

APEC's Achievements in Trade Facilitation 2007-2010

Final Assessment of the Second Trade
Facilitation Action Plan (TFAP II)



Asia-Pacific
Economic Cooperation

POLICY SUPPORT UNIT

Advancing Free Trade for Asia-Pacific Prosperity

EXECUTIVE SUMMARY

Following the conclusion of APEC's Second Trade Facilitation Action Plan (TFAP II) in 2010, the APEC Policy Support Unit (PSU) conducted the Final Assessment of TFAP II. This report consolidates and summarizes the findings from six component assessment reports: an aggregate measurement of total trade transaction costs as well as the contributions made by the APEC sub-fora in four priority areas - Customs Procedures, Standards and Conformance, Business Mobility, and Electronic Commerce (data privacy and paperless trading).

The results of the TFAP II Final Assessment provide strong evidence that the Leaders' goal of a 5% reduction in trade transaction costs over the TFAP II period of 2007 through 2010 has been achieved, with substantial progress made through APEC's trade facilitation efforts at both the aggregate and sub-fora levels.

Data from the World Bank's Trading Across Borders indicators reveal that there has been a 5% reduction in total trade transaction costs across the APEC region over the period of TFAP II, which resulted in total savings of USD 58.7 billion. More specifically, the study found that between 2006 and 2010:

- total fees and charges rose in real terms by USD 6.3 billion, an increase of 4.8%;
- reduction in the amount of total time taken to complete trade-related procedures amounted to USD 65.0 billion, a decrease of 6.2%;
- average number of days taken to complete an export transaction for a single container declined from 17 to 15 days, but the cost incurred rose from USD 842 to USD 856; and
- average number of days taken to complete an import transaction for a single container decreased from 17 to 15 days and the cost incurred also fell from USD 941 to USD 923.

Results from the Final Assessment reports also reveal that each of the four sub-fora have made significant progress to improve trade facilitation and reduce transaction costs through the measures implemented under TFAP II. In the area of customs procedures, the study found the following:

- 8.1% decline in the monetary value of the time taken in customs clearance and technical control between 2006 and 2010;

- the number of Approved Economic Operators (AEOs) in APEC increased by 26% between 2007 and 2009; and
- most APEC economies had either 100% electronic lodgement or increased (or at least kept constant) the proportion of merchandise trade-related documentation lodged electronically between 2007 and 2009, with a number of economies moving closer to fully paperless trading.

In the area of standards and conformance, there has been an increased degree of alignment of technical regulations and domestic standards with the international standards of the International Electrotechnical Commission (IEC) within APEC economies. The harmonized set of standards gives manufacturers greater certainty in standards compliance and allows for economies of scale in production. The study specifically found the following:

- the number of economies reporting alignment with IEC standards rose from 12 in 2006 to 16 in 2010; and
- the degree of alignment to a set of 168 IEC standards reported by APEC members rose to between 91% and 100% alignment in 2010 from a range of 55% to 100% in 2006.

The Final Assessment found that APEC's initiatives in business mobility have been very successful. There were 88,421 active APEC Business Travel Card (ABTC) holders at the end of 2010, an 11.4% increase from the end of 2009 and a 430% increase from the end of 2006. The study estimated the savings obtained by ABTC holders between March-July 2010 and March-July 2011 as a result of the ABTC scheme and found the following:

- 38% reduction in business travel transaction costs, which translates to total savings of USD 3.7 million; and
 - 43.3% reduction in time spent to complete visa applications
 - 27.8% reduction in fees spent on visa applications
 - 52.4% reduction in time spent to complete processing at immigration checkpoints
- 91% of ABTC holders rated their overall level of satisfaction with the ABTC scheme as satisfied.

In the area of electronic commerce, APEC has made

significant progress towards developing a consistent approach to information privacy protection across the region and towards assisting member economies to build capacity in domestic legislation. The guidelines, directories and templates to create the framework for the implementation of a Cross-Border Privacy Rules (CBPR) system in APEC have been completed. This system will support business needs, reduce compliance costs, provide consumers with effective remedies, allow regulators to operate efficiently, and minimize regulatory burdens, while also building a foundation of trust and confidence in data networks.

A case study on the application of an electronic Certificate of Origin (e-CO) between Chinese Taipei and Korea revealed the following:

- USD 274 savings per shipment and reduction of 2 days processing time for exporters;

- USD 397 savings per shipment and reduction of 3 days processing time for importers; and
- potential 6.8% reduction in transaction costs if there is APEC-wide adoption of the e-CO scheme and assuming a conservative ratio of shipments that require an e-CO.

Based on the results of the TFAP II Final Assessment, the CTI is recommended to focus its future efforts on the following:

- strive to systematically address how to better develop, design, implement, monitor, and review its initiatives to facilitate trade and reduce transaction costs; and
- continue trade facilitation efforts beyond TFAP II through greater focus on the APEC Supply-Chain Connectivity Framework.

1. INTRODUCTION

A. 2007-2010 TRADING ENVIRONMENT

The global trading environment faced many challenges from 2007 through 2010. At the start of the TFAP II period in 2007, world trade had slowed due to weakening demand from developed economies, mainly the United States, but also Europe and Japan¹. However, trade remained strong in most developing economies. Meanwhile, fluctuations in commodity prices in 2007 introduced uncertainty into global markets, as higher prices, particularly for energy and food, increased inflationary pressures around the world.

The Global Financial Crisis affected the world economy in late 2008, leading to a decline in the availability of credit as well as an acute loss of investor confidence². Global stock markets fell and international trade declined as a result; consequently, economic growth slowed worldwide. Governments and central banks responded with unprecedented fiscal stimulus, monetary policy expansion and institutional bailouts.

The beginning of 2009 witnessed large declines in trade volumes. Weak demand, falling commodity prices, globalized supply chains, the simultaneous impact of the economic crisis across economies and regions, and limited access to credit were some of the reasons why trade volumes fell so steeply in 2009³. Despite such extreme drops in trade volumes, there was no significant increase in trade barriers imposed

by WTO members in response to the crisis⁴.

By the conclusion of TFAP II in 2010, global trade volumes had rebounded strongly following their collapse in 2009 as the world economy began to recover from a deep recession, returning to their pre-crisis levels but not to their long-term trend⁵. The global recovery in trade was led mainly by rapidly growing demand, especially for capital goods, from developing economies. According to the WTO, the factors that contributed to the large drop in world trade in 2009, including increasingly globalized supply chains, may have also helped to advance the rebound in 2010.

A closer analysis of the indicators for the APEC region reveals the impact that the global economic events over the TFAP II period had on the region. Real GDP in APEC grew by around 7.8% (annual rate of 1.9%) over the TFAP II period, from USD 23.4 trillion in 2006 to USD 25.3 trillion in 2010. Closely following global GDP growth, GDP in APEC grew in each year of the TFAP II period, with an exception in 2009. Recovering from the

¹ World Trade Organization (2008).

² International Monetary Fund (2009).

³ World Trade Organization (2010a).

⁴ World Trade Organization (2010b).

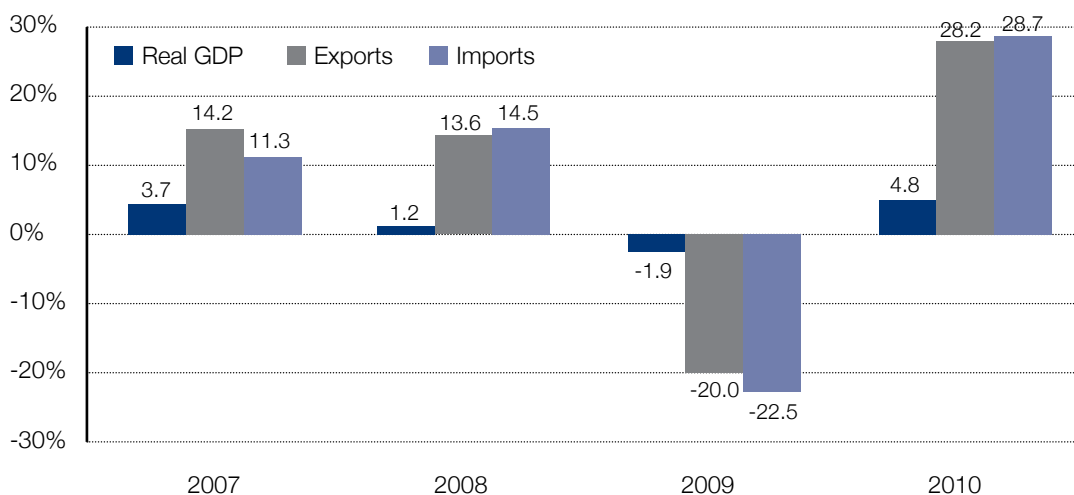
⁵ World Trade Organization (2011a).

2009 recession, APEC's GDP growth in 2010 (4.8%) accounted for 68.9% of the growth in global output.

In nominal terms, total merchandise exports from the APEC region rose from USD 5.4 trillion in 2006 to USD 7.2 trillion in 2010, growing at an annual rate of 7.4% over the TFAP II period. Despite a 20% drop in the value of APEC's exports in 2009 as a result of the Global Financial Crisis and the ensuing slowdown

in economic activity, exports from APEC rebounded strongly in 2010, increasing by 28.2%, while global merchandise exports grew by 21.7%. Growth in total merchandise imports to the APEC region also outperformed the rest of the world, increasing at an annual rate of 6.1% from USD 5.8 trillion in 2006 to USD 7.4 trillion in 2010 compared with an annual rate of 5.4% for global imports. While imports to the APEC region were 0.3% lower than their value in 2008, global imports were 6.9% lower than their value in 2008.

