Asia-Pacific Economic Cooperation

Trade Facilitation through Customs Procedures: Assessment of APEC's Progress

APEC Policy Support Unit

October 2011

Advancing Free Trade for Asia-Pacific Prosperity

Prepared by:
ITS Global
Level 1, 34 Queen Street; Melbourne, Victoria, 3000
Australia

Akhmad Bayhaqi
Policy Support Unit
Asia-Pacific Economic Cooperation Secretariat
35 Heng Mui Keng Terrace
Tel: (65) 6891-9500 Fax: (65) 6891-9690
Email: ab@apec.org Website: www.apec.org

Produced for:
Sub-Committee on Customs Procedures
Asia-Pacific Economic Cooperation

APEC#211-SE-01.10

The authors would like to thank Tammy L. Hredzak, Carlos Kuriyama, Denis Hew and Azul Ogazón Gómez of the APEC Policy Support Unit for their helpful comments. We are also grateful to Mikiharu Simizu, Program Director for the APEC Sub-Committee on Sub-Committee on Customs Procedures (SCCP) for his strong support. The views expressed in this paper are those of the authors and do not necessarily represent those of APEC Member Economies.

TABLE OF CONTENTS

LISTS OF ANNEXES

LIST OF TABLES

LIST OF BOXES

EXECUTIVE SUMMARY

Since its creation in 1989 APEC has been at the forefront of efforts to facilitate trade and it has just completed its Second Trade Facilitation Action Plan II (TFAP II), the overall goal of which was to reduce trade transaction costs in APEC economies by 5% between 2006 and 2010.

For the Final Assessment of TFAP II, the PSU has commissioned a series of studies into different aspects of the Plan. This report addresses the outcomes that have been achieved by the Actions and Measures on Customs Procedures, one of four priority areas that made up TFAP II. The Actions and Measures in question address the following sub-areas of the Plan:

- Time Release Survey (TRS) of Goods;
- Implementation of an APEC Framework based on the WCO SAFE Framework of Standards;
- Simplification and Harmonization of Customs Procedures on the Basis of the Revised Kyoto Convention on Customs Procedures; and
- Paperless and/or Automation of Trade-related Procedures.

For this report, the Actions and Measures on Customs Procedures were assessed from two distinctly different perspectives — the specific objective that was set for their sub-area of the Plan and their contribution to the overall goal for the Plan of a 5% cut in trade transaction costs.

The limitations of the nominated KPIs and of the data collected for them precluded precise conclusions about the consequences of the Actions and Measures on Customs Procedures. In the case of trade transaction costs, these were compounded by the lack of understanding about how each of the actions and measures in question can be expected to affect the various trade transaction cost variables along the international logistics chain.

Accordingly the assessment had to call on a range of other information to permit the following broad conclusions to be drawn.

There have been significant gains made across APEC in reducing the time taken by exporters and importers in completing government 'red tape'. The time taken in Customs clearance and technical control across the APEC region is estimated to have dropped by around 8% over the TFAP II period and it is reasonable to presume that many, if not most, of these changes were the direct consequence of TFAP II Actions and Measures.

The number of Authorised Economic Operators (AEO) in APEC rose from 8,322 in 2007 to 10,502 in 2009. This is a key indicator of progress in implementing an APEC Framework based on the WCO SAFE Framework of Standards. A survey of clearance times in Japan indicates that the savings in merchandise transit times from such a programme are substantial.

No APEC member reported that its customs agency had reduced the number of documents *that the customs agency required* to clear an import or an export transaction between 2007 and 2009. Nevertheless, the *Trading across Borders* survey of the World Bank has revealed

substantial improvements over a longer time horizon, from 2006 to 2010, in terms of two key measures — the number of documents that an exporter or an exporter has to submit to *all* border protection agencies and the time taken to prepare those documents. Between 2006 and 2010 the transaction costs associated with time taken for document preparation in APEC economies fell by 8.7% in real terms.

Most APEC economies report either full or near-full electronic lodgement of trade-related documentation in respect of both imports and exports. Consequently, most of the possible benefits in terms of reduced trade transaction costs have been achieved.

While it is difficult to draw precise conclusions about the outcomes of TFAP II actions, the findings of the report make clear some gaps to be addressed. The general policy recommendations are as follows.

(a) APEC should address processes for developing, monitoring, and reviewing programmes

APEC needs to systematically address the limitations of the process that it has traditionally used to develop, design, implement, monitor, and review its efforts to facilitate trade and enhance supply chain efficiency. This is the overriding priority and one of the keys to the Leaders goal for the Supply Chain Connectivity Framework (SCCF) Action Plan. The other is to continue and expand monitoring and assessing the performance of the Plan, notwithstanding the practical difficulties in doing so.

(b) APEC should undertake cases studies of effectiveness of customs procedures in the region

There is a dearth of understanding about the effectiveness of customs and related border procedures, which is essential for streamlining such procedures and minimizing transaction costs. A number of APEC economies have made wide-ranging changes that would be worthy of further study to distil the wider lessons from their experiences. It is recommended that APEC undertake a series of case studies on the effectiveness of customs procedures in the region, which could be used as benchmarks by others.

(c) APEC should identify & address capacity building implications

Human resources are major constraints on collective action by APEC on customs procedures. The issues are particularly acute for the less developed members of APEC. APEC should identify the capacity building implications of the SCCF actions and measures on customs procedures with a view to implementing appropriate programmes to improve customs procedures and reduce transaction costs in the less developed members of APEC.

(d) APEC should examine the interaction of customs procedures, as well as other transport related regulations, with infrastructure

Customs procedures could directly and indirectly affect infrastructure services at or near the border. They often regulate the loading and unloading of ships and aircraft and the movement of merchandise. As regulatory bottlenecks can cause congestion elsewhere in the transport system, it is recommended that APEC undertake a review of the interaction of customs procedures and transport regulations with infrastructure in APEC with a view to recommending actions to reduce transaction costs in member economies.

There are also several recommendations that are specific to each of the four priority sub-areas on Customs Procedures:

- Time Release Survey of Goods:
  - APEC should specify benchmarks to guide implementation of TRS
  - APEC should specify the key outcomes to be sought from TRS
  - APEC should measure time taken at each step in Customs clearance & technical control
- APEC Framework based on the WCO Framework of Standards:
  - APEC should specify additional KPIs on outcomes
- Simplification and Harmonization o Customs Procedures:
  - APEC needs better defined, measurable & targeted KPIs
- Paperless and/or Automation of Trade-related procedures:
  - Re-evaluation of the current set of objectives, actions and KPIs.

1. BACKGROUND TO THE STUDY

Trade facilitation refers to the simplification and rationalisation of customs and other administrative procedures that hinder, delay or increase the cost of moving merchandise across international borders. Or to put it another way, cutting red tape at the border for importers and exporters so that goods are delivered in the most efficient and cost effective manner.

Since its creation in 1989, APEC has been at the forefront of international efforts to facilitate trade by identifying the obstacles that hinder trade and implementing activities and actions to address them. Many of APEC's better-known successes have been in trade facilitation. Providing assistance to developing economy members in this endeavour has been an important part of this work.

Leading international organizations, such as the World Bank, the World Trade Organization (WTO), and the OECD all agree that trade facilitation reforms can generate significant economic benefits. This reflects the results of published research, which have estimated that the direct costs associated with the international trading process represent up to 15% of the value of trade. Moreover, some researchers have assessed the indirect costs as being as much again.

A. THE FIRST TRADE FACILITIATION ACTION PLAN

At their meeting in Shanghai in 2001, APEC Leaders gave trade facilitation a renewed emphasis by calling for APEC economies to achieve a reduction of 5% in their trade transaction costs over the five years to 2006. This was to be a contribution towards the achievement of the Bogor Goals of free and open trade and investment in the region by 2010 for the developed members of APEC and by 2020 for its developing members.

The Committee for Trade and Investment (CTI) developed APEC's original Trade Facilitation Action Plan (TFAP) to fulfil that goal and to better focus and coordinate the forum's efforts in trade facilitation.

TFAP consisted of a menu of actions and measures that were to be taken by APEC members to reduce trade transaction costs and to simplify administrative and procedural requirements. Once the menu was agreed, member economies were free to choose to implement the actions and measures in question, either individually or as a group, on a voluntary basis. The actions and measures addressed four priority areas for trade facilitation reform that had previously been identified by a survey of APEC business executives. They were:

- Customs Procedures;
- Standards and Conformance;
- Business Mobility; and
- Electronic Commerce.

The CTI proposed that each economy should report on actions and measures it intends to implement to reach the Leaders' goal of a 5% reduction in trade transaction costs over the five-year period (CTI 2003).

APEC economies were asked to make their best endeavours to estimate the potential benefits from implementing these measures as soon as practical. The determination of benchmarks or baselines for assessing the performance of the selected actions and measures was seen as important to measuring progress. Wherever possible, quantitative methodologies were to be used to measure their impact on transaction costs. Where specific quantification was not possible, detailed qualitative analysis should address the selected action's links to the cost of trade transactions and may include the views of experts or the private sector.

From the beginning of the Plan, however, the CTI recognized that there was there was an urgent need to develop baseline measures, if the Leaders' 5% goal was to have any practical meaning (CTI 2002).

Following the conclusion of the Plan, the Final Review of TFAP I found that APEC economies had selected a total of over 1,400 actions and measures to implement and had completed over 62 per cent of them by the end of 2006 (Elek et al 2006). In doing so it pointed out many examples where trade facilitation actions taken by APEC economies had lowered transaction costs, measured in terms of shorter customs clearance times, larger volumes of trade, and reduced paperwork. The Review concluded that was likely that these actions had reduced the real cost of doing business across borders by five percent or more.

On this basis, at Hanoi in 2006 APEC Leaders welcomed the achievement of the goal they had set for the Plan at its commencement.

In reaching its conclusions, however, the Final Review highlighted a series of crucial qualifications to them:

> '...since there is no common definition of transactions costs and very limited baseline information provided by the member economies, it is not possible to point to an all-compassing measure for the region and to provide evidence that this single measure of transaction costs has fallen by at least five percent since 2001' (Elek et al 2006).

B. THE SECOND TRADE FACILITATION ACTION PLAN

At Busan in 2005, APEC Leaders had called for a further 5% reduction in trade transaction costs over the four years following the conclusion of the original Plan (APEC 2007).

In response, the CTI developed APEC's Second Plan (TFAP II) for the period from 2007 to 2010 inclusive (APEC 2007). This involved the CTI revising the menu of actions and measures that had been developed for TFAP I in each of the four priority areas. In the process of doing so the CTI deleted those actions and measures, which had been completed by APEC economies by the end of the original Plan or which were no longer deemed to be appropriate, while adding some new actions and measures.

Member economies agreed that TFAP II would place greater emphasis on collective actions and pathfinder actions. Pathfinder actions allow member economies, which are ready to initiate and implement cooperative activities or measures, to do so, while those members that are not yet ready to participate may join in at a later date.

In developing the Second Plan, the CTI agreed that each of the relevant sub-fora would identify Key Performance Indicators (KPIs) for the collective actions or pathfinders within their areas of responsibility, against which any subsequent progress could be monitored (APEC 2007). While each sub-fora was free to decide the most appropriate KPIs for their actions and measures, the KPIs in question could include measures of time savings, transaction costs savings, enhanced capacity, and enhanced security. CTI also agreed that each sub-fora would devise an appropriate methodology to report progress to the CTI each year that took account their particular circumstances.

Consistent with the approach that had been adopted for TFAP I, CTI agreed that the member economies would continue to report their individual trade facilitation actions through the Individual Action Plan (IAP) process in APEC (APEC 2007).

In 2008 the sub-fora recommended their proposed KPI's and reporting methodologies to the CTI. The CTI agreed a total of 35 KPIs over the four priority areas (CTI 2008) and used the sub-fora progress reports to update the APEC Annual Ministerial Meeting that year.

C. THE INTERIM ASSESSMENT OF TFAP II

In 2010 the Policy Support Unit (PSU) presented its Report on the Interim Assessment of TFAPII to the CTI (PSU 2010). The Interim Assessment addressed the experience of the first two years of the Second Plan (i.e. 2007 and 2008).

Among other things, the Interim Assessment reviewed the KPIs that had been developed by the relevant sub-fora and agreed by CTI for the purpose of assessing each of the TFAP II actions and measures. Each of the KPIs that had been selected for the Plan was evaluated from two different perspectives:

- how well the KPI measured the direct output of the action or measure in question, and
- how well the KPI measured the impact of the action or measure on trade transaction costs.

For this purpose the evaluation criteria that were used for the Interim Assessment were the effectiveness, efficiency and simplicity of the KPI from each of these perspectives.

The Interim Assessment generally found the KPIs to be wanting, particularly for the purpose of measuring the impact of the TFAP II actions and measures on trade transaction costs. Table 1 has a summary of its key findings in this regard.

Accordingly, the Interim Assessment recommended a series of modifications to the existing KPIs as well as the addition of new KPIs. Its recommendations were subsequently endorsed by the CTI.

The Interim Assessment also estimated trade transaction costs in APEC economies for each year between 2006 and 2008. These estimates were used to evaluate the progress that had been made towards the Leaders' goal of a 5% reduction in APEC trade transaction costs by the end of 2010.

The estimates indicated that APEC trade transaction costs had fallen by 1.7% in real terms between 2006 and 2008. This fall represented a collective saving to APEC economies of over US$14 billion a year. The percentage decrease, however, was notably less than the *pro rata* benchmark of 2½% for the Interim Assessment period that is implied by the Leaders' goal for the four years of the Plan.

Moreover the Interim Assessment was unable to determine how much of the reduction in trade transaction costs was due to policy changes generally, let alone how much was a consequence of those policy and administrative changes that had been introduced as a consequence of either the First or the Second TFAP.

Table 1 The summary results of the assessment of Key Performance Indicators

Criteria	Assessment of Key Performance Indicators
Effectiveness	Very few of the KPIs are effective for measuring the direct output of the TFAP II actions and measures. A few in the area of business mobility are effective for indicating progress towards TFAP II goals. Several in other areas qualitatively infer, but do not directly measure or quantify, progress. None of the KPIs are effective for measuring the level of trade transaction costs, either qualitatively or quantitatively. None provide a benchmark against which progress towards cost reductions can be assessed, nor a methodology for analyzing comparable data over time.
Efficiency	Most of the KPIs are generally efficient indicators of the goals set for them under the TFAP II action, requiring few resources to implement. However, none are efficient indicators of trade transaction costs, given the absence of information imparted by the KPI to permit such an assessment and in some cases the indirect relationship between the action or measure set and the costs incurred for achieving it.
Simplicity	In general the KPIs are simple to use and understand, though they contribute little to an understanding, by government or otherwise, of how the KPI directly contributes to an assessment of the expected output of the action or measure. In light of the above it is difficult to understand how the KPIs contribute to an assessment of the impact of the action or measure on the level of trade transaction costs.

Source: PSU 2010

D. THE FINAL ASSESSMENT OF TFAP II

Now that TFAPII has been concluded the PSU has engaged ITS Global and the Centre for Customs and Excise Studies (CCES) at the University of Canberra to assess the performance of the revised set of KPIs on Customs Procedures, which were endorsed by the CTI in the wake of the Interim Assessment. The present assignment is one component of the work that has been initiated by the PSU for the Final Assessment of TFAP II.

This assignment has required ITS Global and the CCES to:

- assess and provide estimates of the KPIs over the period from 2006 to 2010;
- on the basis of this assessment, analyse and determine the impact of the Customs Procedures actions and measures on trade transaction costs over the same period; and
- provide policy recommendations in the light of the results that were obtained.

In undertaking the analysis of the impact on trade transaction costs, ITS Global and the CCES have conducted sensitivity tests of any critical assumptions wherever possible. The consultants have undertaken these tasks in close consultation with PSU staff during the course of the project. This was to ensure that the conduct of the project conformed to relevant APEC protocols, guidelines, and procedures, took appropriate sensitivities into account, and was aware of the limitations and expectations that existed within the organisation.

2. ASSESSING THE ACTIONS & MEASURES ON CUSTOMS PROCEDURES

A. METHODOLOGY & APPROACH

For the purposes of defining what was to be done to facilitate trade within APEC, TFAP II broke down each of the four priority areas into a series of sub-areas. In the case of Customs Procedures, the Plan articulated the following sub-areas:

- Time Release Survey (TRS) of Goods;
- Implementation of an APEC Framework based on the WCO SAFE Framework of Standards;
- Simplification and Harmonization on the Basis of the Revised Kyoto Convention on Customs Procedures;
- Paperless and/or Automation of Trade-related Procedures;
- Harmonization of the Tariff Structure with the Harmonized System (HS) Convention; and
- Appropriate, Transparent and Predictable Trade-related Procedures.

In each of these sub-areas, TFAP II outlined the objective that was to be achieved, the actions and measures that were to be implemented to achieve that objective, and the Key Performance Indicators (KPIs) that were to be used to assess the progress that was made in doing so by APEC economies, both individually and collectively. Table 2 summarises this information. Only the KPIs that were added in the wake of the Interim Assessment and that are the subject of this study are shown in the Table.

The objectives that were articulated by the Plan for each sub-area are best thought of as intermediate objectives and define the direct outcomes that are expected from the particular actions and measures in question. They are intermediate objectives in the sense that they were to be realized on the way towards the overall goal for the Plan that was set by APEC Leaders at its commencement. The overall goal is to reduce trade transaction costs in the region by 5%.

For this report ITS Global has sought to evaluate the suitability of each KPI on Customs Procedures from two separate perspectives:

- How well the KPI assessed the direct outcome of the action or measure in question (the intermediate objective set for the specific sub-area of the Plan); and
- How well the KPI assessed the impact of the action or measure on trade transaction costs (the overall goal for all areas of the Plan).

