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Economic Cooperation**

Reducing Business Travel Costs: The Success of APEC's Business Mobility Initiatives

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EXECUTIVE SUMMARY

Following the conclusion of APEC's Second Trade Facilitation Action Plan (TFAP II) in 2010, the APEC Policy Support Unit (PSU) conducted the Final Assessment by analysing the contributions made by the working groups in the four priority areas – Customs Procedures, Standards and Conformance, Business Mobility, and Electronic Commerce.

The results of the Final Assessment indicate that the initiatives and actions of the Business Mobility Group (BMG) have been very successful in reducing transaction costs related to cross-border business travel in the APEC region over the TFAP II period of 2007 through 2010. The PSU conducted three surveys between March and July 2011 – Client Satisfaction Survey, New Applicant Survey, and Economy Survey – to collect the data necessary to evaluate the impact that the APEC Business Travel Card (ABTC) scheme has made in reducing business travel costs in the APEC region towards the TFAP II goal of a 5% reduction in trade transaction costs.

The study found that business travel costs for ABTC holders were reduced by 38% in the 12-month period between March-July 2010 and March-July 2011 as a result of the ABTC scheme, which translates to total savings of USD 3.7 million. ABTC holders engaged in cross-border business travel in the APEC region experienced the following reductions in transaction costs:

- 43.3% reduction in time costs to complete visa applications (savings of USD 272,214);
- 52.4% reduction in time costs to complete immigration processing (savings of USD 1,905,202); and
- 27.8% reduction in fees spent on visa applications (savings of USD 1,520,380).

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

The Final Assessment also found that 14 out of 17 APEC economies that reported data are meeting the 30-day processing service standard for intra-company transfers of senior managers and executives, and specialists. Additionally, 15 out of 19 APEC economies that reported data process business visa applications within 15 days, with five economies having e-lodgement facilities to receive online visa applications.

The Client Satisfaction Survey revealed that 91% of ABTC holders rated their overall level of satisfaction with the ABTC scheme as satisfied, with 42% of all respondents expressing that they are extremely satisfied. Ninety-three percent of respondents stated that the ABTC is useful in allowing them to travel without applying for a visa and also in avoiding long queues at immigration checkpoints.

However, 20% of the responses indicated that ABTC holders would most like the validity period of the ABTC to be extended, closely followed by shortening the time it takes to obtain

an ABTC (18%). Comments received from respondents also highlighted several other areas for improvement, including the process to renew an ABTC, the signage for APEC lanes at immigration checkpoints, and the knowledge of immigration officials about the rights of ABTC holders.

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

- continue to monitor and evaluate the KPIs as well as client satisfaction in the ABTC scheme every three years;
- continue to expand the ABTC scheme among new card holders in the APEC region and encourage the three transitional members to become full members of the scheme;
- target business people who engage in international business travel most frequently as well as small and medium enterprises to maximize the benefits that the ABTC scheme provides to the business community;
- strive to achieve the client service standards and endeavor to reduce the processing times for new ABTC applications and for renewals, including simplifying the procedures to re-issue ABTCs when new passports are required;
- consider extending the validity period of the ABTC to five years;
- consider centralizing the processing of ABTC applications in order to maximize administrative and operational efficiencies and to progress towards a more consistent client service, including standardizing the requirements to obtain an ABTC across the APEC member economies; and
- increase the use of information and communications technology to reduce costs and improve client service by offering online processing of visa applications as well as Online Status Tracker to monitor the progress of ABTC applications.

1. INTRODUCTION

A. IMPORTANCE OF BUSINESS MOBILITY

Business mobility refers to the flow of business people who are engaged in the conduct of trade and investment activities across borders. A recent survey found that a majority of business executives thought that face-to-face communication and in-person meetings had a large impact on their business, considering it to be the most effective way to meet new clients (79%), essential for negotiating final agreements (89%), and a key factor in successfully building and maintaining long-term relationships (95%)¹.

Since business travelers are usually highly skilled, they are also viewed as a key channel for the international transfer of knowledge. A recent study focused on the face-to-face interactions that are carried out through international business visits and found that by allowing access to external knowledge, business mobility increases an organization's efficient use of human resources as well as provides gains in competitive advantages². A previous study had also found that business visits benefit both sending and receiving economies by enhancing their domestic stock of knowledge³.

In-person communication is particularly important for the transfer of technology, which can lead to greater innovation. A recent study examined the impact of business travel from the United States to 36 other economies from 1993 through 2003 and found that a 10% increase in the number of business travelers accounts for about 1% of the total difference in patenting rates in the typical industry, and its contribution is about one-fifth of the contribution of domestic R&D spending⁴. Studies such as these also suggest a positive correlation between international business travel and productivity.

Improving business mobility therefore stimulates trade and economic growth through several interrelated channels – greater efficiencies from specialization, more rapid technology and expertise transfer leading to increased innovation, and improved resource allocation. With streamlined entry to other economies, business people can enjoy greater reductions in transaction costs and considerable savings in valuable time and resources, which is especially crucial for small and medium enterprises (SMEs).

Impediments to the mobility of business people across borders impose real costs on economies. For example, a 2008 study by the Conference Board of Canada found the costs associated with impediments to business mobility to be significant. The research showed that as a result of visa requirements, Canada's imports and exports of services are CAD 926 million and CAD 330 million lower, respectively. Moreover, inward and outward FDI stocks are CAD 8.9 billion and CAD 4.7 billion lower, respectively, as a result of visa restrictions.

Therefore, limitations on the ability of people to move efficiently so as to conduct trade and investment activities across borders not only hamper the trade and investment flows of an

¹ Harvard Business Review (2009).

² Tani (2011).

³ Tani (2006).

⁴ Hovhannisyan and Keller (2011).

economy, but also reduce the productivity and competitiveness of the economy. Since entry requirements will tend to reduce the number of business travelers, evidence-based research demonstrates how crucial short-term cross-border movements of people are to knowledge transfer and innovation, which ultimately leads to greater economic growth.

B. BUSINESS MOBILITY INITIATIVES IN APEC

APEC is somewhat unique in its focus on business mobility under the area of trade facilitation, reflecting the recognition by members of the contribution of enhanced business mobility towards facilitating trade and investment activity in the region. In 1995, the Osaka Action Agenda identified enhancing the mobility of business people as one of the priority action areas to achieve the Bogor Goals. APEC economies committed to enhance business mobility by exchanging information on regulatory regimes; streamlining the processing of short-term business visitor visas and procedures for temporary residence of business people; using technology to improve border security and other counter terrorism measures; and maintaining a dialogue on these issues with the business community.

The Business Mobility Group (BMG) was established in 1997 when the APEC Business Advisory Council (ABAC) made the facilitation of business travel a priority. The role of the BMG is to enhance the mobility of business people in order to facilitate trade and investment activity in the APEC region. It achieves its aim by building the capacity of members to implement transparent, streamlined short-stay and temporary residence arrangements, and immigration and related border systems to ensure the safe and secure movement of people.

Recommendations from ABAC have shaped APEC's agenda on business mobility through its dialogue with the BMG. In particular, ABAC and the wider business community were integrally involved in the development of the APEC Business Travel Card (ABTC) scheme in 1997. As a major initiative to support business mobility, the ABTC scheme provides business travelers with visa-free travel and expedited immigration processing when visiting participating APEC economies. The cards are issued by the Immigration Authority in the home economy of the traveler.

All 21 APEC members currently participate in the scheme – 18 as full participants, while three economies are transitional members of the scheme⁵. The ABTC provides card holders with pre-cleared short-term entry to economies that fully participate in the scheme. The scheme removes the need to individually apply for visas or entry permits, saving valuable time, and allows multiple entries into participating economies during the three years the card is valid. ABTC holders also benefit from faster immigration processing via access to fast-track entry and exit through special APEC-marked lanes at major immigration checkpoints. Although the transitional members of the scheme do not currently offer pre-cleared entry to business travelers nor do they issue cards, ABTC holders are entitled to access specially designated fast-track immigration lanes upon entry at major international airports in the economies of the transitional members of the scheme. The ABTC scheme therefore makes

⁵ Full members of the ABTC scheme (year of joining): Australia (1997); Brunei Darussalam (2001); Chile (1998); China (2002); Hong Kong, China (1998); Indonesia (2002); Japan (2002); Korea (1997); Malaysia (1999); Mexico (2007); New Zealand (1999); Papua New Guinea (2003); Peru (2001); Philippines (1997); Singapore (2004); Chinese Taipei (2002); Thailand (2001); Viet Nam (2003). Transitional members of the ABTC scheme (year of joining): Canada (2008); Russia (2010); United States (2007).

possible a range of business travel scenarios in the APEC region. (A diagram of these scenarios is at Appendix A.)