Chart 1: Real GDP and nominal trade values in APEC (annual percentage change)

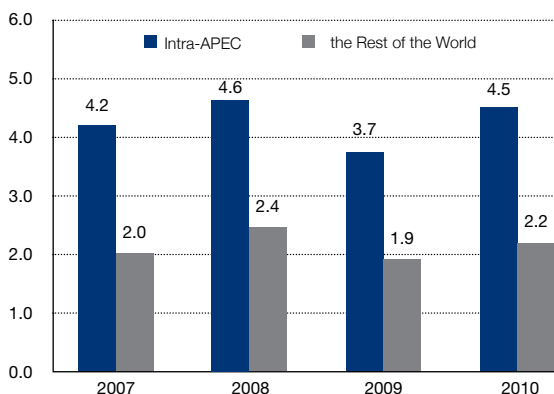


Source: StatsAPEC (World Bank; Chinese Taipei DGBAS; World Trade Organization); International Monetary Fund.

Although trade among APEC economies contributes nearly 70% to APEC's total trade, APEC's trade with the rest of the world has grown more strongly than intra-APEC trade over the TFAP II period. Intra-APEC exports grew at an annual rate of 4.4% between 2006 and 2010, while APEC's exports to the rest of the world increased at an annual rate of 7.1% over that period. Similarly, intra-APEC imports grew at annual

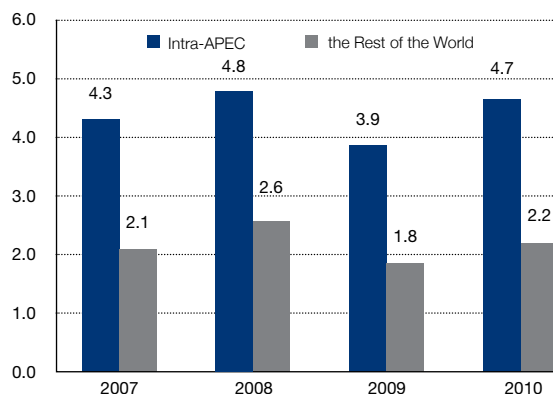
rate of 4.3% between 2006 and 2010, while imports to APEC from the rest of the world rose at an annual rate of 4.7%. However, following the Global Financial Crisis, the importance of intra-APEC trade for recovery, in particular exports, is apparent. In 2010, intra-APEC exports grew by 20.3% compared to an increase of 15.4% in exports to the rest of the world.

Chart 2. Exports of goods (USD trillion)



Source: StatsAPEC (United Nations; Chinese Taipei Bureau of Foreign Trade).

Chart 3. Imports of goods (USD trillion)



While global trade and output growth have gradually recovered following the Global Financial Crisis, the process has been uneven and fragile. The world economy is now entering another challenging phase in which the rebound in trade volumes will no longer play such an important role in growth as before. Advanced economies are facing another potential slowdown, including a reduction in industrial production and depressed demand, while uncertainties surrounding sovereign debt in the euro zone continue to cause concern. Sudden increases in food and energy prices could also hinder economic recovery and limit trade growth. The IMF forecasts that the volume of goods exports will grow by 8.1% in 2011, followed by 6.2% in 2012, while the volume of goods imports will grow by 8.8% in 2011 and 5.4% in 2012⁶.

Finally, one of the on-going issues in the global

trade agenda throughout the TFAP II period was the uncertainty surrounding the successful completion of the Doha Development Agenda (DDA) of trade negotiations among the WTO members. Initiated in 2001, the DDA covers trade negotiations in over 20 topics. The WTO has reported that negotiations for about 80% of the issues being discussed have reached a level of maturity that would allow members to conclude within a short period of time⁷.

However, agreement has not yet been reached, especially in the area of market access, and it seems unlikely that this will be achieved in the near term. Nevertheless, a December 2011 package with a focus on the least developed WTO members is presently being developed. One major area of discussion in the current package is trade facilitation, which the WTO feels has great value to all members – “a true win-win agreement”.

B. IMPORTANCE OF TRADE FACILITATION

Trade facilitation refers to the simplification and streamlining of international trade procedures in order to allow for easier flow of goods, both at the border as well as behind the border. Trade facilitation measures are aimed to reduce trade transaction costs, thereby ensuring that goods are delivered in the most efficient and cost effective manner. Businesses, and thereby consumers, benefit from reduced transaction costs through streamlined procedures, more transparent trade regimes, and better predictability of the application of rules.

Trade facilitation efforts have yielded significant gains in several aspects of international trade and played an important role in enhancing bilateral and multilateral trade flows. In a recent speech, WTO Director-General Pascal Lamy said that every additional day required to ready goods for import or export decreases trade by around 4%⁸. He also quoted research which found that the implementation of trade facilitation measures currently being discussed at the WTO could reduce total trade costs by almost 10%. Moreover, a recent study by the OECD estimated that a reduction in trade

⁶ International Monetary Fund, World Economic Outlook Database September 2011.

⁷ World Trade Organization (2011b).

⁸ World Trade Organization (2011b).

transaction costs by 1% of the value of world trade would result in a global benefit of USD 40 billion⁹.

Improvements in trade facilitation also greatly benefit SMEs, with research showing that reducing the number of days to clear exports by half would increase the probability of exporting by 7.5% to 12% and could increase the share of exports in total sales by 1.6% to 4.5%¹⁰. Research by the World Bank found that if APEC members with below-average indicator values in port efficiency, customs environment, regulatory environment, and e- business usage were to improve their performance half-way to the APEC average, then intra- APEC trade could increase by USD 254 billion (21%), suggesting an increase in APEC average per capita GDP of 4.3%¹¹. Another study found that improving importer transparency of APEC economies to the regional average could lead to a 7.5% (USD 148 billion) increase in intra-regional trade¹².

As the volume and complexity of world trade continues to increase, there is an ever greater need to reduce transaction costs in order to boost the profitability and competitiveness of trade for businesses. APEC has been at the forefront of international efforts to facilitate trade by identifying obstacles that hinder trade and implementing activities and actions to address these obstacles, thereby bringing real benefits to the business community. The promotion of measures to facilitate trade in order to boost economic growth, particularly among the developing APEC members, is crucial to achieving the Bogor Goals of free and open trade and investment in the region.

Based on APEC's Trade Facilitation Principles¹³, the Trade Facilitation Action Plan (TFAP I) was developed by the Committee on Trade and Investment (CTI) in response to the goal set by APEC Leaders in 2001 for member economies to achieve a regional reduction in trade transaction costs by 5% between 2002 and 2006 as progress towards the Bogor Goals. TFAP I consisted of a menu of actions and measures to reduce trade transaction costs and simplify administrative and procedural requirements in four priority areas, which were identified through a survey of business executives in the APEC region – Customs Procedures, Standards and Conformance, Business Mobility, and Electronic Commerce.

APEC members could choose to implement actions and measures agreed under TFAP I either individually or as a group and on a voluntary basis. At the conclusion of TFAP I, APEC economies had selected over 1,400 actions and measures in total, of which over 62% had been completed. Based on self-assessments by each economy, APEC Leaders welcomed the achievement of the 5% reduction target in 2006.

Recognizing the benefits of TFAP I to the business community, APEC's Second Trade Facilitation Action Plan (TFAP II) was developed in response to the goal set by APEC Leaders in 2005 to achieve a further reduction of trade transaction costs by 5% between 2007 and 2010. A major component of TFAP II is an updated and revised menu of actions and measures, including some actions that had not been completed under TFAP I, which focus on the same four priority areas and place greater emphasis on Collective Actions and Pathfinders¹⁴.

In order to measure the impact of their actions and measures on reducing trade transaction costs in the APEC region between 2007 and 2010, each sub-fora developed Key Performance Indicators (KPIs), which were endorsed by the CTI in 2008. The TFAP II Interim Assessment conducted in 2009 reviewed these endorsed KPIs against three criteria: effectiveness, efficiency, and simplicity¹⁵. The report highlighted that only a few of the KPIs for the actions and measures achieved in the four priority areas were effective in indicating progress towards TFAP II goals and that none of the indicators were able to measure the level of transaction costs and therefore any reduction in costs towards the 5% target over the TFAP II period.

Therefore, the Interim Assessment developed new KPIs for each of the sub-fora to capture the transaction costs that could serve as a base to assess their progress towards the TFAP II goal¹⁶. These KPIs were recommended as being the most effective, efficient, and simple indicators for generating data that are capable of quantifying reductions in transaction costs. Analysis of these KPIs has formed the basis of the TFAP II Final Assessment to evaluate how the actions and measures undertaken by each of the sub-fora reduced transaction costs over the TFAP II period.

⁹ Walkenhorst and Yasui (2009).

¹⁰ Li and Wilson (2009).

¹¹ Wilson, Mann, and Otsuki (2003).

¹² Helble, Shepherd, and Wilson (2007).

¹³ APEC's Trade Facilitation Principles is at Appendix A.

¹⁴ A list of the actions and measures under TFAP II in each of the priority areas is at Appendix B.

¹⁵ APEC Policy Support Unit (2009).

¹⁶ A list of the KPIs recommended during the TFAP II Interim Assessment in each of the priority areas is at Appendix C.

2. TFAP II FINAL ASSESSMENT RESULTS

This chapter provides a summary of the findings from six component assessment reports: an aggregate measurement of total trade transaction costs as well as the contributions made by the APEC sub-fora in four priority areas – Customs Procedures, Standards and Conformance, Business Mobility, and Electronic Commerce (data privacy and paperless trading).

A. AGGREGATE MEASUREMENT

During the TFAP II Interim Assessment, the CTI agreed on the methodology and approach that would be used in the Final Assessment to quantify the impact that APEC has made towards the TFAP II goal of a 5% reduction in trade transaction costs between 2007 and 2010. It was agreed that the measurement be aligned with the actions and measures that had been developed to implement TFAP II. The CTI also agreed on the definition of trade transaction costs that would be used¹⁸. This definition is comprehensive and covers transaction costs along the entire logistics chain, including those incurred at, near, and behind the border. The endorsed definition includes only trade transactions costs that are directly imposed by or largely influenced by governments.

The endorsed definition of trade transaction costs for the TFAP II Final Assessment therefore:

- includes time costs;
- excludes the costs governments directly impose on international trade associated with tariffs and non-tariff barriers as these fall within APEC's trade liberalization focus;
- includes the costs of the port and inland transportation links in the international logistics chain; and
- excludes wholesale and distribution costs as they are common to both domestic and international commerce.