Table 2 KPIs – Customs Procedures

Sub-Area	Proposed Actions & Measures	New KPIs for Sub-Area
Time Release Survey (TRS) for Goods	Develop a methodology for conducting a Time Release Survey Measure release times for goods. Identify bottlenecks in customs procedures Develop strategies to address bottlenecks in customs & border procedures Establish processes to assess cargo release times on a continuous or regular basis	Import clearance time (from time of lodgement to approval of declaration) Export clearance time (from time of lodgement to approval of declaration)
Implement APEC Framework based on the WCO SAFE Framework of Standards	Harmonize advance electronic cargo information requirements Use information to identify high-risk shipments & facilitate low-risk ones Use advanced risk management methods to identity high-risk shipments and minimize inspection of low-risk ones Inspect outbound high-risk containers & cargo Implement an Authorized Economic Operator programme	Number of Authorised Economic Operators Percentage of trade covered by Authorised Economic Operators
Simplification & Harmonization based on the Revised Kyoto Convention	Adopt & implement the Revised Kyoto Convention Implement an expeditious customs clearance process for traders Establish an effective advance ruling process Establish a surety bond system to expedite customs clearance & reduce transaction costs	Number of documents required by Customs for import of goods Number of documents required by Customs for export of goods
Paperless and/or Automation of Trade-related Procedures	Establish a national single window (SW) system for customs & border protection agencies Simplify customs procedures & reduce documentation Ensure the replacements for paper documents are media & technologically neutral, Adopt standardized & simplified common data elements & formats	Percentage of import declarations lodged and processed electronically Percentage of export declarations lodged and processed electronically

Source: APEC 2007.

ITS Global performed both assessments against the following evaluation criteria:

- Effectiveness: How well the KPI performed the particular measurement task that had been set for it.
- Efficiency: How much resources were consumed in producing the measurement outcome, in terms of data collection and computational effort.
- Simplicity: How easy is the KPI to use and to understand, both inside and outside government.

This is the same approach that was used for the Interim Assessment of TFAP II. For that application ITS Global had distilled the above evaluation criteria from the principles that underlay the APEC-OECD Integrated Checklist on Regulatory Reform (OECD 1997).

B. LIMITATIONS ON THE EVALUATION

For the Final Assessment the Sub-Committee on Customs Procedures (SCCP) had asked each APEC member to provide the data for their economy in respect of each of the KPIs that are listed in Table 2. The data collected by the SCCP were provided to ITS Global for the study and are recorded in full at Annex E.

A complete assessment would require five years of data for each of the KPIs — covering each of the four years of the Plan itself (2007 to 2010 inclusive) as well as the base year for the Assessment (2006). However, that did not prove to be possible in the circumstances and the data was collected for the period from 2007 to 2009 period. Unfortunately, the data that has been provided for this sub-period is substantially incomplete in terms of both their coverage of APEC membership and the sub-period.[1]

For example, eight APEC members do not conduct Time Release Surveys at all. Of those that do, not all of them conduct their surveys annually and few cover both directions of trade as well as air and maritime freight transport. Only seven APEC members have implemented or are in the process of implementing the APEC Framework based on the WCO SAFE Framework of Standards.

Given the data limitations referred to above, the assessments of the performance of the actions and measures on Customs Procedures necessarily had both quantitative and qualitative components.

The quantitative component involved estimating the percentage change in the KPI for each APEC economy over the Plan period, or over however much of that period that the SCCP data covered. Given the incomplete data coverage, the results were judged against the annual pro rata benchmark implied by the Leaders' goal for the five years of the Plan. This pro rata benchmark was a reduction of 1¼ percentage points for each year.[2]

The qualitative component of the assessment compared the quantitative results with other indicators of the customs performance in the public domain. The latter include the Trading

[1] Peru has submitted some data for 2006 and 2010, which has been included in the Appendix.
[2] For a total reduction of 5 percent over the four years of the Plan [1¼% * 4 = 5%]

across Borders indicators and the Logistics Performance Index (LPI), both of which are maintained and published by the World Bank Group.

The Trading across Borders database includes a set of indicators that are focused on the red tape encountered in exporting or importing a TEU of standardised and widely traded merchandise. The indicators include the:

- number of documents to be submitted to the border protection authorities;
- number of signatures to be obtained from the border protection authorities;
- time taken in document preparation and customs clearance; and
- fees and charges incurred in document preparation and customs clearance.

The LPI is based on a survey of logistics professionals worldwide. Respondents are asked to rate the logistics performance in each economy in seven key areas on a five-point scale from worst to best. One of its components is the efficiency of the clearance process conducted by customs and other border agencies.

The perspective of the LPI is broader than that of the Trading across Borders data but the latter are available on a more frequent basis. The first LPI survey was conducted in 2007 and it has only been repeated once — in 2009. In contrast the Trading across Borders data cover each year of the Final Assessment period.

ITS Global will compare and contrast the trends that are evident in relevant Trading across Borders and LPI indicators with that estimated with the TFAP II KPI data provided to SCCP. In doing so, the various World Bank indicators will be weighted by each economy's share of total container movements, so as to ensure comparability at the APEC level.

3. TIME RELEASE SURVEY OF GOODS

A. BACKGROUND

The objectives set for this sub-area of the Plan were for each APEC member to:

- evaluate its own performance in trade facilitation;
- identify bottlenecks in their customs-related procedures; and
- improve those procedures.

To this end, the Plan envisages that APEC members would implement a way of continuously measuring the time taken by border agencies in releasing imported goods and to use the results to remove bottlenecks in customs and other border procedures.

The World Customs Organization (WCO) has developed a methodology to measure the average time taken by customs and border agencies to release goods that are being imported or exported and to review border clearance procedures used in the process (WCO 2002). Its Time Release Survey (TRS) methodology aims to identify both the problem areas as well as the potential corrective actions that could be taken by government to address those problems.

The WCO methodology is widely used around the world, both within and outside APEC, to highlight the concerns of traders about clearance delays and to assist border agencies in responding to them. The TRS methodology is crucial where traders have to plan deliveries ahead to meet tight production schedules or to manage 'just-in-time' inventories.

In 2008, the CTI agreed that the number of economies that had implemented a TRS would be used to assess this area of the Plan. This KPI directly addresses implementation of the first two actions and measures in this area of the Plan. However, it contributes relatively little to a direct understanding of progress made relating to the other three. It also does little to explain what this component of the Plan contributes to achieving the Leader's goal of reducing APEC trade transaction costs by 5% by the end of 2010.

To help fill this gap, the APEC PSU's report on the Interim Assessment of TFAP II proposed that average clearance times — the time from the lodgement of a customs declaration to its approval — in each direction of trade should be used to assess implementation of this component of the Plan and its contribution to the 2010 goal for reducing trade transaction costs. The CTI accepted this recommendation and APEC members subsequently provided relevant data to the PSU for the Final Assessment.

B. ASSESSMENT OF IMPLEMENTATION OF TRS

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 TRS, albeit with significant variation in the nature and extent of its application. These economies were: Australia, Brunei Darussalam, Japan, the Republic of Korea, Malaysia, New Zealand, Peru, the Russian Federation, Singapore, Chinese Taipei, Thailand, and Viet Nam.

i. Data on customs clearance time

The data on average customs clearance times imply that only 12 APEC economies had implemented a TRS by the end of 2009, and only seven on a continuous or regular basis for both imports and exports. Even then, only two APEC economies — Australia and Japan — have surveyed both of the major transport modes — sea and air — that are used in the international carriage of merchandise.

Clearance times are relevant to the measurement of the immediate outcome of the first two of the TRS actions and measures listed in Table 2 — development of a TRS methodology and its implementation.

They also, however, contribute indirectly to an assessment of the other three. For example, if average clearance times were shown to have consistently declined over time, this would suggest that, *prima facie*, bottlenecks in customs clearance were being identified by APEC members and the sources of the problem addressed in a systematic and continuous way. That said, factors outside the control of the customs and border agencies could also have contributed to any observed change in clearance times. Such factors could include a downturn in trade volumes, or a shift in the composition of trade towards merchandise that did not require the same examination process at the border.

Over the four years to the end of 2010, merchandise trade by APEC economies has grown strongly in volume — by 5% per year on average— and by real value — also by an average of 5% per year. This rules out declining trade as the explanation for any confounding developments. Rates of growth have varied substantially across the region, however, with much higher growth in the value of trade by some economies — for example, Viet Nam (16% per year), Indonesia (14% per year), and China (12% per year) — in contrast to negligible or negative growth in others — for example, Canada, Mexico, and the United States. This means that substantial compositional changes could have occurred and therefore could be responsible, at least partly, for the observed change in clearance times.

Only eight economies have provided clearance time data for just two or three years of the five-year assessment period — three years being the minimum data period for estimating any sort of trend. Accordingly, the data cannot establish the extent of the progress that has been made by APEC economies, collectively or individually, in reducing clearance times in either trade direction over the full term of the Plan, even for those that began a TRS prior to 2007.

The APEC economies that submitted clearance time data for more than one year generally saw their average clearance times not change or decline — see Table 3 for the details.

There were only two instances of increased clearance times during this three year period — in respect of imports for Korea (+15.6%) and exports for Peru (+22.9%). Five APEC economies — Australia, Peru, The Philippines, Chinese Taipei, and Viet Nam —recorded a decline in their average import clearance time, and four a decline in their export clearance time — Australia, The Philippines, Chinese Taipei, and Viet Nam. The Russian Federation and Singapore recorded no change in either direction. All the declines were relatively significant, substantially exceeding the *pro rata* benchmark of 2.5% for the three-year period. Indeed all would have exceeded the 5% decline expected over the full five-year period of the Plan, provided that they did not experience any increase in clearance time in the years not covered by the KPI data.

Table 3 Change in average customs clearance times, selected APEC economies, 2007 to 2009

APEC Economy	Change in Import Clearance Time	Change in Export Clearance Time
Australia	-14.3%	-75%
Korea, Republic of	+15.6%	0
Peru	-33.3%	+22.9%
Philippines, The	-33.3%	-50%
Russian, Federation	0	0
Singapore	0	0
Taipei, Chinese	-8.10%	-8.3%
Viet Nam	-50% to -33.3%	-66.7% to -50%

Source: ITS Global estimates (see also Table E.1. in Annex E).
Note: Japanese data only available for 2008 so change could not be calculated.

In light of the very limited coverage of the data on clearance times, ITS Global has examined other sources that might throw a more consistent and comprehensive light on this issue. The World Bank publishes two such possible sources. One is the *Trading across Borders* component of the Bank's annual *Doing Business* series (World Bank 2010a). The other is the survey conducted by the Bank for its *Logistics Performance Index* (World Bank 2010b).

ii. Trading across Borders data on time taken in trade

In the *Trading across Borders* data, the time taken to negotiate Customs clearance and technical control is measured from the time the relevant documents are submitted to the customs agency until the time when that agency releases the cargo.

It should be noted that this period, recorded by the World Bank, is generally longer than that measured by the KPI and reported to the PSU. The KPI explicitly excludes time involved in obtaining any approvals that may be required from any government agency other than the customs agency. The KPI is a measure from the perspective of the customs agency itself, whereas *Trading across Borders* indicators reflect the perspective of the importer or exporter of the merchandise.

It should also be noted that the *Trading across Borders* survey is based on trade transactions whose origins — in the case of exports — and destinations — in the case of imports — are assumed to be located within the economy's largest city and to have to be shipped by sea internationally through the nearest port. The survey does not cover any other business locations, ports of entry or exit, or mode of international transport such as pipeline, road, or air transport.

Table 4 Time taken in Customs clearance and technical control in APEC, 2006 to 2010

APEC Economy	Direction of Trade	2006 days	2007 days	2008 days	2009 days	2010 days	Change 2006-10 %
Australia	Import	2	1	1	1	1	-50
	Export	1	1	1	1	1	0
Brunei Darussalam	Import	1	1	1	1	1	0
	Export	5	5	5	2	2	-60
Canada	Import	1	1	1	1	1	0
	Export	1	2	2	1	1	0
Chile	Import	4	3	3	3	3	-25
	Export	2	2	2	2	2	0
China, People's Republic of	Import	4	4	4	4	4	0
	Export	2	2	2	2	2	0
Hong Kong, China	Import	1	1	1	1	1	0
	Export	1	1	1	1	1	0
Indonesia	Import	7	4	4	4	4	-43
	Export	2	2	2	2	1	-50
Japan	Import	2	2	2	2	2	0
	Export	2	2	2	2	2	0
Korea, Republic of	Import	1	1	1	1	1	0
	Export	1	1	1	1	1	0
Malaysia	Import	1	1	1	1	1	0
	Export	2	3	3	2	2	0
Mexico	Import	3	2	2	2	2	-33
	Export	3	2	2	2	2	-33
New Zealand	Import	1	1	1	1	1	0
	Export	1	1	1	1	1	0
Papua New Guinea	Import	4	4	4	4	4	0
	Export	4	4	4	4	4	0
Peru	Import	6	6	5	5	3	-50
	Export	4	4	5	5	2	-50
Philippines, The	Import	4	4	3	3	2	-50
	Export	2	2	2	2	2	0
Russian Federation, The	Import	4	4	4	4	4	0
	Export	3	3	3	3	3	0
Singapore	Import	1	1	1	1	1	0
	Export	1	1	1	1	1	0
Taipei, Chinese	Import	1	1	1	1	1	0
	Export	1	1	1	1	1	0
Thailand	Import	3	2	2	2	2	-33
	Export	1	1	1	1	1	0
United States	Import	1	1	1	1	1	0
	Export	1	1	1	1	1	0
Viet Nam	Import	5	5	5	4	4	-20
	Export	5	5	5	4	4	-20
APEC weighted average (a)	**Import**	**2.69**	**2.52**	**2.50**	**2.49**	**2.46**	**-8.5**
	Export	**1.67**	**1.68**	**1.69**	**1.65**	**1.60**	**-4.1**

Note: (a) weighted by the share of the volume of APEC trade in each direction, as measured by shipping container movements at major ports in 2006.
Source: World Bank 2011 and ITS Global estimates

Nonetheless the results of the *Trading across Borders* survey should offer a reliable indication of the direction and the extent of the change in average release times in each direction of trade the over the term of the Plan. For the Final Assessment of TFAP II, the World Bank has provided the PSU with the latest revision of its *Trading across Borders* data for each APEC economy in both directions of trade for each year from 2006 to 2010 inclusive. The Bank's revised data on the time taken in Customs clearance and technical control in each APEC economy are set out in Table 4 above.

The picture that emerges from the *Trading across Borders* data is that nine APEC economies — Australia, Brunei Darussalam, Chile, Indonesia, Mexico, Peru, the Philippines, Thailand, and Viet Nam — realized reductions in the time taken in Customs clearance and technical control. Four of this group — namely, Indonesia, Mexico, Peru, and Viet Nam — achieved cuts in the time taken to clear both imports and exports. In all cases, however, the time savings were substantial but the reliability of the estimated changes in Table 4 is nevertheless influenced by the fact that the time measurements have been rounded off to whole days in most cases.

Twelve economies saw no change in the time that was taken in Customs clearance and technical control for either export or import over the assessment period. They were Canada; the Peoples Republic of China; Hong Kong, China; Japan; Korea; Malaysia; New Zealand; Papua New Guinea; the Russian Federation; Singapore; Chinese Taipei; and the United States. Collectively they account for more than 55% of the APEC trade in each direction.

For APEC, the trade-weighted average of the time taken for import transactions dropped by 8.5% and by 4.2% in the case of exports. The average time taken for export transactions by APEC economies in 2010 was less than half a day quicker than it was for imports.

iii. *Logistics Performance Index* data on time

The other source of data that may be used to assess the performance of this component of the Plan is the World Bank's *Logistics Performance Index (LPI).* The World Bank surveys global and domestic logistics operators for their views on the quality of performance of transport, infrastructure, and customs clearance procedures in economies around the world and uses their responses to rank the performance in each of these areas on a five-point scale.

To date the World Bank has conducted two LPI surveys, in 2007 and 2009. Although the LPI surveys do not yet provide sufficient information to confirm the trends on the APEC economies that are evident from the *Trading across Borders* data, the LPI can help to confirm the reliability of the *Trading across Borders* observations for the two years where the two databases overlap.

Even though the two approaches to data collection are fundamentally different, World Bank researchers have found a significant correlation between the LPI country rankings and the *Trading across Borders* country rankings for each of the six *Trading across Borders* indicators (Arvis et al 2010).

Another important difference between the two datasets is how they define time to import or export, which results in their values differing by almost an order of magnitude (Arvis et al 2010). While the LPI concept of time is that of the lead-time between two events in the supply chain — for example, from factory to free carrier at the port of loading — a detailed

comparison by World Bank staff has revealed, nevertheless, that there is a relatively strong correlation between the *Trading across Borders* data on time taken in trade transactions and the corresponding components of the LPI.

These results tend to confirm that trends identified in the *Trading across Borders* data are reliable indications of the direction and extent of the changes that occurred in customs clearance times over the assessment period, as well as the changes in time taken to complete all the formalities associated with merchandise trade.

iv. Impact of policy and administrative changes

Changes in customs clearance times are caused by many factors, some of which are essential to the observed outcome and some of which only contribute towards that outcome. The same is true for changes in the overall time taken by domestic businesses in completing all the official procedures and 'red tape' that are involved in their importing or exporting merchandise.

For the purposes of the Final Assessment of TFAP II, the key issues are the detailed changes in public policy and public administration that APEC members have implemented in response to the Plan and its predecessor, and the impact that these changes have had on clearance and transit times over the four years of the assessment period.

This period has been chosen to allow for the effect of the necessary lags between the implementation of such changes and their impact on clearance and transit times over the assessment period. For example, the full implications of most policy and administrative changes are generally not felt immediately but take time to emerge. Moreover, that time period is further attenuated if the changes in question are introduced progressively. For these reasons, policy and administrative changes first introduced during 2010 are unlikely to have had any significant impact before the end of that year. They have therefore been ignored for the purposes of this assessment.

Given the scope of the actions that have to be covered in an Individual Action Plan (IAP), the detail which can be provided on any one action or measure as to its scale and nature, is necessarily very limited. Accordingly, the information provided on each of the actions reported in Appendix 1 does not permit a precise assessment of its implications over either the short term or the longer term.

Nevertheless, on the face of it, the actions that are set out in Appendix 1 are likely to reduce the time taken in Customs clearance and technical control as measured by the *Trading across Borders* survey in the relevant trade direction for the APEC economies in question. Moreover, those economies whose reported actions in the customs area were broadest in apparent scope generally had the greatest proportionate time savings in that logistical stage, as shown in Table 4.