The BMG continually works to improve the ABTC scheme and several enhancements have been made since its inception. Priority processing was implemented in 2008, whereby ABTC applicants could nominate up to five economies to which they seek pre-clearance as a priority and upon which an interim card could be issued. The BMG is also currently investigating the potential of a biometrically-enabled ABTC (ABTC Smartcard). In addition, the BMG has developed the ABTC Client Service Framework that provides a best practice benchmark by which economies can self-assess their existing regimes and develop their own strategic action plans.

Other major initiatives and activities of the BMG include the following:

- Maintenance of the APEC Business Travel Handbook, a reference guide that includes up-to-date information on the visa and entry requirements and procedures for short-term business visas and temporary business residency permits, and also provides contact details for the offices that issue visas across the APEC region.
- Expansion of the APEC Regional Movement Alert System (RMAS) that allows real-time validation of passport data between participating economies, thereby enhancing security at the point of departure without impeding other travelers' movements. Australia; New Zealand; and the United States have successfully implemented the system and more BMG members are expected to participate in the future.
- Implementation of the Advanced Passenger Information (API) Initiative to increase safety and security for travelers and economies. API systems assist with streamlining border processing for all passengers and provide increased border security through enabling passenger screening and clearance in advance of a passenger's arrival.
- Conducting a review of the BMG's Professional Immigration Service standards to develop standards that will assist APEC members to improve the quality and consistency of their immigration services and systems.
- Developing an APEC Best Practice in Border Capabilities Model that will help to identify efficiencies in immigration procedures and explore innovation and the use of information and communications technology in border management.
- Working to develop and implement automated immigration clearance systems and Machine Readable Travel Documents (MRTDs) with biometrics that meet international standards, thereby improving security and border control processes.

C. APEC'S TRADE FACILITATION ACTION PLANS

APEC has been at the forefront of international efforts to facilitate trade by identifying obstacles that hinder trade and implementing actions and measures to address those obstacles. Based on APEC's Trade Facilitation Principles, the Trade Facilitation Action Plan (TFAP I) was developed in response to the goal set by APEC Leaders in 2001 for member economies to achieve a regional reduction in trade transaction costs by 5% between 2002 and 2006 as progress towards the Bogor Goals.

TFAP I consisted of a menu of actions and measures to reduce trade transaction costs and simplify administrative and procedural requirements in four priority areas – Customs Procedures, Standards and Conformance, Business Mobility, and Electronic Commerce. At

the conclusion of TFAP I, APEC members had selected over 1,400 actions and measures in total, of which over 62% had been completed, with 56 out of 94 measures having been completed under the Business Mobility priority area. Based on self-assessments by each APEC economy, APEC Leaders welcomed the achievement of the 5% reduction target in 2006.

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

TFAP II described eight actions and measures under two major objectives for the BMG (a complete list of the actions is at Appendix B):

- *Streamline and Standardize Procedures* – enhance the mobility of business people who are engaged in the conduct of trade and investment activities in the Asia-Pacific region; and
- *Enhance the Use of Information and Communications Technology* – enhance the use of information and communications technology (ICT) to facilitate the movement of people across borders, taking into account the Leaders' Statement on Counter Terrorism.

The actions and measures to enhance the mobility of business people in the APEC region have as their core objective the reduction of barriers to cross-border business mobility. They are focused on areas where government regulation can impose transaction costs on cross-border travel (time and cost of procedural requirements and processing) and where governments can have an impact on reducing them (such as through streamlining or standardizing procedures and harnessing the use of ICT).

There are several transaction costs that business travelers face both at and either side of the border that are expected to have an impact on trade. These include:

- processing and clearance times at airports;
- fees for visas and other travel documentation, such as testing or other requirements; and
- preparation and processing time for visas, work permits, employment/practicing requirements (e.g., professional qualifications recognition), and economic needs tests on either side of the border.

The BMG therefore focuses on actions that directly seek to reduce the time and cost involved for business travelers as a result of government regulation, such as actions to facilitate the expedited processing of business visa applications. The promotion and expansion of membership of the ABTC scheme is a key action aimed at reducing transaction costs for business people by eliminating the direct costs of a visa and saving time by avoiding the visa application process and providing access to priority immigration lanes at the border.

D. DEVELOPMENT OF KEY PERFORMANCE INDICATORS

In order to measure the impact of their actions and measures on reducing trade transaction costs in the APEC region between 2007 and 2010, each sub-fora developed Key Performance Indicators (KPIs), which were endorsed by the Committee on Trade and Investment (CTI) in 2008. At that time, the BMG had agreed to 12 KPIs that focused on each of the eight actions required under TFAP II. (A complete list of the previously agreed KPIs is at Appendix C.)

The TFAP II Interim Assessment conducted in 2009 reviewed these endorsed KPIs against three criteria: effectiveness, efficiency, and simplicity⁶. The report highlighted that only a few of the KPIs for the actions and measures achieved by the BMG were effective in indicating progress towards TFAP II goals and that none of the indicators were able to measure the level of transaction costs and therefore any reduction in costs towards the 5% target over the TFAP II period. Furthermore, none of the indicators were able to measure, quantitatively or qualitatively, the contribution of the ABTC scheme in reducing business travel costs.

Therefore, the Interim Assessment developed seven new KPIs to capture the transaction costs that could serve as a base to assess the BMG's progress in improving business mobility towards the TFAP II goal (Table 1). These KPIs were recommended as being the most effective, efficient and simple indicators for generating data that are capable of quantifying reductions in terms of the time and cost incurred in cross-border travel due to improved business mobility. The majority of the recommended KPIs relate to the ABTC scheme given its prominence in the work program of the BMG and its success within APEC.

Table 1. Recommended KPIs for Business Mobility, TFAP II Interim Assessment

Area	Action	Suggested KPI
Streamline and standardize procedures to enhance the mobility of business people engaged in the conduct of trade and investment	Implement and promote the ABTC and/or visa waiver arrangements	1. Total number of ABTC card holders and variation from previous year
		2. Percentage of expired ABTC holders who have re-applied for a new ABTC
		3. Total pre-border application time saved by ABTC
		4. Total time saved clearing immigration at the border by ABTC (hours/minutes)
		5. Total cost savings in business entry fees by ABTC (USD)
	Streamline arrangements for intra-company transferees	6. Processing time for intra-company transfer applications (average, in days) and change from previous year
Enhance the use of ICT to	Introduce e-lodgement	7. Processing time for business

⁶ APEC Policy Support Unit (2009).

facilitate movement across borders	arrangements for temporary visa applications	visa/entry (average, in days/hours) and change from previous year
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Source: APEC Policy Support Unit (2009).

2. ASSESSMENT OF THE BMG ACTIONS

A. BACKGROUND

i. Survey Design and Implementation

The BMG developed two questionnaires that would be the key mechanisms through which the data required to calculate and assess the recommended KPIs could be captured – a revised ABTC Client Satisfaction Survey based on one that had previously been implemented in 2008 and a new survey of the BMG members (an Economy Survey). At the request of the BMG, the APEC Policy Support Unit (PSU) and the Institute for Economic and Social Research at the University of Indonesia (LPEM) assessed these questionnaires and the proposed methodology to calculate the KPIs.

The PSU and LPEM made several suggestions to the BMG in order to improve the survey design and the methodology to evaluate the KPIs as well as to assess whether the TFAP II goal of a reduction in transaction costs had been achieved. These recommendations included the addition of a New Applicant Survey in order to collect similar information from non-ABTC holders based on their actual experience of business travel without the ABTC, which could be used as a comparison against the information collected from the ABTC holders.

The Client Satisfaction Survey and the New Applicant Survey asked respondents about the transaction costs they had experienced in visiting APEC economies on business in the previous 12 months. In addition, the Client Satisfaction Survey included a number of questions that would be used to measure client satisfaction in the ABTC scheme. (The Client Satisfaction Survey is at Appendix D, the New Applicant Survey is at Appendix E, and the Economy Survey is at Appendix F.)

