Besides, to raise efficiency of projects by involving business, as a rule, is much more active. Also to involve private sector means usage in the projects of the best administrative measures, technologies, improvement of quality of service and will help in sharing of the functions.
- o The valuable point for developing economies is that PPP provides decrease of the budget expenses. So, the stimulation of PPP has to become one of the main priorities in e-trade facilitation in APEC economies, with defining strategy of PPP and high level of integration between parties, taking into account particularities of each economy.
- o Increasing of the society educational level in the field of e-commerce is also one of the significant steps in achieving the goals of the "APEC's Strategies...", and economical and social integration in general. APEC economies should promote this process with spreading related information in member economies by web-sites and disseminated materials. In every economy it is recommended to promote advanced educational paperless environment related programs for students and employees, with explanation of all the challenges and advantages, which provides economical integration and cooperation.

### Workshops Proceeding

The First Workshop "Informational Systems for Paperless Trading"

#### (31 May – 1 June, Korea, Seoul)

The APEC Workshop "Information Systems for Paperless Trading" was held in Seoul in May 31 - June 01 - 2010 in the framework of the APEC project "Lessons Learnt of Implementation of "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment".

APEC Member economies agreed that the Workshop made substantial progress in advancing an understanding of the issues of "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment" implementation, information systems for paperless trading development and e-commerce promotion in the whole.

32 participants from 11 APEC Member economies (Chile, China, Indonesia, Korea, Malaysia, Mexico, Peru, the Philippines, the Russian Federation, Thailand, Viet Nam), 2 representatives of APEC fora and invited guest from Pan-Asian Ecommerce Alliance attended the Workshop.

Representatives of APEC fora - Telecommunications and Information Working Group, Sub-Committee on Customs Procedures- gave presentations on the achievements and challenges with respect to the proposed work programs in the "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment".

The Workshop represented an opportunity for APEC Member economies to allow

- to share their respective experiences in implementing information systems for paperless trading, relative to the goals of the "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment";
- to assess the status of information systems for paperless trading development in each economy, and identify implementation issues and problems; and
- to discuss the results of the workshop leading to the formulation of recommendations for the further implementation of the "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment".

On the subjects "Lessons Learnt of Implementation of "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment", "Information Systems for Paperless Trading", "Current Status of Paperless Trading Systems" the following APEC Member economies made their presentations and briefs: the Russian Federation, Korea, the Philippines, Malaysia, Peru, Mexico, Indonesia, Chile, China, Viet Nam and Thailand as well as representatives of APEC fora - Telecommunications and Information Working Group, Sub-Committee on Customs Procedures.

Representatives of APEC fora - Telecommunications and Information Working Group, Sub-Committee on Customs Procedures- also gave presentations on the achievements and challenges with respect to the proposed work programs in the "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment".

Presentations were also made by the Chairman of APEC ECSG Paperless Trading Sub-Group Mr. Monchito B. Ibrahim, as well as the invited guest from the Pan Asian E-commerce Alliance, Ms. Jin Song.

Representatives from the business sector, including e-market places, banks, international trade associations and non-governmental organizations also made their presentations and statements on the Workshop issues.

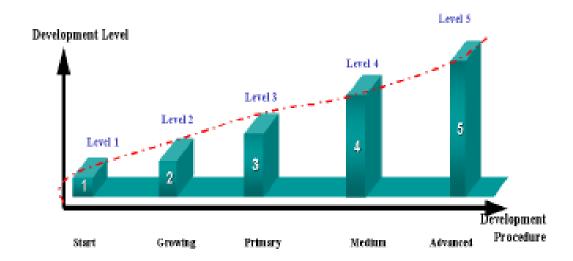
The Workshop discussed the current situation of paperless trading systems in the APEC region and respective APEC Member economies vis-à-vis the implementation of "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment." The participants took into account the presentation on the Korean u-Trade Hub and explored the possibility of its adoption.

The representatives from participating economies presented their progress and electronic certificates of origin.