Thailand provides a good illustration of the relationship. Over the four years to 2009, Thailand completed a series of wide-ranging and significant changes in its customs policy and administration. All of these changes could be expected to reduce processing and transit times either directly — for example, adoption of electronic technologies, reduced import inspection rates, and elimination of export inspections — or indirectly — for example, introduction of a Single Window, better co-ordination between government agencies, and

improved arrangements for the exchange of information with the private sector. Not surprisingly the time taken by imports to Thailand to negotiate Customs clearance and technical control in the *Trading across Borders* survey dropped by 33 1/3% over the assessment period. Although Thailand also abolished export inspection this has not been evident in the revised data.

Another example is the case of Peru. Between 2006 and 2009, Peru began the process of developing paperless trading and a Single Window, as well as streamlining its customs procedures, all of which could be expected to reduce customs processing and merchandise transit times. It is plausible that these changes were key contributors to the substantial declines in time taken by Customs clearance and technical control as recorded for Peru — by 50% for its imports and 50% for its exports — in the *Trading across Borders* survey for the assessment period.

v. Overall assessment

Data on clearance times are highly effective measures of the development of a TRS methodology and its implementation on a continuous or regular basis. Moreover, if clearance times are falling over successive surveys, this is a strong indication that the remaining TRS actions and measures have also been implemented.

As the data are generated as a direct consequence of implementing the TRS actions and measures in the Plan, this KPI is a highly efficient measure of performance. Few additional resources would be required to report these data compared to what are involved in implementing the actions and measures themselves.

Finally the KPI is simple to understand and use.

At the present time, the major limitation of this KPI as a measure of the immediate outcomes of the TRS actions and measures is the relatively limited frequency of the surveys that are used to collect the data in most APEC economies, as well as the relatively recent implementation of those surveys.

C. ASSESSMENT OF IMPACT ON TRADE TRANSACTION COSTS

Table 5 summarises the annual estimates of APEC trade transaction costs that ITS Global has prepared for the PSU as part of the Final Assessment of TFAP II. The estimates are for each year of the assessment period and are broken down by the four logistical stages used to categorise the *Trading across Borders* data, on which these estimates were based. Given their relevance to the TRS actions and measures in TFAP II, transaction costs estimated for Document preparation and of Customs clearance and technical control are further broken down by type of transaction cost— time, on the one hand, and fees and charges, on the other.

As Table 5 highlights, trade transaction costs in APEC economies over the assessment period were heavily dominated by the cost of the time taken in completing merchandise trade transactions. In 2006, the cost of time accounted for around 94% of all the transaction costs in Customs clearance and technical control, and slightly less in Document preparation.

Customs clearance and technical control is the logistical stage most relevant to the TRS actions and measures, which target the systematically improving the effectiveness and efficiency of customs clearance. Such improvements typically realize savings in clearance

times, which is why such times are used for some of the KPIs for the TRS actions and measures. When savings in customs clearance times yield faster transit and delivery times for the merchandise in question, the transaction costs incurred in merchandise trade are thereby reduced.

Table 5 Transaction costs in merchandise trade by APEC economies, by logistical stage, 2006 to 2010

Logistical stage	2006 USD billion	2007 USD billion	2008 USD billion	2009 USD billion	2010 USD billion	Change 2006-10 %
Document preparation	507	488	485	478	471	-7.1
Fees and charges	32	29	38	38	37	+15.8
Time taken	475	460	447	439	433	-8.7
Customs clearance and technical control	194	185	186	184	181	-6.9
Fees and charges	16	16	17	17	17	+6.3
Time taken	178	169	169	168	164	-8.1
Port and terminal handling	223	225	227	234	233	+4.2
Inland transport and handling	262	255	2521	244	244	-7.2
Total trade transaction costs	1,186	1,154	1,149	1,140	1,127	-5.0

Source: PSU forthcoming
Note: 2011 prices

Document preparation is also indirectly relevant to the TRS actions and measures in the Plan. Some of these actions and measures may help streamline the 'red tape' burden that customs procedures impose on the private sector. One of the biggest benefits from doing so is a reduction in the time taken to prepare and submit customs declarations and the other documents that are required to secure release of imported or exported merchandise.

The valuation of time for the estimates in Table 5 draws on work by Professor David Hummels of Purdue University (Hummels 2007) for USAID. Hummels estimated the value of merchandise transit time by calculating the premium firms were willing to pay to save a day by using air rather than sea transport for the international freight leg of a trade transaction.

The benefit of such a switch is the value the firm or its consumers place on saving a day in transit, while the costs are the higher freight charges in using air over sea. Other things being equal, however, consumers buy less of a good when its price is higher but the extent of the drop depends upon the good in question. Its sensitivity in this respect is measured by its own price elasticity of demand, which is the change in the quantity demanded when its price changes by one percent.

Hummels estimated the *ad valorem* tax equivalent of a day's saving in transit time for each product traded by an economy by combining its own price elasticity of demand with the time taken in each direction of trade from the *Trading across Borders* database at the time of the

research (2007). He aggregated the estimates for all merchandise trade in a given direction to get the economic value of a day's saving for each of the 175 economies in the database. The *ad valorem* tax equivalents estimated by Hummels for each of the APEC economies were used to calculate the time costs in Table 5.

Over the four years of TFAP II, total transaction costs in APEC economies have dropped by 5% in real terms, thereby realizing the goal that was set by APEC Leaders at the beginning of the Plan. The time costs in Customs clearance and technical control, however, declined by nearly 8.1% over the same period. This result was comparable to the experience in Document preparation — a logistical stage that is inherently linked to Customs clearance and technical control — but was in sharp contrast to that in Ports and terminal handling where time costs increased by 4.3% in real terms. The extent of the change in Customs clearance and technical control suggests that the causes of the decline in time costs were specific to the logistical stage in question, and were not external to it.

Governments define and enforce the arrangements relating to customs clearance and border control. This and the high rate of growth in trade values and volumes that occurred over the assessment period strongly suggest that the observed decline in time costs in Customs clearance and technical control was a direct consequence of changes in public policy and administration. It is reasonable to presume that many, if not most, of these changes were the consequence of the TRS actions and measures.

Other things being equal, customs clearance times are relatively effective, efficient, and simple proxy indicators of the impact of the TRS actions and measures on trade transaction costs. They are however, only proxies for the transaction costs in question and they therefore need to be accompanied by a series of complementary indicators, such as the time involved in obtaining the release of the cargoes in question. The importance of such complementary measures is highlighted by the fact that most of the clearance delays that occur in most APEC economies reflects the process for obtaining the approvals from border protection agencies other than the customs administration.

At the present time, their major limitation is the relatively limited frequency of the surveys that are sued to collect the data in most APEC economies and the relatively recent implementation of those surveys.

4. APEC FRAMEWORK BASED ON WCO SAFE FRAMEWORK

A. BACKGROUND

This area of the Plan aims to secure and facilitate trade in the region by implementing the APEC Framework based on the World Customs Organization (WCO) Framework of Standards to Secure and Facilitate Global Trade (WCO 2007).

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. It is based on the application of the following principles:

- advance electronic information;
- risk management;
- outbound inspection; and
- business partnerships.

The WCO Framework of Standards is built on two pillars — network arrangements between national customs agencies and partnerships between each national customs agency and businesses along the supply chain, known as Approved Economic Operators (AEOs). Each pillar contains a set of Standards that have been consolidated to guarantee ease of understanding and rapid global implementation. The members of the WCO adopted the SAFE Framework of Standards in June 2005 (WCO 2007).

For the purposes of assessing the progress made towards the objective set for this area of the TFAP II, in 2008 the CTI agreed to measure the number of economies that have progressed implementation of advanced risk management methods based on advance electronic presentation of cargo information (CTI 2008). The nominated risk management methods consisted of advance electronic information, cargo data harmonization, risk management, non-intrusive equipment, and the AEO programme.

The AEO programme is a core part of the SAFE Framework. For this purpose, an AEO is

> '…a party involved in the international movement of goods in whatever function that has been approved by or on behalf of a national Customs administration as complying with WCO or equivalent supply chain security standards. Authorized Economic Operators include inter alia manufacturers, importers, exporters, brokers, carriers, consolidators, intermediaries, ports, airports, terminal operators, integrated operators, warehouses and distributors (WCO 2007).'

Under the SAFE Framework, businesses in the private sector can be accredited by the national customs agency as AEOs. They have to demonstrate they have high-quality management processes that meet the criteria specified by the Customs agency — such as having an appropriate record of compliance with customs requirements and having a demonstrated commitment to supply chain security through participation in a Customs-Business partnership programme. The businesses that qualify as AEOs are allowed to use

simplified and rapid release procedures based on their provision of minimum information. This includes expedited processing and release of shipments, minimum cargo security inspections, and reduced fees and charges.

In its Interim Assessment of TFAP II, the PSU concluded that this KPI did not adequately measure progress towards the Leaders' goal of a 5% reduction in trade transaction costs by the end of 2010 (PSU 2010). Accordingly the PSU recommended that two additional KPIs be added to the Plan and CTI subsequently approved the addition of:

- the number of AEOs; and
- the percentage of trade covered by AEOs

The AEO KPIs were intended to contribute to the measurement of cost and time savings through the faster and less costly processing of low-risk trade transactions by individual customs agencies.

Moreover, there are network benefits from the mutual recognition of the AEO programmes of international trading partners. Mutual recognition facilitates the emergence of secure supply chains, as the different stages in the international trading process necessarily take place in different jurisdictions. For example, the United States has mutual recognition agreements with Japan, New Zealand and Canada, among others and others are in the process of being negotiated among APEC members.

In August 2009 the Sub-Committee on Customs Procedure (SCCP) established the AEO Working Group (AEO WG) to assist APEC economies in establishing AEO programmes and in and in harmonizing them with each others. This was a response to calls from industry to provide clarity and harmonization in AEO programme requirements, and from members looking to commence bilateral discussions on mutual recognition of their AEO programmes.

B. ASSESSMENT OF IMPLEMENTATION OF TFAPII ACTIONS

i. Data on AEO coverage

At present seven APEC economies have an AEO programme in place.[3] They are the People's Republic of China, Japan, the Republic of Korea, New Zealand, Singapore, Chinese Taipei, and the United States. In addition Mexico is conducting a pilot AEO programme that is expected to lead to full implementation in 2012. Canada, Japan, the Republic of Korea, Singapore, and the United States each have mutual recognition agreements with some of the APEC economies in question (AEO WG 2010). The KPI data are set out in Table 2 of Annex E.

The People's Republic of China provided data for 2008 and 2009, Japan and Singapore for 2007 to 2009 — except for the percentage of trade covered by AEOs in 2009 and 2007, respectively. Mexico provided data for the percentage of trade covered for 2007 to 2009 but no data on the number of AEOs. New Zealand provided partial data for 2009 and Thailand provided the number of AEOs for 2009. The United States provided the number of AEOs for 2007 to 2009 and the percentage of values of trade covered for 2008 and 2009.

[3] This was based on data provided for this assessment and the report prepared by APEC's Authorized Economic Operator Working Group (AEO WG 2010).

The data collected by the SCCP indicate that the reported number of AEOs in the APEC region increased from 8,322 in 2007 to 10,502 in 2009.[4] Taken at face value, this suggests that a 26% increase in AEO numbers have occurred over these three years. In all cases, the share of trade covered by AEOs was generally reported to have increased in the reporting economies over the same period. As would be expected, however, the extent of the shift in trade shares was generally not commensurate with the increase in operator numbers. The clear exception was China, where the numbers of operators accelerated more slowly than the share of trade that they handled.

In Chinese Taipei, the number of AEOs and percentage of trade covered increased between 2007 and 2008, and decreased between 2008 and 2009. Between 2007 and 2008, the number of AEOs increased by 33% and the percentage of trade covered increased by 31%. Between 2008 and 2009, the number of AEOs decreased by 11% and the percentage of trade covered decreased by 7.7%. As the number of AEOs decreased disproportionately to the percentage of trade between 2008 and 2009 – despite a reduction in both the number of AEOs and percentage of trade covered – the average percentage of trade covered per AEO actually increased by approximately 3.7%.

The People's Republic of China only provided data for 2008 and 2009. Its operator numbers and share of trade covered by them increased by 76% and 86% respectively between 2008 and 2009. Japan only provided data on the percentage of trade covered by AEOs for 2007 and 2008, which indicated an increase in the number of AEOs of 179% from 2007 to 2008. Singapore's share of trade handled by its AEOs increased by approximately 2 percentage points between 2007 and 2008.

The United States figures for the number of AEOs has consistently increased since 2007, from 7,947 to 9,642 in 2009; and its share of trade handled by AEOs has slightly reduced by 0.8 percentage points between 2008 and 2009.

The reported data do not easily lend themselves to a robust analysis of the consequences of APEC AEO programmes for APEC trade. A rough approximation, however, can be estimated with the data. This suggests that the expansion of AEO programmes in APEC has increased the share of merchandise trade handled by authorised businesses by over 6% per year.[5]

ii. Progress towards the other SAFE Framework objectives

The current KPIs only provide relatively limited information on the progress that has been made by the APEC economies towards all the objectives set for the SAFE Framework component of the Plan. They only address the outcomes from two of the five actions and measures in question, and in doing so provide no information on how well or how far implementation has gone in each case.

The Interim Assessment of TFAP II noted that the suite of KPIs that had been used to that point would benefit from the inclusion of indicators that were designed to measure a broader

[4] Where a reporting economy did not provide data for either 2007 or 2007 and 2008, ITS Global has assumed that the appropriate value for the missing years is zero.

[5] This figure is derived by first calculating the average percentage change in each of the KPIs for each economy where data is available. The percentage change is assumed to be zero in economies where no data has been provided. The average increase is then presented as the simple average.

range of outcomes, including the implications of the actions and measures for trade transaction costs (PSU 2010).

Although the report proposed and the CTI accepted additional KPIs for the Plan, the need for their immediate adoption meant that they could not address all the outcomes that the actions and measures in question were expected to produce. As a consequence the expanded suite of KPIs does not address issues such as:

- which advance electronic information requirements have been harmonized and which have not, and the consequences in each case;
- how such information is used to identify high-risk shipments and to facilitate low-risk ones, as well as the savings in time and cost for the latter group;
- the nature of the risk management processes that are used and the outcomes for low-risk cargoes in terms and transit time and cost;
- the rates of outbound inspection and interdiction, as well as the time taken and cost of the process; and
- the specific operational outcomes of the AEO programme, including the savings in clearance times and costs for the business partners in the programme and the compliance burden that is imposed on them.

Unlike the rest of the Plan, the SAFE Framework actions and measures have two distinctive policy objectives. Their primary objective is national security but their secondary objective is to facilitate trade by streamlining the customs procedures that apply to trade transactions that are assessed as presenting a low risk to national security.

As such, two further sets of KPIs are required to assess progress towards these two objectives. The first set relates to the safety and security of international trade. The second set is concerned with the facilitation of trade and the associated transaction costs for low-risk transactions in terms of time and expense.

For the actions and measures in other parts of the Plan, their KPIs can be used directly to measure the transaction cost implications associated with the implementation of the actions and measures in question. However, for the SAFE Framework actions and measures the KPIs related to transaction costs cannot be assessed in isolation. They need to be evaluated in combination with the relevant KPIs related to safety and security. That is, the assessment of a reduction in trade transaction costs needs to be considered subject to the measures related to the primary policy goal – the effectiveness and efficiency of the protection from trade-related threats to national security in the APEC region.

For example, in order to measure the implementation of the action, ‘the adoption of advanced risk management methods’, the first set of KPIs need to be capable of indicating whether and to what extent an economy has developed and adopted the recommended advanced risk management methods. This includes the particular methods specified in the Plan, such as systematic cargo profiling techniques, and/or a computerized risk management system. This KPI should be able to be used to assess whether there has been an improvement in security through the increased use of advance risk management techniques over the period, and ideally the extent of that improvement.

The second set of KPIs needs to measure the trade facilitation outcomes, including the change in trade transaction costs, that were associated with the improved risk management methods. Among other these would include the corresponding number of examinations of low-risk shipments, the time taken to process them, and the costs involved for a given implementation of the advanced risk management system. Transaction costs can then be assessed keeping in mind both sets of KPIs and the results, in turn, can be used to measure the cost-effectiveness of the national security outcomes that were realized.

An additional example illustrates the interplay of the two sets of KPIs. For measuring progress from the creation and implementation of an AEO programme, the first set of KPIs should include a series of measures that were directed at how well the AEOs as a group were identifying and dealing with high-risk shipments and containers.

Assessment of the transaction cost implications of the programme would be addressed through the second set of KPIs. Among other things, these measures should include the average number, time taken and cost involved in moving merchandise through the AEO channel, as well as an indication of the degree of dispersion for each of those measures. A comparison of the results obtained for both the AEO and non-AEO channel will provide a basis on which to assess the cost-effectiveness of the AEO channel.

iii. The impact of policy and administrative changes

Given the highly incomplete and relatively limited nature of the data collected to date, it is difficult to determine the extent of the overall progress towards the SAFE Framework objectives. For example, an increasing share of the merchandise trade being handled by AEOs does not, of itself, indicate that such a change was caused by the design of the AEO programme. It may simply reflect unrelated factors, such as a change in the composition of trade that happened to favour the businesses that participate in the programme.

Unfortunately there is little or no publically available information on the composition of merchandise trade that enters through the AEO and non-AEO channels and their relationship to the various design features of existing AEO programmes.

In 2010 the APEC Sub-Committee on Customs Procedures (SCCP) undertook a comprehensive review of the status of the APEC Collective Action Plan. This Plan sets outs the actions and measures to be implemented collectively by the member economies to promote the liberalization and facilitation of trade and investment in the region (SCCP 2010).

