



**Asia-Pacific
Economic Cooperation**

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

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

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Executive Summary (Project *CTI 01/2009T*)
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1. Introduction

This executive summary offers highlights of the project “Assessment and Best Practices on Paperless Trading to Facilitate Cross Border Trade in the APEC Region (*CTI 01/2009T*)”, set by APEC’s Electronic Commerce Steering Group (ECSG) and Paperless Trading Sub-Group (PTS).

The project was executed by two teams, one in China focusing on the assessment of paperless trading in APEC member economies and one in Chinese Taipei, focusing on Best Practices. A report was produced by each team and is available with this Executive Summary:

- Assessment of Paperless Trading in APEC Member Economies (team in China)
- Best Practices in Paperless Trading to facilitate Cross Border Trade in the APEC Region (team in Chinese Taipei)

2. Background and Objectives

The “Assessment and Best Practices on Paperless Trading to Facilitate Cross Border Trade in APEC Region” (*CTI 01/2009T*) project is set within the context of APEC’s goals and action plans for trade facilitation and trade transaction costs reduction.

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

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

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

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

This project directly responds to the Blueprint by constructing best practices for paperless trading to facilitate cross-border trade, together with Critical Success Factors and Key Performance Indicators, for inclusion in the APEC reference database, whose provision was endorsed by APEC Ministers in the 1998 Leaders Declaration.

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

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3. Definition of Paperless Trading

In order to avoid ambiguity, and for the purposes of this project only, a definition of “paperless trading” is suggested as “the electronic exchange of structured information *between computer application systems, or between computer application systems and people*, related to the execution of activities involving separate entities or parties in the scope of the Buy-Ship-Pay model as outlined in UNCEFACT Recommendation 18”.

4. Assessment of Paperless Trading in APEC Economies

4.1 Background and Findings

Most APEC members have formulated their guidelines for paperless trading in recent years, and have achieved substantial results. With deepening regional economic integration, paperless trading has been gradually incorporated into the agenda of bilateral or multilateral trading cooperation, and has shown increasing effect on liberalization of trade. The legal climate for paperless trading has also improved.

The 2005 Assessment Report on Paperless Trading of APEC Economies written by APEC E-Commerce Business Alliance summarized development of paperless trading in APEC economies and recognized the ability of the member economies to reach the target of cutting trading cost by 5% by means of paperless trading. Based on the evaluation indicators, the report analyzes the status of paperless trading in APEC economies and studies successful cases to show results, share experience and narrow the gap in terms of paperless trading.

The report evaluates strategies, status, trajectory and challenges of developing paperless trading in APEC economies and includes five parts, with a Double Diamond Model to show the main scope of paperless trading. The report is not based on technical analysis, but rather with social infrastructure and common concerns of all the parties in paperless trading, and particularly from the government’s perspective.

As different economies have different situations, particularly in physical infrastructure, technological development and social infrastructure, they will

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choose different paths for developing paperless trading, which is summed up in the report. Besides, from the macro perspective, the report aims to make a general evaluation plan and evaluation methodology for developing paperless trading.

4.2 Conclusions

The report reached the following conclusions:

1. Most APEC economies place high premium on development of paperless trading and are equipped with effective telecommunications infrastructure and legal system, which accordingly do not constitute obstacles to development of paperless trading.
2. Most APEC economies have adopted electronic declaration systems for Customs, and some economies have achieved substantial results in integration of customs and logistics.
3. Regional cooperation has become stronger in simplifying trading procedures and paperless trading, and significant progress has been made in regional cooperation in paperless trading, thanks to cultural similarity, trading convenience and geographical intimacy.
4. Some economies have started to try to exchange electronic data for cross-border paperless trading. Inter-governmental data exchange and certification has just newly started.
5. Realization of paperless trading is increasingly based on integration of the global supply chain. All the economies have started to revolve around the global supply chain to plan single-window data integration.
6. Dominance in paperless trading has increasingly shifted from government to market and from public sector to private sector; as a result, private and public partnerships have been formed.
7. Some economies have started to build platforms for paperless trading that highlight their regional advantages to promote single-window development of paperless trading. Regional integration is the future development trend.

There still remains unbalanced development despite the huge progress achieved by APEC economies in paperless trading, such as widening gap between south and north in paperless trading development, and digital divide that still exists between developed and developing countries. Many economies are still confronted with operational and legal barriers.