The Client Satisfaction and New Applicant Surveys were available online from 25 March 2011 through 18 July 2011. In addition to English, respondents could complete the survey in Chinese, Japanese, Korean, Spanish, or Vietnamese. There were a total of 1,463 responses to the Client Satisfaction Survey and 278 responses to the New Applicant Survey. The number of respondents from each APEC economy varied significantly, with the majority of responses from ABTC holders in Australia, Thailand, New Zealand, and Korea. The PSU also received Economy Surveys from 19 APEC member economies.

A detailed discussion on the design and implementation of the surveys as well as the data that were collected through the surveys is at Appendix G. A matrix of the travel patterns of business travelers in the APEC region that were revealed through the Client Satisfaction Survey is at Appendix H.

ii. Calculation Methodology Overview

Using data collected through the three surveys described above, the activities related to cross-border business travel covered by this study for the purpose of estimating the reduction in transaction costs as a result of the ABTC scheme include the following, which should result in a conservative estimate:

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

Short-stay business visa entry requirements and visa-waiver arrangements vary among the APEC member economies. The duration of what is considered to be a short-stay visit also varies among the APEC economies, and one economy may have differing short-stay durations depending on the visa requirements as they are applied to other APEC economies. For the purpose of this study, all cases in which a traveler does not require a business visa for at least a 7-day visit are considered to be visa-free. (A matrix of the short-stay business visa requirements between the APEC members is at Appendix I.)

The Final Assessment of the BMG's actions towards the TFAP II goal is not based on the entire TFAP II period of 2007 through 2010, but is instead an analysis of the time and cost savings experienced by ABTC holders over a 12-month period from March-July 2010 through March-July 2011 as a result of the ABTC scheme. To have analyzed the entire TFAP II period, a similar study would have had to have been conducted in 2007, to which the results from this study could be compared in order to determine the extent to which the actions of the BMG resulted in a reduction in trade transaction costs.

However, this would have been impossible given that the revised KPIs on which this study is based were only designed in 2009. Additionally, controlling for procedural changes that occurred during the TFAP II period, and which were not the result of BMG efforts, such as changes in visa fees, would have resulted in further difficulties. It is clear, however, that the actual savings experienced by ABTC holders during the 12-month period analyzed in this study are certainly the result of the BMG's initiatives and efforts throughout the entire TFAP II period.

A detailed discussion of the methodology used to calculate each KPI as well as the reduction in transaction costs experienced by ABTC holders between March-July 2010 and March-July 2011 as a result of the ABTC scheme is at Appendix J.

B. ANALYSIS OF KPI 1

Total number of ABTC card holders and variation from previous year

Expansion of the ABTC scheme is a key activity of the BMG and is a direct indication of how many business people in the APEC region benefit from the scheme. Using data provided by the BMG from the ABTC Processing System, the number of active ABTC holders in the APEC region increased by 11.4% between the end of 2009 and the end of 2010 (Table 2).

Over this period, most APEC members (16 out of 18) experienced positive growth in the number of ABTC holders, reflecting the sustained effort of the BMG to promote the ABTC scheme. Mexico exhibited the strongest growth in the number of ABTC holders between

2009 and 2010 with an increase of 160.6%. In absolute terms, several economies issued over 1,000 new ABTCs in 2010, including China; Singapore; Korea; Thailand; and New Zealand.

The number of ABTC holders in the APEC region has grown steadily since the creation of the scheme in 1997. At the end of 2006, there were 16,684 active ABTC holders⁷. By the end of 2010, there were 88,421 active ABTC holders, a 430% increase over the end of 2006, indicating an additional 71,737 card holders over the TFAP II period.

Table 2. Total number of ABTC holders

Economy	31-Dec-2009	31-Dec-2010	% change
Australia	25,165	24,286	-3.5
Brunei Darussalam	38	43	13.2
Chile	325	416	28.0
China	2,046	3,895	90.4
Hong Kong, China	9,683	10,659	10.1
Indonesia	881	1,495	69.7
Japan	2,765	2,541	-8.1
Korea	7,194	8,422	17.1
Malaysia	3,274	4,140	26.5
Mexico	71	185	160.6
New Zealand	5,470	6,538	19.5
Papua New Guinea	11	22	100.0
Peru	978	1,277	30.6
Philippines	412	476	15.5
Singapore	6,819	8,137	19.3
Chinese Taipei	1,376	1,595	15.9
Thailand	4,486	5,564	24.0
Viet Nam	8,405	8,730	3.9
Total	79,399	88,421	11.4

Note: The three transitional members of the ABTC scheme (Canada; Russia; United States) do not issue ABTCs and are therefore not included in the analysis.

It should be noted that Australia, which has the largest number of active ABTC holders (27.5% of the total number at the end of 2010), recently amended the eligibility criteria for the ABTC to bring them in closer alignment with that of most other APEC economies, resulting in a decline in the number of card holders between 2009 and 2010⁸.

C. ANALYSIS OF KPI 2

Percentage of expired ABTC holders who have re-applied for a new ABTC

To fully assess this KPI, the re-application rate as the share of expired ABTC holders that re-apply for a new ABTC in a given year would need to be calculated. This ratio could be determined by identifying all expired ABTCs in a given time period and comparing it with

⁷ APEC (2009c).

⁸ Australian Department of Immigration and Citizenship (DIAC) amended the ABTC eligibility requirements for Australians in June 2010.

current card holder data. However, given the limitations of the data that could be obtained from the ABTC Processing System, KPI 2 was instead calculated as the share of total applicants between 1 January 2010 and 31 December 2010 that were repeat applicants. An applicant in 2010 was found to be a repeat applicant when an exact name match was also found in the names of applicants between 1 January 2005 and 31 December 2009.

Given that the re-application rate is being calculated as a function of the number of total applicants, it is therefore also a function of the growth in the ABTC scheme. This is also partly why the re-application rates vary significantly across the APEC economies since growth in the ABTC scheme also varies significantly across the APEC members.

It is therefore not surprising that Mexico had the lowest share of repeat applicants in 2010 with 1.5% (Table 3) since KPI 1 previously revealed that Mexico also experienced the highest growth in the number of ABTC holders between 2009 and 2010. Note that the 1.5% share of repeat applicants in Mexico does not imply that only 1.5% of ABTC holders with expired ABTCs re-applied in 2010, but rather that 98.5% of applicants in 2010 were new applicants. In comparison, Viet Nam, which exhibited the lowest rate of growth in the number of ABTC holders between 2009 and 2010 (3.9%) as illustrated by KPI 1, also had the highest share of repeat applicants with 42% of the total applicants in 2010.

Most APEC economies had shares of repeat applicants between 20% and 35% of the total number of applicants in 2010. For the APEC region as a whole, the analysis reveals that approximately 27.6% of the total applicants in 2010 were repeat applicants, implying that while there is strong growth in the scheme, there are also a substantial number of card holders re-applying for the ABTC following its expiry, suggesting that the benefits provided by the ABTC are well recognized and highly regarded by current card holders.

Table 3. Share of repeat ABTC applicants in 2010

Economy	Number of total applicants	Number of repeat applicants	Share of repeat applicants (%)
Australia	6,575	2,255	34.3
Brunei Darussalam	21	2	9.5
Chile	249	66	26.5
China	2,772	291	10.5
Hong Kong, China	5,279	1,862	35.3
Indonesia	869	155	17.8
Japan	1,673	527	31.5
Korea	4,723	1,148	24.3
Malaysia	2,327	337	14.5
Mexico	137	2	1.5
New Zealand	2,962	915	30.9
Papua New Guinea	22	5	22.7
Peru	630	14	2.2
Philippines	247	80	32.4
Singapore	4,510	1,188	26.3
Chinese Taipei	772	146	18.9
Thailand	2,946	660	22.4

Viet Nam	3,453	1,449	42.0
Total	40,167	11,102	27.6

Note: The three transitional members of the ABTC scheme (Canada; Russia; United States) do not issue ABTCs and are therefore not included in the analysis.

It is important to note that while some economies record all applicants into the ABTC Processing System, including those both denied and successful, other economies enter only those applicants that have been approved for assessment by other economies. Given that this difference in procedure causes variation among the economies in the total number of applicants in a given year, the data for this KPI are not strictly comparable across the APEC economies. Given this caveat, it is also not entirely appropriate to aggregate a total for the APEC region; however, we have done so to provide a rough estimate of repeat applicants as a share of total applicants across the region in 2010.

