AFACT

Asia Pacific Council for Trade Facilitation & Electronic Business

# 2007 AFACT Year Book

# PREFACE I

## AFACT Steering Committee Chairman, Anchalaporn Siriwan

On behalf of Royal Thai Government, it is an honor for the Ministry of Information and Communication Technology to be the host of AFACT 2007. As AFACT 2007 Chair, I would like to reassure our active commitment in driving forward AFACT agenda especially in promoting the implementation of internationally accepted standards and policy directives related to trade and transport facilitation as well as electronic government and electronic business in the Asia Pacific region.

Recognizing the priority of developing paperless trading environment through single window, the 25th AFACT meeting will provide an extensive exchange forum where essential steps towards establishing interoperable single window will be elaborated. Relevant UN/CEFACT recommendations, methodologies and standards addressing Application-to-Application interoperability at both process and semantic level will also be discussed.

With active participation from all AFACT members, it is believed that a fruitful dialogue will result to the success of the meeting. It is also our hope that the accomplishment will further serve as a basis for follow-up action and a creation of new initiatives which will facilitate the cross-border trade and transport in this region to the next level.

Last but not least, on behalf of AFACT members, I would like to extend my sincere gratitude to AFACT Roadmap Taskforce Team who has progressively worked to take stock of what is at stake and spent tremendous efforts in refining AFACT operational strategy, formulating AFACT program of work, and identifying the best practical way to strengthen AFACT involvement in the center of the international standard development body. I would like to encourage all of us to fully support AFACT Roadmap Taskforce Team in accelerating the timely achievement of this initiative.

Finally, this publication of AFACT 2007 Year Book with a compilation of country progress reports will not be accomplished without AFACT Secretariat and supporting team members. Their hard work is highly appreciated.

Chairman of AFACT Steering Committee

*Anchalaporn Siriwan*

# PREFACE II

## UN/CEFACT Vice Chair, T.A. Khan

Rapid advances in Electronic Commerce have fuelled the new paradigm of global business. Businesses all over the world have either created or are in the process of creating the eCommerce front-ends to their traditional businesses. The cross-border nature of e-commerce require international coordination in order to avoid unilateral actions that could stifle trade and lead to uncompetitive practices.

The United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) is striving hard to bridge the difference between developed and the ones on the road of development. The organisation of UN/CEFACT Forum in Asia Pacific region is the one major step in this direction. The recent Forum held in New Delhi from 2nd to 6th Oct. 2006 was a great success and has helped in creating the right environment needed for eCommerce development in the region. I hope that other members of AFACT would take lead to host Forum meetings in the region for facilitating growth of trade facilitation and electronic business.

Some other recent developments, which are very significant in the current context also, need to be highlighted. The AFACT roadmap is the most important one, which is under preparation based on the questionnaire circulated to all the member nations. The roadmap was being discussed for quite some time and this would provide the much needed impetus to the growth of AFACT community. UNeDocs and Single Window are other areas, which are catching the attention of all of us and I am confident that the AFACT roadmap would cover the initiatives required in this direction. The growing interest in eAsia Awards is a welcome step and I appreciate the efforts made by Thailand as host for AFACT 2007. These awards give a sense of fulfilment to those who have worked hard to bring this region at par with other developed nations.

The AFACT year book in its fourth year has become a much sought after reference book on the trade facilitation and eBusiness development in Asia Pacific. The efforts put in by AFACT Secretariat in bringing out this edition is appreciable. We wish many more such editions to be as successful as the first three.

UN/CEFACT Vice Chair & Deputy Director General, NIC

*T. A. Khan*

# PREFACE III

## AFACT Secretariat, Jyh-Sheng Ke

The advent of “Information Age” heralds an era that is more fast-paced than ever before. The old paradigmatic way of thinking and understanding can no longer deal with the rapid changes today. At the same time, we are all tightly connected in a ‘global village’ electronically and economically. As a result, a number of growing challenges are confronting us collectively. To name a few: the aging of the industrialized world’s workforce, the threat of fast-spreading epidemics of global climate warming that is perhaps the greatest challenge to the humanity as a whole.

Keeping up with these converging crises that we are already lagging behind, we need to adapt our thinking, methods and outreach strategies other than to our individual advantage, but by placing the emphasis on the welfare of our collective future as a whole. Governments and business leaders must now seek answers to the mighty tasks of keeping growth without jeopardizing the environment, and to balance the pressures for advancement with the improvement of higher quality of life.

These are indeed tough questions. It is fortunate that Information Communications Technology (ICT) can lend us big help. The “Knowledge Economy”, mainly by employing ICT as the driving force in economic growth and transformation, is fundamentally different from the conventional economy. In “Knowledge Economy”, the productivity and competitiveness of the units and agents in the economy depends chiefly on their capacity to generate, process, and apply knowledge-based information efficiently. In the time of great challenges, great opportunity also awaits. For it is only in times of crisis that innovative approaches – approaches that have previously been hidden under old, tired ways of thinking – can emerge powerfully to change the world as we see it. We will likely see an ICT ignited revolution that will change the way of measuring economic growth and progress soon in the years ahead. I believe such a revolution is vital to our future, as well as it will lead the way forward to new opportunities.

As a member in the Asia Pacific community, and the secretariat of AFACT, Chinese Taipei will continue our efforts to promote mutual understanding and exchange for the betterment of the global community as a whole.  Thank You.

AFACT Secretariat

*Jyh-Sheng Ke*

# PREFACE IV

## UN/CEFACT Rapporteur for Asia, Sangwon Lim

The year 2007 marks the 8th year since AFACT has transitioned to the current name and structure from the ASEB of the EDIFACT era. Since its transition, AFACT has faced many internal and external challenges such as the Internet proliferation, growth of membership, rapidly changing ICT trend, JWG restructuring, etc. However, the most demanding one has been an ever-increasing globalization of economy. To be in line with this globalization and deal with other challenges, AFACT has committed to develop its roadmap with the goal of guiding its future work in a strategic manner. The roadmap development is still on the way for delivery and AFACT community collectively embarks on contribution. In the context of AFACT roadmap development and AFACT progress in 2007, I would like to express my gratitude to the 2007 AFACT host, AFACT Roadmap TFT and AFACT Secretariat.

First, as the host of AFACT event in 2007, Thailand significantly contributes to the promotion of AFACT. In conjunction with annual AFACT meeting, Thailand is organizing 2007 eASIA Award, which is a landmark award for best practices of eBusiness in the region. In the 2007 eAsia Award, it is expected that many excellent regional eBusiness projects contest one another to be winners of the Award. Thailand also facilitates the collaboration between AFACT and AFACT Associate members by hosting the 17th meeting of the eBusiness Asia Committee, one of AFACT Associate members, concurrently with 25th AFACT meeting. In the development of AFACT Roadmap, Thailand provides facilitating support this year as the 2007 host and extended provision of such support by Korea is expected as the 2008 host until the final delivery of the Roadmap in 2008.

Second, my great appreciation goes to the members of AFACT Roadmap TFT for their commitment. The TFT members are contributing to this important task on a voluntary basis for the progress of AFACT. My last, but not the least, gratitude is expressed to AFACT Secretariat for its support to AFACT community. The support of AFACT Secretariat, including significant contribution in the preparation of the annual Year Book, is a facilitator for the promotion of AFACT internal activities as well as external visibility. I congratulate AFACT community for the publication of AFACT 2007 Year Book, which is not a small achievement.

UN/CEFACT Rapporteur for Asia

*Sangwon Lim*

# Introduction to AFACT

About AFACT
AFACT Bylaws
2007 AFACT Structure & Members

# ABOUT AFACT

AFACT is the Asia Pacific Council for Trade Facilitation and Electronic Business. It's a non-profit, non-governmental organization that is open to participation from the representatives of member economies and experts from private sectors within the Asia-Pacific region.

The forerunner of AFACT was ASEB (Asia EDIFACT Board) established in 1990 in response to disseminate EDIFACT (Electronic Data Interchange for Administration, Commerce and Transport) policies and activities in the Asia-Pacific region. After 8 years' contribution to facilitate international transaction within the region, through the simplification and harmonization of procedures and information flows, the need for re-engineering was raised in the 16th ASEB meeting to conform to the rapidly changing trend of EDI and EC, and to respond to the successful restructure of UN/CEFACT. As a result of re-engineering, AFACT marked down the era of ASEB in 1998. In 1999, the epoch of AFACT was officially commenced.

AFACT aims to promote the commitment and development of trade facilitation, electronic business policies and activities in the Asia Pacific region, mainly focusing on those promoted by UN/CEFACT (United Nations Center for Trade Facilitation and Electronic Business), to guide, stimulate, improve and promote the ability of business, trade and administrative organizations from members, as well as to exchange products and relevant services effectively within AFACT community.

Currently, there are 18 members from Afghanistan, Australia, Cambodia, Chinese Taipei, India, Indonesia, Iran, Japan, Korea, Malaysia, Mongolia, PRC, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, and Viet Nam. Each of which is represented by a local organization dedicated in promoting the application of standards and recommendations, e.g. UN/EDIFACT, developed by UN/CEFACT. eBusiness Asia committee and PAA (Pan-Asian eCommerce Alliance) are the associate members of AFACT, which are dedicated to promote cooperation in implementing trade facilitation and eCommerce in this region.

There are 11 active Working Groups formed under AFACT, each with its own scope of work and responsibilities. The Working Groups are Awareness and Education Working Group (AEG), Financial Working Group (FWG), Transport Working Group (TWG), Customs Working Group (CWG), Security Working Group (SWG), Air Transport Working Group (ATG), Supply Chain Working Group (SCWG), Legal Working Group (LWG), Internetworking Implementation Committee (IIC), XML Working Group (XMLWG), and Business Collaboration Framework Working Group (BCFWG).

**The major activities include：**

1. Analyzing and understanding the key elements of international transactions and working for the elimination of constraints;
2. Developing methods to facilitate transactions, including the relevant use of information technologies such as UN/EDIFACT and ebXML;
3. Promoting both the use of these methods, and associated best practices, through channels such as government, industry and service associations;
4. Coordinating its work with UN/CEFACT and other relevant international, regional and non-governmental organizations; and
5. Enhancing the cooperation among the AFACT members and promoting the objectives of the mission statement in the Asia Pacific region.

# AFACT BYLAWS

## Article 1
***Name***

The name of this organization shall be the Asia Pacific Council for Trade Facilitation and Electronic Business (hereinafter referred to as "AFACT").

## Article 2
***Mission Statement***

AFACT aims to support in the Asia Pacific region policies and activities, especially those promoted by UN/CEFACT (United Nations Center for Trade Facilitation and Electronic Business), dedicates to stimulate, improve and promote the ability of business, trade and administrative organizations, to exchange products and relevant services effectively in a non-political environment.

Its principal focus is to facilitate international transactions, through the simplification and harmonization of procedures and information flows, and so contribute to the growth of global commerce.

## Article 3
***Terms of Reference***

The principles of the mission statement are to be achieved by:

- Analyzing and understanding the key elements of international transactions and working for the elimination of constraints;
- Developing methods to facilitate transactions, including the relevant use of information technologies such as UN/EDIFACT and ebXML;
- Promoting both the use of these methods, and associated best practices, through channels such as government, industry and service associations;
- Coordinating its work with UN/CEFACT and other relevant international, regional and non-governmental organizations; and
- Enhancing the cooperation among the AFACT members and promoting the objectives of the mission statement in the Asia Pacific region

## Article 4

***Structure***

AFACT shall be a non-profit, non-political, voluntary and independent organization.

## Article 5

***Membership***

Membership shall comprise two categories shown in Appendix 1 hereto:

- Member - The countries and economies in the Asia Pacific region represented by the agency assigned to promote and develop trade facilitation and Electronic Business. Such agency is recognized as the single focal point for UN/EDIFACT or UN/CEFACT related activities.

  Agencies of the United Nations can also be members.

  All existing members and associate members in the ASEB shall be automatically recognized as members of AFACT.

- Associate member - Any other organization from the Asia Pacific region or relevant international organization located in the region, committed to similar objectives as AFACT.

Any country, economy or organization wishing to join AFACT must submit an application for membership in writing to the AFACT Secretariat who shall circulate it to the Steering Committee members for consideration and approval, as well as to all members and associate members for consultation. If approved, the Steering Committee shall report to the Plenary on the approval of the application.

The Chair for the Plenary may also invite non-member countries, economies and experts as observers or special invitees.

## Article 6

***Plenary***

The Plenary shall include members, associate members and observers, represented by their Heads of Delegations. A simple majority of the members is required for a quorum.

The Plenary Meeting shall be a forum to exchange views on any areas of common interest including the latest developments in each member or associate member under the ambit of the Mission Statement.

The Plenary shall be the highest decision making body of AFACT and shall have the responsibility of ratifying all major decisions and monitoring the execution of the adopted resolutions.

The preferred way of reaching decisions shall be by consensus. However, the Chair shall have the authority to call for a vote if, in his view, consensus cannot be reached on a particular issue. In such cases, a simple majority of all voting members constitutes a decision. In case of a tie, the chair shall cast the deciding vote.

Only members are eligible to vote. The vote shall be cast by the Heads of Delegations or their designated representative.

For dissolution of AFACT, the adoption of the Bylaws or a change to the Bylaws, a two-third majority of all voting members is required.

Absent members can have the option to vote by email or other means, or by proxy entrusted to the Chair or a fellow AFACT member.

The Plenary shall meet at least once a year.

## Article 7

***Officers and Secretariats***

Annually AFACT shall identify a member to host the organization (hosting member).

The officers of AFACT shall be the Chair, two Vice-Chairs and the Secretary. The term of office for each post shall be one year.

The hosting member shall nominate the Chair, with one Vice-Chair being nominated by the next hosting member (Chair elect) and the immediate former Chair acting as the other.

At the start of each Plenary, the identification of next hosting member and the Chair elect shall be approved.

The hosting member shall nominate a person who shall be the Hosting Secretary of AFACT (hereinafter the hosting Secretariat).

Their term shall start immediately after the close of the previous Plenary meeting. In order to ensure a smooth hand-over between the two hosting Secretariats, a Joint hosting Secretariat shall exist for an agreed period, after the previous Plenary meeting.

The AFACT Secretariat shall be nominated by the Steering Committee and ratified by the Plenary for four years term, based on the Terms of Reference described in the Appendix 3, which shall be open for any AFACT member and reviewed every four years.

## Article 8

***Steering Committee***

The Steering Committee is responsible for the management and coordination of AFACT between the Plenary meetings. The Steering Committee also supervises the progress status of the decision made by the Plenary meeting.

The composition of the Steering Committee shall be as follows:

- Chair (of AFACT)
- Two Vice-Chairs (of AFACT)
- UN/CEFACT Rapporteur for Asia (Advisor)
- Two Heads of Delegation appointed by the Plenary who will hold office as members of the Steering Committee for a term of two years.
- AFACT Secretariat

The Steering Committee is chaired by the Chair of AFACT.

The hosting Secretariat shall be present in all Steering Committee meetings.

The agenda for the Steering Committee meeting shall be circulated to the Heads of Delegations and Chairs of Working Groups for comments.

The Chair may invite Chairs of Working Groups for specific meetings, as appropriate and all Heads of Delegation shall be entitled to attend meetings of the Steering Committee.

Where required, the Steering Committee shall be empowered to take decisions on behalf of AFACT between Plenary meetings. In such cases, every effort shall be made to consult with the Heads of Delegations.

Steering Committee decisions shall be made by consensus.

The Steering Committee shall meet at least twice a year. This can be either in the form of a physical meeting or a virtual meeting.

## Article 9

***Working Groups***

Working Groups may be established to focus on a specific area of interest, under the ambit of the Mission Statement.

To establish a Working Group, the interested parties shall submit a proposal, including the Terms of Reference, to the Steering Committee for approval and subsequently, to the Plenary for ratification.

Each Working Group shall appoint its own Chair and Secretariat. The term of service for the Chair and the Secretariat shall be for a period of two years.

Each Working Group shall submit its Work Program to the Steering Committee for endorsement.

The Working Group shall meet at least twice a year. This can be either in the form of a physical meeting or a virtual meeting.

The Chair of each Working Group shall report to the Plenary.

All Working Groups under the ASEB shall be automatically recognized as a Working Group under the AFACT. Each Working Group shall review and submit their Terms of Reference to the Steering Committee for approval and subsequently, to the Plenary for ratification.

## Article 10

***Focal Point***

Each AFACT member is required to have a single focal point, dedicated to the promotion, dissemination and implementation of AFACT objectives.

The focal point shall identify the Head of Delegation and a contact person who shall be responsible for communication with the AFACT Secretariat and all related parties.

## Article 11

***EDICOM***

EDICOM is the annual conference and exhibition of AFACT. It features the latest technology and information on Electronic Data Interchange (EDI), Electronic Commerce (EC), UN/EDIFACT and other related activities including trade facilitation.

EDICOM shall be organized by the hosting member, adjacent to the Plenary, in consultation with the Steering Committee.

## Article 12

***Relationship Between AFACT and UN/CEFACT***

As set out in its Mission Statement, AFACT seeks, amongst other objectives, to promote the aims, objectives and activities of UN/CEFACT within the Asia Pacific region. To this end, Asia Pacific delegations to UN/CEFACT provide a strong link between AFACT and UN/CEFACT.

The UN/CEFACT Rapporteur for Asia provides another significant linkage. The Rapporteur shall be appointed by the Plenary of UN/CEFACT on the recommendation of the AFACT Plenary. (The Mandate of the UN/CEFACT Rapporteur for Asia is attached as Appendix 2).

AFACT is also strongly encouraged to identify and nominate potential members to the UN/CEFACT Steering Group. These nominations shall take place after full consultation with AFACT and shall normally be made on behalf of AFACT, to the UN/CEFACT Secretariat, by the delegation holding the Chairmanship of AFACT or by a delegation designated by the Chair.

Close coordination between AFACT Working Groups and UN/CEFACT Working Groups is strongly encouraged and both bodies shall use their best endeavors to ensure this coordination. This is most effectively achieved when there is a formal relationship between the respective groups.

## Article 13

***Expenses***

The hosting member shall cover all expenses involved in organizing the Plenary Meeting, the Steering Committee Meeting and the meetings for the various Working Groups held before the Plenary Meeting.

The hosting member is entitled to charge a participation fee for each delegate. The amount to be charged shall be decided in consultation with the Steering Committee.

The AFACT Secretariat shall cover all the costs incurred in performing the responsibilities as the secretariat and maintaining the AFACT Website.

## Article 14

***Working Language***

The working language of AFACT shall be English.

## Article 15

***Effectiveness***

These Bylaws enter into effect on October 3, 2001, upon ratification by the AFACT Plenary.

# Appendix 1

***List of Members and Associate Members as of May, 2006***

Members：Afghanistan, Australia, Cambodia, Chinese Taipei, India, Indonesia, Iran, Islamic Republic, Japan, Malaysia, Mongolia, Pakistan, Islamic Republic, Philippines, P.R.C, Republic of Korea, Singapore, Sri Lanka, Thailand, Vietnam,

Associate Members：eBusiness Asia Committee, PAA

# Appendix 2

***Mandate UN/CEFACT Rapporteur for Asia***

**Within Asia, the Rapporteur shall:**

- Promote and represent UN/CEFACT's interest and activities to governments, inter-governmental organizations, relevant trade associations and business and trade facilitation organizations;
- Encourage the participation of experts in UN/CEFACT's work program and stimulate the implementation of UN/CEFACT's Recommendations;
- Coordinate UN/CEFACT's activities in the region.

**Liaison Relationships**

This mandate shall be carried out, where appropriate, in liaison with Heads of delegations to UN/CEFACT coming from Asia as well as in liaison with the secretariat of ESCAP and the Chairs of UN/CEFACT's Working Groups.

**Reporting Relationships**

The Rapporteur shall be presented a report at each UN/CEFACT Plenary. The Rapporteur may raise issues directly with the CEFACT Forum Management Group (FMG) and the Bureau, and has an open invitation to attend the Bureau and FMG meetings in a consultative capacity.

**Duration of Appointment**

The appointment as Rapporteur is for two years, renewable.

# Appendix 3

***AFACT Secretariat Terms of Reference***

## 1. Background

- When the Asia EDIFACT Board (ASEB) was reformed into the Asia Pacific Council for the Facilitation of Procedures and Practices for Administration, Commerce and Transport (AFACT) in 1998, the Board decided that AFACT did not have a permanent secretariat, and secretariat roles were served by the host secretariat in one year term. The running secretariat shall be provided by the host member, which this new system shall be reviewed after two or three year's experiences.
- In the Taipei AFACT meeting, the HoD of Islamic Republic of Iran suggested to consider for setting up a secretariat to manage AFACT in consistent manners. The AFACT Plenary has decided to establish a secretariat under AFACT in principle. Then, the Chair (Dr. Lin) allowed the Steering Committee to look for a secretariat within AFACT members.

## 2. Terms of Reference

- The purpose of AFACT Secretariat is to explore, review and identify the most practical approach for managing and operating AFACT tasks on Trade Facilitation and Electronic Business in Asia Pacific region.
- The AFACT Secretariat should coordinate with UN/CEFACT Rapporteur for Asia to achieve the responsibility of the AFACT Secretariat.

Taking account of existing AFACT Terms of Reference, these shall include;

a) To document all AFACT related activities and publish them on the AFACT web site,

b) To maintain the AFACT web site in cooperation with other members' secretariat,

c) To support the host secretariat for organizing AFACT Plenary meeting and its joint working groups' meetings, AFACT Steering Committee meeting and EDICOM,

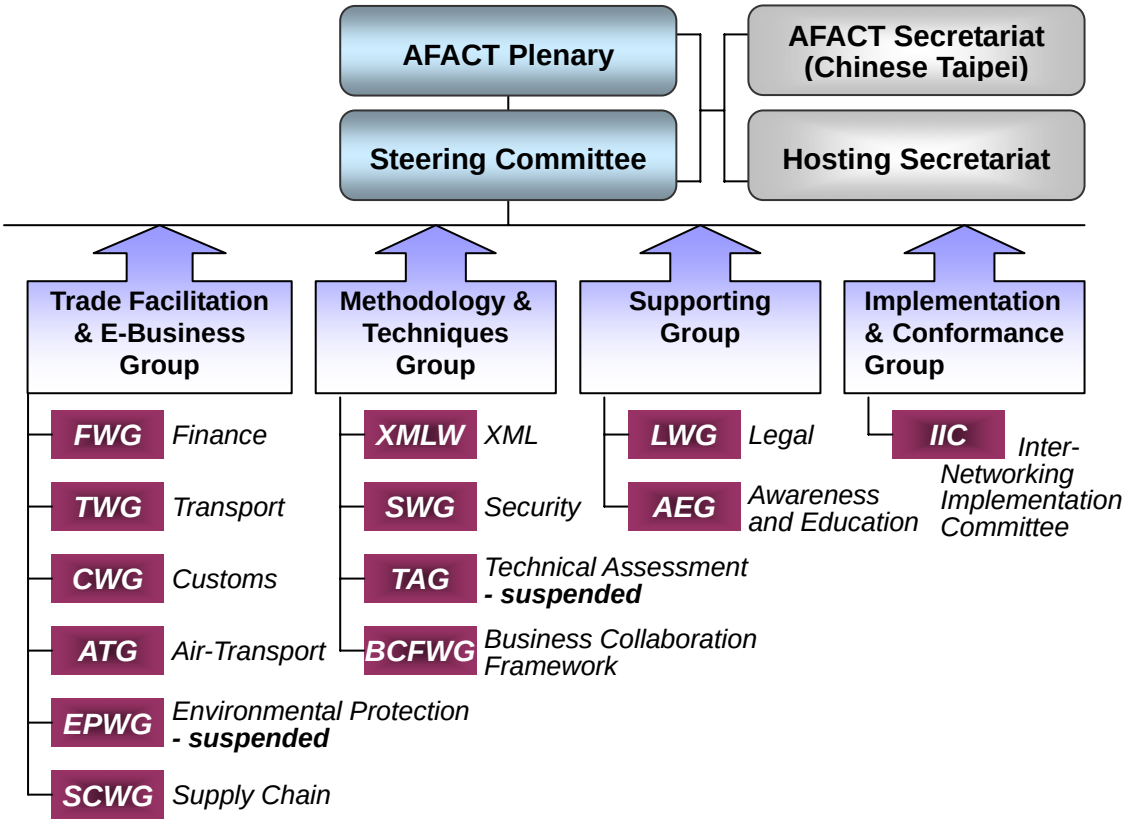
d) To facilitate the affairs in relation to new membership application,

e) To attend AFACT related meetings to support the host secretariat,

f) To attend UN/CEFACT Plenary meeting, if possible, to follow up its decision and discussion made during the meeting and feed back them to AFACT community, and

g) Any other business.

# 2007 AFACT Structure & Members




## Members

| | | | |
|---|---|---|---|
| Chinese Taipei | Singapore | Iran | Pakistan |
| Indonesia | Philippines | Korea | India |
| Thailand | Australia | Japan | Sri Lanka |
| Malaysia | P.R.C. | Viet Nam | |
| Mongolia | Cambodia | Afghanistan | |

## Associate Members

❖ eBusiness Asia Committee ❖ PAA

# AFACT Organization

# 2007 AFACT Steering Committee Board Members

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# 2007 AFACT Heads of Delegations

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# Chinese Taipei Progress Report

## Taipei EC/EDI Committee

# 2007 Members Progress Report：Chinese Taipei

## SECTION I – GENERAL CONDITION UPDATE

### 1.1 Ranking in International Evaluations

In Brown University's study, Chinese Taipei's Online Government services ranked the 2nd position by 198 nations around the world. The Swiss International Institute for Management Development (IMD) formally analyzed Chinese Taipei the 18th of 55 national economies worldwide using 323 criteria to rank the economies in terms of world competitiveness; the IMD rated Chinese Taipei as having the greatest competitive advantages in the category of "business efficiency," and ranked Chinese Taipei 4th and 5th in the items of "technology infrastructure" and "science infrastructure" respectively under the category of "infrastructure." In addition, World Economies Forum (WEF) ranked Chinese Taipei the 18th in Growth Competitiveness Index (GCI) which is the 3rd position of Asian Pacific countries. Moreover, according to the World Economic Forum's (WEF) latest "Global Information Technology Report, 2004-2005," Chinese Taipei was in the 13thposition. Chinese Taipei has steadily improved in the rankings, from the 17th places in 2004 to 15th place in 2005 and finally 13th place this year. Furthermore, Chinese Taipei ranked 22nd in the 2005 e-Readiness survey published by the Economist Intelligence Unit (EIU) and IBM's Institute for Business Value. At last, the International Data Corporation (IDC) publishes an Information Society Index (ISI) comparing 53 countries participating in the information revolution. The latest 2006 ISI ranked Chinese Taipei in 20th place of worldwide. (Table 1)

**Table 1：Chinese Taipei's Ranking in International Evaluations**

| Index | Source | The Ranking of Chinese Taipei |
|---|---|---|
| e-Government | Brown University ( 2006 ) | 2 |
| World Competitiveness | IMD ( 2006 ) | 18 |
| Growth Competitiveness Index (GCI) | WEF (2005 – 2006) | 18 |
| Networked Readiness Index (NRI) | WEF (2005 – 2006) | 13 |
| e-Readiness | EIU ( 2005 ) | 22 |
| Information Society Index (ISI) | IDC ( 2006 ) | 20 |

These rankings strongly indicated the current accomplishment for Chinese Taipei's favorable E-Commerce environment and competitive advantage, which resulted from the governmental promotion policies and consistent strength as well as the efforts from both public and private sectors.

## 1.2 eCommerce Regulation update

The Ministry of Economic Affairs completed a draft of amendment of the "Electronic Signature Act" based on the purpose to promote eCommerce at the end of 2005. The draft had been submitted to Executive Yuan for further discussion at June 2006. Four generating regulations were also drafted during the year of 2006 and will be in effect once the Amendment of Electronic Signature Act to be passed.

Nevertheless, due to a new amendment of Consumer Protection Act was drafted by Consumer Protect Commission at early 2007, the draft of the Amendment of Electronic Signature Act was withdrawn from Executive Yuan to Ministry of Economic Affairs at April, 2007 for the purpose to reorganized for matching up the foreseeable change of eCommerce legal framework.

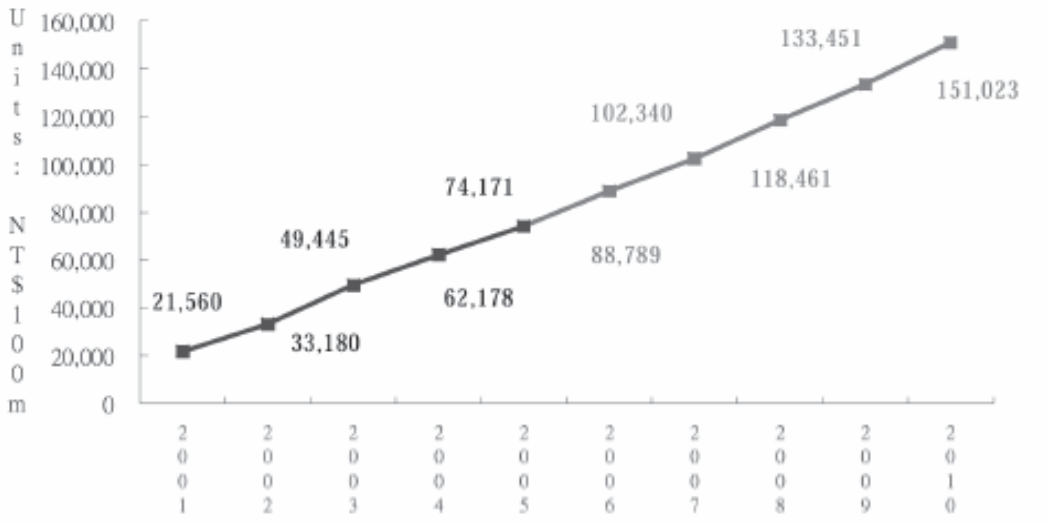
## 1.3 Status of E-Commerce

### 1.3.1 B2B E-commerce Market

According to research performed by the Department of Commerce, MOEA, aspart of the "e-Commerce Legal System and Fundamental Environment Development Program," 96.8% and 98.7% of domestic corporations have established their own intranet and Internet connections respectively, showing that networks are an indispensable part of modern corporate operations. Relatively large numbers of manufacturing firms have established corporate virtual networks (20.7%), followed by information firms (15.7%).

At least 85% of domestic corporations have established web sites. Financial/insurance firms have the highest percentage of web sites (94.6%), followed by information firms (92.6%), while agricultural/forestry/fisheries/livestock firms have fallen behind (76.5%; more than 23.5% of firms lack a company web site).

**Figure 1：Projected Size of Taiwan's B2B e-Commerce Market, 2006～2010**



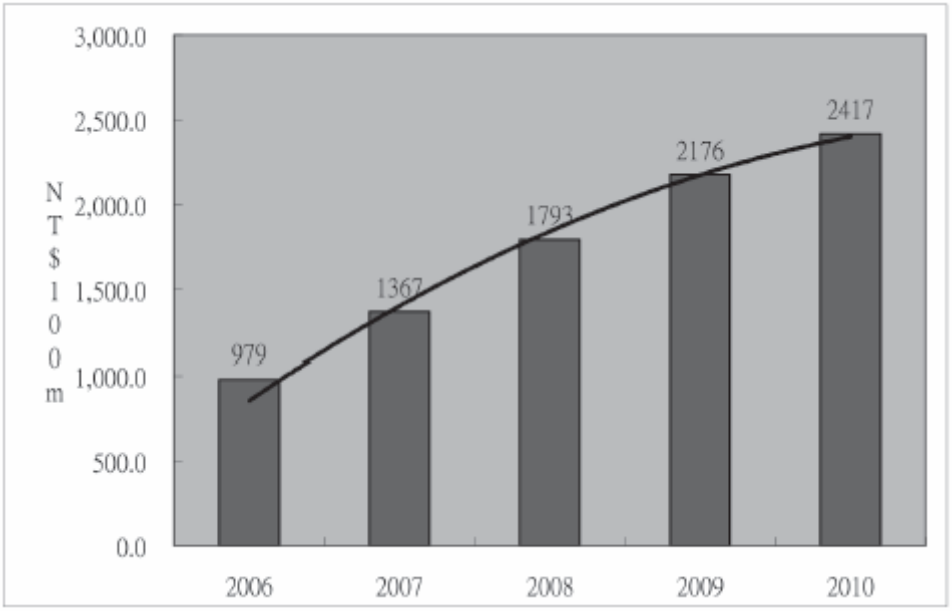

*Source: "e-Commerce Legal System and Fundamental Environment Development Program," Department of Commerce, MOEA, 2006*

As for the overall size of the market, Taiwan's B2B transactions were worth a total of NT$1.411 trillion in 2000 and had grown to NT$7.417 trillion by 2005. The domestic B2B e-commerce market thus grew by approximately NT$6 trillion in only five years, for a compound annual growth rate (CAGR) of 39.4% (Fig.1). Projections show the B2B e-commerce market growing to NT$15.102 trillion by 2010, while maintaining a CAGR of 14.2%.

### 1.3.2 The B2C Online Shopping Market

The three biggest segments of the domestic B2C e-commerce market areinvestment/financial management (44.7%), travel services (17.5%), and beautyproducts (11.3%) respectively, followed by foods/sundry goods (5.4%), books &magazines (4.8%), 3C products (4.1%), digital content information (3.5%), otherproducts and services (3.1%), apparel & accessories, jewelry, and luxury goods(2.0%), home and living merchandise (1.9%), audiovisual products (0.8%), andcomputer software (0.7%).

**Figure 2：Projected Size of Taiwan's Online Shopping Market, 2006～2010**




*Source: "e-Commerce Legal System and Fundamental Environment Development Program," Department of Commerce, MOEA, 2006*

Furthermore, the value of the online shopping market reached approximately NT$ 97.9 billion in 2006, and is expected to break the NT$100 billion mark in 2007and reach 241.7 billion by 2010 (Fig. 2).

The market's CAGR from 2006 to 2010 is projected to be 32.9%. It is also estimated that online retail shopping accounted for a 3.1% share of the overall retail market in 2006.

### 1.3.3 C2C online shopping market

According to statistics, Yahoo! Kimo--Taiwan's leading domestic C2C auction Web site--has auctioned 3.7 million products thus far, and accounts for roughly 80% of the domestic auction market. It is far ahead of eBay's roughly 1.1 million items and PChome's roughly 100,000 items. Yahoo! Kimo's transaction value rose from NT$15 billion in 2004 to 22 billion in 2005. eBay announced on June 5, 2006 that it would form a joint venture with PChome Online Family and establish a new online auction service company. PChome Online will be in charge of management of the new company, and the new Web site will replace PChome Online's

current auction channel and eBay Taiwan's existing Web site; the new auction Web site is expected to start up by the end of 2006.

### 1.3.4 Current State of G2B2C e-Commerce Applications

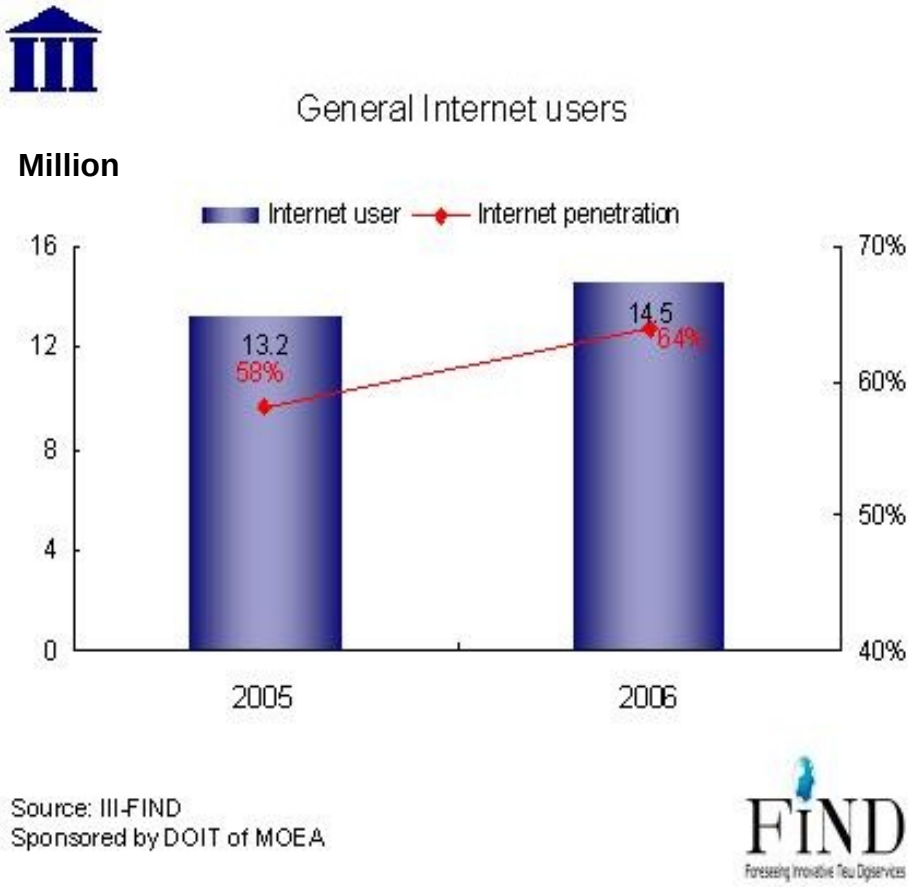
The e-government portal Web site is used an average of approximately 17.75million person-times per month, and contains over 2,500 online reporting and services application. This Web site has enabled companies and individuals to save enormous time and expense that would be spent on visiting government offices. The e-procurement system of the Public Construction Commission, Executive Yuan is a typical e-government application; this system had been used 23 million person-times as of the end of 2005. Electronic tender documents from government agencies have been downloaded from this system for 521,342 times, and government agencies have made 455,524 online orders with a total value of over NT$40 billion.

## 1.4 e-Usage

### 1.4.1 Internet Users

The number of Chinese Taipei's general Internet users, defined as all individuals who have ever used the Internet, had reached 14.52 million in 2006, which has increased nearly 1.3 million since 2005. By comparison, it is a growth rate of 9.8% from 2005 to 2006. The percentage of male and female Internet users was 63.8% for both, a higher increase in that of women than that of men from last year. In terms of age groups, those between 10 and 29 years old had the highest percentage of Internet usage. Moreover, the people of higher education level have more usage rate in Internet.

**Figure 3：General Internet users and Internet Penetration Rate, in 2006**




*Source: FIND, ACI, III / sponsored by DOIT, MOEA*

### 1.4.2 Internet Subscribers

According to the research conducted by IDEAS, III, there were 14.85 millions Internet subscribers in Chinese Taipei by the end of December 2006. By comparison, the Internet subscribers were 14.01 millions at the end of December in 2005, with an increase rate of 6%. (Figure 4)

### 1.4.3 Mobile phone subscribers

According to data published by National Communications Commission (NCC), there

were 23.24 million mobile phone numbers including GSM, PHS and 3G in use in Chinese Taipei as of the fourth quarter of 2006. This represents an increase of approximately 150,000 subscribers or 2% compared to the third quarter of 2006. The mobile phone penetration rate was 101.63% in the fourth quarter of 2006. The Chinese Taipei's mobile phone penetration rate was 113% which was the highest rate of worldwide in the third quarter of 2003. That is because the merger between Chinese Taipei's Telecom Firms and rectification of unnecessary mobile numbers. It is a good sign to over 100% of mobile phone penetration rate.

### 1.4.4 Households Online

According to IDEAS-FIND's survey, 72% of households in Chinese Taipei had access to the Internet. By comparison, it is a growth rate of 5% from 2005 to 2006. In addition, the Online Households rate was 87% of using broadband internet connections in 2006.

### 1.4.5 Business Online

According to the 2006 survey conducted by IDEAS-FIND of III, 83.2% of businesses were connected to the Internet, up from 80.9% in 2005. This figure represented a nearly increase of 3% compared to 2005. Over 96% of the online business connected to the Internet via broadband access.

## 1.5 Taipei EC/EDI Committee

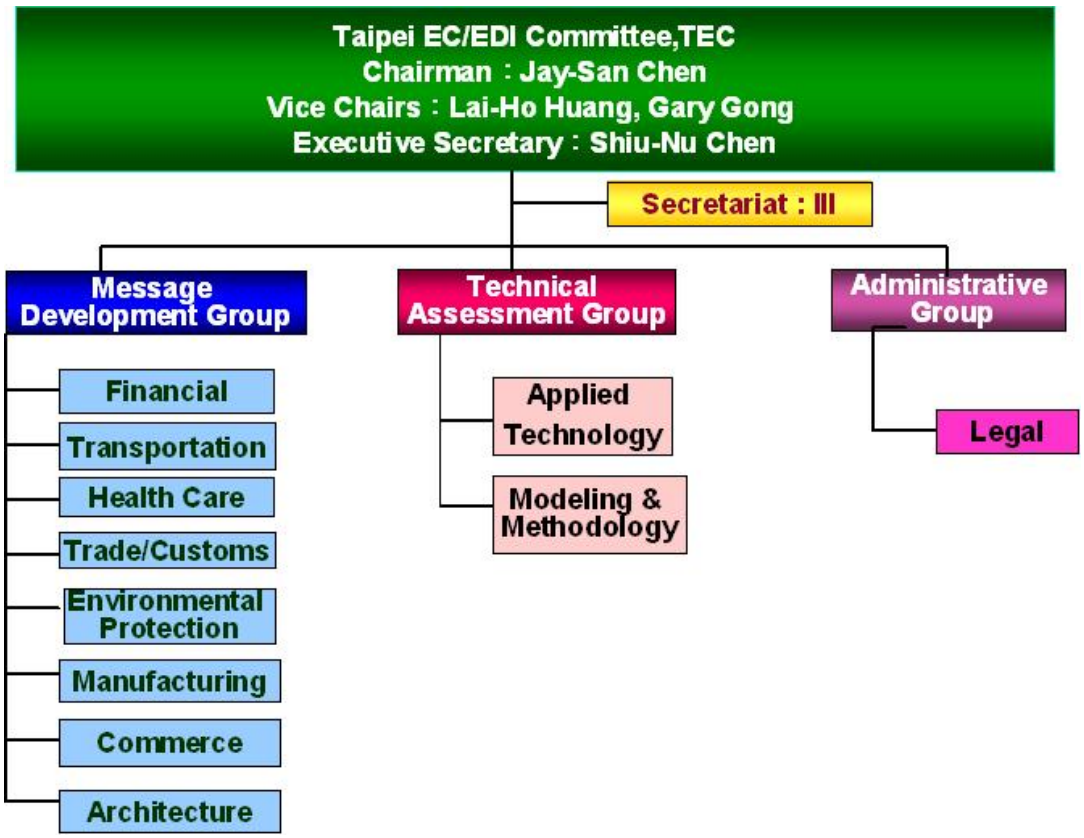
### 1.5.1 Introduction

The Bureau of Standards, Metrology and Inspection under Ministry of Economic Affairs established Taipei EC/EDI Committee (TEC) in 1992 to accelerate the promotion of the eCommerce Standards and Trade Facilitation as well as set up respective working group under the TEC to take charge in specific area of concerns.