#### A number of key themes emerged:

- PTS implements "APEC's Strategies and Action toward a Cross-Border Paperless Trading Environment" in collaboration with the Agricultural Technical Cooperation Working Group, Telecommunications and Information Working Group, Sub-Committee on Customs Procedures, the APEC Business Advisory Council, among others.
- PTS engages the Pan-Asian E-Commerce Alliance, UN/CEFACT, Global Business Dialogue on e-Commerce, Asia PKI Forum, APEC e-Commerce Business Alliance to implement "APEC's Strategies and Action toward a Cross-Border Paperless Trading Environment".

Fig.7. Development Level of Paperless Trade



APEC Member economies agreed that the Workshop made substantial progress in advancing an understanding of the issues of "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment" implementation, information systems for paperless trading development and e-Commerce promotion in the whole. The Workshop also noted that the project lays down the foundation for further work of APEC ECSG PTS as well as APEC Member economies.

Table 3. List of Participant of the Workshop "Informational systems for paperless trade"

No	Name	Economy	Company, Position
1.	Mr. Monchito B.	the Philippines	Commission on Information &
	Ibrahim (speaker)		Communications Technology,
			Commissioner,
			Chair of the ECSG Paperless
			Trading Subgroup (PTS)
2.	Mr. Daniel Musa	Malaysia	Ministry of International Trade
			and Industry, Trade Facilitation
			and Investment Policy Division,
			IT officer

3.	Mr. Johnny Valdez	Peru	Tax Collection and Customs Agency of Per (SUNAT), Customs IT, Software Architect
4.	Ms. Nguyen Thi Kim Lien	Viet Nam	Ministry of Industry and Trade, Vietnam E-commerce and Information Technology Agency, Online Public Services Division, Officer
5.	Ms. Porntip Wanitchayapong	Thailand	Ministry of Commerce, Foreign Trade, Information Technology Division, Senior Office
6.	Ms. Daniela Montanola	Chile	Foreign Affairs Ministry, General Directorate of Economics Affairs, Services, Investment and Air Transport Department, Adviser
7.	Ms. Maria Lourdes Yaptinchay	the Philippines	Department of Trade and Industry, E-commerce Office, Director
8.	Mr. Agus F.Abdillah	Indonesia	PT. Finnet Indonesia, (Subsidiary of PT Telecomunikasi), Operation and Infrastructure, Vice President
9.	Mr. Emmanuel Abraham Ortega Aguilar	Mexico	Ministry of Economy, General Direction Exterior Commerce, Sub Director
10.	Ms.Natalia Makarycheva (speaker)	the Russian Federation	Association for Cooperation with Nations of Asia and Pacific Region, President
11.	Mr.Sergey Subbotin (speaker)	the Russian Federation	Association for Cooperation with Nations of Asia and Pacific Region, Project Director
12.	Ms. Anastasia Filichkina (speaker)	the Russian Federation	Association for Cooperation with Nations of Asia and Pacific Region, Project Leader
13.	Ms. Wang Li	China	China International Electronic Commerce Center, International Cooperation Department, Manager
14	Ms. Ping Ping (speaker)	China	China International Electronic Commerce Center, Global Buyer Development Department, Manager