For the TFAP II Final Assessment, an aggregate measurement was used to evaluate the reduction in total trade transaction costs achieved by APEC economies over the TFAP II period. Using data from the *Trading Across Borders* component of the World Bank and International Finance Corporation's annual *Doing Business Report*, the monetary costs and the time costs for trade transactions involving a single container of merchandise trade are estimated separately for each APEC economy¹⁹. These two estimates are summed to arrive at an estimate of the total trade transaction costs of a single container for

the economy in question. The estimation process then used these results to calculate the annual trade transaction costs incurred for all merchandise trade in each economy²⁰.

The study found that APEC has made substantial progress in reducing total trade transaction costs over the TFAP II period. By 2010, net savings were realized at most stages in the logistics chain across the APEC region. Substantial time savings were achieved – time spent to prepare documentation was reduced by two days for both imports and exports. However, fees and charges rose strongly in real terms, particularly in ports and terminal handling. On average, it took 17 days and USD 842 to complete an APEC export transaction for a single container²¹ in 2006. In 2010, it took 15 days and USD 856. Previously in 2006, it took 17 days and USD 941 to complete an APEC import transaction; in 2010, it took 15 days and USD 923. The fees and charges incurred in each logistical stage for a single container of APEC merchandise trade are summarized in the table below.

Table 1a. Fees & charges in APEC merchandise trade (USD per TEU movement)

Logistical stage	2006	2010	% change
Imports	941	922	-2.0%
Document preparation	193	181	-6.1%
Customs clearance & technical control	113	118	4.5%
Ports & terminal handling	254	259	2.0%
Inland transport & handling	381	364	-4.5%

¹⁸ Trade transaction costs in economic terms are the resource costs - both material costs and time-related costs - involved in searching out, negotiating, monitoring and enforcing the terms of a voluntary economic exchange between a buyer and a seller. They should be distinguished from the costs of producing the good or service in question, which are sometimes referred to as "transformation costs" to underline this point.

¹⁹ The *Trading Across Borders* indicators take into account the number of documents, cost, and time associated with every procedure for trading a standard shipment of goods by ocean transport.

²⁰ To allow for an assessment of how policy changes have affected such costs, the impact of any other parameters was removed. Hence all estimates are calculated based on constant trade volumes and trade values in real terms over the Assessment period using prices that prevailed in mid-2011.

²¹ A transaction involving the inward or outward movement of a 20-foot shipping container of widely traded merchandise was used.

Table 1b. Fees & charges in APEC merchandise trade (USD per TEU movement)

Logistical stage	2006	2010	% change
Exports	842	856	17%
Document preparation	163	175	7.5%
Customs clearance & technical control	87	96	9.5%
Ports & terminal handling	222	240	8.3%
Inland transport & handling	370	345	-6.7%

Note: Figures are the simple average of all 21 APEC economies.
Source: APEC Policy Support Unit (2011a).

By aggregating these results across the total number of containers traded by each APEC economy in 2006²², the study found the following:

- total fees and charges increased from USD 70 billion to USD 72 billion (3%) for imports and from USD 61 billion to USD 66 billion for exports (6.9%); and
- the monetary equivalent of the total time taken to complete trade-related procedures fell from USD 532 billion to USD 498 billion (6.3%) for imports and from USD 524 billion to USD 492 billion (6%) for exports.

Therefore, fees and charges for total trade rose from USD 131 billion to USD 138 billion (4.8%), while the monetary equivalent of the time taken to complete trade-related procedures for total trade fell from USD 1.1 trillion to USD 990 billion (6.2%). The share of these two components in total trade transaction costs is different – fees and charges constitute 12.2%, while time spent comprises 87.8%. Thus, the estimates indicate that total trade transaction costs across the APEC region fell by 5% over the TFAP II period with estimated savings of USD 58.7 billion, indicating that APEC has achieved the TFAP II goal. These results are summarized in the following table.

It should be noted that the *Trading Across Borders* data have limitations, over which some APEC members have expressed concern. Nevertheless, these data represent the most comprehensive and comparable indicators of trade transaction costs that

Table 2. Total trade transaction costs for APEC merchandise trade (USD billion)

Type and component	2006	2010	% change
Imports			
Fees & charges	70	72	3.0%
Time spent	532	498	-6.3%
Exports			
Fees & charges	61	66	6.9%
Time spent	524	492	-6.0%
Total trade	1,187	1,128	-5.0%
Fees & charges	131	138	4.8%
Time spent	1,055	990	-6.2%

Source: APEC Policy Support Unit (2011a).

are publicly available. Additionally, although it is clear that valuable time is spent preparing documents for customs clearances and other regulatory approvals, it is unclear how much of the time taken adds to delays in the delivery of the merchandise in question. For the Final Assessment, a relatively conservative estimate of one half of the time spent in document preparation is assumed to flow through as a transit delay. The study also conducted extensive sensitivity testing, which indicates that, on balance, the result of a 5% reduction in total trade transaction costs across the APEC region over the TFAP II period should be relatively robust.

Trade transaction costs are comparable to trade policy measures in terms of their impact on restricting trade. The study estimated that their combined effect is equivalent to a tax of 18.9% on all APEC imports and 18.7% on all APEC exports. As such, these transaction costs are serious impediments to trade and overall economic performance. The case for further reductions in trade transaction costs without delay is both clear and compelling for all APEC economies.

Although the aggregate measurement reveals that the Leaders' goal of a 5% reduction in trade transaction costs has been achieved over the TFAP II period, it is also necessary to address how the actions and measures under TFAP II have directly contributed to this outcome. Final Assessment reports were prepared for each of the sub-fora that focus on the TFAP II priority action areas. The remainder of this report discusses those evaluations, which examine the impact of the policy changes implemented under TFAP II on trade transaction costs in the APEC region.

²² In 2006, APEC economies exported 95,669,409 twenty-foot equivalent units (TEUs) and imported 99,042,773. (In 2010, APEC economies exported 120,769,556 TEUs and imported 121,207,433.)

B. CUSTOMS PROCEDURES

Customs organizations implement government policies that help to facilitate trade at the border. It is important that trade is conducted in an internationally consistent manner and that customs rules and procedures are kept to a minimum to reduce trade transaction costs, especially in an increasingly globalized trading environment. Simplification of customs procedures includes measures to limit the data requirements of formal customs declarations and to minimize the extent of the supporting documentation that is required by border agencies. The Sub-Committee on Customs Procedures (SCCP) was established in 1994 to simplify and harmonize regional customs procedures to ensure that goods and services move efficiently, effectively and safely through the APEC region, and to reconcile and facilitate border control.

The TFAP II Final Assessment assessed the outcomes that have been achieved through the actions and measures implemented by the SCCP towards a reduction in trade transaction costs. The study evaluated the outcomes of the actions under four main objectives – Time Release Survey of goods; implementation of an APEC Framework based on the World Customs Organization (WCO) Standards to Secure and Facilitate Global Trade (SAFE) Framework; simplification and harmonization of customs procedures on the basis of the Revised Kyoto Convention; and paperless and/or automation of trade-related procedures. The findings of the Final Assessment in each of these areas are discussed below.

Using methodology developed by the WCO, a Time Release Survey (TRS) measures the average time taken by customs and other border agencies to release goods that are being imported or exported and reviews border clearance procedures in the process. When TFAP II commenced, only six APEC members had developed and implemented a TRS. By the end of 2009, however, that number had doubled with 12 economies having implemented a TRS, albeit with significant variation in the nature and extent of its application.

Based on the aggregate measurement study, it is estimated that the time costs in customs clearance and technical control declined by around 8.1% over the TFAP II period. This result, and the high rate of growth in trade values and volumes that occurred over the assessment period, strongly suggests that the decline in time costs in customs clearance and technical control was a direct consequence of changes in public policy

and administration. It is also reasonable to assume that many, if not most, of these changes were the consequence of the actions and measures relating to the TRS that were implemented under TFAP II.

The WCO SAFE Framework of Standards promotes uniformity and predictability in the global trade environment by safeguarding the end-to-end security of the international supply chain and facilitating the passage of legitimate goods through customs control. The WCO SAFE Framework of Standards is built on two pillars, each of which contains a set of standards – network arrangements between domestic customs agencies and partnerships between each domestic customs agency and businesses along the supply chain, known as Approved Economic Operators (AEOs).

There are currently seven APEC economies with an AEO program in place²³. Using data reported by these economies, the number of AEOs in the APEC region increased from 8,322 in 2007 to 10,502 in 2009. This suggests that there has been a 26% increase in the number of AEOs over these three years of the TFAP II period. These economies also reported that the share of trade covered by AEOs generally increased over the same period. The study therefore roughly approximated that the expansion of AEO programs in APEC has increased the share of merchandise trade handled by authorized businesses by over 6.3% per year.

The savings in processing time that an AEO channel can deliver to imports compared to the general cargo channel depends critically upon the design of each, thus it is difficult to extrapolate results from one economy to the APEC region. However, the potential scope of time savings for the private sector from a well-designed AEO program is substantial. In 2009, Japan found that its clearance time for AEO cargo was 60% faster than that for general cargo. These processing time savings translated into a reduction of around USD 2.7 billion in annual trade transaction costs in Japan, likely reducing annual trade transaction costs by 2% in 2009.

²³ Members with an AEO program include China; Japan; Korea; New Zealand; Singapore; Chinese Taipei; and United States. (Mexico is conducting a pilot program that is expected to lead to full implementation in 2012, whereas Hong Kong, China is conducting a review on its pilot program which has been implemented since June 2010.)

The Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures (RKC) is an international treaty that provides a comprehensive framework for customs procedures that aims to facilitate legitimate trade while protecting the community and government revenue from illicit trade. Harmonization between the customs procedures of APEC members is meant to occur through adoption of the best international practice as set out in the RKC.

To measure the extent to which APEC economies have adopted the RKC standards and best practice, while also contributing towards a reduction in transaction costs, the study found that, although the data were incomplete, no APEC members reported changes in the number of documents required for importing or exporting between 2007 and 2009. Since this makes performance assessment difficult, a benchmarking approach was used based on the regional median between 2007 and 2009. The median number of documents required for importing and exporting is four and three, respectively. Using this benchmark, eight economies were below the median performance relating to the number of documents.