### 1.5.2 Constitution

The General Director of the Bureau of Standards, Metrology and Inspection chairs the Taipei EC/EDI Committee.

**Figure 4：Current Structure of TEC**




*Source: TEC Secretariat, December 2006*

# SECTION II – EDIFACT/ebXML/XML BASED STANDARDS DEVELOPMENT

## 2.1 B2B e-Commerce application usage

The Department of Commerce's 2006 e-Commerce Legal System and Fundamental Environment Development Program surveyed the state of corporate e-business and B2B e-commerce application usage at companies in the information industry, manufacturing, financial/insurance industries, agriculture, forestry, fishing, livestock, construction, and B2B

e-commerce in six major industries under its jurisdiction: the food/sundries industry, 3C product logistics industry, publishing/media/entertainment industry, apparel and accessories industry, pharmaceutical and cosmetics industry, and tourism and travel service industry. It would be mentioned three major industries as followed.

- **Information industry**

Although a relatively large number of information companies rely on email to transmit information to and from upstream vendors and downstream customers, in many cases companies also use web-based methods to conduct transactions with downstream vendors. Among responding information companies, 34.9% indicated that they conduct e-commerce transactions with downstream firms and customers employing electronic operating procedures. In summary, information industry firms mainly rely on email to place orders with upstream vendors (79.6%) and also to receive orders from downstream customers (90.1%).

- **Construction Industry**

A relatively high number of construction firms rely on email to transmit information to and from upstream vendors and downstream customers. Among the surveyed construction firms, 5.6% responded that they conduct e-commerce transactions with downstream vendors and customers employing electronic operating procedures.

- **Agriculture, Forestry, Fishing, and Livestock Industries**

A relatively high number of agriculture, forestry, fishing, and livestock firms rely on email to transmit information to and from upstream vendors and downstream customers. Nevertheless, as many as 80% of these firms still transmit information to up- and downstream companies using manual methods.

## 2.2 e-Health care Services

The rapid progress on information technology and the advent of the Internet, with its convenience, ease-of-use, and worldwide access, have enabled healthcare to move into new service models. Chinese Taipei has for many years prided itself on the universal, cradle-to-the-grave medical care that it provides for its citizens, and has notched up some impressive achievements in preventive healthcare, ensuring access to medical treatment, and the diagnosis and treatment of disease. The lifelong care model adopted by the Department of Health (DOH), Executive Yuan, is very much people-centered, with technology playing a supporting role; the adoption of this model has led to the development of a comprehensive set of e-healthcare programs. As soon as they are born, each citizen is issued with a National Health Insurance (NHI) IC card, to facilitate the effective integration of lifelong care provision.

The creation of a centralized, online service window makes it easy for the public to access the healthcare and disease prevention information that they need. Electronic Medical Records (EMRs) have been designed to meet citizens' needs when seeking medical treatment. With these e-records, all of the patient's records from previous visits to different clinics can be accessed by any hospital, giving doctors the patient information they need to make an accurate diagnosis, while at the same time ensuring that the patient's rights are protected. E-enablement also has an important role to play in both long-term care and emergency response, by ensuring the efficient flow of information, making it possible to use resources more effectively, and helping medical personnel to react immediately to changing circumstances. In the last few years, following the implementation of various medical and healthcare information service plans, Chinese Taipei has gradually built up practical, comprehensive online health service architecture; the results achieved in this area are truly impressive.

In 2000, HL7 Association of Chinese Taipei is an accredited organization for international healthcare informatics standards development. In addition, HL7 is an international standard for healthcare data exchange. It provides the “Rules” for common types of communication between healthcare information systems, and is the one of the most widely-implemented exchange protocols internationally. Healthcare organizations can derive tremendous benefits in adopting HL7This was followed in June 2001 by the establishment of HL7- Chinese Taipei Association, and in March 2003 by the establishment of the Medical Imaging Standards Association of Chinese Taipei. By 2005, 13 Protocol/Recommendations for HL7 Standards Specification had been drafted, and a HL7 Message Verification/Validation system had been established, along with a system for comparing international Logical Observation Identifier Names and Codes (LOINC) with Chinese Taipei's NHI-LOINC. In this way, the government hoped to deliver a solid guideline for healthcare interoperability standards.

In 2004, DOH began work on the electronic format standards for medical records. By June 2005, pilot projects with standard components/format for the EMRs had already been completed for outpatient, emergency and inpatient medical records, and work was continuing on the standard formats for specific medical specialties. DOH has also been providing technical consulting service to help hospitals overcome any problems they may encounter when implementing these formats. The standard format for electronic medical record offers several advantages: it conforms to regulatory requirements, has been designed to meet the special needs of hospitals and clinics in Chinese Taipei, conforms to the international HL7 CDA 2.0 standard, and provides first-rate portability (thanks to the use of XML technology).

Comparison of the results obtained in the Survey of Electronic Medical Record Adoption in Hospitals and Clinics surveys (covering all hospitals in Chinese Taipei and 25% of all clinics) implemented by DOH in 2002 and 2005 showed that, following three years of effort during the period 2002 2005, by 2005 EMRs were in widespread use, and the majority of hospitals had achieved impressive results with their introduction. Around 50% of hospitals had reached at

least Level Two in e-record adoption, and 40% had reached Level Three or higher. Level Three represents effective integration of information systems with data. Medical facilities in Chinese Taipei have thus already established a solid foundation for further development in electronic medical record adoption. Hospitals have already achieved intra-hospital integration of information systems and medical records, and are now moving on to the next stage: sharing and exchanging records with other hospitals.

# SECTION III – Trade Facilitation/eBusiness/ eCommerce Related PROJECT UPDATES

This section depicts the current state and future development trend of various standard related projects that are carried out by respective working groups under the Taipei EC/EDI Committee.

## 3.1 Manufacturing

The e-Business standards in seven manufacturing industries were developed and implemented in 2002 with budget from Industrial Development Bureau (IDB), Ministry of Economic Affairs (MOEA). These industries are the textiles, pulp & paper, automobile, heavy electronics, iron & steel, petrochemicals, and machinery industries. During the project period, 14 business process standards, 30 document standards, 2 vocabulary standards, and 4 classification standards were accumulatively developed, and about 143 companies implemented and applied document standards in business process of ordering, purchasing and shipping in a total of 20 systems. (Table 1)

**Table 1：Summary of e-Business Standards Implemented and Applied by industries in 2002 (Source: IDB, MOEA)**

| Industry | Process Applied | Standards implemented | Standards Developed |
|---|---|---|---|
| Textiles (RN-like) | Fabric dying, finishing | Dying/finishing notice, shipping | ▪ Process standard: packing specification notice |

| Industry | Process Applied | Standards implemented | Standards Developed |
|---|---|---|---|
| | process operations | notice | ▪ Document standard: dying/finishing notice, muslin finishing, shipping notice, packing specification notice |
| Petrochemicals (CIDX) | Order operation client-end | Ordering, response, modification, cancellation, response, tracking, and response | ▪ Process standards: Client registration process, demand forecasting process, supply planning/demand planning process<br>▪ Document standards: Qualification application, qualification response (customer management operation), demand forecasting, demand forecasting response, demand planning, demand planning response (supply management operation) |
| | e-Catalog operation | Product catalogue update, particular client catalogue update | |
| Machinery (RosettaNet) | Purchasing operation on supplier's end | Enquiry, quote, purchasing order, tracking, modification, and cancellation | ▪ Process standards: Enquiry, quote, purchasing order, tracking, modify, cancellation<br>▪ Document standards: Enquiry, quote, purchasing order, tracking, modification, cancellation |
| Pulp & Paper (PapiNet) | Order management operation from client end | Ordering, order confirm | ▪ Document standards: Shipping indication, shipping notice |
| Automobile (OAGIS) | Manufacturing management operation from supplier end | LT component demand plan, ST component demand plan, shipping indication, receipt QC | ▪ Process standards: Ordering, payment specification<br>▪ Document standards: Order, payment specification<br><br>Note:<br>LT = Long term<br>ST = short term<br>QC = Quality Control |
| | | Shipping indication, Receipt QC | |

| Industry | Process Applied | Standards implemented | Standards Developed |
|---|---|---|---|
| | | Shipping indicator, ST component demand plan | |
| | | Shipping indication, receipt QC | |
| | | Shipping indication, receipt QC, return notice | |
| Heavy Electronics (OAGIS) | Purchasing operation from supplier end | Enquiry, quote, order form, order confirmation | ▪ Process standards: order process<br>▪ Document standards: order cancel, order modify |
| Iron & Steel (isXML) | Order operation from client end | Order form | ▪ Process standards: Order process<br>▪ Document standards: enquiry, quote, order confirm, order form/ dispatch notice<br>▪ Classification standards: stainless steel plates/hot-rolled stainless steel/cold-rolled stainless steel, stainless steel rod/ steel wire, galvanized & painted steel wire, concrete reinforcement bars<br>▪ Vocabulary standards: particular terminology for iron & steel industry, business related terminology |
| | Distribution operation from client end | Shipping notice, quality certification, non-radiant certification | |
| Total | | Document standards: 36 | Process standards: 14<br>Document standards: 30<br>Classification standards: 4<br>Vocabulary standards: 2 |

In 2003, the budget supported by IDB assisted two benchmark industries, heavy electronics and machinery, to develop e-Business standards application. Moreover, seven major domestic manufacturers of benchmark industries were in cooperation with their upstream and downstream to implement the e-Business standards. The application of e-Business standards included enquiry, quote, order, shipping, quality control and payment of e-Business standard items.

Also, five user-groups were supported by the IDB to develop the plan of e-Business standard application, including the industries of heavy electronics, machinery, filament weaving, iron & steel, and pulp & paper. There were five primary industrial associations carrying out these plans, including Taiwan Association of Machinery Industry, Taiwan Electrical & Electronic Manufacturers' Association, Taiwan silk & Filament Weaving Industrial Association, Taiwan Paper Industry Association, and Taiwan Steel & Iron Industries Association.

The professional training courses and discussion for the industries in the fields of e-Business standards application were provided as well, the courses focusing on XML, UML, ebXML, and etc. There were sixteen courses held in Taipei, Taichung and Kaohsiung with more than 180 participants.

In 2004, IDB learned that the environment for e-Business standards application was getting more and more mature, and expanding standards users in any manufacturing industry was a key success factor for the development of e-business in the future. IDB decided mainly to support industrial users who can commit themselves to implement e-Business standards. Machinery and filament weaving industries have been applied and got sponsorship to implement e-Business standards they have developed these years and keep maintaining standards as well.

"e-Business standards implementation project for machinery industry, 2003~2006" was organized by Precision Machinery Research & Development Center (PMC). User group members are Falcon Machine Tools, Anderson, Fu Sheng Industrial, Fu Chun Shin Machinery Manufacture, Victor Taichung Machinery Works, and Tung Pei Industrial. Chinese Taipei's biggest Motor-driven tools manufacturer, Rexon Industrial was joined in 2005. They set up 28 machinery industry e-Business standards and these seven companies invite over 220 suppliers to use peer-to-peer TAMIvas turnkey solutions. The feature of machinery industry is that they set not only document standards but transmission protocol to improve data communication efficiency. (Table 2)

**Table 2：e-Business Standards In Machinery Industry (Source: IDB, MOEA)**

| No. | Cluster | Segment | |
|---|---|---|---|
| 1 | 2A | 2A1 | New Product Information Notification |
| 2 | 3A | 3A0.1 | Inquiry Apply Request |
| 3 | | 3A0.2 | Inquiry Apply Response |
| 4 | | 3A1.1 | Price And Availability Request |
| 5 | | 3A1.2 | Price And Availability Response |
| 6 | | 3A4.1 | Purchase Order Request |
| 7 | | 3A4.2 | Purchase Order Response |
| 8 | | 3A8.1 | Purchase Order Change Request |
| 9 | | 3A8.2 | Purchase Order Change Response |
| 10 | 3B | 3B0.1 | Shipment Notification Request |
| 11 | | 3B0.2 | Shipment Notification |
| 12 | | 3B2.1 | Shipment Receipt Request |
| 13 | | 3B2.2 | Shipment Receipt Response |
| 14 | | 3B2.3 | Quality Notification |
| 15 | | 3B18 | Shipment Delivery |
| 16 | 3C | 3C0.1 | Remittance Advice Notification |
| 17 | | 3C0.2 | Remittance Advice Response |
| 18 | | 3C3 | Accounts Checking Notification |
| 19 | | 3C5 | Billing Statement Notification |
| 20 | | 3C6 | Payment Notification |
| 21 | 4C | 4C1.1 | Inventory Status Query |
| 22 | | 4C1.2 | Inventory Status Response |
| 23 | 6C | 6C1.1 | Support Service Request |
| 24 | | 6C1.2 | Support Service Response |
| 25 | 7C | 7C1 | Manufacturing Genealogy Query |
| 26 | | 7C2 | Manufacturing Genealogy Notification |
| 27 | | 7C4.1 | Quality Incident Notification |
| 28 | | 7C4.2 | Quality Incident Response |

Taiwan Silk & Filament Weaving Industrial Association and Taiwan Textile Federation organized “e-Business standards set-up pilot project for filament industry, 2004~2005”. User group members are Wisher Industrial, Sumagh High Tech, Tai Yuen Textile, Far Eastern Apparel, Everest Textile, Li Peng Enterprise, Formosa Taffeta, and Taiwan Taffeta Fabric. They have setup 16 filament industry e-Business standards, such as order request/response and order change request/response. 4 supply chains had implemented the standards and passed the pilot test. They also came out detailed plan for platform operation and profitable business model in the near future.

“User group” for e-Business standard application has been proven as a very good strategy, especially in machinery and filament industry. For small and medium size enterprises, both of platform and peer-to-peer solutions can save them a lot when they exchange business information with more than one customer. Big companies’ buying force can also drive SMEs invest money without pain. After information flow related industrial standards have been set up and implemented, these two industries are going to make some plans about involving cash flow and logistics flow in their existing standards to enhance their competitiveness.

After industrial B2B data exchange standards were available, IDB has been developing the e-business maturity evaluation standard which is named as “e-Business Assessment Scheme for Enterprise, e-BASE” for enterprises especially manufacturers since 2005.

According to “AIDA model” in marketing theory, enterprises should be aware of the importance of e-Business before they can take action to implement e-systems. e-BASE as a benchmarking system, can force enterprises to care about e-Business and their e-Business capabilities.

Referring mainly to Supply-Chain Operations Reference-model (SCOR) promoted by Supply Chain Council (SCC), IDB develops e-BASE assessment tool which encompasses 4 sections: “e-Readiness (Enabling)”, “Source”, “Make” and “Deliver”. The purpose of 54 questions here is to measure the degree of e-application in different business operations. The current version focuses on ODM and OEM operation model and the scope will be expanded in next phase.

Through the past two years of promotion, e-BASE has been tested and adopted by more than 3,600 domestic enterprises and attracted the attention of SCC which is an international organization designated to the development of supply chain methodology. Due to the accomplishment that e-BASE has made, the SCC is further considering to include e-BASE in its SCOR.

The result shows that, in turns of e-business operation, enterprises are more mature in the category of “e-Readiness (Enabling)”, followed by “Make”, “Deliver”, and “Source”. Different industries have different level of maturity too. For example, information technology industry by far is the most mature industry in Taiwan, followed by chemical industry, FMCG

industry, and metalworking and machinery industry. As anyone can imagine, big companies get higher score compared to medium and small companies. In total, the e-business maturity of Taiwanese enterprises is improving.

## 3.2 Commerce

### 3.2.1 The Achievement of e-Business Consulting in B2B for Chinese Taipei Distribution Services Industry in 2006

In order to create high additional value and efficiency for Chinese Taipei distribution services industry, the Department of Commerce, Ministry of Economic Affairs, launched the "The Sectors of Electronic Commercial Promotion Plan" and "The Electronic Commercial Pioneer Promotion Plan" to integrate upstream and downstream enterprises in the distribution services industry. The government anticipates that both of the plans can assist the distribution services industry in re-structuring the business processes, strengthening or integrating the marketing channels. What is more, the enterprises can also sort out the proper operation processes, collaboration model or industrial horizontal strategic alliance, and then target the application of the most appropriate e-Business Model in its operation. Finally, the full e-business solution of industrial value chain can be established.

The "Sectors of Electronic Commercial Promotion Plan" aims to drive the integration and collaboration between supply chain and demand chain. It provided consultation for 16 enterprises (including applications and common platforms) in distribution services industry and 4,080 enterprises applied B2B e-business solution in 2006. The benefits include integrating diverse resources, enhancing the operating efficiency of value chain, and consolidating customer relationship. Table 3 depicts the e-business development among different businesses in 2006：

**Table 3：The main e-applications of different businesses for distribution services in 2006**

| Business | The number of counseled enterprises | The number of co-operative enterprises | Major e-Business application list |
|---|---|---|---|
| Food and Commodity Services | 2 | 74 | 1.e-Order Management<br>2.Inventory Management<br>3.Online Shopping System<br>4.Decision Support System |

| Business | The number of counseled enterprises | The number of co-operative enterprises | Major e-Business application list |
|---|---|---|---|
| Cosmetics and Medicine Services | 1 | 4 | 1.Demand Forecasting<br>2.Inventory Management<br>3.Replenishment Management |
| Publishing Audio and Visual Services | 1 | 150 | 1.Digital Music Platform<br>2.Digital Media Management |
| Tourism Services | 4 | 545 | 1.e-Order Management<br>2.Travel Information Management<br>3.Customer Relationship Management |
| Logistics | 2 | 1,595 | 1.e-Order Management<br>2.Portal<br>3.Customer Relationship Management |
| Auto Components | 2 | 695 | 1.e-Accounting Management<br>2.e-Learning<br>3.M-Commerce<br>4.CPFR |
| Other Distribution Services | 1 | 145 | 1.e-Accounting Management<br>2.e-Tracking Management<br>3.e-Procurement Management |
| Common Platform | 3 | 872 | 1.e-Invoice<br>2.Supermarket Product Information Platform<br>3.Distribution Service eHub |
| Total | 16 | 4,080 | |

In addition, “the Electronic Commercial Pioneer Promotion Plan” makes efforts in increasing the industrial international competitiveness and assisting the enterprises in linking with the global supply chains. 7 enterprises carried out the innovative, large-scale or international projects obtaining consultation in 2006. 4 of them integrated 5,650 upstream and downstream enterprises as well as connected the value chain in accordance with the CPFR guidelines. Besides, 5 of them have linked the global supply chain successfully. Table 4 is the industrial benefits that resulted from the 7 projects:

**Table 4：The achievement of e-business consultation for distribution services in 2006**

| Enterprise | Industrial Benefits |
|---|---|
| Watson's Personal Care Stores (Chinese Taipei) Co., Ltd. | It is the first CPFR model in the global Watson's companies and assists the ODM in selling the products to the overseas. |
| Hotai Motor Co., Ltd. | It adopts the customer-oriented multi-dimension collaborative method, including maintenance, insurance, and supply chain. |
| Test-Rite International Co., Ltd. | It replaces the overseas importers, links with the selling system of Wal-Mart, and increases the information transparency of supply chain. |
| Poya Co., Ltd. | It is the first local retailer introducing the CPFR guidelines and driving category management to all branches in Chinese Taipei. |
| President Chain Store Cooperation | It introduces the digital dealing kiosk to meet the customers' demand as well as to diminish the digital divide between urban and rural. |
| G-Music Co., Ltd | It adopts the DRM to establish the first global Chinese digital music platform and combine the online shopping and physical channel. |
| Alexander Group | It is the first enterprise to provide 24 hours online member service in the leisure service industry. |

### 3.2.2 Achievement of "Chinese Taipei e-Logistics Initiative" in 2006

To promote and support Logistics Service Provider (LSP) to enlarge business scale and service coverage, the Ministry of Economic Affairs led and sponsored the "Chinese Taipei e-Logistics Initiative". The Ministry encourages the logistics industry to create effective supply chain integration by forming strategic alliance and strengthening relationship among members of the industry, so as to establish a globalized, integrated and large-sized innovative business model and successful best practice.

In 2006, Department of Commerce supported 8 e-logistics projects, including 4 alliances, and 4 private e-logistics hubs. 404 LSPs have joined theses e-logistics hubs to perform freight document exchange, rate request & quotation, real-time cargo tracking, and billing process

electronically. The government's e-logistics initiative has significantly enabled LSP to exchange freight information efficiently, and provide timely shipment and inventory visibility for shippers and consignees. In addition, the e-logistics initiative has increased non-governmental investment by 120 hundred million. It essentially helps to upgrade the level of service as well as the competitive edge of Chinese Taipei LSPs. The e-service functions that e-Logistics Hubs provide are illustrated in Table 5.

**Table 5：The e-service functions of e-Logistics Hubs in 2006**

| e-service functions | Type of e-logistics Hubs | No. of supported Hubs | *Company Name* | No. of participated LSPs |
|---|---|---|---|---|
| 1. e-Document<br>2. e-Booking<br>3. Vendor Managed Inventory<br>4. Truck Management<br>5. Cargo Tracking<br>6. Co-load system<br>7. e-Billing system<br>8. Reverse Logistics | Alliance | 4 | 1. Dimerco Express Corp.<br>2. Taiwan Express Co., Ltd.<br>3. HSIN CHU TRUCKING Co., Ltd.<br>4. SPEEDY EXPRESS FORWARDER CO., LTD. | 373 |
| | Private hub | 4 | 1. HECNY TRANSPORTATION (TAIWAN) LTD.<br>2. Tonglit Logistics Co., Ltd.<br>3. PACIFIC CHAMPION EXPRESS CO., LTD<br>4. Glory Enterprise CO., LTD. | 31 |

Besides, to facilitate the e-logistics adoption is land wide, Department of Commerce has developed 59 XML standard documents for logistics operations, fully complying with United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) ebXML specifications. Until 2006, the standard documents have been adopted by 869 LSPs. This infrastructure will not only expedite the deployment of e-logistics service among Chinese Taipei LSPs, but also ensure the interoperability with global logistics community in the near future.

## 3.3 Environmental Protection

Taiwan Environmental Protection Administration (TEPA) has been developing a number of environmental-related data standards and information systems for environmental data exchange and sharing. The preliminary results in the past year are summarized as follows.

1. Environmental Data Repository Project (EDR)
   EDR is an integrated data warehouse system that provides a single point of access to data extracted from several major TEPA databases, including the Air Pollution Control System, the Water Permit Database, the Hazardous Waste Control System, and the Toxic Release Database. EDR construct the integrated ontology by extracting the domain knowledge from some of the information sources and aligning the concepts in the ontology with the laws and regulations of Taiwan EPA. The ontology becomes a major component to drive the integration process of the EDR project. EDR is currently

2. Taiwan Air Quality Monitoring Network 2 (TAQMN-2)
   TAQMN-2 has led the establishment of 76 monitoring stations in different regions of the country. The pollutants monitored in TAQMN-2 stations include of PM10, carbon monoxide, sulfur dioxide, nitrogen dioxide, and ozone. The meteorological instruments produce parameters, such as wind direction, wind speed, temperature, dew point and precipitation, which can make the air quality forecasting more accurate. Some sophisticated equipment has been added to the list in order to measure acid rain, hydrocarbons, PM2.5, ultraviolet-type B, etc. Standardizing the use of environmental geographic layer formats and coordinates.
   In future developments, we will adopt XML and related technologies such as Web Services SOAP, and UDDI, based on the concept of multi-layer architecture, to construct a loosely couple platform for integrating heterogeneous environmental monitoring data.

3. Environmental terminologies translation
   In order to give unanimous definition to basic environmental vocabulary, TEPA starts an effort to translate the General Multilingual Environmental Thesaurus, GEMET, which is published by Europe environmental headquarters. This includes of giving more than 5,000 environmental vocabularies their standard Chinese definitions. 2,500 records had been translated and released last year. The entire task should be completed by the end of this year. Upon finishing this fundamental translation work, future environmental information communication and exchange with precision will be possible.

4. Water Quality Data Exchange System (WQDES)
   The purpose of this system is to provide a platform for water quality data exchange, integration, and sharing in Taiwan. Currently, there are many organizations and

agencies, including federal government agencies and local communalities, involving the work of water quality monitoring. It is very difficult to share water quality data since the information typically resides on geographically disparate and heterogeneous databases in different data formats and semantic. WQDES adopted XML as a standard for water quality data exchange among different agencies and implemented a number of software toolkits that can assist each agency to transform their data to a XML file, making the data exchange more efficiently.

## 3.4 Transportation

**3.4.1** The Ministry of Transportation & Communications (MOTC) has initiated the project "Maritime Transport Network (MTNet)" since 2002, which acts as the integration portal architecture to be a key channel for business information exchange of marine transport and seaport stevedoring. MTNet launched the 24 hours/per day services on Jan, 1, 2006. Figure 6 shows the System framework of port single-window service platform of MTNet.

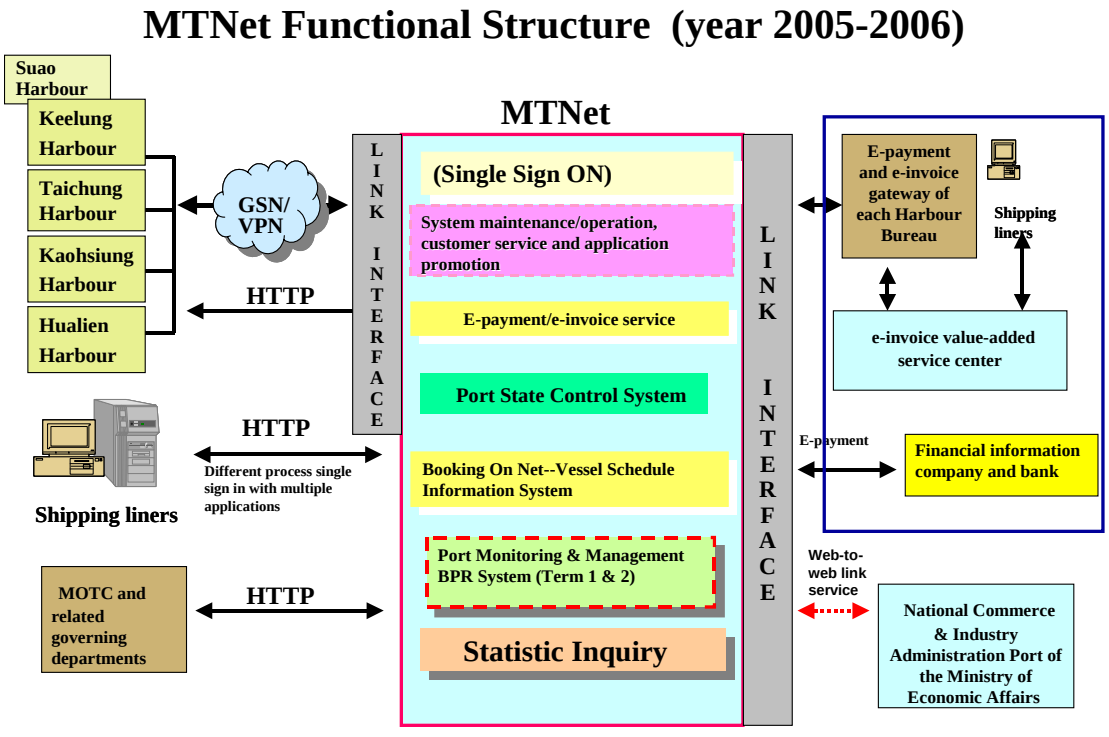



**Figure 1：System framework of port single-window service platform**

**3.4.2** The target of project “MTNet” is to integrate the independently developed information systems of the major ports of R.O.C., to implement the single-window service platform and application of port business and, by means of the single-window integration and development of various service operation flows under centralized control, to provide cross-region, cross-harbor, and cross-agency information receipt/delivery functions, to form a standard information interchange center with linked port webs, and a unified window with parallel international practice link, so as to upgrade the overall competitiveness.

### 3.4.3 Achieved Performance

1. Interface with 54 information systems of similar nature or different natures of various 10 navigation administration agencies, to upgrade the convenience of operators in declaration/operation.
2. Up to June 7, 2007, MTNet has already 430 operators including 1,677 account users. Gradually grow to the utilization volume of 26,000 user times monthly in average, to form the single window of the declaration/operation of R.O.C. shipping liners.
3. Adopt such most advanced technologies as Web Services, ebXML, and PKI, etc., to provide high system integration synergy to the operators.
4. MTNet platform provides Harbor Bureau and shipping liners with XML standard for information interchange, to upgrade the transparency of port platform information flow.
5. MTNet platform provides the standard for information interchange of the dynamic information transmission for containers.
6. MTNet platform provides statistic inquiry and statement printout service, to upgrade the timeliness and correctness of the MOTC statistic data.
7. Complete port state control system; from the inauguration of 2002/1/1 till 2007/3/1, total 948 foreign vessel random inspection times have been completed, and the inspection results are registered in web to provide an inquiry convenience.
8. The “e-Payment and e-Invoice system” has implemented in Kaohsiung port, Hualien port, Taichung port and Keelung port providing on line payment of port service fees. In 2007, Taipei Port and Su-Ao port will adopt this system that has already 16 operators as active users.
9. Complete Business Process Re-engineering (BPR) of total 4 items of process concerning shipping industry, marine technology personnel management system, and the port entry & departure management system. About more than 8,200 batches of declaration/operation are filed by the operators each month, saving the declaration/operation time by more than 30%; operators can

inquire the process progress at any time; after an application case is approved, the system will automatically issue an E-Mail to inform an operator in an initiative manner, to upgrade the service performance; and complied with e signature mechanism, to achieve the paperless operation.

### 3.4.4 Continued Development Plan in the Future

After the automation and operation over the Internet is induced in Maritime Information System, Maritime Information System Project will continuously engage in deepening development of the existing e port operation system, resource integration, resource sharing and port operation BPR, and will successively implement such financial flow systems as decision support and information warehousing system, and port e-finance, etc., as well as shipping form e-system, harbor cargo status tracing information inquiry system, port digital learning and knowledge management platform system, etc., to strengthen and extend MTNet functions, provide an operation environment to allow the operators to perform one-time wharf data input and full-cycle utilization, provide initiative notification of declaration/operation progress and real-time inquiry service, harbor mobile application and automated management system planning, and implementation, and make effort in promoting international exchange and cooperation direction. The future development framework is as follows.

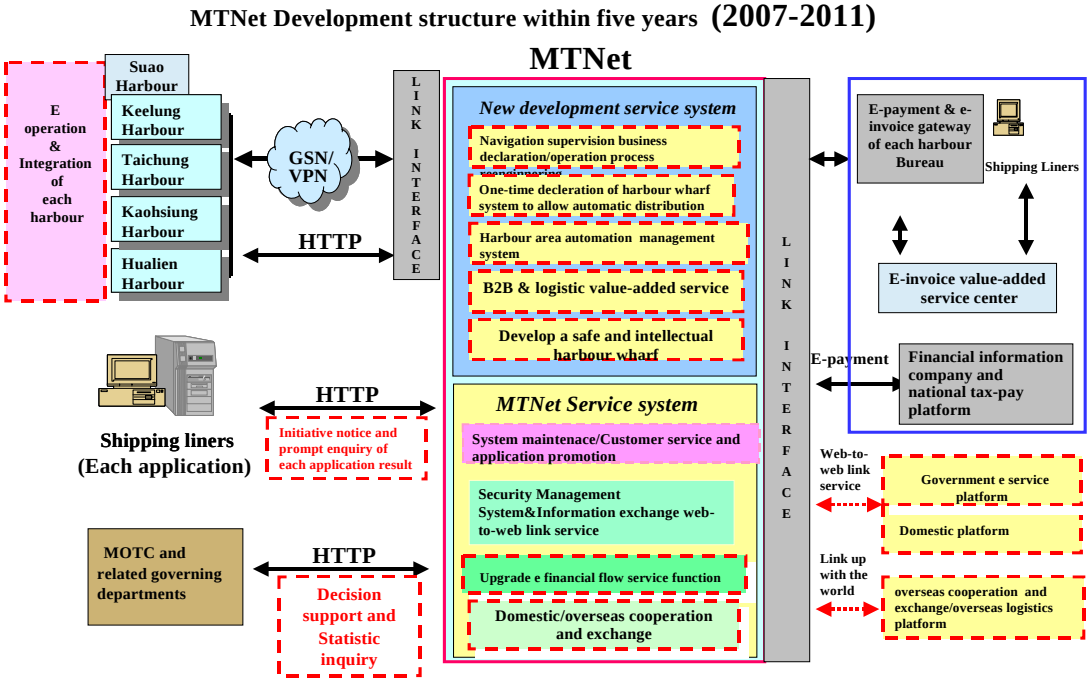



**Figure 2：Future system framework of port single-window service platform**

In the future, on this basic platform, various port application systems will be continuously developed, with an attempt to bring various more convenient and better services to the shipping liners and the public, in order to strengthen the international trade competitiveness of the Chinese Taipei shipping liners and port operation.

### 3.4.5 The "Automatic gate control station system" of MTNet

Complete the development & implementation of automatic gate control station system of 1-5 container centers at Kaohsiung Harbor: Complete the construction of 20 automatic vehicle lanes, effectively improve the Kaohsiung Harbor port container vehicle access control station time, by shortening the time from 3-5 minutes to 10 seconds, so as to upgrade the operation performance of personnel, cargo, and vehicle. It is estimated to save the police manpower by 32 people times/day, provide benefited vehicles for 4,100,000 vehicle/times annually, and cover 2,425 benefited suppliers and 58,000 transportation operators and consignees.

### 3.4.6 The "Free Trade Zone (FTZ) News System" of MTNet will offer users search all the regulations and news related to the FTZ on line.

### 3.4.7 The "E-Loan System and E-Delivery-Order System" of MTNet will finish planning in 2007 and start implementing in 2008.

### 3.4.8 The "E-Booking System" of MTNet starts on-line in 2006 and will promote more users in 2007.

## 3.5 Customs

Chinese Taipei Customs has developed EDI messages for sea cargo and air cargo full-scale automation since 1994. With the firm and stable foundation of EDI system accompanied by other important measures to simplify Customs procedures, the Customs stakeholders enjoy facilitative and rapid Customs clearance. For those cargoes without document review and physical examination, the average release time has minimized to 3 minutes from the moment the Customs accepts the declarations transmitted from Vans or

Customs' website. Customs clients can also easily retrieve the Customs clearance related data from Customs' website.

The Customs and the licensing authorities completed an ebMS gateway mechanism in August 2005. Through this gateway, the public may apply for the import/export licenses/certificates to the 6 agencies including the Bureau of Foreign Trade, Bureau of Animal and Plant Health Inspection and Quarantine under the Council of Agriculture, Bureau of Standard, Metrology and Inspection, National Communications Commission, National Treasury Agency, and Bureau of Energy and Industrial Development Bureau. The submitted data are used both for import/export application and Customs declaration; only few lines should be added for the difference. The ebMS gateway project has reduced 5 percents of declarations needed to be document reviewed which results in the reduction of Customs release time. Subsequently, more administrations plan to link together likewise, which no doubt will enlarge the synergy of data exchange between individual agencies.

Since February 2006, a Web-based e-payment system has set up to provide diversified, convenient, and 24/7 payment services for duty payers. Customs duty and taxes can be paid over Internet with credit card or using banks' account. The transactions have been doubled month by month, and the total amount paid through this channel is over NT 2.4 trillion dollars until this May. The growth trend is expected to be optimistic and continuous.

This year, the Customs improved software and hardware efficiencies of Risk Management System. Approaches include upgrading mainframe, establishing context, identifying risk, analyzing risk, assessing risk, treating risk and monitoring and review have been taken. Customs officers may focus the efforts on high-risk cargoes and hence intensify the opportunity of identifying potential fraudulent Customs declarations on goods shipped from country to country.

By continually modernizing the information system and keeping track of the progress of international standards development, the Customs also makes every effort to offer secure environment besides facilitating Customs clearance. In March 2005, the Customs was granted with certificate issued by the British Standards Institution on compliance with the criteria of BS 7799: Part 2:2002 specification for Information Security Management Systems (ISMS) regarding Clearance System, EDI System, etc. This April, the Customs past an external audit further and gained a certificate of ISO/IEC 27001:2005 (CNS27001). With the above verifications, the Customs is assured to create more favorable and secure information environment for both of the Customs officers and the traders in the trend of globalization and liberalization.

## 3.6 Finance

### 3.6.1 Current Status of FEDI Standards Application:

Refer to UN/CEFACT/EWG electronic data exchange standards:

| Application System | Related Messages | Indexes |
|---|---|---|
| Payment process | PAYEXT、CREEXT、DEBADV、BANSTA、AUTACK | D.95A |
| Control | CONTRL | D.94W |
| Cross-bank payment process | FINPAY<br>BANSTA | D.95 Draft<br>D.95A |
| L/C process | DOCAPP、DOCINF、DOCADV、BANSTA、DOCAMR、DOCAMI、DOCAMA、DOCARE、AUTACK | D.95B |
| Lump-sum payment process | PAYMUL、DIRDEB、DEBMUL、CREMUL、BANSTA、FINPAY、CREMUL | D.95A |
| Foreign currency payment process | PAYEXT、CREEXT、DEBADV、BANSTA、AUTACK | D.95A |
| Notice process | APERAK | D.95A |

### 3.6.2 Current Status of Finance development using EDI:

- Financial organizations: 32
- Value-added network/banks: 23
- Clients: more than 8000 users in the field of Electric、Information Service、Transport、Trade、Medicine、Pharmaceutical Industry、Chemical Industry、Finance and so on.

### 3.6.3 Transaction volumes:

- In 2005, the average monthly transaction through FEDI reaches 439,354 transactions and the average monthly amount is 498,351million NT dollars.
- In 2005, the average monthly cross-bank transaction through FEDI reaches 221,259 transactions and the average monthly amount is 292,976 million NT

dollars.

### 3.6.4 Message Development of XML Standards:

Regarding the development of e-Commerce financial messages, the following XML messages are designed for electronic data exchange between clients and banks. The messages are based on IFX (Interactive Financial Exchange) XML Implementation Specification v.1.4.

| | |
|---|---|
| Base services: | Service Account Inquiry Request/Response |
| | Service Profile Inquiry Request/Response |
| Bank services: | Account Inquiry Request/Response |
| | Balance Inquiry Request/Response |
| | Deposit Account Statement Advise Request/Response |
| | Deposit Account Transaction Inquiry Request/Response |
| Pay services: | Payment Add Request/Response |
| | Checksum Add Request/Response |
| | Payment Modification Request/Response |
| | Payment Cancellation Request/Response |
| | Payment Audit Request/Response |
| | Payment Synchronization Request/Response |
| | Payment Inquiry Request/Response |
| Account aggregation: | Balance Inquiry Request/Response |
| | Deposit Account Statement Advise Request/Response |
| Financing/Factoring: | Credit Line Add Request/Response |
| | Reimbursement Account Add Request/Response |
| | Reimbursement Account Modify Request/Response |
| | Reimbursement Account Cancel Request/Response |
| | Reimbursement Account Inquiry Request/Response |
| | Account With Bank Modify Request/Response |
| | Account With Bank Inquiry Request/Response |
| | Financing Bank Inquiry Request/Response |
| | Credit Line Inquiry Request/Response |
| | Financing Document Add Request/Response |
| | Financing Document Cancel Request/Response |
| | Financing Document Input Request/Response |
| | Document Inquiry Request/Response |
| | Financing Document Verify Request/Response |

Financing Document Inquiry Request/Response
Draw Down Add Request/Response
Draw Down Cancel Request/Response
Due Payment Notice Request/Response
Reconcile Input Request/Response
Supplier History Inquiry Request/Response
Notification: Financing Synchronization Response
Notification: Payment Synchronization Response

Funds Transfer: Transfer Add Request/Response
Transfer Synchronization Request/Response
Transfer Audit Request/Response

The Bill Presentment Service:
Biller Inquiry Request/Response
Bill Inquiry Request/Response
Bill Status Modification Request/Response

The Bankers Association of The Republic of China participates in IFX activities actively - not only participating in Banking /Branch banking / Web services working groups also represents in the Steering Group. We wish to introduce IFX standards into Asia to help promoting electronic data interchange between trading partners and facilitate e-business.

## 3.7 Health Care

The following is the current status report on the Medical Information Standards Plan of HL7 (Health Level Seven) and the implementation of EMR (Electronic Medical Record) format setting under the health care working group.

1. To conduct the “Promotion Project of Health Information Standard, Department of Health, Executive Yuan”
    - To study and promote HL7 v3.
    - To expand HL7 Message Certification and Index System, and to assist at least 10 hospitals to achieve HL7 Message Certification.
    - To expand LOINC-NHI mapping query system, and to assist 6 hospitals (including laboratory) to adopt LOINC as the information standard for laboratory tests.
    - To maintain Standardized Medical Information Exchange System.

- To hold the 6th Asia-Pacific HL7 Conference on Healthcare Information Standards and International Medical Informatics Symposium in Taiwan 2007.
- To propose the Medical Information Standards Initiative Project for the next four years.

2. To conduct the “Establishing the Cross-Hospitals Information Exchange Environment of Patient-Oriented Electronic Medical Record Project”

- To promote Taiwan electronic Medical record Template (TMT) as a national standard.
- To complete the related laws for EMRs exchanging between hospitals and to alleviate the doubts of hospitals when EMRs initiated.
- To request for 8 medical centers to initiate TMT practically, and to exchange the EMRs between hospitals.
- To conduct training courses of TMT for technical professionals, to train the seed personnel for exchanging EMRs between hospitals.
- To construct the administration website of TMT.

## 3.8 Construction and Planning

**Public construction procurement and management**

The Public Construction Commission (PCC) of Executive Yuan in Taiwan is responsible for the planning, deliberation, coordination and supervision of various public construction projects. In view of the importance to build an open, transparent and systemized environment for procuring and managing construction works, the PCC has devoted to the promotion of various electronic systems which include Government Procurement Electronic Tendering System (www.geps.gov.tw), Suppliers e-Catalog, Inquiry Quotation System (gecs.pcc.gov.tw), Inter-entity Supply Contract System (sucon.pcc.gov.tw), Government Procurement Information System (web.pcc.gov.tw) and several construction project management systems account for managing and supervising nationwide construction works. These efforts are aimed to make the procurement and management of public construction works more transparent, fair, efficient and effective.