D. ANALYSIS OF KPI 3

Total pre-border application time savings by ABTC holders

Using data collected through the responses to the Client Satisfaction Survey and the Economy Survey, total pre-border application time savings by ABTC holders in the APEC region is calculated as the time savings by not having to complete visa application forms. These are the savings experienced by ABTC holders by avoiding visa applications for those economies in which they have visited and have received pre-clearance and would have otherwise required a visa.

The average application time savings per ABTC holder varies among the APEC economies, with ABTC holders in Papua New Guinea saving the most amount of time with an average of 42 minutes per card holder (Table 4). In contrast, ABTC holders in some economies experience negative savings, implying that the ABTC holders in those economies spend more time completing the ABTC application than they save by avoiding visa applications for those economies in which they have visited and have received pre-clearance and would have otherwise required a visa.

By multiplying the average time savings per ABTC holder with the total number of ABTC holders in each economy, total pre-border application time savings experienced by ABTC holders in the APEC region for the 12-month period between March-July 2010 and March-July 2011 is estimated to be 643,930 minutes (10,732 hours). This time is converted into a monetary equivalent using GDP per worker in each of the ABTC holders' home economies⁹, resulting in total savings of USD 272,214 for ABTC holders in the APEC region over the period analyzed.

Table 4. Pre-border application time savings with the ABTC

Economy	Average time savings per ABTC holder (minutes)	Total time savings by ABTC holders (minutes)	Total time savings by ABTC holders (USD)
Australia	3.88	94,124	81,549

⁹ For further details on the conversion factors used in the analysis to calculate the opportunity cost of time, see the "Conversion Factors" section of Appendix J – Calculation Methodology.

Brunei Darussalam	4.83	208	107
Chile	8.42	3,504	742
China	19.57	76,226	4,484
Hong Kong, China	19.05	203,086	97,627
Indonesia	13.23	19,782	949
Japan	7.50	19,058	12,746
Korea	6.13	51,610	16,811
Malaysia	5.62	23,251	3,605
Mexico	-2.45	-454	-77
New Zealand	4.38	28,617	13,599
Papua New Guinea	42.02	925	23
Peru	-2.10	-2,678	-235
Philippines	5.05	2,403	91
Singapore	6.92	56,314	38,031
Thailand	3.70	20,598	1,345
Viet Nam	5.42	47,355	817
Total		643,930	272,214

Note: The three transitional members of the ABTC scheme (Canada; Russia; United States) do not issue ABTCs and are therefore not included in the analysis as home economies. Chinese Taipei is also not included in the analysis as a home economy since responses to the Client Satisfaction Survey from Chinese Taipei ABTC holders were insufficient.

E. ANALYSIS OF KPI 4

Total time savings clearing immigration at the border by ABTC holders

Using data collected through the responses to the Client Satisfaction Survey and the New Applicant Survey, total at-the-border immigration time savings experienced by ABTC holders in the APEC region is calculated as the time savings by using the fast-track APEC lanes to clear immigration at border checkpoints. The average immigration time savings per ABTC holder varies among the APEC economies, with ABTC holders in Mexico saving the most amount of time with an average of 104 minutes per ABTC holder (Table 5).

By multiplying the average time savings per ABTC holder with the total number of ABTC holders in each economy, total at-the-border immigration time savings experienced by ABTC holders in the APEC region for the 12-month period between March-July 2010 and March-July 2011 is estimated to be 3,744,805 minutes (62,413 hours). This time is converted into a monetary equivalent using GDP per worker in each of the ABTC holders' home economies¹⁰, resulting in total savings of USD 1,905,202 for ABTC holders in the APEC region over the period analyzed.

Table 5. At-the-border immigration time savings with the ABTC

Economy	Average time savings per ABTC holder (minutes)	Total time savings by ABTC holders (minutes)	Total time savings by ABTC holders (USD)
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¹⁰ For further details on the conversion factors used in the analysis to calculate the opportunity cost of time, see the "Conversion Factors" section of Appendix J – Calculation Methodology.

Australia	46.52	1,129,713	978,778
Brunei Darussalam	32.81	1,411	727
Chile	49.33	20,520	4,343
China	38.74	150,882	8,876
Hong Kong, China	26.28	280,137	134,667
Indonesia	60.20	90,003	4,318
Japan	51.49	130,840	87,505
Korea	43.26	364,351	118,679
Malaysia	66.19	274,043	42,491
Mexico	103.51	19,149	3,240
New Zealand	48.11	314,527	149,463
Papua New Guinea	27.03	595	15
Peru	40.78	52,082	4,576
Philippines	45.22	21,525	818
Singapore	64.15	522,013	352,536
Thailand	28.94	161,006	10,513
Viet Nam	24.29	212,011	3,656
Total		3,744,805	1,905,202

Note: The three transitional members of the ABTC scheme (Canada; Russia; United States) do not issue ABTCs and are therefore not included in the analysis as home economies. Chinese Taipei is also not included in the analysis as a home economy since responses to the Client Satisfaction Survey from Chinese Taipei ABTC holders were insufficient.

F. ANALYSIS OF KPI 5

Total cost savings in business entry fees by ABTC holders

Using data collected through the responses to the Client Satisfaction Survey and the Economy Survey, total pre-border business entry fee savings experienced by ABTC holders in the APEC region is calculated as the fee savings by not having to apply for a business visa. These are the savings experienced by ABTC holders by avoiding visa application fees for those economies in which they have visited and have received pre-clearance and would have otherwise required a visa.

The average business entry fee savings per ABTC holder varies among the APEC economies, with ABTC holders in Papua New Guinea saving the largest amount with an average of USD 118 per ABTC holder (Table 6). In contrast, ABTC holders in some economies experience negative savings, implying that the relatively high cost of the ABTC in those economies has meant that those ABTC holders spend more on the ABTC application fee than they save by avoiding visa application fees for those economies in which they have visited and have received pre-clearance and would have otherwise required a visa.

By multiplying the average fee savings per ABTC holder with the total number of ABTC holders in each economy, total pre-border application fee savings experienced by ABTC holders in the APEC region for the 12-month period between March-July 2010 and March-July 2011 is estimated to be USD 1,520,380.

Table 6. Pre-border application fee savings with the ABTC

Economy	Average fee savings per ABTC holder (USD)	Total fee savings by ABTC holders (USD)
Australia	3.05	73,998
Brunei Darussalam	20.06	862
Chile	18.03	7,500
China	54.62	212,748
Hong Kong, China	14.82	158,001
Indonesia	13.36	19,967
Japan	32.12	81,619
Korea	46.03	387,651
Malaysia	13.25	54,859
Mexico	12.91	2,388
New Zealand	54.11	353,796
Papua New Guinea	118.13	2,599
Peru	-114.33	-146,001
Philippines	7.28	3,467
Singapore	10.78	87,685
Thailand	-16.69	-92,866
Viet Nam	35.75	312,106
Total		1,520,380

Note: The three transitional members of the ABTC scheme (Canada; Russia; United States) do not issue ABTCs and are therefore not included in the analysis as home economies. Chinese Taipei is also not included in the analysis as a home economy since responses to the Client Satisfaction Survey from Chinese Taipei ABTC holders were insufficient.

G. ANALYSIS OF KPI 6

Average processing time for intra-company transfer applications

The BMG recognizes the benefits of streamlined temporary residence processing arrangements for the intra-company transfer (ICT) of senior managers and executives, and specialists. In 1999, BMG members agreed, on a best endeavors basis, to process within 30 days all visa applications and extensions of temporary residence permits for intra-company transfers of senior managers and executives, and specialists (the latter group as defined by each member economy).

Given the difficulties in APEC members collecting data on processing times in previous years, it was decided that current average intra-company transfer processing times for each economy would be obtained through the Economy Survey to establish baseline figures for future measurement and assessment of KPI 6.

The data reveal that the majority of APEC economies are already meeting the 30-day processing service standard – 14 out of the 17 economies that reported data have processing times for ICT applications of 30 days or less (Table 7). In addition, the BMG has reported

that several economies have set up e-lodgement systems to facilitate the processing of intra-company transfers¹¹.

Unless otherwise noted, the current average ICT application processing time in each APEC economy as it applies to transfers from all other APEC member economies to that economy is shown. In order to measure future performance, it will be necessary to calculate a baseline number for those economies in which there is a range of ICT processing times (e.g., processing times vary depending on the home economy of the applicant). In such cases, a simple average of the processing times across all economies could be calculated.

