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The 2013 Interim Assessment for Supply Chain Connectivity Framework Action Plan

APEC Policy Support Unit

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Advancing Free Trade for Asia-Pacific **Prosperity**

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EXECUTIVE SUMMARY

APEC has a very good track record in the area of trade facilitation. The two successive Trade Facilitation Action Plans (TFAPs) have succeeded in reducing trade transaction costs by 10% over the period 2002-2010. In 2010, the Committee on Trade and Investment (CTI) decided to build on this achievement by re-focusing the member economies' attention on the broader issue of supply chain performance through the Supply Chain Connectivity Framework Action Plan (SCFAP) and setting a target of a 10% improvement in supply chain performance in terms of time, costs and uncertainty by 2015. This report is an attempt to measure the interim progress of SCFAP implementation as well as provide feedback to further improve SCFAP implementation in order to achieve the 10% overall goal.

Working closely with member economies, the APEC Policy Support Unit (PSU) constructed a measurement framework comprising the three-tracked assessment on internal indicators, external indicators and self-assessment survey, to find out the extent to which SCFAP actions are contributing to improving supply chain performance.

Several important points could be highlighted from the external indicators assessment. First, in terms of time, APEC economies have been quite successful in reducing trade times by nearly 7% (using Doing Business data on export time and LPI data on import time). This progress would translate into significant cost savings for businesses, exporters and consumers.

Second, in terms of cost, there is some indication of costs increase; however this could be a result of unexpected supply chain disruptions due to natural events such as earthquakes and floods. It remains to be seen whether this trend of costs increase will continue. Nevertheless, APEC economies should look into monitoring and reducing costs in the coming years. Respondents to the self-assessment survey have provided several suggestions on how to expand and improve the SCFAP (Chapter 4).

Third, in terms of uncertainty, based on the percentage of shipments meeting firm quality criteria from LPI, there has been an increase by about 4% over the period 2009-2011. The percentage of shipments that are physically inspected also showed significant improvement and met the interim target. Collectively, this could be interpreted to mean a similar reduction in the level of supply chain uncertainty.

This report therefore highlights that APEC has made significant progress in reducing the time and uncertainty of supply chain performance. Notwithstanding, it is important for member economies to make further progress in some areas, as indicated in the traffic light analysis in Chapter 3.

For the internal indicators assessment, the results reveal that within three years of SCFAP implementation (2010 to 2012), 77% of actions have been completed. This reflects good progress in terms of project completion and implementation. It also shows that there are room for improvement such as for member economies to add more actions within SCFAP and to continue with the ongoing actions included in SCFAP until 2015 in order to move towards the 10% overall goal.

In summary, considerable progress has been achieved in terms of implementing SCFAP projects to improve supply chain performance. APEC's various initiatives such as advanced rulings, PPP framework, building the capacity and access of local logistics providers, single window, *de minimis* value, electronic Certificate of Origin, supply chain visibility, submarine cable protection, road safety standards and Authorized Economic Operators (AEO) would

certainly support a more efficient and reliable supply chain that delivers tangible benefits to businesses.

From the self-assessment survey results, it can be gathered that member economies have experienced benefits from SCFAP-related projects in improving supply chain performance. The key benefits include:

1. Knowledge sharing or measures in addressing the knowledge gap; this is the most notable benefit, as the SCFAP actions have helped raise awareness on important issues related to supply chain performance, and provided a reference or policy guidance to member economy/sub-fora on further improvement.
2. A platform or network for economies to communicate with the industries, and to actively engage and enhance the capacity of SMEs; the actions under SCFAP have helped to improve the relationship between the government and the private sector, including SMEs.
3. Improve awareness and understanding of new technologies that are important to the logistics and transportation sectors.

This report also provides the following recommendations to member economies:

1. Re-double their efforts in reducing the time, costs, and uncertainty in supply chain performance.
2. Target efforts at maintaining the existing key long-term measures that have been initiated and expanding them by leveraging on ICT development.
3. Maintain an open and transparent channel or communication with relevant stakeholders in the private sector in order to improve the regulatory environment.
4. Encourage the design of appropriate capacity building initiatives to address the existing knowledge gap in a systematic and sustainable manner.
5. Provide further support to SMEs to ensure mutual collaboration between industry players (large and small) within the logistics and transportation sectors.
6. Act on the feedback provided in the self-assessment survey by improving SCFAP design and implementation.
7. Undertake a further assessment of SCFAP progress in 2014 by using the updated figures from the external indicators.

CHAPTER 1 INTRODUCTION

1. Rising Importance of Supply Chain Connectivity

Supply chain[1] connectivity is crucial to the economic success of the Asia-Pacific region. Goods, particularly manufacturing goods, now frequently cross borders multiple times during their production process, as component parts from all over the region are brought together for final assembly in different locations, and exported around the region and to the world at large.

Recent research by the World Bank, for example, shows that logistics performance matters more for trade in parts and components—exactly the type of goods that circulate within supply chains—than for trade in final goods; trade in parts and components is nearly 50% more sensitive to improvements in logistics performance than is trade in final goods (Saslavsky and Shepherd, 2012).

Supply chain connectivity – an important area for trade facilitation – makes it easier for enterprises to perform their business efficiently and globally. Shepherd (2011) noted that improving logistics performance is in fact at the core of the private sector facilitation agenda and could have a significant impact on the global pattern of production, exports and specialization. Global enterprises increasingly require and demand efficient logistics to access international markets and to outsource their operations to different locations in order to concentrate on their core competencies and to remain competitive.

For example, transportation and logistics functions are considered highly important in four broad types of the global manufacturing sectors which include: the global innovation for local markets, regional processing, global technologies/innovators and labor-intensive tradables (see table 1). These four sectors accounted for 78% of global manufacturing value added (McKinsey Global Institute 2012).

Table 1 Five Broad Groups of Global Manufacturing

Sector	Traits	Industry Examples
Global innovation for local markets (34% of global MVA*)	• Competition based on innovation and quality; high R&D intensity[1] (5-25%) • Some components traded globally (40-50% trade intensity[2]) with more regional assembly and production	• Chemicals and pharmaceuticals • Transport and equipment including automotive • Machinery, electrical machinery, appliances
Regional processing (28% of global MVA)	• Low tradability (5-20% trade intensity[2]) • Highly complex and costly logistics • Freshness requirements, and local tastes drive proximity need • Relatively automated; little R&D	• Rubber and plastics • Fabricated metals • Food and beverages • Printing and publishing

[1] A supply chain consists of all parties involved, directly or indirectly, in fulfilling a customer requests and not only includes the manufacturer and suppliers but also transporters, warehouses, retailers, and customers themselves (Chopra and Meindl, 2004).

Energy / resource-intensive commodities (22% of global MVA)	• Provide commodity-type inputs to other sectors; low tradability • Energy- and resource-intensive (energy intensity[3] 7-15%) • Price competition; little differentiation	• Wood products • Paper and pulp • Basic metals • Minerals-based products • Refined petroleum, coke and nuclear products
Global technologies/innovators (9% of global MVA)	• Competition based on R&D and cutting-edge technology, with high R&D intensity[1] (25-35%) • Highly tradable (55-90% trade intensity[2]) in both components and final products	• Computers and office machinery • Semiconductors and electronics • Medical, precision, and optical equipment
Labor-intensive tradables (7% of global MVA)	• High labor intensity[4] (30-35 hours per $1,000 value added) • High exposure to price competition • Globally traded (50-70% trade intensity[2]); low proximity needs	• Textiles, apparel, leather • Furniture, jewelry, toys and other manufactured goods not classified elsewhere

1 R&D Intensity = R&D expenditure divided by value added (nominal), US, 2007.
2 Trade Intensity = Exports divided by gross output (nominal), world, 2006-10 average.
3 Energy Intensity = Cost of purchased fuels and electricity divided by value added (nominal), US, 2010.
4 Labor intensity = Hours worked per $1,000 value added (nominal), EU-15, 2007.
* MVA = Manufacturing Value Added

Source: McKinsey Global Institute (2012).

In order to achieve efficient operations of global supply chains, both soft and hard infrastructure are important, as better infrastructure will support and improve trade logistics that lead to stronger competitiveness both at the micro and macro level. At the macro level, Serhat and Harun (2011) noted that logistics is a significant component of GDP[2] because it can affect the rate of inflation, interest rates, productivity, energy costs and availability – among other things; on the other hand, efficient logistics is also important for the aggregate efficiency of the industry and thus for economy-wide competitiveness. The authors further found that "logistics infrastructure and customs variable are the most discriminating variables between high and low competitive countries, followed by, logistics competence and tracking & tracing variable" (p.17).

APEC, with the diversity of its member economies and initiatives, would certainly have an important role to play in supporting this new pattern of global trade and logistics through the identification and elimination of trade-impeding bottlenecks in order to improve supply chain performance. This, in turn, will support APEC's goal of establishing a seamless and connected regional economy.

[2] The logistics industry contributes around 14% of global GDP and generally logistics costs make up some 10–17% of GDP in industrialized economies (Memedovic, et. al. 2008). Other study such as Bowersox, Rodrigues and Calantone (2005) estimated global logistics costs to reach USD 6,732 billion and correspond to 13.8% of world's GDP in 2002 (Rantasila and Ojala 2012).

2. APEC Supply Chain Connectivity Framework Action Plan

Following the success of the two Trade Facilitation Action Plans (TFAPs) in reducing trade transaction costs by 10% over 2002-2010, in 2010, the APEC CTI decided to re-focus economies' attention on the broader issue of supply chain performance through the SCFAP. Under SCFAP, APEC adopted a quantitative target of improving the performance of time, cost and uncertainty of supply chain performance by 10% by 2015, a target APEC Leaders first committed to under the 2010 Yokohama Vision.

Whereas trade facilitation as understood by APEC focuses on reducing trade transaction costs, including through reductions in border formalities, the SCFAP agenda has an additional focus. It has a stronger emphasis in particular on logistics and transport facilitation issues, while also adopting a holistic approach to improving supply chain performance, designed to further support the private sector in conducting their global business through better supply chain connectivity.

The SCFAP identified eight 'chokepoints' in regional supply chains, where public and private sector actions can be combined to help loosen the constraints on traders, and thereby ensure that supply chains operate more quickly, efficiently, and reliably. The eight chokepoints are:

1) **Transparency**: lack of transparency/awareness of full scope of regulatory issues affecting logistics; lack of awareness and coordination among government agencies on policies affecting logistics sector; absence of single contact point or champion agency on logistics matters.
2) **Infrastructure**: inefficient or inadequate transport infrastructure; lack of cross border physical linkages (e.g. roads, bridges).
3) **Logistics capacity**: lack of capacity of local/regional logistics sub-providers.
4) **Clearance**: inefficient clearance of goods at the border; lack of coordination among border agencies, especially relating to clearance of regulated goods "at the border".
5) **Documentation**: burdensome procedures for customs documentation and other procedures (including for preferential trade).
6) **Connectivity**: under-developed multi-modal transport capabilities; inefficient air, land, and multimodal connectivity.
7) **Regulations & standards**: variations in cross-border standards and regulations for movements of goods, services and business travelers.
8) **Transit**: lack of regional cross-border customs-transit arrangements.

APEC economies have agreed on a set of specific actions to tackle each chokepoint. The SCFAP is considered to be a 'living document', which means new actions can be added in over time.

3. SCFAP Measurement Framework

From the outset, an important part of SCFAP has been the development of a performance measurement framework to provide economies with information on the extent to which SCFAP actions are indeed contributing to improving supply chain performance. Keeping in mind the quantitative target - improving the performance of time, cost, and uncertainty of

supply chain performance by 10% by 2015, the APEC Policy Support Unit (PSU) has therefore worked with economies to build a measurement framework from the beginning of SCFAP, focusing on making it as transparent and useful as possible.

The current SCFAP measurement framework comprises three elements:

1) **external indicators**, which track the effects of those actions on measurable supply chain processes and outcomes;
2) **internal indicators**, which tracks the degree to which actions under SCFAP are in fact being implemented;
3) and **a self-assessment survey**, in which economies and sub-fora detail actions taken, and provide views on potential impact and recommendations in improving the remaining actions.

Since the chokepoints are interrelated and existing data overlap for tracking performance on each chokepoint, the eight chokepoints are grouped into three performance clusters (table 2). The grouping also reflects the fact that many indicators (both external and internal) are not collected at a level of detail that would enable their attribution to individual chokepoints, but they still capture information that is relevant to performance at a more aggregate level.

Table 2 Performance Clusters and SCFAP Actions

Performance clusters	Chokepoints
I. Building infrastructure & capacity	2. Infrastructure 3. Logistics capacity 6. Connectivity
II. Streamlining procedures	4. Clearance 5. Documentation
III. Strengthening rules & institutions	1. Transparency 7. Regulations & standards 8. Transit

Source: PSU (2010).

4. Interim Assessment of SCFAP

In 2011, the CTI endorsed the plan for PSU to conduct an interim assessment exercise for SCFAP in 2013, while the final assessment will be conducted in 2016.

This report presents the interim assessment of progress under SCFAP. Chapter 2 presents the summary of assessment results on external indicators, using pro-rata figures based on the 10% target by 2015. Chapter 3 discusses the progress of implementation of actions under the eight chokepoints from the results of internal indicators (using the performance rating system based on a traffic lights analysis). Chapter 4 shows the responses to the self-assessment survey, providing insights from economies on the impact and progress of SCFAP. The report summarizes the key findings in the last section, with recommendations to move SCFAP forward. Technical details and original survey responses can be found in the appendix.

CHAPTER 2 EXTERNAL INDICATORS ASSESSMENT

This chapter provides a summary of the findings from the external indicators assessment report completed in 2012 (PSU 2012)[3]. External indicators track the effects of SCFAP actions on measurable supply chain processes and outcomes, based on a range of data from international sources (definition of external indicators is provided in appendix 1).

The analysis was conducted at two levels: overall level and cluster level. Detailed assessment methodology for external indicators can be found in appendix 2. The traffic light coding was applied as follows: green represents a progress rate of greater than 75%, amber represents a progress rate of between 40% and 75%, and red represents a progress rate of less than 40%. Actual results for both levels were calculated based on simple average. GDP-weighted averages and medians for each indicator are taken as a robustness check, and can be found in the earlier external indicator assessment report.

1. Overall Level Assessment

The World Bank's Logistics Performance Index (LPI) and the World Economic Forum's Enabling Trade Index (ETI), as overall indicators, covering the full range of supply chain process, were taken to capture supply chain performance in all its complexity, including time, cost and uncertainty factors. These two indicators are different but also complementary, hence providing a balanced indication of the degree of overall progress of economies.

Table 3 Results of Overall Level Assessment

Supply Chain Connectivity Initiative external indicators	Direction of improvement	Baseline (2009)	Pro-rata benchmark (2011)	Actual (2011)
LPI Overall Index (score)	↗	3.38	3.49	3.39
ETI Overall Index (score)	↗	4.64	4.79	4.70

Source: PSU (2012).

Figure 1 LPI Overall Index

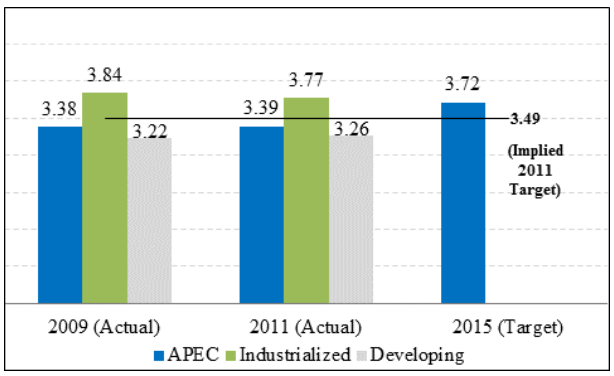
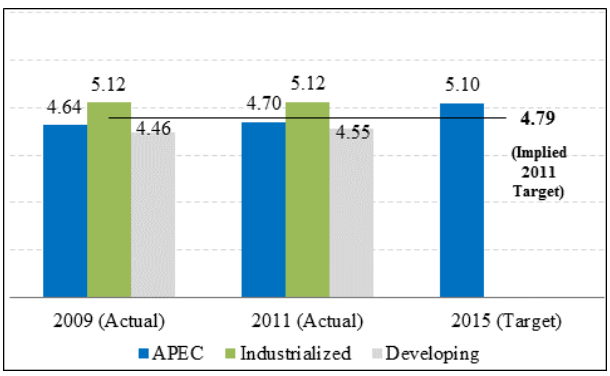


Figure 2 ETI Overall Index



Source: PSU (2012).

[3] APEC PSU (2012), Interim Progress Assessment of SCFAP: Analysis of External Indicators, report prepared by Ben Shepherd, Developing Trade Consultants Ltd.

The LPI index is a perception index based on a survey of over 1,000 logistics and trade facilitation professionals around the globe on six core dimensions[4], providing an indication of private sector sentiment in relation to supply chain performance. The LPI focuses on the performance of gateway ports and corridors, not on international freight links between economies.

Between 2009 and 2011[5], there has been very little change in APEC's simple average LPI score (red light); although there was an increase, it was of the order of less than 0.5%. APEC's average LPI score remained substantially below the implied 2011 target based on the goal of a 10% improvement by 2015.

Additionally, the analysis also constructed an APEC-wide LPI score using raw responses for each economy, calculating confidence intervals, and examining whether or not a statistically significant change has taken place. Results from this exercise were not conclusive, however. The 2009 APEC-wide LPI score was 3.56 with a margin of error of +/- 0.2 points. The 2011 score was higher, at 3.61, but still with a margin of error of +/- 0.2 points. Using unrounded data, the confidence intervals for the two years overlapped, which means there was no statistically significant improvement in APEC's performance between 2009 and 2011. However, the improvement was very nearly statistically significant at the 80% level used by the World Bank's LPI report. The change in underlying numbers was therefore consistent with a possible improvement on the ground, but when mixed with statistical noise and sampling error, it was difficult to be sure to what extent the improvement in score in fact was due to changes in policy and performance.

It is also useful to break out APEC LPI scores separately for industrialized and developing member economies[6]. Using simple averages, the data show that the industrialized economies slipped slightly in terms of their overall LPI score, from 3.84 to 3.77, a change of about negative 1.7% (Figure 1). The developing economies, by contrast, improved from 3.22 to 3.26, which is a change of about 1.2%. Both changes are relatively small, so as already highlighted, there is much for all economies to do to improve their logistics performance with the 2015 SCFAP goal in mind. Overall, 11 economies experienced an increase in their LPI overall index scores in 2009-2011 while seven economies experienced a decline.

On the other side, the ETI is a composite index that aggregates a range of qualitative and quantitative data on each economy's trading environment, covering both public and private sector aspects. It measures the extent to which economies have developed institutions, policies, and services facilitating the free flow of goods across borders.

With amber light, ETI shows an evidence of a small improvement in APEC's average performance between 2009 and 2011, of around 1.5%. Improvement in the ETI has therefore been more rapid than for the LPI, which reflects that the two indices necessarily measure different dimensions of performance and are therefore complementary in this analysis. Overall, 13 economies experienced an increase in their ETI overall index scores in 2009-2011 while six economies experienced a decline.

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[4] Six dimensions of LPI: 1) efficiency of the clearance process by border control agencies, including customs; 2) quality of trade – and transport- related infrastructure; 3) ease of arranging competitively priced shipments; 4) competence and quality of logistics services; 5) ability to track and trace consignments; 6) frequency with which shipments reach the consignee within the scheduled time.

[5] The 2009 and 2011 figures are taken from the LPI 2010 and LPI 2012, respectively.

[6] Industrialized member economies are Australia, Canada, Japan, New Zealand, and the United States.

If to separate the data according to economies' development level, as in Figure 2, the data show that the industrialized economies have remained essentially static between 2009 and 2011, with simple average ETI scores of 5.12 in each year. The developing economies, by contrast, have improved their average score from 4.46 to 4.55, a change of about 1.9%. This is a noticeable increase in score, but it has still not taken place at a rate fast enough to be on track for the 10% goal by 2015. Industrialized and developing economies therefore both need to re-double their efforts in this area.

On the overall level, the key result is that—as was the case for the LPI—progress within APEC has not been sufficiently rapid between 2009 and 2011 to keep pace with the implied 2011 target based on a 10% improvement by 2015.

2. Cluster Level Assessment

Same as the overall level assessment, the external indicators of each performance cluster also combined different types of data to provide a balanced view. In the building infrastructure and capacity cluster, perceptions-based indicators from the LPI, aggregated data from the ETI, and "hard" data from the LPI survey on the percentage of shipments that meet internal quality criteria were put together.

Similarly, in the streamlining procedures cluster, aggregated data from the ETI were examined along with information from the World Bank's Doing Business database and the LPI on the number of procedures, cost, and time taken for import and export transactions.

Performance in the third cluster, strengthening rules and institutions, was more difficult to measure due to the nature of the actions undertaken in this area and their expected outcomes, which do not easily translate into quantitative measures. However, two elements of the ETI provided aggregated data on the performance of border administration, as well as on the broader business environment. Examining these measures together will make it possible to have a firm indication of the extent of progress under the third performance cluster.

A. Building Infrastructure and Capacity

In the first cluster—building infrastructure and capacity—the indicators cover both "hard" (physical) infrastructure and "soft" (regulatory) infrastructure, by combining data from the ETI and LPI on the quality of trade and transport infrastructure and the performance of relevant services sectors. The range of indicators covered by these data is very broad and includes, for example, maritime shipping connectivity as measured by UNCTAD's Liner Shipping Connectivity Index, which is one of the components of the ETI's transport services pillar. Information and communication technologies (ICTs) are also important to supply chain performance at many points, including the ability of border agencies to facilitate e-services for users. ICT performance is captured via the ETI's ICT pillar, which combines data on the extent of business internet use, mobile telephone and broadband subscriptions, internet users, fixed telephone lines, and government online services. These data cover the ways in which both the private and public sectors use ICTs in the supply chain context.

Table 4 Results of Performance for Cluster 1- Building Infrastructure and Capacity

Supply Chain Connectivity Initiative external indicators	Direction of improvement	Baseline (2009)	Pro-rata benchmark (2011)	Actual (2011)
ETI Transport Infrastructure Pillar	↗	4.88	5.04	4.92
ETI Transport Services Pillar	↗	4.58	4.74	4.54
ETI ICT Pillar	↗	4.27	4.42	4.75
LPI Infrastructure Index	↗	3.29	3.40	3.35
LPI Logistics Competence Index	↗	3.30	3.41	3.33
LPI % Shipments Meeting Quality Criteria	↗	80.35	83.02	83.52

Source: PSU (2012).

With green light, the brightest spot in terms of performance is in the crucial area of ICT and percentage of shipments meeting quality criteria. For ETI ICT pillar, 2011 data shows that APEC has already surpassed the 2015 goal of a 10% improvement, as the average score increased by just over 11% between 2009 and 2011. Same as ICT, APEC has made significant progress in the area of percentage of shipments meeting quality criteria, and APEC has improved at a rate slightly faster than what is required for the 10% by 2015 target.

However APEC's transport infrastructure score increased very slightly between 2009 and 2011, by about 0.8%. This rate is considerably slower than what would be needed to meet the 2015 target of a 10% improvement. More worryingly, the data suggest that performance on transport services actually regressed slightly between 2009 and 2011, by about 1%.

The ETI transport services pillar takes into account the amount and the quality of services available for shipment, including the quantity of services provided by liner companies, the ability to track and trace international shipments, the timeliness of shipments in reaching destination, general postal efficiency, and the overall competence of the local logistics industry (e.g., transport operators, customs brokers). These elements correlate with the work that APEC has been doing related with chokepoints 3 and 6.

Clearly, it is important for APEC economies to give renewed attention to transport infrastructure and services in the context of improving supply chain performance by 10% by 2015.

APEC's LPI infrastructure score and logistics competence score also showed slight improvements: 1.8% in the case of infrastructure, and 0.8% for logistics competence. In both cases, the level of improvement is slower than required.

Also important from a policy point of view is the fact that the ETI and LPI data accord in one area: improvements are taking place at a faster rate in infrastructure than in services. This finding suggests that APEC economies may need to give renewed attention to regulatory measures and private sector development in the area of private logistics services, including transport.

B. Streamlining Procedures

Performance cluster II - streamlining procedures - covered two types of indicators. The first group, which consisted of the customs administration and import-export procedures pillars of the ETI along with the customs and border component of the LPI, provided overall information on the efficiency of customs and border procedures. The second group of indicators, which were drawn from the LPI and Doing Business database, provided concrete data on the time, cost, and number of procedures involved in import and export transactions.

These data therefore provided a direct indication of the extent to which bureaucratic measures constitute a burden on supply chain performance. Of all the external indicators, these ones were the most closely related to SCFAP's overarching goals of improving the time, cost, and uncertainty associated with supply chain performance.

Table 5 Results of Performance for Cluster 2- Streamlining Procedures

Supply Chain Connectivity Initiative external indicators	Direction of improvement	Baseline (2009)	Pro-rata benchmark (2011)	Actual (2011)
ETI Customs Administration Pillar	↗	4.82	4.98	4.85
ETI Import-Export Procedures Pillar	↗	5.27	5.44	5.31
LPI Customs Index	↗	3.11	3.22	3.13
LPI Lead Time to Import	↘	2.78	2.69	2.59
LPI Lead Time to Export	↘	2.17	2.10	2.10
LPI Documents to Import	↘	3.98	3.85	3.35
LPI Documents to Export	↘	3.53	3.41	2.66
LPI Cost to Import	↘	767.90	742.31	834.20
LPI Cost to Export	↘	681.29	658.58	692.89
LPI % Physical Inspection	↘	10.95	10.59	9.67
Doing Business Time to Import*	↘	15.90	14.58	14.95
Doing Business Time to Export*	↘	15.48	14.19	14.43
Doing Business Documents to Import*	↘	5.95	5.46	5.90
Doing Business Documents to Export*	↘	5.48	5.02	5.43
Doing Business Cost to Import*	↘	918.14	841.63	896.19
Doing Business Cost to Export*	↘	847.90	777.25	835.67

Note: * For consistency, the Doing Business targets for 2015 are aligned with the APEC EoDB Initiative.
Source: PSU (2012).