As all the systems mentioned above are web-based, there is a limitation on system performance because users need to key-in data repeatedly between systems. Therefore, PCC started to establish data exchange standards to facilitate data exchange among different information systems. These standards are all designed under a strict methodology in accordance with ebXML. Until the end of 2006, there are 32 sets of XML-based data exchange standards which cover mainly 2 categories – government procurement and

construction management, as listed in Table 1.

Beyond these standards, an accompanied data dictionary (DD) of 1,000 items which encompasses definitions, synonyms, tag-names and attributes has also been stipulated to support the use of these standards. A repository (pcstd.pcc.gov.tw) hosting all the standards and DD is also available since 2004.

Most of the standards have been put into field test for verification and validation. Among all the standards, eTenderSheet, sheet for tendering, is the first standard that has been widely used for construction work bidding and cost estimation. Public sectors usually have their budgets prepared with Public Construction Cost Estimation System (PCCES) and release XML files containing purchasing items and quantities thereafter to bidders for computing costs with their own in-house software. Currently, all the construction works that cost more than 10 million NTD (1 USD ≒ 33 NTD) are required to provide such XML-based tender sheets along with other tender documents.

The promotion of data exchange standards to construction industry has been carried out for several years. In 2006, more than 300 people attended PCC's public conferences held in the North, Central and South of Taiwan. A total of 14 training course series were held and more than 360 people attended. There were 19 institutes that took part in the daily progress report data transmission field test (B2G in short) and the total tested B2G projects reached a number of 111. In order to assist institutes which still have no construction management systems for data exchange, a prototype web-based system is also built dedicatedly for evaluating these B2G data exchange standards.

With all these efforts devoted to the development of exchange standard, we expect to have more standards published in the near future to cover the life cycle of construction projects. With the establishment of information infrastructure in the construction industry, both public and private sectors can benefit from the convenience and efficiency of using public construction data exchange standards.

**Table 6：Standards Announced for Data Exchange in Public Construction in Taiwan as of Dec 31, 2006**

| Category | Type | Standard Item |
|---|---|---|
| Government Procurement | e-Tender Management | (a1) Instruction Tender<br>(a2) ETenderSheet<br>(a3) Tenderer Statement<br>(a4) Joint Tendering Agreement Template<br>(a5) Construction Work Contract<br>(a6) Service Contract<br>(a7) Property Contract<br>(a8) Tender Log<br>(a9) Tender Notice<br>(a10) Tender Submit Document Structure<br>(a11) Tender Submit Contract Document<br>(a12) Tender Award Notice<br>(a13) Tender No Award Notice |
| | Common-Supply Purchase Order Management | (b1) Demand Inquiry<br>(b2) Procuring Entity Registry<br>(b3) Procuring Entity Demand<br>(b4) Supplier Registry<br>(b5) Product Specification<br>(b6) Inter Entity Supply Contract<br>(b7) Purchase Order<br>(b8) Notification |
| Construction Management | B2G Project Progress Control | (c1) Daily Report<br>(c2) Progress Report |
| | G2G Program Progress Control | (d1) Program Control<br>(d2) Project Control |
| | PE and Consulting Firms Management | (e1) Annual Business Report<br>(e2) Major Engineer List<br>(e3) Engineer Sign List<br>(e4) Training Score Data |
| | Engineering Drawings' Meta Data | (f1) Drawing Attribute<br>(f2) Review Comment List |

# INDIA Progress Report

**eTrade Division**
**Department of Commerce**
**Ministry of Commerce & Industry**
**Government of India**
**New Delhi**

# 2007 Members Progress Report：INDIA

## SECTION I – GENERAL CONDITION UPDATE

### 1.1 Electronic Commerce (EC)/Electronic Data Interchange (EDI) Users

The advances in e-commerce technology are continuing to transform personal communication and business at an astounding pace in India. Although these advances promise to bring a substantial percentage of the India's population online in the coming years, they also present significant challenges to industry and policymakers alike. Thus in order to create the foundation for the rapid growth of e-commerce, enterprises are adopting the effective e-commerce technology policies that embrace strong intellectual property protection and innovation that drives e-commerce technology.

As per the industry association (NASSCOM) assessment the Indian IT industry has grown its revenues ten fold in the past decade, from $4.8 billion in financial year (FY) 1997-98 to $47.8 billion in financial year 2006-07. Its contribution to GDP is estimated to have grown from 1.2 percent to 5.4 percent in the same period.

The Internet offers unlimited shelf space and isn't bound by operational timings and geographical boundaries; with an opportunity to cater to country wide city markets (for consumers and suppliers alike) at a comparative miniscule cost. E-commerce activities in India have spread across the country to the prominent 'tier-II' cities and towns which are witnessing a pick-up in online retailing activity and increased transaction values.

By early 2007, Internet subscribers in India totaled more than 8.5 million. This equated to an estimated 60 million Internet users throughout the country. The number is set to grow to a 100 million by 2007-08. An estimated 4.6* million Indian Internet users are Banking Online today. The number is expected to grow to 16+ million by 2007-08 including both Internet and Mobile Banking.

(*Estimate is based on information from limited banking sources and is not a complete representation)

### 1.2 EC Market size & Growth

As per the Industry Association (NASSCOM) Strategic Review 2007 the Indian IT Industry is on course to achieve an exports target of $60 billion by 2010. The key findings of

study are:

- Software and Services (IT-BPO) exports to exceed $31 billion in financial year (FY) 2006-07, a 32.6 percent growth;
- Employment in sector to exceed 1.6 million up from 1.28 million last year;
- Domestic IT market broke out of the hardware linked growth pattern for the first time ever in FY '06 and the trend of software and services gaining share is expected to continue; total rise expected to cross $15.9 billion in FY 2006-07, a 21 percent growth;
- MNC investments reach an unprecedented scale; over $10 billion announced in FY 2006-07, to be invested over the next few years;
- Indian Service Providers have grown their share of contracts of values in excess of $50 million dollars from 1 percent in 2002 to 7 percent in 2006; and
- Offshore product development and engineering services to drive increased Internet Protocol (IP) creation.

As per another study*, the internet usage has become more widespread as half of the Indian online population now comes from outside the eight largest cities. The key findings of survey are:

- E-commerce in India has reached $575 Million
- 10.8 million of the total Internet population shopped online - an increase of 76% Year-on-Year (YoY)
- Online travel booking seems to be the biggest e-commerce activity. 84% of the 10.8 million shoppers have booked their travel online at least once
- The 10 most popular activities include email, Instant Messenger (IM), chatting, e-greetings, dating, news, sports, music, games
- Fastest growing online activities include social networking (one third of Internet users use social networking) and online matrimony
- 27% of Indian Internet population read blogs, 15% comment on blogs and 7% write a blog themselves
- 19-35 age group comprised 76% of the users in 2006. In 2007, they account for only 67% of the total users
- 21% came from an IT background in 2006. In 2007, only 17% hailed from an IT background
- 59% of the users browsed in English in 2006, while 41% browse in English in 2007

* India Online 2007

As per Department of telecommunications there are 211.7 million telephones in India as on 30th April 2007 i.e a growth of 44.83 % over last year. In terms of teledensity it is 18.72%. The mobile sector has grown from around 10 million subscribers in 2002 to reach 150 million by early 2007. The Ministry of Communications and Information Technology is targeting 250 million telephone subscribers by end-2007 and 500 million by 2010.

# SECTION II – EDIFACT/ebXML/XML Based STANDARDS DEVELOPMENT

## 2.1 Awareness and Education Programs

The 9th United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) forum was held in New Delhi, India from 2-6 October 2006. It promotes development and simplification of professional electronic data interchange, e-business and administrative processes in most of public and private sectors such as finance, health, business, environment, and so on. These objectives are achieved by :

- Analysing and understanding the key elements of international processes, procedures and transactions and working for the elimination of constraints;
- Developing methods to facilitate processes, procedures and transactions, including the relevant use of information technologies;
- Promoting both the use of these methods, and associated best practices, through channels such as government, industry and service associations;
- Coordinating its work with other international organizations such as the World Trade Organization (WTO), the World Customs Organization (WCO), the Organization for Economic Co-operation and Development (OECD), the United Nations Commission on International Trade Law (UNCITRAL) and the United Nations Conference on Trade and Development (UNCTAD);

This meeting was the opportunity for UN/CEFACT workgroups to gather in the same place, exchange their ideas and register all the accomplished work. Around 300 experts from all around the world, met at India Habitat Centre, New Delhi, India for 5 days from 2-6 Oct 2006. The Forum has been declared as one of the best ever organised Forum by UNECE.

A two day work shop was organized from 3rd to 4th October, 2006 by the Department of Commerce, Government of India, on the United Nations electronic Trade Documents (UNeDocs). UN/CEFACT has now adopted the UNeDocs project as the basis for a new and global standard for electronic trade documents. UNeDocs integrates accepted international

standards and best business practice with the requirements of Internet based technologies. It allows a migration from paper based information exchange to paperless trade. UNeDocs can provide the international accepted data and document structures the emerging single window and paperless trade projects of the Asian Pacific region.

The goal of the two day Workshop was to present important international standards for document and information harmonization and exchange in international trade, to discuss the national and regional adaptation and implementation of these standards and to exchange know how and best practice on pilot projects and initiatives in the region. The workshop aimed to develop recommendations on the development, adaptation and implementation of global standards in the Asia Pacific Region. The workshop included one day Technical Session on UNeDocs data modelling and document design. The recommendations of the workshop were as follows:

**Recommendation 1:** Simplification and Standardization of trade documents according to international standards

The standardization of trade documents, the elimination of unnecessary documents and the use of international standards and code lists can significantly reduce transaction costs for export and import.

While all countries stand to gain from the simplification of trade documents it provides a strategic opportunity for developing countries and emerging economies. It will significantly reduce transaction costs, open access to high value supply chains and ultimately increase national welfare. It can be achieved at relatively low cost and forms the basis for future automation.

Important standards and tools available to simplify processes, data and documents, include:

- UN Trade Data Element Directory (UNTDED-ISO 7372)
- UN Layout Key
- UN/EDIFACT
- UN/CEFACT Core Component Library
- UNeDocs and WCO Data Models
- UN/CEFACT Recommendation No. 33 on Single Window
- UN/CEFACT Core Component Technical Sepcification
- UN/CEFACT XML Naming and Design Rules Specifications

**Recommendation 2:** Achievements and further progress in India

India has made significant progress in the implementation of international standards, in

particular in the implementation of UN/EDIFACT (EDI). This has brought major benefits to Indian Trade and Government. It is recommended to extend the implementation base and in particular to extend solutions to SMEs throughout the supply-chain, including payment systems, using open and interoperable solutions in the Internet domain.

**Recommendation 3:** Adoption of UNeDocs by India

UNeDocs provides the migration path from paper to paperless trade. It is based on open, international standards for trade documents and electronic business. UNeDocs provides specific advantages to India as it:

- fosters document and process simplification
- can leverage the existing investments in eTrade
- provides a basis for data harmonization and exchange and
- can adapt to the different capabilities of the trading partners

UNeDocs implementation in India should start with pilot projects to acquire and test the technologies and standards. The Indian Government and different stakeholders in eTrade should prepare for such a project.

A UNeDocs implementation in India could be a basis for an Indian Single Window. This could lead to integration with the emerging Regional Single Window initiative in Asia Pacific.

**Recommendation 4:** Development of a Cross Border Reference Data Model based on the data models of UNeDocs and WCO

The participants acknowledge the need for integration of the UNeDocs and the WCO data models. Such a combined data model will facilitate and harmonise cross border data exchange between the different stakeholders and Government agencies. This data model should be based on open, international standards.

It should be made available and endorsed on the national level to provide a stable basis for future software systems that exchange data between Government agencies and the private sector.

**Recommendation 5:** Development of a national pool of experts for the implementation of UNeDocs in India

Expert knowledge and tools are needed to adapt global standards and technologies to the specific national or regional requirements. It is recommended to set up a pool of national experts that can carry out this task. The United Nations together with the Government of India should cooperate to transfer this know how and develop the required expertise in India to support implementation.

# SECTION III – Trade Facilitation/eBusiness/ eCommerce Related PROJECT UPDATES

## 3.1 Regulatory Sector

### 3.1.1 Directorate General of Foreign Trade

#### 3.1.1.1 Nature of Project

Directorate General of Foreign Trade (DGFT) is an organisation under Department of Commerce, Ministry of Commerce and Industry engaged in formulation of Foreign Trade Policy of the country and its administer. All types of licenses required for export and import within the country are issued by this organisation. The interface with trade and industry is provided by the 35 offices of DGFT scattered through out the country. EC/EDI implementation stipulates day to day electronic interface with trade and industry and related organisation for electronic delivery of services.

#### 3.1.1.2 Status

Computerisation and networking of all the 35 offices of the DGFT has been completed. Software for all export promotion schemes has been operationalised. The web based electronic application filing system facilitates on-line and off-line submission and processing of application in all the offices. Licenses are now issued in 6 hours as compared to 45 days earlier. Banks are also integrated with system and facilitating e-payments for license fee.

Digital Signature have been integrated into the license application processing. With implementation of Digital Signature and EDI with Customs and Banks, the licenses are now issued and communicated electronically to Customs. As the paperless licenses come from secured and known source, Customs has also started processing the same on line. With implementation of paperless licenses the time taken in clearance and verification of licenses may further come down to 1 day.

### 3.1.2 Risk Management System in Customs Clearance (RMS)

#### 3.1.2.1 Nature of Project

Management of risk involved in declarations filed at the Indian Customs electronic data interchange system (ICES) covering Imports, exports, Import General Manifest is the scope of this project. Risk management system for export declarations is presently being developed. The system also caters to risk based selection of cargo declarations for post clearance audit. 24 major Customs locations spread across the

country covering most Sea ports, Air Cargo complexes, Inland Container Depots and Container Freight Stations are covered under this project .

#### 3.1.2.2 Status

The Risk Management System (RMS) in Indian Customs cargo clearance is introduced to meet the objective of Trade Facilitation by targeting high-risk import cargo, and facilitating low risk, compliant cargo. The system also assures fast track clearance to cargo imported by Accredited Clients with a past track record of high compliance. This system, introduced for the first time in December 2005, is currently operational at sixteen customs locations across India, covering about 75% of Indian Imports.

The system is built on a logical model served by a risk engine comprising of a large number of filters, through which an import cargo declaration is parsed before measuring the risk involved. The engine intelligently assigns risk mitigation instructions depending upon the probability, magnitude and impact of such risk measured in the import declaration. These instructions are flashed on the screens of the customs officers who are required to follow them in the discharge of their functions of assessment, examination and clearance of cargo.

### 3.1.3 ePayment of Custom Duties

#### 3.1.3.1 Nature of Project

This project was aimed at providing importers and their agents

a) the facility of paying customs duty on import cargo through the facility of internet banking (e-payment) with the aim of reducing transaction costs and dwell time,

b) making the process of duty payment more convenient for the importer and

c) reducing interface between trade and customs officers.

#### 3.1.3.2 Status

At present the Indian Customs EDI system is operational across the country in a distributed server environment. At each location, different banks are designated for collection of duty. The facility for e payment is an addition to the existing mechanism for collection of duty. The EDI interchange of data between customs and banks is a complex exercise since it has to be ensured that ‘to pay’ information is sent by Customs to the bank branch connected to the Custom location as well as to the Core Banking Solution of the bank (the bank’s central server) for effecting epayment. At the same time the Custom EDI system has to receive the payment information from

both the channels so that the delivery of the goods takes place.

The interchange between Customs and the Banks takes place in a real time basis. The project is already implemented at 10 Customs locations as on date and is under implementation at other locations.

### 3.1.4 Transshipment of cargo from gateway ports to inland Ports

#### 3.1.4.1 Nature of Project

The software application on Cargo Transshipment automates customs processing at the gateway port for cargo destined for remote inland ports/ container depots (ICD). For such cargo, certain customs procedures like assessment, duty collection, inspection or examination, clearance etc. are carried out at the destination ICD. However, customs at the gateway port is required to discharge certain functions such as verification of container, number/ seal etc. with cargo manifest, risk analysis, calculation of notional cargo value, imposing security deposits etc. for management of the bond and/or guarantee submitted by the custodian etc.

#### 3.1.4.2 Status

The transshipment application implementation has been a very successful project of Indian Customs and has been instrumental in benefiting the trading community comprising of shipping agents/ shipping lines, main-line operators, importers & their agents, transporters, custodians (port, terminal operators) and so on.

Business process re-engineering has sharply reduced/eliminated cumbersome procedures and follow-ups required by shipping agents (or other applicants). This has resulted in reduced interface of trading and community partners with customs officers. Filing of Import manifest can be conveniently done through EDI message by the carrier from his own office. The processing is fast and post-processing facilities are also very user-friendly. The approval message, both in EDI format, as well as in printable versions are automatically transmitted to the applicant. Above all, the whole process does not require a single piece of paper, thus relieving the applicant of a lot of unnecessary cost and effort. For other stakeholders like transporter, custodian etc. also, post-approval message transmission facilitate easy information availability For customs officials, the software implementation has eliminated the routine work of appraisal and approval process of transshipment, thus freeing-up precious time. For Customs House operations at remote ICD, the spin-off benefit of process integration through SMTP messages has been a big boon for both the trading community at ICD (shipping agents, importer and his agent and so on) as well as customs officials. The integration has eliminated the need to file separate cargo

manifest (IGM) at the ICD and thus bypassing a number of avoidable processes. This implementation has also had a significant positive impact on the overall efficiency of the customs processes involving cargo movement and clearance. The fully automated processes with built-in checks and balances have made an efficient, robust and secure contribution towards the stated endeavour of Indian Customs for a trade-friendly environment and growth of trade and commerce in the country.

## 3.2 Port sector

### 3.2.1 Web Based Port Community System (PCS)

#### 3.2.1.1 Nature of Project

Port Community System (PCS) is intended to integrate the electronic flow of information across the trading partners involved in maritime transport chain through a common interface. The PCS, will function as the centralized hub for all the major ports of India and other stakeholders like Shipping Lines/Agents, Surveyors, Stevedores, Banks, Container Freight Stations, Government regulatory agencies, Customs House agents, Importers, Exporters, Transporters, etc. for exchanging electronic messages in secure manner. The main objectives of the PCS are to develop a centralized web-based application, which act as single window, for the community members/stakeholders to exchange messages electronically in secure fashion and to create a data repository for research and analysis.

#### 3.2.1.2 Status

The project is being implemented at all the 11 Major Ports. The implementation will be in four phases, which are as below:

- ✓ The first phase will be at Pilot Sites (Mumbai & JN Ports), which will cover Ports, Shipping Agents, Shipping/Container Lines and Customs House Agents for the secure message exchanges of vessel and container related messages.
- ✓ The Second phase will be at Pilot Sites (Mumbai & JN Ports), which facilitates cargo related message, e-payments and online tracking cargo/containers And Container Freight Station, CONCOR and Stevedores will also be covered.
- ✓ Third phase will be at Pilot Sites (Mumbai & JN Ports) and all remaining messages with full set of features will be integrated with PCS and all the stakeholders will be covered.
- ✓ The last phase will involves replication of PCS at all the remaining major ports and all the stakeholders

The system development and procurement of Hardware & related components is

under process. The System Interface Guideline, PCS Messages formats, Process Flow Implementation for PCS have been worked out. List of Uniform directories have been compiled.

### 3.2.2 Container and Cargo Logistics System (CCLS)

#### 3.2.2.1 Nature of Project

CCLS system has been developed for ICD/Tuglakabad. Various functionalities have been integrated into the CCLS system like Wireless Radio Data Terminals, EDI Linkages with Customs, Electronic Transmission of Inland way bills (IWB's) etc., making it most comprehensive and complete system for an ICD. In order to make the CCLS system, more customers friendly, Web Interface of it has also been developed so that any customer can file his documents electronically through Internet, at his convenience without coming to ICD.

#### 3.2.2.2 Status

The project covers the entire import / export trade and perform all container / cargo related activities of CONCOR through web based interface with community partners like Shipping Lines, Exporters, Importers, Agents, Ports etc. ISO standard codes have been used in all the functionalities like check digit logic in container numbering, Container ISO Codes, UN Location codes for all ICD's/Ports etc. Through this software, any importer/exporter/shipping agent can file his documents including billing. Various Queries and Reports are also part of this web based software to keep track of containers at every stage and also to find out due amount to be paid to CONCOR. Application has also been integrated with major banks, so that customers can directly credit their pre deposit accounts through net banking facility. The online container tracking system is integrated with Indian Railways to provide exact location of container on a route.

## 3.3 Air Sector

### 3.3.1 Nature of Project

The community partners in Air sector facilitates EC/EDI based processing into the clearance of export and import consignments. The community partners in this case are Airports Authority of India (AAI), Airlines, Customs, Banks, Agents etc. The EDI based cargo handling system and Electronic interface between trading partners is to be established. Barcodes are also integrated for the handling of import and export cargo for instant data

capturing and online updation without manual intervention.

### 3.3.2 Status

The four metro airports at Delhi, Mumbai, Kolkata, Chennai, and three at Hyderabad, Bangalore and Trivandrum have established electronic message exchange with Customs. A web based system for AAI's electronic interface with Airlines, Agents, Banks etc. is operational. All export transactions at Delhi, Mumbai, Chennai, Kolkata and Trivandrum airports are done through the system. The system provides interface with airlines, agents, banks etc. The integration of automatic data capturing tools in the automation has also being done. It has been started at Delhi and Mumbai airports for exports. Using EC-EDI functionalities, a large number of transactions are being made by the users from the comforts of their offices itself. Even the payment of Custodian's Terminal / Handling Charges are made conveniently through web based EDI. Now the agencies are required in Cargo Terminal only for physical tendering of their export cargo, taking deliveries of their import cargo and Customs examination, which has proved as a real trade facilitation measure for the users of Cargo Terminal.

## 3.4 Financial Sector

### 3.4.1 Nature of Project

The project is for implementation of intra-bank, inter-bank, and bank-user electronic interface establishment for facilitation of electronic receipts/payments.

### 3.4.2 Status

Banks have established electronic message exchange with major players in international trade like Directorate General of Foreign Trade, Customs, Ports, Airports, Container Corporation of India etc. The epayments for Customs duties is the major initiative as these are high value transactions. It has now been started for 10 Customs locations. Real Time Gross Settlement (RTGS) has been made operational by the Reserve Bank of India. The system provides for inter-bank settlement of funds on a real time mode.

All export intensive centers (106 centers identified for the purpose) are connected and facilitates electronic transactions. The digital signatures are available through Institute for Development & Research in Banking Technology for banking sector.

# IRAN Progress Report

## Islamic Republic of Iran
## Ministry of Commerce

# 2007 Members Progress Report：IRAN

## Introduction

Nowadays, information and communication technology (ICT) has been the economic, social and Cultural axis of development in different countries. E-commerce is an outcome of ICT revolution in trade and economic fields. The rise of the internet and its commercialization in recent decades has transformed traditional methods of commerce. E-commerce has revolutionized the methods and practices of the past trade.

Application of e-commerce by business and its gradual adoption by consumers reflect potential advantages of e-commerce in economic and trade areas; as, there is no way but to insist in the application of e-commerce in economic activities.

The surveys show that e-commerce success in developed and leading developing countries is the result of appropriate e-readiness in such countries. E-readiness includes the internet-based opportunities, quality of information technology infrastructure, government activities and level of trade facilitation. The development of e-commerce requires a series of essential activities in technical infrastructure, standards for trade and administration facilitation, legal and regulatory issues, awareness, training and education, private sector protection, security and government supports to provide conditions for economic players such as consumers and businesses that play a key role in the application of e-commerce.

In respect of its responsibility for implementation of e-commerce in the country, the Ministry of Commerce has endeavored for development and promotion of e-commerce while fully cooperating and working with executive agencies in legal, standards, education and technical areas. Cooperation in preparation and enact of e-commerce law, financial support of master and Ph.D courses in the fields of e-commerce, holding internal and international seminars, implementation of the e-Commerce Feasibility Study project and relevant projects, cooperation and sharing views with executive bodies are the main activities on e-commerce.

According to E-commerce Memorandum of policy, and then comprehensive EC development plan, executive bodies of Iranian government have clear and specific duties for deploying and developing e-commerce capabilities.

Measuring the e-commerce progress is very essential to achieve status and can contribute to the identification of the effective factors of development and the obstacles to e-commerce, coordination of relevant executive agencies and eventually elimination of current problems.

# E-Commerce Strategies in the I. R. of IRAN

On consideration to the rapid global development and expansion of tools for trade facilitation and electronic business and their major role cost reduction, foreign investment encouragement and in providing and strengthening competitive advantages position for the country in international trade, the following actions with regard to the related laws and regulations and also policy making have been taken :

1. The Iranian Council of Ministers in 2002 approved the Electronic Commerce Policy of the government of the Islamic Republic of Iran
2. The Iranian Parliament in 2003 approved the Iranian Electronic Commerce Law of the Islamic Republic of Iran
3. The Iranian Council of Ministers in 2005 approved Comprehensive Electronic Commerce Development of the Islamic Republic of Iran

Based of these developments and following the government's involvement in the activities and deliberations of the respective regional and international specialized agencies like the Asia Pacific Council for the Trade Facilitation and Electronic business (AFACT) and the United Nations Center for Trade Facilitation and Electronic Business (UN/CEFACT), several projects have been implemented, or Planned to be implemented, by the Ministry of Commerce of the Islamic Republic of Iran. Some of the project which is at present in the stages of implementation is: the Customization and application of the Electronic Commerce Standards (such as UN/EDIFACT and ebXML), the Certification Authority project (CA Project), and those in the Stage of Planning are: the United Nations Electronic Document Project (UNeDocs) and the Single Window Project (SW Project).

To elaborate more on the Policy making issue, it should mention that the policy paper, mentioned in 1.above, is based on the following principles and activities:

- To provide and maintain the main infrastructures and the necessary legal and operational backgrounds and prerequisites for the implementation of electronic business in the country.
- To enhance awareness and training and to create the cultural environment for the use of the electronic business.
- To protect the enhancement and promotion of the respective NGO activities in the Country on a competitive basis.
- To remove any discriminatory barriers in the use of the electronic Commerce in the country.
- To ensure the use of the Internet for electronic commerce activities in the Country in

a safe and secure network environment.

Some other operational policies and strategies of the government include: provisions of necessary software, hardware and fast reliable telecommunication equipment, maintenance of the electronic fund transfer and the credit cards in the banking system, performance of the feasibility study and determination of the long-term plan of action, ensuring provision of the services of the certification authorities. Etc.

## Comprehensive EC Development Plan

One of the main results of an EC feasibility study carried out by the Ministry of Commerce was to establish the Comprehensive EC Development Plan later ratified by the Board of Ministers. According to this Plan, the duties of agencies such as Ministries of Commerce, Economic Affairs, justice, ICT, Education, Science, Research and Technology, and also Central Bank and Management and Planning Organization have been determined.

These agencies are active in the creation of public awareness, training, and education, security measures, standardization, e-payment, legislation, promoting relations with international organizations and EC data gathering, preparing technical infrastructures such as enhancing penetration rate of fixed telephone, mobile phone, and internet and computer users.

Ministry of commerce conducts this plan and collects the relevant data and information regarding the activities and performance of agencies and publishes the annual report of EC performance in the country.

## Awareness and Education

One of the main aspects ordinarily considered as a national readiness factor for transfer to eCommerce environment is awareness and education. To develop awareness, training and education in the I. R. of Iran a Project has been carried out by the Ministry of Commerce in 2006 – 2007 as a result of which Comprehensive training and awareness packages covering economic aspects, legal issues, technology tools, standards, applications, implementation Process, etc ; are produced specifically aiming at different stakeholders and audiences such as :

- Businesses and Companies
- Managers of SME's

- Managers of e-Commerce professional services enterprises
- Executive Management in the government sector
- The Mass Media (general training)
- Lawyers, judges and other judicial officers

# EC Standards Implementation in the I. R. of Iran

The E-commerce standards are among the most important infrastructures in the Islamic Republic of Iran's e-Commerce development plan. In other words, according to Iran e-Commerce development plan the EC standards must be implemented for creating a common language between businesses. According to the article 11 of Iran e-Commerce comprehensive development plan, article 79 of I.R. Iran's electronic commerce law and the board of ministers approval on EC standards, the ministry of commerce should make the implementation of the international standards and recommendations possible in the Iranian companies. For this purpose, this project was defined in four categories:

- International standards
- Business web site and electronic mail standards
- Integration of standards
- Standards implementation

The results of this project can be classified as follows:

- An integration model designed to increase the consistency of standards that includes:

  International standards such as UN/EDIFACT, ebXML and etc.

  Web site and e-mail standards such as SOAP, SMTP and etc.
- A road map for e-commerce standards implementation designed for determining the:

  E-commerce standards maturity model

  An action plan for the government for implementation of e-commerce standards in the national scope

  An action plan for the companies for implementation of e-commerce standards in

the corporate scope

- Development of EDIFACT pilot messages for implementation by some Iranian companies.
- Development of more than 8 e-commerce standards courses for the following audiences with regard to their needs and their role in the e-commerce development process:

  Guilds, trade unions and Iranian traders involved in cross border trade

  Small and medium sized enterprises (SMEs)

  Governmental managers that are related to the e-commerce standards issues such as the ministry of commerce

  E-commerce service providers

## Establishment of EDI Gateway in the IRISL

With due attention to necessity of setting up a reliable infrastructure for electronic data interchange as input for IRISL integrated Container System (IICS), a new web based system namely "EDI gateway " has been designed and implemented accordingly. This system is capable for receiving electronic data in terms of UN electronic data interchange (EDI) (messages in CODECO and COARRI format) as well as IRISL electronic data interchange standards. Through this capability, data uploading and modification concerned with container movement affairs have been facilitated either domestic or foreign agents completely.

IRISL agents in all over the world after login on to the EDI Gateway system will be able to send all information about container movement such as Load on Board, Discharging, on Hire, Off Hire, Return to Shipper, Return by Shipper, Deliver to Consignee, Receive by Consignee, Load on Train/Truck/Trailer, Discharge from Train/Truck/Trailer, Empty Gate In, Empty Gate Out via COARRI and CODECO messages.

In the next step, Structure and content of all received information, will be verified and the agents will be aware of any probable deficiency or syntax error. Ability for reporting and content modification has been facilitated for the agent by this system. So that after sender submission, all information can be used by IRISL commercial subsystems.

In above mentioned procedures, activities of agents will be under supervision of principal and in this issue they will be asked for resolving errors and deficient messages. Meanwhile any type of control and supervisory report has been obtained for principal.

Moreover, for the reason that some agents may have some branches in various ports in country, there are facilities by which agents will be able to create required usernames for their

branches due handing over required access rights and afterward agents sit in the position of supervisor for the activities of their branches.

## National Products Classification and Coding System

The lack of having a set of products and services identification standards as a major information infrastructure to support logistics processes, accepted and applied by all firms across the nation, and the costly process of designing local systems in companies, has leaded many unwanted costs due to the weak connections in and between supply chain partners.

National Product and Services Classification and Coding System provides Iranian firms with a common language to not only establish better connections with the business partners and have better sourcing opportunities, but also improve inventory management in their own organizations.

Furthermore, subsequent to investigation and analysis of the needs of the trade community by the economic and commerce experts in Iran, the stated System was defined and activated the UN/CEFACT Recommendation No. 30 which is assigned to be one of the needs of trade facilitation in any country.

National Product and Services Classification and Coding System has been designed according to a logic that it has the capability to adapt with major and prevalent International product Classifications (UNSPSC, HS, NATO, CPC, ISIC, GPC, etc.) and meanwhile to have maintained and preserved its integration with them. Thus, it is able to also assist to facilitate the global E-trading.

The Government, Manufacturers, Suppliers and Purchasing Organizations, and the commercial and industrial sectors are the key members and activists of the National Products and Services Classification and Coding System who play an important role in economical and social development of the country.

Since the system has been made operational one year ago, lots of large, medium and small companies have been enabled to proceed in the commercial competitive arena by benefiting the capabilities of the system in inventory management, locating new target markets, and thus better satisfying the customers needs.

The results of this project will be used at current Barcode systems and future RFID applications also.

## Establishment of the Certification Authority (CA)

This project was intended to produce, distribute and manage the certification authority in e-transaction. The main goal of this project was to provide security through providing certification authority, the culture penetration trade formalities that is a part of operation of design and implementation of software, production and distribution.

Management of certification authority is based on international interactions.

## Conclusion

E-commerce is one of the important Trade and economic issues and has always been under Serious Consideration by many governments. I. R. Iran has also emphasized serious approach to develop and expand e-commerce in the country.

The issues such as awareness, infrastructure; legal and regulatory issues, e-finance, e-logistic, e-taxation; e-government; and trade facilitation are among many issues under consideration.

To develop awareness, training and education, the main activities holding e-commerce MBA and MA degree courses, workshop and seminars on e-commerce building websites, and presenting awards to projects excellence in e-commerce and provision of training packages for different audiences to manage resources, awareness and training man-power, and stimulate demand for application of e-commerce by businesses.

In addition, various trade facilitation and electronic Commerce Projects both in the private and Public Sectors are being carried out by different organizations to boost the foreign trade and the economy of the country.

# JAPAN Progress Report

## Japan EDIFACT Committee (JEC)

# 2007 Members Progress Report：JAPAN

## SECTION I – Governmental ICT Strategy of Japan in 2007

### 1.1 From “e-Japan Strategy” to the Priority Policy Program — 2007

Since 2002, when the Government of Japan had decided and propagated “e-Japan Strategy” in order to become “the world’s most advanced IT nation,” followed by the revised one “e-Japan Strategy II,” which were implemented under the leadership of the IT Strategic Headquarters.

As a result, Japan attained the highest global standards, as demonstrated in our nation’s improved broadband infrastructure and its widened use, by the greater utilization of state-of-the-art cellular phones, and by the improved electronic commerce environment and its dramatic increase in transaction size. Dramatic progress at both the infrastructure and consumer levels resulted in the world’s highest standards in its market and technological environment. Japan is now transitioning from taking a following position to such foremost countries as the United States, which pioneered the IT revolution, to becoming a front-runner in leading the world to create an IT society for the next generation.

Under the New IT Reform Strategy set out by the IT Strategic Headquarters within the Cabinet, in January 2006, focus was put on the ability of IT to reform the social structure. Not only will this characteristic of IT be used to benefit national life from a user-standpoint and improve industrial competitiveness, but also to reform the major societal challenges Japan faces, and to disseminate the achieved results to the world.

Ideally, our nation should primarily aim to achieve a ubiquitous network society, whereby “anybody, can use IT anywhere, at anytime,” while taking care to assure security and protect privacy. And secondly, by this means, continue to be the most advanced IT nation with the world’s highest-level of infrastructure, potential applicability and technological environment.

The Government also had set out “Priority Policy Program 2006” in July 2006 to explicitly identify the policy package to make all the Government to carry out the program with PDCA cycle continuing to assess achievements and speeding up the measures stated in this program, the Japanese Government aim to create a society where “anybody, anywhere, at anytime” can experience the benefits of IT.

## 1.2 The Priority Policy Program — 2007

Succeeding to the Priority Policy Program 2006, the IT Strategic Headquarters in the Cabinet has been developing “the Priority Policy Program 2007.

The revised one is constructed by the following policy packages:

### 1.2.1 Policies to enhance productivity and efficiency both in the Government and the private sectors.

- To develop one-stop services by e-Government both in central and local
- To develop common ICT Platform for extensive use of RFID and e-Commerce
- To implement common production control system for SMEs

### 1.2.2 Those to realize the safe and reliable society

- To implement e-Post Office Box to enhance services for social welfare
- To deploy “Health & Social Welfare IT Card (provisional name)” for the Nation
- To develop a National Standard for the nation wide information sharing for disaster prevention
- To deploy a nation wide online system to provide medical care receipt database

### 1.2.3 Those to develop a platform for innovation

- To invest R&D for the Next Generation Network System (NGN)
- To provide all the elementary and high schools broad-band 24 hours access to Internet

### 1.2.4 Those to attempt structural reforms by means of ICT.

- To implement “Special District of UBIQUITOUS in virtual,” with special exemption from rules and regulations of the Government, where ICT service providers can operate tentative programs to prove the concept

deploying the state-of-the-art technologies

### 1.2.5 Those to promote structural reform to enhance business competitiveness through establishment of management by utilizing ICT

- To develop common ICT platform to promote the population of telework to 20% of total number of employees in the Nation
- To develop next generation information retrieval technologies

### 1.2.6 Enhancement of the presence of Japan in the international competitive society by the provision of valued Information to the world.

- To lead in the effort toward international standardization with respect to technical areas in which Japan has developed ahead of other nations, activities in international standardization organizations, such as IEC, ISO, ITU, etc., will be implemented and cooperation and interaction in the global industrial field are to be promoted under the collaborative efforts of government, industry and academia.

# SECTION II – CEFACT STANDARDS DEVELOPMENT

## 2.1 Single Window System of Japan

### 2.1.1 The current Single Window System

The Single Window System in Japan is constituted with the following two groups of online systems (See Diagram 1 attached herewith):

- Nippon Automated Cargo Clearance Systems (NACCS) and related systems connected via IFS (Import/Export Procedures Interface System)

  FAINS (Sanitary Inspedtion)
  JETRAS (Import/Export Control)

ANIPAS (Animal Qurantine)
PQ-Networks (Plant Qurantine)
Immigration Procedure System

- Port & Harbor EDI for Japan Coast Guard and the Port Authorities

### 2.1.2 Nippon Automated Cargo Clearance Systems (NACCS)

**(1) NACCS**

Japan has two automated customs clearance systems named "the Nippon Automated Cargo Clearance Systems for sea-cargo (Sea-NACCS) and for air-cargo (Air-NACCS)". These systems are operated by NACCS Center.

NACCS promptly and accurately handle customs procedures, legal procedures related to non-customs systems (e.g. food, plant quarantine, animal quarantine, trade control, port EDI) and other tasks related to international cargo and shipment handling.

NACCS is an on-line network system, composed of a computer system used in communicating with the center, and a terminal system located in each of the customhouses, customhouse brokers and other related industries connected with telecommunications lines. NACCS structure date exchange with inter-corporate systems on the EDI method. Now NACCS process approximately 95 % of all import and export customs declarations.

**(2) Sea-NACCS**

Sea-NACCS process customs procedures and private companies related services for import and export cargoes by sea. For imported cargoes, the on-line process begins with the arrival of a vessel in a port and continues through the unloading of sea cargoes from a vessel, import declaration and the approval of import. For exported cargoes, the on-line process is applied to a series of customs procedures and private companies related services including the delivery of sea cargoes to the Customs area(e.g. Customs warehouse), export declaration, the approval of export, the loading of cargoes to a vessel and departure from a port.

Sea-NACCS adopted UN/EDIFACT in submitting arrival report and list of loaded cargo, application for departure, etc. UN/EDIFACT Messages used in Sea-NACCS are as follows:

CUSRES (Customs response message)

CUSREP (Customs conveyance report message)
CUSCAR (Customs cargo report message)
PAXLST (Passenger list message)
CODECO (Container gate-in/gate-out report message)
COPARN (Container announcement message)
IFTMIN (Instruction message)
APERAK (Application error and acknowledgement message)
CONTRL (Syntax and service report message)

In addition, WCO customs data model was introduced into Sea-NACCS about export declaration (EX1) in December, 2005.

**(3) Air-NACCS**

Air-NACCS process customs procedures and private companies related services for import and export cargoes by air.

For imported cargoes, the on-line process begins with the arrival of an aircraft in an airport and continues through the unloading of air cargoes from an aircraft, import declaration and the approval of import. For exported cargoes, the on-line process is applied to a series of customs procedures and private companies related services including the delivery of air cargoes to the Customs area(e.g. Customs warehouse), export declaration, the approval of export, the loading of cargoes to an aircraft and departure from an airport.

### 2.1.3 Port & Harbor EDI

The “Port & Harbor EDI System” (Port EDI System in short) has been in service since 12th October 1999. WAVE (Waterfront Vitalization & Environment Research Center - non-profitable organization) has been assigned to develop, operate and manage this system by Harbor Bureau of Ministry of Land, Infrastructure and Transport, Japan. The parties concerned of this EDI system are Port Authorities, Harbor Masters and Shipping Lines or their agents.

Since the launch on 12th Oct. 1999, the numbers of participants in the Port EDI System is increasing. As of end of June 2005, 113 Port Authorities, 99 Harbor Masters, 109 Guard and rescue offices, 83 Quarantine offices, and 1109 shipping lines, their agents or private berths are members of this system.

Shipping lines/agents have two options to transmit data required electronically, by UN/EDIFACT messages or through the web-screen (Web-EDI).

In the 1st stage, two UN/EDIFACT messages, BERMAN (Berth management message -

UNSM in D00A) and APERAK have been implemented. Adding these two messages, an application of “dangerous (hazardous) goods handling operations (IFTDGN)” has been implemented in October 2000, thence expand to other major ports within this year. In order to implement IFTDGN, we cooperated with PROTECT Group (a users group to develop a harmonized user guidelines in Europe, and their latest version of user guidelines was endorsed as an international standard by IMO) to develop the harmonized message implementation guideline (MIG). Furthermore, we are modifying/changing BERMAN to cover more functions of pilot/tugboat service requirements in cooperation with TBG3 (Transport Sub-working Group under TBG).

Adding IFTDGN, two applications “vessel’s long term schedule and previous called port information (IFTSAI)” and “Passengers’ and crews’ information (PAXLST)” also have been implemented in October 2000.

With regard to the reducing redundant input data item issue, we are collaborating with the customs authority, the immigration authority and the quarantine authority to provide an electronic data input environment for users (shipping lines/agents), so-called “Single Window (SW) ” methodology. This is in service in July 23rd 2003, and once users transmitted Port-in/out related declaration or application data to the portal system, the data is automatically transferred to the related authorities. In Japanese SW, both the Port EDI system and the Sea-NACCS system play a part of portal system. The Port EDI system provides three input methods which are a web screen input, an application program on user PC and UN/EDIFACT messages, for the SW portal system.

Lastly WAVE has been dispatching their representative to various international meetings, such as TBG3/ITIGG (an official subgroup of TBG3 to develop harmonized MIG’s) and other global users’ group (SMDG) so as to develop and implement harmonized MIGs to be used in our system.