Table 7. Average intra-company transfer (ICT) application processing times

Economy	ICT processing time
Australia	8 - 12 weeks
Brunei Darussalam	n/a
Canada	n/a
Chile	30 days
China	4 days
Hong Kong, China	28 days
Indonesia	21 days
Japan	3 - 5 weeks
Korea	11 days
Malaysia	30 days
Mexico	2 - 5 days
New Zealand	30 days
Papua New Guinea	10 - 15 days
Peru	15 days
Philippines	30 days
Russia	20 days
Singapore	7 days
Chinese Taipei	15 days
United States	31 - 42 days

Note: Brunei Darussalam indicated that there is no ICT application applicable; Canada stated that they do not track ICT applications; China's response does not apply to Hong Kong, China and Chinese Taipei; Hong Kong, China's response does not apply to Viet Nam; Japan's response includes processing times for the Certificate of Eligibility (roughly estimated to be 2-4 weeks) and for the visa; Malaysia's response does not apply to China (60 days); the United States' response includes processing times for the petition (within 30 days) and for the visa; Thailand and Viet Nam did not submit an Economy Survey and are therefore not included in the analysis.

H. ANALYSIS OF KPI 7

Average processing time for business visa applications

The BMG encourages members to adopt information and communications technology (ICT) to facilitate the movement of people across borders, including reducing the processing times for business visa and other entry requirements. Members agreed to KPI 7 in order to check whether economies have introduced e-lodgement arrangements for temporary business visa

¹¹ APEC (2009c).

applications and also to track the progress in the processing time of business visa applications.

Similar to KPI 6, given the difficulties in APEC members collecting data on processing times in previous years, it was decided that current average business visa processing times for each economy would be obtained through the Economy Survey to establish baseline figures for future measurement and assessment of KPI 7.

The time taken to process business visa applications varies across the APEC economies. Fifteen out of 19 economies process business visa applications within 15 days and five economies have set up e-lodgement facilities to receive visa applications (Table 8). In Malaysia and the United States, visa applications can only be lodged online. Economies that offer both paper-based and e-lodgement visa arrangements reveal that it takes less time to process online applications than paper-based applications.

Unless otherwise noted, the current average business visa application processing time in each APEC economy as it applies to those APEC member economies from which visitors require a visa to that economy is shown in the table below. In order to measure future performance, it will be necessary to calculate a baseline number for those economies in which there is a range of business visa processing times (e.g., processing times vary depending on the home economy of the applicant). In such cases, an average of the processing times across the economies from which a visa is required could be calculated that also takes into account any differences in the processing times for single-/multiple-entry visas and for paper-based/online applications, if applicable.

Table 8. Average business visa application processing times

Economy	Processing time (days)	
	Paper application	Online application
Australia	30	1
Brunei Darussalam	1	n/a
Canada	7 - 28	n/a
Chile	15	n/a
China	4	n/a
Hong Kong, China	2 - 10	1
Indonesia	3	n/a
Japan	5	n/a
Korea	5 - 10	n/a
Malaysia	n/a	60
Mexico	2	n/a
New Zealand	1 - 6	n/a
Papua New Guinea	10 - 15	n/a
Peru	15	n/a
Philippines	1	n/a
Russia	20	n/a
Singapore	1	< 1
Chinese Taipei	3	n/a
United States	n/a	1 - 5

Note: For Australia and Hong Kong, China, not all APEC economies are eligible to apply for visas online; China's response does not apply to Hong Kong, China and Chinese Taipei; for Korea, single-/multiple-entry visa applications take 5/10 days to process, respectively; the United States' response does not include waiting time for the interview; Thailand and Viet Nam did not submit an Economy Survey and are therefore not included in the analysis.

I. REDUCTION IN TOTAL TRANSACTION COSTS

KPIs 3, 4 and 5 are used to estimate the reduction in total transaction costs related to business travel in the APEC region as a result of the ABTC scheme. Total savings experienced by ABTC holders in each APEC economy are calculated using the results from each of the three KPIs. The results reveal that ABTC holders in Australia experience the largest amount of savings (Table 9), which is expected given the large number of ABTC holders in Australia.

In contrast, ABTC holders in some economies experience negative savings, implying that the relatively high ABTC application fee in those economies has outweighed the time and fee savings those ABTC holders experience by avoiding visa applications for those economies in which they have visited and have received pre-clearance and would have otherwise required a visa and by using the fast-track APEC lane to clear immigration at border checkpoints.

Thus, summing the total savings experienced by ABTC holders in each APEC economy reveals that total savings across the APEC region over the 12-month period between March-July 2010 and March-July 2011 are USD 3.7 million. Much of these savings are the result of time savings by using the APEC lane at immigration checkpoints, followed by fee savings by avoiding visa application fees. ABTC holders in the APEC region experienced pre-border and at-the-border time savings equivalent to USD 2.2 million and pre-border fee savings of USD 1.5 million for total savings of USD 3.7 million.

Table 9. Total savings with the ABTC (USD)

Economy	Total application time savings with ABTC (KPI 3)	Total immigration time savings with ABTC (KPI 4)	Total fee savings with ABTC (KPI 5)	Total savings with ABTC (USD)
Australia	81,549	978,778	73,998	1,134,325
Brunei Darussalam	107	727	862	1,696
Chile	742	4,343	7,500	12,584
China	4,484	8,876	212,748	226,108
Hong Kong, China	97,627	134,667	158,001	390,295
Indonesia	949	4,318	19,967	25,235
Japan	12,746	87,505	81,619	181,869
Korea	16,811	118,679	387,651	523,141
Malaysia	3,605	42,491	54,859	100,954
Mexico	-77	3,240	2,388	5,552
New Zealand	13,599	149,463	353,796	516,858
Papua New Guinea	23	15	2,599	2,637
Peru	-235	4,576	-146,001	-141,661
Philippines	91	818	3,467	4,377

Singapore	38,031	352,536	87,685	478,252
Thailand	1,345	10,513	-92,866	-81,007
Viet Nam	817	3,656	312,106	316,579
Total	272,214	1,905,202	1,520,380	3,697,796

Note: The three transitional members of the ABTC scheme (Canada; Russia; United States) do not issue ABTCs and are therefore not included in the analysis as home economies. Chinese Taipei is also not included in the analysis as a home economy since responses to the Client Satisfaction Survey from Chinese Taipei ABTC holders were insufficient.

In order to determine the reduction in transaction costs as a result of the ABTC scheme, we calculate, counterfactually, what costs ABTC holders would have otherwise experienced in absence of the ABTC scheme. Our calculations indicate that the total time that would have been spent by ABTC holders to complete visa applications is 1,411,610 minutes (23,527 hours) (Table 10). Converting this time into a monetary equivalent provides a counterfactual cost of USD 628,059 in total pre-border application time.

Likewise, our calculations reveal that the total time that would have been spent by ABTC holders to complete immigration processing via the regular passenger lanes at border checkpoints is 7,242,141 minutes (120,702 hours). Converting this time into a monetary equivalent provides a counterfactual cost of USD 3,638,793 in total at-the-border immigration processing time.

Table 10. Calculation of total time costs without the ABTC – counterfactual simulation

Economy	Total application time costs without ABTC		Total immigration time costs without ABTC	
	minutes	USD	minutes	USD
Australia	322,081	279,050	2,113,397	1,831,039
Brunei Darussalam	482	248	3,602	1,856
Chile	7,412	1,569	38,902	8,233
China	146,238	8,603	298,221	17,544
Hong Kong, China	278,649	133,952	538,250	258,747
Indonesia	29,943	1,437	180,210	8,646
Japan	44,716	29,906	260,889	174,481
Korea	131,852	42,948	866,709	282,312
Malaysia	50,123	7,772	457,337	70,910
Mexico	2,647	448	35,107	5,941
New Zealand	66,388	31,547	586,268	278,594
Papua New Guinea	1,315	33	1,779	45
Peru	13,665	1,201	120,693	10,604
Philippines	6,925	263	36,788	1,398
Singapore	122,417	82,673	978,731	660,976
Thailand	66,388	4,335	311,329	20,329
Viet Nam	120,369	2,076	413,928	7,139
Total	1,411,610	628,059	7,242,141	3,638,793

Note: The three transitional members of the ABTC scheme (Canada; Russia; United States) do not issue ABTCs and are therefore not included in the analysis as home economies. Chinese Taipei is also not included in the analysis as a home economy since responses to the Client Satisfaction Survey from Chinese Taipei ABTC holders were insufficient.