The review concluded that APEC had achieved the goals that it had been set for the introduction of Risk Management Techniques, an Advanced Classification Ruling System, and Customs-Business Partnerships. However, the review also noted that additional effort was required to develop AEO programmes and to conclude mutual recognition arrangements for those programmes. Specifically, the report found that 20 APEC economies had implemented risk management approaches to customs control — including databases to support risk management — and 19 economies had introduced advance classification rulings. (Hong Kong, China had not introduced the advance classification ruling system as it is a free port and imposes no tariffs or taxes on inwards cargoes.)

iv. Overall assessment

Currently, AEO programmes have been introduced in APEC economies including Canada, Japan, New Zealand, Singapore, and the United States. At its meeting in 2009, the SCCP endorsed the dissemination of a questionnaire to assess the development of AEOs in the APEC region. In 2010, the SCCP concluded that the goals of Risk Management Techniques, the introduction of an Advanced Classification Ruling System and Customs-Business Partnerships had been achieved but that additional effort was still required in developing AEO programmes and mutual recognition arrangements.

The objective of the SAFE Framework actions and measures is to secure and facilitate trade in the APEC region. The APEC level data provided for this assessment were insufficient to assess whether both objectives have been achieved. The SCCP data, however, appear to indicate that APEC economies have made further progress towards the SAFE Framework goals. Calculation of the improvement in secure trade and associated transaction costs requires the development of additional KPIs and further collection of data.

On their own operator numbers and their share of trade are generally effective, efficient, and simple measures of the extent of implementation of an AEO programme. They contribute relatively little, however, to any understanding as to how much of the rest of the WCO SAFE Framework has been put in place. Additional KPIs are required for this purpose; including KPIs that reflect the distinctly dual nature of the relevant policy objectives in terms of high and low risk cargoes and containers. Moreover, it appears that the data collected to date has not covered all the programmes that were in place at the time.

C. ASSESSMENT OF IMPACT ON TRADE TRANSACTION COSTS

The current KPIs do little to isolate the diverse impacts that specific SAFE Framework measures can have on trade transaction costs. On the one hand, the SAFE Framework seeks to increase the costs imposed on those involved with illicit or high-risk trade transactions, while lowering the costs for low-risk transactions. The combination of insufficient data and the limited scope and specification of the KPIs simply compounds these difficulties.

The data gaps need to be filled and the suite of KPIs need to include other variables that more explicitly target the transaction cost implications for low-risk movements of merchandise. The latter include the time taken and cost to exporters and importers that are involved in completing the aspect of a trade transaction that is affected by the implementation of the SAFE Framework actions and measures in the Plan. Unfortunately the information that is in the public domain is generally so aggregated that it throws little to no light on these particular transaction cost variables, which tend to be highly specific to particular types of trade transactions.

A calculation of transaction costs using APEC member economy data was therefore not possible in the present circumstances.

Nevertheless, there has been at least one attempt to assess the reduction in costs to exporters and importers that has been associated with particular AEO programmes. Using its Time Release Survey (TRS), the Japanese Customs and Tariff Bureau found that its clearance time for AEO cargo was 60% faster than that for general cargo in 2009 (Igarashi 2010). Most of

this saving occurred in the period between submission of the customs declaration and issuing of the import permit.

Box 1 Savings in Transaction Costs from the Japanese AEO Programme

In 2009 the Japanese Customs and Tariff Bureau used its Time Release Survey (TRS) to compare processing times for the importation of cargo through its AEO channel with the equivalent times for general cargo.

The Bureau found that the clearance time for AEO cargo was 60% faster than that for general cargo — AEO cargo took an average of 1.6 days compared with 2.6 days for general cargo. For AEO transactions a significant part of the overall saving of one day occurred between submission of the customs declaration and issuing of the import permit. This process took just 6 minutes for AEO cargo compared to 3.1 hours for general cargo.

To put these results in context, the World Bank's *Trading across Borders* surveys have found that, between 2006 and 2010, Japan was consistently well below the APEC average of the time taken in Customs clearance and technical control for imports. Japan was also well below the APEC average of the time taken for exports but has progressively lost its advantage due to the improvements made by other APEC economies. Table 4 has the details.

ITS Global has estimated that the economic cost of the time taken by merchandise trade navigating Customs clearance and technical in Japan was USD 25.5 billion in 2009 — when expressed in mid-2011 prices (PSU 2011). These estimates were based on each import transaction taking a total of 11 days and each export transaction taking 10 days. Hence a saving of one day in transit time across all Japan's merchandise trade would generate a cost saving of 19% [1/10 + 1/11 = 0.19]. This was equivalent to USD 4.8 billion in 2009 [0.19 * 25.5 = 4.84].

The data collected by the SCCP indicates that the Japanese AEOs handled 55.8% of Japanese merchandise trade in 2008. Assuming this share was maintained in 2009, a saving of one day in processing AEO cargo would have amounted to around USD 2.7 billion in 2009 [0.558 * 4.84 = 2.70]. This was 1.9% of total trade transaction costs for Japan in that year.

ITS Global estimates that these processing time savings would have translated into a reduction of around USD 2.7 billion in annual trade transaction costs for the Japanese economy.[6] On this basis the introduction of the AEO channel in Japan has, on its own, probably reduced annual trade transaction costs in Japan by the order of 2%. The Box above has the details of the estimates.

The savings in processing time that an AEO channel can deliver to importers compared to the general cargo channel will depend critically upon the design of each. Moreover, there are significant differences in the design of each channel in different economies. As a consequence it is difficult, if not impossible, to extrapolate the Japanese results to other APEC economies with any confidence, except to confirm that the potential scope of the time savings to the private sector from a well-designed AEO programme is clearly substantial. Indeed, for most APEC economies they would probably exceed the relative savings that Japan realized in 2009.

[6] Expressed in mid-2011 prices and based on estimates of trade transaction costs in APEC economies, which have been prepared by ITS Global (PSU 2011).

5. SIMPLIFICATION & HARMONIZATION OF CUSTOMS PROCEDURES

A. BACKGROUND

This sub-area of the Plan involves the APEC economies implementing the standards and recommendations in the Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures.

The Revised Kyoto Convention (RKC) is an international treaty that provides a comprehensive framework for Customs procedures that aims at facilitating legitimate trade while protecting the community and government revenue from illicit trade. The RKC sets out the key principles for modern customs procedures including predictability, transparency, the leveraging of information and communications technology. It also outlines best international practice in compliance management, including risk management, the utilization of pre-arrival information and post-clearance audit. Further details of the Convention are in Annex D.

Harmonization between the customs procedures of APEC economies is meant to occur through their adopting the best international practice as set out in the RKC. 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 objective set for this sub-area of TFAP II is to improve efficiency in customs clearance and the delivery of goods in order to benefit importers, exporters and manufacturers through simplified and harmonized customs procedures and best practices (APEC 2007).

The KPI adopted in 2008 for assessing this sub-area of the Plan were the number of APEC economies that had ratified and implemented the body and General Annex of the RKC (CTI 2008). The Interim Assessment concluded that this indicator did not adequately measure progress towards the APEC Leaders' goal of a 5% reduction in trade transaction costs over the time horizon of the Plan (PSU 2010). Therefore two additional KPIs were recommended and adopted:

- the number of documents required by Customs for the import of goods; and
- the number of documents required by Customs for the export of goods.

These KPIs were intended to measure the extent that APEC economies have adopted the body of RKC standards and best practice, while contributing towards the measurement of the impacts of doing so on trade transaction costs.

The 2010 review by the APEC SCCP of the status of the Collective Action Plan concluded that simplification and harmonization based on the RKC was a sub-area of the Plan that required additional effort from SCCP members.

B. ASSESSMENT OF IMPLEMENTATION OF TFAP II ACTIONS

i. Data on number of documents required for import and export transactions

The data that were received from APEC economies on the simplification and harmonization of their customs procedures were incomplete and fragmented. They are set out in Table 3 of Annex E.

All APEC economies except Brunei Darussalam, Canada, New Zealand and Thailand provided details of the number of documents that are required for import and export transactions for each year from 2007 to 2009 inclusive. Thailand provided no data for 2009.

None of the economies that provided data for 2007 to 2009 recorded any change in the number of documents required to export or import in any of the three years. Thailand saw no change between 2007 and 2008.

Consequently, it can be concluded that for APEC member economies there has been no change on average in either of the KPIs between 2007 and 2009.

ii. The coverage of the existing KPIs

The RKC outlines a series of standards and recommended best practices that are relevant to the second action identified for this measure, expeditious clearance. Accession to the RKC requires adoption of these standards, including those on customs procedures. For this sub-area of the Plan, the key RKC standards and practices are those that relate to:

- customs clearance and other customs formalities;
- customs control; and
- the arrival of goods in a customs territory.

The number of documents required to import and export is a good measure of RKC standards limiting data and documentation required. The endorsed KPIs are also effective for comparing broad differences in approach between APEC members.

The change in the number of documents required for a Customs administration to allow the import or export merchandise is one measure of the aggregate outcome from a process to harmonize and simplify customs procedures. However, it only goes to one facet of improved customs procedures. The Interim Assessment of TFAP II noted that this sub-area would benefit from the adoption of additional indicators that were designed to measure a broader range of transaction costs (PSU 2010).

Not all actions proposed for this sub-area of the Plan were covered by the initial KPI proposed for it. Given the need for the Interim Assessment to identify new KPIs for *early adoption*, the report recommended a further set of KPIs which did not address all recommended actions associated with this priority area (PSU 2010). Nor did the new KPIs aim to address every aspect of each action or measure. For example, these KPIs do not cover aspects of performance, such as the time taken to prepare documents (an important contributor to transaction costs associated with customs procedures). They also do not cover progress of APEC economies on other actions and measures in this sub-area of the Plan, such as the establishment of an effective advance ruling process or a surety bond system.

With the conclusion of TFAP II at the end of 2010, APEC shifted its trade facilitation agenda to its Supply Chain Connectivity Framework (SCCF) Action Plan. The inefficient clearance of goods at Customs is one of eight chokepoints nominated in the Action Plan (SCCP 2010). Compliance with the RKC, however, is not included in the SCCF Action Plan.

If the monitoring of the harmonization and simplification of customs procedures by APEC economies is to continue, the development of additional KPIs would help to assess the wide range of actions that are being undertaken by APEC economies. The additional KPIs might include a measure of improved efficiency resulting from the establishment of an effective advance ruling process (see Annex A for the details). This KPI could look to measure whether an economy has implemented such a process and the components of that process. (That is, whether the process includes specific time limits for rulings on the classification of goods, determinations of value, marking and labelling, etc.).

The current focus on the number of documents *required by Customs* can be a misleading indicator of progress in simplification and harmonization. Customs administrations are not the only agencies that are responsible for border protection and, in most cases, are not perceived by the traders as the major impediment on efficient border management (World Bank 2010b). This has led the World Bank to conclude:

> 'A corollary of the gradual convergence of customs procedures worldwide is that other border agencies are seen to be an increasingly serious constraint on supply chain performance in many countries (World Bank 2010b)'

The World Bank concluded that indicators of red tape, including document requirements, show a lack of coordination at the border and impose burdens on private logistics companies. It found that operators in economies with the best logistics performance generally deal with half the number of government agencies as operators in economies with poor performance. The same is also true for documentation.

In this sense, simplification of documentation requires economies to address weaknesses in border management and trade-related infrastructure. In addition to customs, agencies that have responsibility for standards, sanitary, phytosanitary, transport and veterinary issues are also involved in border management. Customs often enjoys higher levels of user-satisfaction than some of these other agencies. This suggests other agencies could be constraining the efficiency of import procedures.

At the national level, the coordination and cooperation of agencies is vitally important to reducing trade transaction costs. Additional KPIs should be developed in order to assess simplification of custom clearance, including documentation requirements, through increased coordination and cooperation of the various border agencies.

Broadening of the KPIs on the documentation burden to encompass documentation by other border agencies rather than just the customs agencies would provide a more accurate measurement of impact on trade transaction costs or alternatively some level of disaggregation that would allow the separation of customs procedures from other border agency procedures.

Better targeted actions

The trade facilitation menu of actions and measures as outlined in TFAP II is detailed and broad. As a result, a wide range of KPIs must be used to assess whether there has been a reduction in transaction costs due to the various actions undertaken by APEC economies.

In order to reduce transaction costs in APEC economies, there is a need for actions which are more tightly defined, measurable and better targeted in terms of the underlying trade transaction costs. This could require identifying specific standards and recommended practices in the Revised Kyoto Convention most likely to result in improved efficiency.

This should include a focus on specific standards under the RKC, such as those related to customs clearance and other customs formalities; customs control; and the arrival of goods in a customs territory (for example, Standards 3.12, 3.16, 6.2 and 8 in the Convention). It could also include actions related to cooperation and coordination between various border agencies. More precise indicators designed around such Standards would provide an intermediate measure of outcomes directed towards the achievement of the targeted reduction in trade transaction costs. This would allow member economies to more easily track their progress.

iii. The impact of policy & administrative changes

Data limitations make it difficult to properly assess whether member economies have improved the efficiency in customs clearance and the delivery of goods through actions to simplify and harmonize customs procedures and best practices.

On the available data, no APEC economy has reported progress for either KPI. That is, all member economies that have provided data have reported no changes in the number of documents required for importing or exporting over the years 2007, 2008 and 2009.

Thailand, which despite not providing data for 2009, required the same number of documents for both import and export in 2007 and 2008. New Zealand, Brunei Darussalam and Canada have not provided sufficient data to assess progress in either KPI.

One difficulty with reviewing actions in this sub-area of the Plan is that they lack an end point where actions can be judged as having been achieved. It would be useful to set a benchmark so that a realistic end point can be determined. Several methods for setting a benchmark are available. APEC could adopt as a benchmark the metrics of the member economy requiring fewest documents. However, use of this benchmark presents an inherent difficulty. It does not take into consideration economy-specific characteristics that may allow a member economy to reduce documentation more than in other economies.

An alternative and more normalized benchmark could be based on a regional median at some time in the past. On this approach, the median number of documents required for importing is four. The median number of documents required for exporting is three.[7] Using this benchmark, eight member economies fall below the median performance on document numbers and, on this assessment, still have further work to do. They are: Chile, China, Indonesia, Mexico, Papua New Guinea, Peru, Russia and Viet Nam.

[7] This median is the same for 2007, 2008 and 2009 data as there has been no change in the documents required for import/export for any economy over the period.

iv. Other indicators of document burden

KPIs for this measure are closely aligned with the *Trading Across Borders* component of the World Bank's *Doing Business Index*. This allows for comparisons to be made.

The *Trading Across Borders* indicator measures the total number of documents required by an importer (or exporter), per shipment, to import (or export) goods. It includes documents required for clearance by government agencies and ministries, customs authorities, port and container terminal authorities, health and technical control agencies and banks.

Trading Across Borders data therefore presents as a proxy measure for the two KPIs for this measure and makes up for limitations in APEC's data. While APEC data demonstrates no improvement in the number of documents required for import or export by any economy, World Bank statistics tell a different story.

For a majority of APEC economies, World Bank data consistently suggests a larger number of documents are required to import and export goods than is recorded in APEC data. This is most likely explained by different definitions used for the APEC KPI and what is captured by the World Bank's survey method.

World Bank data and APEC data measure the number of documents required in customs procedures from different perspectives. Where APEC data is obtained from government sources, World Bank data is obtained from business sources and does not pick up government data. The full set of data is available in Table E.3. Data for four selected economies (Australia, China, Korea and Thailand) comparing APEC with World Bank numbers is set out in Table 6.

Table 6 Comparison of World Bank Trading across Borders (WBTAB) and APEC data

	Customs documents required to import				**Customs documents required to export**			
	Average no. of documents		**Change in no. of documents**		**Average no. of documents**		**Change in no. of documents**	
Economy	**TAB**	**APEC**	**TAB**	**APEC**	**TAB**	**APEC**	**TAB**	**APEC**
Australia	5	1	0	0	6	1	0	0
China	6	8	-1	0	7	8	0	0
Korea	5	1	-5	0	4	1	-2	0
Thailand	6	4	-9	0	6	2	-5	0
Average*	6	4	-4	0	5	4	-2	0

Note: The average number of documents and the change in the number of documents is taken over the 2006-2010 period for Trading across Borders data as compared with the 2007-2009 period for APEC data. APEC data for Thailand is averaged over 2007-2008.
*For the four economies.

To take one example, in Australia although only one document is required to import goods – an import declaration or self assessed clearance document – the import declaration must link to a Cargo Report which links to an Impending Arrival Report in order for clearance to be granted. In the *Trading across Borders* data, in addition to the Customs import declaration,

required documents also include a bill of landing, commercial invoice, packing list and technical standard/health certificate.

The change in the KPIs from the World Bank data is generally consistent with APEC data, with most economies having a constant number of documents required throughout the period. Three exceptions are China, Korea and Thailand, where the number of documents has decreased in all three cases. These cases are examined in turn.

In the *Trading across Borders* data, the number of documents required for importing goods in China has decreased from six documents to five documents between 2007 and 2009. In Korea, it decreased by 50% from six documents to three documents and in Thailand it dropped by 66% from nine documents to three documents.

When taking into account a longer time period, 2006-2010, the reduction in documents required to import is more dramatic, dropping by 62% from eight to three in Korea and by 75% from 12 to three in Thailand.

For exports, between 2007 and 2009 Korea has reduced the number of documents required by a third, from four to three. In Thailand, documentation requirements have dropped over 40% from seven to four. Between 2006 and 2010, Korea has decreased the number of documents required from five documents to three documents; and Thailand has decreased over 55% from nine to four.

The World Bank data shows that many APEC economies have recorded no change in the two indicators but some have made notable progress. Furthermore, no economies have seen KPI data worsen (i.e. the number of documents increase). An overall assessment is that World Bank data reveals an improvement across APEC in the number of documents required for importation and exportation of goods.

v. Time & expense of document preparation

In addition to the number of documents required to import or export, other variables such as average time taken to prepare these documents are also important. This time contributes to the transaction costs associated with the required documents.

In addition to the number of documents, the World Bank *Trading across Borders* indicators examine the time taken to prepare documentation for importing/exporting goods. Though the World Bank found that the number of documents required to import has only fallen in three economies between 2006 and 2010, the average time taken to prepare this documentation has decreased in four economies (Canada, Indonesia, Mexico, Peru and Thailand). For exports, while the number of documents required only decreased in two economies, the time taken to prepare this documentation decreased in over a third of APEC economies including Hong Kong, China; Indonesia; Korea; Malaysia; Mexico; Peru; Thailand and Viet Nam.