### 2.1.4 The Next Generation Single Window System

Under the Priority Policy Program 2006, the Government had decided to implement the Government Common Portal, which will serve nation one-stop services for all the online system of each Ministries. As to International trade affairs, the following online systems will be redeveloped by 2010(See Diagram 2 attached herewith) :

| | |
|---|---|
| Next Version Sea-NACCS | October 2008 |
| Next Version Air-NACCS | October 2009 |
| Next Version Port & Harbor EDI | October 2008 |
| Next Version FAINS (Sanitary Inspedtion) | January 2010 |
| Next Version JETRAS (Import/Export Control) | October 2008 |
| Next Version ANIPAS (Animal Qurantine) | April 2009 |

| | |
|---|---|
| Next Version PQ-Networks (Plant Qurantine) | April 2009 |
| Next Version Immigration Procedure System | October 2008 |

## 2.2 Other EDI Activities

### 2.2.1 Japan Electronics and Information Technology Industries Association (JEITA)

JEITA is a new industry organization established in November 2000 by merging the Japan Electronic Industry Development Association (JEIDA) and Electronic Industries Association of Japan (EIAJ) to enter the 21st century. Its activities cover both the electronics and information technology (IT) fields. Within the JEITA, the EDI Center plays the role of promoting standardization which has been executing activities together with the vendors and buyers, focusing on the EIAJ-EDI Standards in order to exchange business transactions.

JEITA uses EIAJ-EDI Standard based on CII syntax rules, a domestic business protocol standard, developed by the Center for the Informatization of the Japan Information Processing Development Center. The EIAJ-EDI Standard was established for promoting electronic ordering of materials in the electronic manufacturing industry, and has been revised as appropriate every two to three years. The latest version was issued in December 2001.

In December 2003, JEITA released “ECALGA (Electronic Commerce Alliance for Global Business Activities)” as EDI brand for the new era. “ECALGA” is intended to widely offer the solutions to the changing needs of new EDI in the Electronic industry, through newly developed messages which are to reflect the real time exchange of a forecast and stock information. At the same time, “ECALGA” changes EIAJ-EDI Standard to the ebXML base. “ECALGA” seamlessly combines all the business processes among the enterprises in the various fields including, but not limited to, the business segment of planning, designing, development, production, distribution and sales.

### 2.2.2 The Distribution Systems Research Institute (DSRI)

DSRI, a member of GS1, facilitates EANCOM (UN/EDIFACT subset) as the industry EDI standards for Japanese retail and distribution industry since 1997. Since 2000, DSRI has been developing XML/EDI Distribution Standard messages for the grocery industry. In 2004, message development and preparation of Reliable Messaging Protocol guideline have been carried out as follows:

1) Development by XML schema of returns message.
   (12 messages were developed by 2000 – fiscal year 2004)

2) Review and classification of necessary data items, based on data items for JEDICOS.

3) Preparation of XML tags in Japanese and English languages, taking into consideration international standard specifications.

### 2.2.3 Financial Sector

Since March 1996, a function for financial EDI has been available in Zengin System, an electronic payment system mainly used for domestic credit transfer. Payer firms can attach a twenty-digit matching key, with which beneficiary firms can reconcile commercial and payment date, to payment instructions sent through Zengin System.

This function has been succeeded to its fifth-generation system, which start operation in November 2003. In parallel with the development of the new system, a working group of Japanese Bankers Association examined the possibility to introduce a scheme for financial EDI using XML. However, it has decided not to introduce such a scheme for the time being as there are legal and technical issues to be addressed.

MT103 Remit, which is a new message type of SWIFT's FIN for customer payment and has the financial EDI capability, is widely used in Japanese banks. By using MT103 Remit, payers can attach EDI data of up to 9,000 digits and of any type of formats including EDIFACT to a payment instruction. However, Japanese banks use SWIFT messages mainly in cross-border transactions, partly because the protocol and formats for most Japanese payment systems are incompatible with those for SWIFT.

Turning to C2F area, electronic methods to transfer money between individuals' bank accounts are widely used in Japan. According to a survey conducted in March 2005, funds transfer services are provided through the Internet by 79.2 percent of the 456 respondent banks. In addition, services using mobile terminals (e.g., mobile phones) are provided by 80.3 percent of the respondents.

### 2.2.4 Travel, Tourism and Leisure (TT&L)

The initial EDI activity in the travel related industry in Japan started in 1992 soon after the establishment of TT&L work group in UN/EDIFACT. In order to internationally sell Japanese travel products, more than 30 travel related companies and associations have kept working in the name of EC Promotion Organization for Travel Industry to normalize the travel business processes and data by using XML/EDI based on the standards and specifications of UN/CEFACT Forum and OTA (Open Travel Alliance). The first working results on the Japanese original hotels (Ryokan) undertaken by the Organization were submitted to the

Forum last year to be facilitated in the Small Scaled Lodging House Information Project and are now in its harmonization process. The second submission will be ready to the Forum during this year.

The TT&L EDI meeting with Taiwan TT&L industry has been held yearly either in Taipei or in Tokyo and in Dec, 2005 this was held in Taipei with the industry members of the two countries. The visit Japan campaign in Japan has been undergone to promote Japan to the foreigners and the EDI standard activity is also activated these days.

## 2.3 Education and Awareness Programs

### 2.3.1 JEDIC (Japan Electronic Data Interchange Council)

JEDIC has conducted the survey on the EDI status for 59 industry associations in Japan. The result says that 59.4% of the companies are doing EDI in the procurement process and 53.9% of the companies are doing EDI in the area of marketing.

JEDIC publishes the EDI news letters and holds the EDI seminars regularly. Also JEDIC started the new promotion program for ebXML including the hands-on trainings.

### 2.3.2 ECOM (The Next Generation Electronic Commerce Promotion Council of Japan)

ECOM organized the research and the promotion for Electronic Commerce and RFID in Japan. The research report includes How to promote RFID in the various industries, How to build up the information models for the product lifecycle management based on the UN/CEFACT Modeling Methodology, and How to establish the Registry and Repository for ebXML.

### 2.3.3 JASTPRO (Japan Association for Simplification International Trade Practices)

JASTPRO holds “EDI seminar” every year. The contents of the programs include;

1) Current status of Trade Facilitation and EDI

2) Characteristics of Japanese EDI in trade area

3) Port EDI system under single-window service

4) Japanese trade EDI activities with Asian counterparts

## 2.4 Status of ebXML Development

For implementing the e-Business Collaboration based on ebXML, the Model Sharing among the related business entities is the key. The Next Generation Electronic Commerce Promotion Council of Japan (ECOM, Chairman: Takuya Goto, Chairman of the Board, Kao Corporation) is performing activities which contribute to decision of the technical standard about a "core component" and the "modeling methodology" of ebXML. Furthermore, the activity for spreading use of ebXML technology through the actual business of Japan and Asian countries is also carried out.

In order to promote ebXML among the Small and Medium sized Enterprises, ECOM developed and submitted the new specification of ebXML Messaging Service which can provide the Solution for Client-Server System to OASIS.

## 2.5 Working Groups and Committees

### 2.5.1 JEC

Japan EDIFACT Committee (JEC) was established in July 1990 as a supporting organization for UN/ECE/WP.4 (currently UN/CEFACT) and Asia EDIFACT Board (currently AFACT). JEC is composed of committee members representing various field of industry, which includes trade, finance and manufacturing. JEC sends delegates to AFACT meeting every year.

At the Plenary of JEC held 25th June 2007, it was renamed to UN/CEFACT Japan Committee (Abbreviation is same as now i.e. “JEC”)

### 2.5.2 Joint Committee of Technical Assessment and Promotion of Codes in UN/CEFACT Recommendations

At the Plenary of JEC held 25th June 2007, it was resolved that TAG (Technical Assessment Group) and Japan Committee for UN/LOCODE shall be united and jointly operated the following two sub-groups:

#### 2.5.2.1 TAG (Technical Assessment Sub-Group)

With regard to the development of UN/EDIFACT standard messages, TAG has been playing a key roll in technical support by making technical assessment of DMR(Data Maintenance Request) from UN/EDIFACT users in Japan. TAG members have reviewed the translated MDR (Message Design Rule Rev.5 & Rev.6), main points of

EDIFACT Syntax Rules Ver. 4, as well as Ver.1.2 of MACH (Message and Code Handbook) and they had 11 meetings in 2006 fiscal year.

#### 2.5.2.2 UN/CFEACT Code Promotion Sub-Group

UN/LOCODE has been in use in Sea-NACCS and Port EDI system since 1999. For the purpose of successfully introduce these systems, the ex UN/LOCODE Japan committee was established in 1997. Currently the number of the registered UN/LOCODEs for Japan counts 1,616 in comparison with 400 at the beginning. The roll of the committee is to maintain the codes and make a request for new codes in Japan. In the future, it is intended to enhance the roll of the committee to encompass UN codes other than locations.

The new sub-group's mission is to promote any and all the code systems compiled and published as UN/CEFACT Recommendations, such as, but not limited to #3, #9, #20, #21, #22 etc.

### 2.5.3 Special Committees of JASTPRO

(1) Trade Procedures Facilitation under Strengthen Security Environment Committee

In the aftermath of the September 11 terrorist attacks in the United States, demand for the measures to assure tighter security is rapidly increased. Under such circumstances, to satisfy the needs of the international trade environment in terms of efficiency and security becomes universal concern among the parties involved. Since Japan fully rely on trade activities with other part of the world, it is an ultimate issue for Japanese trade community to find the solution to obtain adequate security without interfering efficiency in trade.

In the work program of this committee for this year, primal focus is placed on the research of security measures on various aspects of trade procedures. Some of these are already implemented, others are on the process of being implemented, and the rest are possible future plan. Analysis and evaluation is given to the effect of such measures onto the efficient trade flow. Security measures initiated in the private sector is also studied.

By gathering and sorting out all these available information, some directive condition for effective implementation of security measures in the trade procedure will be sought.

(2) Trade Facilitation System Research Committee

The committee member visit an oversea country in order to study and research trade

network systems from the viewpoint of trade and procedures facilitation. The outcome is reported to the trade industries and authorities concerned. The committee visited China in 2005 and Australia in 2006.

(3) Trade Procedures for XML/EDI Implementation Research Committee

XML/EDI using internet is the hottest theme in EDI business. XML/EDI is regarded the next-generation EDI that resolves the problems in legacy EDI and Web-based (Internet) EDI. JASTPRO launched this committee in order to study possibility of introducing XML/EDI concept into trade procedures. This approach is important to re-use resource of UN/EDIFACT and to keep inter-operability between UN/EDIFACT and XML/EDI. The committee continues to extend their efforts to simplify tag name for data element in UN/EDIFACT and explores the area of trade procedures based on object-oriented model.

# KOREA Progress Report


## Korea Institute for Electronic Commerce

# 2007 Members Progress Report：KOREA

## SECTION I – GENERAL CONDITION UPDATE

In Korea, the effort to promote e-Business implementation has continued by both public and private sectors to accelerate the digitalization of traditional Korean industries. A recent focus of Korean effort is on the maximum utilization of eBusiness for its application to industrial and sectoral domains to improve their competitiveness. The year 2006 marked an increase of e-commerce ratio to total trade to 21.2% in 2006 from 19.3% in 2005.

### 1.1 User Status

#### 1.1.1 Internet Users

As of December 2006, there are about 34,120,000 Internet users (74.8% of total Korean population) in Korea. The number includes wireless Internet users as well as wired Internet users. Compared to the number in December 2005, there is an increase of 1,110,000 Internet users. Analysis of Korean Internet users by gender shows that 80.7% of males and 68.9% of females use the Internet. Analysis of Korean Internet users by age shows that more than 95% of people in their age of 30s or younger use the Internet. Also, people in their 50s and 60s showed a distinguished pattern of increase.

**Table 1：Internet Users in Korea by Age in 2006**

| Age | 6-19 | 20s | 30s | 40s | 50s | 60s |
|---|---|---|---|---|---|---|
| Usage Ratio (%) | 98.5 | 98.9 | 94.6 | 74.9 | 42.9 | 16.5 |

*Source: National Internet Development Agency of Korea, Feb. 2007*

#### 1.1.2 Broadband Penetration

As of December 2006, the ways for Korean household to access Internet are xDSL (89%), cable modem (22.9%), dial-up modem (3.1%), apartment LAN (11%) and Wireless LAN (7.0%). While the ratio of Korean households accessing the Internet via dial-up modem is decreasing, the ratio for accessing the Internet via the broadband increases steadily.

## 1.2 eCommerce Market Status

### 1.2.1 eCommerce Trade Volume

The eCommerce market in Korea grows continuously year-by-year as shown in Table 2. The total eCommerce trade volume in 2006 was 413,584 million US dollars, which was about 15.4% increase compared to the total eCommerce trade volume in 2005. B2B remains as the most dominant type of eCommerce with the share of 88.5% in total trade volume.

**Table 2：eCommerce Trade Volume in 2006 (Unit: Billion USD, %)**

| Year | Total | B2B | B2G | B2C | Other |
|---|---|---|---|---|---|
| *2004* | 314.08 | 279.40 | 27.35 | 6.44 | 0.89 |
| *2005* | 358.45 | 319.20 | 29.04 | 7.92 | 2.29 |
| *2006* | 413.58(100) | 366.19(88.5) | 34.44(8.3) | 9.13(2.2) | 3.8(0.9) |

*Source: Korea National Statistical Office, Mar. 2007, $1 USD ≈ 1,000 KRW*

### 1.2.2 Korea e-Marketplaces

There are 173 e-marketplaces in Korea as of December 2006. Compared to the number of e-Marketplaces in 2005, there is a decrease of 13 e-Marketplaces while the trade volume increased about 25% from 13,591 million US dollars in 2005 to 16,635 million US dollars in 2006. The pattern of increase in trade volume despite constant decrease in number of e-Marketplaces has remained also in 2006 due to the fact that some e-Marketplaces are closed because they failed to make profits in competition even though there is an increase in eCommerce trade. When e-Marketplaces are analyzed by business area, the most dominant areas by number were machinery & industrial materials (20) and electronics (25) followed by MRO (19), while the most dominant area by trade amount was Agriculture, Dairy, fishery and F&B.

**Table 3：Number of e-Marketplaces in 2006 (Unit: Million USD)**

| Areas | e-Marketplaces | |
|---|---|---|
| | Number | Trade Volume |
| Chemical | 9 | 2,156 |
| Construction | 9 | 2,528 |
| Agriculture, Dairy, fishery and F&B | 15 | 4,017 |
| Iron & Steel | 10 | 1,902 |
| MRO | 19 | 3,288 |
| Healthcare | 14 | 747 |
| Machinery & Industrial Materials | 20 | 1,125 |
| Electronics | 25 | 625 |
| Others | 52 | 248 |
| **Total** | **173** | **16,635** |

*Source: Korea National Statistical Office, Mar. 2007, $1 USD ≈ 1,000 KRW*

### 1.2.3 Cyber Shopping Malls

As of December 2006, there are 4,531 cyber shopping malls in Korea. Out of 4,531 cyber shopping malls, 242 are general retailers and 4,289 are specialized retailers. Compared to 2005, 176 more cyber shopping malls were in operation as of December 2006.

**Table 4：Number of Cyber Shopping Malls in 2006**

| | Number | Percentage |
|---|---|---|
| **General Retailers** | 242 | 5.3 |
| **Specialized Retailers** | 4,289 | 94.7 |
| **Total** | 4,531 | 100 |

*Source: Korea National Statistical Office, Mar. 2007*

### 1.2.4 G2B Market

The total trade volume of G2B eCommerce is 34,436 million US dollars as of December 2006, showing gradual annual growth pattern. Out of total G2B trade volume, 56.3% was made through purchase of goods & services and 43.7% was through public work contract.

**Table 5：G2B Market Size in 2006 (Unit: Million USD, %)**

| Year | Total | Purchase of Goods & Services | Public Work Contract |
|---|---|---|---|
| 2004 | 27,349 | 9,816 | 17,534 |
| 2005 | 29,036 | 13,064 | 15,972 |
| 2006 | 34,436(100) | 19,385(56.3) | 15,050(43.7) |

*Source: Korea National Statistical Office, Mar. 2007, $1 USD ≈ 1,000 KRW*

# SECTION II – EDIFACT/ebXML/XML Based STANDARDS DEVELOPMENT

## 2.1 EDIFACT/XML based Standards Development

In Korea, all types of electronic documents (EDI, XML and XML/EDI) are standardized by KEC (Korea E-document Standard Committee). In accordance with the revision of the Framework Act on Electronic Commerce in 2005, KEC has changed its full name from Korea EDIFACT Committee to Korea E-document Standard Committee and the name of its Sub Committees from SCs (Sub-Committees) to SGs (Standard Groups) in 2006 as shown in Figure 1. Currently, there are 505 Korea standard electronic documents (262 EDI, 53 XML/EDI and 190 XML) as of 2006 as shown in Table 6. In addition, KEC maintains one core component library and published two technical specifications and one reference guideline.

**Table 6：Korea Standard Electronic Documents in 2006**

| | EDI | XML/EDI | XML | Sub-total |
|---|---|---|---|---|
| **Trade** | 37 | 27 | 0 | **64** |
| **Insurance** | 4 | 4 | 0 | **8** |
| **Sea Transport** | 38 | 0 | 0 | **38** |
| **Land Transport** | 6 | 0 | 0 | **6** |
| **Finance** | 31 | 0 | 0 | **31** |
| **Healthcare** | 11 | 0 | 0 | **11** |
| **Customs** | 39 | 0 | 60 | **99** |
| **Distribution** | 19 | 0 | 0 | **19** |
| **Iron & Steel** | 11 | 0 | 5 | **16** |
| **Procurement** | 0 | 0 | 66 | **66** |
| **Electronics** | 20 | 0 | 0 | **20** |
| **Automobiles** | 22 | 0 | 0 | **22** |
| **Ship-building** | 21 | 0 | 0 | **21** |
| **Textile** | 0 | 22 | 0 | **22** |
| **Electricity** | 0 | 0 | 46 | **46** |
| **Common** | 3 | 0 | 1 | **4** |
| **Stationary** | 0 | 0 | 12 | **12** |
| **Total** | **262** | **53** | **190** | **505** |

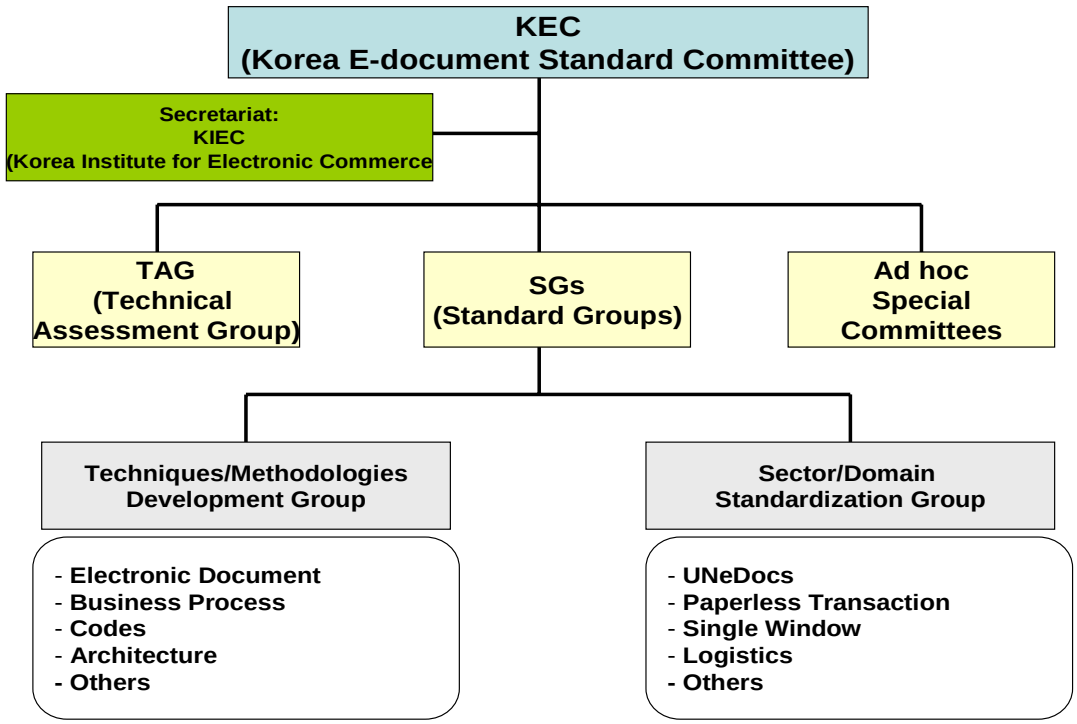



**Figure 1：KEC Structure**

## 2.2 eBusiness/ebXML Promotion and Development

In an effort to promote e-Business in Korea, KIEC maintains the role of focal point of UN/CEFACT in Korea and a membership in OASIS. KIEC contributes to international ebXML standardization by participating in such meetings as 13th UN/CEFACT Plenary, 9th and 10th UN/CEFACT Forum as well as hosting the 16th eBusiness Asia Committee meeting. In an effort to promote domestic eBusiness adoption, KIEC held an international interoperability conference in October 2007 together with the Electronic Commerce Integrated Forum (ECIF).

As a measure to provide e-Business standards contents to Korean market, KIEC manages Korea ebXML Central Registry & Repository (REMKO). As a result of regular content registration, REMKO currently maintains about 40,000 of KEC approved standard electronic documents, code list of electronic documents (XML & EDI), company profiles, basic semantic registers, ebXML related contents, etc. REMKO is also linked to other industrial information services to enable users to search relevant information. REMKO is continuously enhanced for improved user-friendliness and functionality. As a measure to contribute to the

implementation of UN/CEFACT registry, KIEC is participating in the development of UN/CEFACT Registry Technical Specification as well as a proof of concept activity.

Since introducing a certification service for standardized electronic TAX invoice in May 2005, KIEC certified 45 electronic TAX invoice systems until April 2007. The certified systems are endowed with eBusiness Interoperability mark.

# SECTION III – Trade Facilitation/eBusiness/ eCommerce Related PROJECT UPDATES

## 3.1 eBusiness Programs/Projects

### 3.1.1 e-Learning Promotion Program

In full recognition of the importance of e-Learning as one of next generation growth dynamics, Korean government is committed to promote e-Learning through various e-Learning policies and programs.

In 2006, the 2006 e-Learning Whitepaper was published and research was conducted on the status of e-Learning Industry. For the e-Learning standardization, studies were made on such issues as e-Learning terminology, e-Learning quality certification system, etc. As part of ADL Co-Lab cooperation, experts were sent to the US Academic ADL Co-Lab in September 2006 for training. KIEC also concluded a cooperative MoU with the US ADL Co-Lab and established an ADL Partnership Lab in Korea. For international standardization of e-Learning, domestic experts continued participation in ISO/IEC JTC1 SC36 as well as a newly formulated LETSI (Learning, Education and Training Systems Interoperability).

For the human resource development, various courses on e-Learning such as course design, content development, SCORM developer course, etc. were developed and relevant training was provided in the e-Business Human Resource Center. For the promotion, e-Learning Expo 2006 was held in September 2006.

### 3.1.2 e-Business Human Resource Development Program

To nurture quality e-Business human resources, KIEC manages such programs as financial support program to colleges with e-Business program, financial support program to e-Business graduate school with Industry-Academy joint program and e-Business Human

Resource Center.

In 2007, 10 universities were supported in the financial support program to colleges with e-Business program and e-Business graduate school with Industry-Academy joint program. The e-Business Human Resource Center provided 31 times of training to around 890 people with 19 courses in 2006.

In 2007, KIEC kept supporting programs for the development of overseas human resources. In May 2007, KIEC, through its e-Business Human Resource Center, managed an e-Business course to train 15 people from 13 countries in the world. In this program, KIEC provided e-Business lectures, arranged visits to eCommerce companies and field trips for the participants. KIEC also provided an e-Learning course to 20 foreign delegates from 17 countries in July 2007.

### 3.1.3 G4B System

The G4B system is government one-stop service portal for businesses. The system is intended to support the activities of businesses throughout the whole business lifecycle and mainly composed of three services – service for online support of corporate administrative affairs (for example, applying for government license, business registration, etc.), service on industrial information and network linking service & additional service. The G4B system also provides community support and adopted SSO (Single Sign On) function for the convenience of users. After the completion of the 1st stage project to establish the system in 2005, the system went through the 2nd stage project in 2006 and is going through the 3rd stage project in 2007. The 2nd and 3rd stage projects have mainly focused on expanding the scope of its services and contents.

### 3.1.4 CeDA (Certified *e*-Document Authority)

In Korea, there is a rapid increase in the use of electronic data message in every sector of society as e-Business implementation grows ever more. However, in the current business environment, the private sector has also kept a hard copy on paper in compliance with rules on preserving electronic data message for its legal validity while using electronic data message. To redress this issue, Korean government has prepared relevant provision in the Framework Act on Electronic Commerce through the revision in 2005. Under this Act, a trusted third party is designated as the Certified e-Document Authority for reliable preservation, authentication, and circulation of electronic data message. The data message preserved in this authority is legally binding; its authentication is guaranteed by law, and it can be circulated.

In 2006, in conjunction with additional revision of the Framework Act on Electronic Commerce, the effort was focused on the provision of detailed rules on the operation of the Certified e-Document Authority such as revision of enforcement decree and regulation as well as ISP/BPR for strategic direction of the program. In 2006, the work focused on preparing specific requirements, rules and procedures for designating the Certified e-Document Authority. As of June 2007, two companies (KTNET and LGCNS) were designated as Authorized Electronic Data Message Retention Centers. The work on designation of additional applicants and improvement of existing technical specifications and assessment guideline will be continued in 2007.

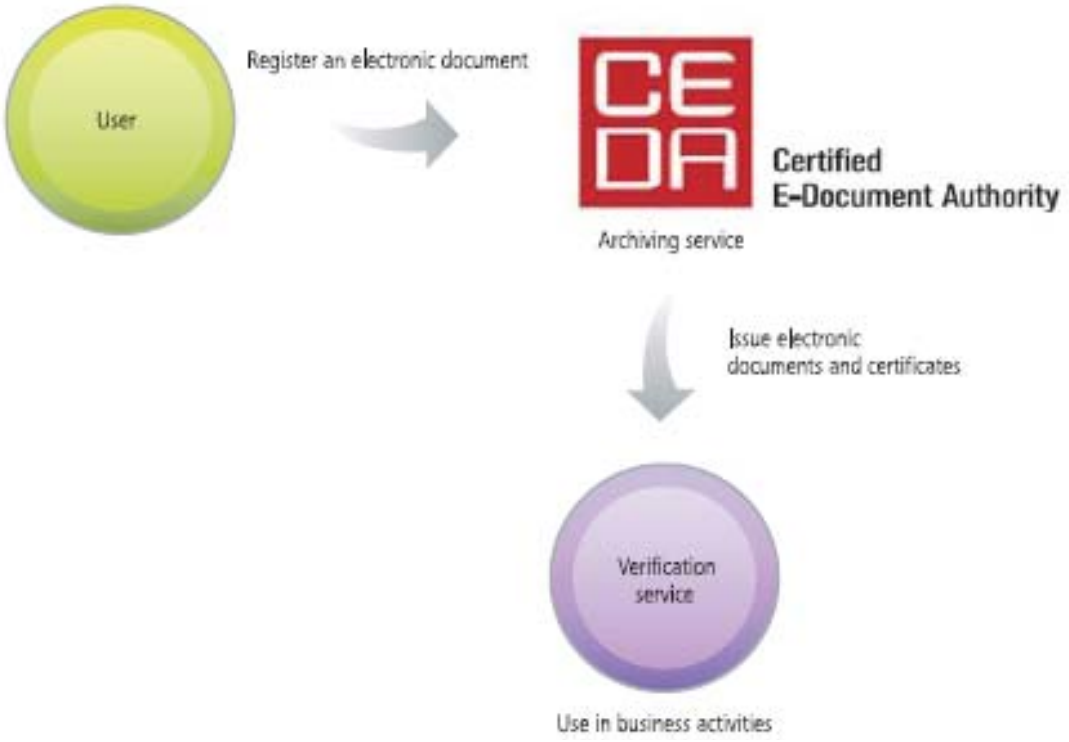



**Figure 2：Conceptual Model of Certified e-Document Authority**

### 3.1.5 Other programs/projects

Other e-Business programs includes such continuous programs as the eTrust certification program for consumer protection in eCommerce, the Electronic Commerce Mediation Committee (ECMC) for alternative dispute resolution of eCommerce dispute, and the Electronic Commerce Resource Center (ECRC) for overcoming geographical Digital Divide.

As of June 2007, there are 61 commercial websites certified with eTrust Mark. For the year 2006, the number of disputes received and mediated by the Electronic Commerce Mediation Committee were 1,991, which was about 14% increase compared to 1,750 of the previous year. In 2007, there are 25 ECRCs operating in various provinces of Korea.

## 3.2 Trade Facilitation

Korean government is committed to promote eTrade as a measure to increase the competitiveness of Korean business in borderless global trade environment of the 21st century. The eTrade Facilitation Committee, established to prepare an eTrade infrastructure, completed the 2nd year project to establish the uTrade Platform; the uTrade Platform officially opened its service in May 2007. The eTrade Facilitation Committee is preparing to launch the 3rd year project, which will include electronic Bill of Lading(eB/L) as part of its enhanced services.

Since the Internet customs clearance portal was opened in November 2005 by the Korea Customs Service (KCS), Korean traders can use either EDI Clearance service or Internet Clearance service depending on their business environment. Since its opening, there is a significant increase in the use of the Internet customs clearance portal. In its effort to lead global logistics security, the Korea Customs Service signed an Agreed Minutes with the Belgian Customs & Excise in June 2007 to launch a pilot project in the areas of customs data exchange and cargo security between the two countries. In this pilot project, WCO CDM (Customs Data Model) and RFID based CSD (Container Security Device) will be utilized.

# PAKISTAN Progress Report


## E-Commerce Resource Centre - Pakistan

# 2007 Members Progress Report：PAKISTAN

## SECTION I – GENERAL CONDITION UPDATE

### 1.1 Introduction

With population of 160 million Pakistan is an English-speaking nation and important member of the world community for its strategic location, skilled manpower, strong agro-based economy and natural resources. Pakistan is global focus of world community due to current geopolitical circumstances, moderate policy and the gateway to Gulf and CIS countries.

### 1.2 Investment in Financial and ICT sector in 2006-07

Foreign Direct Investment in 2006-07 has increased tremendously, over US$4.2/billion was received in 2006-07, whereas total foreign investment is US$6/billion, most of the investment has been made in financial and ICT sector. Investors confidence has increased on Govt. policies, some of investments are following;

| | |
|---|---|
| ABN Amro | US$228/m |
| Standard Chartered | US$487/m |
| NIB Singapore | US$339/m |
| China Mobile | US$460/m |
| Telenor,Denmark | US$660/m |
| Phillip Moris | US$382/m |
| Mobilink, Egypt | US$650/m |
| Etisalat UAE | US$750/m |

ICT spending also increased in public and private sector, most of the spending was on ICT infrastructure, especially in Mobile Telecom sector. Investment from overseas in telecom sector has increased many folds due to deregulation of telecom sector. Business Process Outsourcing (for overseas business) has picked up and over US$500/Million has been invested in BPOI sector by major overseas companies owned by Pakistani nationals. Some of

the BPO companies are listed on stock exchange.

Government in Pakistan has laid the foundation of ICT future by changing the basic policy of monopoly on telecom sector and encouraged healthy competition among telecom operators. Cellular telephony sector has shown unprecedented growth; and mobile phone connections have reached to 60/million from 14 million in 2 years, competition is tough among service providers benefiting customers. There are 12 National level fibre optic projects for inter-city and within cities connectivity. DSL and ADSL connections are freely available. Bandwidths charges have become are very competitive in the region.

Government of Pakistan has declared ICT as one of the four pillars of national economy in 2001, and playing the role of the facilitator, enabler and promoter for ICT. Ministry of IT & Telecom is providing resources for several e-Government projects. Departments of Information Technology in provinces are closely working with private sector for development of ICT in their provinces.

Trade and finance sectors have shown tremendous growth in 2006-07, International trade has touched US$45/billion and financial services have increased its share in GDP. Capital market has attracted overseas investment with remarkable increase in KSE index during last 5 years.

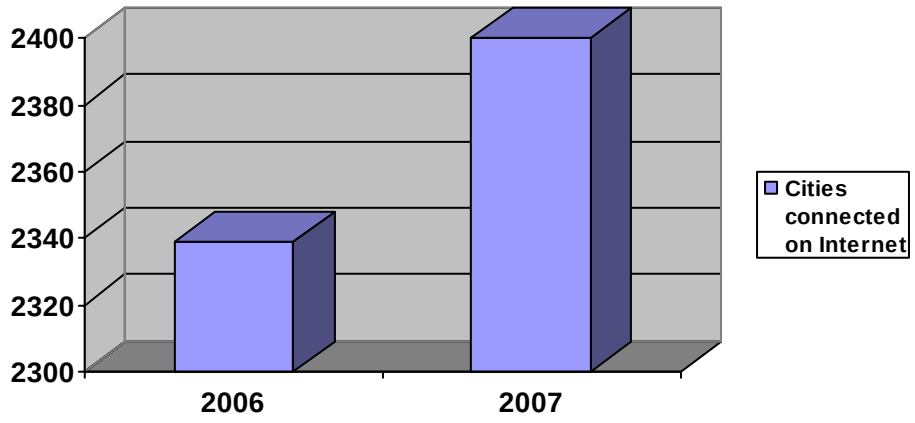
**Foreign Investment Trend in Pakistan;**

| Year | Privatization Proceeds | FDI excluding Pvt. Proceeds | Total FDI | Private Portfolio Investment | Public Portfolio Investment | Total Foreign Investment |
|---|---|---|---|---|---|---|
| 2001-02 | 128.0 | 356.7 | 484.7 | (10) | (483) | (8.4) |
| 2002-03 | 176.0 | 622.0 | 798.0 | 22 | (261) | 559.1 |
| 2003-04 | 199.0 | 750.4 | 949.4 | (28) | 339 | 1,260.7 |
| 2004-05 | 363.0 | 1,161.0 | 1,524.0 | 153 | 458 | 2,134.6 |
| 2005-06 | 1,540.3 | 1,980.7 | 3,521.0 | 351 | 613 | 4,485.0 |
| 2006-07 July-April | 133.2 | 4,027.0 | 4,160.2 | 1,148 | 671.4 | 5,979.2 |
| Total | 2,539.5 | 8,897.8 | 11,437.3 | 1,635.5 | 1,337.4 | 14,410.2 |

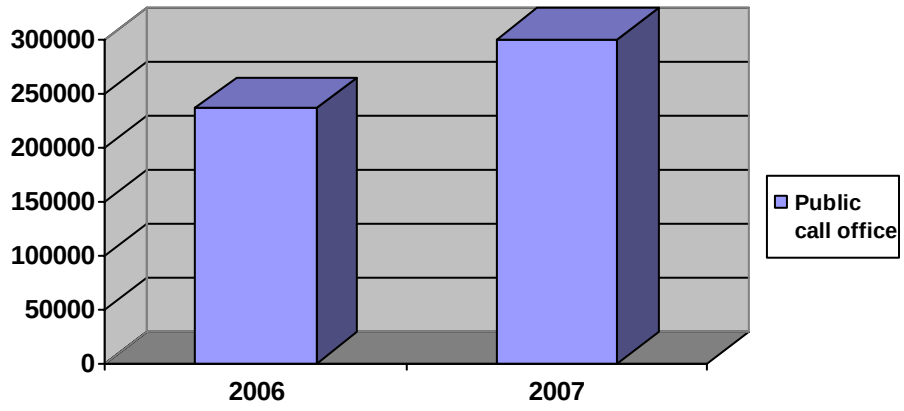
*Source Board of Investment, Govt. of Pakistan*

As a result of policies adopted by the Government following is progress in ICT:

- ICT total investment and spending has crossed US$12/Billion in 2006-07
- Over US$2/Billion foreign direct investment has been received in Telecom sector
- Over 70 DNOP, ISP and other data service operators are in operation
- Internet users are over 6.5/Million
- Mobile phone users increased to 60/Million
- Over 2400 cities and towns are connected to Internet
- Over 2000 Internet cafés are in operation

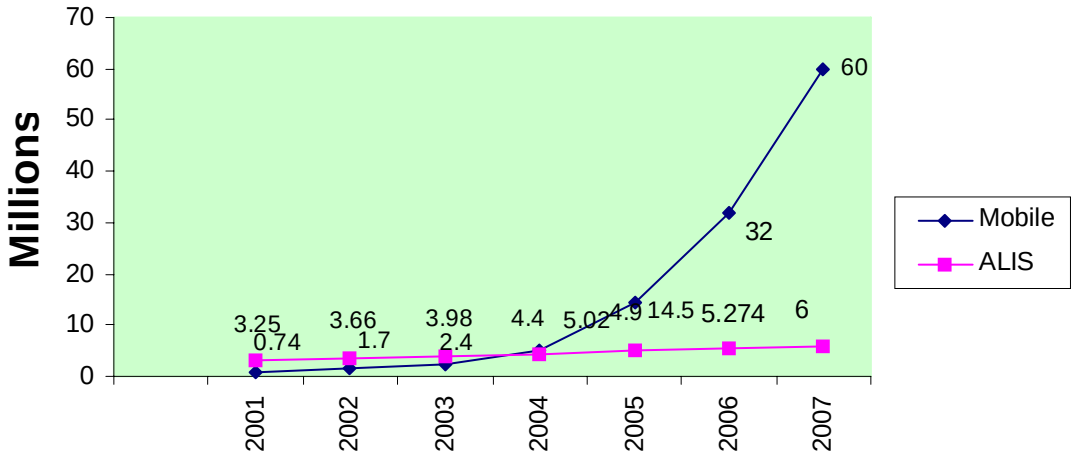



- 300,000 Public Call offices are operating in the country

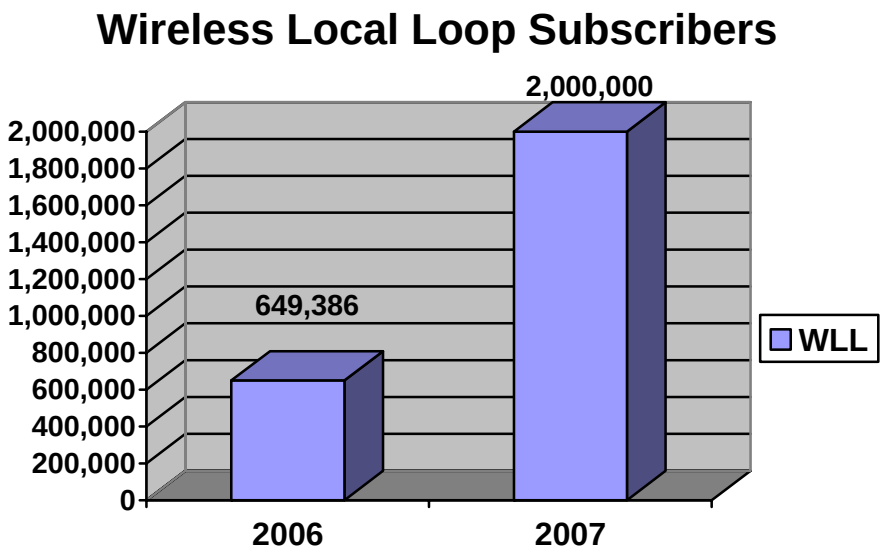


- International and domestic telecom tariff has been drastically reduced
- Personal Computers population is over 5/Million
- Over 120,000 Graduates are working in ICT sector
- Software exports and services are over US$500/million
- Over 100 call centers for overseas operations are working
- E-Government projects are over US$300/million, at federal and provincial level

**Mobile Subscribers vs. Fixed Line Subscribers**




Pakistan's telecom sector is now moving into a period of what could well be phenomenal growth. Since fixed-line penetration stood at a low 4% and there is plenty of room for further expansion. The government is continuing to pursue its targeted national teledensity of 7% (around 10 million lines) by 2010. To achieve this target, around 1 million additional lines need to be installed every year. Pakistan's mobile sector, which had started to grow strongly over the last few years, rocketed to 60 million subscribers (30% penetration) by June 2007 and was gearing up for further growth. The mobile population has been increasing at a staggering 200% annually. In absence of fixed line; WLL has picked up sharply and appx. 2,000,000 lines are working in WLL sector.




| 1.3 Telecom Infrastructure: | June-2005 | June-2006 | June-2007 |
|---|---|---|---|
| Telephone lines (including WLL) | 5.4/m+ | 6.0/m+ | 7.2/m+ |
| Mobile phones | 14/m+ | 32/m+ | 60/m |
| ISPs / DNOPS | 150+ | 170+ | 180 |
| PCOs | 225/k | 236/k | 300K |
| Cities connected through Internet | 2100 | 2339 | 2400 |
| Internet users | 5/m+ | 5.5/m+ | 6/m |
| e-Mail users | 6/m+ | 6.5/m+ | 7/m |
| Cyber Cafes | 4,500 | 5,500 | 2000 |
| Fiber Connectivity | 400+ cities | 500+ | 550 |
| % Digitalization | 100% | 100% | 100% |
| Landline Tele-density | 3.6% | 3.9% | 4% |
| NWD locations | 2,000 | 2,200 | 2400 |
| Cellular Density | 7% | 21% | 30% |

## 1.4 Deregulation of Telecommunications and its impact

Pakistan telecommunication sector had remained a monopoly for a very long time. Telecommunication sector has been liberalized since PTCL privatization. So far Pakistan Telecommunication Authority (PTA) has issued 14 LDI and 76 LL licenses in addition to 92 WLL licenses and other operators for ISPs and DNOPs etc., 6 cellular operators are working with 60/m subscriber's base.

## 1.5 Investment in Telecom sector

Mobile operators have announced to invest more than USD2 billion in infrastructure; Mobilink is investing around USD 831 million in next three years, Telenor and Warid, the newly licensed operators are investing around USD 495 million and USD 325 million respectively. China Telecom has started operation after acquiring Paktel operations, and would invest USD500.

With six mobile companies operating in Pakistan, tele-density in mobile sector has increased to 30%, rural areas has been benefited from cellular revolution in Pakistan, as compared to fixed lined tele-density of 4%. There are further opportunities for growth in fixed lines and mobile sector. Local and international companies are investing in these areas and International calling business as the VoIP has been legalized. VoIP sector has increased tremendously during last two years; mainly due to large number of overseas Pakistanis (5/m) living around the globe and reduction in calling charges from Pakistan to North America, Europe and Middle East. Now it is cheaper to call from Pakistan, as compared to a call from America.

## 1.6 IT Sector in Pakistan

With most of the global IT company presence in Pakistan, and with revenues growing by 35% year on year, the IT industry is probably the most exciting and dynamic sector in the country today. An industry characterized by about 125,000 professionals, major ongoing IT projects within the government and the private sector for millions of US dollars, and world-class software product and services companies bears testimony to the vibrancy of the IT and IT enabled services sector in Pakistan.