Finally, we calculate, counterfactually, that the total fees that would have otherwise been paid by ABTC holders for visa applications are USD 5,475,535 (Table 11). Thus, our calculations reveal that ABTC holders in the APEC region would have experienced total time and fee costs of USD 9.7 million in absence of the ABTC scheme.

Table 11. Total costs without the ABTC (USD) – counterfactual simulation

Economy	Total application time costs without ABTC	Total immigration time costs without ABTC	Total fee costs without ABTC	Total costs without ABTC
Australia	279,050	1,831,039	1,731,473	3,841,561
Brunei Darussalam	248	1,856	2,007	4,110
Chile	1,569	8,233	28,766	38,568
China	8,603	17,544	434,381	460,527
Hong Kong, China	133,952	258,747	384,219	776,918
Indonesia	1,437	8,646	140,170	150,253
Japan	29,906	174,481	218,394	422,780
Korea	42,948	282,312	531,818	857,078
Malaysia	7,772	70,910	104,067	182,749
Mexico	448	5,941	11,793	18,182
New Zealand	31,547	278,594	639,233	949,374
Papua New Guinea	33	45	4,354	4,432
Peru	1,201	10,604	50,386	62,191
Philippines	263	1,398	22,797	24,458
Singapore	82,673	660,976	322,385	1,066,033
Thailand	4,335	20,329	299,029	323,692
Viet Nam	2,076	7,139	550,265	559,480
Total	628,059	3,638,793	5,475,535	9,742,387

Note: The three transitional members of the ABTC scheme (Canada; Russia; United States) do not issue ABTCs and are therefore not included in the analysis as home economies. Chinese Taipei is also not included in the analysis as a home economy since responses to the Client Satisfaction Survey from Chinese Taipei ABTC holders were insufficient.

Therefore, our study estimates that business travel costs for ABTC holders have been reduced by 38% over the 12-month period between March-July 2010 and March-July 2011 as a result of the ABTC scheme for total savings of USD 3.7 million¹² (Table 12). The results reveal that ABTC holders in Korea experienced the largest decrease in business travel costs with a 61% reduction over the period analyzed.

Examining the three transactions used to calculate the total reduction in business travel costs reveals that, over the 12-month period between March-July 2010 and March-July 2011, pre-border application time costs were reduced by 43.3%, at-the-border immigration processing

¹² The margin of error of this result is 21.6%, implying that the actual savings experienced by ABTC holders as a result of the ABTC scheme are between USD 2.9 million and USD 4.5 million (for a reduction in transaction costs of between 29.8% and 46.1%). For further details on the margin of error calculation, see the “Margin of Error” section of Appendix G – Survey Design, Implementation and Results.

time costs were reduced by 52.4%, and pre-border application fees were reduced by 27.8% for ABTC holders engaged in cross-border business travel in the APEC region.

Table 12. Reduction in total transaction costs as a result of the ABTC scheme

Economy	Total savings with ABTC (USD)	Total costs without ABTC (USD)	Reduction in transaction costs (%)
Australia	1,134,325	3,841,561	-29.5
Brunei Darussalam	1,696	4,110	-41.3
Chile	12,584	38,568	-32.6
China	226,108	460,527	-49.1
Hong Kong, China	390,295	776,918	-50.2
Indonesia	25,235	150,253	-16.8
Japan	181,869	422,780	-43.0
Korea	523,141	857,078	-61.0
Malaysia	100,954	182,749	-55.2
Mexico	5,552	18,182	-30.5
New Zealand	516,858	949,374	-54.4
Papua New Guinea	2,637	4,432	-59.5
Peru	-141,661	62,191	227.8
Philippines	4,377	24,458	-17.9
Singapore	478,252	1,066,033	-44.9
Thailand	-81,007	323,692	25.0
Viet Nam	316,579	559,480	-56.6
Total	3,697,796	9,742,387	-38.0

Note: The three transitional members of the ABTC scheme (Canada; Russia; United States) do not issue ABTCs and are therefore not included in the analysis as home economies. Chinese Taipei is also not included in the analysis as a home economy since responses to the Client Satisfaction Survey from Chinese Taipei ABTC holders were insufficient.

J. EVALUATION OF THE KPIS

The KPIs used in the TFAP II Final Assessment, which were recommended to the BMG during the Interim Assessment, are effective to measure the level of transaction costs in quantitative terms, and are therefore effective to measure reductions in these costs. The KPIs capture both the time and fee components of business travel costs such that the impact of the ABTC scheme on facilitating business mobility could be quantitatively assessed.

However, the implementation of the KPIs is not entirely efficient. To calculate and assess the KPIs, essential information is required that is not readily available. This information includes not only the time and fee costs faced by travelers in cross-border business travel, but also the travel patterns of ABTC holders in the APEC region. For this study, a survey of both ABTC holders and non-ABTC holders was conducted to collect this necessary information. Implementation of the surveys and the subsequent calculations required a significant amount of time. To reduce the costs of data collection, the BMG could explore further ways in which to collect this critical information, such as requiring new applicants and renewing ABTC holders to complete the surveys as part of the application or renewal process.

Finally, the KPIs are simple and easy to understand. However, as has been illustrated in the report, the actual measurement of the KPIs requires a fair bit of statistical knowledge. Given that a robust methodological framework for measuring and evaluating the KPIs has been established through this study, it is expected that future measurement and interpretation of the KPIs would be less challenging.

3. ABTC CLIENT SATISFACTION

A. ABTC CLIENT SATISFACTION SURVEY 2008

Promoting and expanding membership of the ABTC scheme is a key activity of the BMG and significant effort has gone into examining new options to enhance the operation of the scheme. Suggestions from the business community have always been important to the BMG, which led to the development of a Client Satisfaction Survey. The survey was first conducted from October 2008 to January 2009 and received responses from over 1,600 ABTC holders.

The results from that survey indicated that ABTC holders held a very positive view of the scheme, with convenience cited as the strongest merit of the ABTC¹³. Fifty-nine percent of the respondents indicated that expedited processing at airports was their most important reason for using the ABTC, while 31% stated that avoiding visa applications was most important. Survey comments revealed that the ABTC scheme makes business trips much easier to manage and also makes business trips on short notice possible.

Using a scale of one to five, where five denotes extremely satisfied, 84% of the respondents rated their satisfaction with the ABTC scheme as a five or four. Sixty-eight percent stated that APEC lanes are easy to find in airports and 82% revealed that they were satisfied with the expedited processing at airports made available through the scheme, while 74% indicated that the ABTC was useful to avoid applying for visas.

Survey comments also suggested ways in which the ABTC scheme could be improved. These recommendations included to shorten the processing time for pre-clearance; extend the term of the validity of the card; provide seamless validity at the time of passport renewal; improve the knowledge of the ABTC among immigration officials; and create a consistent approach on the management of APEC lanes at immigration checkpoints, including standardizing the APEC lane signage.

B. CLIENT SERVICE FRAMEWORK

In consideration of the issues and suggestions raised by ABTC holders through the Client Satisfaction Survey, the BMG developed a Client Service Framework with a set of client service standards. These standards are to provide guidance to APEC members in order to improve client satisfaction and to monitor future review and assessment of client service.

The Framework provides a best practice benchmark of client service standards and aims to achieve greater consistency and a more uniformed product and service offering to ABTC holders. The scope of the Client Service Framework is to:

- establish appropriate client service goals that emphasize commitment to clients and the service they should expect;
- identify the key areas which determine client satisfaction in the ABTC scheme and the specific client service improvements that clients are likely to value; and

¹³ APEC Business Advisory Council (2009).

- establish a process to review client service arrangements, and to enable the BMG members to self-evaluate and report to the BMG on client service improvements.

Client service is central to the work of the BMG and the Client Service Framework reflects the acknowledgment that the administration of the ABTC scheme has significant bearing upon how the region's business community views the APEC brand. The client service goals are as follows: to ensure that the ABTC scheme is reliable and delivers to clients the key benefits of immigration pre-clearance and fast-lane immigration processing; delivery of the card and its benefits to clients is effective; communication with clients is effective; and clients are highly satisfied with the ABTC scheme and with the service delivery.