APEC economies also made progress towards reducing paper documentation and automating procedures over the TFAP II assessment period, thereby realizing the benefits associated with less costly and more efficient electronic procedures than paper-based systems. Most economies had either 100% electronic lodgement or increased (or at least kept constant) the proportion of merchandise trade-related documentation lodged electronically between 2007 and 2009. In addition, a number of APEC economies moved closer to fully paperless trading over that period. The study estimated that, on average, the share of customs declarations handled electronically increased by 4.57 percentage points a year for imports and 4.09 percentage points a year for exports.

In 2010, there were 13 APEC economies that had developed single window systems, while an additional five economies were in the process of developing the system²⁴. A single window system enables importers

and exporters to submit regulatory documents to a single entity and/or location, resulting in time and cost savings for traders. It has been found in Japan that the computerization of customs and other government agency procedures into a single window system reduces clearance times by one to two days. It is therefore reasonable to assume that transaction costs would have decreased in economies where there has been a significant increase in the share of declarations handled electronically.

The TFAP II Final Assessment found that there have been significant gains made across APEC in reducing the time taken by exporters and importers to complete customs procedures. The time taken in customs clearance and technical control across the APEC region is estimated to have dropped by around 8.1% over the TFAP II period. Although no APEC member reported that its customs agency had reduced the number of documents required to clear an import or an export transaction between 2007 and 2009, data from the World Bank reveals that the transaction costs associated with the time taken for document preparation in APEC economies fell by 8.7% in real terms between 2006 and 2010.

Based on the results of the TFAP II Final Assessment, the SCCP is recommended to focus its future efforts on the following:

- identify the capacity building implications of the actions and measures on customs procedures with a view to implementing appropriate programs to improve such procedures and reduce transaction costs in the less developed APEC members;
- examine the interaction of customs procedures, as well as other transport related regulations, with infrastructure since regulatory bottlenecks can cause congestion elsewhere in the transport system, thereby recommending actions to reduce transaction costs; and
- undertake case studies on the effectiveness of customs procedures in the region, which could be used as benchmarks by others for streamlining such procedures and minimizing transaction costs.

²⁴ Members with a single window system include Australia; Brunei Darussalam; Canada; Chile; China; Indonesia; Japan; Korea; Malaysia; Philippines; Singapore; Thailand; and United States.

C. STANDARDS AND CONFORMANCE

Harmonized standards and conformance procedures improve the efficiency of production and facilitate the conduct of international trade, resulting in more rapid trade flows, reduced costs and greater integration of production networks. APEC has relied on international standards and participated in international conformity assessment systems since its establishment in 1989. The Sub-Committee on Standards and Conformance (SCSC) was established in 1994 to help reduce the negative effects that technical barriers such as differing standards and conformance arrangements have on trade and investment flows in the Asia-Pacific region.

Through the work of the SCSC, APEC member economies have taken steps to align their domestic technical regulations and standards with international standards, thereby reducing the likelihood of their constituting technical barriers to trade in the region. These activities reflect and support the WTO Technical Barriers to Trade (TBT) Agreement to use international standards and recognize international conformity assessment schemes to facilitate trade in goods where possible.

The SCSC has given particular importance to APEC member economies aligning their technical regulations and domestic standards with the international standards of the International Electrotechnical Commission (IEC), which covers electrical and electronic products. The SCSC recognises conformity certificates established under the IEC System for Conformity Testing and Certification of Electrical and Electronic Components, Equipment and Products Certification Bodies' (IECEE CB) Scheme and has also developed the APEC Electrical and Electronic Products Mutual Recognition Agreement (EEMRA). These initiatives underline the importance of electrical and electronic products to trade in the APEC region. Since 2006, the value of intra-APEC exports in electrical and electronic products has amounted to over USD 1 trillion each year.

Several APEC economies have mandatory pre-market product safety registration schemes for electrical and electronic products that utilize IEC standards and recognized conformity certificates issued with the IECEE CB scheme. In the absence of mandatory requirements, importers and retailers in some APEC economies also use relevant IEC standards and conformity certificates as part of their market driven supply chains. These cases are examples where international standards and an international conformity

assessment system are being used to facilitate trade within APEC economies.

The TFAP II Final Assessment found that APEC economies have increasingly aligned their technical regulations and domestic standards with the standards of the IEC. Based on an evaluation of the APEC members' Voluntary Action Plan (VAP) responses, the degree of alignment of technical regulations and domestic standards with those of the IEC increased over the TFAP II period. The number of economies reporting alignment with IEC standards rose from 12 in 2006 to 16 in 2010. The extent of alignment over the selected list of 168 IEC standards also increased. Reported results ranged from 55% to 100% in 2006, but are now between 91% and 100% alignment.

As a reference for the study, televisions were chosen as the product in which to evaluate the achievements made by the SCSC towards reducing trade transaction costs. The value of APEC's worldwide exports in televisions, in real terms, grew from USD 39.1 billion in 2005 to USD 54.1 billion in 2008 (38.4% or 11.5% per year) followed by a decline to USD 46.7 billion in 2009 (assumed to be due to the contraction in consumer spending as a result of the Global Financial Crisis). Intra-APEC trade in televisions consistently accounted for around 80% of the value of these exports over that period. The growth experienced in exports of televisions was in line with global trends, with APEC economies consistently contributing approximately 55% to 62% of world exports.

The study found that over the TFAP II period an increasing number of APEC economies aligned their technical regulations to the international standard covering electrical safety requirements for televisions, IEC 60065. In 2006, 10 APEC members reported 100% alignment with IEC 60065. In 2010, 15 APEC members reported 100% alignment with IEC 60065. For the APEC members that provided VAP responses, the share of television imports by value that are covered by IEC 60065 increased from 14.9% in 2006 to 94.5% in 2009.

Under the IECEE CB Scheme, certification bodies that are signatories to the scheme issue test certificates for products that conform to relevant IEC standards. These test certificates can then be utilized by manufacturers directly to enable market access of their products, or seek formal recognition of these

certificates by other certification bodies that are also signatories to the scheme. Recognized test certificates are the number of issued test certificates that have been formally recognized by other certification bodies, mostly in other economies, for which case retesting is not required.

There has been an increasing number of conformity certificates issued and recognized for electrical and electronic products under the IECEE CB Scheme over the TFAP II period, although the number of certificates issued for televisions remained relatively unchanged at around 3,000 certificates per year (reflecting the current medium to long term product life cycle for televisions). The proportion of certificates issued by certification bodies from APEC member economies has remained stable, at just below half of the total number of certificates issued worldwide. The number of issued certificates recognized in APEC economies increased between 2006 and 2010, with APEC's share of the total recognized certificates in the world increasing from 45% to 56%, demonstrating the growing use of an international conformity assessment system within the APEC member economies.

The results of the TFAP II Final Assessment reveal that APEC member economies are aligning their technical

regulations and domestic standards with international standards for specific product classes. By economies undertaking this alignment to a harmonized set of standards, manufacturers have greater certainty in standards compliance, which also allows for the realization of economies of scale in production. This alignment of standards also allows for test results to be recognized across wider jurisdictions. Since the APEC EEMRA recognizes the IECEE CB, an international conformity assessment scheme, this reduces the need to retest products when they enter new markets. This reduction in compliance costs for exporters has the overall effect of reduced trade transaction costs.

The Final Assessment therefore found that the work of the SCSC contributes to trade facilitation and to the TFAP II goal of a reduction in trade transaction costs. This is achieved in a number of ways, including the alignment of APEC members' technical regulations and domestic standards with selected international standards for certain categories of products. The SCSC members are recommended to continue to develop strategies that reduce costs and facilitate trade through increased conformity with international standards and international conformity assessment schemes.

D. BUSINESS MOBILITY

Business mobility refers to the movement of business people who are engaged in the conduct of trade and investment activities across borders. Limitations on the ability of people to move efficiently across borders not only hampers trade and investment flows, but also results in lost opportunities for transfers of knowledge and technology as well as reduced productivity and competitiveness of an economy. With streamlined entry to other economies, business people enjoy greater reductions in transaction costs and considerable savings of valuable time and resources, which is especially crucial for small and medium enterprises (SMEs).

The Business Mobility Group (BMG) was established in 1997 to enhance business mobility throughout the region by exchanging information on regulatory regimes, streamlining the processing of short-term business visitor visas and procedures for temporary residence of business people, using technology to improve border security and other counter terrorism measures, and maintaining a dialogue on these issues with the business community. The APEC Business Travel Card (ABTC) scheme was developed through dialogue with the APEC Business Advisory Council (ABAC) and the wider business community.

To support business mobility in the APEC region, the ABTC scheme provides business travelers with visa-free travel and expedited immigration processing when visiting participating APEC economies. All 21 APEC members currently participate in the scheme - 18 as full participants, while three economies are transitional members of the scheme²⁵. The ABTC provides card holders with pre-cleared, facilitated short-term entry to economies that fully participate in the scheme, removing the need to apply for visas or entry permits, thereby saving valuable time. Although the transitional participants of the scheme neither issue ABTCs to their own business travelers nor offer pre-clearance to other business travelers, ABTC holders are entitled to access fast-track immigration lanes upon entry into these economies.

At the end of 2010, there were 88,421 active ABTC holders in the APEC region, an 11.4% increase from the end of 2009 and a 430% rise from the end of 2006, indicating that there were an additional 71,737 card holders over the TFAP II period. Data from the ABTC Processing System show that approximately 27.6% of the total ABTC applicants in 2010 were repeat applicants, implying that while there is strong growth in the scheme, there are also a substantial number of card holders re-applying for the ABTC.

For the TFAP II Final Assessment, three surveys were conducted – Client Satisfaction Survey, New Applicant Survey, and Economy Survey - to collect the data necessary to estimate the impact of the ABTC scheme towards reducing trade transaction costs related to business travel in the APEC region. The study analyzed the following three transaction costs related to cross-border business travel:

- (pre-border) time spent to complete visa application forms – excludes the time spent preparing documents and waiting while the visa application is being processed;
- (at-the-border) time spent to complete immigration processing upon arrival in the destination economy – only takes into consideration the time spent waiting in line upon arrival in the destination economy; and
- (pre-border) fees paid for the visa application - includes only official fees and excludes any unofficial or informal fees.