Following are some of the leading global companies operating in Pakistan with healthy growth every year. Over 100 overseas IT companies are operating in Pakistan, including offshore development centers based in Pakistan listed at KSE and NASDAQ.

| Company | 2005 | 2006 | 2007 |
|---|---|---|---|
| Oracle | 40 | 70 | 75 |
| IBM | 20 | 25 | 30 |
| NCR | 30 | 35 | 35 |
| Microsoft | 30 | 30 | 35 |
| Intel | 30 | 35 | 35 |
| Cisco | 30 | 50 | 50 |

**Revenue Growth (%)**

The size of Pakistan IT industry is estimated at US$2.0/billion/year with average growth of 35%/year.

## Statistics of the Pakistani IT/IT enabled services

| | |
|---|---|
| Number of IT companies working in Pakistan | 600 +(Registered PSEB Members) |
| Number of substantial IT companies | 400+ (Active PSEB Members) |
| Number of companies ISO certified | 70 |
| Number of companies CMM Assessed | 4 CMM Level 5 companies |
| IT and IT Enabled Services Exports during 2006-2007 | US$ 120 million, reported by State Bank |
| Percent growth in Exports | 45% over |
| Export target for the current fiscal year 2006-2007 | US$ 150 million (State Bank transactions) |
| Annual Software Industry Turnover | Over US$ 200 million |
| Number of IT graduates produced per year | 15,000 |
| Number of Universities offering IT / CS programs | 45 |
| IT Professionals engaged in software export development | 11,000 |
| Call Center agents working for international clients | 16,000 |
| Total number of IT professionals employed in the country | 125,000 |
| Total IT spending in fiscal year 2006-07 | US2/billion |
| Total amount of space utilized in STPs | 600,000 sq ft |
| Cost per E-1 connection (2MB) | US$ 1000 per month |

Note: It is estimated that about 500 non-PSEB registered software development set-ups are also working in country, most of these are owned by large to medium organizations and working for in-house development.

## 1.7 Legislation for e-Laws:

Govt. of Pakistan has promulgated Electronic Transaction Ordinance for legal acceptance of electronic transactions in the country. Cyber Crimes Law and Data Protection Laws have been drafted and ready for legislation. Payment Systems Electronic Funds Transfer Act (PSEFT) has been promulgated to enable financial electronic transaction with finance bill in June 2007.

## 1.8 Digital Certificate:

Certification Authority (Verisign) has been established in private sector by NIFT, to issue the digital certificates to corporate and citizen. The digital certificates are available now in Pakistan.

# SECTION II – EDIFACT/ebXML/XML Based STANDARDS DEVELOPMENT

## 2.1 Internet Merchant Account

- Internet merchant account facility for Small and Medium Enterprises exporters is available through Citibank. Goods and services are being transacted successfully through Citibank payment gateway since last 4 years.

## 2.2 Pakistan Commercial Community System (PACCS)

The basic purpose of the project is to provide a B2B Electronic Document Exchange for International trade and services. The goals to be achieved are:

1. Enable electronic exchange of commercial documents in domestic and international trade.

2. Provide Single Window for all users; importers, exporters, Customs, State Bank of Pakistan, Export Promotion Bureau, Ports, Shipping Lines, Airlines, clearing and forwarding agents, traders, banks, trade and industry associations, Other Govt. agencies and all other stakeholders.

**Status:**

- Customs-1 is semi automated whereas CARE is web based customs clearance system.
- CARE system is operational at Karachi International Container Terminal, Pakistan International Container Terminal and Qasim International Container Terminal, appx. 50% of sea cargo is being handled by CARE. Clearing agents and exporters / importers can submit data online for export and import transactions to Customs in CARE system. Whereas Customs-1 is being used at Airports, Dry Ports and at places where CARE is not yet implemented.
- The Ministry of Commerce has completed Trade and Transport Facilitation Project (TTFP) Part 1, financed by World Bank in 2001 with technical assistance from UNCTAD. TTF Part 2 is being started by Ministry of Commerce with funding from World Bank (www.nttfc.org).
- SMEDA (Small and Medium Enterprise Authority) has launched Industrial Information Network portal (www.iin.gov.pk) for B2B trade match making. SMEDA is already playing a lead role in facilitating small and medium enterprises for their business needs.
- Trade Development Authority of Pakistan has launched B2B matchmaking portal (www.epb.gov.pk) to facilitate exporters and importers. TDAP, an arm of Ministry of Commerce, leads the efforts to facilitate exporters and importers and looks after international trade.
- Private sector has started efforts to launch e-Trade exchange in collaboration with foreign ASPs in the region and solution providers.
- CBR has issued RFP for implementation of National Single Window system for trade facilitation, to be known as Pakistan Commercial Community System (PACCS).

## Major developments in Electronic Customs Clearance (www.paccs.gov.pk)

### One Window

PACCS is a one-window system; it can connect to PACCS over the web and carry out all activities related to Customs from anywhere in Pakistan, by customs agents, importers and exporters.

**24X7 systems**

PACCS is a twenty-four-by-seven system.

**Paperless environment**

PACCS is completely paperless, all documents and declarations (Bills of Entry, Shipping Bills, Refund applications, etc) are all electronic and available online.

**Virtual System**

PACCS is independent of geography. You can import, export and conduct all other activity with Customs from anywhere in the country. For instance, you can file your declaration over the web from your head office in Islamabad, pay your duties through an **Online Bank** from a field office in Lahore and get your goods cleared for a factory in Karachi.

**Automation**

PACCS is completely automated. Highly advanced Processing and Risk Management Systems process all declarations. All information regarding receipt of request, clearance of cargo is delivered online. In case any clarifications regarding declaration are deemed necessary; are intimated online.

**Self Assessment**

Under PACCS Customs does not interfere in the process of discharge of legal liabilities of duties and taxes. On submission of declaration instant online receipt is issued in the shape of Customs Reference Number (CRN) also known as Machine Number.

**Processing of Declaration**

The moment a CRN is allotted, the Risk Management System commences the processing of declaration. The studies indicate that up to 80% of trade is by responsible and legitimate businesses and does not pose a

threat to the country or the exchequer. In all such cases the cargo will be cleared and importer will be intimated online. The process takes less than 15 seconds. In case a threat is detected, detailed scrutiny including examination of cargo may be undertaken.

**Risk Management**

PACCS has a highly sophisticated automated Risk Management System. Under PACCS the

traffic of containers flowing through our ports is not disturbed. Customs keeps a vigilant eye on the flow and intercepts only those consignments as are perceived to pose a threat to the country or its exchequer. Such instances are verified and in case the threat is not real, cargo is expeditiously returned to its normal flow. Certain consignments may be verified on random basis.

**No un-receipted Expense**

All processes of PACCS have been designed to ensure that the trade does not incur any un-receipted expense in clearance of the cargo. Every step of Customs clearance is documented and it is ensured that the tax collectors do not come into contact with the taxpayers thus eliminating any chances of foul play. A transparent system gives Customs officials greater confidence in performance of their duties since they are protected against fictitious allegations of wrongdoing.

**Instant Duty drawbacks / Rebates**

Under PACCS the Goods Declaration (Shipping Bill) is in itself a request for rebate. Form-E's are not required to be presented to Customs instead Form-E number is entered as part of GD. For sanction of rebate claims exporter are not required to await Bank Credit Advices (BCA). In order to obtain rebates all to do is file a Goods Declaration to Customs, the due rebate will be computed and sanctioned to with the sailing of the vessel. Filing a separate rebate claim and calculation sheet on receipt of BCA are no longer required.

# SECTION III – Trade Facilitation / eBusiness / eCommerce Related PROJECT UPDATES

## 3.1 National Trade Corridor

The Prime Minister of Pakistan has directed to establish Task Force under the Deputy Chairman Planning Commission, with secretaries of the Ministries of Communications, Commerce, Ports & Shipping, Central Board of Revenue, and Ministry of IT as members. Several steps have been taken in phases to improve transportation logistics chain, on the basis of the inadequacies and weaknesses identified that include non-availability of information in electronic form. World Bank has provided funds for the Trade and Transportation Facilitation Project in Pakistan. Total of Rs. 1140/m has been approved for the National Trade Corridor project, whereas Rs.360/m has been allocated by World Bank for

TTF2 project for 5 years operation.

## 3.2 Progress in Financial Sector

Financial sector has spent over US$400/Million during 2006-07 in ICT infrastructure, new projects, maintenance, human resource development and services.

RTGS project is underway for implementation with backward linkages to commercial banks and clearinghouse. Bank2Bank Electronic Funds Transfer is available on limited scale at ATMs and through Bank's websites on Internet, it would be expanded for duty payments and taxes.

The commercial banks have shown robust performance during 2006-7. Improved ICT infrastructure and use of IT services has played key role in improving bank's performance and productivity.

Over 4000 commercial banks branches are online now; out of 7000 branches in the country. 90% of the urban area branches are online. 1200 bank's branches are authorized to deal in foreign exchange.

Several licensed exchange companies are handling foreign exchange business, under guidance and rules of State Bank of Pakistan. Some of the companies have started offering online funds transfer for workers remittances and have good response.

Two ATM switches are operating with countrywide network of over 2000 ATMs. 5.6/Million ATM / Debit cards have been issued with 1.5/Million credit cards. Smart cards, stored value cards, loyalty cards and pre-paid cards have become part of the culture in urban cities.

Five POS switch networks are operational with 30,000 POS terminals, with two Loyalty card networks.

Payment gateway by Citibank for Internet B2C transactions is in operation since last four years. Airlines, mobile companies, ISPs and merchants are using service with good turnover of Internet transactions.

Automated check clearing house (NIFT a Public-Private company owned 51% by banks) is operational in 14 cities of Pakistan, with turnover of 60/m/checks/year. Efforts are underway to establish Electronic Check Clearing House (ECH), B2B EFT and B2C Payment Gateway.

Mobile phone banking services are available with several banks, where customer can use the service for payment of utility bills and perform several other transactions online.

Following projects are at various stages of implementation in private and public sector:

- E-Billing with e-Payments on Internet, ATM, Mobile phone and Kiosk
- E-Security Infrastructure
- Mobile Payment Gateway
- E-Money, Digital cash, Smart cards, Offline POS, Loyalty cards
- Payment Gateway for Internet / POS transactions
- Money Exchanges Reporting, Workers Remittance project for Non Resident Pakistanis
- Foreign exchange reconciliation for Import / Exports and services
- Capital market integration with payment system

### Government sector projects:

World Bank PIFRA project is being implemented in AGPR.

Several e-billing projects in Govt. sector are underway that would be linked to the banks.

Central Board of Revenue has initiated PACCS Single Window project with online payment of taxes, e-Logistics, e-Security and exchange of electronic commercial documents among stakeholders.

National Registration Authority is proving utility bill payment facility through Kiosk.

Ministry of IT has funded several e-Government projects and now supervising implementation process.

US$200/m provincial e-Govt. projects for Land Records, Revenue, Education, and Health are underway.

# PHILIPPINES Progress Report

## Philippines Exporters Confederation, Inc.

# 2007 Members Progress Report：PHILIPPINES

## SECTION I – GENERAL CONDITION UPDATE

### 1.1 Overview

Below outlines the trade facilitation efforts of the country in the past years:

| Date | Title |
|---|---|
| 19 Jul 1994 | Executive Order No. 190, "Approving and Adopting the National Information Technology Plan (NITP) 2000 and Establishing the National Information Technology Council (NITC)" |
| 28 Oct 1997 | National Information Technology Plan for 21st Century (IT21)<br>- Documents the country's common vision and presents the nation's broad strategy to spur the country to global competitiveness through Information Technology. |
| 07 Nov 1997 | Administrative Order No. 332, "Directing all government agencies and instrumentalities, including LGUs to undertake electronic interconnection thru the internet to be known as the RP Web" |
| 23 Feb 1998 | Executive Order No 468, "Providing for the Creation of a National Council for the Promotion of Electronic Commerce in the Country" |
| 23 Feb 1998 | Executive Order no. 469, "Amending Order No. 190" |
| 1998 | Philippine Information Infrastructure Policy (PIIP)<br>- Defines the legal, regulatory and policy environment that can accelerate and rationalize the development of Philippine information infrastructure. Allows both public and private sectors to join and share their resources in the progressive, integrated and timely development of Philippine information infrastructure. |
| 19 Jul 1999 | Revitalizing the National Information Technology Council (NITC) and the National Computer Center (NCC) |
| Jun 2000 | Internet Strategy of the Philippines (ISP.com)<br>- Comprehensive internet strategy to develop an environment conducive for investments in and growth of e-commerce. It identifies a focus market where Filipino companies can concentrate initially and immediately to maximize inherent advantages of the country's human resources. It outlines how the government will create the physical, educational, financial, logistical and legal/institutional environment conducive for IT development and e-commerce. |
| 14 Jun 2000 | RA 8792, E-Commerce Act of 2000 (ECA), "An Act Providing for the Recognition and Use of Electronic Commercial and Non-Commercial |

| Date | Title |
|---|---|
| | Transactions and Documents, Penalties for Unlawful Use Thereof and for Other Purposes"<br>- Mandates all government departments and offices to accept electronic data messages and documents in their transactions within two years from its effectivity.<br>- Provides for penalties on computer hacking, introduction of viruses and piracy of copyrighted works of at least P100,000 and maximum commensurate to the damage incurred, and imprisonment of six months to three years among others.<br>- Promotes e-commerce in the country, particularly in business-to-business and business-to-consumer transactions whereby business relations are enhanced and facilitated and consumers are able to find and purchase products online.<br>- Aims to reduce graft and corruption in government as it lessens personal interaction between government agents and private individuals.<br>- The DTI was tasked to direct and supervise the promotion and development of electronic commerce in the country in coordination with relevant government agencies. It is empowered to promulgate rules and regulations, provide quality standards or issue certifications, and perform such other functions as may be necessary for the implementation of the Act in the area of electronic commerce. These may include, but shall not be limited to, the installation of an online public information and quality and price monitoring system for goods and services aimed at protecting the interests of the consuming public availing of the advantages of this Act. |
| 05 Jul 2000 | Executive Order No. 262, "Amending Executive Order No. 302 Series of 1996, entitled Providing Policies, Guidelines, Rules and Regulations for the Procurement of Goods/Supplies by the National Government and Executive Order No. 201, Series of 2000" |
| 12 Jul 2000 | Executive Order No. 264, "Establishing the Information Technology and E-Commerce Council (ITECC) from the Merger of the National Information Technology Council (NITC) and the Electronic Commerce Promotion Council (ECPC)"<br>- ITECC is the highest policy making body on ICT matters. It hopes to lead the Philippine ICT industry through the next millennium and beyond by providing a clearly defined direction through strong and capable leadership.<br>- The Secretary of DTI was designated as chairperson of the Council with DTI (Office of Special Concerns) as Secretariat when it was first established. In 2001, ITECC was reorganized with the President as chairperson and PMS as Secretariat. Secretary Manuel A. Roxas II and Ambassador Roberto Romulo were designated as co-chairs.<br>- ITECC has five regular committees to focus on the many areas of ICT, namely: Business Development, e-Government Implementation, Information Infrastructure, Human Resource Development, and Legal |

| Date | Title |
|---|---|
| | and Regulatory; and an auxiliary committee, the Communications Committee, in charge of advocacy and information dissemination on ITECC and ICT concerns.<br>- DTI was a member of the Business Development and the Legal and Regulatory Committees, under which a sub-committee was created: (to provide) Legal Support to the DTI on the Implementation of the ECA. The DTI-Office of Policy Research acted as secretariat to the sub-committee. |
| 12 Jul 2000 | Executive Order No. 265, "Approving and Adopting the Government Information Systems Plan (GISP) as Framework and Guide for All Computerization Efforts in Government"<br>- Government Information Systems Plan (GISP), Otherwise known as Philippine Government Online. Envisions an electronic bureaucracy that is widely and readily accessible to the Filipino people. It is a master plan that harnesses the potentials of information and communications technology for good governance, and promotes transparency and accountability in government operations and transactions. Approved and adopted with the issuance of Executive Order No. 265 |
| 13 Jul 2000 | Implementing Rules and Regulations of the ECA |
| 01 Dec 2000 | Department Order No. 103, "Creation of the DTI IT Team"<br>- The DTI IT Team is directed to support the IT and E-Commerce thrust of the Department. It has five (5) functional groupings:<br>• Policy – lead: OPR<br>• Business/Industry Development Services – lead: BOI<br>• Trainings – lead: PTTC<br>• Promotions – lead: CITEM<br>Secretariat and Help Desk – lead: OSC |
| 04 Dec 2000 | NSCB Memorandum Order No. 08, "Creation of a Task Force on the Measurement of Electronic Commerce"<br>- The Task Force is tasked to develop a conceptual and statistical framework on e-commerce that would address information requirements for better policy making and setting in the area of e-commerce.<br>Its specific functions are:<br>1. To formulate the definition of electronic commerce that will be used for measurement purposes and determine its coverage considering both the local setting and practices of international organizations and other countries;<br>2. To identify the current and future concerns of policy-makers on the use of electronic commerce in the country as basis for determining data requirements;<br>3. To conduct consultations with concerned government and private sectors and other inter-agency bodies in the identification of data requirements and in seeking their cooperation in the implementation of the action plan formulated by the Task Force |

| Date | Title |
|---|---|
| | Chairman: DTI Co-Chair: NSCB |
| 25 May 2001 | Executive Order No. 18, "Reorganizing ITECC Transferring the Chairmanship to the President and Designating DTI and Private Sector Representative as Co-chair" |
| 17 Jul 2001 | Supreme Court Memorandum No. 01-7-01, "Rules on Electronic Evidence"<br>• Provides rules on electronic documents as evidence in all civil actions and proceedings as well as quasi-judicial and administrative cases.<br>• Exempts business records that are made or kept by electronic, optical and other similar means as hearsay evidence.<br>Specifies factors in assessing evidentiary weight of an electronic document |
| 28 Sep 2001 | Joint Department Administrative Order No. 2 between DOST and DTI, "Providing Implementing Rules and Regulations on Electronic Authentication and Electronic Signatures" |
| 8 Oct 2001 | Executive Order No. 40, "Consolidating Procurement Rules and Procedures for all Government Agencies, Government Owned or Controlled Corporations and Government Financial Institutions and Requiring the Use of the Government Electronic Procurement System" |
| 08 February 2002 | Implementing Rules and Regulations on Executive Order No. 40 |
| 11 July 2002 | NCC Memorandum Circular No. 2002-01, "Guidelines on Creation of the Agency's Official Website and Compliance to E-Commerce Law and Stage One of the UN-ASPA Stages of E-Government" |
| 10 Jan 2003 | RA 9184, E-Procurement Act, "An Act Providing for the Modernization, Standardization and Regulation of the Procurement Activities of the Government and For Other Purposes" |
| 10 Jan 2003 | Executive Order No. 163, "Modifying the Rates of Import Duty of Information and Communications Technology (ICT) Products Under the Tariff and Customs Code of 1978 (Presidential Decree No. 1464, as Amended), in Order to Implement the e-ASEAN Framework Agreement" |
| 31 July 2003 | NCC Memorandum Circular No. 2003-01, "Guidelines on Creation Compliance to E-Commerce Act (R.A. 8792) and Stage Two and Three of the UN-ASPA Five Stages of E-Government" |
| 12 Jan 2004 | Executive Order No. 269, "Creating the Commission on Information and Communication Technology (CICT)" |
| 24 Feb 2004 | Department Administrative Order No. 01, "Prescribing Rules Governing the Voluntary Accreditation of Information Certifiers on Electronic Signatures"<br>(Unpublished) |
| 20 Jul 2004 | Executive Order No. 334, "Abolishing the Information Technology and Electronic Commerce Council and Transferring Its Budget, Assets, |

| Date | Title |
|---|---|
| | Personnel, Programs, and Projects to the Commission on Information and Communications Technology" |
| Aug 2004 | CICT Memorandum Circular No. 1, "Guidelines in the Administration of the .ph Domain Name" |
| 5 Aug 2005 | Implementing Rules and Regulations of RA 9184 |
| 23 Aug 2005 | Memorandum Circular No. 05-08-2005, "Voice Over Internet Protocol (VOIP)" |
| 23 Aug 2005 | Memorandum Circular No. 06-08-2005, "Frequency Band Allocations for Broadband Wireless Access" |
| 23 Aug 2005 | Memorandum Circular No. 07-08-2005, "Rules and Regulations on the Allocation and Assignment of 3G Radio Frequency Bands" |
| 27 December 2005 | Executive Order No. 482, "Creating the National Single Window Task Force for Cargo Clearance" |
| 06 Mar 2006 | Department Order No. 12, "Creation of the DTI E-Commerce Team"<br>- The DTI E-Commerce Team is created in view of the provisions under Sec. 29 of RA 8792 with the following core members: Sr. Undersecretary Thomas Aquino; OPR Director; MIS Director; BETP Director; BITR Director; BPS Director; BTRCP Director; NCR Director; BOI Director; BOI-EID Director; BOI-TMD Director; BOI-ICT Services BDM; and SB Corp. President and COO. |
| 04 Jul 2006 | Administrative Order No. 155, "Designating the Secretary of Trade and Industry (DTI) as Export Enforcer"<br>- As an Export Enforcer, the DTI Secretary is vested with the power to act in behalf of the President on decisions reached by the Export Development Council (EDC), implement measures to lower the cost of doing business for exporters, call on all government agencies under the Executive Branch to implement such decisions, report on such implementation and exercise the EDC function of imposing sanctions on any government agency or officer of employee or private sector entity that impede efficient exportation of Philippine goods. |
| 08 Aug 2006 | Executive Order No. 557, "Establishing an Anti-Red Tape Task Force"<br>- The Anti-Red Tape Task Force, which is composed of full-time members from the Presidential Management Staff (PMS), CICT, DTI, Export Development Council Secretariat and NAPC and for invitation is the Philippine Chamber of Commerce and Industry (PCCI), with the Secretary of DTI as the Chairperson, is tasked to handle the anti-red tape module of the National Competitiveness Summit. |

*Source: Implementation of E-Commerce Act Team, Office of Policy Research, DTI*

## 1.2 Policy and Advocacy Initiatives

After seven years when the E-Commerce Act (Republic Act No. 8792 signed on 14 June 2000) was passed into law, there have been several accomplishments on its implementation. The recently-issued guidelines are:

- Department of Finance (DOF)-Department of Trade and Industry (DTI) Joint Department Administrative Order (DAO) No. 2, Series of 2006 - Guidelines on Electronic Payment and Collection System (EPCS) in Government
- Bangko Sentral ng Pilipinas (BSP) Circular No. 542, Series of 2006 - Consumer Protection for Electronic Banking
- Department of Trade and Industry (DTI) Department Administrative Order (DAO) No. 8, Series of 2006 - Prescribing Guidelines for the Protection of Personal Data in Information and Communications System in the Private Sector
- National Telecommunications Commission (NTC) Memorandum Circular (MC) No. 05-06-2007, Series of 2007 - Consumer Protection Guidelines (for Telecoms and Broadcast Services)
- National Telecommunications Commission (NTC) Memorandum Circular (MC) No. 04-06-2007, Series of 2007 - Data Log Retention of Telecommunications Traffic
- SME-FIT Program (April 2006) - SME Financing for Information Technology Build-Up

| | Date Issued | Date of Effectivity | Background/Objectives | Updates |
|---|---|---|---|---|
| DOF-DTI Joint DAO No. 2, Series of 2006 | 25 October 2006 | 15 November 2006 | Enable government to control, secure, and monitor revenue and fee collections electronically and facilitate easier transactions by the public with government | -Government Electronic Payment and Collection System Evaluation Team (GEPCSET) constituted on 9 November 2006, Chair is DOF, Vice-Chair is DTI<br>- Guidelines for the Evaluation and Accreditation of E-Payment and Collection System in Government (Technical IRR) issued on 15 January 2007<br>- 2007 Action Plan formulated on 03-05 May |

| | Date Issued | Date of Effectivity | Background/Objectives | Updates |
|---|---|---|---|---|
| | | | | 2007 |
| BSP Circular No. 542, Series of 2006 | 1 September 2006 | 26 September 2006 | - Provides the rules and regulations concerning consumer protection for electronic banking products and services<br>- Governs the implementation of e-banking activities for purposes of safeguarding customer information; preventing money laundering and terrorist financing; reducing fraud and theft of sensitive customer information; and promoting legal enforceability of banks' electronic agreements and transactions | - The Supervision and Examination Sector – Consumer Affairs Group (SES-CAG) was established on 16 October 2006 under the Office of Supervisory Policy Development (Office Order No. 892)<br>- The SES-CAG is responsible for the following:<br>▪ Handling consumer issues involving financial institutions (FIs) under BSP supervision<br>▪ Enhancing the public's financial literacy on matters pertaining to FI's financial products and services |
| DTI DAO No. 8, Series of 2006 | 21 July 2006 | 15 August 2006 | - Encourages and provides support to private entities to adopt privacy policies on protection of all types of personal data in information and communications system<br>- Prescribes rules governing data protection certifiers and the general principles on protection of personal data<br>- Provides for the establishment of a Privacy Complaints Office (PCO) which shall act as central repository of complaints on any privacy violations | - Philippine Accreditation Office (PAO) revised the application form and guidance document for the accreditation of Data Protection Certifiers to better suit the requirements of DAO 8.<br>- Certifying Bodies (CBs) operating in the country have been notified that PAO is ready to accept applications for accreditation. However, CBs that signified interest for accreditation have not pursued application. |

| | Date Issued | Date of Effectivity | Background/Objectives | Updates |
|---|---|---|---|---|
| NTC MC No. 05-06-2007, Series of 2007 | 08 June 2007 | 29 June 2007 | - Covers all broadcast and public telecoms entities including Value Added Services and content providers<br>- Provides guidelines for charging and billing subscribers<br>- Provides procedures in filing complaints with NTC for lost/stolen cell phones, malicious text messages, text scam and spam | |
| NTC MC No. 04-06-2007, Series of 2007 | 08 June 2007 | 29 June 2007 | - Requires PTEs to retain records of bills and completed calls/traffic within 2 months for non-metered services with fixed monthly charges and 4 months for other telecom services, from the date calls were made<br>- PTEs to allow access to NTC and the complaining subscriber access to records (i.e., traffic data on the origin, destination, date, time and duration of communications) upon formal written request and in connection with the complaint, and provide NTC hard copy of records within 3 days from date of request | |
| SME-FIT Program (April 2006) | April 2006 | | - Direct lending facility of SB Corp. intended to help SMEs develop some degree of IT capability through the acquisition of simple hardware facilities, software solutions, website | - Accredited two IT providers as conduits of the program: the E-methods for Business Management (EMBM) and Global Wireless Connections for a credit line of P 1.0 Million |

| | Date Issued | Date of Effectivity | Background/Objectives | Updates |
|---|---|---|---|---|
| | | | development, training and tutorial packages from IT providers<br>- A rediscounting scheme using IT providers as conduit and primary borrower<br>- The loan is in a form of a credit line of up to P10M depending on the asset size of the IT provider | each for one year.<br>- Briefings are regularly being conducted every month to further promote SB Corp financing programs, especially SME-FIT.<br>- Other IT-related conduits (i.e., ANOVA Computer and Cellular Phones and Easybyte Computer Ventures) availed of SME Flexible, a lending facility for business expansions. |

*Source: Updates on the Implementation of E-Commerce Act, Office of Policy Research, DTI*

### 1.2.1 Accession to the Revised Kyoto Convention (RKC)

Philippine Exporters Confederation (PHILEXPORT) with assistance from 2 United States Agency for International Development (USAID) projects, funded an applicability, situational, and gap analysis on Philippine compliance with the RKC. The findings and recommendations were endorsed to the President. The Department of Foreign Affairs (DFA) clearing with other government agencies before ratification.

The summary of findings is as follows:

In the General Annex, the country is compliant in 70 out of 118 standards. In Chapter 10, the Philippines is fully compliant. On the other hand, the country is not compliant in 6 standards and 3 transitional standards. For those in which Republic of the Philippines (RP) legislation is SILENT, a Manual of Customs Procedures may be issued as regulation enough for compliance.

For specific annexes, the country is compliant in 214 out of total of 393 standards. Fully compliant in Chapter 1, Specific Annex K. The country is non-compliant in 174 standards of the specific annex. Moreover, there are 33 standards and recommended practices that are inconsistent with RP laws, hence, RP to express reservation. There are 2 standards and recommended practices for RP to amend regulations, not laws, for compliance. For those in which RP legislation is SILENT, a Manual of Customs Procedures may be issued as regulation enough for compliance. In summary, the Specific Annexes are manageable. RP is

compliant in 54% of total standards and recommended practices in chapter not rejected by RP. The country can be RKC compliant in nearly 29% of the standards and recommended practices through guidelines in the form of Manual of Customs Procedures issued as regulations.

In the end, the Specific Annexes (Sp) that RP has reservations are:

1. Sp Annex A Chapter 1 Recommended Practice 9,10,11 and Chapter 2 Rec Practice 10
2. Sp Annex B Chapter 3 Rec Practice 6, 7
3. Sp Annex C Rec Practice 2
4. The whole Sp Annex D
5. Sp Annex E Chapter 2 Rec Practice 6 & 9
6. Sp Annex F Standard 3 Rec Practice 25, 26
7. Sp Annex G Chapter 1 Standard 5 Rec Practice 9,10,14,19,21,23
8. Sp Annex H Standard 25 Rec Prac 15,21
9. Sp Annex J Chapter 1 Rec Practice 9, 14, Chapter 3 Standard 13

Moreover, the National Strategy for RKC Compliance is enumerated below:

1st stage:

- General announcement and order
  - Executive Order (EO) mandating compliance by all concerned agencies to all standards and recommended practices in the General Annex and specific annexes not inconsistent with current laws
  - Will include instructions for concerned agencies to submit lists of regulations inconsistent with the recommended practices and time table for aligning
- Issuance of a general amendatory implementing rules and regulations (IRR) for those standards and accepted practices not inconsistent with the Code but are inconsistent with national legislation

2nd stage:

- Preparation of a Manual of Customs Operations
  - Structured in line with the RKC particularly with the Specific Annexes, with a section for each specific annex
  - Must incorporate various RKC standards and accepted practices as provided in the National Strategy and the Instrument of Accession
  - Preparation of a Manual of Customs Operations

- o Private sector and donor agencies participation in developing the manual of customs operations and compliance

3rd stage:

- Drafting of amendatory laws for those provisions of the RKC that are inconsistent with the current laws.

The findings of the study are posted in www.rkcphil.net.

### 1.2.2 National Competitiveness Council – Working Group on Transaction Costs and Flows/ Anti-Red Tape Task Force

The National Competitiveness Council (NCC) was created under Executive Order No. 571 (Creating the Public-Private Sector Task Force on Philippine Competitiveness), issued on 05 October 2006, to implement the Action Agenda resulting from the National Competitiveness Summit (NCS). The NCS involves coordination with public and private institutions regarding prospects for competitiveness as well as the mobilization of funding from international organizations. The Task Force is co-chaired by the DTI Secretary for the public sector, with private sector member as counterpart. Other members include four (4) secretaries, 2 business organizations, 1 academe and 1 civil society.

The NCS has eight (6) Working Groups (WGs) with corresponding private sector Champions. Such WGs refer to the identified factors/drivers of competitiveness, namely:

1. Competitive Human Resource Efficient Public and Private Sector Management
2. Effective Access to Financing
3. Improved Transaction Costs and Flows
4. Seamless Infrastructure Network
5. Energy Cost Competitiveness and Self-Sufficiency Special Concerns with the Ombudsman and Judiciary
6. Special Concerns with Legislature and Flagship Projects

Particularly, focus on the WG on Transaction Costs and Flows (TCF) will be important to trade facilitation. Below are the major projects of the WG-TCF:

| Project | WCY Indicator |
|---|---|
| 1. Improve the procedures for the entry and exit of business persons (Short Term – Bureau of Immigration) | Immigration Laws |
| a) ACR-ICard implementation (3 months) | |

| Project | WCY Indicator |
|---|---|
| b) Visa upon arrival application (3 months) | |
| 2. Enhance the procedures for the entry and exit of goods (Short Term-Bureau of Customs)<br>a) X-ray machines for imported/export inspection<br>b) National Single Electronic Window<br>▪ BOC-Department of Agriculture link (3 months)<br>▪ Other agencies link (12 months)<br>c) Automated System for Customs Data (ASYCUDA) | ▪ Transparency<br>▪ Public Service<br>▪ Bribing and Corruption<br>▪ Customs' Authorities |
| 3. Consistency in the implementation of business rules at the national and local levels (Long Term)<br>▪ Prioritization levels:<br>~ 1st level: cities of National Capital Region<br>~ 2nd level: priority sectors and other key cities<br>~ 3rd level: other locations increasing coverage per year<br>a) Benchmarking and Best Practices<br>b) Capability Building | ▪ Policy direction of the government<br>▪ Government decisions<br>▪ Transparency<br>▪ Bribing and Corruption<br>▪ Ease of doing business (Worldbank, WB)<br>▪ Start up days (WB) |
| 4. Improve the processes in starting, maintaining and closing a business (Short-Long Term)<br>a) Phil Business Registry System<br>▪ Business Registry (DTI-2007)<br>▪ Business Portal (DTI-2008)<br>b) Streamlining of procedures on business transactions of DENR (DENR 2007-2008)<br>c) Virtual Call Center (CICT 2007-2008)<br>d) Establishment of business support tools (e.g. OSS, CCD, etc.) and streamlining procedures in selected local areas (LGUs and NGAs in the localities 2007-2010) | ▪ Transparency<br>▪ Public Service<br>▪ Bribing and Corruption<br>▪ Ease of doing business (WB)<br>▪ Start up days (WB) |

| Project | WCY Indicator |
|---|---|
| 5. Institutionalize regulatory impact assessment on present and/or revised government requirements (Long Term – DTI, National Economic Development Authority, Department of Budget and Management) | ▪ Policy direction of the government<br>▪ Adaptability of government policy<br>▪ Government decisions<br>▪ Transparency<br>▪ Public Service<br>▪ Regulation Intensity<br>▪ Ease of doing business (WB)<br>▪ Start up days (WB) |
| 6. Harmonize incentives (Long Term – DTI, DOF, Department of Interior and Local Government/ULAP/ Leagues) | ▪ Policy direction of the government<br>▪ Legal and regulatory framework<br>▪ Adaptability of government policy<br>▪ Government decisions<br>▪ Political parties<br>▪ Transparency<br>▪ Public Service<br>▪ Creation of firms<br>▪ Ease of doing business (WB)<br>▪ Start up days (WB) |

For the Anti-Red Tape Task Force, which is the group overseeing the Transaction Cost and Flows Working Group, Development Academy of the Philippines proposes the project entitled “Anti-Red Tape in the Issuance of Business Permits and Other Related Services”. This proposal focuses on reducing time, requirements, costs and signatures to set up business through simplification, standardization, and certification of processes and requirements in the application of licenses and permits from local governments. The result of these commitments will be embodied in an Local Government Unit (LGU) Service Charter on Trade Services. This project will be undertaken in two stages:

1. Simplification and standardization of forms and processes for business permits – will include start-up/selection of pilot LGU, data/process review and assessment, presentation and validation of findings, pilot testing (Luzon, Visayas and Mindanao).
2. Formulation of Service Charter and Certification as Red Tape-Free – will include drafting of the service charter, presentation and approval of the draft, EO drafting, printing and publication of service charter, development of criteria and guidelines as red-tape free certification, training design development and assessors training for DTI and Development Academy of the Philippines.

Additionally, for the Management Working Group, some of their projects are:

1. Implement a quality management system for government offices to achieve ISO 9000 certification, to be worked out by DBM, DAP, Civil Service Commission to address the unwieldy bureaucracy and compensation structure
2. Fast-track implementation of the government rationalization program

| | Total | Submitted | Approved | Under Evaluation | For Revision |
|---|---|---|---|---|---|
| Departments | 21 | 19 | 2 | 16 | 1 |
| Other Executive Offices | 29 | 28 | 7 | 20 | 1 |
| GOCCs | 62 | 32 | 5 | 22 | 2 |

3. Institutionalize a system of cross-posting between Senior government officers and equivalent local officers from private business corporations, which is to be started
4. Develop programs to have LGUs achieve world-class performance by over half of cities in 2008, to be started by DILG in cooperation with the leagues of LGU executives
5. E-Governance in all government offices, for empowerment and budgetary allocation through CICT
6. EBESE, 70 beneficiaries with Employers Confederation of the Philippines in 2006, needs additional resources to continue
7. Bayanihan for productivity, needs to be sustained

For the Infrastructure Working Group, their priority projects are:

- EDSA Rehabilitation
- Subic Bay Port Development
- SCTEP
- Manila Bulk Water
- Aqueduct 5 & 6

Those projects with outstanding issues causing delays were the following:

- Ninoy Aquino International Airport (NAIA) 3 – valuation and just compensation; technical defects

- South Luzon Expressway 1,2,3 – non-renewal of PNCC franchise by Congress, which is expiring end April 2007; International Finance Corporation (IFC) loan pending franchise renewal
- STAR 2 – 23% slippage mainly due to right-of-way problems
- RORO ports (Central Nautical Highway) – 7 out of 16 delayed either due to right-of-way problems, bad weather conditions, or conflict with the LGU
- C5 Expressway (NLEX-SLEX Link) - DBM released Php 100 M out of Php 1.3 B requirement to address right-of-way acquisitions
- North-South Rail Linkage – ROWA/relocation of informal settlers; opening of bids on March 22, 2007

Other projects are:

- LRT 1 North Extension: design has been approved and the invitation to Bid was published on 28 January 2007; budget for reallocation; Gov't to float bond worth Php 6Billion
- Clark Airport - Masterplan Phase I funding of FS approved in principle with the NEDA cabinet group
- Northrail Project - on-going clearing operations and relocation of informal settlers; feasibility studies ongoing; financing being arranged
- Southrail Project – NEDA reviewing FS
- Light Rail Transit 1 South Extension - NEDA-ICC already approved the project; LRTA is expected to proceed with publication of invitation to bid; forward obligation authority (FOA) to the DOTC/LRTA being considered to cover budgetary requirements for the periods 2007-2011
- Laguindingan Airport - Land Acquisition nearing completion, with ongoing negotiation with Ayala Land for the donation of land
- Metro Rail Transit 7 – invitation for Swiss challenge published
- Cebu Bulk Water - NEDA approved the project under Swiss Challenge
- Puerto Princesa Airport - funding shall come from RP's royalty share of Malampaya energy projects
- Kalibo Airport - Delay in the acquisition of the proposed site

This working group emphasized its Soft Infra (Policy) recommendations, with particular mention of the draft EO 500-B; the Tiger Air issue (given only 3 months by Civil Aeronautics Board under "liberalized charter," when issuances before covered 6 months to a year, even as it handles 40% or 200,000 of Clark's 500,000 passenger traffic, provides P100 million revenue for RP, and is an ASEAN carrier); and the need to create "ROWA Courts" to facilitate

right-of-way issues.

Moreover, the International Finance Corporation will be conducting the Doing Business Subnational in the Philippines. This will elaborate cost of doing business indicators in 17 cities. The selected indicators are starting a business, registering property, getting licenses. The 17 cities are: Caloocan, Las Pinas, Makati, Malabon, Mandaluyong, Manila, Marikina, Muntinlupa, Paranaque, Pasay, Pasig, Quezon City, Taguig, Valenzuela, Cebu, Lapu-Lapu, Mandaue, and Davao. The local partner is Asian Institute of Management.

Key milestones:

1. kick off mission
    a. project presentation to local public officials
    b. meetings with private sector
2. right of reply
    a. confidential consultation with each city
    b. feedback on preliminary results
    c. information regarding ongoing reforms
3. dissemination conference
    a. high level public and private sector champions
    b. media strategy

### 1.2.3 Administrative Order No. 170

This administrative order, which was issued on 29 December 2006, established the working arrangements for the effective operation of the Philippine Government Portal, delineating the responsibilities of specific government agencies. The Office of the Executive Secretary (OES) exercises the general oversight functions over the operations of the government portal. The responsibilities of other government agencies are:

a. Office of the Press Secretary (OPS) – primarily responsible for direct supervision and maintenance of the government portal
b. Commission for Communication and Information Technology (CICT) – responsible for the portal's network and security management.
c. Philippine Information Agency (PIA) – responsible for ensuring that the site's overall appearance reflects the values and aspirations of the Philippine government.
d. Other government agencies – responsible for providing content, subject to the editing and approval of the OPS.

### 1.2.4 Executive Order No. 605

This executive order, which was issued on 23 February 2007, institutionalizes the structure, mechanisms, and standards to implement the government quality management program (GQMP). All department and government agencies are directed to adopt the ISO 9001:2000 Quality Management System as part of the implementation of a government wide quality management program. The objectives of GQMP are:

a. promote and enhance public sector performance through the adoption of ISO 9001:2000 Quality Management System in all agencies;

b. Develop an institutional infrastructure that shall provide certification with international accreditation;

c. Establish the citizen's charter of key government offices that shall be provided to the transacting public as government's manifestation of service guarantee; and

d. Recognize citizen-driven government organizations that have attained ISO 9001:2000 certification for other government agencies to emulate.

## 1.3 Statistical Information

### 1.3.1 State of Web Presence of National Government Agencies for the first quarter of 2007

Of the total 375 NGAs, 94.4 percent or 354 have web presence while 5.6 percent or 21 NGAs have no web presence. According to stages of e-government by the UN-ASPA standards, Stage 4 is still the same with ten (10) NGAs having transactional websites. Government agencies under Stage 3, however, have increased from 40.34 percent or 142 NGAs to 41.24 percent or 146 NGAs. The increase in figures is the result of upgrading of web presence of some agencies. Government agencies under Stage 2 has a slight decrease to 40.11 percent or 142 NGAs from the previous quarter's 40.63 percent or 143 NGAs. Stage 1 have decreased to 15.82 percent or 56 NGAs from previous quarter's 16.19 percent or 57 NGAs.