Under the second performance cluster, green lights are given to LPI lead time to import and export, LPI documents to import and export, LPI percentage physical inspection and Doing Business time to export. LPI lead time to export has fallen by 3.3%, and lead time to import has fallen by 6.8%. In the case of export time, the progress rate is approximately on target for achievement of the SCFAP 2015 goal, and for import time, progress is faster than required to achieve that goal. The change of LPI documents is about 1.7% in the case of export, and 8.6% in the case of import, both are on track. In addition, there has clearly been a major fall in the use of physical inspection across the APEC region between 2009 and 2011, already reaching the 2015 target (drop by 11.7%). Among Doing Business indicators, time to export is the only indicator on track, but still not as fast as required by the Ease of Doing Business (EoDB) Initiative (a 25% reduction by 2015).

APEC has not met the implied 2011 target on another ten indicators. The progress rate for ETI customs administration is 17.5%, and for ETI import-export procedures is 23.7%, both of which suggest further work on streamlining procedures. LPI customs index only grew by 0.7%, which is not a significant progress and is aligned with the ETI figure. LPI cost to export and import also show red lights, with an 8.6% increase in import cost and a 1.7% increase in export cost.

In terms of the number of economies, only eight economies showed an increase in LPI cost to import, while 11 economies actually recorded a decrease. Looking at the individual economy data more closely, there were three economies that experienced a high increase in cost (over 100%): New Zealand (195%), Russia (176%) and Thailand (182%). Indeed, in 2011 New Zealand experienced a major earthquake while Thailand also suffered from a massive flood which may affect the survey results. It remains to be seen whether this trend of higher costs would continue.

Doing Business time to import shows amber color; with a progress of 6.0% reduction, it is slower than the requirement to reach target. The results for Doing Business cost to import and export are different from the result for LPI: costs have fallen slightly, on average, but not enough to be in line with the 25% target. Doing Business export cost fell by around 1.4%, and import cost dropped by 2.4%. Results for Doing Business document to import and export are similar to the corresponding measures in LPI, although different transactional definitions mean that the numbers are significantly different in each case. Neither in relation to import documents nor export documents has APEC made progress at a rate sufficient to be in line with the 25% reduction by 2015 target.

It is worth emphasizing that the cost indicators collected in LPI and Doing Business reports are defined as: typical charge for a 40-feet dry container or a semi-trailer (i.e. total freight including agent fees, port, airport and other charges) for LPI; and fees levied on a 20-foot container – excluding ocean transport costs (for DB). These costs would probably be more related to cargo handling and port fees as well as labor costs.

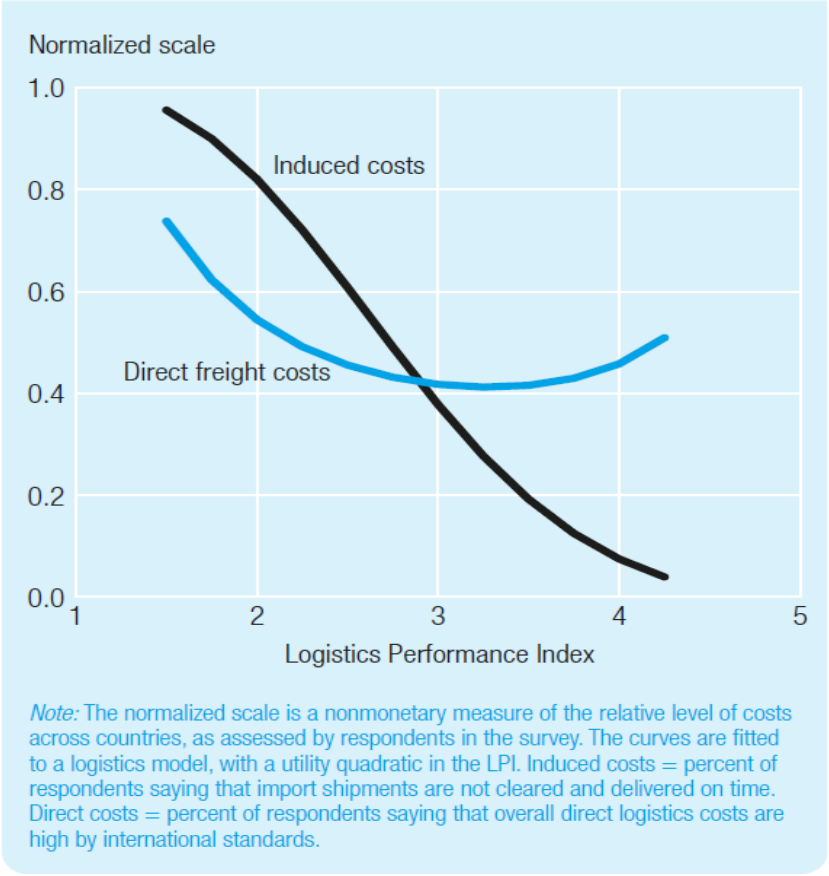
Indeed, the calculation of logistics costs is complex due to the many processes involved such as individual firm strategies as well as the macroeconomic environment which includes labor and energy costs. As such it would be difficult to exactly pinpoint the drivers of the logistics costs.

Dolman (2012) highlighted that in the case of Australia, the cargo handling fees for export described in the LPI went up from less than USD 600 in 2006 to around almost USD 1,000 in 2009. This is probably caused by the large costs increase in the port of Melbourne during the period of 2006 to 2010 which was due to the newly introduced infrastructure costs to re-coupe costs of channel deepening and other costs of providing port infrastructure.

In fact, improvement in LPI scores might entail necessary costs increase, especially in terms of direct (freight) costs[7]. As figure 3 shows, direct freight costs might even increase as logistics performance reaches a certain level.

[7] Structure of logistics costs faced by traders could be grouped under two categories. Direct costs associated with shipment, such as freight costs, port and handling charges, procedural fees (such as bonds), agent fees, and side payments. Traders would also need to absorb the induced costs associated with hedging for the lack of predictability and reliability of the supply chain; which is basically the costs of non-delivery or avoidance of non-delivery.

Figure 3 Direct freight costs versus induced costs assessed by LPI respondent, 2007



Source: World Bank (2007).

C. Strengthening Rules and Institutions

Performance cluster III – strengthening rules and institutions – is inherently more difficult to relate to existing quantitative measures. The two indicators in this area were both drawn from the ETI: the transparency of border administration pillar and the business environment sub-index. Both measures are based on perceptions data. The former covers irregular payments in connection with border transactions, and the extent of corruption. The latter covers indicators of the regulatory environment, such as the protection of property rights, ethics and corruption, undue influence in public life, government efficiency, domestic market competition, financial market efficiency, and openness to foreign participation. In addition, it covers physical security, as measured by the reliability of the police service, and business costs of crime, violence, and terrorism. All these aspects of the various indicators can have a profound impact on supply chain performance.

Table 6 Results of Performance for Cluster 3- Strengthening Rules and Institutions

Supply Chain Connectivity Initiative external indicators	Direction of improvement	Baseline (2009)	Pro-rata benchmark (2011)	Actual (2011)
ETI Transparency of Border Administration Pillar	↗	4.52	4.67	4.51
ETI Business Environment Sub-Index	↗	4.75	4.91	4.70

Source: PSU (2012).

As shown in table 6, in both cases, the results are not in line with expectations: the transparency index has regressed by 0.4%, and the business environment index has slipped by 1.1%. Both changes are relatively small, but suggest that APEC economies have significant work to do in these areas if they are to meet the goal of a 10% improvement by 2015.

3. Summary

The external indicators assessment adopts a multi-dimensional approach using more than 20 separate indicators grouped under three performance clusters. It serves as a diagnostic tool to identify areas where rapid progress is made and areas where enhanced efforts are needed.

At an overall level, there is some evidence of progress by APEC member economies. Based on the increase of 0.3% of LPI score between 2009 and 2011, trade transaction cost in the region would reduce by the same magnitude[8]. However, improvements of overall indicators are not as fast as the rate implied by the 2015 goal of a 10% improvement.

LPI cost data and the Doing Business cost data are coded red under the traffic light system, because the cost indicators have not fallen substantially over the last two years. However, it is important to interpret these results in context, because supply chain costs are affected by many factors and incidents; and many times, introducing new technology will lead to increased costs, while reducing time and improving reliability and productivity[9].

In terms of time, APEC economies have been successful in reducing trade times by nearly 7% in two years, using Doing Business data on export times and LPI data on import times. This is an impressive achievement, which translates into significant cost savings for exporters and, ultimately, consumers.

Two other quantitative measures that stand out in addition to trade times and documents are the percentage of shipments meeting quality criteria, and the percentage of shipments that are physically inspected. Both indicators have seen substantial improvement over recent years, and are coded as green in the traffic light system. They are both important indicators of supply chain certainty, since the failure to conform to quality requirements and the likelihood of physical inspection contribute to making supply chains less reliable. In addition to reducing the time and formalities associated with import and export transactions, as indicated particularly by the LPI data, APEC economies have also been successful in reducing supply chain uncertainty in these ways.

[8] Trade costs in this model refer to the full set of trade transaction costs, namely all factors that drive a wedge between export and import prices

[9] The results of the TFAP II (2007-2010) Final Assessment also recorded that fees and charges rose in real terms by USD 6.3 billion, an increase of 4.8%. Nevertheless, the benefits from the reduction in the amount of time required to complete trade transactions outweighed the rising fees and charges, resulting in a savings of USD 58.7 billion and a 5% reduction in total trade transaction costs (PSU 2011).

The external indicators analysis also has some specific findings:

- **Stronger performance on quantitative indicators**

A more positive picture emerges from the consideration of quantitative performance data than from qualitative survey data. The traffic light system confirms APEC's performance on quantitative indicators particularly of time tends to be stronger than for perceptions-based indicators. The only perceptions indicator that is coded green in the traffic light system is the LPI ICT index, which evidences very rapid improvement within the region over the last two years. Two other quantitative measures that stand out in addition to trade times and documents, which have already been mentioned, are the percentage of shipments meeting quality criteria, and the percentage of shipments that are physically inspected. They are both important indicators of supply chain certainty, since the failure to conform to quality requirements and the likelihood of physical inspection contribute to making supply chains less reliable. In addition to reducing the time and formalities associated with import and export transactions, as indicated particularly by the LPI data, APEC economies have also been successful in reducing supply chain uncertainty in these ways.

There is perhaps a gap or lag between what is happening on the ground in economies, and the private sector's perception of progress (captured in LPI survey). It may be that the lag will be picked up in coming years, and then the perception data will reflect faster rates of progress. However, it may also indicate that it is important for economies to increase their efforts at outreach to the private sector, to ensure that operators are aware of the positive policy changes that have taken place.

- **Catching up by developing economies**

The analysis also breaks down the results to distinguish between industrialized and developing economies. Several cases show the rate of improvement is faster in developing economies than in industrialized ones, which is indicative of a catching up process underway. Such convergence would be a very positive development for regional supply chains, which increasingly incorporate economies at different levels of development. Converging performance would result in greater certainty for private sector operators, in addition to the net performance improvements that would be implied.

CHAPTER 3 INTERNAL INDICATORS ASSESSMENT

As one of the three tracks to assess the performance of the SCFAP, the internal indicators were not designed to measure the effect of SCFAP but to capture the qualitative aspect of the Action Plans' progress. Internal indicators could also be seen as input or process indicators, monitoring the extent to which actions foreshadowed in the SCFAP are actually being implemented, hence they trace the progress of the SCFAP, and provide direct evidence of improvement and changes.

As such, the focus of the internal indicators assessment would be on how many projects and programs have been conducted according to the timeline of the SCFAP, what sort of improvements or changes the completed projects have been able to initiate or create at the ground level, and how the improvements are related to the overall SCFAP goals.

In assessing the implementation of the key elements, PSU has previously proposed a performance rating system based on a 3-point rating (traffic light analysis). Green means the objective of the action is on track to be fully achieved within the time frame; amber means the objective of the action will be partly achieved within the time frame; and red means the objective of the action will not be achieved within the time frame. Most of the available Completion Reports (CRs) indicated that the objective(s) of the activity has been achieved successfully within the time frame. In cases of delay, it was mainly due to the onset of tsunami in 2011. For a very few actions in which no progress has been reported and where the timeline has passed, a red traffic light was given. Detailed results of the traffic light method are provided under Appendix 3.

For this interim assessment of internal indicators, the 2010 SCFAP matrix (*2010/AMM/007app05*) was used as the benchmark template, and the newly added actions were listed for information but not taken into account in this interim assessment. One action listed under the SCFAP could contain one or several elements. As PSU has noted previously, it was not clear what is considered as 'one element', so PSU had to make its own judgment in defining each element[10]. In addition, the SCFAP is meant to be a living document, in which economies would update the elements of the matrix with new projects that contribute to the 10% overall goal. For this reason, it would be quite difficult to apply a strict benchmark or target pole for the internal indicators in relation to the interim assessment.

The SCFAP matrix represents the activities and projects that members have agreed to implement in order to address the different supply chain chokepoints. A review of the APEC project database shows that only around half of the actions have the necessary CRs. This is because a significant part of the actions are not APEC-funded projects[11], and CRs are hence not required. In order to review the SCFAP progress, PSU has relied on additional source of information that comes from the CTI annual report to ministers. Based on the CTI reports and the available CRs, PSU identified a total of 103 elements, out of which 76 has been implemented (74%).

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[10] PSU defines an element based on projects/ activities under each action. For example, Symposium on Supply Chain Connectivity is one action under chokepoint 1, and two symposiums were held in 2010 and 2012 respectively; therefore, there are two elements under this action and two green traffic lights given.

[11] Completion reports are only required for APEC-funded projects. For self-funded projects, completion reports are encouraged.

The following section describes the progress of each chokepoint within the SCFAP as well as provides additional related information.

Chokepoint 1: Transparency

For Chokepoint 1, a total of 12 elements were identified from the action plans; nine of which have been completed to date (75%). Actions under chokepoint 1 involved initiatives related to advanced rulings and the establishment of National Logistics Associations (NLAs) within APEC economies. There were also several capacity building activities such as workshops and symposiums under this chokepoint.

As mentioned at the trade policy dialogue on advanced rulings during CTI3 in 2011, the purpose of advanced rulings is to give certainty to importers so they can anticipate how their goods will be treated by the customs in advance of making the entry. In this regard, advanced rulings have the potential to increase certainty and predictability in supply chains.

As for the compendium of best practices for NLAs, it is apparent that different models of NLAs have been established to suit different places, at different times, for different reasons. Having an NLA established provides a means to enable easier collaboration/coordination between logistics firms as well as better communication between the relevant government agencies and industry players.

Chokepoint 2: Infrastructure

For Chokepoint 2, a total of ten elements were identified from the action plans; six of which have been completed to date (60%), and four are still under implementation. Initiatives in Chokepoint 2 focused on improving the infrastructure quality within APEC economies. The issue of supply chain 'visibility' was also highlighted during one of the workshops conducted under this chokepoint. The suggestion was that APEC members may need to harmonize their container visibility platforms and that the next steps should be to discuss a possible container visibility platform in APEC.

Infrastructure availability is indeed a crucial factor for ensuring supply-chain connectivity. Transport infrastructure, such as road, ports, container technology, makes a great difference in achieving efficient supply chain performance. A study by ADB (2012) highlighted that adequate investment in transport infrastructure could result in an accumulated reduction in trade costs ranging from 11.5% (the case of Central Asia) to 25.3 % (the case of Indonesia) of trade value in 2020.

The increasingly important role of regional infrastructure[12] should also be acknowledged as it could serve as an effective catalyst for stronger regional economic integration. Based on ADB (2012) study, the potential gains in real income from investment in transport regional infrastructure for Asia could range from USD 4.5 billion (the case of Sri Lanka) to USD 345.8 billion (the case of China) by 2020 (using 2008 USD price level). As such there is an urgent need

[12] Regional infrastructure project could be defined as a project with activities such as physical construction works and coordinated actions related to policies and procedures, spanning over two or more economies, or a domestic infrastructure project that has significant regional impact (Bhattacharyay 2008 in ADB 2012).

to foster regional cooperation in establishing a nurturing environment to encourage new regional infrastructure projects.

Chokepoint 3: Logistics Capacity

For Chokepoint 3, a total of eight elements were identified from the action plans; seven of which have been completed to date (88%). The initiatives in Chokepoint 3 highlighted the importance of local logistics sub-providers in the overall supply chain performance. It must be recognized that a supply chain can only be as strong as the weakest link. As such building the capacity and access of local logistics providers should be a priority in building a strong supply chain network. While efficient transportation infrastructure such as port is obviously important for trade competitiveness, port is actually only one element of the connecting factors between logistics and trade growth; as such we need to also look at the total cost of getting products from producers to markets (Damiri 2009). In industrialized countries, almost a third of logistics turnover is contracted to third party logistics (3PL) providers (Memedovic, et. al. 2008).

The wide access to ICT technology should be able to increase the productivity of SMEs significantly by facilitating easier access for local logistics sub-providers to connect with logistics Multi-national Corporations. However, a recent APEC survey (2011) found that common usage of IT resources by SMEs is quite low, and many are just starting to modernize and take advantage of both new and existing technologies. As such the role of national logistics association (as stated in Chokepoint 1) and intensive collaboration between SMEs would be very important in increasing the access of information and education for SME logistics companies.

Chokepoint 4: Clearance

For Chokepoint 4, a total of nine elements were identified from the action plans; five of which have been completed to date (56%).

The initiatives in Chokepoint 4 focused, among others, on improving the Single Window implementation as well as on encouraging economies to conduct the Time Release Surveys (TRSs). They also included the APEC Pathfinder to Enhance Supply Chain Connectivity by establishing a Baseline *de minimis* Value, which was endorsed by APEC Ministers in 2011.

Recent studies have demonstrated that higher *de minimis* values provide considerable economic benefits to customs administrations, the private sector, and consumers through costs savings and reductions in trade transaction costs, in particular by facilitating the immediate release of shipments thereby improving the movement of goods through regional supply chains. In 2011, ten APEC economies have agreed to exempt express and postal shipments from customs duties or taxes and from certain entry documentation requirements for shipments valued at or less than USD 100 recognizing, however, that economies may choose not to apply such exemptions for restricted goods or from taxes that are also applied to domestic goods. Economies can also commit to implementing a *de minimis* value of USD 100 or higher by the end of 2012 (see Annex A of the 2011 Annual Ministerial Statement).

A recent CAPEC study on *de minimis* thresholds in the APEC region noted that setting a *de minimis* threshold of USD 100 could amount to cost savings of USD 19.8 billion per year; also a 10% cut in delivery times could potentially expand exports by more than 4%.[13]

Chokepoint 5: Documentation

For Chokepoint 5, a total of 22 elements were identified from the action plans; 16 of which have been completed to date (72%).

The initiatives in Chokepoint 5 focused on customs administration and the application of e-commerce and paperless trading to cut costs and red-tape. The example of electronic Certificate of Origin (eCO) pathfinder project was highlighted as a success story in improving supply chain performance in cross-border trade.

In a recent APEC study (2012) about eCO readiness for APEC economies, it was found that most economies have done well in the five basic aspects for eCO issue: Domestic eCO System; Electronic Signature law and Public Key Infrastructure (PKI) technology; Secure exchange network and PKI mutual recognition; Government's acceptance of eCO issue; and Online eCO repository. The study found that economies have well-prepared infrastructure for eCO cross-border transmission but that they still need to arrive at certain agreements for cooperation with other related economies to jointly promote the implementation of eCO cross-border transmission.

Chokepoint 6: Connectivity

For Chokepoint 6, a total of 27 elements were identified from the action plans; 25 of which have been completed to date (93%).

The initiatives in Chokepoint 6 focused on improving supply chain visibility, for example by discussing the possible information network for sharing cargo status for improving multi-modal logistics and global supply chain. The concept of Secure and Smart Container (SSC) and Supply Chain Visibility (SCV) were also discussed. One of the projects put forth the systemic operation mode of SSC; it explained how to use the secure and smart container to realize container security monitoring and automatic operation function. For example, combined with the automatic software, the crane can identify and handle the secure and smart container in the yard without any human intervention thus improving the efficiency of container operation. Under SVC, the feasibility of constructing an information network to share cargo status information in the multi-modal logistics was also discussed.

IBM (2010) has emphasized the need for visibility to achieve a smarter supply chain management. As the number of supply chain partners increases, there is a need for accurate, time-sensitive information; yet despite continued technological enhancements, lack of visibility to worldwide, timely information to make in-stream decisions remains a significant issue. Aberdeen Group study (2012) highlighted that best-in-class companies are 2.44 times as likely to have online visibility into the customs events status, 1.92 times as likely to have formalized supply chain risk management, 1.78 times as likely to have the ability to analyze the current level of supply chain risk exposure, and 1.7 times as likely to have online visibility into supply chain disruptions.

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[13] *De Minimis* Thresholds in APEC report by Conference of Asia-Pacific Express Carriers; August 2011.

Another important deliverable for this chokepoint is the APEC Principles of Transborder Logistics Services Optimization (2011). The objective of the principles is to improve the efficiency of the processes associated with trading in goods and cargo flows across national borders by simplifying and harmonizing trade and transportation procedures and practices and optimizing trans-border logistics. APEC economies will be guided by the principles of: transparency, consistency, simplicity, efficiency, harmonization, standardization, inter-agency coordination and cooperation. Under the principle of inter-agency coordination, it was mentioned that APEC economies will establish National Trade and Transportation Councils or any other suitable mechanism. From these principles, it is apparent that initiatives such as the Authorized Economic Operators (AEO), the WCO Revised Kyoto Convention, Single Window, Time Release Study and the Globally Networked Customs are still seen as important for efficient trans-border logistics services optimization. These principles, should be successfully implemented, could have a significant impact in facilitating faster, cheaper and safer clearance at the border.

The SSC Development for Intermodal Transport also has the potential to speed up customs clearance and improve operational efficiency. SSC could save container stockpiling costs in ports or stations, and reduce inventory costs and storage costs caused by a large number of goods stockpiled.

Chokepoint 7: Regulations & Standards

For Chokepoint 7, a total of nine elements were identified from the action plans; seven of which have been completed to date (78%).

Submarine cable protection, cyber security and road safety standards are among the issues discussed under this chokepoint. This chokepoint highlighted the importance of industry-government collaboration in improving the supply chain performance and reliability.

Submarine cable facilities are considered as critical infrastructure that supports the progress and development of ICT (the internet economy) which in turn support economic and trade-related activities. For example, a Deloitte report (2011) noted that the direct contribution of the internet to the Australian economy is worth approximately USD 50 billion or 3.6% of Australia's Gross Domestic Product (GDP) in 2010 and the direct contribution of the internet to the Australian economy is set to increase by USD 20 billion over the next five years. McKinsey (2011) highlighted that almost USD 8 trillion exchanged hands each year through e-commerce; while SMEs using web technologies extensively are growing more quickly and exporting more widely.

In terms of road safety standards, an APEC 2011 report highlighted that road crashes account for an estimated 1.27 million deaths and 50 million injuries worldwide each year. They cost the equivalent of 1% to 3% of an economy's gross national product (GNP). The report also recommended specific actions which APEC could take to advance safety in the heavy vehicle logistic supply chain, such as: (1) to ensure hands-on training in eco-driving, fatigue management and corporate safety programs is available for the economies who choose to follow it up; (2) lobby for and support the development of a globally-focused good practice manual for heavy vehicle safety, directed at all sectors of the road transport industry; and (3) to assist developing economies to establish centers of excellence in driver training (APEC 2011b).

Chokepoint 8: Transit

For Chokepoint 8, a total of six elements were identified from the action plans; three of which have been completed to date (50%).

This chokepoint highlighted the importance of Cross-Border Customs-Transit Arrangements. ADB (2009) noted that transit operations are severe obstacles, often generating significant additional transport and administrative costs for imports and exports; in addition long waiting time at border crossings is a major contributor to the high cost in transit transport operations as well as uncertainties in delivery times. ADB (2009) also noted that the main reasons for high transit trade costs can be eased through regional efforts to harmonize transit operations and procedures and deepen cross-border cooperation. Related with AEO, which ensure the security of the supply chain, in 2010 an APEC compendium was completed of Authorized Economic Operators which will promote the establishment and mutual recognition arrangements of AEO programs. In addition, APEC Authorized Economic Operator Capacity Building Plan was also endorsed in 2011.

CTI in 2011 put forward an information paper (*2011/SOM1/CTI/018*) highlighting the impediments relating to Cross-Border Customs-Transit Arrangements based on Singapore's industry feedback which includes some of the following:

(1) Customs issues: varying customs documentation standards; need for multiple financial guarantees; lack of adequate IT infrastructure and inter-operable data-sharing system; arbitrary administrative fees and delays at customs offices.
(2) Goods inspection issues: uncoordinated national AEO programs; delays in security screening.
(3) Land transportation issues: restrictions on registration of trucks & drivers.

Some of the suggestions in addressing the above impediments were provided in the document (*2011/SOM2/CTI/012*), which included, for example, the following measures:

- Of the companies surveyed, some had raised suggestions for transit systems in the APEC region to be modeled after the European customs transit model. Elements within the European model, such as the New Computerized Transit System (NCTS), are reported to facilitate trade by linking up customs offices, thereby increasing the efficiency and effectiveness of transit procedures.
- Businesses raised the need for a common guarantee system, whereby only one comprehensive guarantee is required to cover the entire transit route for any given consignment of goods.
- A common guarantee system, supported by stringent common technical standards for vehicles and containers, will assure customs authorities that goods have not been tampered with in transit and thus exempt them from physical inspection (except in extraordinary cases) both at the customs office of entry and at the customs office of exit, to the benefit of companies who will enjoy more seamless transit.
- Employment of risk management techniques to identify and administer selective inspection of 'high-risk' goods in transit can also help to expedite the clearance of low-risk goods in transit, especially goods transported by AEO companies.
- Businesses called for the removal of restrictions on registration/operation of transit vehicles and drivers as one of the key solution to the impediment.

Summary

As the SCFAP is considered a living document, there is difficulty in establishing a firm evaluation of progress. In addition, some of the elements under the chokepoints had their respective timeline while some had none. Most of the SCFAP elements were due in 2012; several have a revised timeline of 2013; and a few up to 2015.

At the chokepoint level, Chokepoints 6 and 3 are among the top two in terms of implementation. Chokepoints 2, 4 and 8 only have around half of their elements implemented.