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Operational barriers mean that design, implementation and operation of paperless trading lack human and technological resources and the skills in process reengineering. Legal barriers mean that development of paperless trading lacks a strong driving force, particularly legal compulsion, as paperless trading not only involves the private sector, but, more importantly, requires partnership between the public and private sectors, which means that the government must have strong executive power and support from the legislative body.

The report suggests that APEC economies deepen their research into benefits that have been brought by paperless trading to international trade, sum up their experience and lessons, reach consensus and build capacity in the region for the development of paperless trading. It is advisable that various economies communicate and share with each other, and learn from each other to bridge the digital divide of paperless trading between developed and developing countries.

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5. Best Practices on Paperless Trading to Facilitate Cross Border Trade

5.1 Background

The Best Practices aspect of this project aimed, with reference to existing implementations, to derive example best practices and critical success factors for the paperless cross border exchange of regulatory documents, and example paperless trading best practices that may be referenced by the private sector, including by Small and Medium Enterprises (SMEs). It also aimed to consider appropriate Key Performance Indicators (KPIs) to monitor the level of achievement of paperless trading. These deliverables aimed to support, albeit in a small way, APEC's goals and action plans for trade facilitation and trade transaction costs reduction.

As indicated above, quantitative measurements of the extent of paperless trading for the various sectors involved in the supply chain - such as buyers and sellers, forwarders, carriers, and terminals, banks and insurance, Customs and other Government agencies – do not seem to be available, particularly for all APEC member economies. However, a holistic assessment of the paperless trading capability of the various sectors indicates that multinationals including buyers and sellers, multinational forwarders, air and ocean carriers and the associated terminals are well advanced, as are Customs, and Banks particularly for local payments. There is now focus on improving the integration and paperless capability of other government agencies and there are various paperless initiatives for cross border settlement. However, the assessment indicates in general SME forwarders, who play a hub role in the international supply chain, and SME buyers and sellers, may need a priority focus in raising their cross border paperless trading capability.

A questionnaire was prepared which asked for specific characteristics and assessments of local and cross paperless trading projects. Based on the nine completed Economy responses and thirteen completed private sector responses, as well as related interviews and a review of other relevant case studies, consideration was given to areas where best practice guidelines,

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including analysis of obstacles and critical success factors, may be helpful and would supplement existing material. In addition, Key Performance Indicators for Paperless Trading were considered, notably in the context of the “Report on *Reducing trade transactions cost*” mentioned above.

5.2 Recommendations

Recommendations from the project are outlined below.

Recommendation 1: APEC adopt the Appendix A ‘Best Practices for the Paperless Exchange of Cross Border Regulatory Documents’ as a framework for reference by APEC Member Economy Public Sectors (B2G and G2G).

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

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

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

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Recommendation 2: APEC adopt the Appendix B ‘Paperless Trading Best Practices (Private Sector)’ as a framework for reference by APEC Member Economy Private Sector for Paperless Trading (cross border B2B and B2G).

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

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

Recommendation 3: APEC make reference to the Appendix C Paperless Trading Readiness Assessment Template to assist APEC Member Economy Public and Private Sectors to assess Paperless Trading initiatives.

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

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

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Recommendation 4: Suggest the APEC member economies to consider the KPIs in Appendix D as an alternative or addition to those specified in the “Report on Reducing trade transactions cost”

The “Report on Reducing trade transactions cost” recommends additional KPIs related to measuring the reduction in Trade Transaction Costs.

It is suggested that Member economies consider that the Phase 2 of the Study may review KPIs, as outlined in Appendix D.

Recommendation 5: Request APEC to establish a framework for the consistent research of the cost contribution of each process and sector to the Trade Transaction Cost plus the estimated cost reduction that may be achieved through paperless trading

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

Recommendation 6: Request APEC to Conduct a Survey on the Paperless Trading readiness of, and adoption by, SME dominated sectors in APEC member economies

Following on from the holistic assessment of the Paperless Trading capability of the various sectors involved in the international supply chain, and the framework for the analysis of the cost contribution of the supply chain processes and sectors to trade transaction costs, as suggested in Recommendation 5, it would be very useful to have an objective assessment of the capability of SMEs to conduct paperless trading amongst APEC economies, to confirm the priority that should be accorded.

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

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

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

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