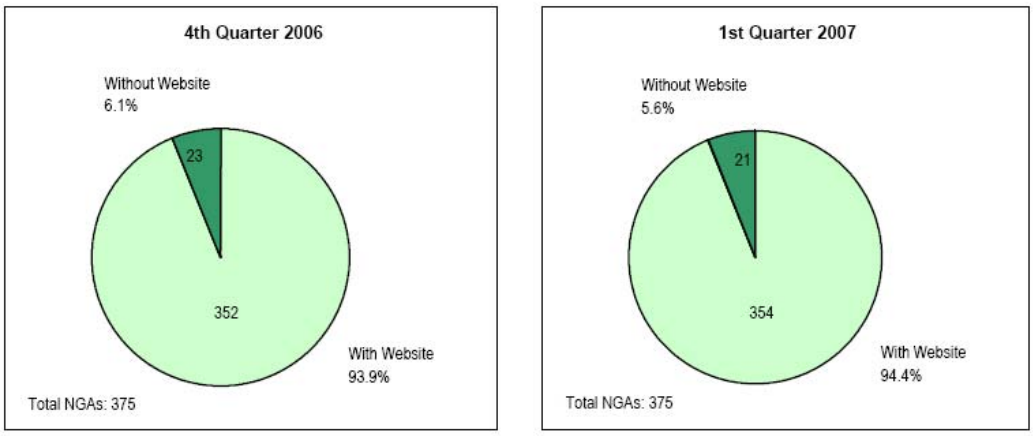
### 1.3.2 State of Web Presence of State Universities and Colleges for the first quarter of 2007

Of the total 111 SUCs, 49.55% or 55 SUCs have web presence compared to fourth quarter's 55% or 61 SUC's. There are 50.45% or 56 SUCs without web presence. According to stages of e-government by the UN-ASPA standards, 40% or 22 SUCs have made it to Stage

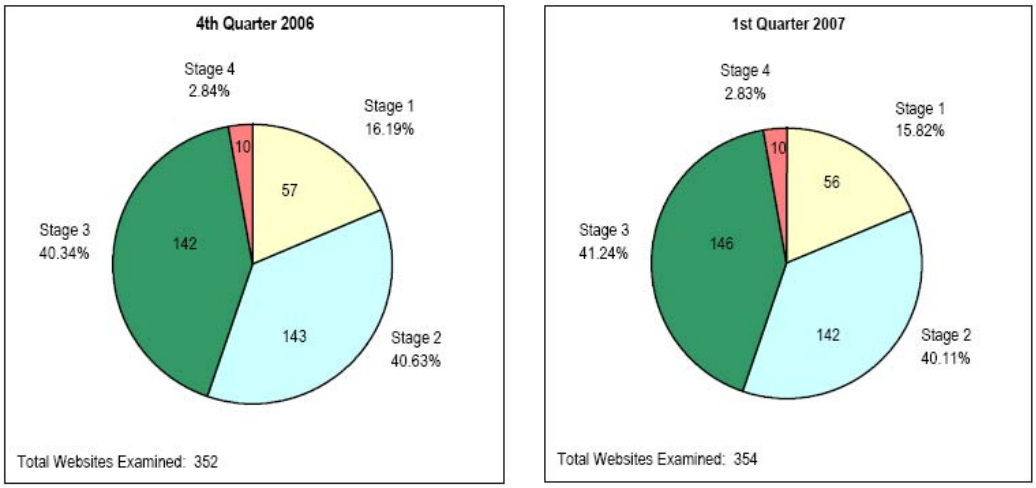
3 from previous quarters' 31.15% or 19 SUCs. However, SUCs under Stage 1 and Stage 2 fell down or decreased compared to last quarter's data with 15 and 18 SUCs respectively. This is due to either the upgrade of some SUC's to Stage 3 and the increase in the number of SUC's without web presence.

*Source: National Computer Center website, [www.ncc.gov.ph](http://www.ncc.gov.ph)*

**State of Web Presence in the National Government Agencies (NGAs)**




**NGAs Websites According to Stages of E-Government (UN-ASPA)**




*Source: National Computer Center website, [www.ncc.gov.ph](http://www.ncc.gov.ph)*

# SECTION II – EDIFACT/ebXML/XML Based STANDARDS DEVELOPMENT

## 2.1 BPS Standard and Conformance Portal

The Bureau of Product Standards (BPS), with assistance from USAID project, has undertaken the project "Standard and Conformance Portal". This project that will serve as a mechanism in providing the needed technical information to Philippine exporters such as administrative, documentary and legal requirements to Philippine exporters to minimize technical barriers to trade (TBTs) and the unnecessary cost of compliance. It shall inform the export business community about proposed technical regulations, and provide a mechanism for engagement with proponents to consider their concerns before such regulations are finalized; improve the access of Philippine exports to international markets by increased compliance to TBT and sanitary and phytosanitary (SPS) requirements as a result of enhanced notification system and ICT infrastructure; improve exporter access to testing and certification for compliance with necessary technical regulations; and enhance private-government coordination in the development and maintenance of the established "Standards & Conformance Portal".

The expected outputs are:

a. Easily retrievable information to exporters on standards, administrative, documentary and legal requirements for specific products and services in specific markets, particularly the major trading partners (e.g. USA, Japan, Europe, China and Singapore) to comply with such requirements

b. Mechanism for exporters' engagement with proponent WTO members of new, revised or amended technical regulations to have their concerns considered strongly before regulations are finalized/adopted

c. Advisory and facilitation assistance network to access appropriate testing and certification organizations for compliance with necessary requirements. Networking will be initially focused on the Philippines and the ASEAN member countries.

d. Institutional arrangement between the Philippine private and public sectors to sustain the "Standards and Conformance Portal" and continuously enhance its capabilities

## 2.2 Task Force on Export Controls

The Bureau of Customs (BOC), to address Philippine cooperation in global efforts pertaining to the non-proliferation of Weapons of Mass Destruction (WMDs), created and constituted a Task Force on Export Controls (BOC-TFEC) under Customs Special Order No

5-2007. This CSO enumerated BOC-TFEC duties and responsibilities:

a. to coordinate the Bureau's efforts in formulating proposed customs laws, rules and regulations, and orders relative to controls to be imposed against the proliferation of WMDs and related articles; to spearhead the enforcement of the same; and to enlist the assistance of other groups, services, units and personnel of the Bureau, and

b. to interact and coordinate with other government agencies relative to the requirements/needs of the BOC-TFEC.

The Bureau of Customs (BOC) has also provided container x-ray machines for inspection of various cargoes imported.

## 2.3 National Single Window

The national single window project under the oversight of the Bureau of Customs is still a project on its early implementation. The project was officially launched early this year as part of the ASEAN international Single Window initiative. The system itself seeks to initially implements internal single window projects in ASEAN countries so as to facilitate more efficient and transparent customs processes within and among countries. In the Philippine context, the BOC has taken steps to integrate customs processes through computerization and through agreements/partnerships with other government agencies. According to Deputy Commissioner Arevalo, "the agreements range from acquisition of electronic permits and clearances, shipping manifests, import/export documents, advanced ship profiling and other custom-related requirements, as well as intelligence networks". Plans for the National Single Window include fully computerized and internet-based networks as well as full computerization of the BOC within the year. The initiative itself would result to more efficient customs processes but most especially, it would facilitate better trade relations among ASEAN nations. In fact, for the past months, the customs reforms brought by this initiative have helped properly enforcing piracy and IPR laws. Almost 800 million pesos worth of confiscated goods was taken upon the institutional changes were made in the bureau.

## 2.4 GXS' RosettaNet eCustoms Solution

On August, 2006, the Philippine BOC launched the use of GXS RosettaNet-based customs clearance solutions in accordance with its plight to create a more automated customs system in the country. GXS, a provider of business-to-business (B2B) e-commerce solutions, offers a system to make customs clearances easier and faster for high-tech industry manufacturers as well as freights forwarders and customs brokers in the country. These industries are what have been driving the countries growth for the past years, and by having a

system in place, the industries may become more enhanced and strengthened. This system securely sends customs declarations directly to the BOC's Operating system so as to speedily process transactions for the said vital industries. The Philippines considered to be the first country in the world to use and apply the GXS RosettaNet-based eCustoms solution in its entirety for its customs processes.

# SECTION III – Trade Facilitation/eBusiness/ eCommerce Related PROJECT UPDATES

## 3.1 Anti-Money Laundering Council (AMLC) – Transaction Monitoring and Analysis System (TMAS) Project

The TMAS project was undertaken to establish the AMLC as a world-class financial intelligence unit aligned with the actual implementation of the AMLA legislation and its subsequent changes. The legislation is applied in operational layers as the regulations and procedures and built into the system components that support them. The main system of this project is the Transaction Monitoring and Analysis System which has the following components:

Phase 1

- Data Management and Consolidation
- Case Management and Workflow
- Document Management and Imaging

Phase 2

- Data Mining
- Link Analysis and
- Visualization

**Project Status:**

- Phase 1
  - For pilot testing of the Data Management and Consolidation component.
  - For deployment to AMLC users of the Case Management and Document

Management components.

- On going parallel run of reports from interim system vs. reports from TMAS.

- Phase 2
  - Conceptual specifications of Data mining component under study - Software for link analysis and visualization component acquired and implemented.
  - HW/SW requirements, network cabling and security equipment have been acquired and installed.
  - Network infrastructure is already in place at primary site and back up site.

## 3.2 Bureau of Customs (BOC) – ASYCUDA World (e- Customs)

The ASYCUDA WORLD Project primarily aims to increase the collection of lawful revenues and lower the transaction costs from imported articles and all other dues, fines and charges accruing under the enforcement of Tariff and Customs Code (TCC) and other laws relating to tariff and customs administration. This project will also automate/web-enable the major BOC processes and achieve the ASEAN Single Window and be a showcase for e-government projects.

e-Customs (ASYCUDAWorld) Systems:

- Imports and Assessment System
- Export Processing System
- BOC Portal
- Modernization
- Funds Monitoring
- Resources and Operations Management
- Enterprise Resource Management Systems (ERP/CRM)

**Project Status:**

1. Completed the consultancy services for RFP/TOR Development and Bid Management. Awarded to Pacific Consultants International in association with Zeus Networks, Inc.
2. On-going consultancy services for the upgrade of the ASYCUDA++ from version 1.15 to 1.18 from UNCTAD.
3. On-going implementation of e-Customs (ASYCUDAWorld) Project:

   *a. Systems implementation:*

- Completed the development of BOC information website (www.customs.gov.ph)
- Accreditation of two (2) of the initial four (4) value-added service providers is now at the acceptance technical testing stage; the other two (2) are still at the QA and technical testing stage. On-going preparatory activities for the parallel run in April
- On going systems integration/user acceptance testing with 14 major systems running under a pilot environment which will make up the 30+ systems to be implemented in CY 2007. Formal Acceptance testing for Financial Management System started.
- On going data conversion for the Enterprise Resource Planning Systems

*b. Modernization*

- Completed the rehabilitation of the Customs Computer Center (renamed as Customs ICT Center); completed the renovation of ICT offices at Manila International Container Port (MICP), NAIA, and Port of Manila; completed the renovation of the Formal Entry Division and Cash Division offices at the Port of Manila, the Technology Management Service and PC Training rooms at CRIC.
- Completed the re-cabling of the three Metro Manila ports and the offices under the Office of the Commissioner.

*c. Training/Change Management*

- Completed the conduct of technical trainings, project briefings/ overview, Train-the-Trainer program, and pre-requisite trainings to various stakeholders,
- On-going trainings on e-mail systems, Introduction to Computer Systems and Working with Windows for OCOM and Metro Manila ports users.
- Finalized the Business Process Operations Manual
- On-going distribution nationwide of communication materials, i.e., Project Backgrounder, Poster, Peryodikit (Newsletter), AVP
- On-going coordination/consultation meetings with Export Development Council on Export Processing; Department of Agriculture on Inter-agency Linkage (Nat'l single Window) and Arrastre Operators on On-Line Release system
- On-going coordination with other government agencies to progress National Single Window. Conducted briefings for BIR, DTI Bureau of Standards and Bureau of Import Services.

*d. Technical/Operations-IT facilities*

- Completed the delivery of hardware/ software/ network infrastructure to the ICT Center and offices/units under the Office of the Commissioner (includes servers and biometrics)
- On going delivery of hardware/ software/ network infrastructure to ports in

metro manila and nationwide and setup of e-Mail (plus user training) and PABX (VOIP) systems

- Completed installation of enhanced Wide Area Networks on 12 provincial ports.

4. Other developments:
   - The Electronic-to-Mobile (e2m) Project was formally launched on February 6 2007. This project will allow stakeholders (importers, exporters, brokers, etc.) to transact with BOC via the cellphone or thru SMS.
   - MOU with DA for the pilot implementation of the National Single Window was signed December 2006.
   - MOA with BOC, Philippine National Police (PNP), Philippine Economic Zone Authority (PEZA) and the Semiconductor and Electronics Industries of the Philippines, Inc. (SEIPI) was signed October 2006. The agreement is in line with the objective of the National Single Window.

## 3.3 Bureau of Food and Drugs (BFAD) – Automation of the Bureau of Food and Drugs Project

The BFAD Automation Project will facilitate a more transparent and systematic processing of applications, quick access to records, and strengthen the post monitoring of registered and nonregistered food, drugs, devices, cosmetics and other products covered under the BFAD mandate. The project also aims to automate and enhance the existing Registration and Licensing manual business process thus resolving the existing backlog on product applications and enhancing the agency's production capacity.

**PROJECT COMPONENTS:**

1. Development of BFAD Integrated IS (BIIS)
   - BFAD Licensing and Registration System
   - Post Monitoring and Licensing and Registration System
   - Access and Maintenance of the Formulation and Process of Licensed Products
   - Web page Development
   - Imaging System/Records Management System
2. Procurement of Intranet Solutions and Internet Services using the DSL 512kbs lines and a PABX System

**Project Status:**

*System Development and Implementation of BIIS:*

- On-going systems development for the Licensing and Registration System, and Records Management System.
- Completed the development of BFAD website, for uploading.
- Supply, Delivery and Acquisition of LAN Cabling and Internet Protocol:
- Completed the installation of structured cabling, network and IP Telephony devices
- Installation, Configuration, Training and documentation for and Internet Service Trunk lines:
- For finalization of the contract between PLDT and BFAD which covers the installation/ configuration of an Internet service and trunklines.

*Supply and Delivery of Various IT Equipment:*

- Completed the delivery of ICT equipment except for the five (5) additional personal computers.

## 3.4 Bureau of Internal Revenue (BIR) Integrated Computerization Project

The Project aims to contribute a stronger tax administration, resulting in an increase in revenue collections, more effective delivery of government frontline services, and minimizing red tape/ graft and corruption in the government. It should also provide convenient frontline services to taxpayers through an internet-based application for online taxpayer information and services, and verification of taxpayer compliance or non-compliance. The Project also involves the computerization of various applications of ICT in BIR operations and administration such as:

- Revenue Generating Systems
- E-Submission of Government Payees
- External Linkages
- Mobile Revenue Officers (ROs)
- Computer Assisted Audit Program
- Data/ Text Mining
- Automated Excise Data Management System (AEDMS)
- E-Services
- ITS Web Enablement

- E-Correspondence
- Automation of LA/ LN
- Upgrade TCP Infrastructure
- Business Continuity
- BIR IT Outsourcing

**Project Status:**

*e-Submission*

- Completed the pilot implementation of e-NGAS at BIR National Office
- On-going implementation of e-NGAS in 19 Revenue Regions
- Completed the preparation of the TOR for enhanced version of e-NGAS; development and acceptance on-going
- Pilot implementation of e-Submission of BIR
- On-going coordination with other government agencies for the rollout of e-Submission

*External Linkages with Government Agencies*

- On going project implementation
- Domestic Frame Relay Service (BIR-DOF Link)
- Awarded to Bayan Telecommunications, Inc. (Bayantel) through Negotiated

*Procurement*

- Awarded to Bayantel through Public Bidding
- Domestic Frame Relay Service (BIR-LTFRB Link) awarded to Bayan
- Telecommunications, Inc. through Public Bidding

*Mobile Technology*

- Contract for Mobile Subscription of Revenue Officers for the Tax Compliance Verification Drive Project (Mobile RO) awarded to Smart Telecommunications, Inc. through Public Bidding; project completed
- Subscription for Smart Telecommunications Inc. was terminated since March 2006
- Public bidding of Mobile Subscription of Compliance Verification Drive Project was deferred due to some technical issues on SIM Locking
- New TOR submitted for bidding

*Computer Assisted Program*

- Maintenance contract of 12 ACL units awarded to Prodigy Data Solution Pte. Ltd.
- Additional 30 units ACL Software procured through PS-DBM awarded to Prodigy Data Solution Pte. Ltd.; delivered to BIR
- On-going procurement for maintenance contract (42 units)

*Data/Text Mining*

- Contract for the Procurement of Data Mining Software awarded to Micro-D International, Inc. through Public Bidding
- Contract for the Maintenance of Software Licenses (consolidated eCorrespondence and Data Mining) awarded to SAS Institute (Phils.), Inc. through Direct Contracting; ongoing project implementation
- Contract for SAS Software Licenses (consolidated SAS software licenses for Data Warehouse, Client Tools for TPI, Client Tools for Excise Petroleum, eCorrespondence and Data Mining) awarded to SAS Institute (Phils.), Inc. through Direct Contracting
- Ongoing establishment of MOA with other agencies for data build-up

*Automated Excise Data Mgmt System (AEDMS)*

- Completed the procurement of resource requirements
- Project implementation suspended; for system enhancement (inclusive in Excise Tax Systems) under eFPS project

*e-Correspondence*

- Contract for eCorrespondence Project: Expansion of Letter Notices System and Integration of the eReport Card and other ITS-TPI Reporting Discrepancy Systems awarded to Micro-D International, Inc. through Public Bidding; completed in 2004
- Contract for eCorrespondence Project: Expansion of Letter Notices System and Integration of the eReport Card and other ITS-TPI Reporting Discrepancy Systems completed in 2005
- Contract for eCorrespondence Project: Expansion of Letter Notices System and Integration of the eReport Card and other ITS-TPI Reporting Discrepancy Systems awarded to Micro-D International, Inc. thru Negotiated Procurement
- Contract for the Maintenance of Software Licenses (consolidated with Data Mining) awarded to SAS Institute (Phils.), Inc. through Direct Contracting
- Contract for SAS Software Licenses (consolidated SAS software licenses for Data Warehouse, Client Tools for TPI, Client Tools for Excise Petroleum, eCorrespondence and Data Mining) awarded to SAS Institute (Phils.), Inc. through Direct Contracting

*ITS Web Enablement*

- Ongoing training and roll out of Payment Data Entry System (PDES) in

noncomputerized RDOs (80% complete)

- Development of web-enabled ITS to be included in the Lot B IT Outsourcing Project (Application Development and Maintenance)

*Automation of LA/LN Monitoring System*

- Completed the procurement of required resources
- Nationwide training and roll-out of stand alone systems (100% complete)
- Ongoing project implementation

*Business Continuity*

- Contract for the Business Continuity for Critical Production Servers awarded to the JV of ePLDT, Inc. & Sun Microsystems, Phils. through Public Bidding; bidding completed. On-going project implementation. This project will be consolidated with Data Center Hosting Services in 2006
- TOR for Help Desk Customization/ Consolidation submitted to DBM-PS for procurement; dropped for bidding because of absence of interested bidders.
- TOR for Help Desk Customization/ Consolidation replaced by Call Monitoring System to be procured through BIR BAC

*IT Outsourcing Lot A Project & Contract Management*

- Consultancy services rendered by KPMG Laya Mananghaya and Co.; project completed
- New TOR is being prepared for Phase II Lot B (Application Development & Maintenance)
- Consultancy services awarded to Admired Technologies, Inc. through Public Bidding; ongoing project implementation
- New TOR is being prepared for Phase II Lot C (Data Center Services)
- Contract awarded to the Joint Venture of Sun Microsystems Phils., Inc., ePLDT, Inc. and Philcox, Inc. through Public Bidding; contract extended until July 2006
- Contract awarded to SunPhilcox JV, Inc. Lot D (Data Capture Services)
- Contract awarded to ISI thru PS-DBM bidding

*Source: Report on the Status of ICT Projects funded under the E-Government Fund, as of April 30, 2007 National Computer Center website, www.ncc.gov.ph*

# SRI LANKA Progress Report


## ICTA

# 2007 Members Progress Report：SRI LANKA

## SECTION I – GENERAL CONDITION UPDATE

**1.1** Sri Lanka with a population of19 million increasingly using information and communication technology in all areas. Communication infrastructure has been improved and internet accessibility is available even in rural areas. To address the issue of accessibility the Information and Communication Technology Agency of Sri Lanka (ICTA – www.icta.lk) has set up 377 access centers ("Nenasalas – www.nenasala.lk) throughout Sri Lanka, with Internet, and email facilities, where education, training is provided, and also value added services such as reservation of medical personnel over the Internet.

**1.2** The issue of formulating and incorporating into the country's legal system suitable measures relating to ICT, so as to promote the development of ICT, and to create a facilitating legal environment is presently being addressed by the ICT Agency of Sri Lanka (ICTA).

The Electronic Transaction Bill was finalized with legal and policy inputs from ICTA and presented to the Parliament in March 2006 and was enacted as the Electronic Transaction Act no 19 0f 2006.

As a follow-up to the enactment of the e-Transactions Act, Sri Lanka became one of the first three countries in the Asian Region (and first country in South Asia) to sign the United Nations Convention on the Use of Electronic Communications in International Contracts (commonly known as the e-Contracting convention

**1.3** With regret that we mention that the person who promoted AFACT activities in Sri Lanka Prof. V.K Samaranayake who was Chairman of ICTA passed away on 6th June 2007. He pioneered the establishment of the Legal Working Group (LWG) under the AFACT, and was its first Chair.

## SECTION II – EDIFACT/ebXML/XML Based STANDARDS DEVELOPMENT

**2.1** Although there is no attempt at the national level at the moment to develop standards, action has been initiated to develop standard for port community. Both Customs and Port systems are based on EDIFACT standards.

## SECTION III – Trade Facilitation/eBusiness/ eCommerce Related PROJECT UPDATES

**3.1** Lanka Customs introduced an automated risk management system in 2007. The Risk Management Committee was setup and the committee based on reports from Intelligence and Post Audit Units decides the criteria. Accordingly declaration-processing system is being updated and instead of individuals deciding the channel, the system selects. Therefore it is transparent and has reduced the clearance time. Customs is able to evaluate the compliance level of the importers and agents.

**3.2** Sri Lanka Customs has improved its website (www.customs.gov.lk) providing a wealth of information. Added facilities included the tariff calculator where a user could be able to find out how much he has to pay for a consignment.

**3.3** The Ceylon Chamber of Commerce initiated action to issue Country of Origin certificate electronically.

**3.4** GS1 Sri Lanka (Global Standards 1) is in the process of developing a database of all the bar coded items in Sri Lanka. When it is finalized (within two months) it will be connected to the international system.

**3.5** The Sri Lanka Ports Authority has introduced an electronic payment system in certain areas in 2007 and it will be rolled over to other areas by the end of 2007. Agents can now submit the manifests and delivery order electronically. In addition to that facilities have been provided for users to make on line inquiries regarding berthing of vessels and de-stuffing of cargo. Further actions have been initiated to exchange data between Customs and Ports systems.

# THAILAND Progress Report

**Ministry of Information and Communication Technology**

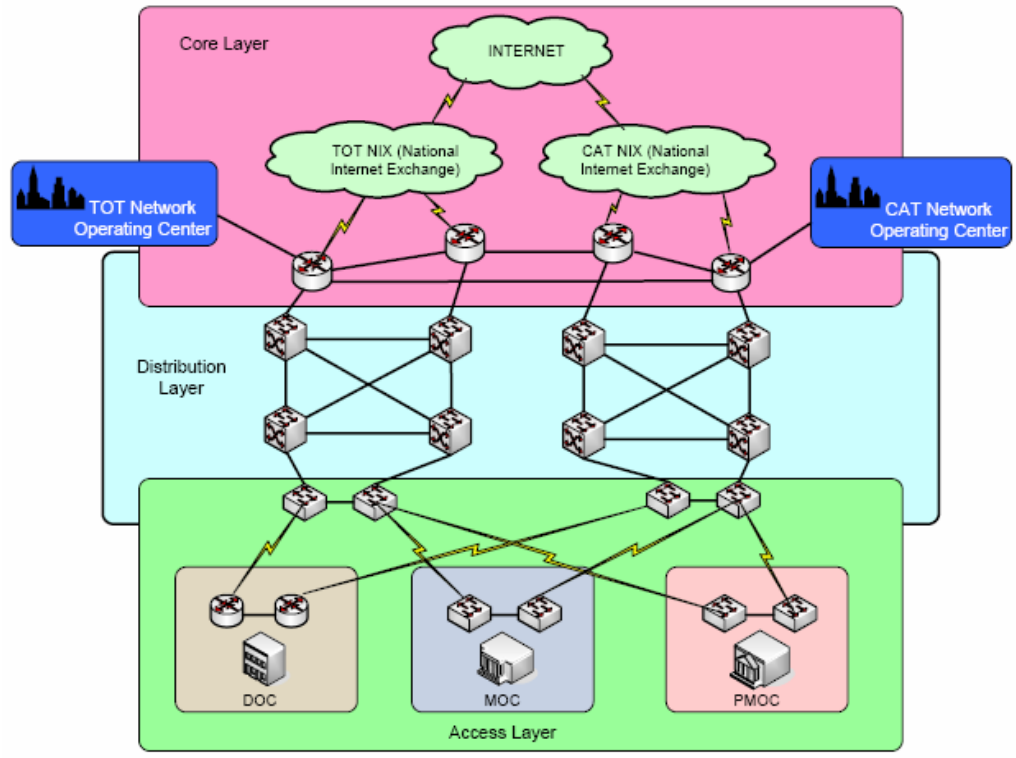
# 2007 Members Progress Report：THAILAND

## SECTION I – GENERAL CONDITION UPDATE

### 1.1 Telecommunication Infrastructure

#### 1.1.1 Government Information Network (GIN)

Ministry of Information and Communication Technology (MICT) is in the process of developing the Government Information Network (GIN) during 2006-2007. GIN intends to integrate the information network of all government agencies to the Ministerial Operation Centre (MOC) and Departmental Operation Centre (DOC), which will be linked to Prime Minister's Operation Centre (PMOC). With GIN, government's data and information can be managed more effectively and lead to the efficient decision making of Prime Minister.




**GIN's Conceptual Network Architecture**

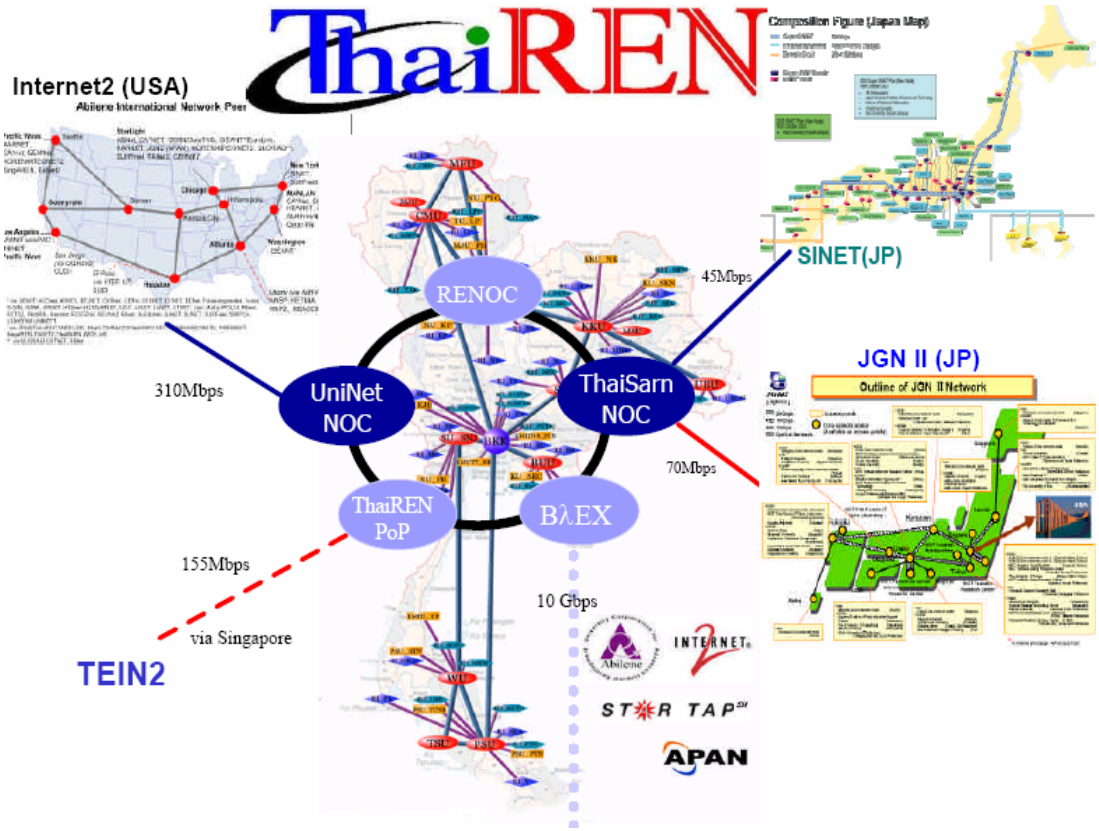
*Source: Ministry of Information and Communication Technology*

This highly secured and reliable network has been developed using a cutting edge technology that can support several information formats. The service coverage of the network will be broadened throughout Thailand. The Ministry targets to connect information network of 274 government agencies in Bangkok and surrounding provinces in the first phase and extends to cover 235 government agencies in the second phase.

### 1.1.2 Thai Research and Education Network (ThaiREN)

Ministry of Information and Communication Technology (MICT) in cooperation with National Electronics and Computer Technology Center (NECTEC) and Commission of Higher Education have developed Thai Research and Education Network (ThaiREN) to connect together two well-established research oriented networks including University Network (Uninet) and Thai Social/Scientific Academic and Research Network (ThaiSarn).

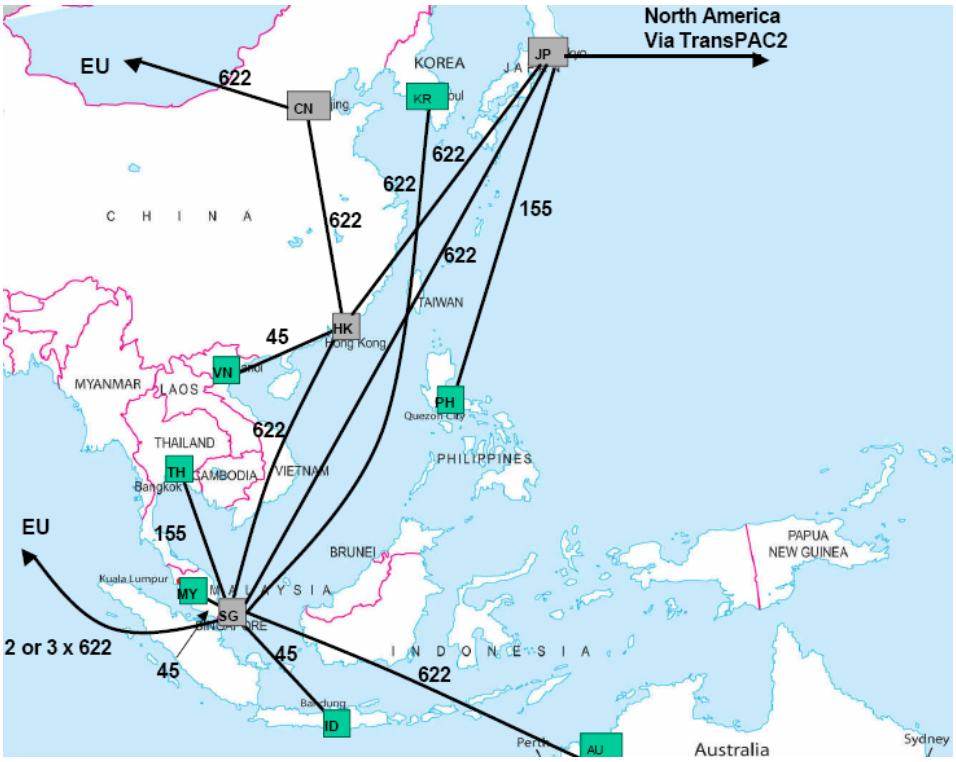
**Thai Research and Education Network (ThaiREN)**




*Source: National Electronics and Computer Technology Center*

ThaiREN, in addition, has also been connected to Trans-Eurasia Information Network Phase 2 (TEIN2) with network connection speed at 155 Mbps. The connection between these two networks will allow and encourage cooperative research among researchers in Asia Pacific.

**TIEN2 Topology**




*Source: National Electronics and Computer Technology Center*

The Ministry has made this network available to all universities and research institutes throughout Thailand since June 2006. The network has been extensively used. Sample applications of this network include Tele-Medicine, Distant Learning, Next Generation Network Testing (IPV 6), and Tele and Video Conferencing.

## 1.2 Legal Framework

There has been a remarkable progress in the development of legal framework necessary to support the uptake of e-commerce in Thailand. Following the effective enactment of

Electronic Transaction Bill with an incorporation of Electronic Signature on April 3, 2002, Electronic Transaction Commission chaired by Minister of Information and Communication Technology was founded according to Article 102 of the Bill with below mandate:

- To make sound policy recommendations to the Cabinet regarding the promotion and development of e-commerce as well as resolutions for any hindrance occurred.
- To monitor the operation of e-commerce
- To propose the development of necessary royal decrees to support the enforcement of Electronic Transaction Bill
- To issue regulations relevant to the implementation of electronic signature
- To handle all other matters as indicated in Electronic Transaction Bill

Under Electronic Transaction Commission, several initiatives that provide critical foundation for the development of e-commerce have been carried out by the Sub-committee on Legal Infrastructure. Key initiatives include:

- The Royal Decree on Regulatory Practices in e-Government Implementation has been put forth and become effective since November 26, 2006. Supplementary regulation regarding the practical approach for secure e-government transactions has been drafted and awaited for approval.
- The draft Royal Decree on Electronic Fund Transfer was in principle approved by the Cabinet. It has been submitted to Office of the Council of the State for further consideration.
- The draft Royal Decree and Supplementary Regulation on Services Related to Electronic Certification were also issued. They have been submitted to Office of the Council of the State for further consideration.

# SECTION II – EDIFACT/ebXML/XML Based STANDARDS DEVELOPMENT

## 2.1 Thailand e-Government Interoperability Framework (TH e-GIF)

In response to the government's directive in promoting cost-efficient exchange of information and linked-up services between applications of different platforms for citizens, Ministry of Information and Communication Technology has completed the preparation of Thailand e-Government Interoperability Framework. The framework aims to provide contractors commissioned to develop software solutions for government agencies with a set of guidelines that forms a basis of interoperability among applications in respect to process, data, and technical communication protocol.

Thailand e-Government Interoperability Framework comprises of two major parts. While the first part deals with managerial aspect of applications integration and development, the second part provides a set of common rules that guides different phases of application development from the elicitation business requirements in terms of process and information to the derivation of XML Schema from information model. The common rules are based on internationally-accepted standards. They include:

- UN/CEFACT's Modeling Methodology for an analysis and modeling of process and information requirements
- UN/CEFACT Recommendation No. 34 on Data Rationalization and Standardization for International trade as a guideline for aligning data elements used within and across information domain
- UN/CEFACT Core Components Technical Specification (ISO 15000-5) for the construction of information model
- UN/CEFACT XML Naming and Design Rules for transforming CCTS-based information model to XML schema

Technical specifications including communication protocol and security measure required to ensure secure and interoperable exchange of information as well as organizational mechanisms for the management of Thailand e-Government Interoperability Standard have also been attached to the latter part.

# SECTION III – eBusiness/eCommerce Related PROJECT UPDATES

## 3.1 Thailand Single Window e-Logistics

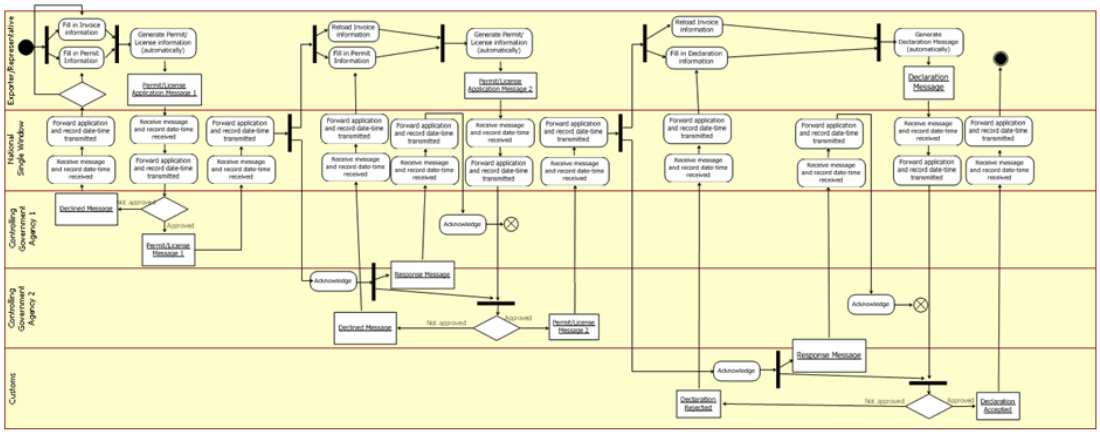
Recognized as a means to promote trade efficiency and national competitiveness, Single Window e-Logistics has been prioritized as one of the national agenda since 2003. Several projects have been initiated and implemented to affirm Thailand's commitment in accomplishing the ASEAN Agreement and Protocol to Establish and Implement ASEAN Single Window by 2008.

### 3.1.1 Royal Thai Customs

Royal Thai Customs was designated by the Cabinet as a lead agency responsible for coordinating with relevant public and private agencies to ensure the establishment of National Single Window and with other stakeholders in ASEAN to make possible a virtual environment for ASEAN Single Window.

As an organizational mechanism to push forward the development of National Single Window, Royal Thai Customs formed a special working group consisting of representatives from controlling government agencies, port/airport operators, banks and, IT service providers. Two sub-working groups have been operating under this special working group. While one works on the streamlining of business process and the alignment of data requirements, another works on technical communication protocol as well as related security issue.

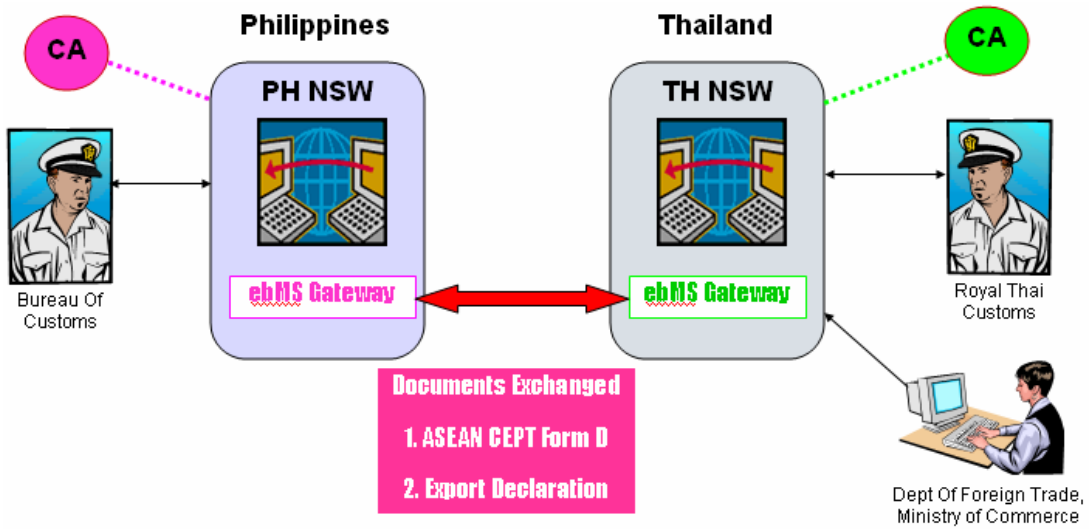
**Possible Business Scenario of License/Permit and Declaration Integration**




*Source: Institute for Information Technology Innovation, Kasetsart University*

The integration of license/permit and customs declaration information is a current area of emphasis. Different phases of implementation were defined according to organizational and technical readiness of participating agencies. The exchange of electronic messages will be based on HTTPS protocol through ebMS 2.0-compliant ebXML Message Handler (MSH). To ensure secure transactions, security module with an incorporation of digital signature will be implemented. Respective data requirements have already been identified. Relevant XML schemas have also been designed and developed.

**Conceptual Framework of Documents Exchange between Thailand and the Philippines**




*Source: Royal Thai Customs*

Under ASEAN Single Window framework, Royal Thai Customs in collaboration with Department of Foreign Trade and the Philippines' Bureau of Customs initiated a pathfinder project to study the feasibility of information exchange using an electronic message handler that was compliant with ebMS 2.0 specifications. Two messages in agreed XML format including Customs Declaration and Preferential Certificate of Origin for Intra-ASEAN Trade (ASEAN CEPT Form D) were successfully exchanged and integrated with respective back-end systems.

Besides driving the establishment of interoperable Single Window, Royal Thai Customs has been working to migrate Customs automation system for import and export cargo processing from EDI to XML. The newly developed e-Export system facilitates the administration of export procedure from cargo declaration to cargo clearance. EDI service for export cargo processing has already been cut off since July 1, 2007.

### 3.1.2 Ministry of Transport

Working towards National Integrated Single Window e-Logistics, Ministry of Transport recognize the need to improve its administration of procedural and documentary requirements to facilitate international transportation of goods. This ongoing 1-year project covers:

- The simplification of related business processes
- The harmonization of data definitions and regulatory/business names against those provided in WCO Data Set and United Nations Trade Data Elements Directory to establish Transport Standardized Data Set
- The development of information model for relevant electronic messages based on UNeDocs and XML schema according to UN/CEFACT XML Naming and Design Rules
- The pilot implementation of Transport Single Window e-Logistics

### 3.1.3 Ministry of Information and Communication Technology

Ministry of Information and Communication Technology has commissioned the study of possible investment and operational models for Thailand's Single Window e-Logistics. The model will be based on the framework put forward in Technical Guide of ASEAN Single Window and National Single Windows Implementation. The study is expected to finish by the end of August 2007.

Since the term of reference for National Single Window development will also be part of project deliverable, a sound understanding of information flow along export and import process is essential. The process and information flow of exporting and importing pre-defined products are being captured, modeled and analyzed using UN/CEFACT's Modeling Methodology.