The conclusion to be drawn is that time taken to prepare documents has fallen across APEC and that many economies have improved clearance performance for traders. This suggests progress towards the TFAP II objective of improved efficiency in customs clearing and the delivery of goods through simplified and harmonized customs procedures and best practices. A key enabler of this improvement is likely to be the ongoing rollout of electronic platforms for customs procedures in many APEC economies.

Box 2 Case Study: Republic of Korea

In recent years, the Republic of Korea has streamlined and modernized its customs procedures. As a consequence, in 2010 Korea was ranked the 8th most attractive jurisdiction in the world on the World Bank's *Trading Across Borders* index.

Between 2006 and 2011 the Republic of Korea dramatically reduced the number of documents required to import merchandise from eight to three. Korea has also reduced the number of documents required to export goods from five to three.

Korea operates a system of paperless import and export declaration forms for all trade, except high-risk goods and cargo selected for inspection. According to the *Trading across Borders* survey, the Korean authorities require:

- an import or export declaration form;
- a bill of lading;
- a packing list (for exports); and
- terminal handling receipts (for imports).

The *Trading across Borders* survey estimated that it takes approximately two days to prepare the documentation for trade in goods.

Since 2005, the Korean Customs Service has operated a web-based clearance system in an effort to streamline customs clearance procedures and reduce the costs borne by the private sector.

Since 2007, the Korean Customs Service has also operated a single window that is built around a web-based import/export requirement confirmation system. The system encompasses the import requirements administered by the Korea Food and Drug Administration, the National Fisheries Products Quality Inspection Service, and the National Veterinary Surgeon and Quarantine Service.

Sources: WTO 2008 & World Bank 2009.

vi. Overall assessment

The objective of this sub-area of the Plan was to improve the efficiency of customs clearance by simplifying and harmonizing customs procedures. The data collected by the SCCP were insufficient to determine whether the efficiency of customs clearance had improved over the period covered by the Plan. Other indicators, however, indicated an overall improvement in

the documentation burden on the private sector but they are relatively narrow in their focus and do not capture other aspects of the simplification and harmonization process. Based on this finding, it is likely that the objective of improved efficiency in customs clearance in APEC economies has been met through a reduced burden associated with document preparation.

The number of documents required customs clearance is a simple and easily understood measure of the extent custom procedures in APEC economies have been simplified and harmonized. As it is requires few resources to be dedicated to its collection, it is also a very efficient indicator. Its effectiveness, however, is relatively modest as it represents a rather coarse measure of simplification and harmonization, even at a highly aggregated level.

As with the other KPIs, a major limitation of this suite of indicators as a measure of the immediate outcomes of this sub-area of the Plan is the significant gaps in effective coverage in terms of data collection.

C. ASSESSMENT OF IMPACT ON TRADE TRANSACTION COSTS

i. Value of resources used to prepare documentation

Exporters or importers who are responsible for preparing documentation to present to customs agencies have costs associated with the assembly and checking of required data as well as any fees and charges associated with engaging a third-party to prepare documentation on their behalf.

The preparation of documentation involves labour time and capital resources and, as such, is an opportunity cost to the business as these resources are not available for producing other business outputs, such as the goods and services the business produces to make a profit. In calculating the opportunity costs associated with document preparation an assumption regarding labour usage needs to be made. The Final Assessment of TFAP II has assumed that document preparation involves labour time, whose opportunity cost is the average level of output produced (GDP) per day worked.

The non-labour costs of document preparation, such as paper or computer use, are assumed to be negligible.

ii. Impact on merchandise transit time

At least part of the time taken in document preparation can be expected to delay the delivery of the goods in question. The precise relationship between the amount of time taken to prepare documents and the associated delay in goods is not clear. At one extreme, it may not add any time to delivery, at the other extreme it may take an equivalent amount of time to process as transit delay.

Any calculation of the transaction costs associated with document preparation requires additional data, including measures of the average time taken to complete a document and the average impact of that process on transit delay.

As the data on customs documentation collected by the SCCP did not cover all years of the assessment period, it is not possible to calculating the impact of the changes in documentation on trade transaction costs over the full period.

If it was assumed that the data remained constant for the complete 2006-10 period such that no economy had any change in the number of documents required for import or export and the overall time associated with preparing documents had decreased on average (as the World Bank statistics suggest), it is likely that the data would show an overall reduction in transaction costs across the APEC economies.

Based on the World Bank's *Trading Across Borders* data, the Direct Estimation report of TFAP II (2011) found that documentation preparation dominated the distribution of transaction costs over logistical stages at the APEC level and accounted for 40% of all trade transaction costs in 2010. Between 2006 and 2010, transaction costs associated with time taken to prepare documents and the associated delay decreased by 8.7% in real terms across APEC economies, including a reduction of 10.6% for imports and 6.5% for exports. There was an increase in fees and charges associated with document preparation over the period, with a trade-weighted average increase of 15.8% across APEC economies in real terms, including an increase of 13.2% for imports and 18.9% for exports.

For APEC as a whole, the reduction in the real cost of time to prepare documentation was more than enough to counteract the impact of increases in fees and charges. Overall, the transaction costs associated document preparation decreased by 8% in real terms over the assessment period.

This change is largely due to transaction cost reductions in China, Korea and Thailand where the number of documents required for import/export has decreased. Economies including Canada, Indonesia, Mexico and Peru have also significantly contributed to reduced transaction costs due to a significant reduction in time taken to prepare documents in these economies over the period.

iii. Overall assessment

Between 2006 and 2010 the transaction costs associated with document preparation in APEC economies, including the documentation required by their customs agencies, fell by 9.5% in real terms. On this basis it seems likely that APEC economies have met the 5% benchmark set by APEC Leaders for TFAPII. To improve robustness of this estimate, it is recommended that further data be collected to determine whether APEC economies meet the benchmark for a range of additional KPIs as outlined in section B. ii. above and in the final recommendations.

6. PAPERLESS AND/OR AUTOMATION OF TRADE-RELATED PROCEDURES

A. BACKGROUND

The objective of this sub-area of the Plan is to reduce paper documents for trade-related procedures and to automate or computerize such procedures.

The KPI for paperless procedures agreed to by the CTI in 2008 was the number of economies that have implemented and simplified procedures and reduced requirements for paper documentation in customs clearance.

The Interim Assessment of the Plan concluded that this did not adequately measure the impact of the proposed actions and measures on trade transaction costs (PSU 2010). Accordingly it recommended two additional KPIs, which were subsequently approved by CTI:

- the share of import declarations that were lodged and processed electronically; and
- the share of export declarations that were lodged and processed electronically.

These KPIs were intended to contribute towards measures of the relevant impacts on trade transaction costs, reductions in the requirements for paper documentation, the extent that any replacements for paper documents were media and technology neutral.

B. ASSESSMENT OF IMPLEMENTATION OF TFAP II ACTIONS

i. Data on coverage of electronic declarations

Data on the percentages of import and export declarations that were lodged and processed electronically for the 2007-09 period were provided by 20 APEC economies. No data were made available by Canada.

As with the other sub-areas of the Plan, data limitations made it difficult to assess whether APEC economies had reduced paper documentation and automated or computerized procedures over the assessment period. What can be gleaned from them — assuming the same rate of implementation in the economies from which no data was collected — is that, on average, the share of customs declarations handled electronically increased by 4.53 percentage points a year for imports and 4.09 percentage points a year for exports. The details are in Table 4 of Annex E.[8]

ii. The coverage of the current KPIs

The KPIs on the proportion of declarations handled electronically offer good indications of progress in implementing the actions and measures in this sub-area. They effectively measure the progress made in digitizing of procedures and documentation. They also indirectly measure whether electronic systems are technologically neutral as the proportion of declarations lodged electronically approaches 100%, as it is in most APEC economies.

[8] These were calculated as a simple average of the changes in APEC member economies.

Additional KPIs are needed to measure progress from the other actions and measures in the sub-area, including whether economies are utilizing a single-window system and adopting standardized and simplified common data elements.

These other actions and measures remain highly relevant for APEC economies. Under the current SCCF Action Plan, the inefficient clearance of goods at the border was identified as a chokepoint in existing supply chain networks. To improve efficiency, the SCCF identifies actions for implementing single window systems in APEC economies between 2010 and 2013. This includes a stock-take on the status of the single window system and difficulties faced in developing these systems.

iii. The impact of policy and administrative changes

Just under half of all the APEC economies that provided data had fully implemented electronic processing of all declarations by 2007. They included the People's Republic of China; Hong Kong, China; the Republic of Korea; Malaysia; Mexico; New Zealand; Peru and Singapore.

Of those that had not established full electronic processing, most handled over 90 per cent of declarations electronically by 2009. They included Australia, Chile, Japan, Papua New Guinea (PNG), the Philippines, Thailand and the United States. Brunei Darussalam introduced electronic processing in June 2009, with all declarations processed electronically after June 2009.

Between 2007 and 2009, most economies had either 100% electronic lodgement or increased (or at least kept constant) the proportion of trade documentation lodged electronically. They included Brunei Darussalam, Chile, Japan, the Philippines, Russia, Chinese Taipei, and Viet Nam.

Indonesia and Papua New Guinea, however, were exceptions and the United States increased the number of declarations lodged and processed electronically between 2008 and 2009. Between 2007 and 2009 Indonesia's rate of electronic lodgement dropped from 92% to 81% for imports and from 82% to 78% for exports. Papua New Guinea's rate dropped from 97% to 94% for imports and from 92% to 85% for exports over the same period.

Between 2006 and 2009, a number of APEC economies moved closer to fully paperless trading.

In their Individual Action Plans, Australia and Brunei Darussalam have reported moving to full paperless trading. Malaysia, Mexico, Peru, the Philippines, Papua New Guinea, the United States and Viet Nam have introduced and or further developed automated customs procedures. Indonesia, Korea, Peru, Papua New Guinea have developed single window systems and most members have improved border technologies introducing or improving electronic customs systems.

Box 3 Case Study: The Russian Federation

Customs procedures are relatively lengthy and burdensome in the Russian Federation. World Bank data suggests that Russia imposes some of the most complex document requirements in the world calling for completion of up to 30 documents to import or export goods. Russia also has one of the lowest share of electronically lodged and processed customs declarations in APEC.

In 2003, the Russian Federation and the World Bank's International Bank of Reconstruction and Development set aside $US140 million to implement a Customs Development Project to modernize the information systems of the customs authorities of the Russian Federation. The project was aimed to improve the regulatory and legislative basis for customs requirements, working processes and information technologies. The cost of the project was later revised to $US180 million.

The Russian Federation has been moving towards simplifying its customs processes through the introduction of electronic customs clearance. It has been estimated that use of online declarations can reduce the customs clearance process from almost two days to as quickly as 15 minutes.

The first electronic customs declaration was submitted in 2002. However, the technology did not become commonplace as customs offices were not adequately equipped. The technology was not reflected in the Customs Code until 2003.

In 2008, the Federal Customs Service developed the means for electronically declaring goods through the internet. Between 2007 and 2009 the proportion of import and export declarations lodged and processed electronically in the Federation increased from 3.67 % to 7.74 % and 1.35 % to 11.49 % respectively – almost double the proportion for imports and an almost nine fold increase for exports.

However, there remains a substantial amount of reform that is required, particularly in relation to improving the availability of technology in customs offices and reducing the burden of document requirements on the private sector.

The inspection regimes operated by the border agencies in the Russian Federation also involves a significantly more frequent rate of inspection with over 20% of imports and exports having to undergo physical inspection compared with the OECD average of 5% of imports. The introduction of more efficient computer-based risk assessment systems could help limit the delays that are associated with inspections.

Sources: World Bank 2009, Russian Federal Customs undated,, , Ernest & Young 2009, *The Moscow Times*, accessible at: http://www.themoscowtimes.com/business/business_for_business/article/electronic-customs-declaration/390614.html, Owpbakery International, 2008, Business Portal for Russia accessible at: http://www.owpbakery.com/147-0-The-Russian-Customs-Process.html

iv. Comparison with other indicators

In September 2006, the Single Window Working Group (SWWG) was established under the Sub-Committee on Customs Procedures (SCCP). The SWWG developed a strategic plan for

the implementation of single window systems. In 2009 the final report of the SWWG was completed and in 2010 SCCP members agreed on three action items for future work on the implementation of national single windows. This included a stocktaking on progress made in each economy (SCCP 2010).

The stocktaking report found that all 21 APEC economies have adopted computer-based cargo clearance systems (SCCP 2010). Most economies – Russia is one exception – process nearly 100% of customs declarations through their single window. This is consistent with the data obtained from the APEC economies for the current study.

Adding to this picture, the stocktaking report found that 13 economies have now developed single window systems. They are Australia, Brunei Darussalam, Canada, Chile, China, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore, Thailand and the United States. An additional five economies have single window systems currently under development.

In only two APEC economies, however, is the single window system configured to cover all border agency procedures, not just customs procedures. Most of these economies have developed single window systems that link their customs clearance systems with the systems of their other border agencies.

The report also found that 17 of the 21 APEC economies had achieved harmonization with internationally recognized standards. The four exceptions were Chile, Canada, New Zealand and the United States. Each of the 17 has used international standards such as UN EDIFACT and WCO Data Model in developing their single window system.

Two APEC economies — Australia and Korea — were found to have achieved international interoperability. Ten economies had started trade-related data or document exchange, such as for certificates of origin and phyto-sanitary certificates. They are Canada; Chile; China; Hong Kong, China; Indonesia; Malaysia; Mexico; the Philippines; Thailand and Viet Nam. Economies have also undertaken measures such as introducing electronic data interface (EDI) or harmonizing data elements between two systems.

The review of the Collective Action Plan concluded that the goal of adopting and supporting paperless trading had been achieved (SCCP 2010). However, the review concluded that the goal of producing Harmonized APEC data elements still required further work.

v. Overall assessment

The objective of this sub-area of the Plan was to digitize and automate border procedures and documentation. The data collected by the SCCP indicate substantial progress on both counts.

The share of declarations that are handled electronically is a simple and easily understood measure of the progress that has been made. As it places few demands on government in terms of dedicated resources for collection, it is also a relatively efficient KPI. That said, its effectiveness is hampered by the fact that it is a highly aggregated indicator. As such it is incapable of distinguishing the progress made with particular actions or measures.

As with other KPIs, the significant gaps in data coverage are major limitations on the use of this suite of indicators.

C. ASSESSMENT OF IMPACT ON TRADE TRANSACTION COSTS

i. Savings from digitization of documentation

As described earlier exporters and importers incur costs preparing documentation to present to customs agencies or to complete online customs forms. Costs relate to the assembly and checking of required data, together with any fees and charges associated with engaging a third-party to prepare documentation on their behalf.

These costs will differ based on whether documentation has to be presented in paper form or whether it can be submitted online. The preparation of documentation is likely to use similar resources. However, time savings are realized where the documentation is submitted and processed electronically.

The preparation of documentation involves the application of labour-time, and capital in some cases. As such, it is an opportunity cost to the business since these resources are not available for producing other business outputs, such as those goods and services from which the business derives a profit. In calculating the opportunity costs associated with document preparation, an assumption regarding labour usage is required. A comparison between the opportunity costs associated with paper-based and electronic documentation procedures can then be made to calculate the resource savings associated with electronic procedures.

Calculation of the time savings associated with electronic procedures requires additional data including the average labour costs associated with electronic and paper-based systems.

ii. Time cost associated with delay to delivery caused by document preparation

In addition to the opportunity costs of labour associated with the preparation of documents, part of the time taken in document preparation can be expected to delay the delivery of the goods in question. It is likely that time cost savings will occur with electronic – rather than paper-based – procedures due to increased efficiency.

The relationship between the amount of time taken to prepare documents and the associated delay in goods for electronic procedures as compared to paper-based systems is not clear. At one extreme, it may not add any time to delivery, at the other extreme it may take an equivalent amount of time to process as transit delay.

In order to calculate the transaction costs associated with document preparation, additional data are required. This includes an estimate of the average time taken to complete a document electronically as compared to completing paper-based documentation, and the average impacts on transit delay.

Transaction costs have not been calculated using APEC member economy data because of the poor coverage of available data. With no data for any economy for 2006 and 2010 little can be gained from looking at transaction costs between 2007 and 2008, and between 2008 and 2009. Supporting data, including the associated labour and time delay costs, is also needed before transaction costs can be calculated.

Other sources have examined savings associated with computerization. It is reasonable to assume that electronic procedures are less costly and more efficient than paper-based systems. For example, 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 (Government of Japan 2007).

Assuming that electronic processing uses the same resources for document preparation but reduces the transit delay by 1.5 days, and using the assumptions adopted for the Final Assessment of TFAP II,[9] the single window system would have reduced Japan's associated transaction costs by approximately 26%. As Japan increased the share of declarations handled electronically from 97.7% in 2007 to 97.8% in 2009, it is likely that transaction costs did not drop significantly as a consequence of that change.

Although not all APEC economies will face similar transaction cost impacts as Japan, we can assume that transaction costs would have decreased in economies where there has been a significant increase in the share of declarations handled electronically, including Brunei Darussalam, Chile, the Philippines, and Russia. Correspondingly, transaction costs are likely to have increased in economies where the percentage of declarations lodged electronically has decreased, including Papua New Guinea and Indonesia.

If the monitoring process is to continue, additional data, including an estimate of the average time taken to complete an electronic/paper-based document and the average impacts on transit delay, will be required to estimate the transaction cost impacts.

iii. Overall Assessment: Achievement of TFAP II objectives

Though data limitations meant a quantitative assessment of improvements could not be calculated over the assessment period, most APEC economies the share of declarations handled electronically between 2007 and 2009 either remained constant or improved. The SCCP has separately concluded that a majority of APEC economies have put single windows systems in place, and standardized and simplified their common data elements (SCCP 2010).