The Client Satisfaction Survey and the New Applicant Survey asked respondents about the transaction costs they had experienced in visiting APEC economies on business in the previous 12 months. To estimate the reduction in transaction costs as a result of the ABTC scheme, the study used a counterfactual simulation (i.e., what costs ABTC holders would have otherwise experienced in absence of the ABTC scheme). Through this approach, the study found that the transaction costs for ABTC holders were reduced by 38% between March-July 2010 and March-July 2011, representing

²⁵ Full members of the ABTC scheme (year of joining): Australia (1997); Brunei Darussalam (2001); Chile (1998); China (2002); Hong Kong, China (1998); Indonesia (2002); Japan (2002); Korea (1997); Malaysia (1999); Mexico (2007); New Zealand (1999); Papua New Guinea (2003); Peru (2001); Philippines (1997); Singapore (2004); Chinese Taipei (2002); Thailand (2001); Viet Nam (2003). Transitional members of the ABTC scheme (year of joining): Canada (2008); Russia (2010); United States (2007).

a total savings of USD 3.7 million. Specifically, ABTC holders engaged in cross-border business travel in the APEC region experienced the following reductions in transaction costs over that period:

- 43.3% reduction in time spent to complete visa applications as a result of receiving pre-clearance (a savings of 10,732 hours with a monetary equivalent²⁶ of USD 272,214);
- 52.4% reduction in time spent to complete immigration processing as a result of the fast-track APEC immigration lanes (a savings of 62,413 hours with a monetary equivalent of USD 1,905,202); and
- 27.8% reduction in fees spent on visa applications as a result of receiving pre-clearance (a savings of USD 1,520,380).

The Client Satisfaction Survey also asked questions relating to client satisfaction in the ABTC scheme to assess an ABTC holders' overall experience with the scheme. The following show a selection of key results:

- 91% of ABTC holders rated their overall level of satisfaction with the ABTC scheme as satisfied;
- 93% of respondents thought that the ABTC was useful in allowing them to travel without applying for a visa and in avoiding long queues at immigration checkpoints; and
- 20% of the responses indicated that ABTC holders would most like the validity period of the ABTC to be extended, followed by 18% that would like to see the time it takes to obtain an ABTC shortened.

The Final Assessment also found that 14 out of 17 APEC economies that reported data are meeting the 30-day processing service standard for intra-company transfers of senior managers and executives, and specialists (the latter group as defined by each member economy). Additionally, 15 out of 19 APEC economies that reported data process business visa applications within 15 days, with five economies having set up

e-lodgement facilities to receive online visa applications.

The results of the TFAP II Final Assessment demonstrate that the initiatives of the BMG have been very successful in reducing trade transaction costs related to cross-border business travel in the APEC region. In just a one-year period (March-July 2010 through March-July 2011), transaction costs for ABTC holders were reduced by 38% as a result of the ABTC scheme, representing a total savings of USD 3.7 million. The convenience and time savings that the ABTC provides to business travelers in the region has been extremely valuable.

Based on the results of the TFAP II Final Assessment, the BMG is recommended to focus its future efforts on the following:

- continue to monitor and evaluate the KPIs as well as client satisfaction in the ABTC scheme every three years;
- consider extending the validity of the ABTC to five years;
- continue to expand the ABTC scheme among new card holders in the APEC region and encourage the three transitional members to become full members of the scheme;
- target frequent business travelers as well as small and medium enterprises to maximize the benefits that the ABTC scheme provides to the business community;
- consider centralized processing of ABTC applications in order to maximize administrative and operational efficiencies as well as to progress towards a more consistent client service, including standardizing the requirements to obtain an ABTC across the APEC member economies; and
- increase the use of information and communications technology to reduce costs and improve client service by offering online processing of visa applications and Online Status Tracker to monitor the progress of ABTC applications.

²⁶ The opportunity cost of time was converted into a monetary equivalent using GDP per worker in each of the ABTC holders' home economies.

E. ELECTRONIC COMMERCE

The Electronic Commerce Steering Group (ECSG) promotes the development and use of electronic commerce by exploring how APEC economies may best develop legal, regulatory, and policy environments that are predictable, transparent and optimized to enable economies across all levels of development to utilize information and communications technology to drive economic growth and social development. The principles for the work of the ECSG are set out in the APEC Blueprint for Action on Electronic Commerce, which was endorsed by Ministers in 1998.

Originally established in 1999 as an APEC Senior Official's Special Task Force, the ECSG was aligned to the CTI in 2007 to enhance the coordination capacity of the ECSG by ensuring a stronger focus on trade and investment issues. The ECSG is divided into two sub-groups – the Data Privacy Sub-Group (DPS), established in 2003, and the Paperless Trading Sub-Group (PTS), established in 2004. Separate TFAP II Final Assessment reports were prepared for the DPS and the PTS. The results of those evaluations are discussed below.

i. Data Privacy

In recent years, the global economy has witnessed a substantial increase in the volume of e-commerce – a trend that shows no signs of slowing down since online transactions make economic activity more efficient, faster, and cheaper. However, surveys often reveal that customers sometimes refrain from engaging in electronic commerce activities, especially those involving financial transactions, because of concerns over data security and privacy. Privacy violations can occur when the personal data used to complete an electronic transaction is acquired, stored, sold or used without the awareness or consent of the customer.

APEC has been at the forefront of placing electronic commerce and data privacy issues on the international agenda, having recognized early on the importance of data privacy in fostering trust and confidence within

information systems so that information flows for trade could take place without any violation and the benefits of electronic commerce could therefore be maximized. The Data Privacy Sub-Group (DPS) works to establish a common APEC approach to data privacy by developing the APEC Privacy Framework, which was endorsed by Ministers in 2004.

The APEC Privacy Framework promotes a consistent approach to information privacy protection across APEC economies while avoiding the creation of unnecessary barriers to information flows. The Framework sets out nine Information Privacy Principles which provide clear guidance and direction to businesses operating in APEC economies: preventing harm, notice, collection limitations, uses of personal information, choice, integrity of personal information, security safeguards, access and correction, and accountability.

During the TFAP II period, the DPS developed many valuable initiatives towards improving data privacy in the APEC region. To advance the international implementation of the APEC Privacy Framework, Ministers endorsed the APEC Data Privacy Pathfinder Initiative in 2007, which is designed to support business needs, reduce compliance costs, provide consumers with effective remedies, allow regulators to operate efficiently, and minimize regulatory burdens. By the end of 2010, there were 16 APEC economies participating in the Pathfinder²⁷.

The Pathfinder contains general commitments leading to the development of an APEC Cross-Border Privacy Rules (CBPR) system that would enable accountable cross-border data flows under the guidance of the APEC Information Privacy Principles. The CBPR system would require businesses to develop their own internal rules on privacy procedures governing the movement of personal information across borders. The scheme would then provide guidance on how these cross-border privacy rules can comply with the APEC Privacy Framework and meet the high standards of the APEC

²⁷ Members participating in the Data Privacy Pathfinder include Australia; Canada; Chile; China; Hong Kong, China; Japan; Korea; Mexico; New Zealand; Peru; Philippines; Singapore; Chinese Taipei; Thailand; United States; and Viet Nam.

Information Privacy Principles so as to be recognized across APEC economies, thereby building consumer, business and regulator trust in the electronic cross-border flow of personal information across the region.

In 2008, the DPS endorsed a work plan for the Data Privacy Pathfinder that identified nine interrelated projects necessary to implement a CBPR system in the APEC region. Four key elements aimed at promoting consumer trust and business confidence in cross-border data flows were identified for the projects and activities developed under the Pathfinder: self-assessment, compliance review, recognition/acceptance, and dispute resolution and enforcement.

Eight documents, including guidelines, directories and templates, were developed by the DPS to implement these Pathfinder projects leading towards the development of a CBPR system in the APEC region. Five of these documents had been completed by the end of the TFAP II period in 2010, while the other three were completed in 2011. These documents create the framework for the implementation of a CBPR system in APEC.

The APEC Cross-Border Privacy Enforcement Arrangement (CPEA) is another outcome of the Pathfinder initiative. This multilateral arrangement provides the first mechanism in the APEC region for privacy enforcement authorities to share information and provide assistance for cross-border data privacy enforcement. Endorsed by APEC Ministers in 2009, the CPEA commenced in July 2010 and currently has five participating economies²⁸. The CPEA signifies the ongoing commitment within APEC to increase the protection of cross-border flows of personal information and is a significant step in the effective implementation of the APEC Privacy Framework.

For the TFAP II Final Assessment, 11 APEC economies indicated to the PSU that they have actively considered the APEC Privacy Framework while developing or modifying their domestic data privacy legislation²⁹.

Reflecting the differing levels of development in domestic privacy frameworks, many economies are developing or modifying their legislation to incorporate the Information Privacy Principles under the APEC Privacy Framework, while some are also looking ahead to the development of the APEC Cross-Border Privacy Rules system and the APEC Cross-Border Privacy Enforcement Arrangement.

The activities of the DPS throughout the TFAP II period to develop a consistent approach to information privacy protection across the APEC region and to build capacity have produced several concrete results. By working to improve the security of cross-border data flows, the actions of the DPS clearly improve trade facilitation in the APEC region. Additionally, building a foundation of trust and confidence in data networks ensures the growth of electronic commerce in the region, thus allowing businesses and consumers to reap the benefits associated with electronic commerce, including reduced trade transaction costs.

Based on the results of the TFAP II Final Assessment, the DPS is recommended to focus its future efforts on the following:

- strive to ensure that all member economies participate in the Cross-Border Privacy Rules system and in the Cross-Border Privacy Enforcement Arrangement;
- continue capacity building efforts among the APEC members so that more economies are able to develop and modify their domestic data privacy legislation with reference to the Information Privacy Principles under the APEC Privacy Framework;
- continue to exchange information related to domestic progress in terms of data privacy regulation to avoid regional inconsistencies that may otherwise occur in these regulations over time; and
- monitor how the achievements of the DPS reduce trade transaction costs and improve trade facilitation in the APEC region by developing quantifiable KPIs or a case study approach that could estimate the benefits to the business community as a result of the CPBR system.