### 3.1.4 Other Government Agencies

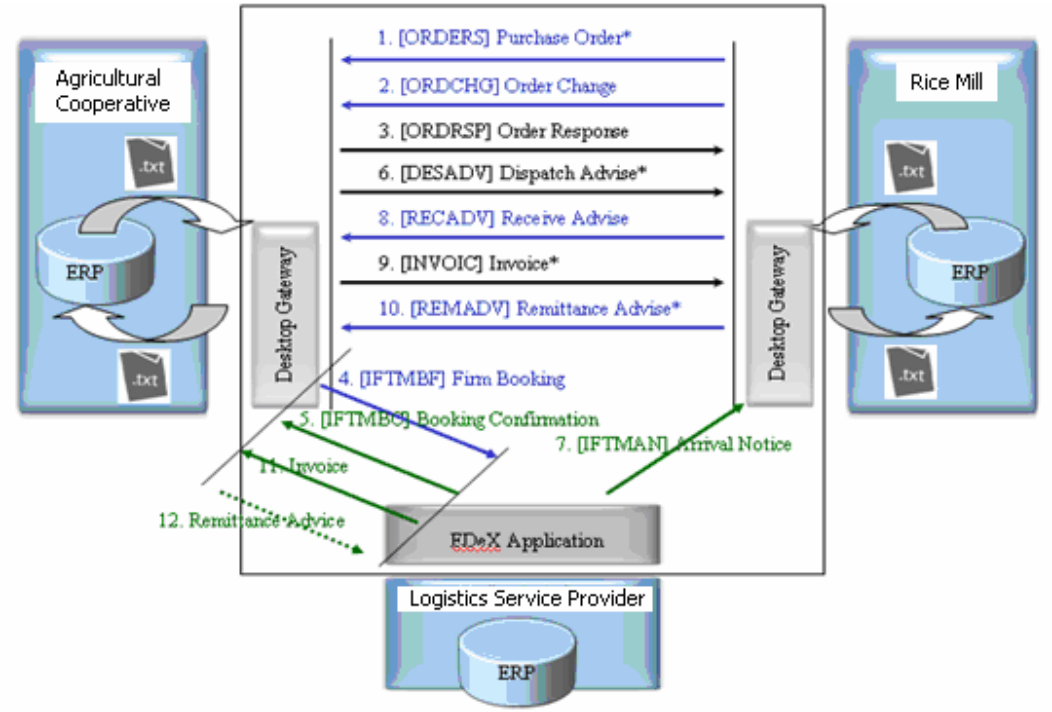
Department of Foreign Trade and several government agencies under the auspices of Ministry of Agriculture and Cooperatives are now offering an online service for export/import license/permit/certificate application.

| Government Agencies | Examples of Online Application |
|---|---|
| Department of Foreign Trade | – Certificate of Origin<br>– Certificate of Origin with Preferential Treatment<br>– Import and export license of general and some specific cargo for commercial and non-commercial purpose |
| Department of Livestock Development | – Health Certificate<br>– License for import, export, pass animals and/or animal remains through Thailand |
| Department of Fisheries | – Health Certificate |
| Department of Industrial Works | – Import and export license of hazardous substances |

## 3.2 Supply Chain Management and Traceability System for Jasmine Rice

The Software Industry Promotion Agency (SIPA) has worked with several organizations including the National Electronics and Computer Technology Centre, RFID Cluster under Thailand Embedded Systems Association and universities to implement a pilot project to showcase the use of ICT to facilitate information exchange between a rice mill, an agricultural cooperative and a logistics service provider, and thus improve efficiency of logistics processes for Thai jasmine rice.

**Conceptual Model of ERP/Logistics for Thai Jasmine Rice Showcase**




*Source: Software Industry Promotion Agency*

The EDI-based project was conducted in three north-eastern provinces where approximately 1.5 million tonnes of the rice are produced annually which is equivalent to 27 percent of Thailand's total production. RFID in addition has also been attached to each pallet of rice to allow the traceability of its movement from origin through to the destination. The project achieved satisfactory outcome. The concept will therefore be applied to other agricultural products.

## 3.3 National Interbank Transaction Management Exchange (ITMX)

Following a roadmap for Thai Payment System proposed in 2001 and a successful proof-of-concept implementation of XML/ebXML based payment system led by the Bank of Thailand in collaboration with Thai Bankers' Association, the National Electronics and Computer Technology Center, and Institute for Information Technology Innovation in 2004, "National ITMX Co., Ltd." was founded in July 2005 with shares being held by local commercial banks. The company has been operating under the supervision of the Bank's

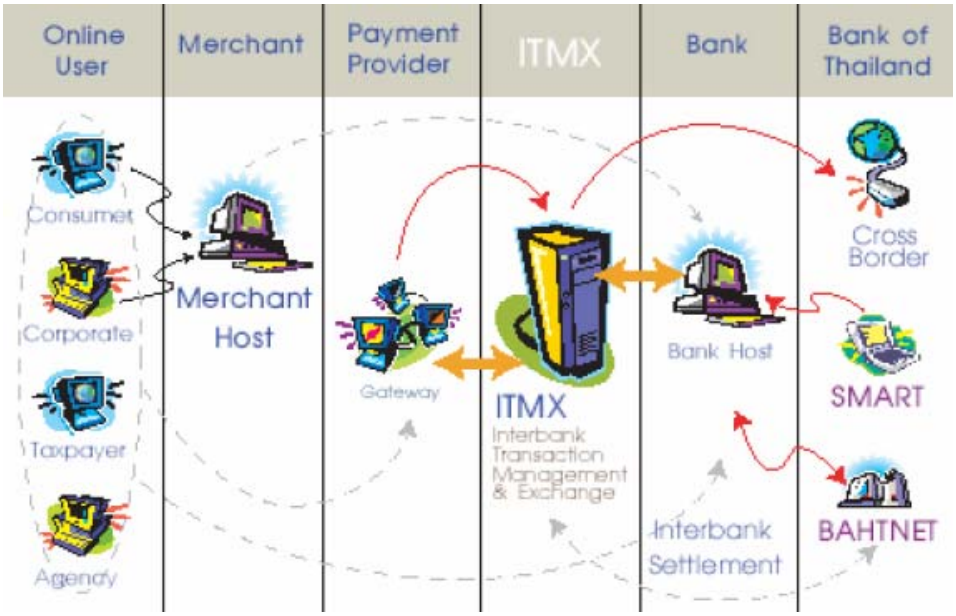
Payment System Committee with its prime objectives as follow:

- To establish an ebXML-based national gateway for electronic payment transactions that can be initiated from multiple channels such as ATMs, counters, Internet, and mobile phones across banking systems
- To eliminate the need for individual banks and financial institutions to upgrade and maintain their own payment system
- To support the growth of e-Business.

Having its first actual operation launched in April 2007, National ITMX is set to manage over 1.5 million transactions per day and projected to grow 15 percent annually over the next several years. Key features include:

- Payment transfer services both within and across borders for single payments and bulk payments
- Switching services for interbank payments for both domestic and international transactions
- Mechanisms for financial and operational risk control through Liability Manager
- Comprehensive processing recovery and full-fledged disaster recovery

**National ITMX's Conceptual Model**



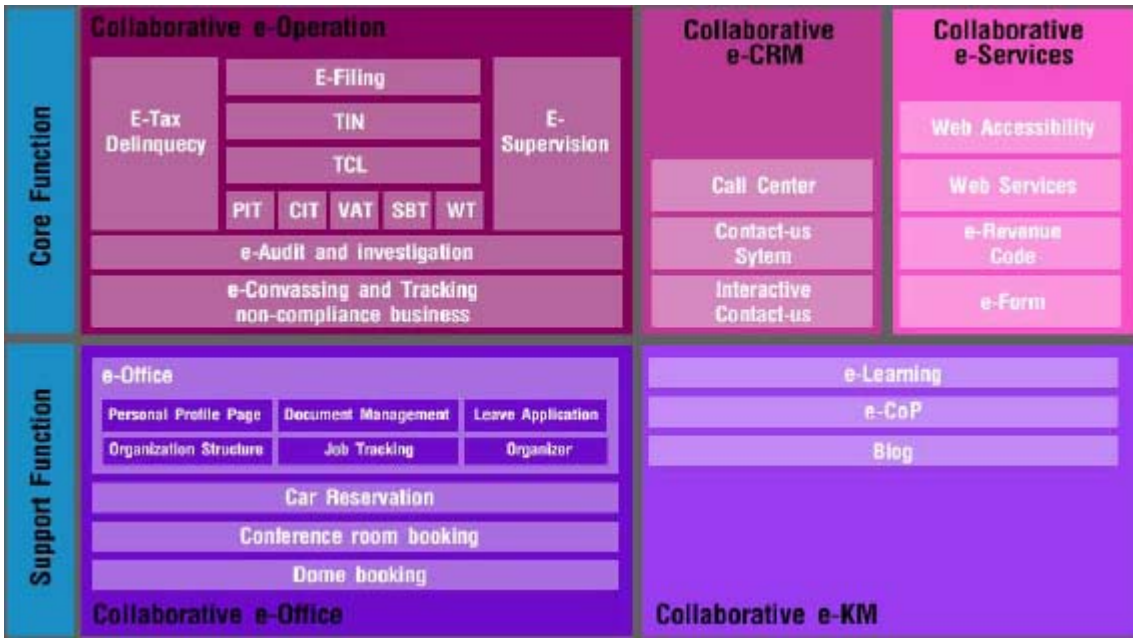

*Source: Bank of Thailand*

Currently, the provision of services in the first phase is limited to SMART Debit, SMART Credit, Credit Settlement, Fee distribution, and Bilateral Risk Settlement. According to national ITMX implementation plan, the provision of services will be extended to include ATM Pool and other low-value channels as well as single high-value transaction via Real Time Gross Settlement (RTGS) in its second and third phase respectively.

## 3.4 E-Revenue

The Revenue Department has upgraded its system to provide a higher level of service excellence. Web services technology has been applied to improve its operational collaboration with other regulatory agencies such as Customs Department, Excise Department, Land Department, Ministry of Commerce, and Ministry of interior, Social Security Office, and Securities and Exchange Commission of Thailand.

**Collaborative e-Revenue**




*Source: Revenue Department*

Various applications including Tax Identification Number system (TIN), Transaction Control Log system (TCL), e-Supervision system, e-Tax Delinquency system, e-Audit and Investigation system, as well as e-Canvassing and Tracking of Non-compliant Businesses has been developed to enable core functions of Revenue Department to be performed more efficiently and productively.

# 2007 Members Progress Reports

# 2007 Associate Members Progress Reports

Pan-Asian E-Commerce Alliance (PAA) Progress Report

eBusiness Asia Committee Progress Report

# Pan-Asian E-Commerce Alliance

# (PAA)

# Progress Report

# 2007 Associate Members Progress Report：PAA

## SECTION I – GENERAL CONDITION UPDATE

### 1.1 Introduction

**1.1.1** The Pan-Asian E-Commerce Alliance is the first regional e-Commerce alliance in Asia that aims to promote and provide secure, trusted, reliable and value-adding IT infrastructure and facilities for efficient global trade and logistics. This includes the mutual recognition of digital certificates issued by members' Certificate Authorities for use in electronic documents exchanged among the parties. Combined membership of the parties now exceeds 200,000 organizations, representing almost all active trading enterprises in the Asian market.

**1.1.2** Current PAA Members comprise Tradelink of Hong Kong, Trade-Van of Chinese Taipei, CrimsonLogic of Singapore, KTNET of Korea, CIECC of China, TEDI Club of Japan, Dagang Net of Malaysia, TEDMEV of Macau and CAT Telecom Public Co. Ltd of Thailand.

## SECTION II – EDIFACT/ebXML/XML Based STANDARDS DEVELOPMENT

### 2.1 Communication Protocol

**2.1.1** PAA interconnection Specification was developed based on ebXML MS v2.0 Revision C and ebXML Collaboration Protocol Profile and Agreement v2.0. The specification is approved and endorsed by PAA Steering Committee in February, 2003.

**2.1.2** All PAA members are currently connected to each other based on the PAA interconnection Specification.

## 2.2 Messaging Standards

**2.2.1** PAA uses standard XML as the native syntax for processing managing information to create PAA document format and some were adoption from UBL. It follows some of the guiding principles for XML tools and methodologies such as Compliance with standard UML; Compliance with ebXML where relevant; and etc.

**2.2.2** The following are some of the PAA documents format for PAA projects:

- Purchase Order
- Invoice
- Advance Shipping Notice
- Packing List
- Trade Documents format for Export Declaration
- Certificate of Origin

**2.2.3** The following are some of the code list adopted:

- Location Code – UN/LOCCODE
- Country code – ISO 3166
- Currency code – ISO 4217
- Unit of measurement – UN/ECE No. 20
- Weight unit – UN/ECE No. 20
- Volume unit – UN/ECE No. 20
- Package type – UN/ECE No. 21
- Mode of transport – UN/ECE No. 19
- Container type – ISO 6346

## 2.3 PKI Mutual Recognition Framework

**2.3.1** The PAA Certificate Policy Authority (“Policy Authority” or “PAA Policy Authority”) was established to define a common Certificate Policy and administer the recognition of the Certificate Policies and Certification Practice Statements (CPS) used by Alliance members against this common Certificate Policy.

PAA Certificate Policy adheres to RFC 2527. CAs are free to adopt their own policies and practices for those areas that do not have any specific stipulations within their CPS, which must also adhere to RFC 2527.

**2.3.2** This Certificate Policy ("Policy") is intended for use within the Public Key Infrastructure (PKI) established by the members of the Alliance as defined and managed by the Pan Asian Certificate Policy Authority Limited ("Authority").

**2.3.3** This Policy contains the set of rules that govern the issuance and use of digital certificates among the members of the Alliance, and indicates the applicability of the certificates to the communities within the Alliance. Specifically, the Policy is intended to support the Alliance and its Members in the following areas:

- Provide high level of assurance that enables secure and reliable transmission of business and transaction documents, and contribute to assuring non-repudiation of business transactions;
- Facilitate inter-connection of network services to provide e-commerce transaction application services for the business community; and
- Support a Pan Asian portal enabling global business connection and communication.

# SECTION III – Trade Facilitation/eBusiness/ eCommerce Related PROJECT UPDATES

## 3.1 Secure Electronic Cross Border Trade Transactions

Leveraging the PAA legal framework for electronic cross border trade transactions and the mutual recognition of digital certificates amongst members of the alliance, PAA has over the years developed a suite of services and solutions for the PAA economies. We enable and facilitate our customers to exchange trade documents electronically with local and overseas business partners in a secure environment. Through the PAA network, an importer from an importing economy can seamlessly inherit and reuse trade declaration data from the corresponding exporter of an exporting economy for the local trade declaration.

In recent months, we have made significant achievements and contributions for the freight industry. Freight forwarders of various PAA economies can now exchange a range of

trade documents such as Commercial Invoice, Packing List, and Bill of Lading with their counterparts both effectively and efficiently.

## 3.2 Electronic Certificate of Origin

As an APEC Pathfinder initiative, PAA has been actively involved in the development and facilitation of exchange of electronic certificate of origin between import and export economies. It is envisaged that initiative will bring values to both the traders and the government authorities. With the blessing and support from the local authorities, Chinese Taipei and Korea are now going full stream ahead on establishing the first ECO project. The project involves both the public and private sectors from the two economies. It is anticipated that first ECO exchange will be carried out within this year. In the mean time, other economies like Hong Kong, Japan and Singapore are exploring the possibility to participate.

# eBusiness Asia Committee

# Progress Report

**2007 Associate Members Progress Report：eBusiness Asia Committee**

# SECTION I – GENERAL CONDITION UPDATE

## 1.1 Membership status

The eBusiness Asia Committee was established in December / 2000 for facilitating the e-Business environment in Asian region by implementing ebXML and/or XML based emerging technology. The eBusiness Asia Committee is a non-profitable and a non governmental organization, and there are 28 members.

The members are：

1. Japan
   - ECOM (Electronic Commerce Promotion Council of Japan):www.ecom.or.jp
   - Fujitsu (www.fujitsu.com)
   - NEC (www.nec.com)
   - NTTDATA (www.nttdata.co.jp)
   - Oracle Japan

2. Republic of Korea
   - KIEC (Korea Institute for Electronic Commerce): www.kiec.or.kr
   - B2B Internet
   - Posdata (www.posdata.co.kr)
   - KTNET (www.ktnet.co.kr)
   - Korea Polytechnic University

3. Chinese Taipei
   - III (Institute for Information Industry) www.iii.org.tw
   - GCOM (www.global-com.com.tw)
   - TCA
   - Trade Van
   - NTNU

4. Malaysia
   - DagangNet (www.dagangnet.com)
   - Royal Malaysian Customs (www.customs.gov.my)
   - EC Partners

5. Thailand
   - NECTEC (National Electronics and Computer Technology Center) www.nectec.or.th

- I3T

6. China
   - CECID (Center for E-Commerce Infrastructure Development) of Hong Kong www.cecid.hku.hk
   - SKLSE (State Key Laboratory of Software Engineering), Wuhan University www.sklse.org
   - CNIS
   - ICO Ltd.

7. Singapore
   - CrimsonLogic (www.crimsonlogic.com.sg)
   - Sun Microsystems Pte. Ltd. (www.sun.com)

8. Other region
   - Axway
   - OASIS UBL

## 1.2 Awareness and Promotion

In addition to the regular eBusiness Asia Committee meeting, we held the tutorial session for implementing ebXML in Hong Kong and Taipei in 2005.

# SECTION II – ebXML Based STANDARDS DEVELOPMENT

## 2.1 Interoperability Task Report

The Interoperable task of the ebXML Asia Committee is engaging in the interoperable in Functional Service View of ebXML standardization, that is Information Technology side, and currently dedicated to the interoperability test among the solutions developed by each member.

Up to now eBusiness Asia Committee has issued ebXML interoperability certification on ebXML Messaging Service specification v2.0, including basic functions and reliable messaging, for 19 companies and organizations passed the interoperability test.

The following table shows the solutions passed the certification.

| | Aug / 2003 | May / 2005 |
|---|---|---|
| Level 2 Certificate<br><br>Reliability | CECID (Hong Kong)<br>CrimsonLogic (Singapore)<br>Fujitsu (Japan)<br>GCOM (Taipei)<br>Hitachi (Japan)<br>IIIT (Thailand)<br>Innodigital (Korea)<br>KTNET (Korea)<br>NEC (Japan)<br>POSDATA (Korea)<br>Samsung SDS (Korea)<br>SKLSE (China) | Algo21(Japan)<br>B2B Internet (Korea)<br>CJS (Japan)<br>Dasan (Korea)<br>ETRI (Korea)<br>Infoteria (Japan)<br>NTT Data (Japan) |
| Level 3 Certificate<br><br>Security | | CECID (Hong Kong)<br>CrimsonLogic (Singapore)<br>Fujitsu (Japan)<br>Infoteria (Japan)<br>IIIT (Thailand)<br>Innodigital (Korea)<br>KTNET (Korea)<br>NEC (Japan)<br>SKLSE (China) |

In 2006, the Interoperable task group contributed a pull messaging service specification which enables a client/server solution for ebMS V3 to OASIS. The ebMS V3 is expected to be published in 2007.

## 2.2 Core Component Task Group

The Core Component task of the eBusiness Asia Committee is engaging in the part of Business Operational View of ebXML standardization, that is standardization of the business information entities and the methodology for standardizing them.

The world wide activities to standardize Business Process and Business Information is going on within the UN/CEFACT. The eBusiness Asia Committee is one of the nominated organizations participating the harmonization group (TBG17) of UN/CEFACT. Which means that the eBusiness Asia Committee can submit the new Core Components to UN/CEFACT

based on Asian business requirements. The eBusiness Asia Committee is supporting the standardization of Business Information components based on the harmonization process within Asia.

# SECTION III – ebXML PROJECT UPDATES

## 3.1 Registry and Repository Federation Project

The Registry and Repository Federation Project was started jointly with ISO/IEC JTC1 SC32 WG2 and successfully completed by March of 2006.

In near future we can expect several levels of Registry and Repositories scattered in the world supporting their dedicated business domains. For example, in Korea they already have several Industry Registry and Repositories, such as Steel industry, Trade industry, Automobile industry, and also the National level Registry and Repository .Those Registry and Repositories should be smoothly federated to support the inter-industry business or the inter-country business.

The Objective of Registry and Repository Federation is to enable sharing of information and software between interested parties within deferent domains for the purpose of enabling business process integration, the public available registries provide a seamless service federated with deferent registries in deferent domains (deferent industries of deferent countries).

# eASIA Award Success Stories

2003 eASIA Award Success Stories
2004 eASIA Award Success Stories
2007 eASIA Award Semi-Final List

# 2003 eASIA Award Success Stories

Trade Facilitation
eBusiness in the Private Sector
eBusiness in the Public Sector

# 2003 eASIA Award Success Stories

## Trade Facilitation

**Category : Trade Facilitation**
**Project title : Facilitating Cross-Border Paperless Trading and Customs Clearance**
**Organization : Trade-Van Information Service Co.**

**Summary**

Unbounded TradingNet "Facilitating Cross-Border Paperless Trading and Customs Clearance"

Trade-Van has built a highly integrated and efficiently managed networking service, on the foundation of the cargo-clearance networking service, to help the trade communities and the related government agencies strengthen their core competence. Trade-Van provides a one-stop connection service window for the cargw/trade community, which covers the processes from purchase order, invoice, customs clearance, etc., to proof of delivery. The value-added network was built to play as the trade facilitator in order to achieve paperless trading, trade facilitation and information visibility. To be a one-stop connection window, Trade-Van has made every endeavor to align, exchange information with other global services network, such as PAA(PAA-Pan Asia e-Commerce Alliance), TRAXON, SITA, etc. It is recognized that what Trade-Van has done for the trading community can eliminate the requirement for paper documents needed for customs, other cross-border trade administrations, and logistics industries. It can significantly reduce business costs and streamline transport, freight, customs and other trading transactions throughout the region.

**Category : Trade Facilitation**
**Project title : Port EDI - Port Electronic Data Interchange System**
**Organization : Waterfront Vitalization and Environment Research Center WAVE**

**Summary**

New Port Scene "Port EDI - Port Elec-tronic Data Interchange System"

Port-EDI System in Japan launched in October 1999 to introduce EDI system in Port and harbor community to reduce paper-based procedures. This system is fully based on UN/EDIFACT standards and implemented some of UN Standards Messages, such as BERMAN(Berth Management message), PAXLST(Passenger List message), IFTDGN(Dangerous Goods Notification message), IFTSAI(Forwarding and transport Schedule and Availability Information) and APERAK(Application Error and Acknowledgement Message). The usage rate is growing month by month since the System launched in October 1999 from 541 applications to 20,551 in October 2002. The most important issue is how Japanese Government quickly does ratify the IMO/FAL Convention and simplify current procedures based on this convention. Also, the Single Window System of which the Port-EDI System is inter-connecting with the Sea-NACCS has been developed and will be launched in August 2003. In the meantime, users can submit their messages into the single entry point through the Internet or Dial-up Line.

**Category : Trade Facilitation**
**Project title : Korea e-Trade Hub Project**
**Organization : KTNET**

**Summary**

e-Business Roamer "Korea e-Trade Hub Project"

The vision of e-Trade Hub is "Single global e-Trade Service". It means that once traders or related organizations are connected to e-Trade Hub, they are able to do "Single Window" based transaction with trading partners in the world any time, any where over the internet. It provides more efficient and cost effective solution to e-Trade industry, and handles connecting corporate legacy system, EAI and B2Bi in unified framework. In addition to the foundation functionality described above, eTradHub service also provides the interconnection with global network include PAA(Pan-Asia e-Commerce Alliance) service, Korea-Japan e-Trade Hub project and ASEM(ASIA-Europe e-Commerce) project. e-Trade Hub brings a new level of core infrastructure in e-Business of Korea. By establishing the electronic trade network with international standard e-Business model, e-Trade Hub will expand Korea's electronic trade market and software industry as the central area of the global e-Business community.

**Category : Trade Facilitation**
**Project title : TradeNet**
**Organization : CrimsonLogic Pte Ltd**

**Summary**

Easy Customs Declaration “TradeNet”

As Singapore’s trade grew, the government authorities had to constantly increase the recruitment and training of processing staff to take care of the growing volume of trade declarations. TradeNet, Singapore’s venture into electronic trading using Electronic Data Interchange or EDI was implemented on 1st of January 1989. under the TradeNet System, the trading community is given an electronic means of submitting trade documentations to all relevant government authorities for their processing, through a single entry point. Upon submission, traders will receive an electronic approval conditions or reasons for rejection. Today, there are more than 2,500 establishments plugged into TradeNet, from traders, shipping agents and freight forwarders to air cargo agents. More than 600,000 permit applications are being processed through the TradeNet system every month. 95% of these permits are processed within a minute. The TradeNet System on the Internet links traders to the different government authorities with greater work efficiency and increased case of use. In today’s technology-driven business world, employing the right state of the art technology is crucial for companies to gain that competitive edge.

# eBusiness in the Private Sector

**Category：eBusiness in the Private Sector**
**Project Name：「Hua-Nan Venus Plan」--- Global eFinancial Services**
**Organization：Hua-Nan commercial Bank, Ltd.**

**Summary**

Precedential Customer Service " 「Hua-Nan Venus Plan」- Global eFinancial Services"

Considering the demand of the enterprise for the rapid capital control in response to the globalization and liberalization of the industry and the demand of the customer for the integrated and convenient financial products and services, HNCB stated to cooperated with the IT industry to improve the overall response efficiency of the supply chain for the industry , enabling the transformation of the industry, and reinforcing the global competitive strength of individual enterprises in year 2001. The "Venus Plan" is designed with the client as the core of the entire plan. It provides integrated financial products and services based on the demand of the client, and expands the application scope from a single client to the entire community and supply chain system. The goal of the "Venus Plan - Global e-Financial Service" is to respond to the requests of clients more rapidly, to improve the originality of financial products and to introduce the e-Information exchange standard, enterprise information link and information share mechanism on the Internet to reinforce the loyalty of the clients. Introducing the "Venus Plan" in the new economic era creates a "Three Win" effect for HNCB, the banking industry and clients.

**Category：eBusiness in the Private Sector**
**Project Name：Global Supply Chain Community Service – viaHub**
**Organization：e-Commerce Resources Center ECRC, III(Institute for Information Industry)**

**Summary**

String of Global Business “Global Su-pply Chain Community Service- viaHub”

viaHub is a B2B Common platform, which adapts RosettaNet standard and data/network security technology, hardware reliability and XML technology etc. In the past two years, viHub has been successfully worked with BenQ, Tatung, Yageo, D-Ling, AU Optronics, World Peace Industrial, Lite-On Electronics, Lite-On IT, Accton, and Elitegroup Computer Systems commit to adapt viaHub platform in Star Project to link 500 suppliers. The trade value processing on viaHub by the end of 2003 will more than NT$200 billion annually. These 10 participating IT firms in the Star Project will have combined revenue of NT$480 billion for the full year 2002, or 4.8% of Taiwan’s gross national product. ViaHub will keep strengthening its competitive ability(e.g. e-Design, e-Sourcing, e-VMI, etc) to facilitate Taiwanese supply chain community connect with overseas buyers, in order to make Taiwan become the global e-Business trading center.

**Category：eBusiness in the Private Sector**
**Project Name : Solme B2Bi Suite for ebXML Development**
**Organization : InnoDigital Co. Ltd.**

**Summary**

Industry On The Move “Solme B2Bi Suite for ebXML Development”

The Solme B2Bi suite project proves the concept of ebXML as one of the first implementations and proposed a leading electronic business-to-business model. The main goal of this project is to develop a complete B2Bi platform, which enables all business in any shape, form or size and to easily conduct B2B eBusiness with beneficial returns. Companies always seek to manage costs while increasing profitability. This strategic goal urges them to rush to eBusiness. However, the old-fashioned electronic business-to-business models such as EDI still have limitations such as large initial investment, absence of global open standard, etc. ebXML, which is sponsored by OASIS and UN/CEFACT, gives us the prospect of building more open B2Bi framework. EbXML presents an infrastructure and semantic framework that ensures business-to-business interoperability. The ultimate goal of B2Bi suite project is to prove the concept of ebXML and provide a leading electronic business-to-business model, which enables companies of any size to conduct electronic business-to-business collaborations and eliminate paper documents, reducing costs and improving efficiency.

# eBusiness in the Public Sector

**Category：eBusiness in the Public Sector**
**Project Name：The eBusiness Project: for the IT and other Major Manufacturing Industries**
**Organization：Ministry of Economic Affairs**

**Summary**

Predominate Competitiveness "The eBusiness Project: for the IT and other Major Manufacturing Industries

Electronic business implementation is one of Taiwan's most critical success factors for industry development especially in facing the developing trend of globalization. In response to this brand new business environment, The Taiwan government in cooperation with private sectors from various industries has communally participated in the "Industry automation and Electronic Business Program(iAeB)" led by MOEA from the year 1999 on. This project has three focuses: "The Enhancement of Industry e-Business Infrastructure", "The Reinforcement of the Industry Electronic supply Chain", and "The Assistance of e-Marketplace Industry Development". In addition to revolutionizing the global business models for Taiwan's IT industry, this project fully mobilized the implementing in e-Business trends in other major manufacturing industries. The benefits and results attained through the implementation of the e-Business project will advance multinational economic cooperation between various industries. (website: www.moea.gov.tw or itap.tdp.org.tw or www.moeaidb.gov.tw/~iaeb/)

**Category：eBusiness in the Public Sector**
**Project Name：The Electronic Filing System**
**Organization：The Supreme Court, Singapore**

**Summary**

New Law Epoch "The Electronic Filing System"

The Electronic Filing System (EFS) is the world's first nationwide paperless court system. The EFS is an excellent case study of how information technology is harnessed to help achieve effective, efficient and economical dispensation and administration of Justice. This system revolutionizes the conduct of civil litigations in Singapore through its facilities for electronic filling, electronic extracts, electronic service of documents and electronic information services. The introduction of court hearings in an electronic environment frees lawyers from the logistical burden of managing physical files, which includes tracing, moving and storing them. The EFS aims to minimize paperwork and allow secure reliable and convenient exchange of information and legal documents between law firms and courts. Also, it takes advantage of the proven leading edge technologies in Web, J2EETM, XLM messaging and public key infrastructure to facilitate the just, efficient and expeditious conduct of civil litigation.

**Category：eBusiness in the Public Sector**
**Project Name：eRevenues Strategy: A revolution in tax administration**
**Organization：Revenue Dept., Ministry of Finance**

**Summary**

Limpid Finance "eRevenues Strategy: A revolution in tax administration"

The Revenue Department as an organization responsible for collecting the majority of government revenue is driving forward to modernize the whole organization nationwide by implementing a series of e-Revenue strategies. This system utilizes ICT technology and is directed towards the internal improvement of tax administration as will as the creation of electronic interfaces with external bodies. Electronic taxpayer service initiatives have driven the Revenue Department towards improved levels of service, transparency and professionalism. e-Revenue's project scopes include: a. e-service: utilizes information and communications technology(ICT) to provide better and professional services to taxpayer. b. up-to-date finance: enhance the efficiency and fairness in tax collection by utilizing modern information and communications technology. In order to achieve its departmental mission, the RD takes initiatives for the e-Revenue strategies. The RD is driving forward to be modernized across the shole organization nationwide with the increasing utilization of ICT.

# 2004 eASIA Award Success Stories

Bridging Digital Divide
Electronic Business in Private Sector
Electronic Business in Public Sector
Trade Facilitation

# 2004 eASIA Award Success Stories

Asia Pacific Council for Trade Facilitation and Electronic Business

## Bridging Digital Divide

**Category：Bridging Digital Divide**
**Project title：Bridging The Digital Divide In An e-Era**
**Organization：Institute for Information Industry**

### Summary

Bridging The Digital Divide In An e-Era is designed to provide IT education and assistance to people in remote areas in Taiwan and improve their education, society and financial capability.

In Taiwan, aboriginal people have only half as many households with computer ownership and only 1/3 of them have access to the Internet. Capital Taipei City has twice as many households with computer ownership than Nantou County in the south.

Due to the digital divide among ethnic groups and cities, III funded the “Bridging Digital Divide Project” (BDDP) in 2001 to bridge the gap. With efforts from both public and private sectors, IT education has been provided to people in remote areas and improved their financial capability.

### Methodology/Scope

The project is divided into three stages:

- **Promoting digital concepts and knowledge (2001)**

  To raise the awareness of digital divide, some NTD$29 million was allocated for special exhibitions and seminars, computer donation, training teachers and the establishment of demonstration sites.

- **Establishing experimental digital sites and providing guidance (2002)**

  People living in rural areas gained access to digital tools and were taught how to maintain and repair computers. Several demonstrative sites were built to provide a comprehensive digital-learning system.

- **Emphasizing on integrative digital solutions (2003/2004)**

  Multiple resources are invested in these remote areas, including digital tools, digital-learning facilities and digital course materials. Major tasks included improving villagers’ digital skills and assisting local schoolteachers to utilize digital tools in teaching.

### Achievements/Challenges

This project has greatly enhanced local villagers' digital skills and assisted the sustainable development of villages. Integrated resources and other institutes have helped to bridge the digital divide in Taiwan.

In the past three years under this project, 11 counties have been benefited from 133 IT activities and 63,500 people have attended those activities. About 2,800 people and 660 computer volunteers were trained in computer and Internet courses held in remote areas. A total of 10 new and 304 used computers have been donated to 20 sites in need and 16 organizations have contributed to efforts for bridging digital divide.

Challenges the project faces include:

- Villagers must learn to maintain and operate the information and Internet facilities in their region.
- Create demand for the use of computer and Internet in remote areas
- Assist an integrated, sustainable development in remote areas

**Category：Bridging Digital Divide**
**Project title：Personnel Training of Electronic Business**
**Organization：Department of Commerce, MOEA**

## Summary

The Personnel Training of Electronic Business project aims to provide manpower cultivation resources in central and southern Taiwan, where resources have been insufficient.

This project enables people with no IT background to acquire basic e-business knowledge through National Chung Cheng University's automation center, manufacturing integration center, library and digital learning center. Trainees learn about how e-business works, study examples of successful e-business cases and acquire other new skills.

In order to meet the needs in central, southern and eastern Taiwan, the project combines in-class instruction with distance learning. The manpower cultivation and knowledge extension have brought about a significant narrowing of the digital divide between enterprises and rural areas.

This project is expected to train over 500 individuals annually, with each undergoing at least 48 hours of training.

## Methodology/Scope

Three training programs -- "Management of Operations in e-Business", "Project Management in e-Business" and "Strategy and Planning in e-Business" -- were launched to serve different targeted attendees among low, middle and high-ranking personnel from businesses such as retail, service and logistics.

Project implementing methods are explained based on course content planning, execution of program commencement, program implementation concept, and method of preparing teaching material, online structure of teaching platform, performance assessment and analysis

A program prototype is in place to arrange the schedule, recruitment and propagation of the program. This will provide suitable training programs to meet the needs of local industry and trainees.

**Achievements/Challenges**

Since the start of this project, a total of 9,000 disks of e-books on the three training programs were published between 2001 and 2003. In 2002, free e-books were downloaded 1,509 times, and the accumulated download count reached 3,866 times in 2003.

This project has enabled 73 percent of students to become e-proficient in central, southern and eastern Taiwan and also helped to reduce the digital divide between rural and urban areas.

The project's blueprint for the future:

- Training personnel for e-commence as the basic foundation during 2001 to 2005
- Encourage industries to adopt e-commence widely in 2006 and develop fully digitized course contents.
- e-commerce training should be conducted across the country in 2007
- In 2008, e-commerce training will be internationalized as successful overseas cases will be adopted as case studies and certified e-commence personnel from abroad will be introduce for the training.

**Category：Bridging Digital Divide**
**Project title：eSuvidha**
**Organization：National Informatics Centre, Department of Information Technology, Government of India**

**Summary**

e-Suividha is an e-governance package that provides a single window facility for citizens to submit requests for civil services and to monitor the status of their application. The web-based software is developed to automate such application process, which was long and tedious in the past.

The project aims to construct IT infrastructure in the North Eastern States of India by establishing Community Information Centers (CICs) in 487 blocks of eight States. These CICs are equipped with computer and communication infrastructure to connect the local population with the digital world.

**Methodology/Scope**

Windows 2000 has been chosen as the server platform. CICs use a visual-based client application which provides interface for application acceptance and upload data to the server at State Head Quarters. The Application Processing Centres are in charge of updating the status of application through a web-based interface.

The e-Suvidha Application has four modules: Administration, Processing, Application Status and AAC.

- **Administrative module**: used for administrative purposes and covers nature of the services, expected time for the application, details of required documents and the department that processes the application.
- **Processing module**: used by the Application Processing Centers to update status of an application.
- **AAC module**: a client-server application installed at the CICs to accept application forms. It is used to upload application data to State Head Quarters Server for processing.
- **Application Module**: enables the applicant to view the status of application submitted at AAC through the Internet.

## Achievements/Challenges

eSuvidha has been implemented in about 50 CICs, mainly in the states of Arunachal Pradesh, Assam and Tripura. Government of Tripura has recently decided to implement eSuvidha across the state as a delivery point for all citizen-centric services.

Efforts are being made to implement eSuvidha in all 487 CICs of the North East and training and awareness programs have been conducted for CIC operators in order to accelerate the process.

Looking forward, the project needs to:

- develop a generic application that can accommodate diverse processing practices across States and Services;
- tackle different administrative structures in different states;
- provide a common interface that can allow different government departments in various levels to process the applications;
- identify an application for processing by an Application Processing Centre from applications received by Application Acceptance Centers all across the state and
- install and configure and maintain AACs module at about 500 CICs.

**Category：Bridging Digital Divide**
**Project title：eBario: Providing Equal Access to ICTs for Rural Communities**
**Organization：Universiti Malaysia Sarawak**

## Summary

eBario is a pilot project designed to provide Information and Communication Technologies (ICTs) to Bario in the Kelabit Highlands, close to the border

between Kalimantan in Miri Division of Sarawak.

Today, schools and communities in Bario have access to telephones and the Internet. The community is also applying ICTs in their daily life. With access to ICTs, there has been increased computer literacy in Bario and the standard of living has been greatly improved.

The most obvious impact is an increase in the number of tourists. As of October 1,

2003, the number of flights to Bario has increased from one to two flights a day. The project also contributed in easing the migration problem, as an increasing number of young people stay in Bario with their families to run tourist accommodation and tourist activities. There are now six lodges and three homestays in Bario.

## Methodology/Scope

The project employs the Participatory Action Research (PAR) model, where the community is involved in the process of generating knowledge about their own conditions and learning how ICTs can improve their community. The approach allows the community to identify problems, followed by guidance from the research team to find a solution to these problems. Under the PAR methodology:

- researchers learn about life in Bario from the community;
- the community learn about ICTs from the researchers;
- community members play a major role in the research by contributing ideas;
- researchers identify with the community and
- as a team, the community-researchers partnership achieves mutually beneficial outcomes from the project.

**Plans are underway to initiate e-commerce to allow the community to sell their products such as handicrafts, and much sought-after fragrant Bario rice online.**

## Achievements/Challenges

The eBario project's achievements so far include:

- named as one of the Top Seven Intelligent Communities 2001 by World Teleport Association
- Industry Innovators Award for Systems Development & Applications by Society of Satellite Professionals International in 2002, Washington DC
- Special presentation on e-Bario at 2003 World Summit on Information Society
- (WSIS) by Strategy and Policy Unit of ITU (ITU-SPU)
- Winner of IT Premier Award Anugerah Perdana Teknologi Maklumat (socio-economic sector) (2003) – presented by the Prime Minister of Malaysia
- Special Mention: DAGs Demonstrator Application Grant Scheme (DAGS) Convention 15th January 2004

One of the main challenges the eBario team faces is transport in the remote area of Bario. The team needs to fly computers, materials for the telecenter and even fuel to run the generator into Bario. As diesel-powered electricity is too costly, a hybrid design based on solar-power in addition to a diesel-powered generator has been implemented.

**Category：Bridging Digital Divide**
**Project title：Rural Internet Program**
**Organization：Ministry of Energy, Water and Communications**

## Summary

The Rural Internet Program (RIP) is designed to increase Information and Communications Technology (ICT) literacy and awareness in targeted rural areas.

The population census 2000 showed that 40 percent of Malaysia's population or nine million people live in rural areas. A Needs Survey also showed that 66.7 percent of people in the rural areas have not used Internet and 61.3 percent of those who have not used Internet are interested to use the Internet.

The RIP aims to serve approximately 2.8 million people in the rural population by 2008, primarily those above 17 years old.

## Methodology/Scope

In this project, the government provided each Rural Internet Centre (RIC) with basic telecommunications infrastructure. Facilities provided include five or six personal computers, two laser printers, one colour printer, one scanner, one digital camera, one unit of air conditioner and broadband internet access (ADSL or ISDN).

The operating cost of the RICs is borne by the Government. A remote online monitoring system has been set up at each RIC for the Ministry to monitor and obtain statistics for RIP planning and development.

Two government-appointed supervisors at each centre are responsible for daily operations. They are required to submit reports fortnightly to the Ministry.

Women and the elderly are given priority in this project since the objective of the RIP is to improve the IT literacy of this specific group in the society. Students, though also allowed to use these facilities, are not given top priority in this programme since they are offered other opportunities such as computer labs in schools.

Due to the low level of computer literacy in these areas, users learn to know basic computer hardware such as keyboard and mouse in the initial stage. Later on they learn about basic computer skills including word processing and spreadsheets.

## Achievements/Challenges

Since the commencement of the RIP in December 2003, RIC users and awareness about this programme have been increasing. On average about 60 to 70 people use the centre every week, with some 10 to 15 new users. Users are mainly housewives, pensioners, youngsters and the self-employed. To date, the number of users trained totalled 21,219 while the number of users stood at 29,032.

The introduction of e-mail application has also helped many elderly users to communicate with their children living in urban areas. A number of ASEAN visitors have visited this program and want to install similar systems in their country.

One of the challenges is people's perception of ICT, as many parents are still sceptical about the Internet, which they view as a venue of computer games or chat rooms. Therefore in addition to communicating with parents, a filtering system should be installed to ensure positive use of Internet.

If needed, a mini exhibition or virtual centre should be set-up at RICs to display current and future Internet technology and increase positive awareness in the rural areas.

**Category：Bridging Digital Divide**
**Project title：Virtual Malaysia Project**
**Organization：Creative Advances Technology Sdn Bhd**

## Summary

The Virtual Malaysia portal is an open e-business platform designed by Creative Advances Technology (CAT) to maximize the Information Communication Technology (ICT) for operators in the tourism industry.

Originally developed as an R&D project, the Virtual Malaysia portal has been upgraded and enhanced with GIS Map, Virtual Reality, e-brochure, e-commerce, e-packages, SMS and PDA download and acts as an e-commerce platform.

Operators in the tourism industry will be able to use the Virtual Malaysia portal to kick –start their e-business at a minimal cost. The project also offers other mediums including CDROM (multimedia and graphic) and Magazine (publication) as the tools for tourism promotions.

## Methodology/Scope

Virtual Malaysia involves e-marketing, e-commerce and e-resource management.

The CAT Content Management System is designed to simplify the hassle and tedious scope in managing, updating and disseminating content. Through this Content Management System, activities such as publishing, deleting, updating and monitoring the content can be managed systematically.