Table 7 Progress of Implementation for the Eight Chokepoints

	Elements implemented	Total elements	Percentage of Implementation
Chokepoint 1	9	12	75
Chokepoint 2	6	10	60
Chokepoint 3	7	8	88
Chokepoint 4	5	9	56
Chokepoint 5	17	22	77
Chokepoint 6	25	27	93
Chokepoint 7	7	9	78
Chokepoint 8	3	6	50
Total	79	103	77

The table below shows the grouping of elements under each performance cluster. More efforts would be needed to complete the projects under the clusters on Streamlining Procedures and Strengthening Rules & Institutions.

Table 8 Progress of Implementation for the Three Clusters

Cluster	Elements implemented	Total elements	Percentage of Implementation
Building Infrastructure & Capacity	38	45	84
Streamlining Procedures	22	31	71
Strengthening Rules & Institutions	19	27	70
Total	79	103	77

Within the three years of SCFAP implementation (2010 to 2012), 77% of the actions have been completed. This reflects good progress in terms of project completion and implementation. It also shows that there are rooms for improvement such as for member economies to add more actions within SCFAP and continue with the ongoing actions included in SCFAP until 2015 in order to achieve the 10% overall target.

CHAPTER 4 ANALYSIS ON SELF-ASSESSMENT SURVEY

As the third track to assess the progress of SCFAP implementation, a self-assessment survey was developed to collect member economies' views and information on the (potential) impact of SCI actions on policy change and on improvement in supply chain performance. The survey also served the purpose of gathering policy recommendations in improving the remaining actions as well as in adding new actions under the SCFAP.

The survey was sent on October 2012 to 21 APEC member economies and nine APEC sub-fora that are actively involved in the implementation of SCI-related activities; and by the end of February 2013, 21 responses were submitted to the PSU. The responses provided a snapshot on the implementation of activities under the SCFAP. Based on the economies' views and comments on the SCFAP projects, the analysis of the survey responses complemented the assessment on external and internal indicators, providing thus a holistic view of the different perceived outcomes as a result of the SCFAP activities.

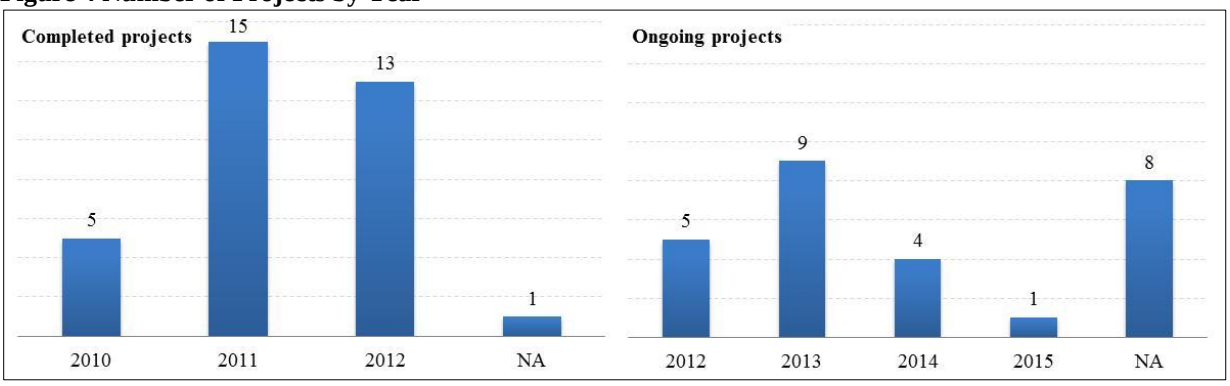
The responses and analysis of each question in the self-assessment survey are presented and discussed in the following paragraphs.

Question 1

List the completed or current Supply Chain Connectivity Action Plan activities that your economy/sub-fora/working group is actively involved with as a proponent or co-sponsor or participant.

For question 1, member economies/sub-fora reported a total number of 61 projects, of which 34 were completed and 27 ongoing. These projects covered a broad range of activities, ranging from topics such as supply chain visibility to best practices and benefits of national logistics associations.

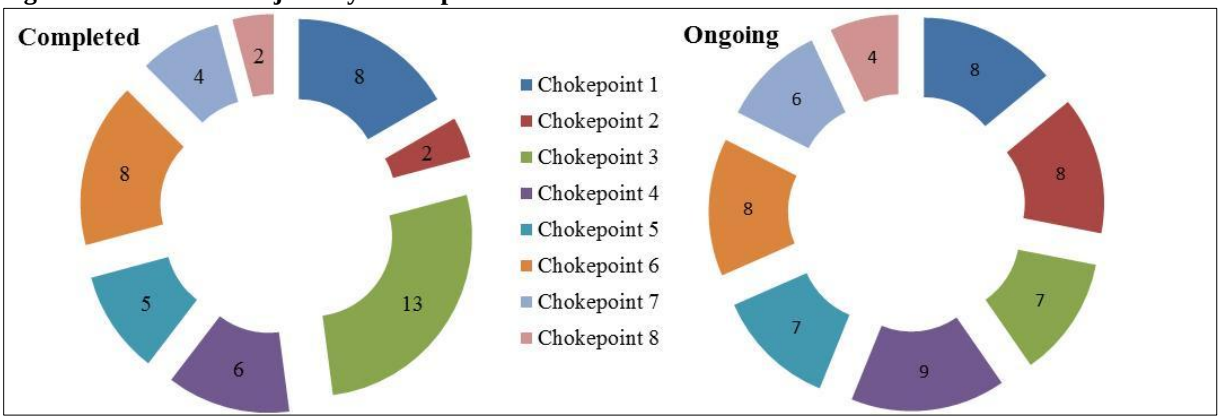
Figure 4 Number of Projects by Year



Note: NA means date is not specified.

In the period 2010 to 2012, 34 projects were completed (figure 4, left panel), with the majority of projects completed in 2011 and 2012. The completion date for one project however was not specified (NA in the chart). In the same period, 27 activities were ongoing. Out of these, five were supposed to be concluded in 2012; nine in 2013; four in 2014; one in 2015; and the remaining eight were without a completion date. Looking at the chart on ongoing projects, there is room for member economies/sub-fora to design and implement more activities from 2013 to 2015.

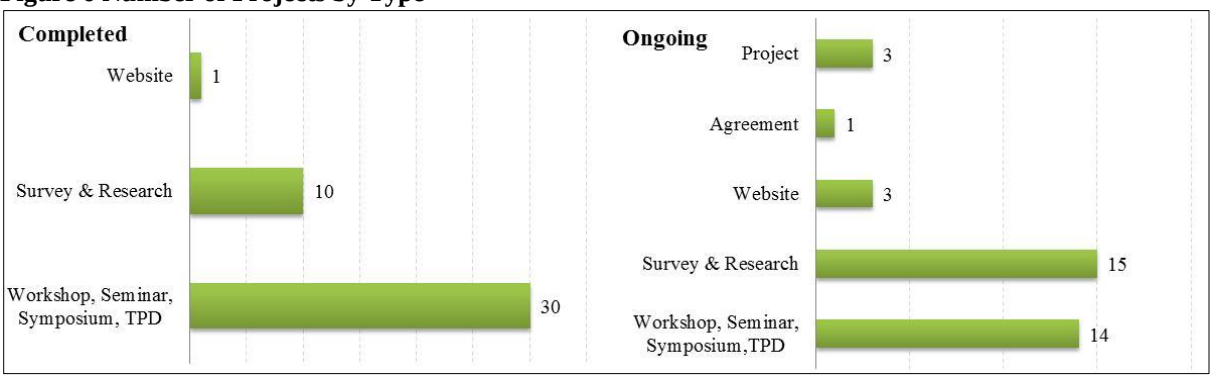
Figure 5 Number of Projects by Chokepoints



Projects under SCFAP are designed to address either one chokepoint or multiple chokepoints. For completed projects, from 2010 to 2012, Chokepoint 3 recorded the highest number of projects, with 13 projects completed. This is followed by Chokepoints 1 and 6, with eight projects each. Chokepoints 2 and 8 had fewer projects with only two activities each completed during this period.

Within the ongoing projects, chokepoints are more evenly distributed: nine ongoing projects relating to Chokepoint 4; eight projects focusing on Chokepoints 1, 2 and 6; and four projects addressing Chokepoint 8.

Figure 6 Number of Projects by Type



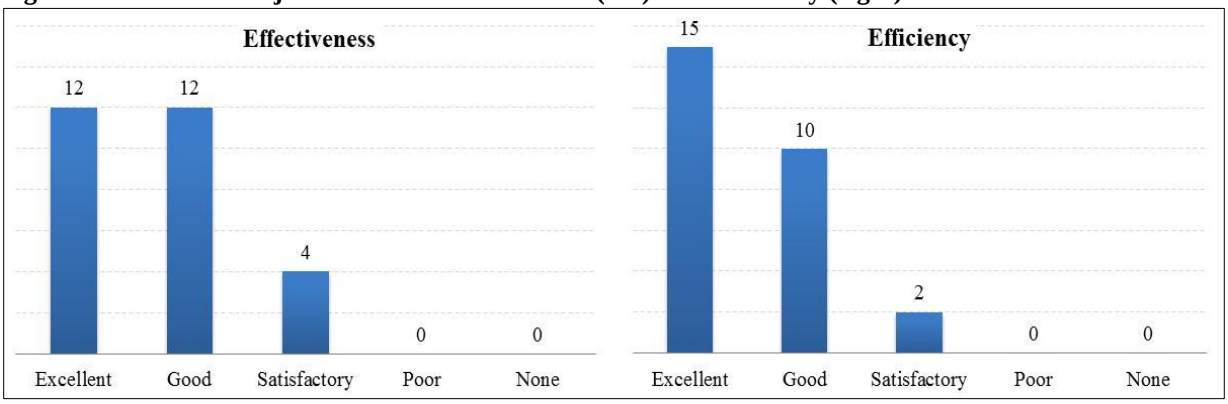
As to the type of projects, the survey results show that 30 workshops, seminars, symposiums and trade policy dialogues took place from 2010 to 2012. In the same period, ten surveys and research projects were undertaken, and one website created. As for the ongoing projects, there were various activities such as workshops, research, and consensus building (agreement). Training and capacity development formed a major component with 14 workshops, seminars, symposiums and trade policy dialogues in the pipeline. Approximately 15 surveys and research are expected to be carried out, in addition to efforts to complete three websites and one Mutual Recognition Agreement. Three activities were classified as projects since their scope of work was not evident.

Question 2

Please rate the level of success for the completed SCI projects based on the pre-designed components.

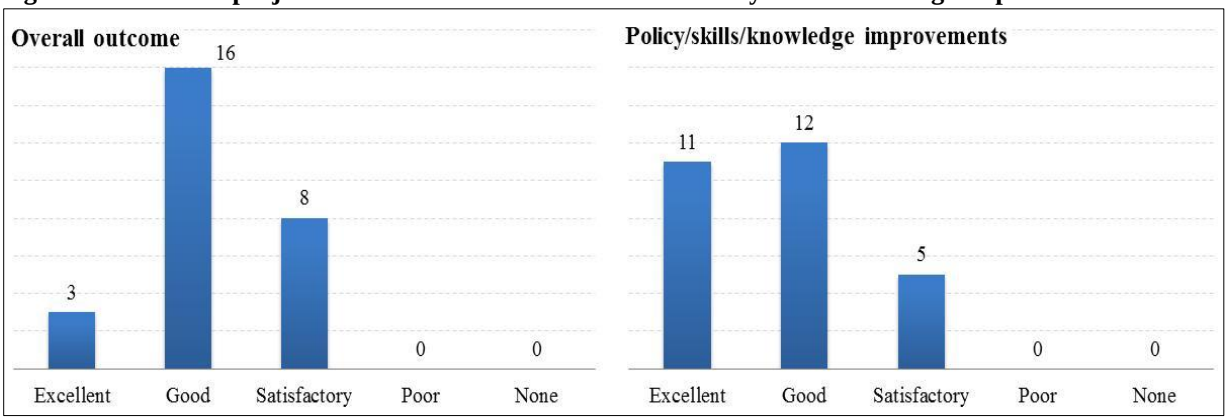
For this question, APEC members/sub-fora rated the success of the 28 completed SCI projects[14] on two levels: (a) effectiveness (on time) and efficiency (on budget), and (b) the impact of the project on supply chain performance, covering overall improvements, policy/skills/knowledge improvements, time improvements, costs improvements, and uncertainty improvements[15].

Figure 7 Number of Projects Rated on Effectiveness (left) and Efficiency (right)



Most projects were rated highly on effectiveness and efficiency. Eighty-six percent of completed projects (24 out of 28) and 93% of completed projects (25 out of 27) were rated as 'Excellent' or 'Good'. There was one project with no rating on efficiency. This result indicates that the SCFAP projects have been implemented both on time and on budget. In addition, 12 projects were rated as 'Excellent' on both effectiveness and efficiency, and these comprised activities ranging from regional workshops on single window to workshops that enhance SME's capacity to participate in supply chains.

Figure 8 Number of projects Rated on Overall Outcome and Policy/Skill/Knowledge Improvement

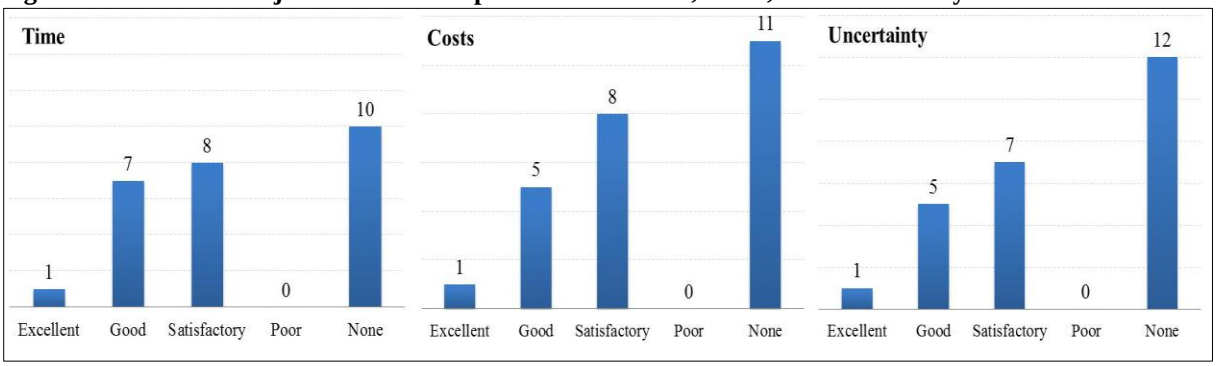


In terms of overall outcome, the ratings were also positive. Three projects were rated as 'Excellent'; 16 as 'Good'; and 8 as 'Satisfactory'. One project was not rated on overall outcome. Economies/sub-fora also provided their views on the impact of SCFAP projects on policy/skill/knowledge improvements. Nearly 40% of projects (11 out of 28 projects) were deemed to have resulted in 'excellent' policy/skill/knowledge improvements, and over 40% of projects (12 out of 28 projects) resulted in 'good' policy/skill/knowledge improvements.

[14] Five ongoing projects were also rated, but are not taken into account in the analysis.

[15] Supply chain uncertainty is defined as the lack of consistency in supply chain transit time, around which users have organized their activities. The self-assessment survey provided specific explanation and examples.

Figure 9 Number of Projects Rated on Improvement in Time, Costs, and Uncertainty



To complement the external indicators assessment on time, costs and uncertainty, economies/sub-fora were asked to provide their views on the impact of SCFAP projects on these three elements.

Different with the results presented in the earlier sections, in this section, a significant number of projects were rated as 'None' which means that there was deemed to be no improvement in time, costs and uncertainty from the implementation of these projects. In some cases, economies/sub-fora listed concrete outputs that the SCFAP projects have produced, but they also indicated the difficulty of linking the outputs to specific outcomes (reduction in time, costs, and uncertainty in this case). Some economies indicated that they have received positive feedback on the projects, but that it was too early to ascertain the progress or impact of these projects. In many other cases, economies/sub-fora found it difficult to associate a particular project with quantitative figures on time, costs, and uncertainty, or to measure the improvements in time, costs and uncertainty in the first place.

Economies/sub-fora also rated a number of projects as 'Good' and 'Satisfactory' with more in the latter category (31% of projects as having a satisfactory impact on time, 32% as having a satisfactory impact on costs, and 28% as having a satisfactory impact on uncertainty). Only one project was rated as 'Excellent' in all the three elements of time, costs and uncertainty.

Many economies/sub-fora also explained the reasons behind their ratings which cover the following three levels of outcomes:

- Knowledge level: Several viewed the SCFAP projects to have addressed the crucial knowledge gap within the government or industry, provided evidence on significant gains from enhanced multi-modal connectivity, and enhanced understanding of the current situation and promoted awareness.
- Cooperation level: Economies/sub-fora regarded SCFAP projects to have improved engagement and competitiveness of key stakeholders, and offered a platform to enable communication between government and the private sector.
- Policy level: Several projects were seen to provide useful recommendations and best practices on supply chain visibility, improving policy coordination among members, and providing inputs to relevant policies, thus leading to important policy reform and strengthened local institutions.

Question 3

From the Supply Chain Action Plans that your economy/sub-fora/working group is actively involved with (question #1), please identify 1 program that you have considered to be the most successful one. Please explain the reasoning or criteria for your answer.

Member economies/sub-fora identified 16 projects to be the most successful projects under the SCFAP. Several of these projects contributed to the efforts on addressing more than one chokepoint, hence one project may appear under more than one cluster. These projects spanned across the eight chokepoints, with more projects falling under Chokepoints 1 and 4.

- **Cluster I: Building Infrastructure and Capacity**

There were six projects under cluster I on Building Infrastructure and Capacity: (1) Transborder Control and Optimal Transborder Logistics; (2) Programme for enhancing the Capacity of APEC Local/Regional Logistics Sub-providers; (3) Supply Chain Visibility Feasibility Study; (4) Study on the Travel Time of Good Vehicles on Main Economic Corridors; (5) Global Supply Chain Workforce Development Needs; (6) Automated Transport Management Systems Implementation for Optimizing Logistics within the Asia-Pacific with emphasis on ITS and GNSS Applications[16].

These projects generally drew expertise from different sectors to share knowledge and best practices and also to improve the understanding of APEC economies on relevant issues. Some projects also contributed to strengthening the capacity of private sector and the workforce to participate more productively in the supply chains. Other projects reinforced the local infrastructure through the development of local commercial centres and enhancing economic corridors so that supply chains could function more smoothly.

- **Cluster II: Streamlining Procedures**

There were seven projects under cluster II on Streamlining Procedures, namely: (1) Transborder Control and Optimal Transborder Logistics; (2) APEC Regional Workshop on Single Window; (3) Korea-Chinese Taipei Electronic Certificate of Origin (eCO) Pathfinder project; (4) Case Study on Establishing an APEC *De Minimis* Baseline Value; (5) AEO program, which accredit low-risk companies as AEOs for ensuring the supply chain security, so that the global trade could be facilitated; (6) Joint Border Management System; and (7) Strengthen Cooperation with the Relevant International Organizations.

These projects examined ways to streamline procedures through knowledge sharing, in-depth study of situation on the ground, technical assistance and training, as well as harmonization with international standards. Several projects under this cluster took a 'pathfinder' approach, where several economies pioneered to undertake an action with the aim of demonstrating results in order to attract the other members to participate.

Taking the APEC Regional Workshop on Single Window (SW) as an example, based on shared information and experiences of economies that have introduced SW systems or exchange trade-related data/documents electronically, the project identified difficulties faced by economies that have not introduced SW and provided the means and strategies to assist them. Economies found that the project has helped to reduce the gap between developing economies and the more developed ones.

The Korea-Chinese Taipei Electronic-Certificate of Origin (eCO) Pathfinder project was another example. The project facilitates cross-border paperless trading and more economies are now looking at participating in this project.

- **Cluster III: Strengthening Rules and Institutions**

There were eight projects in cluster III on Strengthening Rules and Institutions, namely: (1) Compendium of Best Practices and Benefits of National Logistics Associations (NLAs) in Selected APEC Economies; (2) Transborder Control and Optimal Transborder Logistics; (3) Chokepoint 8-related programs; (4) AEO Program; (5) the New Advance Clearance Process (PE); (6) Global Supply Chain Workforce Development Needs; (7) Automated Transport Management

[16] ITS refers to Intelligent Transportation System, and GNSS refers to Global Navigation Satellite System.

Systems Implementation for Optimizing Logistics within the Asia-Pacific with emphasis on ITS and GNSS Applications; (8) chokepoint 1-related programs.

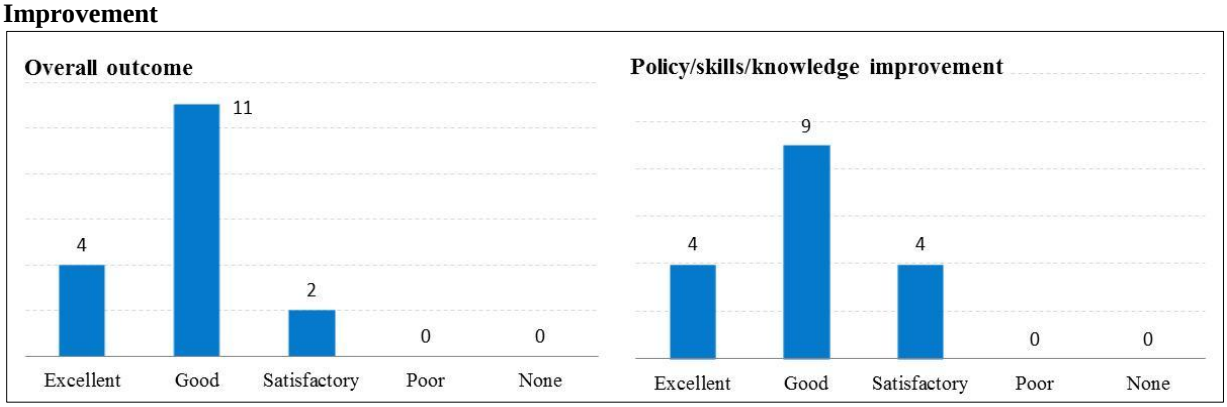
These projects have contributed to strengthening rules and institutions from various aspects such as strengthening the role of NLAs; sharing information on transport and logistics governance; suggesting guidelines to facilitate transit and eliminate existing barriers; addressing workforce development, women's involvement and capacity building; and coordinating policies and engaging stakeholders.

Question 4

Between the years of 2010 to 2012, how well has your economy/sub-fora/working group met the objectives of improving the supply chain performance in terms of time, costs and uncertainty?

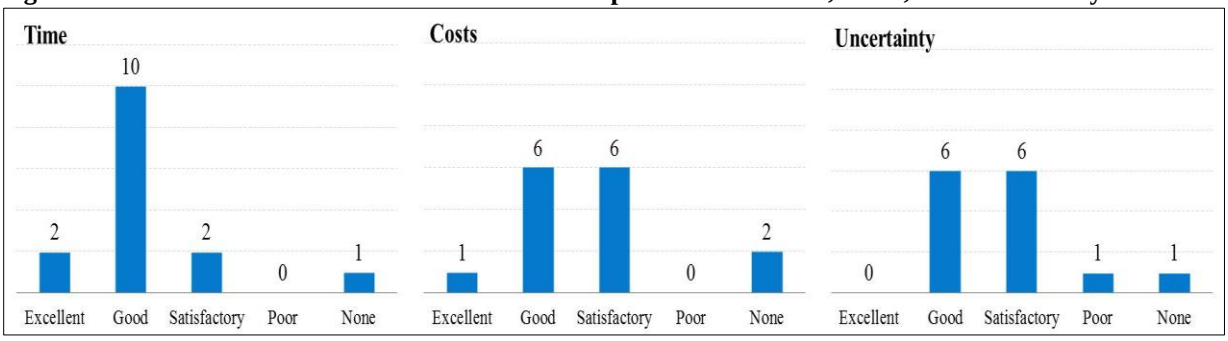
Question 4 was a self-evaluation by member economies/sub-fora on their individual performance in meeting the SCFAP goals. Five aspects were examined including overall improvements, policy/skills/knowledge improvements, time improvements, costs improvements, and uncertainty improvements.

Figure 10 Number of Economies Self-evaluated on Overall Outcome and Policy/Skill/Knowledge Improvement



Base on the results, member economies/sub-fora rated themselves positively in terms of overall outcome and policy/skills/knowledge improvement. Three economies gave themselves an 'Excellent' on both aspects while most member economies/sub-fora gave themselves a 'Good' rating: 11 out of 17 (65%) economies/sub-fora on overall outcome, and 9 out of 17 (53%) on policy/skills/knowledge improvement.

Figure 11 Number of Economies Self-evaluated on Improvement in Time, Costs, and Uncertainty



Between 12 and 15 economies/sub-fora rated their own performances in improving time, costs and uncertainty while a number of economies/sub-fora skipped this portion. Among the three elements, economies were most confident of their improvement in time: 12 out of 15 economies/sub-fora selected 'Excellent' and 'Good' in this aspect. On improvement in costs

and uncertainty, most economies/sub-fora rated their performance as 'Satisfactory' and 'Good' (6 in each category and in each aspect). A few economies/sub-fora selected the 'None' or 'Poor' categories due to the difficulties of measuring their performances in terms of improvement of time, costs and uncertainty.

Member economies/sub-fora also provided more information to substantiate for the self-evaluation as follows:

- The development of the **Australian** National Ports Strategy has led to knowledge improvements and initiatives to improve data collection on ports. Between 2010 and 2011, the number of days needed for border clearance time (all inspections) dropped from 0.9 days to 0.4 days. The Waterline data shows the cost of cargo handling has risen while the ship rate has had a positive growth rate but with some variability. On the land side, the vehicle (truck) notification IT system is under implementation, providing almost real-time information to empty container park operators on the expected arrival (notifications) of trucks for specified (30 minute) time-slots during the day.
- In 2012, **Chile** has enacted a number of provisions to achieve the SCFAP goals and other bilateral and multilateral commitments[17].
- **China** led the Project for Enhancing the Capacity of APEC Local/ Regional Logistics Sub-providers to improve the understanding of the current situation and explore ways to improve engagement and competitiveness of local/regional logistics sub-providers. The goals of the project were successfully achieved, and adequate knowledge was acquired to design a multi-year project with great potential for improved supply chain performance.
- **Hong Kong, China** was ranked very favorably on Ease of Doing Business, Logistics Performance Index, and Enabling Trade Index. Hong Kong, China also participated actively in various projects under the SCFAP. The Road Cargo System of the Customs and Excise Department was newly launched to enable traders to submit advance cargo information electronically. Together with other systems, these have made the cargo clearance process highly efficient. The port facilitates and light dues charged on ocean going vessels were further reduced by 20% in March 2011.
- As one of the coordinating economies of Implementation of Single Window System under chokepoint 4, **Japan** has held two workshops to enhance the SW development and SW international interoperability.
- **Korea** has implemented the eCO pathfinder project with Chinese-Taipei to realize paperless trading and held a workshop on FTA rules of origins. These activities have improved Korea's supply chain performance by providing a best practice for paperless trading and sharing information and experience of ROOs.
- **Malaysia** has been very supportive of trade facilitation initiatives in general. Closer collaboration between the public sector and private sector has resulted in an increase of ranking for Trading Across Borders indicator under the World Bank Doing Business report 2013 from the previous year.