By 2007 most APEC economies had fully implemented electronic documentation and procedures for merchandise trade so most of the benefits in terms of reduced trade transaction costs were already being felt by that time. It is therefore likely that the further improvements since that time would have had a relatively modest impact on such costs.

As more and more APEC economies achieve fully paperless documentation and fully automated procedures — the exceptions being the Russian Federation, Viet Nam and, to a lesser extent, Indonesia and Chinese Taipei — there is a need to reassess the original TFAP II objective as it has, by and large, been achieved for most APEC economies. While supporting

[9] The final report assumes that the five days for document preparation per TEU movement in Japan, it also assumes that the transit delay is half the time taken in document preparation. Time was valued at the opportunity cost of the output that was forgone by the employing businesses.

these economies in their digital transition, the objective should shift towards seeking improvement in the efficiency and consistency of customs systems. The current set of objectives, actions and KPIs should therefore be re-evaluated.

7. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

A. FINDINGS

The following are some of the findings from the report specific for each component of SCCP actions under TFAP II:

i. Time Release Surveys (TRS)

KPI Submission Analysis

- 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 TRS, albeit with significant variation in the nature and extent of its application (e.g. only seven on a continuous or regular basis for both imports and exports).

Assessment of contribution to trade transaction costs

- The time costs in Customs clearance and technical control declined by around 8.1 % over the TFAP II period. This and the high rate of growth in trade values and volumes that occurred over the assessment period strongly suggest that the observed decline in time costs in Customs clearance and technical control was a direct consequence of changes in public policy and administration. It is reasonable to presume that many, if not most, of these changes were the consequence of the TRS actions and measures.

ii. Implementation of an APEC Framework based on the WCO Framework of Standards

KPI Submission Analysis

- The data collected by the SCCP indicate that the reported number of AEOs in the APEC region increased from 8,322 in 2007 to 10,502 in 2009. Taken at face value, this suggests that a 26% increase in AEO numbers occurred over these three years. In all cases, the share of trade covered by AEOs was generally reported to have increased in the reporting economies over the same period.

Assessment of contribution to trade transaction costs

- The Japanese Custom and Tariff Bureau found that its clearance time for AEO cargo was 60% faster than that for general cargo in 2009. In fact, ITS Global estimates that processing time savings would have translated into a reduction of around USD 2.7 billion in annual trade transaction costs for the Japanese economy. On this basis the introduction of the AEO channel in Japan has, on its own, probably reduced annual trade transaction costs in Japan by the order of 2%.
- The savings in processing time that an AEO channel can deliver to imports compared to the general cargo channel will depend critically upon the design of each thus it is difficult to extrapolate the Japanese results to other APEC economies with any confidence, except to confirm that the potential scope of the time savings to the private sector from a well-designed AEO programme is clearly substantial. Indeed, for most APEC economies they would probably exceed the relative savings that Japan realized in 2009.

iii. Simplification and Harmonization on the Basis of the Kyoto Convention

KPI Submission Analysis

- APEC member economies have reported no changes in the number of documents required for importing or exporting over the years 2007, 2008 and 2009.
- An alternative and more normalized benchmark could be based on a regional median at some time in the past. On this approach, the median number of documents required for importing is four. The median number of documents required for exporting is three. Using this benchmark, eight member economies fall below the median performance on document numbers and, on this assessment, still have further work to do.
- The Trading across Borders data from World Bank shows that many APEC economies have recorded no change in the two indicators but some have made notable progress. Furthermore, no economies have seen KPI data worsen (i.e. the number of documents increase). An overall assessment is that World Bank data reveals an improvement across APEC in the number of documents required for importation and exportation of goods.

Assessment of contribution to trade transaction costs

- ITS Global estimates that between 2006 and 2010 transaction costs associated with time taken for document preparation fell by 8.7% across APEC economies, including a reduction of 10.6% for imports and 6.5% for exports (based on World Bank data).

iv. Paperless and/or Automation of Trade-related Procedures

KPI Submission Analysis

- Data limitations made it difficult to assess whether APEC economies had reduced paper documentation and automated or computerized procedures over the assessment period. What can be gleaned from them — assuming the same rate of implementation in the economies from which no data was collected — is that, on average, the share of customs declarations handled electronically increased by 4.53 percentage points a year for imports and 4.09 percentage points a year for exports.
- Between 2007 and 2009, most economies had either 100% electronic lodgement or increased (or at least kept constant) the proportion of trade documentation lodged electronically. They included Brunei Darussalam, Chile, Japan, the Philippines, Russia, Chinese Taipei, and Viet Nam. In addition between 2006 and 2009, a number of APEC economies moved closer to fully paperless trading.

Assessment of contribution to trade transaction costs

- In the case of Japan, assuming that electronic processing uses the same resources for document preparation but reduces the transit delay by 1.5 days, and using the assumptions adopted for the Final Assessment of TFAP II, the single window system would have reduced Japan's associated transaction costs by approximately 26%. As Japan increased the share of declarations handled electronically from 97.7% in 2007 to 97.8% in 2009, it is likely that transaction costs did not drop significantly as a consequence of that change.

- Although not all APEC economies will face similar transaction cost impacts as Japan, we can assume that transaction costs would have decreased in economies where there has been a significant increase in the share of declarations handled electronically, including Brunei Darussalam, Chile, the Philippines, and Russia. Correspondingly, transaction costs are likely to have increased in economies where the percentage of declarations lodged electronically has decreased, including Papua New Guinea and Indonesia.
- By 2007 most APEC economies had fully implemented electronic documentation and procedures for merchandise trade so most of the benefits in terms of reduced trade transaction costs were already being felt by that time. It is therefore likely that the further improvements since that time would have had a relatively modest impact on such costs.

B. GENERAL CONCLUSIONS

It is difficult to come to precise conclusions about the outcomes of the TFAP II actions and measures on Customs Procedures over the four years of the Plan to the end of 2010. This includes both their direct and immediate outcomes, as well as their consequences for trade transaction costs. There are several reasons for the difficulty.

The first reason reflects the limitations of the data provided by APEC members on each of the KPIs chosen by the CTI to assess the performance of the actions and measures in question. A full assessment would required annual data over a five year period — the base year for the assessment (2006) as well as each year of the Plan. The KPIs data available is limited to the 2007 to 2009 period, even the data that has been provided for this sub-period is substantially incomplete in terms of both their coverage of APEC membership and the sub-period.

The second reason for the difficulty is the limitations of the KPIs themselves. While all of the KPIs were designed to throw light on the outcomes of interest to the assessment, none of them can fully illuminate all those outcomes on their own. They need to be accompanied by other KPIs that address each of the variables that shape those outcomes. For example, only one of the KPIs measures the time taken by an importer or an exporter to complete a trade transaction. And none of the KPIs addresses any other cost variables, such as the fees and charges that traders incur in the process. Unfortunately the time available after the Interim Assessment, which evaluated this need, was too short to allow all the gaps to be filled.

The final reason for the difficulty is a lack of understanding about how each of the actions and measures in question can be expected to affect the various trade transaction cost variables along the international logistics chain. This knowledge is essential to any assessment of the consequences of those changes for the achievement of the APEC Leaders' goal for TFAP II of a 5% reduction in trade transaction costs over the four years of the Plan.

Despite these limitations, certain broad conclusions can be reached on the basis of an assessment of the other sources of available information.

The indicators collected by the World Bank for its annual *Trading across Borders* project suggest there have been significant gains across APEC over the assessment period in terms of the time taken by the private sector to complete government 'red tape' at or near the border for the import and export of merchandise. This may be contrasted with many of the Customs Procedures KPIs, which often reflect the perspective of just one government agency, such as

the customs administration. It ignores the fact that other agencies are involved in border protection that can add to this 'red tape'.

It is not possible to say which of the changes in public policy or its administration made over the assessment period, or indeed before this period, were the cause of the savings in transit time that were evident in the *Trading across Borders* data. It is also not possible to conclude how much of the *Trading Across Borders* time savings have been generated by changes in public policy or its administration, undertaken by the APEC economies, either individually or collectively. It is clear, nevertheless, that these changes were at least part of the cause of the *Trading across Borders* time savings.

At the individual economy level, these *Trading across Borders* indicators are entirely consistent with the results of the World Bank's *Logistics Performance Index*. Although the two sets of indicators use entirely different approaches to collect their data, they nevertheless give strongly similar results. This helps to confirm the broad conclusion that changes in public policy and its administration were at least part of the cause of time savings.

The difficulties encountered in assessing the TFAP II outcomes are, in large part, a consequence of the process that APEC has traditionally used to develop, design, implement, monitor, and review its efforts to facilitate trade by APEC economies.

At the start of the First Plan, APEC members were simply asked to use their best endeavours to estimate the benefits from the actions and measures in question. While benchmarks or baselines for assessing the performance of selected actions and measures were seen as important for measuring progress, little was done in this regard beyond the specification of an overall goal in terms of a nominated cut in trade transaction costs. Moreover, even that goal was selected without any agreement on how to define and measure those costs quantitatively or any idea of the impact that particular actions or measures would have on those costs.

At the start of the Second Plan this was still the case. It was not until the Interim Assessment that the first steps were taken to correct some of these constraints. APEC now has an agreed definition of trade transaction costs and a method for estimating them.

Nevertheless, as this report makes clear, many of the gaps remain largely unaddressed; despite the fact that trade facilitation is now just one part of a far broader SCCF Action Plan. If these gaps remain unaddressed, it will be much harder for the SCCF Action Plan to achieve the goal set of a further 10% cut in trade transaction costs that has been set for it by APEC Leaders

C. POLICY RECOMMENDATIONS

i. General recommendations

APEC should address processes for developing, monitoring, and reviewing programmes

APEC needs to systematically address the limitations of the process that it has traditionally used to develop, design, implement, monitor, and review its efforts to facilitate trade and enhance the efficiency of international supply chains involving APEC economies.

This is the overriding priority and will be one of the keys to the successful achievement of the Leaders goal for the SCCF Action Plan. The other is to continue and expand the process of monitoring and assessing performance under the SCCF Action Plan. While there have been considerable practical difficulties with the monitoring of its predecessors, these should not be interpreted as reasons for caution in this regard, quite the contrary.

APEC should undertake cases studies of effectiveness of customs procedures in the region

There is a dearth of understanding about the effectiveness of customs and related border procedures, both inside and outside APEC. Such understanding is essential for the streamlining of such procedures so as to minimize the transaction costs burden that they impose on legitimate international trade in merchandise.

A number of the middle-income economies in APEC, such as Indonesia, Malaysia and Thailand, have made wide ranging changes in their customs and related procedures in recent years. These changes appear to be associated with improvements in effectiveness that would be worthy of further study to distil the wider lessons from their experiences.

The proposed case studies should focus on changes made to official procedures, rather than the use of digital technologies to transmit and/or assess information that is required to administer those procedures. In doing so, case studies should also focus on the co-ordination arrangements and sharing of information between all those government agencies with responsibility for border protection measures.

It is recommended that APEC undertake a number of case studies on the effectiveness of customs procedures in representative economies in the region. These case studies can then be used by other APEC economies as a benchmark.

APEC should identify & address capacity building implications

The level and quality of human resources are major factors in the successful implementation of collective actions in the area of customs procedures. For example, the agencies in question require suitably trained analysts to collect and evaluate data on performance with a view to identifying procedural bottlenecks at or near the border and devising the policy and administrative changes that will best alleviate them. Moreover, implementation of the advanced risk management methods that underpin modern approaches to border protection and customs administration is critically dependent on increasingly specialized skills and abilities.

These issues are likely to be particularly acute for the less developed members of APEC, but the potential gains from reforms in those economies are also expected to be much higher and to be shared with their trading partners, both inside and outside of APEC. This means that attention needs to be given to the capacity building implications of the actions and measures on customs procedure that are agreed in APEC. Although this is being done to some degree at present, the responses have been largely *ad hoc* and would benefit from the adoption of a more holistic approach.

It is recommended that APEC undertake research to identify the capacity building implications of the actions and measures of customs procedures under TFAP II and more recent agreements, such as SCCF, where appropriate. Such a study can then be used to design

and implement capacity building programmes to improve customs procedures and reduce transaction costs in the less developed members of APEC.

APEC should examine the interaction of customs procedures, as well as other transport related regulations, with infrastructure

Customs procedures could directly and indirectly affect the delivery of infrastructure services to importers and exporters at or near the border. This is particularly true for port and terminal services and the transport links to the rest of the host economy.

Such procedures can regulate the loading and unloading of international shipping and aircraft as well as the movement of the merchandise that they carry in and out of the seaport or airport in question. Hence a bottleneck caused by regulatory control exercised at one point in the logistics chain can manifest itself as congestion elsewhere in transport system.

As the most recent estimates of trade transaction costs make clear, there has been a distinct divergence in performance in the transport stages of the logistical chain. Transaction costs in Ports and terminal handling and Inland transport and handling have increased in real terms over the assessment period, whereas those in Document preparation and Customs clearance and technical control have declined. The latter costs were the principal focus of TFAP II, whereas the former are being addressed by the SCCF Action Plan, its successor programme.

Chokepoint 2 of the SCCF Action Plan is meant to address inefficient or inadequate transport infrastructure but, at present, focuses on the provision of physical infrastructure rather than how it is managed. Questions of efficiency are not limited to the physical capacity of the infrastructure in question but include the management of the demand for its services. For this reason, the scope of Chokepoint 2 needs to be extended to management of the infrastructure in the widest possible sense in order to achieve the objectives of the chokepoint. This could be achieved through wider consultation with other related agencies, such as the transportation and port authorities.

It is recommended that APEC undertake a review of the interaction of customs procedures and transport regulations with infrastructure in APEC. The findings of the review can then be used to recommend actions to reduce transaction costs in member economies.

ii. Time Release Survey of Goods

APEC should specify benchmarks to guide implementation of TRS

As TFAP II concluded at the end of 2010, trade facilitation is now being pursued through the SCCF Action Plan, which targets the action to be taken in eight defined ‘chokepoints’ along the supply chain.

The Action Plan for Chokepoint 4 aims to improve the efficiency of goods clearance ‘at the border’, and to enhance coordination among border agencies, especially relating to clearance of regulated goods. One of its proposed actions involves APEC members conducting TRS, whenever possible, to measure the effect of simplifying and facilitating cargo clearance at border. (A related action is concerned with the provision of capacity building on TRS.)

This continuity with TFAP II actions and measures on TRS is crucial. TRS provides a systematic basis for improving the effectiveness and efficiency of border management but

such surveys have yet to become well-established within APEC on either a comprehensive or a regular basis.

APEC should facilitate the progressive closure of these gaps in the application of TRS. This would be best done by APEC specifying a series of detailed and measureable benchmarks that are meant to guide the implementation of TRS programmes in member economies. These benchmarks should cover issues such as the reliability of the surveys, the frequency of their timing, as well as their coverage in terms of the directions of trade and the modes of freight transport.

APEC should specify the key outcomes to be sought from TRS

A TRS programme should be designed to facilitate the identification of the bottlenecks in the operation of the customs clearance arrangements 'at the border', the prioritisation of those bottlenecks for subsequent remedial action, and finally their progressive reduction or removal. Success in each of these three areas is the ultimate test as to how well such a programme has been implemented.

To ensure that the TRS programmes implemented by member economies are able to realise their full potential, APEC should specify a series of procedural outcomes that economies ought to achieve in terms of identifying, prioritising, and removing the bottlenecks in question. As far as possible these procedural outcomes should be sufficiently detailed and measureable so as to provide the discipline that is necessary for successful achievement of the goal set by APEC Leaders for the Supply Chain Connectivity Framework Action Plan goal in terms of a further reduction in APEC trade transaction costs.

APEC should measure time taken at each step in Customs clearance & technical control

The present TRS KPIs only measure the interval from the submission of a customs declaration to its approval by the customs agency. This ignores the fact that other government agencies can be involved in approving the release of merchandise and that the time taken to obtain all such approvals can have a greater impact on merchandise transit time than that required to obtain approval of the declaration. Indeed the *Trading Across Borders* data strongly suggest that this is generally the situation that prevails in most APEC economies and that the additional margin of time is substantial and a major cost to APEC economies. The present KPIs are focused on only part of the potential problems and not necessarily the most important part. This omission requires urgent correction.

These issues would be automatically addressed by any well-designed and implemented TRS. Such a programme could be expected to generate the data that was needed to measure each of the other components of the overall time that is taken up as merchandise for import or export passes through the overall system of Customs clearance and technical.

APEC should take advantage of this fact by specifying a series of KPIs for TRS that seek to measure the time taken by each component of the overall time that is taken by the private sector in obtaining a customs clearance.

iii. APEC Framework based on the WCO Framework of Standards

It is not clear if the SCCF Action Plan will continue the SAFE Framework actions and measures form TFAP II or some variation on them. That said, it is quite clear that the

objectives set for the SAFE component of TFAP II have yet to be achieved and, although progress has been made, a good deal more remains to be done. In the circumstances, it would not seem sensible to abandon the project or to downgrade the priority given to it.

APEC should specify additional KPIs on outcomes

The SCCP has concluded that development of the AEO programme within APEC requires additional effort from SCCP members. If this is confirmed then the monitoring process will need to be continued and broadened with the introduction of additional complementary KPIs to cover the new efforts and to explore the consequences in greater depth. Among other things, this should involve measures of the improvements realized in improved protection from the movement of high-risk cargoes and containers and the reduction in customs-related transaction costs associated with the low-risk cargoes and containers.

For measuring progress from the creation and implementation of an AEO programme, the first set of KPIs should include whether an economy has implemented an AEO and the proportion of trade covered by AEOs. Assessment of reduced transaction costs, through the second set of KPIs, should include the outcomes form the AEO programme, including the trends in the rate of inspection, the time taken, and the costs imposed on business users, as well as measures of the range on outcomes achieved in each case.

The SAFE Framework actions and measures have two distinctive objectives, a primary objective of securing national security and a secondary objective of facilitating trade. Accordingly there is a need for two sets of KPIs. A comparison of the two sets of results will provide a basis on which to assess the cost-effectiveness of the national security measures.

iv. Simplification & Harmonization of Customs Procedures

APEC needs better defined, measurable & targeted KPIs

The menu of actions and measures for improving efficiency in customs clearance and delivery of goods through simplified and harmonized customs procedures and practices could now usefully be more tightly defined and better targeted in terms of the underlying trade transaction costs.