The Client Service Framework identifies three priority areas which are most likely to impact the level of satisfaction that clients have with the ABTC scheme: (1) ABTC processing arrangements; (2) APEC signs and fast lane arrangements; and (3) client information and contact. Under each of these key areas is a detailed list of service objectives that APEC economies, both individually and collectively, should seek to achieve on a best endeavors basis. (A complete list of the service objectives under the ABTC Client Service Framework is at Appendix K.)

The BMG also recognizes that it is very important to monitor the progress made on the client service goals and objectives and to periodically review the client service arrangements. A reporting arrangement for assessing performance of each economy against the Framework has been approved. The review process consists of an internal evaluation based on annual reporting from the BMG members against each of the client service objectives, and an external evaluation based on the results of a Client Satisfaction Survey.

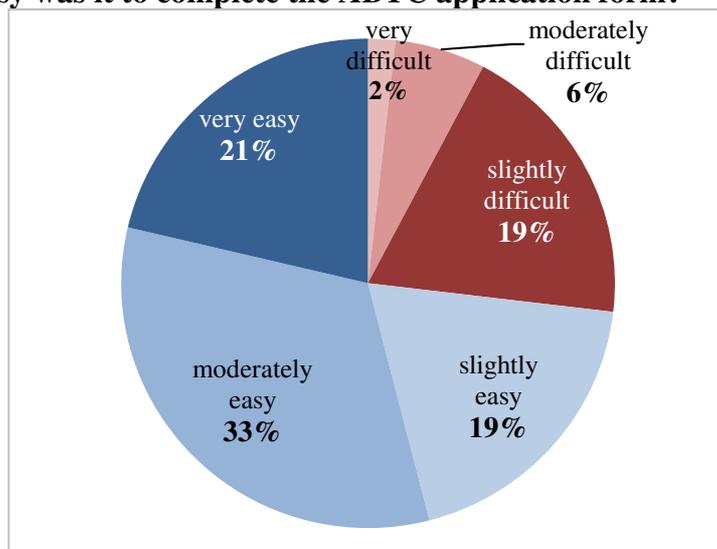
C. ABTC CLIENT SATISFACTION SURVEY 2011

Building on the previous Client Satisfaction Survey conducted in 2008, the Client Satisfaction Survey conducted in 2011 to collect the data necessary to measure the KPIs and the overall reduction in transaction costs as a result of the ABTC scheme also contained eight questions related to client satisfaction. These questions were designed to assess an ABTC holders' overall experience with the ABTC and covered the ABTC application form, APEC lanes, usefulness of the ABTC, and areas for improvement.

This section presents the findings based on the responses to these client satisfaction questions. As discussed previously, the Client Satisfaction Survey conducted in 2011 concluded with 1,463 valid responses, with the majority of responses from ABTC holders in Australia, Thailand, New Zealand, and Korea. The survey responses and comments have provided meaningful insight into the current operation and customer service of the ABTC scheme.

The Client Satisfaction Survey asked respondents to rate how easy it was to complete the ABTC application form. The responses reveal that 73% of respondents thought the application form was easy to complete, with 21% of all respondents indicating that it was very easy to complete (Figure 1). Only 2% of respondents indicated it was very difficult to complete the ABTC application form.

Figure 1. How easy was it to complete the ABTC application form?



The Client Satisfaction Survey included two sets of questions about the experience of using the APEC lane at immigration checkpoints in each of the respondent's three most visited travel destinations. One set of questions asked respondents whether the APEC lane is easy to find at immigration checkpoints in their travel destinations. Responses revealed that ABTC holders found it easy to find the APEC lane at their travel destinations 67% of the time (Figure 2). ABTC holders also indicated that it was very difficult to find the APEC lane at their travel destinations 8% of the time.

Respondents were also asked whether the APEC lane is always open at immigration checkpoints in each of their travel destinations. Responses indicated that the APEC lanes are open in their travel destinations 65% of the time, and that they were always open 30% of the time (Figure 3). However, the APEC lane was never open in their travel destinations about 5% of the time.

Figure 2. Are the APEC lanes easy to find at immigration checkpoints?

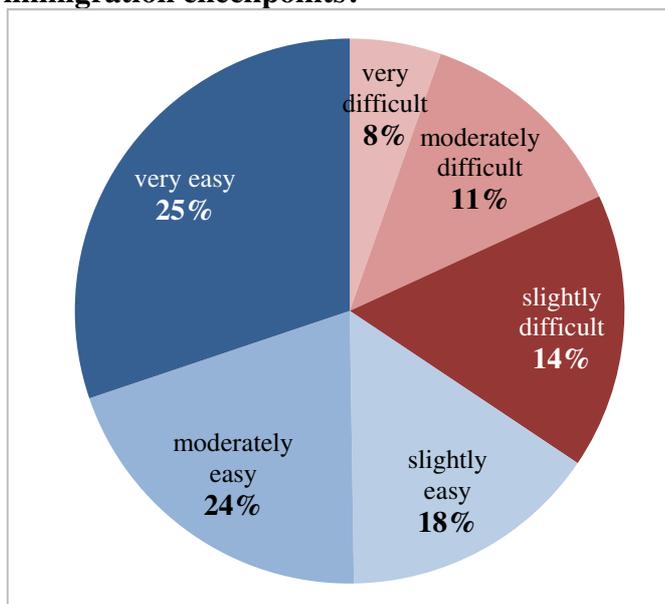
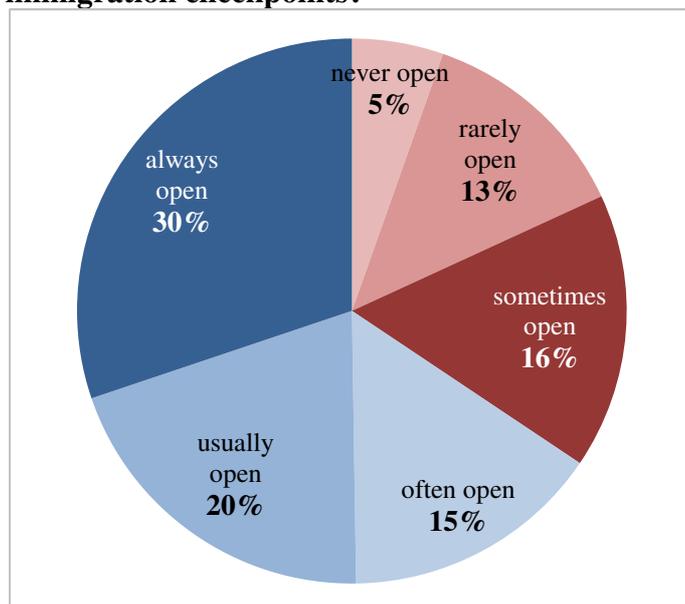


Figure 3. Are the APEC lanes always open at immigration checkpoints?



Note: Some figures may not add to 100% due to rounding.

When respondents were asked to rate how useful the ABTC is in allowing them to travel without having to apply for a visa and in helping them to avoid long queues at immigration checkpoints, the responses were overwhelmingly positive. Ninety-three percent of respondents thought the ABTC was useful in allowing them to travel without having to apply for a visa, with 69% of all respondents indicating that it was extremely useful (Figure 4). Similarly, 93% of respondents felt that the ABTC was useful in helping them to avoid long queues at immigration checkpoints, with 58% of all respondents stating that it was extremely useful in this aspect (Figure 5).

Figure 4. How useful to you is the ABTC in allowing you to travel without having to apply for a visa/s?