[17] The provisions include: Electronic Transmission of Customs Transit Declarations; Elimination of requirement of payment of duties and taxes for imports under the suspension regime; A reduction in the rate applicable to goods entered under the Temporary Admittance Applications in relation to the tariff preference that they are looking to attain; Approval of rules regarding the presentation of electronic manifests; Creation of the Public-Private Customs Council; Approval of the regulatory framework for the implementation of electronic dispatch; The modification and the facilitation of the processes for the approval of external deposit enclosures.

- In **Mexico,** approximately 30 economic operators involved in foreign trade transactions, including government agencies, exporters, importers, freight forwarders and customs auxiliaries have benefited, since single window represents a simplification of 40 documents, 165 administrative procedures and 200 data elements. As of 30 October 2012, 88.2 millions of paper sheets have been saved, which represents 337 million litres of water and 43 thousand trees. More than 75,000 users are registered; this captures 100% of operators related to foreign trade transactions.
- **Peru** has implemented the Foreign Trade Single Window on 1 January 2010. In 2011, a New Process of Customs Clearance and the Express Delivery of Consignment Procedures were implemented, and the International Transit of Goods Procedures was automated. In 2012, Peru implemented advanced rulings in criteria application of customs valuation of goods in four categories[18] and participated in the APEC Questionnaire on Regulations and Procedures for Good Transit.
- **The Philippines'** ranking in the WEF Global Competitiveness Report improved significantly during the 2010-2012 period. From the 85th slot in 2010, the Philippines rose to 75 in 2011, and to 65 in 2012.
- **Singapore** continues to be ranked very favourably on the Ease of Doing Business, Trading Across Borders, and Logistics Performance Index reports in 2012.
- **Chinese Taipei** Customs helped carriers save the operational cost of shipping companies about USD 1,170,000 annually. The pilot project, RFID e-seals, also saved waiting time up to 100,000 hours per year. On Customs side, Chinese Taipei Customs reduced the number of physical escorts up to 30,000 person-times per year. Chinese Taipei Customs also saved operation time up to 63,000 hours. In addition, Customs officers also do not need to waste time moving, sealing and inspecting containers affixed by RFID e-seals.
- During the past few years, **Thailand** has been focused on infrastructure and hardware to improve supply chain performance, and Thailand has realized that the National Single Window (NSW) system still needs an extensive number of skilled human resources, while the actual system still needs further development to connect all related agencies.
- **The United States**' C-TPAT has been the key Government voluntary initiative to ensure compliance with supply chain security measures. The US has been working diligently on trade transformation initiatives, including CBP's Automated Commercial Environment, Centers for Excellence and Expertise, Simplified Entry, Role of the Broker, Trade Intelligence, Trade Partnerships, and One U.S. Government at the Border. Other aspects of work also contributed to supply-chain performance, such as work under the IIEG group, and the Global Supply Chain Seminars. In addition, the GNSS technology also benefits the cost and time improvement.
- **Viet Nam** reported that capacity building programs under CTI have contributed to raising the awareness, sharing best practices and experiences as well as providing diversified approaches and skills to the issues.
- The **TPTWG/Canada** has played a key role in supporting the SCFAP implementation through the coordination of projects; workshops and focus groups; and other cross-fora engagement in order to address the transportation-related supply chain chokepoints. The TPTWG has also played a leading role in benchmarking activities related to supply chain performance measurement indicators in collaboration

[18] They are application of returns, suspensions, exemptions of customs duties, and re-import of repaired or altered goods; application of quotas; criteria application of customs classification of goods.

with non-APEC actors such as the World Bank, International Transport Forum (ITF) and private sector stakeholders. More specifically, the TPTWG's Intermodal and Intelligent Transportation Experts Group (IIEG) has endeavored to contribute to overall supply chain performance through continued efforts on developing workforce capacity, increasing involvement of women in the supply chain, and contributing to the awareness of and development of technology.

Question 5

a. Please list below any positive aspects such as better policy making, tangible impacts, knowledge sharing etc. that are achieved through the activities under the SCI Action Plan.

Economies/sub-fora reported a number of positive aspects that have been achieved through the activities under the SCFAP, and many of these aspects are interlinked.

The most notable aspect is about knowledge sharing or measures in addressing the knowledge gap. According to the internal indicators assessment, a substantial portion of SCFAP activities were workshops/seminars/symposium, and these activities generally brought stakeholders from the government, industry and academia together to share views, best practices and lessons learned from past experiences. The SCFAP actions thus raised awareness on some important issues related to supply chain performance, and provided a reference or policy guidance to member economy/sub-fora on further improvement. In a way, this would empower member economies and build up their capacities in undertaking collective actions.

The second positive aspect is that SCFAP actions have provided a platform or network for economies to communicate with the industries, and to actively engage and enhance the capacity of SMEs. Thus the actions have helped to improve the relationship between the government and the private sector. It also serves as a platform for APEC economies to coordinate their policies and regulations on many fronts, such as border control, safety and security, intermodal transportation logistics, supply chain visibility, among others.

The adoption of new technologies is another important aspect. Several actions under SCFAP have improved the awareness and understanding of new technologies. For example, the smart container technologies improve supply chain visibility; the ITS and GNSS systems and technology harmonize approaches of transportation and cargo flow; and cross-border information exchange platform (the eCO exchange system between Chinese Taipei and Korea) has led to a 6% (approximate) savings on cost. These technologies automate transportation systems, integrate processes, and streamline procedures. The result from the external indicators on ICT is also the strongest compared with the other results.

On the domestic level, to implement the SCFAP actions, some economies have set up or strengthen local institutions, improved physical infrastructure and networks, or are reviewing and revising the rules and procedures that affect supply chain performance.

b. Can any of the aspects identified under Q5a be enhanced?

Economies/sub-fora provided important points on the aspects that could be enhanced under the SCFAP. Some comments were general, while others were more specific to certain projects.

In general, several economies/sub-fora indicated that the private sector (especially shippers and freight forwarders) could be involved more in SCFAP actions, for example, through dialogue on a needs basis to exchange views on major issues or concerns and latest trends and development in the use of technologies. In addition, economies/sub-fora could put in more efforts to synchronize definitions and identification of good sources of data for quantitative

measures. There is also a need to harmonize activities with relevant international organizations (ISO, UN/CEFACT) to improve efficiency of supply chains and to allocate additional funding to study and survey the activities of supply chain stakeholders on the ground. Lastly, economies/sub-fora also emphasized the importance of implementing existing technologies, supporting tracking technologies as well as exploring new technologies.

On the SCFAP itself, economies/sub-fora deemed that timely update on the actions is desirable, given changes in the economic environment and other external factors. More capacity building activities on a regular basis could be conducted, taking into account the different stages of development of member economies in human resources, organizational, legal and institutional framework. In addition, APEC could assess projects in a more timely fashion and publish the results, so as to help identify successful areas and areas that need further work or fresh initiatives.

At the project level, there is a call for enhancing efforts on Single Window (SW) system by improving domestic interoperability and connecting to SW systems of other economies. The eCO pathfinder project could also be further promoted to improve its effectiveness.

Domestically, economies mentioned that the availability and quality of physical infrastructure are still a challenge for some economies, hence improvement is needed. Furthermore, government and regulatory involvement to streamline regulatory processes at borders is essential in improving supply chain performance.

Question 6

Does your economy/sub-fora/working group have any suggestions or policy recommendations in how the SCI Action Plan can operate more effectively and efficiently?

A significant number of economies /sub-fora provided concrete suggestions to improve the effectiveness and efficiency of SCFAP.

Many economies/sub-fora suggested that economies could provide more feedback on the progress of SCFAP implementation; review the progress of SCFAP more timely; and publicize the results so as to improve the understanding of SCFAP and garner the support and involvement from the businesses and industry. It was also suggested that a Sub-group on Supply Chain Efficiency efforts could be set up to provide regular updates on the different projects.

There were also suggestions that member economies could engage more with relevant stakeholders to identify specific problems faced by each member and priority areas/menu of actions in respect to different performance clusters, and then to design targeted capacity building activities with measurable goals in a phased approach. APEC could also develop policy guidelines or best practice guidelines for each chokepoint for reference by the economies.

A greater level of participation and coordination also would improve the effectiveness and efficiency of SCFAP. Economies/sub-fora indicated that communication between coordinating economies and other economies could be strengthened so that more economies could be on board in all the programmes implemented. Cross-fora collaboration could also be encouraged.

In addition to the above, the enhancement of physical infrastructure for both developed and developing economies could be better facilitated through the identification and allocation of funds for key projects. In this respect, APEC could work with relevant international organisations such as the ADB to prioritize the projects.

Question 7

To what level do your economy/sub-fora/working group's general activities support the eight chokepoints under the SC Action Plan?

Question 7 was aimed to find out and understand the member economy/sub-fora's level of involvement and support in each chokepoint. This would help to identify areas where the SCFAP should focus on. Twenty-one economies/sub-fora responded to this question but a few responses were incomplete.

Table 9 Number of Economies/Sub-fora Supporting Each Chokepoint

	Very well	Moderately	Slightly	Not at all
1. Transparency	10	2	4	2
2. Infrastructure	5	5	6	2
3. Logistics Capacity	3	9	1	6
4. Clearance	9	8	2	2
5. Documentation	11	2	5	3
6. Connectivity	6	6	6	1
7. Regulations & standards	6	6	3	3
8. Transit	7	4	5	2

Table 9 shows that the economies/sub-fora seemed to be undertaking activities which support these three chokepoints more than the other chokepoints, namely Chokepoints 5 (Documentation), 1 (Transparency), and 4 (Clearance). Comparing across the eight chokepoints, a large number of economies/sub-fora rated their support in these three chokepoints as 'Very well': 11 economies/ sub-fora in Chokepoint 5, 10 in Chokepoint 1, and nine economies in Chokepoint 4. Support to the other chokepoints was moderate with five to seven economies/sub-fora rating their support as 'Moderately'. These chokepoints are namely, Chokepoints 2 (Infrastructure), 6 (Connectivity), 7 (Regulation & standards), and 8 (Transit).

Taking the categories of 'Very Well' and 'Moderately' as a general indication of the level of involvement in all the eight chokepoints, the number of economies/sub-fora who were involved in each chokepoint ranged from 10 to 16. Chokepoint 4 has the highest level of involvement with 16 economies/sub-fora, and Chokepoints 2 and 8 each involving 10 economies/sub-fora. On the flip side, a few economies/sub-fora reported that they were not involved in one or some chokepoints, which may imply the need to get a higher level of participation among member economies/sub-fora.

Member economies/sub-fora also provided specific examples to show how they have supported the SCFAP. They are as follows:

- **Australia**'s transport and logistics governance is well defined and collaboration is occurring through all levels of government, with activities and programs undertaken through a broad range of government and non-government/ industry players. Reforms

involving national transport and logistics systems are being undertaken[19], and a rigorous system for assessing the impact of new legislation and regulatory proposals is in place.

- In **Chile**, the Single Window is directly related to the facilitation and enhancing of supply chains; the Authorized Economic Operator not only promotes trade facilitation but also security in the supply chain; the Regional Intelligence Liaison Offices obtain intelligent information regarding high risk operations; and the Electronic Clearance folder allows streamlining the dispatch of goods, thus avoiding the movement of hard copies between port terminal, non-port enclosures and customs warehouse enclosures.
- **China** is leading a project that supports addressing Chokepoints 1, 3, 5 and 7 through research. The project also works on establishing a logistics information network that will facilitate SME logistics service providers' access to trade-related information. A following multi-year project will tackle Chokepoints 2, 4, 6 and 8, providing a window to address trade-related problems encountered by SME logistics service providers and regulatory and policy issues.
- **Hong Kong, China** has been taking various initiatives to improve supply chain performance with respect to air, land, and maritime transportation. Notwithstanding the high efficiency in cargo clearance, Hong Kong, China has been launching new initiatives conducive to trade facilitation, such as the Road Cargo System and the Intermodal Transhipment Facilitation Scheme in 2010, and the Authorized Economic Operator Program in 2012 (piloted in 2010).
- **Japan** contributes actively in SCFAP initiatives: in 2010, with Chinese Taipei, Japan prepared the report of the SCCP Single Window Report/ Working Toward the Implementation of SW in the APEC Economies and International Interoperability; also in 2010, with the United States, Japan developed APEC Authorized Economic Operator Compendium; in 2011, Japan and Hong Kong, China developed APEC Guidelines for Customs Enforcement of Counterfeiting and Piracy and its check sheet.
- **Korea** has held and participated in various activities of relevant international organizations, such as Seoul Symposium on Trade Facilitation and the Doha Development Agenda, the Regional Single Window Workshop, the WCO Global AEO Conference, International Origin Conference, etc.
- **Malaysia** is actively looking at current issues that are affecting the logistics activities in Malaysia, e.g. issues relating to Port Charges Handling, e-commerce platforms, and National Single Window. Malaysia is also undertaking case studies on the ground to verify the time taken, costs and number of documentations affecting export and import.
- **Peru** has reorganized local institutions to improve the business environment and the logistics services. In addition, in 2012, Peru implemented AEO program and started to apply Customs Tariff adding the Fifth Recommendation of Amendment to the Harmonized Description and Coding System. Peru is in the process to establish guidelines of the application of border measures for copyrights and related rights protection.
- **The Philippines** implemented the Automated Export Declaration System and National Single Window, and is working on policy recommendations to intensify infrastructure development, particularly improvements on the Roll-on-Roll-off service system.
- **Chinese Taipei** held several workshops to address chokepoint 3. Particularly, the APEC Workshop on Transporting Goods and Services Reliability and Cost-Efficiently produced the Compendium of Innovative Strategies Available to SMEs for Reducing Transportation Cost, which was endorsed by the SMEWG. Chinese Taipei and Malaysia

[19] Major current reforms include: Stronger Shipping for a Stronger Economy shipping reform package, the Coastal Trading Act 2012, Heavy Vehicle Regulatory Reform, the establishment of the National Maritime Safety Regulator; and National Rail Safety Regular.

implemented an information platform that was used for the pilot cross-border test in 2010, and which helped to establish a global information platform for multi-modal transport.

- **Thailand** has conducted the Ministerial Strategic Plan to Support the National Logistics System Development (2012-2016) to achieve efficient transport logistics system. The key strategies include the development of transport infrastructure connecting with domestic and international networks, the support of railway and water transport use to reduce logistics transport cost, and the development of new transport gateways to facilitate the growth of trade in the region.
- The **EWG** has many activities that will help the development and trade of (1) energy (e.g., LNG, electricity) by looking at issues related to the integration of various forms of renewable energy onto a smart grid or the growing role of natural gas in the global energy economy; and (2) energy products and services (e.g., LED lights, air conditioners, best practices) by working on standards research and testing protocols that will facilitate a freer flow of products based on consistent standards and measuring methods.
- The **SCCP** has had great success in promoting the AEO concept. In addition, the SCCP engages the trade community through the APEC Customs Business Dialogue and the Virtual Working Group, and assists in meeting the objectives of the Action Plan through promoting dialogue, transparency and standardization.

Question 8

Describe examples of lessons learned or best practices in your economy/sub-fora/working group in implementing the SCI Action Plan. Please also provide any suggested activities that you think it would be useful to further expand the current SCFAP in order to achieve the 10% target in 2015.

Economies/sub-fora cited some exemplary projects, namely:

- **China** mentioned that through implementation of the programme for Enhancing the Capacity of APEC Local/ Regional Logistics Sub-providers, China have discovered the need for more efficient ways of gathering information and gaining an understanding of the actors involved in the supply chain.
- **Korea** found the 'systematic approach' proposed by **the United States** is one of the useful ways to assess the progress of the supply-chain performance and enforce capacity building.
- Closer collaboration with the private sector was emphasized by **Malaysia, the Philippines** and **Singapore**. Particularly, the Philippines has created a public-private sector group through the National Competitiveness Council to address challenges for improving supply chains. Singapore's success lies in the public-private partnership implementation of National Single Window and the TradeNet.
- **Chinese Taipei** listed the eCO exchange model between Chinese Taipei and Korea as a best practice for cross-border paperless trading. The positive results of the RFID e-Seal technology and the Container Movement Security Project were also showcased to enhance supply chain security.
- **The United States** suggested assisting Chokepoint 8 through an AEO mutual agreement, because AEOs, which are accredited as low-risk companies that ensure the supply chain security, could lead to faster processing of goods by Customs and reduce examination rates. The United States is also implementing several successful projects regarding workforce development, technology standards development, models of short sea shipping and ideal energy transportation. Besides, the United States suggested that cooperation would be achieved through implementation of innovations in all transportation and logistics areas including ITS and GNSS location-based guidance and navigation systems.

On expanding the current SCFAP in order to achieve the 10% target in 2015, member economies suggested the following activities:

- Better utilization of current technologies to gather information and understand the situation so as to design future actions and policies.
- On Chokepoint 8, to develop activities such as the facilitation of transit through a third party to facilitate the elimination or reduction of trade barriers.
- Collect Time Release Survey (TRS) results to evaluate the quantitative progress of supply-chain performance.
- Collaborate with the World Bank to address burdensome customs documentation and other procedures.
- Propose more capacity building programmes that involve more than one sub-fora.
- Support PSU in establishing the minimum of indicators to measure compliance progress.
- Develop APEC Policy Guidelines for each chokepoint.
- Identify a key opportunity to bring all information together in one place and reduce multiple and complex reporting requirements.
- A more general discussion or high-level meeting on the progress to highlight the importance of the SCFAP in addressing chokepoints in support of APEC-wide objective of advancing regional economic integration.

Summary

The self-assessment survey has gathered useful information and feedback that could be used to strengthen the implementation of SCFAP. Member economies reported benefits from SCFAP related projects in improving supply chain performance, and many of these aspects are interlinked.

The most notable aspect is knowledge sharing or measures in addressing the knowledge gap. According to the internal indicators assessment, a substantial portion of SCFAP activities were workshops/seminars/symposium, and these activities generally brought stakeholders from the government, industry and academia together to share views, best practices and lessons learned from past experience. The SCFAP actions thus raised awareness on some important issues related to supply chain performance, and provided a reference or policy guidance to member economy/sub-fora on further improvement. In a way, this would empower member economies and build up their capacities in undertaking collective actions.

Another positive aspect worth noting is that SCFAP actions have provided a platform or network for economies to communicate with the industries, and to actively engage and enhance the capacity of SMEs. Thus the actions have helped to improve the relationship between the government and the private sector. It also serves as a platform for APEC economies to coordinate their policies and regulations on many fronts, such as border control, safety and security, intermodal transportation logistics, supply chain visibility, among others.

Another important aspect is the adoption of new technologies. Several actions under SCFAP have improved the awareness and understanding of new technologies. For example, the smart container technologies improve supply chain visibility; the ITS and GNSS systems and technology harmonize approaches of transportation and cargo flow; and cross-border information exchange platform has led to a 6% (approximate) savings on cost. These technologies automate transportation systems, integrate processes, and streamline procedures. The result from the external indicators on ICT is also the strongest compared with other results, confirming the existing potential in achieving further results.

Lastly, the survey also highlighted the difficulties in accurately measuring and attributing the impact of SCFAP projects to improvement in time, costs and uncertainty. While some economies reported that they have received positive feedback on the projects, it may be too early to ascertain the progress or impact. Given that a major part of SCFAP projects involved capacity building activities, it may take a longer period of time to evaluate their impact.

CHAPTER 5 CONCLUSION AND RECOMMENDATIONS

The three-tracked assessment on SCFAP implementation has produced some interesting findings from the various angles.

The external indicators assessment shows that APEC economies have been quite successful in reducing trade times by nearly 7% (using Doing Business data on export time and LPI data on import time). There is some indication of costs increase, however, which could be the result of unexpected supply chain disruptions due to natural events such as earthquakes and floods. It remains to be seen whether this trend of costs increase will continue. Nevertheless, APEC economies should strive to monitor and reduce costs in the coming years. For uncertainty, based on the percentage of shipments meeting firm quality criteria from LPI, there was an increase by about 4% over the 2009-2011 period. The percentage of shipments that are physically inspected also showed significant improvement and met the interim target. Collectively, this could be interpreted to mean a similar reduction in the level of supply chain uncertainty.

Based on the internal indicators assessment, within the three years of SCFAP implementation (2010 to 2012), almost 77% of the actions have been completed. This result reflects good progress in terms of project completion and implementation.

The results from the self-assessment survey also reveal that member economies have experienced benefits from SCFAP-related projects in improving supply chain performance. The key benefits include the following:

1. The most notable aspect is knowledge sharing or measures in addressing the knowledge gap. According to the internal indicators assessment, a substantial portion of SCFAP activities were workshops/ seminars/ symposium, and these activities generally brought stakeholders from the government, industry and academia together to share views, best practices and lessons learned from past experiences. The SCFAP actions thus raised awareness on some important issues related to supply chain performance, and provided a reference or policy guidance to member economy/sub-fora on further improvement. In a way, this would empower member economies and build up their capacities in undertaking collective actions.
2. Another positive aspect worth noting is that SCFAP actions have provided a good platform or network for economies to communicate with the industries, and to actively engage and enhance the capacity of SMEs. Thus the actions have helped to improve the relationship between the government and the private sector. It also serves as a platform for APEC economies to coordinate their policies and regulations on many fronts, such as border control, safety and security, intermodal transportation logistics, supply chain visibility, among others.
3. The adoption of new technologies is also important. Several actions under SCFAP have improved the awareness and understanding of new technologies. For example, the smart container technologies improve supply chain visibility; the ITS and GNSS systems and technology harmonize approaches of transportation and cargo flow; and cross-border information exchange platform (the eCO exchange system between Chinese Taipei and Korea) has led to a 6% (approximate) savings on cost. These technologies automate transportation systems, integrate processes, and streamline procedures. The result from the external indicators on ICT is also the strongest compared with the other results.

The survey also highlighted the difficulties in accurately measuring and attributing the impact of SCFAP projects to improvement in time, costs and uncertainty.

The results from the three-tracked assessments highlighted the complexity of the existing chokepoints as these chokepoints often are interlinked with one another. For instance, eliminating barriers in infrastructure, under Chokepoint 2 would require good regulations and a healthy competitive environment – issues that are also covered under Chokepoints 1 and 3. From a broader perspective, it could also be affected by the progress made under the Investment Facilitation Action Plan (IFAP) – as a better investment environment would have an impact on the availability of transportation infrastructure. In turn, the quality of logistics environment would affect a firm's decision on their investment location. The topic on Good Regulatory Practices that was discussed by the Economic Committee (EC) could also support the achievement of the 10% goal target by reducing costs and uncertainty in terms of eliminating behind the border barriers. It is apparent from here that the SCFAP matrix on projects and activities is not the only efforts by APEC and individual economies in improving supply chain performance. There are other related initiatives or activities that could also contribute towards achieving the 10% goal by 2015.

Based on the findings of the three-tracked assessments, the following recommendations are proposed:

1. It will be important for economies to re-double their efforts to reduce the time, costs, and uncertainty of supply chain performance through existing as well as future actions within the eight chokepoints. The focus should be on actions that are expected and have been proven to make a significant and tangible impact in improving supply chain performance.
2. Efforts should be targeted at maintaining the existing key long-term measures that have been initiated earlier and to expand them by utilizing the strong progress in ICT development. Supporting progress of the development the Single Window system in each economy as well as further acceleration towards electronic lodging of customs and border paperwork would be important steps. Further implementation of AEO program, which ensure security, should be encouraged as well.
3. As many of the logistics players come from the private sector, improving the regulatory environment which supports the development of an efficient logistics and transportation sector is a must. Governments should maintain an open and transparent channel or communication with relevant stakeholders in the private sector to improve the regulatory environment.
4. Capacity building has been and will still be an important component of the SCFAP. Designing appropriate capacity building initiatives that directly address the existing gap in a systematic and sustainable manner should be encouraged.
5. SCFAP actions have provided a good platform or network for economies to communicate with industries, and to actively engage and enhance the capacity of SMEs. Moving forward, further support should be provided to SMEs to ensure that there would be mutual collaboration between industry players (large and small) within the logistics and transportation sector.
6. To act on the feedback provided in the self-assessment survey by improving the SCFAP design and implementation. This could include increasing the level of involvement in capacity building programs and reducing multiple and complex reporting requirements.

7. In terms of evaluating and tracking the progress of SCFAP in the future, it is recommended to undertake a further assessment of the external indicators in 2014. The linkages and interaction between the time, costs and uncertainty indicators of supply chain performance could also be further explored.

To conclude, supply chain connectivity is becoming increasingly important for businesses to perform efficiently. The importance of examining supply chain issues in a holistic manner should be emphasized given the impact that connectivity has on businesses, trade and welfare. A smooth and efficient supply chain brings benefits to those participating in it, in terms of higher returns, higher productivity and improved welfare.

On the other hand, a disruption or break in these chains can create unpredictable negative impact on businesses, societies and governments. Addressing these supply chain challenges using existing regional cooperation mechanisms, such as APEC, would be the best way forward for economies to minimize the risks as well as to reap the potential benefits of a more connected supply chain.