1.7	N/ T 1	D 11' C	3 C IZ 1 1
15.	Mr. Jeonghwa	Republic of	, ,
	Kim	Korea	Economy, Director
	(speaker)		
16.	Mr. Jin-Dal Park	Republic of	Korea International Trade
10.		Korea	Association, Chief of e-Biz
	(speaker)	Korca	service HQ
17.	Ms. Ha	Republic of	
	Miley(Juyeon)	Korea	Trade Association), Paperless
			Trade office
	(speaker)		
18.	Mr. Hyun Jin	Republic of	KITA(Korea International
	Choi	Korea	Trade Association), Paperless
	(1		Trade office, Manager
10	(speaker)	Danublia C	VTNET (Vanca Trade Nation 1
19.	Mr. Dong Lee	Republic of Korea	`
	(speaker)	NOICa	Co.), Global Business Team, Team Manager
20.	Mr. Sangbee	Republic of	-
20.	Shim	Korea	Trade Association), Secretariat
		11010a	General
	(speaker)		
21.	Mr. Deockhee	Republic of	Hyundai Motors Co.
	Lee	Korea	
	(1)		
22	(speaker)	Daguldia of	Varia Evahanaa Dank
22.	Mr. Shinwon	Republic of Korea	Korea Exchange Bank
	Kang	Kolea	
	(speaker)		
23.	Ms. Haley Hyun	Republic of	Asia Pacific Women's
		Korea	Information Network Center,
	(speaker)		Head of International
			Cooperation Division
24.	William Chung	Republic of	`
	(ama alzari)	Korea	Co.), General Manager
	(speaker)	APEC Fora	
25.	Mr. Jinhyun Cho	Telecommunicati	CISSP Korea Internet Security
25.	ivii. Jiiiiyuii Cilo	ons and	Center, KrCERT/CC Korea
	(speaker)	Information	Internet & Security Agency,
	, , ,	Working Group	Senior Researcher
26.	Mr.Hidetoshi	Sub-Committee	Deputy Director, Office of
	Aramaki	on Customs	Regional Customs Cooperation,
		Procedures	Customs and Tariff Bureau,

	Assistant to the SCCP Chair		Ministry of Finance, Japan
	(speaker)		
		InternationalOr	
		ganizations	
27.	Ms. Jin Song	Pan Asian E-	Manager
		Commerce	
	(speaker)	Alliance	
		Other Delegates	
28.	Mr. Vadim	Russia	Economics Development
	Potrashkov		Center JSC, Department of
			Strategic Development, Project
	(speaker)		Manager b2b, b2g
29.	Mr. Boris Sladkov	Russia	The Trade Representation of
			the Russian Federation in the
			Republic of Korea, Deputy
			Trade Representative
30.	Mr. Sergey	Russia	Association for Cooperation
	Kozlyakov		with Nations of Asia and
			Pacific Region, Vice-President
31.	Ms. Larisa	Russia	"Gemtrast", Deputy General
	Pevneva		Director
32.	Ms. Anastasia	Russia	The Trade Representation of
	Voronkova		the Russian Federation in the
			Republic of Korea, Expert

# The Second Workshop "Domestic Paperless Trading Environment"

### (21-22 October, Vladivostok, Russia)

The Workshop discussed domestic paperless trading environment in APEC region, the status of "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment." The participants made the presentations concerning existing domestic environment in their economies and future perspectives of it's development at the first day of the workshop.

34 participants from 9 APEC Member economies (Chinese Taipei, Korea, Malaysia, Mexico, Peru, the Philippines, the Russian Federation, Thailand and Viet Nam) attended the Workshop.

The Workshop gave an opportunity for APEC economies to network and exchange views on domestic environment of paperless trading and e-commerce as a whole.

#### The Workshop participants:

- presented the information on current status of domestic environment and the
  perspectives of its further development, relative to the goals of the "APEC's
  Strategies and Actions toward a Cross-Border Paperless Trading
  Environment";
- identified the key aspects of domestic paperless trading environment and shared the experience on domestic environment improving to choose the appropriate priorities and activities in APEC Economies;
- discussed the intermediate results of the Workshop and project on the whole to endorse proposals for further implementation of the "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment".

On the subjects "Lessons Learnt of Implementation of "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment", "Domestic Paperless Trading Environment", "Current Status of E-Commerce Legal Base and Regulatory Framework" the following APEC Member economies made their presentations and briefs: the Russian Federation, Chinese Taipei, Korea, Malaysia, Mexico, Peru, the Philippines, Thailand and Viet Nam. Presentation was also made by the Vice-Chair of APEC ECSG Paperless Trading Sub-Group Ms. Susan Lu.

Representatives from the business sector of the Russian Federation and Korea, including e-market places and their association, international trade association as well as non-governmental organizations also made their presentations and reports on the Workshop issues.

The Workshop highlighted the importance of holistic approach to the domestic paperless trading environment development and emphasized the role of government in establishment of relevant regulatory framework.