²⁸ Members participating in the Cross-Border Privacy Enforcement Arrangement include Australia; Canada; Hong Kong, China; New Zealand; and United States.

²⁹ These members include Australia; Canada; Chile; Hong Kong, China; Korea; Mexico; New Zealand; Peru; Philippines; Singapore; and United States.

ii. Paperless Trading

The Paperless Trading Sub-Group (PTS) develops projects on the use of paperless trading in commercial processes involving business-to-business (B2B) and business-to-government (B2G) transactions and promotes the use of electronic documents and Internet technologies in international trade. These projects aim to use “e-solutions” or electronic procedures and processes in cross-border trade to save time and costs for firms and government agencies seeking regulatory compliance information from traders.

For the TFAP II Final Assessment, a case study approach was used to evaluate the contribution of the actions and measures of the PTS towards reducing trade transaction costs in the APEC region. An Electronic Certificate of Origin (e-CO) Pathfinder Project between Chinese Taipei and Korea was selected for the case study given its clearly defined and relatively small scope that allowed measurement of the savings as a result of the e-CO. Since the project was launched in May 2010, 20 importers from Chinese Taipei and 15 exporters from Korea have used the e-CO service to transact between the two economies.

A preliminary analysis of the project indicated that the e-CO would reduce both pre-border and at-the-border cost components of trade transaction costs for traders in both Chinese Taipei and Korea. For example, since Certificates of Origin (CO) are typically issued in hard copy, contributing to high paper costs, the e-CO therefore reduces paper costs in the customs procedure. Additionally, the e-CO eliminates the costs associated with delivery and verification of the CO. The following table summarizes the activities in which an e-CO is expected to reduce trade transaction costs.

Table 3. Trade transaction costs directly associated with a Certificate of Origin

Costs	Paper CO	e-CO
Traders' explicit costs		
CO application fee	Yes	Yes
Delivery cost of CO from exporter to importer	Yes	Yes (Less)
Delivery cost of CO from importer to customs broker	Yes	No
Delivery cost of CO from customs broker to importing customs office	Yes	No
Other explicit costs:		
Paper costs	Yes	No
Warehouse costs	Yes	No
Traders' time costs		
Time cost of applying for CO	Yes	Yes
Time cost of delivering CO	Yes	No
Time cost of waiting for CO verification	Yes	No
Time cost of delayed customs procedure due to CO	Yes (longer)	Yes (shorter)
Government's explicit costs		
Administrative costs of issuing CO	Yes	Yes
Administrative costs of verifying CO	Yes	No
Government's time costs		
Time cost of issuing CO	Yes	Yes
Time cost of verifying CO	Yes	No

Source: APEC Policy Support Unit (2011c).

The TFAP II Final Assessment found that the e-CO Pathfinder Project between Chinese Taipei and Korea has delivered concrete results for participating traders. Reported benefits include time and cost savings by using electronic instead of paper certificates of origin, confidence in the transmission of cross-border documents in a secure online environment, savings in warehouse costs, and faster customs clearance processes.

Savings from the e-CO Pathfinder Project between the traders were estimated based on the results of direct interviews conducted with several importers in Chinese Taipei and exporters in Korea. It was found that the Korean exporter saves time and cost in not having to get the CO authenticated at the commercial office of Chinese Taipei in Korea and also avoids the cost and delay of sending the paper CO by mail or courier to the importer or the importer's customs broker.

Based on the average savings experienced by the surveyed exporters, total savings for the Korean exporters by using the e-CO were estimated to be USD 217 per shipment and a reduction of 2 days in the export processing time. Specifically, it was found that the exporters experienced administrative time savings of 4 hours and 20 minutes (a monetary equivalent³⁰ of USD 74) and direct expense savings of USD 143.

The survey also found that importers or importing customs brokers in Chinese Taipei save time and cost in not having to send the CO to the customs broker or to customs. Based on the average savings experienced by the surveyed importers, total savings for importers using the e-CO in Chinese Taipei were estimated to be USD 205 per shipment and a reduction of 3 days in the import processing time. Specifically, it was found that the importers experienced administrative time savings of 7 hours and 15 minutes (a monetary equivalent³¹ of USD 58) and direct expense savings of USD 147.

Other benefits to traders come from the avoidance of business losses that the e-CO scheme makes possible compared with a paper CO. These business losses occur when the paper CO has to be reissued following the discovery of an error, extending the time before the goods can be released. The study estimated that this situation occurs 7% of the time, with a pro-rated cost over all shipments of USD 249 per shipment, of which exporters incur USD 57 and importers incur USD 192. Since these business losses would not occur by using an e-CO, including these costs as savings under an e-CO results in total savings per shipment of USD 274 for exporters and USD 397 for importers.

Based on the average savings experienced by the surveyed exporters in Korea and importers in Chinese Taipei, the results were extrapolated on the assumption that the e-CO is adopted in other APEC economies under different scenarios in order to estimate the potential regional impact of the e-CO Pathfinder Project in reducing trade transaction costs. The following table summarizes the findings.

Table 4. Projected reduction in transaction costs from an e-CO

Scenario	Assumption	Projected APEC Trade Transaction Costs Reduction
(1) APEC-wide e-CO adoption	25% of shipments require a CO in most economies; exceptions are Indonesia (60%), Thailand (20%), and Chinese Taipei (10%).	6.8%
(2) only Chinese Taipei and Korea adopt e-CO	25% of shipments require a CO in Korea; 10% in Chinese Taipei	0.2%
(3) more "e-advanced" economies adopt e-CO	Australia; Brunei Darussalam; Canada; Hong Kong, China; Indonesia; Japan; Malaysia; New Zealand; Philippines; Singapore; Thailand; US using the shipments that require a CO ratios specified in scenario (1)	2.8%
(4) China + e-advanced economies adopt e-CO	China and the e-advanced economies specified in scenario (3) using the shipments that require a CO ratios specified in scenario (1)	5.9%
(5) Sensitivity Test 1: low APEC-wide e-CO adoption	5% of shipments require a CO in all economies	1.3%
(6) Sensitivity Test 2: high APEC-wide e-CO adoption	40% of shipments require a CO in all economies	10.4%

Source: APEC Policy Support Unit (2011c).

³⁰ The opportunity cost of time was converted into a monetary equivalent using USD 17 per hour (average monthly wage for administrative staff in Korea is USD 3,000; therefore, USD 3,000/22 working days/8 working hours = USD 17 per hour).

³¹ The opportunity cost of time was converted into a monetary equivalent using USD 8 per hour (the average wage per hour in Chinese Taipei is approximately half of the average wage per hour in Korea).

In summary, the TFAP II Final Assessment revealed that there are significant cost reductions experienced by businesses through the application of an e-CO. These savings come from administrative time savings, direct expense savings, process time savings, as well as from the reduced risks associated with an e-CO compared with a paper CO. The study found that exporters in Korea experienced a savings of USD 274 per shipment and a reduction in processing time of 2 days, while importers in Chinese Taipei experienced a savings of USD 397 per shipment and a reduction in processing time of 3 days.

Assuming the e-CO is adopted in other APEC economies, the projected estimates of the reduction in trade transaction costs as a result of the e-CO scheme range from 0.2% (assuming only Chinese Taipei and Korea have adopted the e-CO) to 10.4% (assuming a high ratio of shipments require an e-CO under an APEC-wide e-CO adoption). If there is APEC-wide e-CO adoption, and a conservative assumption of the ratio of shipments that require an e-CO, then it is estimated that there would be a 6.8% reduction in trade transaction costs as a result of the e-CO scheme.

3. CONCLUSION AND RECOMMENDATIONS

The results of the TFAP II Final Assessment provide strong evidence that the Leaders' goal of a 5% reduction in total trade transaction costs between 2007 and 2010 has been achieved, with substantial progress being made through APEC's trade facilitation efforts at both the aggregate and sub-fora levels. An aggregate measurement of the total trade transaction costs in the APEC region reveals that the savings in the amount of time taken to complete trade-related procedures amounted to USD 65 billion, a decrease of 6.2% over the TFAP II period. Although fees and charges rose in real terms by USD 6.3 billion, an increase of 4.8%, the benefits from the reduction in the amount of time required to complete trade transactions outweighed the rising fees and charges, resulting in a savings of USD 58.7 billion and a 5% reduction in total trade transaction costs.

Assessment reports prepared for each of the TFAP II priority action areas reveal that significant progress to improve trade facilitation and reduce transaction costs has also been made through the actions and measures

Based on the results of the TFAP II Final Assessment, the PTS is recommended to focus its future efforts on the following:

- expand the scope of the e-CO Pathfinder Project between Chinese Taipei and Korea to include other electronic B2B and B2G documents, such as e-Invoice and e-Packing List;
- expand the e-CO Pathfinder Project to APEC member economies who have a preferential trade agreement, since in such cases a CO is a mandatory document for traders to enjoy preferential tariffs, hence strengthening the incentives for traders to adopt the e-CO;
- expand the e-CO Pathfinder Project to more APEC member economies, focusing on economies that would be able to proceed quickly given their advanced ICT infrastructure;
- establish a set of quantifiable KPIs in order to evaluate the cross-border paperless trading projects developed by the PTS; and
- endeavor to address the lack of reliable statistics on the ratio of exports or imports in each economy where a CO is required.

implemented at the sub-fora level. In the area of customs procedures, it is estimated that the time costs in customs clearance and technical control declined by around 8.1% over the TFAP II period. There was a 26% increase in the number of Approved Economic Operators (AEOs) across the region between 2007 and 2009, as well as a general increase in the share of trade covered by AEOs. Additionally, most APEC economies had either 100% electronic lodgement or increased (or at least kept constant) the proportion of merchandise trade-related documentation lodged electronically between 2007 and 2009, with a number of economies having moved closer to fully paperless trading.