REFERENCES

Aberdeen Group (2012), *Supply Chain Visibility Excellence: Mastering Complexity and Landed Costs*

Arvis, J.-F., Duval, Y., Shepherd, B., and Utoktham, C. (2012), *Trade Costs in the Developing World: 1995-2010*, World Bank Working Paper

ADB (2009), *Designing and Implementing Trade Facilitation in Asia and the Pacific*

ADBI (2012), *Infrastructure for Asian Connectivity*

APEC (2011), *Transborder Control and Optimal Transborder Logistics*, available online at http://publications.apec.org/publication-detail.php?pub_id=1242

APEC (2011b), *Road Safety Measures for Heavy Vehicles in APEC Transport Supply Chains*

APEC (2011c), *Using of ICT by SMEs- Situational Review of the APEC SME Logistics Service Provider*

APEC (2011d), *Transborder Control and Optimal Transborder Logistics, available online at* http://publications.apec.org/publication-detail.php?pub_id=1242

APEC (2012), *Study on the Readiness of ECO Implementation in Cross-Border Trade in APEC Region*

APEC PSU (2011), *APEC's Achievements in Trade Facilitation 2007-2010 - Final Assessment of TFAPII*

APEC PSU (2012), *Interim Progress Assessment of SCFAP: Analysis of External Indicators*, report prepared by Ben Shepherd, Developing Trade Consultants Ltd.

Bouët, A., Decreux, Y., Fontagné, L., Jean, S., and Laborde, D. (2008), *Assessing Applied Protection Across the World*, Review of International Economics

Bowersox D., Rodrigues A. and R. Calantone (2005), *Estimation of Global and National Logistics Expenditures: 2002 Data Update.* Journal of Business Logistics, Vol. 26, No.2

Chopra, Sunil and Peter Meindl (2004), *Supply chain management: strategy, planning, and operation*

Damiri, Mohd Hafizzuddin Md (2009), *Issues and Challenges of Logistics in Malaysia: A Perspective*

Deloitte (2011), *The Connected Continent: How the Internet is Transforming the Australian Economy*

Dolman, Gary (2012), *Measuring Supply Chain Performance*

IBM (2010), *New Rules for a New Decade: A Vision for Smarter Supply Chain Management*

McKinsey Global Institute (2011), *The Great Transformer: The Impact of the Internet on Economic Growth and Prosperity*

McKinsey Global Institute (2012), *Manufacturing the Future: The Next era of Global Growth and Innovation*

Memedovic, et. al.(2008), *Fuelling the Global Value Chains: What Role for Logistics Capabilities?*

Rantasila, Karri and Lauri Ojala (2012), *Measurement of National-Level Logistics Costs and Performance*

Saslavsky, D., and Shepherd, B. (2012), *Facilitating International Production Networks: The Role of Trade Logistics*, Policy Research Working Paper No. 6224, the World Bank

Serhat, Burmaoglu and Sesen Harun (2011), *Analyzing the Dependency between National Logistics Performance and Competitiveness: Which Logistics Competence is Core for National Strategy?*

Shepherd, Ben (2011), *Logistics Costs and Competitiveness: Measurement and Trade policy Applications*

World Economic Forum (2012), *The Global Enabling Trade Report 2012: Reducing Supply Chain Barriers*

World Bank (2007), *Connecting to Compete: Trade Logistics in the Global Economy*, Logistics Performance Index 2007

World Bank (2010), *Connecting to Compete: Trade Logistics in the Global Economy*, Logistics Performance Index 2009

World Bank (2012), *Connecting to Compete: Trade Logistics in the Global Economy*, Logistics Performance Index 2011

ABBREVIATION LIST

ABAC	APEC Business Advisory Council
ADB	Asian Development Bank
APEC	Asia-Pacific Economic Cooperation
AEO	Authorized Economic Operator
ASEAN	Association of Southeast Asian Nations
ATMS	Automated Transport Management System
CBP	Customs and Border Protection, the United States
CO	Certificate of Origin
C-TPAT	Customs-Trade Partnership Against Terrorism, the United States
CR	Completion Report
CTI	Committee on Trade and Investment
e-B/L	Electronic Bill of Lading
EC	Economic Committee, APEC
eCO	electronic Certificate of Origin
EFM	Electronic Freight Management
ESCAP	Economic and Social Commission for Asia and the Pacific, United Nations
ECSG	Electronic Commerce Steering Group, APEC
EODB	Ease of Doing Business
ETI	Enabling Trade Index, World Economic Forum
EWG	Energy Working Group, APEC
FTA	Free Trade Agreement
FTZ	Free Trade Zone
GATS	General Agreement on Trade in Services
GHG	Greenhouse Gas
GNP	Gross National Product
GNSS	Global Navigation Satellite System
GSC	Global Supply Chain
JBMS	Joint Border Management System
ICT	Information and communication technology
IFAP	Investment Facilitation Action Plan
IIEG	Intermodal & Intelligent Transportation Expert Group
IMR	International Mobile Roaming
ISO	International Organization for Standardization
ITF	International Transport Forum
ITS	Intelligent Transportation System
LNG	Liquefied natural gas
LPI	Logistics Performance Index, the World Bank
MAG	Market Access Group, APEC
NCTS	New Computerized Transit System
NLA	National Logistics Associations
NSW	National Single Window
OECD	Orangisation for Economic Co-operation and Development
PKI	Public Key Infrastructure
PSU	Policy Support Unit, APEC
PTS	Paperless Trading Subgroup, APEC

RKC	Revised Kyoto Convention
ROO	Rules of Origin
SCCP	Sub-Committee on Customs Procedures, APEC
SCFAP	Supply Chain Connectivity Framework Action Plan
SCV	Supply Chain Visibility
SCSC	Sub-committee on Standards and Conformance, APEC
SME	Small Medium Enterprises
SMEWG	Small medium Enterprise Working Group, APEC
SSC	Secure and Smart Container
SW	Single Window
TEL	Telecommunications and Information Working Group
TFAP	Trade Facilitation Action Plan
TPD	Trade Policy Dialogue
TPTWG	Transportation Working Group, APEC
TRS	Time Release Survey
3PL	Third Party Logistics
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business
UNCTAD	United Nations Conference on Trade and Development
WCO	World Customs Organization
WEF	World Economic Forum
WTO	World Trade Organization

APPENDIX

Appendix 1. Definition of External Indicators

Indicators	Description
ETI Overall Index	**Enabling Trade Index**--the ETI measures the extent to which individual economies have developed institutions, policies, and services facilitating the free flow of goods over borders and to destination. It is composed of four sub-indexes and 9 pillars.
LPI Overall Index	**Logistics Performance Index**--LPI summarizes the performance of countries in six areas that capture the most important aspects of the current logistics environment: Efficiency of the customs clearance process; Quality of trade and transport-related infrastructure; Ease of arranging competitively priced shipments; Competence and quality of logistics services; Ability to track and trace consignments; Frequency with which shipments reach the consignee within the scheduled or expected time. The LPI survey is conducted every two years to improve the reliability of the indicators and to build a dataset comparable across countries and over time.
ETI Transport Infrastructure Pillar	**5th pillar: Availability and quality of transport infrastructure**--the availability and quality of transport infrastructure pillar measures the state of transport infrastructure across all modes of transport in each economy, as demonstrated by the density of airports, the percentage of paved roads, as well as the extent of transshipment connections available to shippers from each country. Also captured is the quality of all types of transport infrastructure, including air, rail, roads, and ports.
ETI Transport Services Pillar	**6th pillar: Availability and quality of transport services**--the availability and quality of transport services pillar complements the assessment of infrastructure by taking into account and the quality of services available for shipment, including the quantity of services provided by liner companies, the ability to track and trace international shipments, the timeliness of shipments in reaching destination, general postal efficiency, and the overall competence of the local logistics industry (e.g. transport operators, customs brokers). This pillar also takes into account the degree of openness of the transport-related sectors as measured by countries' commitments made under the General Agreement on Trade in Services (GATS).
ETI ICT Pillar	**7th pillar: Availability and use of ICTs**--the availability and use of ICTs pillar includes the penetration rates of these tools, such as mobile phones and the Internet in each country, also measures of the perceived use of Internet by business for buying and selling goods and an index of the availability of government online services.
LPI Infrastructure Index	**Infrastructure**--based on responses to the question: "Evaluate the quality of trade and transport related infrastructure (e.g. ports, railroads, roads, information technology) (very low - very high)".
LPI Logistics Competence Index	**Logistics competence**--based on responses to the question: "Evaluate the overall level of competence and quality of logistics services (e.g. transport operators, customs brokers) (very low - very high)".
LPI % Shipments Meeting Quality Criteria	**% of shipments meeting quality criteria**--based on the question "As a logistics provider, do you maintain indicators of services level to client? If yes, what is the percentage of imports to your country of work meeting your quality criteria for delivery to the consignee?
ETI Customs Administration Pillar	**2nd pillar: Efficiency of customs administration**--the efficiency of customs administration pillar measures the efficiency of customs procedures as perceived by the private sector, as well as the extent of services provided by customs authorities and related agencies.

Indicators	Description
ETI Import-Export Procedures Pillar	**3rd pillar: Efficiency of import-export procedures**--the efficiency of import-export procedures pillar extends beyond the customs administration and assesses the effectiveness and efficiency of clearance processes by customs as well as related border control agencies, the number of days and documents required to import and export goods, and the total official cost associated with importing as well as exporting, excluding tariffs and trade taxes.
LPI Customs Index	**Customs**--based on the responses to the question: "Evaluate the efficiency of the clearance process (i.e. speed, simplicity and predictability of formalities) by border control agencies, including Customs (very low - very high)."
LPI Lead Time to Import	**Lead time import for port/airport, median case (days)**--based on responses to the question: "When importing a full load to your country of work, please estimate the following time parameters: typical distance, best case (up to 10% of the shipments are on-carried within), and median case (50% of the shipments are on-carried within)". From Port/Airport (import on-carriage: DES to DDP) and By Land (import carriage: EXW to DDP)
LPI Lead Time to Export	**Lead time export for port/airport, median case (days)**--based on responses to the question: "When exporting a full load from your country of work, please estimate the following time parameters: typical distance, best case (up to 10% of the shipments are pre-carried within), and median case (50% of the shipments are pre-carried within)". To Port/Airport (export pre-carriage: EXW to FOB) and By Land (export carriage: EXW to DDP)
LPI Documents to Import	**Number of documents**--based on responses to the question: "How many documents do you typically have to submit to border-related government agencies involved in the clearance process, including Customs in your country of work?
LPI Documents to Export	**Number of documents**--based on responses to the question: "How many documents do you typically have to submit to border-related government agencies involved in the clearance process, including Customs in your country of work?
LPI Cost to Import	**Typical charge for a 40-foot import container or a semi-trailer (US$)**--based on responses to the question: "When importing a full load to your country of work, please estimate the following cost parameter: typical charge for a 40' dry container or a semi-trailer." From Port/Airport (total freight including agent fees, port, airport and other charges) and by Land (total freight including agent fees and other charges).
LPI Cost to Export	**Typical charge for a 40-foot export container or a semi-trailer (US$)**--based on responses to the question: "When exporting a full load from your country of work, please estimate the following cost parameter: typical charge for a 40' dry container or a semi-trailer." To Port/Airport (total freight including agent fees, port, airport and other charges) and by Land (total freight including agent fees and other charges).
LPI **%** Physical Inspection	**Physical inspection (%)**--based on responses to the question: "On average, what percentage of your import shipments is physically inspected in your country of work?"
Doing Business Time to Import	**Trading Across Borders - Time to import (days)**--the time for importing is recorded in calendar days. The time calculation for a procedure starts from the moment it is initiated and runs until it is completed. If a procedure can be accelerated for an additional cost and is available to all trading companies, the fastest legal procedure is chosen. Fast-track procedures applying to firms located in an export processing zone are not taken into account because they are not available to all trading companies. Ocean transport time is not included. It is assumed that the importer does not waste time and commits to completing each remaining procedure without delay. Procedures that can be completed in parallel are measured as simultaneous. The waiting time between procedures - for example, during loading of the cargo- is included in the measure.

Indicators	Description
Doing Business Time to Export	**Trading Across Borders - Time to export (days)**--the time for exporting is recorded in calendar days. The time calculation for a procedure starts from the moment it is initiated and runs until it is completed. If a procedure can be accelerated for an additional cost and is available to all trading companies, the fastest legal procedure is chosen. Fast-track procedures applying to firms located in an export processing zone are not taken into account because they are not available to all trading companies. Ocean transport time is not included. It is assumed that the exporter does not waste time and commits to completing each remaining procedure without delay. Procedures that can be completed in parallel are measured as simultaneous. The waiting time between procedures - for example, during loading of the cargo- is included in the measure.
Doing Business Documents to Import	**Trading Across Borders - Documents to import (number)**--all documents required per shipment to import the goods are recorded. It is assumed that the contract has already been agreed upon and signed by both parties. Documents required for clearance by government ministries, customs authorities, port and container terminal authorities, health and technical control agencies, and banks are taken into account. Since payment is by letter of credit, all documents required by banks for the issuance or securing of a letter of credit are also taken into account. Documents that are renewed annually and that do not require renewal per shipment (for example, an annual tax clearance certificate) are not included.
Doing Business Documents to Export	**Trading Across Borders - Documents to export (number)**--all documents required per shipment to export the goods are recorded. It is assumed that the contract has already been agreed upon and signed by both parties. Documents required for clearance by government ministries, customs authorities, port and container terminal authorities, health and technical control agencies, and banks are taken into account. Since payment is by letter of credit, all documents required by banks for the issuance or securing of a letter of credit are also taken into account. Documents that are renewed annually and that do not require renewal per shipment (for example, an annual tax clearance certificate) are not included.
Doing Business Cost to Import	**Trading Across Borders - Cost to import (US$ per container)**--cost measures the fees levied on a 20-foot container in U.S. dollars. All the fees associated with completing the procedures to import the goods are included. These include costs for documents, administrative fees for customs clearance and technical control, customs broker fees, terminal handling charges and inland transport. The cost does not include customs tariffs and duties or costs related to ocean transport. Only official costs are recorded.
Doing Business Cost to Export	**Trading Across Borders - Cost to export (US$ per container)**--cost measures the fees levied on a 20-foot container in U.S. dollars. All the fees associated with completing the procedures to export the goods are included. These include costs for documents, administrative fees for customs clearance and technical control, customs broker fees, terminal handling charges and inland transport. The cost does not include customs tariffs and duties or costs related to ocean transport. Only official costs are recorded.
ETI Transparency of Border Administration Pillar	**4th pillar: Transparency of border administration**--the transparency of border administration pillar assesses the pervasiveness of undocumented extra payments or bribes connected with imports and exports, as well as overall perceived degree of corruption in each country.
ETI Business Environment Sub-Index	**Subindex D: Business environment**--the business environment sub-index looks at the quality of governance as well as at the overarching regulatory and security environment impacting the business of importers and exporters active in the country. It is composed of two pillars: Regulatory environment and Physical security

Appendix 2. Assessment Methodology for External Indicators

General Approach

Due to involvement of multiple stakeholders and a complex network of transactions, measuring supply chain performance reflects the multi-dimensional nature of supply chain activities. The method of assessment of external indicators is to bring together a range of data from international sources, data are thus comparable across economies, and can be aggregated to give figures for APEC-wide performance.

The World Bank's Logistics Performance Index (LPI) and Doing Business dataset, and the World Economic Forum's Enabling Trade Index (ETI) provide useful information on the financial and time burdens facing importers and exporters, which fit well with the time and cost objectives of SCFAP. However, there is no direct indicator to measure uncertainty; hence an indirect approach is taken, in which the focus is on the impact of uncertainty on time and cost parameters within the supply chain. Another alternative is to use a proxy indicator for supply chain reliability, such as the percentage of shipments that meet firm's internal quality criteria.

On the aggregate level, the LPI and ETI are selected to cover the full range of supply chain processes, which take two different and complementary approaches, and endeavor to capture supply chain performance in all its complexity, including time, cost and uncertainty.

On the disaggregate level, rather than produce indicators for each chokepoint separately, the approach taken here is to check progress based on the performance clusters, given the interconnections among chokepoints. The approach provides a balanced view and represents the best compromise between methodological rigor and the availability of ready-made data at the international level.

It should be noted that for comparative purposes, 2009 is taken as the baseline year. Data for all indicators are published with a one-year lag, thus the comparison used to assess progress at this interim stage is therefore performance in 2011 versus performance in 2009.

Quantitative Methodology

The objective of the assessment is to produce indicators at regional level, thus data for individual economies need to be aggregated to the regional level, three approaches are adopted:

- Simple average is transparent and easy to apply, but it puts too much emphasis on the performance of smaller economies, thus constraining the APEC performance.
- GDP-weighted average, especially choosing a single year GDP as weights, can reflect economy size and hence are taken as a robustness check against simple average.
- Median is the data point that splits the sample into two groups of equal size, so it represents a level of performance that at least 50% of economies meet. Its strength is that it is not affected by extreme high and low values in the way average is.

Trade-weighted average is not used, because economies that trade little presumably do so in part because the time, cost and uncertainty of supply chain transactions are relatively high. However, the fact that they trade little means they will receive only a small weight in the trade-weighted average, so when it comes to regional aggregate, it will overstate performance because economies with significant supply chain difficulties receive small weights.

A single APEC LPI can be constructed directly based on the responses from the World Bank logistics performance survey. This makes it possible to construct a confidence interval around the average. A confidence interval is useful in assessing whether a change in the underlying indicator is statistically significant, or whether it possibly reflects sampling error due to the survey nature of the dataset. Put it in a simple way, confidence interval can tell the extent to which progress is empirically evident over the 2009-2011 period.

Progress Rate

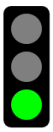
In addition to calculating averages and medians, this report also calculates progress rates for each piece of data under consideration. The progress rate is defined as the ratio of the observed change in an indicator between 2009 and 2011, and the expected change in the indicator over the same period based on the 2015 target of a 10% improvement.

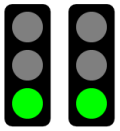
A progress rate of 100% indicates that APEC is exactly on target to meet the 2015 goal. A progress rate higher than 100% indicates that APEC is ahead of target as at 2011, and correspondingly a rate less than 100% indicates that economies need to make faster progress in order to be on track for the 2015 target.

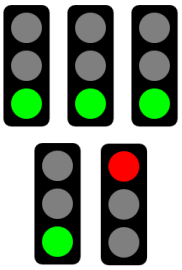
Progress rates provide the basis of construction of a ‘traffic light’ system for coding performance. Indicators are considered to be on track (green light) is the progress rate is better than 75%. They are coded as needing improvement (amber light) is the progress rate is between 40% and 75%. Finally, a red light is assigned to areas in which the progress rate is less than 40%, and where considerable policy attention is required if the 2015 target is to be met.

Appendix 3. Internal Indicators Assessment: Traffic Light Results for 8 Chokepoints

Table 1: Actions and Progress in Chokepoint 1

Action (Title and brief descriptions)	Latest status	Elements completed
APEC Guidelines for Advance Rulings (due originally in 2011, revised to 2012)		
1. To develop a set of APEC guidelines for advance rulings	**2010:** APEC Guidelines for Advance Rulings was endorsed at AMM (*2010/CSOM/003app06*).	**1 out of 1**  **(1 guidelines established)**
2. Further research on the practices of Advance Rulings conducted by member economies	**2011:** APEC completed Advance Rulings General Survey of economies. Results were reported at CTI 2. (*2011/SOM2/CTI/014*).	**1 out of 1**  **(1 survey completed)**
3. Capacity building workshop on implementation of advance rulings.	**2011:** At CTI3, a TPD on Advance Rulings: Increasing Certainty and Predictability in Supply Chains was held on 21 September in San Francisco. Two general themes that can assist APEC in determining potential next steps were shared by the speakers at the TPD. The first theme was that the governance, or how advance rulings are administered, is key to their effectiveness and the resulting benefits. The second theme was that expanding the scope of advance rulings practiced by economies can enhance trade facilitation within the region. With these themes in mind, APEC could develop a work plan to promote the implementation of valuation advance rulings and enhance the governance, or administration, of advance rulings. In particular, APEC economies could agree to establish a	**1 out of 1**  **(1 TPD completed)**

Action (Title and brief descriptions)	Latest status	Elements completed
	capacity building vehicle through which a firm commitment is reached to more concretely promote implementation of valuation advance rulings by economies. **<u>Quote from the self-assessment survey:</u>** The project creates awareness of important policy issues that could lead to important policy reform affect supply chain performance.	
Symposium on Supply Chain Connectivity (due originally in 2010, revised to 2012) 1. A private-public sector conference using real world examples from logistics providers to illustrate how the global supply/value chain operates; this specific concept could also be part of a broader logistics conference. The objective would be to use this process to enhance awareness of regulations affecting logistics for the private sector and for economies to improve their understanding of where improvements could be made.	**2010**: The Sendai Symposium was built on the outcomes of the Symposium held in Singapore in May 2009 by furthering the development, finalization, and implementation of the identified specific actions within the eight action plans. The Symposium helped to identify possible targets as well as tools/methodology of measuring the improvement of supply-chain indicators. It also explored and helped identify possible capacity building efforts needed and available for economies to take forward APEC's SCFAP agenda. (PSU supported this activity.) **2012**: CTI held a symposium on Supply Chain Connectivity Measurement Framework in April in Singapore. The main objective of the Symposium was to share experiences and exchange views on the measurement of supply chain connectivity from different perspectives (international organizations, private sectors, and academia), to take stock of the implementation of the Supply-chain Connectivity Framework Action Plan (SCFAP), and to discuss the self-assessment survey that was prepared by	**2 out of 2**  **(2 symposiums completed)**

Action (Title and brief descriptions)	Latest status	Elements completed
	the PSU. An outcome report can be found online. (No CR is available)	
Compendium of Best Practices of National Logistics Associations (NLA) (due in 2011) To develop a compendium of best practices on the establishment of individual economy national logistics associations. The project will demonstrate the role of logistics associations as a partnership between the transport logistics supply chain industry and government. Key elements of the project are: 1. A visit to Australia and another APEC economy with a national logistics association for first hand analysis of the role of government, key stakeholders and national logistic associations in the supply chain sector. 2. A Trade Policy Dialogue (TPD) in the margins of a CTI meeting in 2011 with presentations by relevant organizations. The TPD would develop and improve understanding within APEC on the role of government and national logistics associations as well as information sharing and best practice in developing and implementing national logistic associations. 3. A workshop in one of the participating developing APEC economies to business case model and foundation for a national logistics association.	**2011:** Three workshops were conducted over a 12 month period in Melbourne, Bangkok and Hanoi. The project developed a generic template for a national logistics association, based on existing models from Australia, Singapore and Thailand. The template is being further developed for Indonesia, Papua New Guinea and Vietnam as a practical guide for those economies to establish national logistic associations to suit their own circumstances. (An external completion report from RMIT is available for this activity.) **2012:** A compendium was produced on the benefits and best practices of collaboration between government and industry on policies and regulations on transport logistics industry. **Quote from the self-assessment survey:** The project achieved the following specific outcomes: (i) demonstrated relevance of NLAs to addressing the specific issues surrounding the framework of inter-regional supply chain 'chokepoint' identified by the SCFAP, (ii) created the generic model and definition of an NLA, (iii) led to the establishment of the Domestic Logistics Association, (iv) developed the generic template and compendium which will be an on-line tool to assist establishment or enhancement of NLAs in APEC economies. The project improved skills and knowledge in developing NLAs and their role to the development of effective and efficient national supply chain, which	**4 out of 5**  **(3 workshops and 1 compendium completed, no information about TPD)**

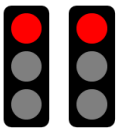
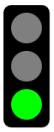
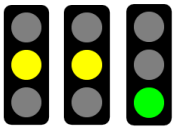
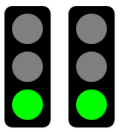
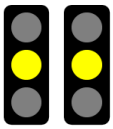
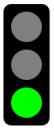
Action (Title and brief descriptions)	Latest status	Elements completed
	improves the role of NLA related to the process of policy assessment.	
Improving the Understanding of Logistics Services (due originally in 2011, revised to 2012) 1. To conduct a survey among industries to provide economies a better understanding of the various services involved in the logistics industry. The objective would include improved policy coordination within APEC economies and a better understanding of how policy decisions can affect various elements of a supply chain. 2. A particular output could include an assessment of the impact of logistics services on trade transaction costs with a view to identifying proven policy approaches that reduce these costs.	No update.	**0 out of 2** 
New Action: Initiative to Advance the Action Plan for Chokepoint 1 of the APEC Supply Chain Connectivity Framework (*2012/SOM1/020anx4*) (added in 2012, due in 2014) The initiative will take a more systematic approach to addressing Chokepoint 1 through: 1. "Supply Chain Inventory" of policies and practices, 2. Diagnostic reports based on the Supply Chain Inventory, and **3.** Targeted capacity building.	**2012**: The diagnostic report "Strengthening Supply Chains in APEC: Transparency, Cooperation, and Capacity Building" is undertaken. (At CTI1 2013 in Jakarta, a presentation was made on the analysis of Chokepoint 1 of the SCFAP by the World Bank).	**For information only, not included in interim assessment.**
Total for Chokepoint 1	(No CR is available for the above activities.)	**9 out of 12** **(75%)**

Table 2: Actions and Progress in Chokepoint 2

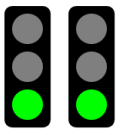
Action (Title and brief descriptions)	Latest status	Elements completed
PPP implementation model to facilitate development of new transport infrastructure (due in 2010) 1. Expert workshops to assess best practice in PPP markets and prioritise reform measures in order to create a common approach towards private infrastructure investment.	**2010:** Two workshops were conducted in Indonesia and Australia. (No CR is available.)	**2 out of 2**  **(2 workshops completed)**
Study and Seminar on energy, transport and environmental benefits of transit-oriented development (due in 2012) 1. Development of an analytical approach to assess the energy and environmental benefits of transit oriented development. 2. Comparative case studies of benefits from developed and developing economies. 3. Outreach seminar on project findings with particular attention to capacity building for developing economies.	**2011:** Work for this element began in 2011, and an analytical approach was developed, which would be applied to several case studies. **2012**: Project on "Transport, Energy and Environmental Benefits of Intermodal Freight Strategies" is still ongoing. It consists of a paper using analytical tools to assess the energy saving and GHG reduction effects of Intermodal Freight Strategies and a workshop.	**1 out of 3**  **(1 analytical approach completed, 1 workshop and 1 case study are ongoing)**
Examine individual transportation/trade policies that use a gateway or a trade corridor approach (due originally in 2011, revised to 2012) 1. Seminar on gateway performance management and measurement to provide an overview of possible approaches to both performance measurement and performance management in the gateway and trade corridor context. The seminar will	**2011**: Canada delivered a workshop on supply chain connectivity to discuss how to measure performance in achieving the ten percent improvement by 2015 in supply chain performance. **2012:** In collaboration with TPTWG and CTI, Canada organized a self-funded	**2 out of 2**  **(2 workshops completed)**