A consensus was reached on the following key aspects of domestic paperless trading environment:

- in legal / policy area clear objectives, strong leadership and collaboration of government bodies,
- in procedural / methodological area common standards and data models.

The Workshop considered the current situation in domestic paperless trading environment in the APEC Member economies and taking into account the deliverables of the first Workshop (Seoul, Korea) outlined the recommendations for further implementation of the "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment". In addition to the deliverables of the first

APEC Member economies agreed that the Workshop had provided the better understanding of issues of domestic paperless trading environment as well as "APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment" implementation.

Table. 4. List of Participant of the Workshop "Domestic Paperless Trading Environment"

Ŋoౖ	Name	Economy	Company, Position
1.	Ms. Susan H.S. Lu (speaker)	Chinese Taipei	APEC Electronic Commerce Steering Group, Paperless Trading Subgroup Vice Chair
2.	Mr. Amran Sameon (speaker)	Malaysia	Ministry of International Trade and Industry of Malaysia, Trade Facilitation and Technology

			Department, Director
3.	Mr. Carlos Quispe (speaker)	Peru	Tax and Customs Agency of Peru (SUNAT), Technical Leader
4.	Mr. Tran Vu Thach (speaker)	Viet Nam	Vietnam E-Commerce and IT Agency, Policy and Legal Department, Officer
5.	Ms. Porntip Wanitchayapong (speaker)	Thailand	Ministry of Commerce, Foreign Trade, Information Technology Division, Senior Office
7.	Ms. Maria Lourdes Yaptinchay (speaker)	the Philippines	Department of Trade and Industry, E-commerce Office, Director
9.	Ms. Jessica Edith Tapia (speaker)	Mexico	Ministry of Commerce of Mexico, E-Procurement Department, Expert
13	Mr.Jin-Dal Park	The Republic of Korea	Korea International Trade Association, Chief of e-Biz service HQ
14	Ms. Milley Ha	The Republic of Korea	General manager assistant of KITA
15	Mr. Austin Chang(speaker)	The Republic of Korea	Korea International Trade Association (KITA), Deputy General Manager

# **Russian Participants**

16.	Mr. Alexey Shurov,	Primorsky Region (Russia)Department of
	(speaker)	Communication and Informatization, Director
17.	Mr. Sergey Krivets	Director Division of Border Complex (Department
	(speaker)	of Industry and Transport Primorsky Region).
18.	Mr. Sotnik Dmitry	Primorsky Region (Russia), Department of Foreign
		Affairs. Vice-Director.
19.	Mr. Rybnikov	Primorsky Region (Russia), Department of Foreign
	Sergey	Affairs, Division chief
210.	Ms. Leskova Elena	Primorsky Region (Russia) Department of Foreign
		Affairs
211.	Mr. Kozhaev Denis	Financial director of JSC "Bank Primorye

22.	Mr. Varlamov	Vice-president for Foreign Affairs of JSC "Bank
	Victor	Primorye"
23.	Mr. Abushkin	Specialist of Insurance Company "Rosgosstrakh"
	Artur.	
24.	Mr. Porublev	Chief of the Division of "Reifeisenbank"
	Konstantin.	
25.	Mr. Almakeev	Chief of the Division of JSC "East port".
	Oleg	
26.	Mr. Furman	Director for Information Technologies of
	Konstantin	Vladivostok Sea Trade Port.
27.	Mr. Senin Maxim	Sea Trade Port, Project leader
28	Ms. Voronina	Financial Director of Sea Trade Port of Hakhodka
	Tatyana	
29.	Ms. Konko Tatyana	Director of "Vladivostokvneshtrans".
30.	Mr. Nikolay Vasiuk	Chief of the Financial Markets Service Division.
31.	Mr. A. Domrachev	Ministry of Telecom and Mass Communications of
		the Russian Federation, Department of State Policy
		of Informatization and Information Technologies,
		Counselor
32.	Mr. Ilya Dimitrov	Association of e-market Places, Executive Director
33.	Mr. Oleg Senkevich	Customs Procedures Department, Federal Customs
		Agency, Director.