In the area of standards and conformance, there has been an increased degree of alignment of technical regulations and domestic standards with the international standards of the International Electrotechnical Commission (IEC) within APEC economies. The number of economies reporting alignment with IEC standards rose from 12 to 16 over the TFAP II period. In addition, the extent of alignment

over the selected list of 168 IEC standards also increased – from a range of 55% to 100% in 2006 to between 91% and 100% alignment in 2010. By economies undertaking this alignment to a harmonized set of standards, manufacturers have greater certainty in standards compliance, which also allows for the realization of economies of scale in production.

For business mobility, the study found that there were 88,421 active APEC Business Travel Card (ABTC) holders in the APEC region at the end of 2010, an 11.4% increase over the number at the end of 2009 and a 430% increase over the number at the end of 2006. The assessment estimated that transaction costs for ABTC holders between March-July 2010 and March-July 2011 were reduced by 38% as a result of the ABTC scheme, resulting in total savings of USD 3.7 million. This includes a 43.3% reduction in time spent to complete visa applications, a 27.8% reduction in fees spent on visa applications, and a 52.4% reduction in time spent to complete immigration processing. The study also found that 91% of ABTC holders rated their overall level of satisfaction with the ABTC scheme as satisfied. Additionally, 14 out of 17 economies that reported data are meeting the agreed 30-day processing service standard for intra-company transfers of senior managers and executives, and specialists, while 15 out of 19 APEC economies that reported data process business visa applications within 15 days, with five economies having set up e-lodgement facilities.

In the area of electronic commerce, APEC has made significant progress towards developing a consistent approach to information privacy protection across the region and towards assisting member economies to build capacity in domestic legislation. The completion of eight documents, including guidelines, directories and templates, set the framework for the implementation of a Cross-Border Privacy Rules (CBPR) system in APEC. This system will support business needs, reduce compliance costs, provide consumers with effective remedies, allow regulators to operate efficiently, and minimize regulatory burdens, while also building a foundation of trust and confidence in data networks,

thereby ensuring the growth of electronic commerce in the region.

There is evidence within APEC that paperless trading initiatives have contributed to a reduction in trade transaction costs, thereby helping businesses to save resources. A case study revealed that the application of an electronic Certificate of Origin (e-CO) between Chinese Taipei and Korea amounted to savings per shipment of USD 274 and a reduction of 2 days processing time for the exporters and USD 397 and a reduction of 3 days processing time for the importers. It is estimated that if there is APEC-wide e-CO adoption, and using a conservative assumption of the ratio of shipments that require an e-CO, there would be a 6.8% reduction in trade transaction costs as a result of the e-CO scheme.

Although the results of the TFAP II Final Assessment reveal that APEC has made substantial progress towards improving trade facilitation in the region, several difficulties were encountered in the process of evaluation, particularly in determining exactly how the actions and measures of the sub-fora contributed directly to a reduction in trade transaction costs across the region. Much of this had to do with the fact that the Key Performance Indicators (KPIs) had been adopted retrospectively, resulting in many economies being unable to provide the necessary data for the entire TFAP II period. Moving forward, APEC should therefore strive to design and build in more effective indicators to monitor and evaluate the performance of each initiative across time and throughout the entire process.

A recent World Bank report highlighted the relative competitiveness of APEC's trade-related procedures against other regional groupings³². While APEC had the lowest per container costs to export and import compared with the others, there is still room for improvement in terms of the time taken to export and import. Both the EU and the OECD groupings required fewer documents and less time was needed to complete trade procedures, which suggests that there is still much potential for APEC members to reduce the time spent to complete trade procedures. The following table provides a more detailed comparison.

³² World Bank (2011).

Table 5. Trading Across Borders Regional Comparison

Region	Documents required (number)		Time required (days)		Cost required (USD per container)	
	Export	Import	Export	Import	Export	Import
APEC	5.5	6.0	15.0	15.2	846.6	912.8
East Asia & Pacific	6.4	6.9	22.7	24.1	889.8	934.7
European Union (EU)	4.5	5.3	11.5	12.1	1,025.3	1,086.5
Latin America	7.1	7.5	19.0	22.0	1,310.6	1,441.1
Organization for Economic Co-Operation and Development (OECD)	4.4	4.9	10.9	11.4	1,058.7	1,106.3
South Asia	8.5	9.0	32.3	32.5	1,511.6	1,744.5

Note: Data shown covers the period June 2009 to June 2010.
Source: World Bank (2011).

APEC's trade facilitation efforts will continue beyond TFAP II and greater focus should be given within the broader scope of the APEC Supply-Chain Connectivity Framework. This Framework includes actions to improve eight chokepoints along the supply chain and was developed in consultation with the business sector during the Symposium on Supply-Chain Connectivity in Singapore in 2009³³. The actions bring opportunities

for further improvement in trade facilitation efforts relating to logistics and transport constraints, which can greatly impact the trade competitiveness of an economy³⁴. The Framework sets the goal of a 10% improvement in terms of the time, cost, and uncertainty in moving goods and services along the entire supply chain by 2015.

³³ For more information on the actions under each chokepoint, please see the Supply-Chain Connectivity Framework Action Plans.

³⁴ Bhattacharya and Wolde (2010) show that if the Middle East and North Africa were to reduce its transport constraints to the world average, the region could increase exports by about 10% and imports by over 11%.

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APPENDIX

A. APEC'S TRADE FACILITATION PRINCIPLES

Principle	Impact
Transparency, Communications, Consultations and Cooperation	<ul style="list-style-type: none"> • Traders become an integral part of developing streamlined procedures and rules; • Reduces corruption due to enhanced transparency; • Increases trade-related security since trade would be based on a model of trust and partnership rather than a model of enforced compliance.
Simplification, Practicability and Efficiency	<ul style="list-style-type: none"> • A transparent and consultative process of developing rules and procedures would result in a simplified, practical, and efficient system that works in the region; • Simplified transaction requirements ensure sustainability since these would reduce compliance cost for traders; • Simplified and practical rules are especially important in reducing compliance costs for Small and Medium Enterprises which have higher barriers to entry.
Non-discrimination, Consistency, Predictability and Due Process	<ul style="list-style-type: none"> • Non-discriminatory rules allow businesses to maximize profits since investment and export decisions are based on market prices rather than administrative fiat; • Consistency and Predictability have “reputation” impacts for domestic businesses that benefit from greater foreign investment and enhanced trading opportunities; • Due process ensures stakeholders have access to adequate legal appeal procedures – adding greater certainty to trade transactions.
Harmonization, Standardization and Recognition	<ul style="list-style-type: none"> • Reduces product development, marketing inventory and placement cost of new products since standards across economies are harmonized and recognized; • For products with short shelf lives like IT and food products; harmonization, standardization, and recognition significantly reduces time delays related to multiple product tests in different markets; • Reduces burden on regulatory authorities because the need for re-testing and re-certification is reduced.
Modernization and the Use of New Technology	<ul style="list-style-type: none"> • Shorter clearance time due to paperless trading reduces cost of shipment, time-to-markets, and inventory costs; • Simplified electronic documentation requirements reduces staff time spent on document preparation and agents' fees resulting in increased business efficiency; • Ensures greater security for public due to use of high-tech security features like e-signatures, optical vehicle recognition systems, and vehicle scanning systems.

B. TRADE FACILITATION ACTION PLAN II (TFAP II) ACTIONS AND MEASURES

Customs Procedures

Objectives	Actions
Time Release Survey (TRS) of goods	<ul style="list-style-type: none"> • Development of methodology to measure the time required to release goods. • Successful undertaking of the measurement of the time required to release goods. • Identification of bottlenecks and areas for improvement in Customs related procedures. • Development and implementation of strategies to address identified bottlenecks and problems. • Establishment of a process within the organization for ongoing assessment of cargo release times on a continuous/regular basis.
Implement APEC Framework based on the WCO Framework of Standards	<ul style="list-style-type: none"> • Harmonize the advance electronic cargo information requirements on inbound, outbound and in-transit shipments. • Receive advance electronic information in order for Customs administrations to identify high-risk shipments and facilitate low risk shipments as early as possible in the supply chain. • Develop and adopt advanced risk management methodology, such as a systematic cargo profiling techniques, and/or a computerized risk management system to identify high-risk shipments and minimize physical examination of low-risk shipments. • Perform an outbound inspection of high-risk containers and cargo, preferably using non-intrusive detection equipment such as largescale X-ray machines and radiation detectors. • Create and implement an Authorized Economic Operators (AEO) program which provides benefits to businesses that meet certain security standards to maximize security and facilitation of the international trade supply chain.
Simplification and harmonization on the basis of the Kyoto Convention	<ul style="list-style-type: none"> • Adopt and fully implement the Body and General Annex of the Revised Kyoto Convention and, to the extent possible, the Specific Annexes. • Provide expeditious clearance for traders who meet the criteria specified by Customs. • Establish an effective advance ruling process, such as an advance classification ruling system, with an office responsible for providing advance rulings that are binding at the time of import. Rules, guidelines, and procedures employed by these offices for advanced rulings should be transparent and operational. The ruling process should include specific time limits for rulings and an opportunity to appeal those rulings. Rulings could include: classification of goods, determinations of value, marking and labeling, quotas, and any other admissibility requirement. • Establish a surety bond system to allow for entry of goods with payment of duties to be delayed and identify financial institutions that will underwrite surety bonds for international trade (similar to the ATA Carnet system of the International Chamber of Commerce but expanded to include all goods entry).
Paperless and/or automation of trade-related procedures	<ul style="list-style-type: none"> • Establish national single-window consistent with the outcomes of the 2007 APEC Single Window Initiative that uses internationally endorsed standards and build on international developments including ASEAN Single Window. • Simplify procedures and reduce the requirements for paper documentation in Customs clearance. • Ensure measures to replace paper documents for cross-border trade administration with electronic equivalents that are media and technology neutral, and secure interoperability with and between all parties involved in the international supply chain of goods and services. • Adopt standardized and simplified common data elements and formats in accordance with WCO data model.