Action (Title and brief descriptions)	Latest status	Elements completed
examine the measurement of fluidity and port utilization (metrics). The seminar will also present a gateway performance table: a public-private engagement mechanism including all the principle parties (terminal operators, railways, shippers/receivers, labour organizations and industry associations, for example).	workshop on Public Performance Measurements –Internal Indicators in Singapore in February 2012 to define metrics for measuring supply chain performance. The results addressed the need for capacity building within APEC to strengthen performance measurement and advanced the work of SCFAP by helping economies quantify improvements to supply chain efficiency. The seminar leveraged links with international organizations that are working on logistics performance measurement, for example the World Bank and the International Transportation Forum (ITF). (No CR is available as this was a self-funded project. PSU attended this activity)	
Model framework for improving the efficient use of transport infrastructure within APEC (dropped in 2011) 1. Study to identify specific needs of economies and international examples of best practice in land-side transport component of sea freight supply chains. 2. Develop a model 'informed' APEC infrastructure framework. Workshops to build capability in applying the model framework, including discussion on how the framework could be applied to the challenges of APEC member economies. 3. Showcase projects to put the framework into practice. This could include partnering each project team with a team of experienced mentors that can share knowledge and help to guide the project. Lessons from the showcase projects can further inform best practice.	Not applicable.	**This action was dropped from SCFAP in 2011.**

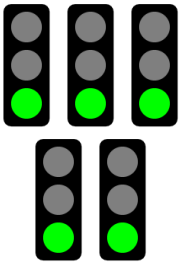
Action (Title and brief descriptions)	Latest status	Elements completed
Explore strategies for isolating and segregating long-haul port-related traffic from commuter/local traffic in metropolitan areas.		
Analytical work on logistics infrastructure (due in 2013) 1. Study on the travel time of goods vehicles on main economic corridors. (due in 2013) 2. Study on the contribution of road transport in the manufacturing and household sector. (due in 2013)	**2012:** The study on Economic Corridors in Indonesia is ongoing. It is decided that Study on the contribution of road transport in the manufacturing and household sectors would go ahead as self-funded project managed by the Indonesian Department of Public Works.	**0 out of 2**  **(2 studies ongoing)**
3. Project to identify bottlenecks in the transport and logistics chain focusing on port sectors in the APEC region and to consider possible solutions to eliminate those bottlenecks by sharing best practices. (due in 2012)	Japan organised a workshop in conjunction with TPT-WG on Enhancing Visibility of Maritime Container Transportation for Advancing Supply Chain Connectivity on July 31st, 2012. Presentations were made on the latest technology and developments in container tracking and visibility. Recognizing the difficulty in standardising all economies' initiatives due to each economy's established commercial measures, the workshop concluded that APEC members need to harmonize their container visibility platforms and that the next steps should be to discuss a possible container visibility platform in APEC. (No CR is available.)	**1 out of 1**  **(1 workshop completed)**
4. Study to identify specific needs of economies and international examples of best practice in land-side transport component of sea freight supply chains. (added in 2011)	Japan has also completed a self-funded research project on Best Practices to Eliminate Bottlenecks in Freight Transport Focusing on Port in 2012.	**For information only, not included in interim assessment.**

Action (Title and brief descriptions)	Latest status	Elements completed
Sharing best practices for seamless intermodal cargo movement (added in 2012, due in 2012) 1. Workshop coinciding with TPTWG36 in St Petersburg in August 2012 to formulate best practice in physical transport infrastructure development and intermodal connectivity. The workshop will also consider ways to improve coordination within APEC of transport infrastructure national development plans.	**2012:** The project on Sharing Best Practices for Seamless Intermodal Cargo Movement Phase 1: Physical Infrastructure is completed. The workshop provided an opportunity for APEC economies to network and exchange practices of transport physical infrastructure development, and seamless intermodal cargo movement in APEC economies and the Asia-Pacific Region. **Quote from the self-assessment survey:** The common approaches and best practices were presented by participants from APEC member economies, which generated proposals and recommendations to improve seamless multi-modal transportation in the APEC region through efficient and coordinated GNSS application.	**For information only, not included in interim assessment.**
Total for Chokepoint 2	(No CR is available for the above activities.)	**6 out of 10 (60%)**

Table 3: Actions and Progress in Chokepoint 3

Action (Title and brief descriptions)	Latest status	Elements completed
Review constraints affecting engagement of Small and Medium Enterprises (due in 2012) 1. Conduct surveys and study on the environment affecting SMEs, which may include: 1) policy & institutional framework related to logistics development; 2) status of small or medium logistics companies & other related companies of their own capabilities for development, such as use of ICTs, truck tracking systems, operation modes, and management skills including warehouse and trans-shipment management etc ; 3) constraints	**2011:** In 2011, China undertook a project on Program for Enhancing the Capacity of APEC Local/Regional Logistics Sub-providers as a kick-off activity to address chokepoint 3. This project included a survey, a seminar and a field visit. The seminar, including a field visit, was held on 24-25 August in Suzhou, China. Various issues constraining the logistics sub-providers were discussed, and some recommendations for further enhancing their capacity were generated from the	**2 out of 2**  **(1 seminar/field visit and 1 study/survey completed)**

Action (Title and brief descriptions)	Latest status	Elements completed
affecting engagement of SMEs, especially the policy and business environment constraints.4) Free Trade Zone (FTZ) practice; 5) overall trend for development of regional logistics, such as technology development, changing needs and requirements of the markets, government blueprint for logistics development etc.	seminar. The preliminary results of the survey were also presented in the seminar to facilitate the discussions. The final Report of the study program has been completed and circulated to members. The report has identified a number of follow-up actions for consideration. (CR is available for CTI 02/2011T and the report for the study could be found online.) **Quote from the self-assessment survey:** The goals of the project were successfully achieved. It enhanced the capacity of SME logistics service providers by sharing information on major barriers to the logistics business, and identifying ways to enhance competitiveness of SME logistics service providers in the region. The follow-up seminar brought together all the stakeholders to discuss their concerns, share experience and explore ways to enhance competitiveness of SME logistics service providers in the region. **2012:** As follow-up, a multi-year project on Enhancing Logistics Performance through Training and Networking for APEC Local/Regional Logistics Sub-providers has been approved and is currently under implementation. The objective of the project is to (1) improve awareness of the changing international business situation, (2) promote awareness and understanding of supply chain relevant policies and regulations in each APEC economy, and (3) promote awareness and proficiency in modern cross-border supply chain practices and advanced logistics technologies; all in an effort to facilitate supply chain cost reduction, build potential for faster and	**This is a follow-up project; it is not included in interim assessment.**

Action (Title and brief descriptions)	Latest status	Elements completed
	easier execution of cross-border trade, and improve the cross-border logistics environment.	
Help raise the quality of APEC economies' logistics services and management (due in 2012) 1. Conduct training programs as a platform for communication and information sharing, which may include: 1) how to address constraints SMEs are facing; 2) how to develop markets which may include how to provide more integrated and value-added logistics services for an expanded niche market based on the essential capacity building, and how to achieve joint development and mutual benefits with their customers; 3) experience sharing on green supply chain efforts; 4) experience sharing on the training of international logistics personnel; 5) experience sharing on trans-shipment operation models in APEC economies; 6) how to utilize and maximize the benefits of FTZ including the effects of establishing FTZ at ports in the APEC region; 7) organize site visit to FTZ at ports in APEC region; 8) innovative concept of trade facilitation e.g., e-logistics, streamline customs procedures, utilization of new trade lane.	**2010-2011:** The ECSG completed an APEC e-Trade and Supply Chain Management Training Course. Three phases of the training course have been organized. The course sought to introduce the latest logistic management models for SME through education among APEC members, especially developing member economies; to identify the role of logistics supply chain management and its impact on SMEs as well as policy makers; and to have in-depth discussion on the challenges and opportunity of the expansion of logistic supply-chain management. (CR is available for CTI 02/2010T.) The SMEWG hosted a seminar on Improving SME Competitiveness through Sustainable Business Practices on 14 May 2011 in Big Sky. This half-day participatory seminar included panel sessions that sought to address and discuss issues relevant to SME sustainability, including views from the SMEs, policymakers, and financial and multilateral development institutions. The goal of this seminar was to discuss and identify practical actions APEC can take to support material improvement in SME competitiveness through sustainable business practices. (No CR is available.) **2012:** The ECSG conducted a workshop on Capacity Building of Different Aspects in e-Commerce of Supply Chain	**5 out of 5**  **(1 training course and 1 seminar, 2 workshops and 1 guidelines completed)**

Action (Title and brief descriptions)	Latest status	Elements completed
	Connectivity Implementation in Kazan in May 2012 (CTI 03/2012T). This project is a follow-up of the Supply Chain Connectivity: e-Commerce as a Main Driver and Integration Tool workshop that was held in San-Francisco, in 2011 (CTI 16 2011T). The workshop discussed different e-commerce methods and tools for different supply chain connectivity aspects and their fulfillment and determined key supply chain connectivity aspects which maximize the implementation of the SCFAP as well as select the most effective e-commerce methods and tools which are used for these purposes. The report of the workshop is available online. (CR is available for CTI 16 2011T but not yet for CTI 03/2012T). The SMEWG held an APEC Workshop on Transporting Goods and Services Reliably and Cost-Efficiently in Chinese Taipei on 11 July 2012 which enabled economies and SMEs to share experiences and best practices. A report of the workshop is available online. One of the key outcomes of the workshop was a draft Compendium of Innovative Strategies Available to SMEs for Reducing Transportation Costs. (No CR is available for this activity) As a part of its multi-year project to enhance SMEs' natural disaster resiliency, the SMEWG developed a set of Guidelines on Promoting SME Business Continuity Plans to Strengthen Reliability of Supply Chains, which was adopted by the SME Ministers at their meeting in St Petersburg.	
2. Work with ABAC to encourage exploration of opportunities for linkages	There is a plan to involve ABAC in the project of "Enhancing Logistics	**0 out of 1**

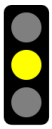
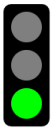
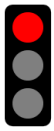
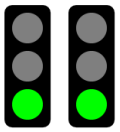
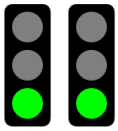
Action (Title and brief descriptions)	Latest status	Elements completed
and cooperative alliances among logistics providers in the region	Performance Through Training and Networking for APEC Local/Regional Logistics Sub-providers".	
Total for Chokepoint 3		**7 out of 8 (88%)**

Table 4: Actions and Progress in Chokepoint 4

Action (Title and brief descriptions)	Latest status	Elements completed
Implementation of Single Window system (due in 2013)		
1. Conduct a stock-taking study on the status of implementation of Single Window system (SW) for cargo clearance and difficulties in facing the development of the SW.	**2010:** A stocktaking survey was conducted in 2010, finding that 13 economies introduced SW system and 5 economies have SW system currently under development. 10 economies have experience in the trade-related data exchange. (No CR is available.) **2013:** 14 economies introduced Single Window system and 4 economies have Single Window system currently under development.	**1 out of 1**  **(1 survey completed)**
2. Adopt the UN/CEFACT SW Definition in developing their SW. The definition is "a facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export, and transit-related regulatory requirements. If information is electronic, then individual data elements should only be submitted once."	No update.	**0 out of 1** 
3. Adopt internationally recognized instruments and standards such as UN/EDIFACT, XML, and WCO Data Model in SW design to increase international interoperability.	**2013:** 13 economies applied the WCO data model into their customs clearance model.	**0 out of 1** 

Action (Title and brief descriptions)	Latest status	Elements completed
4. Establish a coordination mechanism composed of stakeholders to discuss better coordination on cargo clearance at the border including the mechanism for establishment of SW. 5. Carry out assessment of the capacity building needs and provide Capacity Building for the development and the maximum use of SW, including experience sharing of trade-related documents/ information such as Certificate of Origin (CO) between SW systems.	**2011:** A Regional Workshop on Single Window under the framework of SCCP was conducted in 2011 in Chinese Taipei (CTI-SCCP 04 2011T). The objective of this workshop was to identify the bottlenecks that APEC economies are facing in implementing SW systems. (CR is available.) **Quote from the self-assessment survey:** The outcomes of the workshop included having i) shared the latest information and experiences of economies that have introduced SW systems or exchange trade-related data/ documents electronically; ii) identified difficulties faced by the economies that have not introduced SW; iii) found out means or strategies to assist the economies that have not introduced SW systems in enhancing their capacity to do so and iv) reached a consensus that economies should make continued efforts to further promote SW in the region. **2012:** The second Single Window Workshop was held in October 2012. The objectives of this workshop were to share the information about good / bad practices, difficulties, and countermeasures in implementing SW systems as well as the SW systems interoperability and to have discussions based on the above. **Quote from the self-assessment survey:** The workshop continued economies' efforts to further promote SW in the region. The activities will indeed be beneficial for promoting APEC regional interoperability. SCCP continues to work on the	**2 out of 2**  **(2 workshops completed)**

Action (Title and brief descriptions)	Latest status	Elements completed
	development of SW by 2020 and accelerate seamless data sharing between/ among SW systems.	
WCO Guidelines for the Immediate Release of Consignments (due originally in 2013, revised to 2012) 1. Implement the principles of the WCO Guidelines for the Immediate Release of Consignments by Customs including adoption of the appropriate *de minimis* thresholds for low value shipments allowing duties to be waived.	**2011:** APEC Ministers endorsed the APEC Pathfinder to Enhance Supply Chain Connectivity by Establishing a Baseline *De Minimis* Value, and instructed officials to develop a capacity-building program with the goal of increasing the participation of economies in the Pathfinder. (No CR is available for this activity) **2012:** A capacity building initiative by the United States was implemented. The initiative utilizes a case study approach to provide economies with detailed analysis to assist in the decision-making process to join the Pathfinder. The case study focused on identifying and raising awareness of the benefits and challenges, including the economic benefits of enhancing supply chain performance and reducing administrative costs through improved allocation of government resources. Participation is voluntary for economies. A case study was conducted in cooperation with Viet Nam and the goal is to expand this process to other economies. **<u>Quote from the self-assessment survey:</u>** The project helps to remove burdensome border clearance procedures.	**2 out of 2**  **(1 pathfinder and 1 case study completed)**
Time Release Survey **(due in 2013)** 1. Conduct Time Release Survey (TRS), when possible, to measure the effect of	**2012:** The TRS is under implementation. NZ reported completed, while THA	**0 out of 1**

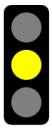
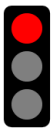
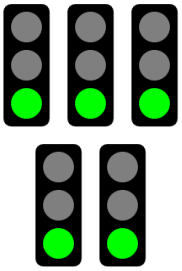
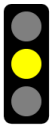
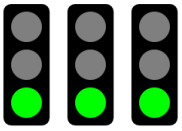
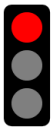
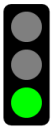
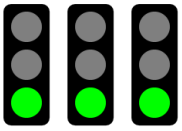
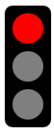
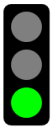
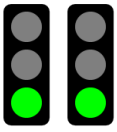
Action (Title and brief descriptions)	Latest status	Elements completed
simplifying and facilitating cargo clearance at the border. 2. Provide Capacity Building on TRS for requesting economies to conduct TRS.	reported ongoing. SCCP will discuss how Time Release Studies can be carried forward within the Sub-committee at SCCP in 2013.	 **0 out of 1** 
Total for Chokepoint 4		**5 out of 9** **(56%)**

Table 5: Actions and Progress in Chokepoint 5

Action (Title and brief descriptions)	Latest status	Elements completed
Self-Certification of Origin Capacity Building Program (due originally in 2011, revised to 2012) 1. To hold capacity building workshops in 2010-2011, as a follow-up to the Ministers' instruction in 2009, in order to enhance the capacity of participants in the Self-Certificate Initiative Pathfinder and to support effective implementation, to promote understanding and encourage more member economies to join the Pathfinder and to further develop the program.	**2010:** Successful completion of the APEC Self-Certification of Origin Capacity Building program that was adopted in 2010. A workshop was held in Malaysia in 2010 (CTI 14 / 2010A). **2011:** Three self-certification workshops were held in the Philippines (CTI 41/2010A), in Brunei Darussalam (CTI 41/2010A) and in Viet Nam (CTI 06 2011A). (3 CRs are available) **<u>Quote from the self-assessment survey:</u>** The workshops were effective in raising awareness among government officials and private sector representatives on the value of self-certification as a trade facilitation mechanism. **2012:** At MAG1, Singapore briefed the ASEAN pilot project on self-certification, highlighting that Thailand had joined the project in October 2011 and the number of certified entities has increased since its launch in August	**5 out of 5**  **(5 workshops completed)**

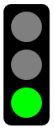
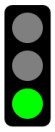
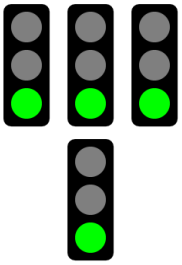
Action (Title and brief descriptions)	Latest status	Elements completed
	2010. MAG, where appropriate, to report on a yearly basis on progress towards implementing self-certification, thereby encouraging more economies to join the Pathfinder Initiative. Korea held a workshop on FTA Rules of Origin in Seoul in 10-12 July 2012, as part of FTAAP Capacity Building Needs Initiative. (No CR is found for this activity)	
APEC Elements for Simplification of Documents and Procedures Relating to ROOs (no date specified originally, revised to2012) 1. To work on 2 of the 5 elements proposed by Singapore in 2009: to collect Information on Reasonable Long Validity Period and Waiver of Certificate of Origin or Declaration. 2. Economies would select and work on next element(s) 3. To exchange and assess best practices	**2011**: It was reported that the work was ongoing. **2011:** MAG collected information on two remaining elements: Harnessing IT to Ease Documentation and Procedures of APEC Elements for Simplifying Customs Documents (13 economies responded) and Minimum Data Requirements in FTAs (14 economies responded) through two surveys. **2012:** Revision of the survey on Minimum Data Requirements in FTAs was reported by Singapore at MAG1. Report of recent developments on Harnessing IT to Ease Documentation and Procedures were presented by Chile at MAG2. (No CR is available)	**0 out of 1**  **3 out of 3**  **(2 surveys and 1 report completed)**

Action (Title and brief descriptions)	Latest status	Elements completed
for confidence building and risk management, and to reach the best recommendations and establish principles.	No update.	**0 out of 1** 
APEC Website on Tariff and ROOs (WebTR) (due originally in 2010, revised to 2012) 1. Member economies are to develop their respective website which will be later linked to the WebTR 2. To complete WebTR	**2010:** Web TR was completed and launched. **2011:** MAG members' agreement on the desirability of expanding the scope and functionality of the WebTR. Possible ideas have been circulated and discussed at MAG meetings. **2012:** The United States withdrew the proposal on 21st Century APEC Tariff Database	**1 out of 1**  **(1 website completed)**
Strengthen Cooperation with the Relevant International Organizations, i.e. ADB, ASEAN, ESCAP, OECD, UNCTAD, the World Bank, WCO, WTO (no date specified originally, revised to 2012) 1. To explore joint programs 2. To facilitate work process and expand the horizon of capacity building program by optimising synergy 3. To exchange views on how to implement action plans effectively by organizing roundtable discussion and Trade Policy Dialogue 4. To explore a partnership with the World Bank on research, data collection, and analysis and adapt relevant initiatives	**2011**: MAG members agreed to invite WCO to attend MAG meetings, to continue discussion on possible areas for collaboration. WCO proposed that MAG and WCO collaborate on a comparative study of product specific rules by product sectors. WCO made a presentation on its ROO database, which contains comprehensive information on ROO provisions in FTAs applicable to WCO. 3-year guest status granted for WCO to attend SCCP meetings, until 31 December 2013. No update.	**3 out of 3**  **(3 activities with WCO completed)** **0 out of 1**

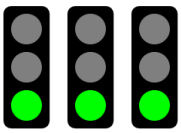
Action (Title and brief descriptions)	Latest status	Elements completed
under the WB's Aid for Trade Facilitation Project to facilitate capacity building and technical assistance, e.g. advanced cargo information to facilitate pre-arrival risk assessment and pre-clearance.		
Simplification and harmonisation of customs procedures on the basis of revised Kyoto Convention (RKC) (no date specified) To promote each economy's accession to and/or implementation of the revised Kyoto Convention	**2011:** SCCP worked on toward simplification and harmonization of procedures based on the Revised Kyoto Convention (RKC). Ten economies have acceded to the RKC. Those economies which have not acceded yet have adopted major principles for trade facilitation stipulated in the convention. (No CR is available) **2012:** APEC is working with WCO on simplification and harmonisation of customs procedures. A research project is on-going.	**2 out of 2**  **(1 completed activity, 1 on-going research project)**
Explore the possibility of adopting electronic certificates related to customs procedures (no date specified originally, revised to 2012) 1. To explore the possibility of implementing electronic certificates of origin (eCO) issued by an authority among the APEC members when applicable, i.e. under preferential agreements. 2. To further develop electronic certificates of origin pathfinder	**2010**: Successful implementation of the eCO project between two member economies, Chinese Taipei and Korea, since May 2010, which moved beyond its pilot stage. Several other economies have been also preparing or considering their participation in the implementation of the eCO. Chinese Taipei's update on the PTS on the current status that more users have joined the live project. **2011**: Joint Study proposed by Korea to promote the introduction of e-B/L world wide at ECSG. Korea held working level meeting with Japan in November 2011 and with China in May 2012, and agreed	**2 out of 3**  **(1 project and 1 workshop completed, 1 ongoing study)**

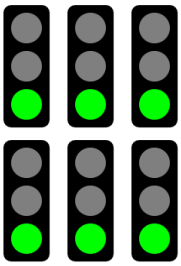
Action (Title and brief descriptions)	Latest status	Elements completed
3. To develop other initiatives for paperless trading by studying best practices and sharing information, etc.	to cooperate in the joint study. **2012**: Workshop on the Study on the Readiness of eCO Implementation in Cross-border Trade in APEC Region was organized by China in Beijing in July 2012. (No CR is available) **2011:** A workshop on Supply Chain Connectivity: e-Commerce as a Main Driver and Integration Tool (CTI 16/2011T) was held in San Francisco on 19 September 2011, the objective was to discuss ways for improving the "soft infrastructure" of supply chain by e-commerce tools implementation. The report for the workshop is available online (CR is available). **2012**: ECSG has been developing projects on the use of paperless trading in commercial processes. These projects aim at using "e-solutions" or electronic procedures and processes in cross-border trade in order to save time and costs for firms and government agencies seeking regulatory compliance information from traders. Areas covered by these projects include e.g eCOs; electronic invoicing, business requirements for data harmonization and single window, best practices in paperless trading, e-negotiations, archiving of e-documents and e-trade financing.	**1 out of 2**  **(1 workshop completed, 1 ongoing project)**
Total for Chokepoint 5		**17 out of 22** **(77%)**

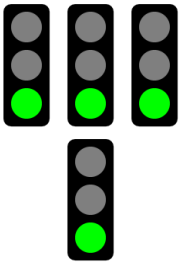
Table 6: Actions and Progress in Chokepoint 6

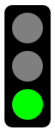
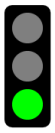
Action (Title and brief descriptions)	Latest status	Elements completed
Study the economic impact of enhanced multi-modal connectivity in the Asia-Pacific region (due in 2011) The study is to identify the key impediments affecting multi-modal connectivity in the Asia Pacific region today; explore the potential economic impact of increased multi-modal connectivity on the Asia-Pacific region in terms of economic growth, trade flows, and regional economic integration; and propose actions to address these impediments to multi-modal connectivity.	**2010**: The study was completed, is available online. **<u>Quote from the self-assessment survey:</u>** The project provided evidence that there could be significant gains from enhanced multi-modal connectivity (e.g. reforms in multimodal transport could potentially lead to a four percent increase of exports within the APEC region). The study also enhanced understanding and awareness on possible policy recommendations that could help in enhancing multi-modal connectivity.	**1 out of 1**  **(1 study completed)**
Explore further work on air transportation in the APEC region to meet Asia-Pacific supply-chain, business and economic requirements. (due in 2015)	**2011:** The United States organized a Conference on Air Cargo, Trade and Economic Growth in San Francisco in September 2011 under the auspices of TPTWG. The objective of the event was to bring together government officials, private sector participants, and relevant trade associations to have a conversation on the role greater air cargo liberalization could play in advancing economic growth in the Asia-Pacific. (No CR is available.)	**1 out of 1**  **(1 conference completed)**
Project Proposal: "Application of navigation systems in monitoring and optimizing management of multi-modal transportation" (due in 2011) Key objectives were to discuss the importance of systemic use of navigation information to raise efficiency and security of multi-modal transportation; and to advocate the advantages of navigation information systems application for cargo and passenger traffic control and	**2011:** A self-funded project on Global Navigation Satellite System (GNSS) Application for Seamless Transport Supply Chain Connectivity in APEC was started to address the issue of multi-modal connectivity and enhanced management of transportation within seamless supply chains through wider application of various GNSS technologies by APEC economies. A two-day workshop and an exhibition were held in Vladivostok, Russia on 2-4 October 2011. (No CR is available.)	**4 out of 4**  **(2 workshops, 1 project/principles and 1**

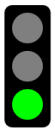
Action (Title and brief descriptions)	Latest status	Elements completed
synchronization of multi-modal transportation.	**<u>Quote from the self-assessment survey:</u>** The workshop discussed the extended application of GNSS technologies to enhance the management and operation of surface transportation systems and freight movement across supply chains among and within APEC economies. The common approaches and best practices were presented by participants from APEC member economies, who generated proposals and recommendations to improve seamless multi-modal transportation in the APEC region through efficient and coordinated GNSS application. **2011**: The workshop was held in conjunction with another APEC-funded project, Trans-border Control and Optimal Trans-border Logistics (TPT 06/2010), which has been was completed successfully. The final report was issued with the APEC Principles of Trans-border Logistics Services Optimization. The objective of the principles in a broader sense is to improve the efficiency of the processes associated with trading in goods and cargo flows across national borders by simplifying and harmonizing trade and transportation procedures and practices and optimizing trans-border logistics. The proposed project seeks to address issues in Chokepoints 1, 4 and 6 which include transparent and effective collaboration of business and government bodies inside each APEC Member economy as well as "across the border". (CR is available.) The outcome of the activity is also available. **<u>Quote from the self-assessment survey:</u>** The workshop increased knowledge and understanding of participants on	**exhibition completed)**