The project includes:

- **Packages2Go**: a system designed for travel agents to have online presence; they can also sell their travel packages in a wider target market.
- **GIS Map**: it assists tourists to navigate through GPS (Geographic Positioning System) and can be downloaded into PDA.
- **E-Mall:** it offers online shopping for travel and tourism products such as crafts, crystal and publication.
- **E-ticketing:** an e-business solution that allows online business transaction.
- '**C-Flex':** the multitemplates and content management system enables users to conduct e-business with just one click.

| Achievements/Challenges |
|---|
| Virtual Malaysia currently receives more than five million hits per month. I addition to promoting Malaysia as a tourist destination, Virtual Malaysia also provides the facility and infrastructure of e-commerce for Malaysian companies to sell their products and services online.<br><br>VirtualMalaysia.com has received prestigious awards including<br><br>• "Best Content Development" at the Asia Pacific MSC at the IT and Telecommunications Awards (APMITTA)<br>• "The Best Tourism Applications" award at the Asia Pacific Information Communications Technology Awards (APICTA)<br>• ICT Premiere Award 2003<br><br>The latest development in this project is Malaysia Diving and Snorkelling Guide CD/DVD ROM that features more than 200 dive sites and underwater footage as well as videos.<br><br>One of the challenges is how to manage the balance between cultural and technical changes. As the tourism industry is most sensitive towards changes in economy, tourism-based organizations need to be proactive in order to capture the ever-changing streams of economies. |

# Electronic Business in Private Sector

**Category：Electronic Business in Private Sector**
**Project title："On Demand", A Revolutionary Step in the Paper Manufacturing Industry for the New Century**
**Organization：Yuen Foong Yu Paper Mfg. Co, Ltd.**

| Summary |
|---|
| The On Demand project is an e-service platform through which e-business processes are established to provide customers a new range of services featuring rapid response, one-stop shopping and rapid problem solving.<br><br>The project meets the need for a system to bring customers closer to Yuen Foong Yu. There are two divisions of this project are Fine Paper & Paper Board Division and Container Board & Packaging Division.<br><br>The new business model helped Yuen Foong Yu and other companies in the paper manufacturing industry to reduce inventory levels, improve operational performance and achieve the industry's "On Demand" objectives. All the 116 participating downstream customers were able to achieve significant reduction in inventory levels, with total savings at more than NT$2 million a year.<br><br>The On Demand project offers an example of how a traditional industry can use information technology to improve the overall operational performance and at the same time encourage downstream customers to raise their level of e-business adoption. |

## Methodology/Scope

The first step of the project was to conduct a survey on customers' needs. Both

Divisions then followed by internal SWOT analysis. The project then developed a new business strategy with changes in operational models and processing procedures.

The electronic service platform was designed and implemented to carry out the new procedures and functions. To promote the use of the new system, top managers have personally visited all major customers. A series of demonstration and seminars were conducted in different geographical areas. The benefit to the customers from the use of the system is the true key factor to convince the customers and to the success of the Project.

## Achievements/Challenges

Through this e-business platform, customers have achieved additional cost savings in packaging material inventory and purchasing due to the shortening of the transaction process and delivery periods.

In terms of business results, the Container Board & Packaging Division is electronically connected with 279 customers. The revenue from strategic customers has gone up from 150 million NT dollars in 2001 to 650 million NT dollars in 2003. The cost savings associated with human resources at the design center is now 6.9

NT million dollars per year.

Challenges include:

- When deliveries are due to the customers, the distributor usually informs the company before a delivery is made, causing deficiency.
- Deficient in-between systems caused overstocking for the paper mills, distributors, and printing plants.
- Emergency problems caused by papers or printing are not solved instantly, increasing production costs for customers

**Category：Electronic Business in Private Sector**

**Project title：Pioneering Semiconductor Value Chain Integration: TSMC/ASE e-Supply Chain Project**

**Organization：Taiwan Semiconductor Manufacturing Company (TSMC) Advanced Semiconductor Engineering Inc. (ASE)**

## Summary

The TSMC/ASE e-Supply Chain project is an industry-shaping, paradigm-shifting force to upgrade the entire semiconductor industry competitiveness through process and data standardization.

The project is designed to integrate key operational activities and data between TSMC and ASE, resulting in a seamless information and transaction interface to their joint customers, as if manufacturing took place in the customers' own backyard.

This project led to the standardization of the entire semiconductor supply chain processes and protocols, thus elevating the industry's efficiency and value creation to the next level.

## Methodology/Scope

Substantial resources have been deployed to implement the project over a six-year period. An iterative, phased approach in project management was adopted to ensure solid delivery of milestones without significantly disrupting current operations.

The core element in the project is data sharing, aiming to achieve integrated utilization of data between upstream, midstream and downstream enterprises.

The strategy focuses on the adoption of innovative standards, simplified procedures and has an emphasis on cost-down. A comprehensive e-business supply chain platform has been established to enable customers and strategic partners to exchange data with TSMC and ASE in an efficient and convenient manner.

In building this logistics system, the two companies are able to leverage the advantages that they enjoy as a result of being leading players in their respective fields - IC foundry operation and IC assembly and testing.

## Achievements/Challenges

The project's process integration and data exchange experiences has formed the foundation of RosettaNet standards. Other leading companies in the semiconductor industry have followed suit, drawing up supply chain standards for the IC industry as a whole that will facilitate the growth of Taiwan's IC companies.

The most difficult challenges encountered over the six-year period of project implementation related to business process re-engineering, process integration, process and data exchange standardization and change management.

Going forward, the project will focus on the following:

- Extending the e-Supply Chain to more partners both up and down the value chain
- Continuing to shape industry standards through RosettaNet

**Category：Electronic Business in Private Sector**
**Project title：Web based Enterprise-wide Integrated Application System (EIAS)**
**Organization：Gujarat Co-operative Milk Marketing Federation**

## Summary

The Enterprise-wide Integrated Application System (EIAS) project is designed to integrate information of the supply chain in the milk industry.

The system speeds up the delivery of information in India, where a national-wide telecommunication infrastructure is still not in place. In short, it brings under one umbrella procurement information from 2.2 million farmers on one side and 3000 distributors on the other.

Information delivery has been greatly improved by EIAS. Under this system, information on milk procurement reaches the decision-making level (the Federation) from the collection point in about 12 hours. Production and dispatch details from production centers reach the Federation within two to three hours.

Sales and stock data from remote sales locations can also reach the Federation every two hours with the help of EIAS.

## Methodology/Scope

EIAS, a customised ERP (Enterprise resource planning), adopts the client-server technology so EIAS can be plugged into various points in the supply chain.

The project's Zonal offices and major members of the Federation are connected through a secure IP-based VPN. All sales offices, C&F points and wholesale distributors are also connected through TCP/IP Internet Mail Account for timely exchanging of information.

The Geographical Information System(GIS) is installed at the project's head office and key marketing offices. With the help of GIS, it is easy to locate members and update their information on a regular basis.

GIS is also used for business planning and review activities. It enables the system to obtain information in the milk society such as farmer member census and animal census data. As a result farmers are able to monitor milk production, animal productivity and the health condition of animals and conduct industry analysis.

## Achievements/Challenges

Achievements under EIAS include:

- Significant inventory reduction of up to 25 percent at all levels of supply points.
- Improved forecast accuracy and optimisation of resources.
- Greater distribution penetration and more efficiency in the supply chain.
- Strong alignment of people, processes and technology..
- Improved service and distribution of stocks in the market.

This project has won recognition in the industry, including:

- Selected for the IMC Ramkrishna Bajaj National Quality Certificate of Merit, 2003 in the Service Category
- Award for Brand Excellence - for creating an identity of an Indian Brand
- GCMMF ranked the 6th in the Business world survey ranking of India's most respected companies Awards (2003), and was the 3rd of FMCG sectoral winners.

**Category：Electronic Business in Private Sector**
**Project title：Internet EDI Security System**
**Organization：Meteora-System Co., Ltd**

## Summary

This Internet EDI Security System features a ‘Trust Model’ to provide a legally binding contract between two business parties across borders. It follows UN/CEFACT Recommendation No.26 and enables businesses involved to build cross-border relationships without relying on a third party such as CA.

(UN/CEFACT is the United Nations Centre for Trade Facilitation and Electronic Business. It is open to participation from Member States, intergovernmental organizations, and sector and industry associations recognized by the Economic and Social Council of the United Nations (ECOSOC). The Centre's objective is to be "inclusive" and it actively encourages organizations to contribute and help develop its recommendations and standards.)

The contract can only be addressed by UN/CEFACT and is supported by an Internet encryption and logging system, known as the “Silk Road”.

The Internet EDI Security System followed the project of ”Silk Road” and succeeded in standardising the technology as one-time cipher for the net. The core of the technology is a system of changing keys. More practically, this software has been applied to IP telephone, which makes eavesdropping impossible by any means over the net.

## Methodology/Scope

The Internet EDI Security System followed a decryption technology of Silk Road and succeeds in standardising the technology for the net. The core of one input for the net is the changing keys, and is referred to as “one-time keying”.

It aims to provide electronic messages with a “legally binding effect” across different national legal systems and intend to overcome the problems across borders. In this case, "national" is synonymous with the corporation. Key issues include differences in national legal systems, authentication across borders and security.

## Achievements/Challenges

This goal is to create a legally binding contract based on an agreement between two parties conducting business across borders.

One-time pad cipher, standard encryption lists recommended by such as NIST, NESSI, CRYPTOREC are only temporary solutions since with the same keys and text, the transformed message always produces the same cipher-texts.

This is the main reason the one-time pad cipher is quite different.

Further out the idea is to spread the usage of this ‘Silk Road’ technology as it does not conflict with current technology.

**Category：Electronic Business in Private Sector**
**Project title：Automate@hsbc**
**Organization：HSBC Bank Malaysia Berhad**

## Summary

The Automate@hsbc project is designed by HSBC Bank Malaysia to help Small-Medium Enterprises (SMEs) to achieve greater efficiency and competitiveness by using HSBC's IT infrastructure and facilities.

Instead of investing heavily on their own technology infrastructure, SMEs can use HSBC's facilities to conduct e-commerce e-banking.

This project creates the driving theme of allowing small businesses to utilize facilities of their business partners that operate in a large scale. This system is applicable to all smaller enterprises especially in developing countries.

## Methodology/Scope

Automate@hsbc offers SMEs primarily free of charge services, or a small nominal fee if any, to enhance the value proposition for their customers. SMEs can enjoy a powerful suite of e-facilities. They also receive benefits including critical event alerts, online information, e-collaborative workflow operation, e-trade facilitation and tracking, electronic filing/retrieval, cheque outsourcing, financial control and other cost-saving advantages.

In short, the project means implementation of a wide range of electronic facilities, including internet, wireless, self-service and other technologies, to offer a complete set of value-added services and business benefits to SMEs. It offers:

- 24hrs Electronic Banking Centres for online bulk cash deposits, cheque payments/deposits
- Electronic cheque writing & receivable outsourcing
- SMS & Secured Email Smart Alert services
- Internet banking
- E-collaborative workflow processing & e-trade facilitation
- 24hrs Telebanking service and Call Centre support

## Achievements/Challenges

About 3,000 SMEs have signed up in different degree of automation and e-collaborative operation. When fully used, there are over 20,000 online users. This project has helped banks to have over 90 percent customer transactions and 70 percent of TT (Telegraphic Transfers) done via internet banking.

Automate@ hsbc has been awarded with the following in the past:

- "Best of E-Commerce Applications" by Asia Pacific ICT Awards 2003

- “Best of E-Commerce Applications” by MSC-APICTA Awards 2003
- "Best Consumer Internet Bank 2003" by Global Finance
- CIO Asia Awards 2004
- Malaysian PM’s IT Award 2002 for Bulk Cheque Scanning Deposit Machine & end-to-end processing solution

**Category：Electronic Business in Private Sector**
**Project title：FlexiClaims**
**Organization：CrimsonLogic**

## Summary

FlexiClaims is a web-based end-to-end automated claim processing system for healthcare management organizations (HMOs) and/or insurance companies to manage operational processes with more flexibility.

From medical benefits management, membership administration and claims processing, to billing and generating specialized management reports for reference and analysis, FlexiClaims combines them at one stop for customers’ convenience.

Customers will not have to manually submitting multiple claim forms as FlexiClaims automates all these so that the processes between the parties involved – HMOs and/or insurance companies, clinics, hospitals, and corporations – blend seamlessly into only one procedure. As a result, HMO and insurers are able to maximise efficiency, delivery quality and operational transparency, with reduced claims turnaround and real-time utilization performance.

## Methodology/Scope

FlexiClaims replaces the manual task of submitting claims to HMOs and claim processes by HMOs. The application is a multi-tier web application, designed based on the object-oriented concept and developed using the Java 2 Enterprise Edition platform (J2EE) technology. The system:

- allows user manage service provider, membership account, plan scheme creation and claim processing
- allows user to submit and approve claim online
- enables claims processing fully integrated with service provider, membership and plan
- provides information
- generates statistical reports for analysis
- helps companies manage employee account

## Achievements/Challenges

FlexiClaims allows HMOS and service providers to submit claims online. HMOs are able to access the claim submission for evaluation and go through the claims approval process immediately. The claims process is fully integrated with service provider, membership and scheme module to access information that is needed during the end-to-end claims cycle.

With FlexiCaims, HMOs can now manage claim 24x7 online and easily integrate with new service provider. The claim process is shorter with minimal error by integrating with service provider, membership and scheme information. The integrated information also reduces the manual tasks of submitting and crossing reference to numerous documents, hence reducing and controlling claim fraud.

CrimsonLogic, the developer of FlexiClaims, is currently marketing the service to overseas HMOs. Marketing efforts are also being made to promote the service to overseas authorities. Through presentations and demonstrations in conferences and exhibitions.

# Electronic Business in Public Sector

**Category：Electronic Business in Public Sector**
**Project title：eBAS – A Successful Government EIP**
**Organization：Directorate-general of Budget, Accounting and Statistics (DGBAS), The Executive Yuan**

## Summary

eBAS (electronic Budget, Accounting and Statistics) is a portal and knowledge management platform designed to improve the inter-governmental communication.

It rebuilds business digitalization processes and increases administrative efficiency. As a result, eBAS reduces both time and cost of data transfer and to increase administrative efficiency.

All DGBAS (Directorate-general of Budget, Accounting and Statistics) subordinate agencies and personnel have linked up to the new network, which has its own dedicated website to provide various e-business application, data exchange and communication functions.

## Methodology/Scope

eBAS is constructed as a G2G (Government to Government) network for rapid data transmission and exchange. It is a portal that integrates BAS application services, including information systems such as Government Budget, Government Accounting, Official Statistics Management, Census Investigation and BAS Personnel.

There are four strategies in this project:

- **Innovative Service:** provide an environment in the BAS e-community for stimulating creativity and establishing appropriate behavior.

- **Common Consensus:** form information promotion taskforces to build up common consensus within the organization.
- **Effective Reengineering:** convert existing paper-based processes into digital data exchange mechanism and set up an assessment procedure for the BAS system.
- **Electronic Infrastructure:** set up a mode of communications to overcome the limitations of distance among the BAS members across the country. Complete the knowledge bank to provide an intelligent platform for national BAS staffs.

## Achievements/Challenges

eBAS has improved G2G, G2C (Government to Citizen) and C2C (Citizen to Citizen) administration and service efficiency. The achievements include:

- Significantly reduces time and cost of data transfer and increases efficiency.
- Reduces the quantity of documents and repeated data input to save costs and shorten processes.
- Standardizes procedures to reduce overall operating cost.
- Strengthens the BAS personnel's knowledge management and communication ability.
- Establishes a nation-wide family of BAS members to bolster their morale.

Looking forward eBAS will integrate all BAS-related management information systems into the eBAS intelligent platform to strengthen a digitalized workflow and operation environment.

The eBAS system's successful experiences should also be promoted to other governmental organizations to improve inter-government communication and administrative efficiency.

**Category：Electronic Business in Public Sector**
**Project title：Vitamin C (Cash) – Supply Chain e-Financing Project**
**Organization：Department of Industrial Technology, Ministry of Economic Affairs**

## Summary

Project C focuses on e-financing operations in a supply chain between manufacturers and suppliers in the IT sector. It seeks to align cash flow services with the existing e-business supply chain to provide a range of financial services including global payment and collection, offset, account aggregation and an online financing system.

This project brings together players in the banking industry and assists them in solving payment issues between lead manufacturers and their suppliers.

It also creates an enabling environment for Taiwan's industries to keep orders, financing and cash within Taiwan and to construct a global financial services network for domestic banks.

## Methodology/Scope

This project integrates e-supply chain systems with e-payment services provided by financial institutions to replace paper checks, providing electronic banking services for enterprises. The online e-finance service for suppliers is free of a guarantee requirement and uses the transaction information at any given step in the order process.

**Methodology:**

- Setting application qualifications, principles for approval and calling for qualified players through an openly announcement.
- Using the mechanism of the DoIT/MOEA's IT Application and Promotion (ITAP) Program for Enterprise to guide, audit and promote the execution of each participant in Project C.
- The Bank Working Group (BWG) is organized to set common electronic banking requirements and coordinate business processes between banks, lead manufacturers and suppliers.
- Coordinating the BAROC (The Bankers Association of ROC) to take responsibility for developing and disseminating FXML standard messages for Project C
- Seeking common ground, setting unified inspection and acceptance regulations.

## Achievements/Challenges

This project has helped to strengthen the competitiveness of Taiwanese banks, giving Taiwan's financial sector an edge in terms of capabilities and innovative services. It also enables Taiwanese financial institutions to build a global financial services network.

By the first quarter of 2004, Project C had included eight banks and over 4,500 suppliers. The amount of e-finance had reached NT$23 billion, and this figure is projected to grow to NT$60 billion at the end of 2004. Suppliers obtained favorable loan rates, with reductions of approximately 50 percent. The increased transparency of transaction information made it possible for banks to simplify their credit procedures, saving them around NT$30 million.

Thorny issues in this project include accounts receivable and accounts payable issues as the integration with e-payment tools has not finished at that moment. The majority of payments are still done via paper means by writing a check, or through other complex manual processes. Another challenge is supplier's financing issues.

Looking forward, Project C e-finance services aim to reach Taiwanese firms abroad via overseas bank branches.

**Category：Electronic Business in Public Sector**
**Project title：e-Panchayat**
**Organization：National Informatics Centre, Department of Information Technology, Ministry of Communications and Information Technology, Government of India**

## Summary

The e-Panchayat project is designed to introduce IT services to the village level.

The services provided by e-Panchayat range from simple birth and death certificates, trade licences to works monitoring and financial accounting.

Under this project, a website has been set up for each Panchayat, which is the village-level government.

The project aims to bring a customized information system and IT infrastructure to the village level. In addition to introducing the digital culture to villagers, the project will also minimize the recurring expenditure on operation and maintenance.

## Methodology/Scope

As desktops are now available at affordable prices, the e-Panchayat software can be easily loaded into the computer system in the village. The system will eventually be available across the state and some strategies have been mapped out to achieve this goal.

Due to budget concerns, the Commissioner Panchayat Raj & Rural Employment will only be responsible for expanses of the servers. On a Build Own and Operate (BOO) basis, the systems will be facilitated by a self-employment generation scheme.

Under this scheme, one or two families in each village will make a living by providing services to the entrepreneur who runs the e-Panchayat. As the entrepreneur receives payments to input data and reports, he/she will be responsible for system maintenance, procurement, internet connection and associated logistic issues.

The software in this project is developed by National Informatics Centre (NIC) and the central server infrastructure by the State Government. The field level resources are facilitated in line with the BOO model.

## Achievements/Challenges

Some selected panchayats, including Ramachandrapuram and Edida , have started

deployment and implementation of this electronic system. Over 200 RSDP (Remote Sensing Data Policy) operators have been trained by NIC to be the major stake holders in providing and maintaining resources to villages lack of financial resources.

Major challenges in this project include:

- Lack of resources.
- Lack of infrastructure.
- Lack of awareness among various stake holders.
- Misconceptions about the proposed systems.
- Lack of commitment.
- Resistance to Change.
- Lack of change management strategy at State level.

The next step is to sign a MOU between NIC and the GP Department and start the implementation by organizing training and awareness programmes.

**Category：Electronic Business in Public Sector**
**Project title：Electronic Bidding Core System**
**Organization：Japan Construction Information Center**

## Summary

The Electronic Bidding Core System allows bidders to use the internet rather than have to be present at the venue. They simply file the bids from their office.

It aims to consolidate current Electronic Bidding Systems and reduce costs for bidders.

A bidder may build their own Electronic Bidding System based on the Core System and this is designed to reduce costs and prevents multiple interface and authentication, which has been confusing in the past.

The Japan Construction Information Center (JACIC) and the Service Center of Port

Engineering (SCOPE) have jointly set up the "e-Bidding Core System Development Consortium" to introduce the Core System to the public as well as local government offices. The Core System is highly flexible and can be applied to different users.

It supports registration, application, bidding and re-bidding and also shows the results of tenders on the system. But companies without Internet can still use the traditional paper bidding system.

## Methodology/Scope

The Electronic Bidding Core System provides a simple screen layout so users can understand the bidding progress at a glance. They can also customize their screen layouts through this user-friendly system. The layout is in accordance with GUI Guidelines, which details how to use other Electronic Bidding Systems along with the core system.

The Core System is in two parts, a customisable area and a core area. In the former, users can design their own screen and account books. In the latter, bidding-specific program components and a public key infrastructure are included. As the Core System is developed with Java, program codes can be unified to improve efficiency in development and maintenance management.

## Achievements/Challenges

Results of an opinion survey on bidding-related businesses have shown that the Core System is highly reliable and flexible. So far 25 ministries and public corporations, including MLIT and MAFF, all prefectures and government-designated cities are using this system as special members. MLIT has been operating an Electronic Bidding System based on the Core System since 2002, and has implemented about 30,000 electronic bidding as of March 2003.

The system has significantly simplified the bidding process and attracted more bidders. Standard electronic authentication has been adopted for implementing transactions to prevent Internet forgery and alteration.

The Core System V3.1 has been released, greatly enhanced the system's performance particularly in its multiprocessing capability.

**Category: Electronic Business in Public Sector**
**Project title: e-management for education (IMSeducation)**
**Organization: University College of Engineering & Technology Malaysia**

## Summary

The Integrated Management System Education (IMS education) project is designed to help universities in managing resources and decision-making with an integrated system. This total campus management system is a combination of software engineering, network engineering, electrical engineering, management and psychology.

The project aims to:

- Improve efficiency and productivity;
- Deliver culture values;
- Reduce operation cost and increase profit;
- Integrate organizations through the Integrated Information System and
- Provide effective Decision Support and Strategic Planning Tools

## Methodology/Scope

IMS education adopts a strategic approach that manages an organization through a technology-based system. It focuses on Integration, Automation, Artificial Intelligence, Dynamic and Paperless.

- **Integration**: all data is stored in a single Integrated Database to avoid duplication and all applications are fully connected as one integrated process.
- **Automation**: it avoids manual transferring of information between all related entities in the organization. All the processes are done by the Integrated System.
- **Intelligence**: the Intelligent Timetable Engine enables all slots in the time table to be done in a fair, optimum and efficient manner.
- **Paperless**: all application, approval, meetings or reporting mechanism have been adjusted to ensure the use of online information instead of hard copy.
- **Dynamic**: the system in the e-management's environment has been designed to cater any change at any time as required.

## Achievements/Challenges

The achievements of the projects include:

- The Premier Award 2003 from MAMPU in Public Sector Category
- MSC APICTA 2003 Merit Award (MSC Asia Pacific ICT Award) in education category
- Finalists PIKOM 2003 (Malaysian Computer Asssociation) in private sector category

The IMSeducation project should be extended to datawarehousing and data mining activities to produce analytical reports to support the strategic planning of the organization. It should also be expended to other sectors such as IMShealthcare, IMSmanufacturing, IMSbanking, IMSrestaurant, IMSconstruction, IMSfinancing and IMStrading.

One of the major challenges in this project is to convince the top management about benefits of e-management and the implications to the university. The short dateline, fast deliverables, high expectations from the users, zero error, zero downtime, no alternative and no turning-back strategy require a very strong and tough team and project leader .

**Category：Electronic Business in Public Sector**
**Project title：Tax Agent Portal**
**Organization：Australian Taxation Office**

## Summary

The Tax Agent Portal project aims to deliver a convenient and secure website, within which tax agents can access a range of online products, services, tools and information relating to the tax system.

The Portal was designed with direct input from tax professionals at all stages. It provides convenient access to view client information, update certain client details in real time, download reports, submit online forms and send messages to the Tax Office - all within a secure environment. The Portal is available to all registered tax agents via a secure link.

One of the early deliverables of this program was a secure online environment within which tax agents could access information regarding their clients and submit transactions to the Tax Office. The ultimate aim of the Tax Agent Portal is to become a fully integrated, electronic hub for accessing information from, and transacting business with, the Tax Office. The project has been progressing well and is on track to deliver future improvements to reach the stage where tax agents have a high fidelity portal environment where eBusiness transactions will satisfy nearly all of their tax interactions.

## Methodology/Scope

- Taking a **user-centred approach**, creating products and services that are Easier, cheaper and more personalised.
- Making the emerging design **visible** through early **documentation** and Prototypes that focus on dialogue, sustain energy and facilitate co-design.
- Working collaboratively in **interdisciplinary teams**, helping ensure that, When change is implemented, the user experience reflects that intent.
- Building a **shared understanding of intent** and ensuring that, when Change is implemented, the user experience reflects that intent.
- Following a **disciplined yet flexible process** that stays true to our design Principles and achieves higher quality in less time.
- Mapping the user pathway and other layers of design upfront to create a **Coherent blueprint** for change.
- Looking for **innovative solutions** that align with corporate directions and **Achieve a balance between tax system integrity and user expectations.**

| Achievements/Challenges |
|---|
| The Tax Agent Portal has been highly successful and is used by a large proportion of tax agents on a daily basis, with usage increasing each month. It currently has around 100,000 logons every week by an average of 11,000 different agents. During April 2004, there were more than 3.5 million page hits on the Tax Agent Portal. In 2003, the Tax Agent Portal was nominated for, and won, the CPA Australia – Queensland Public Sector Award that recognises significant contributions and innovations to the fields of finance, accounting and business within the public sector.<br><br>Security is the biggest challenge for this project. The Portal offers two levels of authentication - User ID/Password and Public Key Infrastructure (PKI) digital<br><br>certificate security. This accreditation provides assurance that the certificate issuing process and the technology and practices that underlie it are robust and are in line with published standards. As part of the assurance processes relating to security, independent bodies have undertaken a Threat Risk Assessment and conducted penetration testing for each portal release. |

# Trade Facilitation

**Category：Trade Facilitation**
**Project title：eTrade (Facilitating international trade in India)**
**Organization：Department of Commerce, Ministry of Commerce & Industry, Government of India**

| Summary |
|---|
| The eTrade project is a solution based on e-commerce (EC) and electronic data interchange (EDI). The unified portal allows the trading community access to all trade regulating agencies that deliver their services through electronic means.<br><br>The eTrade project aims to:<br>• Simplify procedures.<br>• Provide 24 hour access to users with their business partners.<br>• Increase procedure transparency.<br>• Reduce costs and time in transaction.<br>• Introduce international standards and practices to the domestic industry. |

| Methodology/Scope |
|---|
| Under the project, departments involved in international trade need to offer their services via EC/EDI with an objective to bring the overall transaction time to international level. |

Problems in EC/EDI implementation have been identified and a study was conducted on the framework for implementation of EC/EDI in India. Important strategies include:

- Mapping and re-engineering of the core regulatory trade processes.
- Defining clear success criteria for EC/EDI implementation and connecting all agencies to the system.
- Assigning an agency to monitor and assess the implementation.
- Setting up a task force to process re-engineering.
- Planing National Message Development project;
- Internetworking of VANs.
- Seeking legal amendments to facilitate the project.
- Organizing training programmes.

**Achievements/Challenges**

Achievements of the eTrade project include:

- Integration of all international trade regulatory / facilitating agencies eTrade through a portal (http://etrade.nic.in) has been provided this year.
- The project has empowered the trade & industry to have a transparent system for international trade, wherein they would be in-command to have anywhere anytime access to all the trade regulatory/facilitating agencies.
- Significant reduction in transaction time of services is achieved e.g. license application now disposed in 6 hours instead of earlier 45 days.
- Reduction and early detection of frauds.
- Digital Signature/PKI integration
- Electronic Payment integration
- Uniformity and simplification of processes across different locations

Looking forward, the project is working on a web-based system to computerize shipping documents so operators can exchange information in a secured electronic environment.

**Category：Trade Facilitation**
**Project title：Using Smart Card in Customs Procedure**
**Organization：ASYCUDA project - Islamic Republic Of Iran Customs Administration**

**Summary**

The Smart Cards project is designed to replace paper-based permits with electronic means. These electronic permits are much more configurable and manageable than paper-based permits.

As one of the most common customs offences in Iran is documents forgery, Smart Cards will reduce document forgery and are ideal substitutes to paper-based documents. With a layered security mechanism of storage and retrieval, Smart Cards are the most secured permits in circulation.

## Methodology/Scope

The following procedures are adopted in the Smart Cards project:

- **Import procedure**: all the permits issued by the Customs will be encoded in the Smart card format by the Smart Card machine. All the cards are subjected to configuration before encoding.
- **Transit procedure**: data/information of transit documents will be encoded into the Smart Cards. The data will be tracked en route to destinations and controlled by relevant controlling agencies. All transit data will be written-off down the road.
- **Export procedure**: controlling agencies in this case act as port offices or warehouses.
- **Miscellaneous procedure**: as all Customs procedures have been addressed in the automated ASYCUDA system, Smart Cards can be applied for other purposes.

## Achievements/Challenges

Smart Cards achievements include:

- Increase the government's revenues by reimbursement of taxes that were not levied before.
- Replace all paper-based documents by electronics means.
- Speed up the issuance of permits by removing the manual method.
- Reduce related costs.

A lack of robust and reliable telecommunication infrastructure in Iran has been the biggest issue for Smart Cards as not all parties involved are equipped with the Internet.

Looking ahead the project needs to seek closer co-operation among organizations in the trade chains and active users of this facility. It is also crucial to build a culture of data exchange.

**Category：Trade Facilitation**
**Project title：PTP Community Systems**
**Organization：Port of Tanjung Pelepas**

## Summary

PTP is one of Malaysia's latest and most modern container terminals. The PTP

Community Systems were developed to provide tools for its community to carry out business transactions via electronic means. They consist of various application systems to serve distinct functions of port business or authority requirements.

The project offers the community all necessary functions in conducting business transactions related to the seaport. With the ability to handle remote and self-service database transactions, the community can perform their functions anytime and anywhere.

The systems have transformed PTP to an efficient port through flexibility, a comprehensive network and simplified process. Many approaches in this project are completely new to Malaysian ports and the success of PTP means a model has been set up for other ports to follow.

## Methodology/Scope

PTP Community Systems consist of the following:

- **Navis** - container operation system
- **FZIPS** - Free Zone information processing system
- **VCS** - Vessel clearance system
- **GCAMS** - Gate control and monitoring system
- **SCM** - Simplified container movement

The systems aim to create a one-stop-access point for operators to deal with PTP and reduce any duplicated data entry in the process.

The systems operate on a 24-hour basis and data facilitation is made possible via usage of UNEDIFACT messages, direct entry via the Internet, or uploading of simple data format.

## Achievements/Challenges

Benefits brought in by the systems include time and cost saving, minimum duplication of data, self-service flexibility, simplified process and efficiency.

As the systems are now in place and most of the process has been defined, the next step will be to transform sporadic interfaces to a structured manner. A service platform where interfacing can be done in service layers rather than from system to system should be built. The portal approach will be used to reflect single market place.

One of the main challenges is to transform the paper-based exercise to completely paperless, especially when it involves different parties. As some approaches required high-level policy reviews, delays are inevitable and such delays have become an obstacle in system development.

**Category：Trade Facilitation**
**Project title：Green Light Partnership for Trade Development**
**Organization：Mongolian National Chamber of Commerce & Industry**

## Summary

The Green Light Partnership for Trade Development is designed to promote and support trade and investment. This project acts as a bridge between public and private sectors for a constructive dialogue on trade facilitation.

As the project organiser, Mongolian National Chamber of Commerce & Industry (MNCCI) gives priority to issues related to trade facilitation and business environment. One of the MNCCI's main tasks in 2003-2004 is to promote trade facilitation throughout the country, by building a structure consisting of representatives from the government and non-governmental organizations.

## Methodology/Scope

An IT Committee, organized by MNCCI, was established in 2003 consisting of IT companies, non-governmental organizations and IT specialists from MNCCI. The Committee has jointly conducted a yearly study on E-Assessment of Mongolia with Development Gateway of Mongolia, an NGO.

MNCCI and Mongolian Custom General Administration have also moved to simplify paper-based procedures at the customs. An e-application system for Certificate of Origin has been introduced at the beginning of 2004.

The "Co-operation Declaration of Business Representing NGOs of Mongolia" project has been established to facilitate trade and develop the private sector.

Priorities are:

- To reach business communities and the private sector and form a framework for business related laws and regulations.
- To promote IT and e-commerce in Mongolia; transfer foreign trade documents into the e-form under the drive for e-customs.
- To play a strong advocacy role and create more opportunities for the Mongolian business community.
- To simplify trade procedures and promote e-commerce.

## Achievements/Challenges

Currently over 30 associations representing the business community have joined "Co-operation Declaration of Business Representing NGOs of Mongolia" and they have set up a Council of Business Supporting Associations.

In 2004 MNCCI will set up the National PRO Committee to increase awareness and acceptance of trade facilitation. The first Business to Business, B-to-B, electronic offer network, which will allow domestic businesses to exchange offers in E-form, will also be established for the development of e-commerce in Mongolia.

**Category : Trade Facilitation**
**Project title : Transport Code Repository**
**Organization : Tradegate Australia Ltd**

## Summary

The Transport Code Repository is a single point of reference for codes needed for e-commence. This online reference acts as a central location linking all the codes.

As it is critical in e-commerce to have a commonly accepted list of codes that all parties can agree on, the Transport Code Repository automates the distribution of code tables whenever they are changed.

Premier users receive automatic updates of code tables through this system daily so they are always up to date. Tradegate, a non-profit association, acts as a neutral, independent manager of the repository, with codes maintained by the "owners" of the codes.

## Methodology/Scope

- Conduct a review of existing code sets to remove inaccurate and redundant codes and to make provision for new codes where required
- Create a repository of code accessible – via the internet – and usable by all organisations irrespective of size or industry sector
- Provide links to code sets maintained by international agencies such as ISO, UN, WCO, WTO, IMO, SMDG, EAN-UCC, etc., to enable quick and ready access to the relevant codes
- Provide a mechanism for update of both national and international code sets to ensure their relevance to industry requirements

## Achievements/Challenges

The Code Repository simplifies the maintenance of codes that are hosted on it, by allowing anyone with internet access to search for a code and request a new code if they cannot find what they are looking for. This request is sent to the code maintainers, the "owners" of the codes who create the appropriate code if necessary.

The main challenge is to gain more acceptance of the system within the community and to get more code tables hosted on the repository. The final method of cost recovery of the service on an ongoing basis has not been determined as it may ultimately be determined by usage. The options are to charge an annual fee to access the service or a transaction based fee for each access or to seek combined government/industry grant funding to provide the service on an ongoing basis. The latter would certainly be less demanding and costly in terms of administration.

**Category：Trade Facilitation**
**Project title：CertOfOrigin**
**Organization：CrimsonLogic Pte Ltd**

## Summary

CertOfOrigin is the world's first end-to-end web-based COO application and certification system, providing a single interface for exporters and their agents to apply for a COO conveniently.

CertOfOrigin is developed to simplify the workflow of COO, which is one of the documents required by some banks, or authorities to complete cross-border trade between buyers and sellers.

The system enables the Authorised Organisations (AO) to approve COO applications, as well as the documents required to authenticate the origin of the goods traded online securely and conveniently. The entire process, from COO application by exporters and their agents to receipt of approved COO by the Customs officers and other trading partners in the importing country, can be completed in an electronic environment, bringing multiple benefits to the trading community.

## Methodology/Scope

CertOfOrigin allows exporters to submit an application electronically from the comfort of their office or anywhere else. It also enables chamber officers to approve and certify COO applications online with easy retrieval of supporting documents through data integration capability built within CertOfOrigin. Immediate transmission of approved COO to designated recipients such as the banks, overseas buyers, and customs officers has also been enabled in a secure electronic environment.

This system:

- allows the exporters and agents to apply CO online
- allows AO to certify CO online
- allows the specify CO recipients to take a hard-copy printout of the CO
- transmits the CO to the destinations like banks or overseas buyer electronically.

## Achievements/Challenges

In Singapore, the four chambers of commerce has accepted and implemented CertOfOrigin as an electronic COO application and certification system. CertOfOrigin was officially launched with the full support of the chambers. The Singapore Business Federation and Singapore Customs have also endorsed the project.

CrimsonLogic, the developer of CertOfOrigin, is currently marketing the service to overseas customs and embassies in countries such as North America and the Middle East to develop a truly global eTrade environment.

Challenges it faces include the promotion of new technology acceptance by the trading community and electronic COO acceptance by overseas authorities, such as the Customs.

# 2007 eASIA Award Semi-Final List

Bridging Digital Divide Category
Electronic Business in Private Sector Category
Electronic Business in Public Sector Category
Trade Facilitation Category

# 2007 eASIA Award Semi-Final List

| Bridging Digital Divide Category | |
|---|---|
| DD01 | Project title：Taiwan e-Culture Construction Plan<br>Country/Economy：Chinese Taipei<br>Organization：Council for Cultural Affairs |
| DD02 | Project title：Bridging the Digital Divide of the SME Project / Taiwan SME Digitalization Task Force Plan<br>Country/Economy：Chinese Taipei<br>Organization：Chunghwa Telecom Co.,Ltd |
| DD03 | Project title：The First Rural ICT Center in Iran, Gharnabad Village<br>Country/Economy：Iran<br>Organization：Iran University of Science and Technology |

| Electronic Business in Private Sector Category | |
|---|---|
| PR01 | Project title：Li Peng e-Business Plan - e-Spin Global Brand Collaborative Research and Production Plan<br>Country/Economy：Chinese Taipei<br>Organization：Li Peng Enterprise Co.,Ltd |
| PR02 | Project title：KYMCO's Collaboration<br>Country/Economy：Chinese Taipei<br>Organization：KWANG YANG MOTOR CO.,LTD. |
| PR04 | Project title：PLISM (Port Logistics' Integrated System for Maritime Business)<br>Country/Economy：Korea<br>Organization：KL-Net |

| Electronic Business in Public Sector Category | |
|---|---|
| PU01 | Project title：G2B2C Government Official Document Interchange System<br>Country/Economy：Chinese Taipei<br>Organization：Institute for Information Industry |
| PU05 | Project title：KONEPS (Korea On-Line E-Procurement System) The Best Practices of e-Government<br>Country/Economy：Korea<br>Organization：The Republic of Korea Public Procurement Service |
| PU06 | Project title：COLLABORATIVE e-Revenue<br>Country/Economy：Thailand<br>Organization：The Revenue Department of Thailand |

| Trade Facilitation Category | |
|---|---|
| TF01 | Project title：Maritime & Habor Information Overall Development<br>Country/Economy：Chinese Taipei<br>Organization：Ministry of Transportation and Communications |
| TF05 | Project title：Implementation of EC-EDI in Air Cargo Sector<br>Country/Economy：India<br>Organization：Airport Authority of India |
| TF08 | Project title：Internet Clearance Portal System<br>Country/Economy：Korea<br>Organization：Korea Customs Service |

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# Meeting History

# Meeting History

| | Year | Date | Place | Remark |
|---|---|---|---|---|
| **1st** | 1990 | Nov. 5~6 | Tokyo, Japan | JS/EB Plenary |
| **2nd** | 1991 | Jun. 25~26 | Singapore | JKS/EB Plenary & EDICOM '91 |
| **3rd** | 1991 | Oct. 28~29 | Tokyo, Japan | AS/EB Plenary |
| **4th** | 1992 | Jun. 11~12 | Tokyo, Japan | AS/EB Plenary & EDICOM '92 |
| **5th** | 1992 | Oct. 29~30 | Seoul, Korea | AS/EB Plenary |
| **6th** | 1993 | May. 20~21 | Beijing, China | AS/EB Plenary |
| **7th** | 1993 | Oct. 25~27 | Seoul, Korea | AS/EB Plenary & EDICOM '93 |
| **8th** | 1994 | Jun. 6~8 | Kuala Lumpur, Malaysia | AS/EB Plenary |
| **9th** | 1994 | Nov. 28~30 | Chinese Taipei | AS/EB Plenary & EDICOM '94 |
| **10th** | 1995 | Jun. 5~7 | Bangkok, Thailand | AS/EB Plenary |
| **11th** | 1995 | Nov. 1~3 | Kuala Lumpur, Malaysia | AS/EB Plenary & EDICOM '95 |
| **12th** | 1996 | Jun. 4~7 | Manila, Philippines | AS/EB Plenary |
| **13th** | 1996 | Oct. 28~30 | New Delhi, India | AS/EB Plenary & EDICOM '96 |
| **14th** | 1997 | Apr. 30 ~ May. 2 | Singapore | AS/EB Plenary & EDICOM '97 |
| **15th** | 1997 | Nov. 2~6 | Colombo, Sri Lanka | AS/EB Plenary |

| | Year | Date | Place | Remark |
|---|---|---|---|---|
| **16th** | 1998 | Jul. 4~10 | Tehran, Iran | AS/EB Plenary |
| **Management Team Meeting** | 1999 | Apr. 22~23 | Singapore | |
| **17th** | 1999 | Sep. 5~10 | Seoul, Korea | AS/EB→AFACT Plenary & EDICOM '99 |
| **18th** | 2000 | Sep. 11~15 | Chinese Taipei | AFACT Plenary & EDICOM '00 |
| **19th** | 2001 | Oct. 1~3 | Jakarta, Indonesia | AFACT Plenary & EDICOM '01 |
| **20th** | 2002 | Oct. 28 ~ Nov. 1 | Kuala Lumpur, Malaysia | AFACT Plenary & EDICOM '02 |
| **21st** | 2004 | Jan. 11~14 | Karachi, Pakistan | AFACT Plenary & EDICOM '03 |
| **22nd** | 2004 | Sep. 19~22 | Singapore | AFACT Plenary & EDICOM '04 |
| **23rd** | 2005 | Oct. 24~27 | Hanoi, Viet Nam | AFACT Plenary & EDICOM '05 |
| **24th** | 2006 | Aug. 7~11 | Karachi, Pakistan | AFACT Plenary & EDICOM '06 |
| **25th** | 2007 | Aug. 6~10 | Bangkok, Thailand | AFACT Plenary & EDICOM '07 |

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