Harmonization of Tariff Structure with the HS Convention	<ul style="list-style-type: none"> • Fully implement the HS Convention and incorporate the HS 2007 changes. • Adopt laws/regulations to provide binding tariff classification to importers and ensure consistent and uniform application of the HS, by providing the WCO HS Explanatory Notes in local languages to relevant parties including front line Customs officers. • Build capacity of Customs laboratories and officials in charge of classification.
Appropriate, transparent and predictable trade-related procedures	<ul style="list-style-type: none"> • Enhance capacity and integrity of Customs officials. • Implement customs and other trade-related laws/regulations in a consistent and uniform manner across the economy and avoid any inappropriate exercise of discretion by Customs and other trade-related administration officers. • Prevent the delay in the issuance of trade-related documents and procedures under Customs purview for cross-border flow of goods and for reimbursement of Customs duties and taxes.

Standards and Conformance

Objectives	Actions
Align APEC economies' domestic standards with international standards; implement good practices for the development and implementation of technical regulations	<ul style="list-style-type: none"> • Align with International Standards in agreed priority areas and provide updated information for inclusion in the VAP. • Align regulations, rules and procedures, standards and codes affecting the acceptance of goods between economies and markets on the basis of international standards where appropriate, eg CODEX, OIE, IPPC, ISO and IEC standards. • Implement WTO TBT Committee Decision on Principles for the Development of International Standards, Guides and Recommendations and use language consistent with the WTO TBT Committee decision in trade agreements and national laws and regulations when referring to international standards. • Implement the Work Programme on Trade Facilitation in Information Technology Products. • Adopt Good Regulatory Practice through revising regulations to reflect the three documents endorsed by the SCSC: Principles and Features of Good Regulatory Practice; APEC Information Notes on Good Practice for Technical Regulations; and Guidelines for the Preparation, Adoption and Review of Technical Regulations. • Align domestic regulations for medical devices with the principles of the Global Harmonization Task Force (GHTF). Progressively adopt and implement GHTF guidance documents. • Align domestic hazard classification and labeling schemes for chemicals to the Globally Harmonized System (GHS). • Sign on to the global MRA on measurement standards coordinated by the International Committee for Weights and Measures (CIPM). • Participate in international and regional comparisons of measurement standards organized by the International Committee for Weights and Measures (CIPM) and the Asia Pacific Metrology Programme (APMP). • Promote active participation by the national standards body in regional fora, such as the Pacific Area Standards Congress (PASC).

<p>Achieve recognition of conformance in regulated and voluntary sectors</p>	<ul style="list-style-type: none"> • Adopt/implement the APEC Electrical and Electronic Mutual Recognition Arrangement (EEMRA). • Implement the Work Program on Trade Facilitation in IT products and utilize the supplier's declaration of conformity, underpinned by relevant accredited conformity assessment. • As appropriate, work with the Specialist Regional Bodies (SRBs) and member economies' accreditation bodies to establish accreditation services for any relevant additional conformity assessment activities, and extend the scope of existing accreditation services, where necessary. • Participate in the APEC Food Sectoral MRA. • Participate in the APEC Tel MRA. • Participate in the Asia Pacific Laboratory Accreditation Cooperation (APLAC) multilateral MRAs. • Participate in the Pacific Accreditation Cooperation (PAC) multilateral MRAs. • Participate in the global MRA on measurement standards of the International Committee for Weights and Measures (CIPM).
<p>Technical infrastructure development</p>	<ul style="list-style-type: none"> • Participate in the implementation of the technical infrastructure development strategy developed in conjunction with the SRBs. • Participate in the APEC Food Safety Cooperation Forum. • Participate in the APEC Standards Education initiative.
<p>Ensure the transparency of standards and conformance of APEC economies and facilitate engagement with industry</p>	<ul style="list-style-type: none"> • Provide information on contact points for technical information relating to standards and conformance in individual economies. • Where practicable, make information about standards and conformance arrangements publicly available. • Provide opportunities for industry to contribute to standards development activities. • When developing regulations take note of industry agreements across APEC economies, e.g. the World Wine Trade Group Agreement on labeling.

Business Mobility

Objectives	Actions
<p>Streamline and standardize procedures</p>	<ul style="list-style-type: none"> • Implement standards for travel documentation examination, professional service, travel document security (and issuance systems), and immigration legislation. • Streamline arrangements for intra-company transferees in accordance with the agreed APEC 30-day processing standard. • Implement and promote the APEC Business Travel Card and/or visa free or visa waiver arrangements or at least 3 year multiple entry visas for short term business visitors such as those engaged in the negotiation of the sale of services or goods, establishing an investment or participating in business-related conferences, seminars or workshops.
<p>Enhance the use of information and communications technology</p>	<ul style="list-style-type: none"> • Introduce e-lodgement arrangements for temporary residency applications. • Introduce an advanced passenger information system which preclears passengers to ensure faster clearance on arrival. • Introduce machine readable travel documents (MRTDs), if possible with biometrics, by end 2008. • Make available comprehensive information and application forms for short-stay and temporary residence business visas, including through the APEC Business Travel Handbook and official immigration/consular affairs websites, in accordance with Business Mobility Group agreements. • Contribute information on lost and stolen travel documents, on a best endeavors basis, to the database of the International Criminal and Police Organization (ICPO).

Electronic Commerce

Objectives	Actions
Remove barriers to electronic commerce	<ul style="list-style-type: none"> • Identify and map out major barriers to e-commerce through the exchange of practices, including but not limited to laws, regulations and policies, on e-commerce across APEC. • Ensure compatibility among government, business and the community in online interactions including providing for authentication, confidentiality and certainty in online interactions. • In consultation with the private sector, develop a Web portal that will allow all data collected as part of the exchange of practices on e-commerce to be entered directly via the Internet. In addition to streamlining responses and data gathering, the data will be more easily extracted to create an external (unrestricted) site that economy constituents can reference regarding current trade practices on general concepts as well as export-related forms and financing assistance. • Continue work in APEC TEL on developing regulatory frameworks that facilitate the convergence of telecommunications, information technology and broadcasting.
Speed the use of electronic commerce	<ul style="list-style-type: none"> • Facilitate the use of secure electronic payment methods. • Promote consumer and business education on legal issues. • Implement policies that result in the competitive supply of information and communication services. • Reduce business costs through increased transparency. • Assist the private sector with their network security and data privacy efforts and explain the economic reasons behind developing sound network security and data privacy practices. • Develop an e-government portal for procurement that will produce improved and faster information flows, more informed and predictable supply chain and logistics from better requirements tracking, and increased potential for improved oversight and visibility of suppliers and bidding processes. • Increase trust and confidence in electronic transactions and e-commerce to counter problems associated with a lack of effective authentication. • Facilitate e-commerce adoption in industries, particularly SMEs, to address industry-specific obstacles in e-commerce. • Encourage member economies to share information on IT security incidents and collaboratively promote IT security awareness among governments, businesses and the general public.

C. TRADE FACILITATION ACTION PLAN II (TFAP II) KEY PERFORMANCE INDICATORS

Customs Procedures

Area	Action	Key Performance Indicator (KPI)
Time Release Survey (TRS) of goods	Relevant Actions and Measured specified in TFAP II	<ol style="list-style-type: none"> 1. Import clearance time (time of lodgement to approval of declaration) 2. Export clearance time (time of lodgement to approval of declaration)
Implement APEC Framework based on the WCO Framework of Standards	As above	<ol style="list-style-type: none"> 3. Number of authorized economic operators 4. Percentage of trade covered by authorized economic operators
Simplification and harmonization based on the Revised Kyoto Convention	As above	<ol style="list-style-type: none"> 5. Number of documents required by Customs for import of goods 6. Number of documents required by Customs for export of goods
Paperless and/or automation of trade-related procedures	As above	<ol style="list-style-type: none"> 7. Percentage of import declarations lodged and processed electronically 8. Percentage of export declarations lodged and processed electronically

Standards And Conformance

Area	Action	Key Performance Indicator (KPI)
Align APEC economies' domestic standards with international standards	Align regulations, rules and procedures, standards and codes affecting the acceptance of goods between economies and markets on the basis of international standards where appropriate	1. Percentage of imports of a specific product covered by international standards under IECEE/CB as opposed to domestic standards where imports, like domestic products, are regulated to comply with specified standards (case study)
	Align with International Standards in agreed priority areas and provide updated information for inclusion in the VAP	<ol style="list-style-type: none"> 2. Reduction in the number of EE products under IECEE/CB scheme that have to have different specifications to enter markets with different regulatory standards 3. Reduction in comparative cost of getting a representative product to market after adoption of agreed international standards (case study)
Achieve recognition of conformance in voluntary sectors	Adopt/implement the APEC Electrical and Electronic Mutual Recognition Arrangement (EEMRA)	4. Change in costs of conformance of products covered by the EEMRA and the IECEE/CB with regulatory standards in import markets

Business Mobility

Area	Action	Key Performance Indicator (KPI)
Streamline and standardize procedures to enhance the mobility of business people engaged in the conduct of trade and investment	Implement and promote the ABTC and/or visa waiver arrangements	<ol style="list-style-type: none"> 1. Total number of ABTC card holders and variation from previous year 2. Percentage of expired ABTC holders who have re-applied for a new ABTC 3. Total pre-border application time saved by ABTC 4. Total time saved clearing immigration at the border by ABTC (hours/minutes) 5. Total cost savings in business entry fees by ABTC (USD)
	Streamline arrangements for intra-company transferees	<ol style="list-style-type: none"> 6. Processing time for intra-company transfer applications (average, in days) and change from previous year
Enhance the use of ICT to facilitate movement across borders	Introduce e-lodgement arrangements for temporary visa applications	<ol style="list-style-type: none"> 7. Processing time for business visa/entry (average, in days/hours) and change from previous year

Electronic Commerce

Area	Action	Key Performance Indicator (KPI)
Remove barriers to electronic commerce	Build government, business and general public confidence in electronic commerce	<ol style="list-style-type: none"> 1. Percentage reduction in operating and service delivery costs 2. Percentage of relevant data stakeholders can access electronically 3. Number of stakeholders that have incorporated electronic transactions into their business processes



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