This should include a focus on specific standards under the RKC including those under the areas of customs clearance and other customs formalities; customs control; and the arrival of goods in a customs territory, such as Standards 3.12, 3.16, 6.2 and 8. A revised set of actions should also include actions relating to cooperation and coordination between border agencies.

v. Paperless and/or automation of trade-related procedures

Re-evaluation of the current set of objectives, actions and KPIs

The majority of APEC member economies are now approaching 100% paperless and/or automation of trade-related procedures. The objective of computerizing trade-related procedures is also largely achieved. This presents an opportunity to shift the focus of this measure towards improvement in the *efficiency and consistency* of customs systems.

To facilitate this, the current set of objectives, actions and KPIs should be re-evaluated and re-focused on the provision of efficient and standard electronic customs systems to continue reducing transaction costs in APEC economies.

8. REFERENCES

AEO WG [Authorized Economic Operator Working Group], 2010, *Authorized Economic Operator Program Compendium*, Working Group to the Sub-Committee on Customs Procedures, APEC, Singapore, September.

APEC, 2007, *APEC's Second Trade Facilitation Action Plan*, APEC Secretariat, Singapore, September

Arvis, J. Mustra, M., Ojala, L., Shepherd, B. and Saslavsky, D., 2010, *Connecting to Compete 2010: Trade Logistics in the Global Economy – The Logistics Performance Index and Its Indicators*, The World Bank Group, Washington, D.C.

CTI [Committee on Trade and Investment], 2002, *Toward the Shanghai Goal: Implementing the APEC Trade Facilitation Action Plan 2002*, APEC, Singapore

CTI [Committee on Trade and Investment], 2008, *Committee on Trade and Investment: 2008 Annual Report to Ministers*, APEC, Singapore

CTI [Committee on Trade and Investment], 2008 Annual Report to Ministers, Committee on Trade and Investment, *Second Trade Facilitation Action Plan (TFAPII) Key Performance Indicators (KPI) and Reporting Methodologies*, APEC, Lima, November

Elek, Andrew, Nguyen Ngoc Anh, and Woo Yuen Pau, 2006, *Final Review of APEC's Trade Facilitation Action Plan (2001-2006) and Suggestions for Future Initiatives*, Report prepared for the APEC Secretariat, APEC, Singapore

Ernest & Young, 2009, 'Electronic Customs Declaration', *The Moscow Times*, accessed at: http://www.themoscowtimes.com/business/business_for_business/article/electronic-customs-declaration/390614.html

Government of Japan, 2007, 'Time Release Survey Time Release Survey in Japan in Japan - How to Measure and Use Performance', *Presentation to the APEC Customs-Business Dialogue*, Sydney, Australia, 29 June

Hummels, David, 2007, *Calculating Tariff Equivalents for Time in Trade*, Report prepared for USAID [United States Agency for International Development], Nathan Associates Inc., Washington, DC, March.

IEG [Independent Evaluation Group], 2008, *Doing Business: An Independent Evaluation*, The World Bank Group, Washington D.C.

Igarashi, K., 2010, 'Japan Customs' experience in conducting Time Release Studies', *Presentation to CAREC Time Release Study Seminar*, Central Asia Regional Economic Cooperation (CAREC) Program of the Asian Development Bank, Asian Development Bank Institute, Tokyo, 8-10 September, accessed at: http://www.carecinstitute.org/uploads/events/2010/9th-CCC/Day2-JPN-Customs-TRS-Experience.pdf

OECD [Organization for Economic Cooperation and Development], 1997, *The OECD Report on Regulatory Reform: Synthesis*, OECD, Paris

Owpbakery International, 2008, *Business Portal for Russia*, accessed at: http://www.owpbakery.com/147-0-The-Russian-Customs-Process.html

PSU [Policy Support Unit], 2010, *Reducing trade transaction costs in APEC economies by 5% - Progress with achieving the goals of TFAP II, Interim Assessment of TFAP II,* APEC Secretariat, Singapore

PSU [Policy Support Unit], 2011 (forthcoming), *Final Assessment of TFAP II: Direct Estimation of Trade Transaction Costs*, APEC Secretariat, Singapore

Russian Federal Customs, n.d., *Customs Information Systems Modernisation*, accessed at http://www.russian-customs.org/fbusiness/cism/index.html

SCCP [Sub-Committee on Customs Procedures], 2010, *Collective Action Plan*, APEC Secretariat, APEC, Singapore

SCCP [Sub-Committee on Customs Procedures], 2010, *Single Window Report – Working Towards the Implementation of SW in the APEC Economies and International Interoperability*, 2010/SOM3/SCCP/002, Report to the Second Sub-Committee on Customs Procedures Meeting, 15-17 September, Tokyo, Japan

WCO [World Customs Organization], 2002, *Guide to measure the time required for the release of goods*, Brussels, Belgium.

WCO [World Customs Organization], 2007, *WCO SAFE Framework of Standards*, Brussels, Belgium, June

World Bank, 2010a, 'Trading across Borders', *Doing Business 2011,* The World Bank Group, Washington, DC, accessed at: www.doingbusiness.org/

World Bank, 2010b, 'Connecting to Compete: Trade Logistics in the Global Economy', *The Logistics Performance Index and its Indicators*, The World Bank Group, Washington D.C.

World Bank, 2009, *Doing Business in Russia*, World Bank, Washington, DC, accessed at: http://www.doingbusiness.org/data/exploreeconomies/russia/

WTO [World Trade Organization], 2008, *Trade Policy Review for Korea 2008*, WTO, Geneva, accessed at http://www.wto.org/english/tratop_e/tpr_e/tp304_e.htm

ANNEX A: APEC TFAPII ACTIONS AND MEASURES

Customs Procedures

1. Time Release Survey (TRS)

Objective

To conduct self-evaluation of Trade Facilitation, find bottleneck in the customs related procedures and to improve them.

Actions

a) Development of methodology to measure the time required to release goods.

b) Successful undertaking of the measurement of the time required to release goods.

c) Identification of bottlenecks and areas for improvement in Customs related procedures.

d) Development and implementation of strategies to address identified bottlenecks and problems.

e) Establishment of a process within the organization for ongoing assessment of cargo release times on a continuous/ regular basis.

2. Implement APEC Framework based on the WCO Framework of Standards.

Objective

To secure and facilitate global trade in the APEC region.

Actions

a) Harmonize the advance electronic cargo information requirements on inbound, outbound and in-transit shipments.

b) 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.

c) Develop and adopt advanced risk management methodology, such as systematic cargo profiling techniques, and/or a computerised risk management system to identify high-risk shipments and minimise physical examination of low-risk shipments.

d) Perform an outbound inspection of high-risk containers and cargo, preferably using non-intrusive detection equipment such as large-scale X-ray machines and radiation detectors.

e) Create and implement an Authorized Economic Operators (AEO) programme which provides benefits to businesses that meet certain security standards to maximize security and facilitation of the international trade supply chain.

3. Simplification and Harmonization on the Basis of the Kyoto Convention

Objective

To improve efficiency in customs clearance and the delivery of goods in order to benefit importers, exporters and manufacturers through simplified and harmonised customs procedures and best practices.

Actions

a) Adopt and fully implement the Body and General Annex of the Revised Kyoto Convention and, to the extent possible, the Specific Annexes.

b) Provide expeditious clearance for traders who meet the criteria specified by Customs.

c) 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: a) classification of goods; b) determinations of value; c) marking and labelling; d) quotas; and e) any other admissibility requirement.

d) 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).

Standards and Conformance

1. Align APEC Economies' Domestic Standards with International Standards; Implement Good Practices for the Development and Implementation of Technical Regulations

Objectives

a) To align national standards with international standards so as to minimize the need for reassessment against multiple sets of requirements and facilitate trade.

b) To ensure the development and implementation of technical regulations in a way that minimises obstacles to trade and avoids unjustifiable costs for producers and consumers.

Actions

a) Align with International Standards in agreed priority areas and provide updated information for inclusion in the VAP.

b) 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, e.g. CODEX, OIE, IPPC, ISO and IEC standards.

c) Implement the WTO Technical Barriers to Trade 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.

d) Implement the Work Program on Trade Facilitation in Information Technology Products.

e) 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.

f) Align domestic regulations for medical devices with the principles of the Global Harmonization Task Force (GHTF). Progressively adopt and implement GHTF guidance documents.

g) Align domestic hazard classification and labeling schemes for chemicals to the Globally Harmonized System (GHS).

h) Sign on to the global Mutual Recognition Agreement (MRA) on measurement standards coordinated by the International Committee of Weights and Measures (CIPM).

i) Participate in international and regional comparisons of measurement standards organized by the International Committee on Weights and Measures (CIPM) and the Asia Pacific Metrology Program (APMP).

j) Promote active participation by the national standards body in regional fora, such as the Pacific Area Standards Congress (PASC).

2. Achieve Recognition of Conformance in Regulated and Voluntary Sectors.

Objectives

a) Where required by regulation, work towards the acceptance of conformity assessment results from technically competent bodies regardless of nationality or geographic location;

b) Eliminate arbitrary impediments to trade and introduce cost savings.

Actions

a) Adopt/implement the APEC Electrical and Electronic Mutual Recognition Arrangement (EEMRA).

b) Implement the Work Program on Trade Facilitation in IT products and utilise the supplier's declaration of conformity,

underpinned by relevant accredited conformity assessment.

c) 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.

d) Participate in the APEC Food Sectoral MRA

e) Participate in the APEC Telecommunications MRA

f) Participate in the Asia Pacific Laboratory Accreditation Cooperation (APLAC) multilateral MRAs.

g) Participate in the Pacific Accreditation Cooperation (PAC) multilateral MRAs.

h) Participate in the global MRA on measurement standards of the International Committee for Weights and Measures (CIPM).

3. Technical Infrastructure Development

Objective

a) To ensure that the technical infrastructures of all APEC member economies are at least at a level where all economies have the capacity to fulfill obligations under the WTO TBT and SPS Agreements.

b) To ensure a logical development of technical infrastructure capacity based on an assessment of needs in individual economies utilising APEC strategic plans in both the TBT and SPS areas.

Actions

a) Participate in the implementation of the technical infrastructure development strategy developed in conjunction with the SRBs.

b) Participate in the APEC Food Safety Cooperation Forum

c) Participate in the APEC Standards Education initiative

4. Ensure the Transparency of Standards and Conformance of APEC Economies and Facilitate Engagement with Industry

Objectives

a) Ensure that all APEC members will have access to information regarding the Standards and Conformance regimes of fellow members and comply with relevant WTO obligations.

b) Ensure that industry has access to information about the standards and conformance requirements of trading partner APEC economies

Actions

a) Provide information on contact points for technical information relating to standards and conformance in individual economies.

b) Where practicable, make information about standards and conformance arrangements publicly available.

c) Provide opportunities for industry to contribute to standards development activities.

d) When developing regulations take note of industry agreements across APEC economies, e.g. the World Wine Trade Group Agreement on labelling

Electronic Commerce

1. Removing Barriers to Electronic Commerce

Objectives

To eliminate obstacles for constituents (including citizens, business

of all sizes and government agencies) in the global trade flow by identifying, addressing, and alleviating identified barriers and outof-date practices.

Actions

a) Identify and map out major barriers to e-commerce through the exchange of practices, including but not limited to laws, regulations and policies, on ecommerce across APEC

b) Ensure compatibility among government, business and the community in on-line interactions including providing for authentication, confidentiality and certainty in online interactions.

c) 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 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.

d) Continue work in APEC TEL on developing regulatory frameworks that facilitate the convergence of telecommunications, information technology and broadcasting.

2 Speed the Use of Electronic Commerce

Objective

To build constituent confidence in e-commerce by streamlining

processes and removing obstacles.

Actions

a) Facilitate the use of secure electronic payment methods.

b) Promote consumer and business education on legal issues.

c) Implement policies that result in the competitive supply of information and communication services.

d) Reduce business costs through increased transparency.

e) 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.

f) 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.

g) Increase trust and confidence in electronic transactions and e-commerce to counter problems associated with a lack of effective authentication.

h) Facilitate e-commerce adoption in industries, particularly SMEs, to address industry-specific obstacles in e-commerce.

i) Encourage member economies to share information on IT security incidents and collaboratively promote IT security awareness among governments, businesses and the general public.

Business Mobility

1. Streamline and Standardize Procedures

Objective

To enhance the mobility of business people who are engaged in the conduct of trade and investment activities in the Asia-Pacific region.

Actions

a) Implement standards for
i) travel documentation examination;
ii) professional service;
iii) travel document security (and issuance systems); and
iv) immigration legislation.
b) Streamline arrangements for intra-company transferees in accordance with the agreed APEC 30 day processing standard.

c) Implement and promote the APEC Business Travel Card and/or visa free or visa waver 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.

2. Enhance the Use of Information and Communications Technology

Objective

To enhance the use of information and communications technology (ICT) to facilitate the movement of people across borders, taking into account the Leaders' Statement on Counter Terrorism.

Actions

a) Introduce e-lodgement arrangements for temporary residency applications.

b) Introduce an advanced passenger information system which pre-clears passengers to ensure faster clearance on arrival.

c) Introduce machine readable travel documents (MRTDs), if possible with biometrics, by end 2008.

d) 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.

e) Contribute information on lost and stolen travel document, on a best endeavours basis, to the database of the International Criminal and Police Organization (ICPO)

ANNEX B: THE WORLD BANK'S *TRADING ACROSS BORDERS* SURVEY

As part of its *Doing Business* project, the Work Bank conducts an annual survey of the time taken and expenses incurred by business in complying with government procedures associated with import and export for most countries around the world. Its *Trading across Borders* survey is based on a 20-foot shipping container of standardised cargo. The cargo is based on merchandise that is widely traded, non-perishable, and does not raise health, environmental, or security issues.

The *Trading across Borders* data panel includes unit measures of the fees and charges and time taken to complete each stage of the process of moving a shipping container of standardised cargo in each trade direction for each jurisdiction around the world.

The survey measures the time taken and expense for business in negotiating each of the following four logistical stages in the international trading process:

- Document preparation;
- Customs clearance and technical control;
- Port and terminal handing; and
- Inland transport and handling.

The time taken to complete the activities that make up each stage are generally expressed in days; where less than a full day is involved it is measured in hours. The data panel cover all APEC economies, for the period from 2006, when the time series was begun, to 2010 inclusive.

Despite the usefulness of World Bank information, there are questions about its representativeness. The hypothetical nature of the export and import transactions and the relatively small survey samples used for the collection of the raw data mean that there are question marks over the representativeness of the Trading across Borders data panel. In this regard, the Bank has acknowledged that:

- The raw data relate to businesses in the largest city and may not be representative of regulation in other geographical areas;
- The data relate to a limited liability company of a specified size and may not be representative of the regulation on other businesses, for example, sole proprietorships;
- The transactions that constitute the standardized scenario refer to a specific set of issues and may not represent the full set of issues a business encounters;
- The measures of time taken involve an element of judgement by the expert respondents. When sources indicate different estimates, the estimates of the time taken are the median values of the responses received; and
- The methodology assumes the business has full information on what is required and does not waste time completing the procedures in question (World Bank 2010a).

In 2008 an evaluation of the World Bank's *Doing Business* Indicators by its Independent Evaluation Group (IEG) found that the data is provided by few informants, with some data points generated by just one or two firms in a country (IEG 2010).. Not all of the information is purely factual, with time and cost indicators requiring informants to make estimates based on their experience.

It also finds that the Doing Business exercise reflects the limitations inherent in the underlying research and that the indicators are not intended to, and cannot, capture country nuances. While the indicators are primarily measures of laws and regulations as they are written, they do not aim to measure the extent to which the law is actually applied, which impacts the relevance of each indicator in a given country.

The IEG states that the limitations of the Doing Business Indicators underscore the need to be interpreted cautiously and in conjunction with other complementary tools.

ANNEX C: ACTIONS ON CUSTOMS PROCEDURES IN INDIVIDUAL ACTION PLANS, 2006 TO 2009

The table below sets out brief summaries of the public policy and administrative changes in the area of customs procedures that APEC members have reported to the APEC Secretariat through the annual Individual Action Plan (IAP) process over the period from 2006 to 2009.

APEC Economy	**Actions Reported by Economy under Customs Procedures**
Australia	• Moving to allow full paperless trading • Developing new arrangements for reporting and clearing air cargo
Brunei Darussalam	• Introduced green and red channels for cargo. • Adopting UN EDIFACT standard and reducing documentation • Implementing illegal and counterfeit product controls at the border • Moving to full paperless customs processing
Canada	• Introducing advanced technologies into border management, with emphasis on advance electronic information
Chile	• Became a contracting party to HS Convention • Introduced advance publication of all proposed regulations with provision for public comment, prior to their implementation
Hong Kong, China	• Enhanced cooperation with private sector on customs clearance • Implemented system for improved handling of complaints • Introduced electronic payment for express cargo • Introduced advanced technologies into processing of cargo and passenger clearances
Indonesia	• Implemented changes in management, operations and staffing of customs agency • Implemented interagency process to streamline service delivery • Introduced green and red lanes for cargo • Launched Single Window
Korea, Republic of	• Introduced electronic technologies into the national Single Window
Malaysia	• Implemented improved and simplified customs procedures • Implemented paperless trading • Established a Customs Intelligence Centre to increase customs efficiency • Introduced green and red channels for cargo
Mexico	• Further development of automated paperless trading

APEC Economy	**Actions Reported by Economy under Customs Procedures**
Peru	• Development of paperless trading • Development of Single Window • Introduction of permanent arrangements to communicate with customs users • Began process to simplify customs procedures
Philippines, The	• Launched website to increase access to customs information and transactions. • Implemented internet lodgement for import declarations
Papua New Guinea	• Introduced automated customs procedures • Introduced a green/yellow/red lane system • Launched a customs website • Introduced arrangements for annual consultation with customs stakeholders on issues of mutual concern • Began implementation of Single Window with paperless trading
Thailand	• Implemented electronic systems for customs declarations, payments, and other customs services • Introduced paperless customs service for exports • Redesigned Valuation Database System to conform to WCO guidelines • Implemented ASEAN 2007 Harmonized Tariff Nomenclature • Reduced inspection rate on imported goods • Eliminated inspection of exports • Concluded an interagency MOU to facilitate EDI and simplified procedures • Introducing electronic Single Window
United States, The	• Implementing paperless trading • Harmonizing tariff nomenclature with 2007 HS
Viet Nam	• Introducing documents for electronic customs and paperless trading • Implementing customs modernization strategy • Implemented 2007 HS and ASEAN 2007 Harmonized Tariff Nomenclature • Harmonizing trade data based on WCO dataset

Source: Policy Support Unit 2010

ANNEX D: THE REVISED KYOTO CONVENTION ON THE SIMPLIFICATION AND HARMONIZATION OF CUSTOMS PROCEDURES

The International Convention on the Simplification and Harmonization of Customs Procedures was originally adopted in 1974 and subsequently revised in 1999.