Action (Title and brief descriptions)	Latest status	Elements completed
	successful reforms and best practices in trans-border logistics already being implemented in many APEC economies. The workshop was also successful in promoting understanding and awareness of the need to further improve trans-border logistics, which in many cases cause major chokepoints for the movement of goods, as well as business people. **2012:** A workshop on Automated transport management systems (ATMS) implementation for optimizing logistics within the Asia-Pacific with an emphasis on ITS and GNSS application is scheduled for October 2012. The workshop aims to create the opportunity for participants to share experiences and best practices in the areas of construction, harmonization of approaches to transportation and cargo flow monitoring, and logistics management systems use. Participants are expected to formulate recommendations for the wider introduction of transportation and cargo flow management systems. These recommendations will inform the establishment of a mechanism of coordination of activities aimed at the enhancement of global supply chain routes in the Asia-Pacific region through advanced ATMS technologies.	
Introduce the Secure and Smart Container (SSC) concept for intermodal transport (with a practical application mode) (due in 2010)	**2010:** The project was completed in June. Based on the questionnaire and seminar, the secure and smart container concept, functions, standard framework and application mode were researched, and got good achievement. **2011**: An international seminar about Secure and Smart Container Development was held successfully in Beijing, with a	**3 out of 3**  **(1 project, 1 seminar and 1 survey/analytical work completed)**

Action (Title and brief descriptions)	Latest status	Elements completed
	completion of a survey and an analysis. The report of the seminar is also available. (CR is available TPT 03-2009A). **<u>Quote from the self-assessment survey:</u>** The project is successful in promoting awareness and encouraging the additional development of smart container technology, which is currently used in the United States and Canada, but has seen only limited application in other members. The use of smart container technology reduces costs by increasing the ability to track and locate cargo. In addition, because the technology reduces theft, it also reduces costs and increases speed and time of transport.	
Provide training in management of security, safety and emerging technology in intermodal transportation and supply chain systems	**2009-2010**: Three seminars have been successfully conducted in the Philippines, Indonesia (2010) and Viet Nam (2009). (Only 1 CR is available: TPT 02/2010A.) **2011:** A project on Survey of Supply Chain Workforce Development Needs & Conducting Seminars on Managing Operations and Risk in Intermodal Global Supply Chain Operations was completed. (CR is available.) **<u>Quote from the self-assessment survey:</u>** The Survey of Global Supply Chain Workforce Development Needs and Workshops Project was very successful in providing an overview of the skills needed, the available training programs, and a framework for the development of workforce skills and needed competencies in the APEC Region. As identified in the final report, there were a significant number of deficiencies identified throughout the various economies in developing knowledge and	**6 out of 6**  **(3 seminars, 2 workshops and 1 report completed)**

Action (Title and brief descriptions)	Latest status	Elements completed
	expertise throughout the supply chain.	
Supply Chain Visibility Initiative (due in 2012) 1. Discuss within relevant fora (e.g. CTI, SCSC, ECSG, SCCP, and TPTWG) and hold seminars and workshops for enhancing "supply chain visibility" to determine the feasibility of constructing an information network to share cargo status information in the multi-modal logistics.	**2011**: The Supply Chain Visibility Feasibility Study was commenced. Phase I collected information about the current status of the supply chain in the APEC region through the questionnaire survey to transportation players. (CR is available CTI-SCSC 07/2011T.) Phase II (self-funded, August 2011): Pilot examinations under the supply chain visibility network are conducted by Japan and other economies. After the pilot examination, considering the results of Phase I and II projects, an investigator will conduct interviews with transportation players to make recommendations to APEC members for supply chain improvement. (No CR is available) **2012:** Phase III (CTI 28/2011T) a set of draft recommendations for member economies to establish common technical grounds for visualized, trans-border logistics in the APEC region will be developed based on the results of Phase I and II and other additional input from other economies' experiences. These were discussed at a workshop that took place on 21 May 2012 in Kazan where participants shared best practices for enhancing supply chain visibility in the APEC region and agreed on next steps to promote supply chain visibility. (CR is available CTI-SCSC 28 2011T) **<u>Quote from the self-assessment survey:</u>** The project provided recommendations and best practice of information sharing, which improved policy coordination	**4 out of 4**  **(3 research projects and 1 workshop completed)**

Action (Title and brief descriptions)	Latest status	Elements completed
	when developing SCVs among APEC. it also offered a platform for both the government and private sector of APEC members to share APEC recommendations through the reporting of best practices. The Phase 3 Workshop helped address the issues and improve the awareness of the stakeholders, which will target to the 10% efficiency improvement.	
2. Hold the "APEC Supply Chain Visibility Workshop" aiming at constructing an information network to share cargo status information in the multi-modal logistics by: (i) sharing the knowledge as to the positive effects of constructing the information network on productivity and efficiency of manufacturing industry, logistics industry, and customs procedures; (ii)identifying the minimum required information to be shared through the network to construct the information network; (3) identifying activities by international standardising bodies, industries, ports and customs, which are necessary to construct the information network.	**2010**: APEC Supply Chain Visibility Workshop was held in the margin of SCSC2 in Sendai to share awareness of the importance of Supply Chain Visibility. (CR is available CTI 05/2010T) **<u>Quote from the self-assessment survey:</u>** This project was a good starting point to discuss visibility of international supply chain and improves collaborative relationships between or within governments and industries.	**1 out of 1**  **(1 workshop completed)**
3. Discuss a possible information network for sharing cargo status for improving multi-modal logistics and global supply chain. (1) Introduce advanced efforts in APEC members to improve visibility of container cargo movements through sea-ports.	**2012**: Japan held a workshop on Enhancing Visibility of Maritime Container Transportation for Advancing Supply Chain Connectivity (TPT 04/2011) in August 2012 in Russia, focusing on discussing ways to enhance visibility of maritime container transportation, with an aim to share best practices on sharing data of the Container Terminal Operation System. (No CR is available.) **<u>Quote from the self-assessment survey:</u>** The workshop aimed to share best	**1 out of 1**  **(1 workshop completed)**

Action (Title and brief descriptions)	Latest status	Elements completed
	practices of advanced economies on container data sharing between logistics providers.	
(2) Conduct pilot projects with a view to proving the effectiveness of the required information and other elements identified by the above-mentioned workshop.	**2011:** Pilot examinations under the supply chain visibility network are conducted by Japan and other economies. **2012**: Russia to take forward ongoing project on Sharing Best Practices for Seamless Intermodal Cargo Movement – Phase 1 Physical Infrastructure. Aim is to develop a listing of best practices on transport infrastructure development and modal connectivity for intermodal cargo movement, and conduct a workshop on these best practices.	**1 out of 1**  **(1 Pilot Project completed)**
(3) Formulate guidelines on how APEC should move to construct the interoperable information network to share cargo status in multi-modal logistics.	2012: APEC recommendation, served as a guide towards the construction of cargo movements information sharing infrastructure, was issued on 21 May 2012 in Kazan.	**1 out of 1**  **(1 guidelines completed)**
(4) Conducting capacity building activities for facilitating implementation of the guidelines mentioned above to enhance "supply chain visibility"	2012: Japan carried out a seminar for its private sectors and wrote an article on publications to facilitate their awareness of APEC recommendation.	**1 out of 1**  **(1 seminar completed)**
Project Proposal: **Security monitoring model and network for regional supply chain with a particular focus on food security** (due in 2011) Key Objectives: (1).understanding of existing problems and impediments to supply chain security among APEC economies; (2) improved transportation security and cooperation on supply chain	**2012**: Project is underway. TPTWG has commenced the implementation of its project on Security Monitoring Model and Network for Regional Supply Chain with a Particular Focus on Food Security (TPT 03/2010A) with expected deliverable to be baselines (policies, management, and technology applications) including a case study on food transportation security for	**0 out of 1**  **(1 project on-going)**

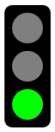
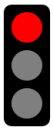
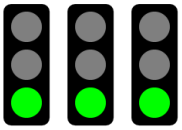
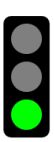
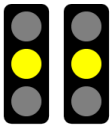
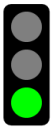
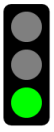
Action (Title and brief descriptions)	Latest status	Elements completed
security monitoring among APEC economies; (3) potential development of a supply chain and transport security information-monitoring network	developing a supply chain and transport security information monitoring network. (expected completion in 2015)	
Optimization of the supply chain through computational modeling (due in 2012) 1. Develop a computational tool for modeling and optimizing the transportation network. The tool will integrate problems typically treated in a piecemeal fashion, including economic, environ- mental and safety considerations, and analyze trade-offs between them while predicting network performance.	**2012**: Canada has completed its self-funded project on Focus Group on Supply Chains Connectivity Framework: Public Performance Measurements – Internal Indicators. A focus group workshop on supply chain performance measurements and internal indicators was in Singapore in February 2012. The key objective of the project was to determine the feasibility of implementing quantitative supply chain performance indicators for APEC trade and investment. (No CR is available)	**1 out of 1**  **(1 workshop completed)**
Electronic Freight Management (EFM) Information Exchange Platform (due in 2011) 1. Deploy a test adoption of EFM over an international trans-Pacific supply chain where containerized goods moved by ocean carrier from Asia, land at a Canadian port and continue overland to a final destination such as a distribution centre. This will track information exchange associated with clearing containerized goods through customs, port and terminal, and rail carriage systems for inland transportation and will also include inter-modal systems involving motor carriers providing transportation to distribution centres.	No update.	**0 out of 1** 
Total for Chokepoint 6		**25 out of 27** **(93%)**

Table 7: Actions and Progress in Chokepoint 7

Action (Title and brief descriptions)	Latest status	Elements completed
Improving Submarine Cable Protection (due in 2011/2012) 1. Survey economies on their submarine communications cables and compile important information. Economies would be requested to nominate a designated point of contact to coordinate/facilitate stakeholder contact in their respective economies. 2. Develop an inventory of legislative instruments and regulatory requirements relevant to submarine communication cables that operate in each economy. This would include permits, licenses, fees for repair, penalties and details of the inspection regime in each economy.	**2011:** A survey listing APEC economy points of contact on submarine cable regulatory and repair matters was tabled at TEL 44 in Kuala Lumpur in September 2011. The survey lists legislative requirements and will support further work on promoting cable resilience. (No CR is available.) Australia and New Zealand co-hosted a TPD on Protection of Submarine Telecommunications Cables in San Francisco. The TPD recommended closer APEC-industry linkages to address information sharing issues and the need for review of regulatory barriers to cable protection and repair. Following the TPD, the PSU initiated a study of the economic impact of disruptions to the submarine cable network in the Asia-Pacific region. **2012**: The above-mentioned report was completed. It supports the development of closer linkages between the cable industry and regulators through information sharing and review of regulatory barriers to cable protection and repair. (No CR is available.)	**3 out of 3**  **(1 survey, 1 TPD and 1 study completed)**
3. Raise awareness at Ministerial level of the importance of submarine communications cables and the impact and attendant cost to economies of outages.	**2011-2012:** The importance of submarine cable protection was recognized in the declarations issued at TELMIN8 in 2011 and TELMIN9 and 2012. (No CR is available.)	**1 out of 1**  **(1 declaration issued)**

Action (Title and brief descriptions)	Latest status	Elements completed
Reducing International Mobile Roaming (IMR) Charges (due originally in 2012, revised to 2013) Development of multi-pronged approach which will include: 1. Training sessions for telecommunications regulatory authorities; 2. Development of an Action Plan - a report describing the IMR market within APEC economies and details of the multipronged approach available to regulators to improve consumer awareness and foster a reduction in roaming charges.	**2012**: Australia is exploring means of funding the training sessions. **2012**: Australia is attempting to secure funding for the engagement of a consultant as part of an overarching strategy on IMR.	**0 out of 2** 
Enhancing regional Cyber Security (due in 2010, dropped in 2012) An APEC-wide Cyber Security Awareness Day is proposed to be held at the APEC TEL Ministerial Meeting hosted by Japan in 30-31 October 2010. As part of the APEC Awareness Day, there would be an APEC hosted website and an APEC-wide poster display at the ICT Ministers meeting and a possible exhibition at the 2010 APEC Leaders Meeting in November 2010.	**2010:** The APEC-wide Cyber Security Awareness Day was successfully held during TELMIN8. (No CR is available)	**1 out of 1**  **(1 activities completed)**
In collaboration with the APEC Secretariat, ABAC Australia and Logistics Associations in Australia, Malaysia, New Zealand and Singapore, develop a questionnaire to obtain details to document and exchange information on case studies and local experience on: (1) strategies for the social marketing of road safety measures – particularly best practice – which have resulted in positive change and offered the prospect of further advances; (2) approaches to planning, funding and priority setting for road infrastructure and for network operations and management; (3) standards for safety in and the safe use of vehicles, including use of emerging technologies like	This activity was revised as **Road Safety Standards for Heavy Vehicles (see below)** in 2011.	**Not applicable.**

Action (Title and brief descriptions)	Latest status	Elements completed
digital tacho-graphs and GPS-based tracking systems which enable heavy vehicle safe driving and operating practices to be monitored.		
Develop a pilot project, drawing on survey outcomes from relevant APEC economies. To develop an APEC funding concept note for consideration by the TPTWG for ranking by 10 September. The TPTWG has given this project its top ranking in considering 5 recent concept notes. The concept note project 'Road Safety Measures for Heavy Vehicles in the Transport Supply Chain Sector in APEC' seeks to empower economies to develop own road safety measures for heavy vehicles in the transport supply chain sector in APEC, with a view to promoting a common approach for the implementation and the alignment of safety measures and standards.	This action was revised as **Road Safety Standards for Heavy Vehicles (see below)** in 2011.	**The action was dropped from SCFAP in 2011.**
Subject to BMC3 outcomes, a full project proposal will be developed for BMC1 funding consideration in February 2011.	This activity was revised as **Road Safety Standards for Heavy Vehicles (see below)** in 2011.	**Not applicable.**
Road Safety Standards for Heavy Vehicles (revised based on activities above in 2011, due in 2011) 1. In response to a directive by Transport Ministers from Australia, Malaysia, New Zealand, Singapore and Thailand who met in February in 2010 in Melbourne, Australia developed and received approval for an APEC funded project to develop a compendium on heavy vehicle standards. The compendium will include measures to address driver fatigue, a Safety Code of Practice for Heavy Vehicles, and address issues relating to improving driver efficiency through a Professional Driver Training Program, initially for developing economies.	**2011**: A compendium of road safety measures for heavy vehicles in APEC transport supply chains has been finalized (TPT 05/10A) and will be circulated within TPTWG. The compendium provides a practical guide for dealing with driver fatigue, improving driver efficiency and developing a safety code of practice for heavy vehicles. The project was in response to a directive from Transportation Ministers from Australia, Malaysia, New Zealand, Singapore and Thailand who met in Melbourne, Australia in February 2010. (CR is	**1 out of 1**  **(1 compendium completed)**

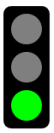
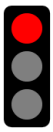
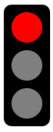
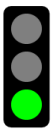
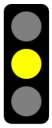
Action (Title and brief descriptions)	Latest status	Elements completed
2. TPTWG will use the project outcomes to urge APEC economies to draw relevant matters from the compendium to address variations in cross-border standards for movements of goods and services.	available.) **2012: Quote from the self-assessment survey,** economies have been urged at the TPTWG meeting in July 2012 to draw on relevant outcomes from the Compendium (available online) for the development or improvement of their heavy vehicles standards policies.	**1 out of 1**  **(1 activity completed)**
New Project: Electronic Data Interchange Linkages between Seaports (added in 2012, due in 2013) A project to develop a best practice checklist for electronic sharing of maritime cargo information to reduce supply chain blockages. The project will demonstrate supply-chain benefits by highlighting electronic data interchange linkages between port community systems. It will build on APEC's work on single windows, cross-border paperless trade and certification. Deficiencies in information infrastructure linking major seaports as well as overlapping information requirements by seaport authorities are major impediments to the effective functioning of supply-chains in the Asia-Pacific region.	Not applicable.	**For information only, not included in interim assessment.**
Total		**7 out of 9** **(78%)**

Table 8: Actions and Progress in Chokepoint 8

Action (Title and brief descriptions)	Latest status	Elements completed
Questionnaire to all APEC member economies to request information on: Which documents are acceptable by customs administrations for accreditation of goods in transit? Is there a timeframe for these goods in a third country? Is the division of the original consignment permitted in distribution centers /Free Zones? (due originally in 2010, revised to 2012)	**2012:** SCCP is completing a revised questionnaire on the treatment of transit by a non-party for application of preferential treatment, including how and which documents are required for this compliance at the customs administration of the importing economy. 14 economies have answered the questionnaire. Colombia a guest in the SCCP, answered it voluntarily, showing great interest through the entire process. The analysis of the responses is in process. The Final Report of this analysis is to generate proposals that ultimately will allow APEC economies to harmonize measures and procedures aimed at facilitating cross-border movement of goods between members. The estimated date of completion and consolidation of the Final Report is 31 October 2012.	**1 out of 1**  **(1 survey completed)**
Elaborate a comparative study in order to determine trends and best practice in the APEC Region, regarding a critical issue in the framework of bilateral trade agreements. (due in 2011)	No update.	**0 out of 1** 
Present to all stakeholders the result of the information gathering exercise (TBD)	No update.	**0 out of 1** 
Further discuss concepts to draft APEC guidelines for Transit and Transshipment. (due originally in 2010, revised to 2012)	**2012**: Draft Customs-Transit Guidelines for APEC FTAs is under consideration in the SCCP and CTI.	**1 out of 1**  **(1 draft guidelines submitted)**

Action (Title and brief descriptions)	Latest status	Elements completed
Draft if possible APEC guidelines for Transit and transshipment. (due originally in 2010, revised to 2011)	**2012**: Draft Customs-Transit Guidelines for APEC FTAs is under consideration in the SCCP and CTI.	**0 out of 1** 
Identify specific issues and impediments relating to cross-border customs-transit arrangements for logistics companies that operate in the APEC region. (due in 2011)	**2011:** Seven impediments that companies faced in cross-border customs transit were identified at CTI 1. (*2011/SOM1/CTI/018*). Suggested approaches in addressing the impediments, based on industry feedback and inputs from economies were compiled at CTI2. (*2011/SOM2/CTI/012*)	**1 out of 1**  **(1 study completed)**
Total for Chokepoint 8	(No CR is available)	**3 out of 6 (50%)**

Appendix 4. Responses to the Self-Assessment Survey

Question 1:

List the completed or current SCI Action Plan activities that your economy/sub-fora/working group is actively involved with as a proponent or co-sponsor or participant.

Table A.1 Completed Projects by 2012

Name of the project	Date of completion	Chokepoints	Type of activity
1. Supply chain visibility workshop	2010	6	Workshop
2. Symposium on supply chain connectivity	2010	1	Symposium
3. Self-certificate of origin capacity building workshop	2010	5	Workshop
4. APEC website on tariff and ROOs (WebTR)	2010	5	Website
5. Capacity building for logistics service providers*	2010	3	Workshop
6. Road safety measures for heavy vehicles in APEC transport supply chains	2011	7	Survey, research
7. Programme for enhancing the capacity of APEC local/regional logistics sub-providers	2011	3	Survey, research, seminar
8. Trade policy dialogue on advance rulings	2011	1	Trade policy dialogue
9. Sharing key success factors and experience in trade in services of SMEs	2011	3,4,7	Seminar
10. APEC self-certificate pathfinder phase 2	2011	5	Workshop
11. APEC supply chain visibility workshop (2010)	2011	6	Workshop
12. 2011 APEC regional workshop on single window	2011	4	Workshop
13. APEC self-certificate pathfinder workshops	2011	5	Workshop
14. APEC SME workshop on innovation, entrepreneurship and cloud computing	2011	3	Workshop

Name of the project	Date of completion	Chokepoints	Type of activity
15. Survey of supply chain workforce development needs & Seminars on Managing operations and risk in intermodal global supply chain operations	2011	1,2,3,6	Survey, workshop
16. Secure and smart container development for intermodal transport	2011	1,2,3,4,6,7,8	Survey, workshop
17. Supply chain visibility workshop	2011	6	Workshop
18. Trans-border control and optimal trans-border logistics	2011	1,4,6	Survey, workshop
19. APEC E-trade and supply chain management training course	2011	3	workshop
20. Seminar on improving SME competitiveness through sustainable business practices	2011	3	Seminar
21. Compendium of best practices and benefits of national logistics associations in selected APEC economies	2012	1,7	Workshop
22. Symposium on supply-chain connectivity measurement framework	2012	1	Symposium
23. Supply chain visibility feasibility study- phase 1 to 3	2012	6	Survey, workshop
24. Workshop on enhancing visibility of maritime container transportation for advancing supply chain connectivity	2012	6	Workshop
25. Best practices to eliminate bottlenecks in freight transport focusing on port sector*	2012	3	Research, workshop
26. APEC regional workshop on single window	2012	4	Workshop
27. APEC workshop on FTA rules of origin	2012	5	Workshop
28. APEC SME workshop on reducing high transportation and related costs	2012	3	Workshop
29. Questionnaire under ‘chokepoint 8: lack of regional cross-border custom transit arrangement to all APEC member economies.’	2012	8	Survey
30. 2012 green freight seminar	2012	3	Workshop
31. Focus group on supply chain connectivity framework – public	2012	1	Research, workshop

Name of the project	Date of completion	Chokepoints	Type of activity
performance measurement: internal indicators			
32. Workshop on capacity building of different aspects in e-commerce of supply chain connectivity implementation	2012	3	Workshop
33. Workshop on transporting goods and services reliably and cost-efficiently	2012	3	Workshop
34. Time release survey (NZ)	--	4	Research

Note: * denotes projects that are not listed under SCFAP.

Table A.2 Ongoing Projects

Name of the project	Expected Date of completion	Chokepoints	Type of activity
1. Transport, energy and environmental benefits of intermodal freight strategies	2012	1,2,3,6	Research, workshop
2. Automated transport management systems implementation for optimizing logistics within the Asia-Pacific with emphasis on ITS and GNSS application	2012	2,3,6,7	Workshop
3. GNSS application for seamless transport supply chain connectivity in APEC	2012	2,3,6,7	Workshop, research
4. Sharing best practices for seamless intermodal cargo movement: phase 1, physical infrastructure	2012	2	Workshop
5. The last-mile of supply chain –third party logistics forum and technical visits	2012	3,6,7	Forum
6. Research project on chokepoint 8	2013	8	Research
7. Study on the travel time of good vehicles on main economic corridors (INA)	2013	2	Research
8. Joint border management system –implementation of single window system	2013	4	Research

9. WCO Guideline for the Immediate Release of Consignment	2013	4	Research
10. Workshop on global supply chain resilience	2013	1,2,3,4,6,7,8	Survey, workshop
11. Time Release survey (THA)	2013	4	Survey
12. AEO capacity building workshops	2013	1,4	Workshop
13. Maximizing energy efficiencies of supply chain connectivity through rail-waterway intermodal container transport in APEC economies	2013	1,7	Survey, workshop
14. Proposal to address customs clearance delays caused by difficulties in navigating overly complex customs and requirements and documentation	2013	5	Website
15. MYP-Enhancing logistics performance through training and networking for APEC local/regional logistics sub-providers	2014	3	Survey, workshop, website
16. Advancing the action plan for chokepoint 1	2014	1	Research, capacity building programs
17. Adoption of electronic certificates related with customs procedures under preferential trade agreements	2014	5	project
18. Carbon footprint	2014	--	Workshop, research
19. Security monitoring model and network for regional supply chain with a particular focus on food security	2015	1,2,3,4,6,7,8	Survey, workshop
20. Capacity building programme for the APEC Pathfinder to Enhance Supply Chain Connectivity by Establishing a Baseline *De Minimis* Value	--	4	Case study
21. Korea-Chinese Taipei electronic-Certificate of Origin (eCO) Pathfinder	--	5	Project
22. Simplification and harmonization of customs procedures on the basis of the revised Kyoto Convention	--	5	Research
23. WCO accredited Rules of Origin trainer	--	5	Project
24. APEC single window initiative	--	4	Workshop
25. AEO Action Plan	--	6	Project, workshop

26. US Customs and Border Protection (CBP) Trade Transformation Initiative	--	1,2,5,6	Research
27. Mutual Recognition Arrangements	--	1,4,5,8	Agreement

Question 2:

Please rate the level of success for the completed SCI projects based on the components.

Table A.3 Rating of the Level of Success for the Completed SCI Projects

Number of projects	effectiveness	efficiency	Outcome- improvements				
			Overall	Policy/skills/ knowledge	Time	Costs	Uncertainty
Excellent	12	15	3	11	1	1	1
Good	12	10	7	12	7	5	5
Satisfactory	4	2	0	5	8	8	7
Poor	0	0	0	0	0	0	0
None	0	0	0	0	10	11	12

Table A.4 Rating of the Level of Success for the Ongoing SCI Projects

Number of projects	effectiveness	efficiency	Outcome- improvements				
			Overall	Policy/skills/ knowledge	Time	Costs	Uncertainty
Excellent	1	1	1	1	0	0	0
Good	3	3	3	4	3	3	3
Satisfactory	1	1	1	0	2	2	2
Poor	0	0	0	0	0	0	0
None	0	0	0	0	0	0	0

Question 3:

From the SCI Action Plans that your economy/sub-fora/working group is actively involved with (question #1), please identify 1 program that you have considered to be the most successful one, Please explain the reasoning or criteria for your answer.