The Revised Kyoto Convention (RKC) includes a range of different procedures to simplify and harmonize through the use of annexes. Each annex describes standards and recommended practises for numerous provisions which are recognized as necessary for the achievement of harmonization and simplification of customs procedures. This includes standards, which are recognized as necessary for the harmonization and simplification of customs procedures as well as recommended practices, which are recognized as constituting progress towards the harmonization and simplification of customs procedures.

The Revised Kyoto Convention's General and Specific Annexes contain a large number of standards and recommendations related to 18 different areas.

The convention includes a General Annex which includes standards and recommended practices on areas including:

- Clearance and other Customs formalities
- Duties and taxes
- Security
- Customs control
- Application of Information Technology
- Relationship between the Customs and Third parties
- Information, decisions and rulings supplied by the Customs
- Appeals in Customs matters

There are also Specific Annexes, which include standards and recommended practices on areas including:

- Arrival of goods in a Customs territory
- Importation
- Exportation
- Customs warehouses and free zones
- Transit
- Processing
- Temporary admission
- Offences
- Special procedures
- Origin

For the purposes of this study, ITS Global assumes the relevant standards for the purpose of achieving efficiency in Customs clearance are those related to:

- Clearance and other Customs formalities
- Customs control
- The arrival of goods in a Customs territory

Examples of relevant standards and recommended practices in the RKC include:

General Annex Standard 3.12: The Customs shall limit the data required in the Goods declaration to only such particulars as are deemed necessary for the assessment and collection of duties and taxes, the compilation of statistics and the application of Customs law.

General Annex Standard 3.16: In support of the Goods declaration the Customs shall require only those documents necessary to permit control of the operation and to ensure that all requirements relating to the application of Customs law have been complied with.

General Annex Standard 6.2: Customs control shall be limited to that necessary to ensure compliance with the Customs law.

Specific Annex A Standard 8: Where the Customs require documentation in respect of the production of the goods to the Customs, this shall not be required to contain more than the information necessary to identify the goods and the means of transport.

Specific Annex A Recommended Practice 9: The Customs should limit their information requirements to that available in carriers' normal documentation and should base their requirements on those set out in the relevant international transport agreements.

Specific Annex A Recommended Practice 10: The Customs should normally accept the cargo declaration as the only required documentation for the production of the goods.

ANNEX E: DATA PROVIDED BY APEC ECONOMIES

Table E.1a: Time Release Survey of Goods (Levels comparison with Doing Business data)

	Change in average customs clearance times for import											
Economy	**2006**		**2007**		**2008**		**2009**		**2010**		**Change (from 2007 to 2009)**	
	APEC	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**
Australia	N.A.	2	0.28 days	1	0.25 days	1	0.24 days	1	N.A.	1	-0.04 days	-1
Brunei Darussalam	N.A.	1	N.A.	1	N.A.	1	8.92 - 17.68 hours	1	N.A.	1	N.A.	0
Canada	N.A.	1	N.A.	1	N.A.	1	N.A.	1	N.A.	1	N.A.	0
Chile	N.A.	4	N.A.	3	N.A.	3	N.A.	3	N.A.	3	N.A.	-1
China	N.A.	4	N.A.	4	N.A.	4	N.A.	4	N.A.	4	N.A.	0
Hong Kong, China	N.A.	1	N.A.	1	N.A.	1	N.A.	1	N.A.	1	N.A.	0
Indonesia	N.A.	7	N.A.	4	N.A.	4	N.A.	4	N.A.	4	N.A.	-3
Japan	N.A.	2	N.A.	2	N.A.	2	0.1-3.1 hours	2	N.A.	2	N.A.	0
Korea	N.A.	1	90 mins	1	95 mins	1	104 mins	1	N.A.	1	+ 14 mins	0
Malaysia	N.A.	1	5 mins – 4 hours	1	N.A.	1	N.A.	1	N.A.	1	N.A.	0
Mexico	N.A.	3	N.A.	2	N.A.	2	N.A.	2	N.A.	2	N.A.	-1
New Zealand	N.A.	1	N.A.	1	N.A.	1	4.44 hours	1	N.A.	1	N.A.	0
Papua New Guinea	N.A.	4	N.A.	4	N.A.	4	N.A.	4	N.A.	4	N.A.	0
Peru	6	6	12	6	9	5	8	5	4	3	-4	-3
Philippines	N.A.	4	3 days	4	2 days	3	2 days	3	N.A.	2	- 1 day	-2
Russia	N.A.	4	1 day	4	1 day	4	1 day	4	N.A.	4	0	0
Singapore	N.A.	1	10 mins	1	10 mins	1	10 mins	1	N.A.	1	0	0
Chinese Taipei	N.A.	1	37 mins	1	38 mins	1	34 mins	1	N.A.	1	-3 mins	0
Thailand	N.A.	3	66 mins	2	N.A.	2	N.A.	2	N.A.	2	N.A.	-1
USA	N.A.	1	N.A.	1	N.A.	1	N.A.	1	N.A.	1	N.A.	0
Vietnam	N.A.	5	30-45 mins	5	25-40 mins	5	15-30 mins	4	N.A.	4	-15 mins	-1
Simple APEC Average		**2.7**		**2.4**		**2.3**		**2.2**		**2.1**		**-0.6**

Source: APEC SCSC KPIs submission and World Bank TAB database.

Table E.1b: Time Release Survey of Goods (Levels comparison with Doing Business data)

	Change in average customs clearance times for export											
Economy	**2006**		**2007**		**2008**		**2009**		**2010**		**Change**	
	APEC	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**
Australia	N.A.	1	0.4 days	1	0.08 days	1	0.1 days	1	N.A.	1	-0.3 days	0
Brunei Darussalam	N.A.	5	N.A.	5	N.A.	5	N.A.	5	N.A.	2	N.A.	-3
Canada	N.A.	1	N.A.	1	N.A.	1	N.A.	1	N.A.	1	N.A.	0
Chile	N.A.	2	N.A.	2	N.A.	2	N.A.	2	N.A.	2	N.A.	0
China	N.A.	2	N.A.	2	N.A.	2	N.A.	2	N.A.	2	N.A.	0
Hong Kong, China	N.A.	1	N.A.	1	N.A.	1	N.A.	1	N.A.	1	N.A.	0
Indonesia	N.A.	2	N.A.	2	N.A.	2	N.A.	2	N.A.	1	N.A.	-1
Japan	N.A.	2	N.A.	2	N.A.	2	N.A.	2	N.A.	2	N.A.	0
Korea	N.A.	1	2 mins	1	2 mins	1	2 mins	1	N.A.	1	0	0
Malaysia	N.A.	2	N.A.	2	N.A.	2	N.A.	2	N.A.	2	N.A.	0
Mexico	N.A.	3	N.A.	2	N.A.	2	N.A.	2	N.A.	2	N.A.	-1
New Zealand	N.A.	1	N.A.	1	N.A.	1	41 mins	1	N.A.	1	N.A.	0
Papua New Guinea	N.A.	4	N.A.	4	N.A.	4	N.A.	4	N.A.	4	N.A.	0
Peru	3	4	3.5	4	4.6	5	4.3	5	4	2	+0.8	-2
Philippines	N.A.	2	30 mins	2	20 mins	2	15 mins	2	N.A.	2	-15 mins	0
Russia	N.A.	3	1 day	3	1 day	3	1 day	3	N.A.	3	0	0
Singapore	N.A.	1	10 mins	1	10 mins	1	10 mins	1	N.A.	1	0	0
Chinese Taipei	N.A.	1	12 mins	1	11 mins	1	11 mins	1	N.A.	1	-1 min	0
Thailand	N.A.	1	N.A.	1	N.A.	1	N.A.	1	N.A.	1	N.A.	0
USA	N.A.	1	N.A.	1	N.A.	1	N.A.	1	N.A.	1	N.A.	0
Vietnam	N.A.	5	15-30 mins	5	10-20 mins	5	5 - 15 mins	4	N.A.	4	-10 to -15 mins	-1
Simple APEC Average		**2.7**		**2.4**		**2.3**		**2.2**		**2.1**		**-0.6**

Source: APEC SCSC KPIs submission and World Bank TAB database.

Tabel E.2: Implement APEC Framework based on the WCO Framework of Standards

	Number of Authorised Economic Operators				Percentage of Trade covered by Authorised Economic Operators			
Economy	**2007**	**2008**	**2009**	**Change**	**2007**	**2008**	**2009**	**Change**
Australia	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Brunei Darussalam	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Canada	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Chile	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
China	N.A.	830	1460	630	N.A.	11.00%	20.44%	9%
Hong Kong, China	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Indonesia	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Japan	111	310	389	278	54.50%	55.80%	N.A.	1%
Korea	N.A.	N.A.	5	N.A.	N.A.	N.A.	10.51%	N.A.
Malaysia	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Mexico	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
New Zealand	N.A.	N.A.	126	N.A.	N.A.	N.A.	50% of US exports	N.A.
Papua New Guinea	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Peru	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Philippines	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Russia	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Singapore	14	27	41	27	N.A.	6.83%	9.13%	2%
Chinese Taipei	250	333	296	46	25.62%	33.62%	31.04%	5%
Thailand	N.A.	N.A.	3	N.A.	N.A.	N.A.	N.A.	N.A.
USA	7,947	8,882	9,642	1,695	N.A.	52.00%	51.20%	-0.8%
Vietnam	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Simple APEC Average	2081	2076	1495	535	40.1%	31.9%	24.5%	3.5%

Note: The simple APEC average is taken as the average of the change between 2007 and 2009 for economies where data is available. For countries where only 2 years of data is provided the change is taken as the change between those two years, this effectively assumes that the missing year's value is the same as the corresponding year's data.
Source: APEC SCSC KPIs submission.

Table E.3: Simplification & Harmonization Based on the Revised Kyoto Convention (APEC economy data and *Trading across Borders* data)

	No. documents for import												No. documents for export											
Economy	**2006**		**2007**		**2008**		**2009**		**2010**		**Change**		**2006**		**2007**		**2008**		**2009**		**2010**		**Change**	
	APEC	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**	**APEC**	**DB**
Australia	N.A.	5	1	5	1	5	1	5	N.A.	5	0	0	N.A.	6	1	6	1	6	1	6	N.A.	6	0	0
Brunei Darussalam	N.A.	6	N.A.	6	N.A.	6	N.A.	6	N.A.	6	N.A.	0	N.A.	6	N.A.	6	N.A.	6	N.A.	6	N.A.	6	N.A.	0
Canada	N.A.	4	N.A.	4	N.A.	4	N.A.	4	N.A.	4	N.A	0	N.A.	3	N.A.	3	N.A.	3	N.A.	3	N.A.	3	N.A.	0
Chile	N.A.	7	7	7	7	7	7	7	N.A.	7	0	0	N.A.	6	6	6	6	6	6	6	N.A.	6	0	0
China	N.A.	6	8	6	8	6	8	5	N.A.	5	0	-1	N.A.	7	8	7	8	7	8	7	N.A.	7	0	0
Hong Kong, China	N.A.	4	2	4	2	4	2	4	N.A.	4	0	0	N.A.	4	2	4	2	4	2	4	N.A.	4	0	0
Indonesia	N.A.	6	6	6	6	6	6	6	N.A.	6	0	0	N.A.	5	5	5	5	5	5	5	N.A.	5	0	0
Japan	N.A.	5	2	5	2	5	2	5	N.A.	5	0	0	N.A.	4	2	4	2	4	2	4	N.A.	4	0	0
Korea	N.A.	8	1	6	1	6	1	3	N.A.	3	0	-5	N.A.	5	1	4	1	4	1	3	N.A.	3	0	-2
Malaysia	N.A.	7	3	7	3	7	3	7	N.A.	7	0	0	N.A.	7	2	7	2	7	2	7	N.A.	7	0	0
Mexico	N.A.	4	5	4	5	4	5	4	N.A.	4	0	0	N.A.	5	5	5	5	5	5	5	N.A.	5	0	0
New Zealand	N.A.	5	N.A.	5	N.A.	5	N.A.	5	N.A.	5	N.A	0	N.A.	7	N.A.	7	N.A.	7	N.A.	7	N.A.	7	N.A.	0
Papua New Guinea	N.A.	9	5	9	5	9	5	9	N.A.	9	0	0	N.A.	7	5	7	5	7	5	7	N.A.	7	0	0
Peru	5	8	5	8	5	8	5	8	4	8	0	0	6	6	4	6	4	6	4	6	3	6	0	0
Philippines	N.A.	8	3	8	3	8	3	8	N.A.	8	0	0	N.A.	8	3	8	3	8	3	8	N.A.	8	0	0
Russia	N.A.	13	19-30	13	19-30	13	19-30	13	N.A.	13	0	0	N.A.	8	14-27	8	14-27	8	14-27	8	N.A.	8	0	0
Singapore	N.A.	4	1-2	4	1-2	4	1-2	4	N.A.	4	0	0	N.A.	4	1-2	4	1-2	4	1-2	4	N.A.	4	0	0
Chinese Taipei	N.A.	6	4	6	4	6	4	6	N.A.	6	0	0	N.A.	5	3	5	3	5	3	5	N.A.	5	0	0
Thailand	N.A.	12	4	9	4	3	N.A.	3	N.A.	3	0	-9	N.A.	9	2	7	2	4	N.A.	4	N.A.	4	0	-5
USA	N.A.	5	4	5	4	5	4	5	N.A.	5	0	0	N.A.	4	3	4	3	4	3	4	N.A.	4	0	0
Vietnam	N.A.	8	10	8	10	8	10	8	N.A.	8	0	0	N.A.	6	4	6	4	6	4	6	N.A.	6	0	0
Simple APEC Average	N.A.	**6.7**	**5.3**	**6.4**	**5.3**	**6.1**	**5.1**	**6.0**	N.A.	**6.0**	**0.0**	**-0.7**	N.A.	**5.8**	**4.3**	**5.7**	**4.3**	**5.5**	**4.2**	**5.5**	N.A.	**5.5**	**0.0**	**-0.3**

Note: The simple APEC average is taken as the average of the change between 2007 and 2009 for economies where data is available. For economies where only 2 years of data is provided the change is taken as the change between those two years, this effectively assumes that the missing year's value are the same as the corresponding year's data. (Source: APEC SCSC KPIs submission)

Table E.4: Paperless and/or Automation of Trade-Related Procedures (APEC economy data)

	Percentage of import declarations lodged and processed electronically				Percentage of export declarations lodged and processed electronically			
Economy	**2007**	**2008**	**2009**	**Difference**	**2007**	**2008**	**2009**	**Difference**
Australia	99.42%	99.38%	99.40%	-0.02%	99.69%	99.68%	99.70%	0.01%
Brunei Darussalam	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	100.00%
Canada	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Chile	95.00%	96.50%	97.50%	2.50%	100.00%	100.00%	100.00%	0.00%
China	100.00%	100.00%	100.00%	0.00%	100.00%	100.00%	100.00%	0.00%
Hong Kong, China	100.00%	100.00%	100.00%	0.00%	100.00%	100.00%	100.00%	0.00%
Indonesia	92.00%	82.00%	81.00%	-11.00%	82.00%	80.00%	78.00%	-4.00%
Japan	97.70%	97.80%	97.80%	0.10%	98.10%	97.80%	98.10%	0.00%
Korea	100.00%	100.00%	100.00%	0.00%	100.00%	100.00%	100.00%	0.00%
Malaysia	100.00%	100.00%	100.00%	0.00%	100.00%	100.00%	100.00%	0.00%
Mexico	100.00%	100.00%	100.00%	0.00%	100.00%	100.00%	100.00%	0.00%
New Zealand	100.00%	100.00%	100.00%	0.00%	100.00%	100.00%	100.00%	0.00%
Papua New Guinea	97.45%	96.55%	93.83%	-3.62%	92.19%	86.09%	85.18%	-7.01%
Peru	100.00%	100.00%	100.00%	0.00%	100.00%	100.00%	100.00%	0.00%
Philippines	70.00%	70.00%	95.00%	25.00%	0.00%	0.00%	0.00%	0.00%
Russia	3.67%	6.19%	7.74%	4.07%	1.35%	5.75%	11.49%	10.14%
Singapore	100.00%	100.00%	100.00%	0.00%	100.00%	100.00%	100.00%	0.00%
Chinese Taipei	68.23%	69.64%	69.89%	1.66%	85.52%	85.61%	84.60%	-0.92%
Thailand	99.91%	99.80%	99.80%	-0.11%	97.14%	99.91%	99.97%	2.83%
USA	86.80%	88.20%	90.20%	3.40%	98.53%	99.99%	99.99%	1.46%
Vietnam	20.00%	50.00%	81.00%	61.00%	20.00%	50.00%	81.00%	61.00%
Simple APEC Average	81.51%	82.80%	90.66%	9.15%	78.73%	80.24%	86.90%	8.18%

Note: The simple APEC average is taken as the average of the change between 2007 and 2009 for economies where data is available. For economies where only 2 years of data is provided the change is taken as the change between those two years, this effectively assumes that the missing year's value are the same as the corresponding year's data. The yearly figures for Chinese Taipei are being calculated as the yearly average of the data submitted.
Source: APEC SCSC KPIs submission.