Table A.5 The Most Successful Project under SCFAP

Name of the project	Reasoning
1. Compendium of Best Practices and Benefits of National Logistics Associations (NLA) in Selected APEC Economies	The project provided a tangible result at the third and the last workshop in Hanoi. Papua New Guinea established an NLA to be a peak industry body in collaboration with government on future policies and measures. In addition, other participating economies such as Indonesia and Vietnam took this opportunity to strengthen the role of their NLAs to liaise with their governments. In addition, other participating economies continue to share information on transport and logistics governance and other industry matters.
2. Transborder Control and Optimal Transborder Logistics (TPT06/2010)	The objectives of the project supported efforts to address chokepoints 1, 4 and 6 explicitly. It included the coordination of a workshop held in November 2011 in Moscow, that involved cooperation between APEC government officials, the APEC Business Advisory Council, industry representatives, and non-governmental organizations in order to share best practices, which were compiled from all 21 APEC Member economies and documented in the final report (available on the TPTWG website).
3. Chokepoint 8-related Programs	The final report on chokepoint 8 was recently circulated to the SCCP group and guidelines that summarize the key findings were suggested. The project works towards facilitating transit though third parties as well as preferential treatment, in a safe and timely manner thus reducing or eliminating existing barriers.
4. Programme for Enhancing the Capacity of APEC Local / Regional Logistics Sub-providers	The objective of this project was to enhance understanding on the current situation of local/regional logistics and explore ways to improve engagement and competitiveness of local/regional logistics sub-providers in the region. As such this project served as a situational assessment that was used to lay the groundwork for the current ongoing project. The goals of the project were successfully achieved, and adequate knowledge was acquired in order to design a multi-year project with great potential for improving supply chain performance.
5. Supply Chain Visibility (SCV)	HKC: The project provided recommendations and best practice as information sharing of SCV. The

Feasibility Study	information is a good reference for implementing joined-up network that improve visibility of cargo status information. CT/SCSC: With the implementation of the Container Movement Security Project, Chinese Taipei Customs provided a feasible solution to balance trade facilitation and security. Chinese Taipei Customs' experience with the application of RFID e-Seals can help other entities not only to control the movement of cargoes and containers but also to realize the advantage of transnational cooperation.
6. The Study on the Travel Time of Good Vehicles on Main Economic Corridors	This program is related to Indonesia's long term national program of MP3EI (program to enhance national supply chains and connectivity by 2025). The study result will provide recommendations on how to increase speed in the economic corridors.
7. APEC Regional Workshop on Single Window (SW)	JPN: Two workshops on single window were held in 2011 and 2012, and member economies shared their knowledge and highlighted the importance of not only political will and budget, but also the strong leadership at the operational level. Because Customs is just one of the key users in SW system and there should be the leading agency(s) to develop SW system, strong leadership is necessary to unite all the relevant agencies. PE: The activities on SW allowed Peru to review SW implementation strategies and improve them, to reduce the gap with more developed economies. The activities also sketch a way to perform in order to attain a highly dynamic SW. In 2010, Peru also implemented the New Advance Clearance Process in importation for home use, which enables clearance at port within 48 hours. Hence, changes have been made in regulations and technological adaptations in order to ensure 25% of growth up to December 2012, as well as the implementation of a team for random cases or when the situation requires special attention. SIN: The 2012 workshop promoted the development and international interoperability of SW, which was in response to instructions from Economic Leaders, Ministers and Heads of Customs to prescribe concrete measures to address chokepoint 4. The outcomes of the workshop included having i) shared the latest information and experiences of economies that have introduced SW systems or exchange trade-related data/documents electronically; ii) identified difficulties faced by the economies that have not introduced SW; iii) found out means or strategies to assist the economies that have not introduced SW systems in enhancing their capacity to do so; and iv) reached a consensus that economies should make continued efforts to further promote SW in the

	region.
8. Korea-Chinese Taipei electronic-Certificate of Origin (eCO) Pathfinder Project	ROK: The cross-border exchange of eCO is very important in realizing paperless trading, promoting trade facilitation and reducing trade costs. The eCO project between Korea and Chinese Taipei can provide a best practice for cross-border paperless trading for APEC member economies. With the successful implementation of the project, the the eCO program can be extended to other APEC economies including Vietnam, Indonesia, and Malaysia, and other economies that expressed their willingness to cooperate on this issue. CT: The eCO Pathfinder is the most active pathfinder project under APEC ECSG, and the eCO exchange model between Chinese Taipei and Korea has been adopted by APEC member economies as a best practice for cross-border paperless trading.
9. Case Study on Establishing an APEC De Minimis Baseline Value	The project helps to bring on board other economies with low De Minimis Value to considering revising it to ensure that the baseline value is higher and more facilitative for businesses.
10. Joint Border Management System (JBMS)	The JBMS will continue modernization of New Zealand's border management. The Trade Single Window (TSW) is one of the major components of the JBMS Programme. It will ultimately enable parties involved in international trade and transport to electronically submit the craft and cargo clearance data that is required by New Zealand border agencies, once only, through one entry point. The system brings benefits to both industry and border agencies.
11. ME PONGO GAMARRA, Multi-sector Strategies	ME PONGO GAMARRA is the most important multi-sector strategies implemented by the Government of Peru to boost production of the Gamarra complex, as one of the largest commercial centers in Peru. The main objective is to promote the competitiveness of the textile and apparel sector. A contest was organized, GAMARRA PRODUCE, consisting of continuous productive technical assessments to thousands of SMEs. The finalists will have the opportunity to gain access to new markets and strengthen their capacity. So far, this contest has completed several phases. The initiative will be replicated in different regions of the country through an integrative model where the public and private sectors will together work with one goal: productive inclusion.
12. AEO Program	C-TPAT, the US AEO program, has worked to encourage thousands of companies to adhere to C-TPAT's security criteria. Through work with other government agencies and continued work with US importers, compliance to C-TPAT's criteria is now a global standard. The program was instrumental in the development of other AEO programs around the world by providing technical

	assistance and training. Global Supply Chain Workforce Development Needs (TPT 02/2009A) was nominated by the IIEG to the Lead Shepard (Maria Elena Bautista) in 2009 for a special recognition because of its wide ranging scope and provision of workforce capacity development this project is probably the most significant. The project is really the development and culmination of many different activities in the TPT Intermodal Experts group that began in 2000 to attempt to develop workforce capacity. Moreover, the project and report laid out additional plans and a road map for increasing workforce capacity over the next few years. In addition, the project was an outgrowth and continuation of the work begun in the late 90's and has demonstrated a steady effort by the IIEG to address workforce development, women's involvement and capacity building in APEC. Automated Transport Management Systems Implementation for Optimizing Logistics within the Asia-Pacific with emphasis on ITS and GNSS Applications and GNSS application for Seamless Transport Supply Chain Connectivity in APEC - A questionnaire has been prepared for the upcoming workshop in Sochi, Russia Knowledge gained from questionnaire results will be discussed at the workshop.
13. Chokepoint 1-related programs	Under the Chokepoint 1 Group, members have developed the Supply Chain Inventory for Chokepoint 1 which covers the areas of coordination of policies, stakeholder engagement, publication, anti-corruption, and business certainty. In Viet Nam, all these areas are fostered, especially in the area of publication or disseminate the regulations, news, legal rules to the business community.
14. Strengthen Cooperation with the Relevant International Organizations	The integral importance of developing linkages between SCCP with international organizations, such as the WCO and international development banks, is well recognized. These relationships ensure that APEC promotes SCI action plan items efficiently and effectively in harmony with recognized international standards. They also promote capacity building while raising the stature of APEC more widely.

Question 4:

Between the years of 2010 to 2012 how well has your economy/sub-fora/working group met the objectives of improving the supply chain performance in terms of time, costs and uncertainty?

Table A.6 Self-evaluation by Member Economies on Achieving the Goals of SCFAP

Number of economies	Outcome- improvements				
	Overall	**Policy/skills/knowledge**	**Time**	**Costs**	**Uncertainty**
Excellent	4	4	2	1	0
Good	10	8	10	6	6
Satisfactory	2	3	2	5	4
Poor	0	0	0	0	1
None	0	0	1	1	1

Question 5:

a. Please list below any positive aspects such as better policy making, tangible impacts, knowledge sharing etc. that are achieved through the activities under the SCI Action Plans.

Table A.7 Positive Aspects Achieved through SCFAP Activities

AUS	- The project on Compendium of Best Practices and Benefits of National Logistics Associations (NLA) in Selected APEC Economies helped PNG established their NLA, created the definition of NLA and a NLA generic model. - The Symposium on Supply-chain Connectivity Measurement Framework addressed the crucial knowledge gap within the government and industry. It resulted in a set of agreed supplementary indicators. - The Seminar on the Performance Measurement of Supply Chains in the Asia-Pacific Region shared knowledge between different economies, which in the long run will lead to improved understanding of the problems in logistics chains and possible solutions to those problems. Economies synchronized definitions of key concepts and quantitative measures of logic chain performance; in the long run, it will lead to datasets which can be used to make more meaningful comparisons between economies and across time of logistic chains.
CDA/ TPTWG	- TPTWG has initiated collaboration with the World Bank and the World Economic Forum (WEF), in addition to other international organizations such as the ITF, and private/academic stakeholders to bolster the efforts of CTI and the PSU. - TPTWG conducted several well-attended and successful workshops, training courses, and high-level meetings to share best practices in relation to the standardization of intermodal transportation logistics; the implement international safety and security regulations within the various modes of transportation, and advance sustainable intermodal transportation infrastructure and networks. - TPTWG empowered APEC economies to develop their own road safety measures for heavy vehicles in the transport supply

	chain sector, with a view to sharing and promoting a common approach for the implementation and the alignment of safety measures and standards through the development of a compendium available on APEC's TPTWG website.
CHL	- Chile acquired X-ray portals for imports and goods in transit, expanding the existing geographical coverage. - Chile has overhauled rules and procedures based on facilitation measures under trade agreements, including trade facilitation measures, both in terms of imports and goods in transit as well as dispute settlement mechanisms. - Chile has integrated the border controls with adjacent economies, allowing the coordination of border procedures allowing the coordination of border procedures and permission to share information, which leads towards the facilitation and connectivity of cross border transit. - Chile has technical assistance agreements, covering the important systems of exchange of information and reciprocal consultations, which allow the facilitation of trade
PRC	- The structure of the Action Plan allows APEC economies to work together with a unified focus on specific underlying issues that need to be resolved.
HKC	- Sharing knowledge and experience on various subjects is a strong point of SCFAP to enhance supply chain performance.
INA	- The Study on the Travel Time of Good Vehicles on Main Economic Corridors will show up-to-date progress on road condition in the economic corridor, and could provide a reference for future improvement of the road sector. - Other action plans have increased skills and knowledge for future policy making.
JPN	- The projects related to Single Window (SW) shared common understanding on the importance of strong leadership at the operational level, which was brought back to economies where SW has not developed and would be used to implement the SW system.
ROK	- The activities under the SCFAP provided useful information and knowledge to the Korea Customs Service.
MAS	- The activities led to improvements in the current single window system nationally, reduced number of burdensome documentation such as the merger of invoice and packing list, and shared knowledge that led to closer collaboration among ASEAN members on the ASEAN Single Window to further expand the functions available.
NZ	- Positive aspects of SCFAP are developing and sharing expertise (ROO trainer and self-certification workshops), better relationships with industry, reducing documents required, facilitating trade, streamlining electronic processes (JBMS), and gathering of information (TRS).
PE	- As positive impact of SCFAP, a special committee, integrating public and private institutions and chaired by the Ministry of Foreign Trade and Tourism, led the Single Window for Foreign Trade (project).

	- In the case of the Ministry of Production, since 2010 the single window has implemented procedures on drug precursors; such as Procedure N° 79 -Unique Text of Administrative Procedures, with respect to the "Entry Clearance and Departure of Drug Precursors and Controlled Products from the country". - Positive aspects of the SCFAP activities are knowledge sharing, identification of best practices, strengthening efforts in implementing strategies, such as SW system, logistic chains, trade facilitation. - Regarding advanced clearance, a declaration management report was elaborated on advanced clearance, which enables to make decisions regarding the quantity of declarations, their regularization, and conclusion of advanced clearance. Without such tools, it is difficult to properly manage documents in regularizing and concluding clearance. A preferential treatment was granted to declarations submitted under advanced clearance in the customs area. A procedure regulation advance ruling issuance was approved and its dissemination ensures predictability in execution and a proper decision-making when solving requests on rulings issuance
PHL	- The APEC Self-Certification Pathfinder Phase 2 Workshop was effective in raising awareness among government officials and private sector representatives on the value of self-certification as a trade facilitation mechanism. - Other positive aspects of the SCI action plans are public advocacy and buy-in; sharing and documentation of best practices.
SIN	- Knowledge sharing through workshops and capacity-building programmes (e.g. *de minimis* study by US) is a positive aspect.
CT	- The activities held by Chinese Taipei have enhanced the capacity of local/regional logistics sub-providers and reduced constraints affecting engagement of SMEs by: 1) provision of a platform for communication and knowledge sharing among logistic providers, SMEs, and policy makers; 2) experience-sharing on how SMEs can improve traceability of goods, reduce times, costs and procedures. SMEs' management capacities in this regard are thus improved. - Knowledge and experience-sharing is considered a major part in this particular pathfinder action plan, and so far we have shared the successful eCO practice between Chinese Taipei and Korea with many other economies such as China, Thailand, the Philippines, etc. The approximate 6% savings on costs with the successful adoption of cross-border eCO exchange is one of the most tangible impacts of this activity. - Safe and transparent door-to-door transportation without Customs inspection can be achieved through the application of RFID e-Seals. Meanwhile, this goal can be more easily achieved by integrating with the AEO program in order to establish a cross-border information platform among regional economies so as to enhance the visibility of global supply chain.
THA	- Positive aspects of the SCFAP are sharing knowledge and best practices, improving transparency, raising awareness, building networks for coordination, and policy guidance.
US	- The primary benefits that have been attributable to the Global Supply Chain (GSC) include: improved workforce capacity; increased involvement of women in the GSC; increased awareness of smart container technologies; increased awareness and

	use of GNSS systems and technologies. - Another positive aspects of SCFAP is knowledge sharing of best practices and lessons learned from the workshop in Sochi Russia, as well as coordination among the APEC economies on ITS and GNSS as it applies to automated transport systems.
VN	- Positive aspects from SCFAP are sharing knowledge and practices in customs procedures and supply chain, as well as exploring new technologies and global standardization.
SCSC	- ROK: Harmonization through knowledge sharing and standardization activities are positive aspects of the SCFAP outcome. - CT: A safe and transparent door-to-door transportation without inspection by Customs could be achieved by the application of RFID e-Seals. The cross-border information platform could be established prior among AEO (Authorized Economic Operator) members in different countries. The platform could be helpful for entities to enhance the visibility of global supply chain.

b. Can any of the aspects identified under Q5a be enhanced?

Table A.8 Aspects of SCFAP That can be Enhanced

AUS	- The synchronizing of definitions and identifications of good sources of data for quantitative measures of logistic chains can be enhanced by increasing the number of variables in scope and by making quantitative measures play a central role instead of where they are now as supplementary measures and sub-ordinate to qualitative measures.
CDA/ TPTWG	- Greater involvement of the private sector in some planning operations can be built, in order to identify opportunities to increase throughput and reduce transit time of Asia-Pacific supply chains. - APEC could increase involvement with shippers and freight forwarders to identify key chokepoints. - APEC could allot some additional funding to study and survey key private sector participants in the supply chain.
CHL	- In terms of technological implementation, certain enhancements can be made from the point of view of new integrates information systems of control, both in operative procedures and data mining that will allow streamlining integrates processes; the delivery of relevant and timely information for the adoption of border measure; the improvement of systems for the calculation of tax evasion; etc.
PRC	- Timely updates on the Action Plans could be desirable, given changes in the economic environment and other external factors.
HKC	- To enhance knowledge and experience sharing under SCFAP, the following projects could be conducted: (a) more capacity building activities on a regular basis (e.g. seminars/training courses/workshops/experience sharing sessions/field visits) taking into account different stages of development of member economies in human resources, organisational, legal and institutional

	framework aspects, and timely assessment of projects and publication of results, etc.; and (b) dialogues on a need basis for relevant stakeholders in the public and private sectors to exchange views on major issues or concerns, latest trends and developments in use of technologies to enhance performance, etc.
INA	- The Study on the Travel Time of Good Vehicles on Main Economic Corridors could support the MP3EI program by providing the recent condition of the road in 6 economic corridors, but then the physical challenges have to be accommodated and improved.
JPN	- The economies, who have not implemented SW systems, could enhance domestic interoperability and connect directly to the SW system of other economies. - The next steps should be to discuss the future container visibility platform in APEC economies incorporating user opinions. From the questionnaire, many economies seem to have requested for more information and direct approach to experts.
MAS	- Participation could be expanded further and APEC could improve on the existing case studies to push for further policy reforms.
PE	- Developing capacity professional could be enhanced. - On single window, aspects (such as a legal framework that can offer some guidelines and allow better and faster changes in legislation) need to be addressed more frequently in workshops/ events. This requirement may help to pursue a correct working functioning of the Single Window. - For Advanced Clearance, implementing the declaration management report on advanced clearance makes it possible to regularize and conclude advanced clearance within the legal timeframe, while minimizing unsolved cases. The number of cases and regulations to be implemented in the framework of future negotiations may encourage modifications in order to add features not currently considered.
PHL	- On the sharing and documentation side, APEC should continue to take stock of the projects done to identify which areas have been completed and have achieved success and identify further those which would need further work and/or fresh initiatives.
CT	- According to the PSU eCO Benefits Survey, the savings on costs of cross-border trading can be approximately 6% if the eCO exchange is promoted to the rest of the APEC community. This action plan could be further promoted to further improve its effectiveness.
THA	- APEC could continue the activities of sharing knowledge/ best practices and capacity building to improve long term performance of supply chains in APEC.
USA	- More involvement of the private sector in some planning operations is needed to identify ways that could increase the throughput and reduce transit time. Increased involvement with shipper and freight forwarders would help identify key choke points.

	- Additional funding from APEC to study and survey key private sector participants in the supply chain is needed. - The importance of government and regulatory involvement to streamline regulatory processes at borders is essential. However, government involvement is only part of the supply chain and the addition of private sector shippers and transport companies is also needed. - Additional security within economies is needed to increase throughput and reduce costs due to theft and damage. - TPT and the IIEG could provide additional support of these tracking technologies to reduce theft and pilferage within economies and in transit. - Additional support for tracking technologies is needed. - Economies could expand the government role beyond the customs border crossing issues to increase involvement and facilitation of all aspects of the supply chain. The government sector only deals with the immediate issues of crossing borders and not with the entire supply chain.
VN	- Customs officials and experts from the SCSC, TPTWG, SCSC could be more actively involved in sharing experiences and best practices as well as in exploring new technologies and/or global standardization.
SCSC	- ROK: Technology is there, but improving effectiveness and efficiency can be achieved by international harmonization (e.g. standardization) activities within ISO, UN/CEFACT, etc. These studies are good initiative actions, but continuous and specific studies should be followed.

Question 6:

Does your economy/sub-fora/working group has any suggestions or policy recommendations on how the SCI Action Plans can operate more effectively and efficiently?

Table A.9 Suggestions on Improving Effectiveness and Efficiency of SCFAP Implementation

CHL	- A greater level of feedback in regards to the development under and implementation of SCFAP chokepoints
PRC	- Timely updates on the Action Plans to take into account of changes in the economic environment and other external factors
HKC	- Identify priority areas/menu of actions in respect of different performance clusters, taking into account the interim assessment conducted by the PSU in a holistic manner - Address the priority areas/menu of actions through targeted capacity building activities with measurable goals in a phased approach taking into account different stages of development of economies in an orderly manner - review progress and priority areas/menu of actions taking into account the latest trends and development on a regular basis

	- Engage relevant stakeholders and the industries through dialogues to exchange views to facilitate formulation of policies and priority areas on informal/need basis
JPN	- Collect the results of Time Release Survey (TRS) from each economy to measure the improvement in detail and to reveal which part needs more improvements at the border
ROK	- Identify the specific problems of each APEC member economy for capacity building to enhance the supply chain performance
MAS	- Lead economies to push for increased participation of the economies and ensure that more economies are on board of all of the programmes implemented
NZ	- Improve communication from coordinating economies
PE	- Generate mechanisms to disseminate information on best practices and achievements obtained by APEC economies - To further encourage active and steady participation of economies to know their status, plans and next steps, to have a more complete view of APEC economies - Encourage discussion on key subjects, propose issues and discuss among economies some guidelines
THA	- Develop policy guidelines for each chokepoint
USA CDA/ TPTWG	- Publicize SCFAP to better understanding of it, garner more support and involvement from business and industry and connect business leaders, academia and government representatives to ensure that major difficulties are identified. - Enhance physical infrastructure for both developed and underdeveloped economies, facilitate identification and allocation of monies for key projects by working with and helping the Asia Development Bank prioritize projects - Find additional research funds to support SCFAP chokepoints - A sub-group on Supply Chain Efficiency efforts could be set up to provide regular updates on the different projects - A more general discussion of chokepoints across APEC on supply chain efficiency
EWG	- Look at specific products or natural resources with a ‘whole of APEC’ approach, e.g. trade in liquefied natural gas (LNG)
SCSC	- Follow up with continuous and specific studies
SCCP	- Encourage cross-for collaboration, especially on Action Plan items that impact multiple sub-committees

Question 7:

To what level do your economy/sub-fora/working group’s general activities support the eight chokepoints under the SCI Action Plan?

Table A.10 Member Economies' Level of Involvement in Each Chokepoint

	1. Transparency	2. Infrastructure	3. Logistics Capacity	4. Clearance	5. Documen-tation	6. Connectivity	7. Regulations & standards	8. Transit
Very well	10	5	3	9	11	6	6	7
Moderately	2	5	9	8	2	6	6	4
Slightly	4	6	1	2	5	6	3	5
Not at all	2	2	6	2	3	1	3	2

Question 8:

Describe examples of lessons learned or best practices in your economy/sub-fora/working group in implementing the SCI Action Plan. Please also provide any suggested activities that you think it would be useful to further expand the current SCFAP in order to achieve the 10% target in 2015. Please indicate relevant websites or other reference materials whenever possible.

Table A.11 Lessons Learnt or Best Practices in Implementing SCFAP and Suggested Activities to Expand SCFAP

Economy	Lessons learnt or best practices	Suggested activities
CHL		- Under chokepoint 8, suggested activities include the facilitation of transit though a third party, for the application of a determined preferential tariff in what is related to a proposal for the requirement of the same documents, the length of stay in a third party, formalities in transit operations, the request for the same document of accreditation of the stay in a non APEC member. In general, all these recommendations that are being developed, seek to facilitate the elimination or reduction of trade barriers. - The latter also implies a reduction in costs though the streamlining of procedures and the reduction in port charges in a third party. In the same way, the implementation of technology is directly proportional to a reduction in time, cost and the monitoring of transit operations
PRC	- Through the knowledge gained from implementing and discussing project CTI 02 2011T, we have discovered	- On gathering information and gaining an understanding of the actors involved in the supply chain, survey and workshops have

	the need for more efficient ways of gathering information and gaining an understanding of the actors involved in the supply chain.	worked in the past, however there need to be better utilization of current technologies to accurately gauge the current situation, and thereby design future actions and policies. The ongoing MYP serves as the first step to explore and meet this need.
JPN		- Collecting TRS results is one of the best ways to see and evaluate the quantitative progress of the supply-chain performance. It would also reveal which part needs more improvement at the border.
ROK	- A "Systematic Approach" proposed by the United States is one of the useful ways to assess the progress of the supply-chain performance and enforce capacity building of the supply-chain of the economies.	- It is planned to address burdensome customs documentation and other procedures by undertaking this approach in collaboration with the World Bank.
MAS	- Closer collaboration with the Private sector can help push for more policy reforms that can help achieve the objective of 10% target in 2015.	- Propose for more capacity building programmes that involves more than 1 sub-fora such as Customs and Transports to ensure a better understanding of policies that involves both authorities.
MEX	- Regarding Chokepoint 8, a set of required documents was defined to take care of transit by a non-Party for the application of preferential treatment. As a result, a common view for this purpose has been implemented with APEC and non-APEC trade partners.	
PE	- While Peru has not implemented TRS, Peru uses other means to evaluate the quantity progress when adopting measures that match customs clearance on supply chain transactions.	- Support the PSU to establish a minimum of indicators to measure compliance progress.
PHL	- The Philippines has created a public-private sector group through the National Competitiveness Council which was charged to address challenges	
SIN	- Singapore's public-private partnership implementation of National Single Window, and TradeNet	

CT/ SCSC	- Compendium of Innovative Strategies Available to SMEs for Reducing Transportation Costs was proposed and endorsed by SMEWG, which will be of use for APEC members. - ECO Pathfinder is the most active pathfinder project under APEC ECSG, and the eCO exchange model between Chinese Taipei and Korea has been adopted by APEC member economies as a best practice for cross-border paperless trading. - The RFID e-Seal technology used by Chinese Taipei Customs can provide a speedy Customs clearance environment (a green channel). The movement of sea containers and air cargoes in green channels can be tracked in real time. Therefore, the cargo flow in global supply chains can be visible to both the private and public sectors. - The pilot project called Container Movement Security Project implemented by Chinese Taipei Customs can provide an efficient clearance environment and bring benefits to all participants in the end-to-end supply chain. Container security, manpower reduction, cost reduction, and efficiency for escort were all realized in Taiwan by the pilot project.	
THA		- Develop APEC Policy Guidelines for each chokepoints, which will be suggestive to facilitate knowledge-based decision making to adopt supply chain policies
USA	- CBP maintains its goal of pursuing AEO mutual arrangements to assist with Chokepoint 8 towards Authorized Economic Operators (AEOs) and reap benefits, such as faster processing of goods by Customs or through reduced examination rates. This, in turn,	- To achieve a goal of increased supply chain security, the US plans to participate and lead conversations, which also reduces multiple and complex reporting requirements. The US works to continually comply and work towards increased and effective AEO programs throughout APEC economies and will continue to do so through

	translates into savings in time as well as costs, and generally a more effective and secure supply chain. - DOT has several successful projects regarding workforce development, technology standards development, models of short sea shipping and ideal energy transportation. However, these projects are not yet completed. - Cooperation is achieved through implementation of innovations in all transportation and logistics areas including ITS and GNSS location-based guidance and navigation systems. It is playing one of the key roles in improvement of transportation system quality which is of specific importance for trade facilitation. Intermodal cargo flow may escalate substantially by adopting location-based ATMS, including use of GNSS. This project contributes to studies on intensification and optimization of traffic, avoiding costly investments into infrastructure construction during times of economic uncertainty.	trainings, workshops, and bilateral discussions as necessary. - We should identify a key opportunity to bring all information together in one place and make sure that we have plenty of notice about when and where it will occur. This question could be the topic of a special session or meeting of the IIEG and the NCIT would be happy to host it or facilitate it.
CDA/ TPTWG		- A more general discussion or high-level meeting on the progress made by APEC Member Economies, sub-fora committees/working groups, the private sector (business and industry) and other international non-APEC stakeholders, could highlight the importance of the SCI Action Plan in addressing the chokepoints in support of the APEC-wide objective of advancing regional economic integration.