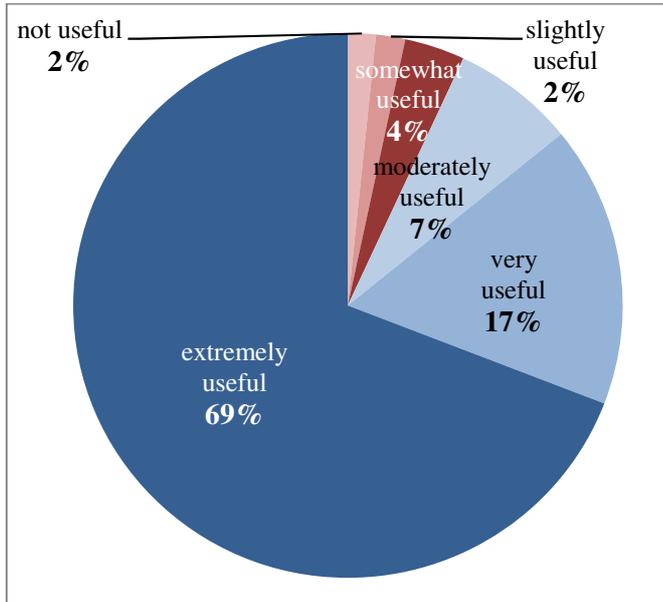
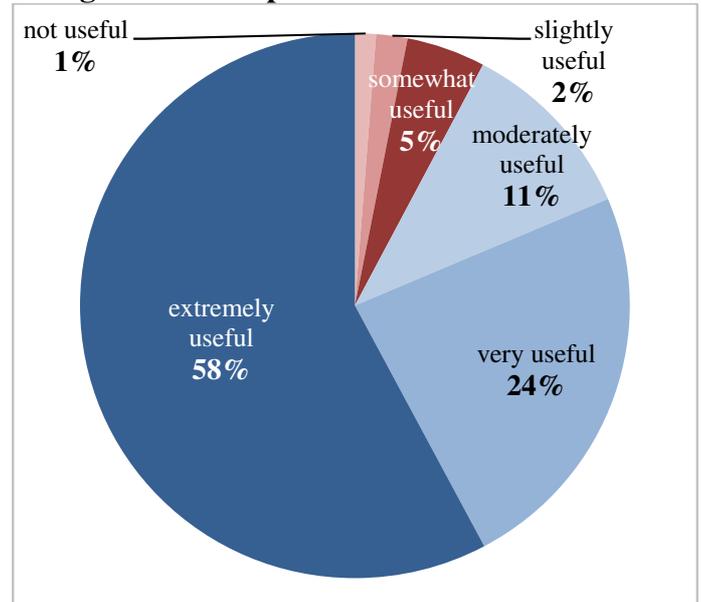


Figure 5. How useful to you is the ABTC in helping you to avoid long queues at immigration checkpoints?



With regard to their overall level of satisfaction with the ABTC scheme, responses from the ABTC holders were again overwhelmingly positive. Ninety-one percent of respondents rated their overall level of satisfaction with the ABTC scheme as satisfied, with 42% of all respondents expressing that they are extremely satisfied with the ABTC scheme (Figure 6).

When asked what they thought is the best thing about the ABTC, 58% of survey respondents indicated that the best feature of the ABTC is that they don't have to apply for a visa (Figure 7). Thirty-nine percent revealed that the best feature of the ABTC is that it allows them to avoid long queues at immigration checkpoints, while just 3% of respondents thought that not having to pay for a visa is the best thing about the ABTC.

Figure 6. How would you describe your overall level of satisfaction with the ABTC scheme?

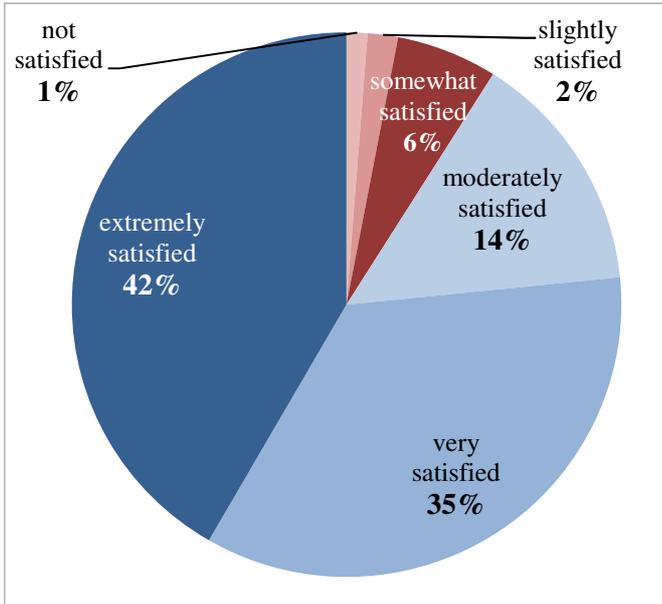
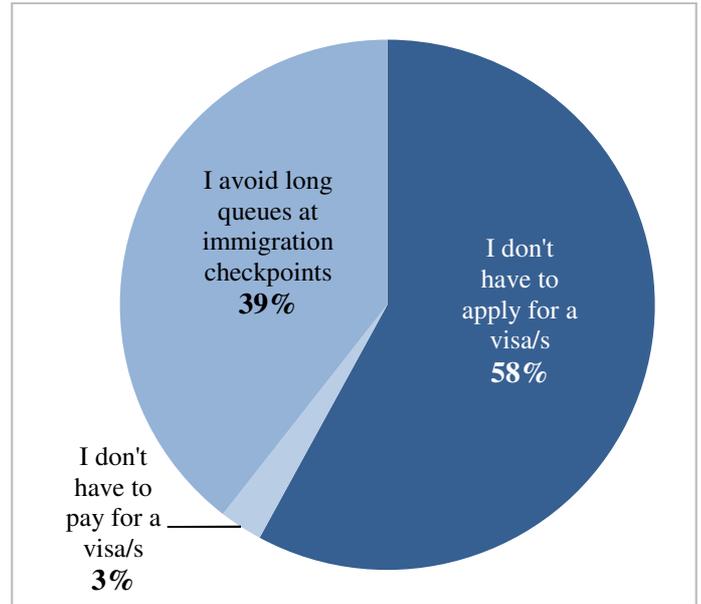
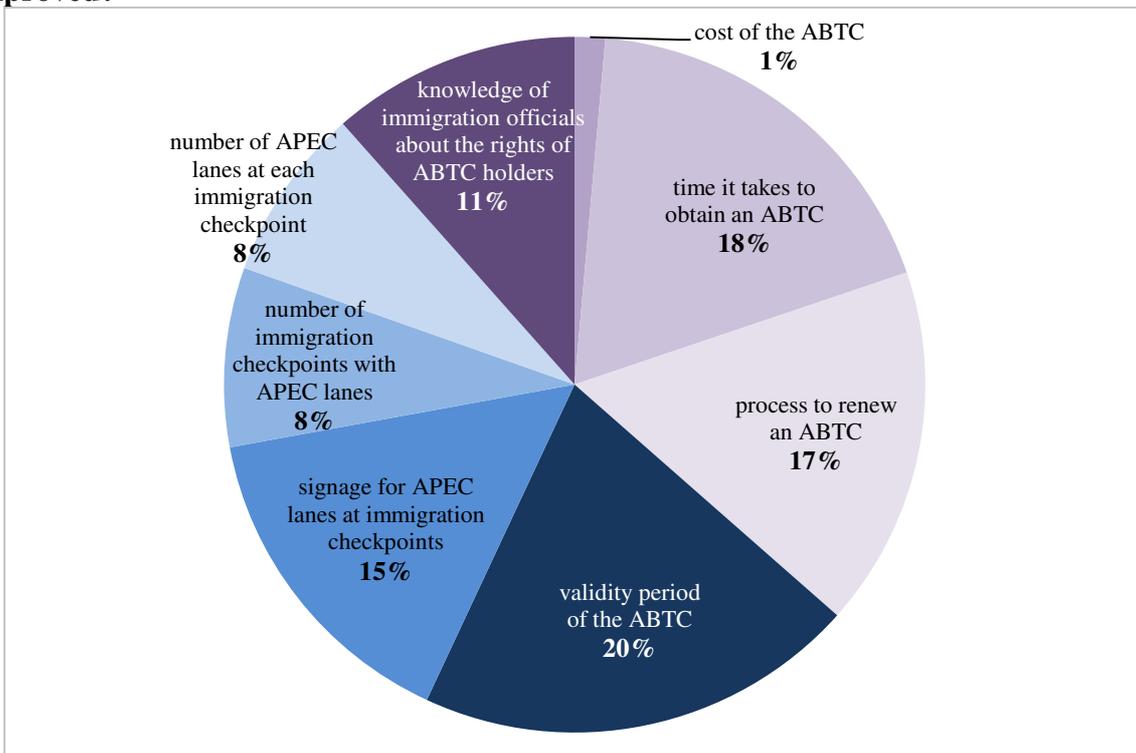


Figure 7. What do you think is the best thing about the ABTC?



The Client Satisfaction Survey also asked respondents which three things among eight selections they would most like to see improved regarding the ABTC scheme. Most of the responses (20%) indicated that ABTC holders would most like the validity period of the ABTC to be extended. The responses revealed that the other main areas for improvement include the time it takes to obtain an ABTC, the process to renew an ABTC, the signage for APEC lanes at immigration checkpoints, and the knowledge of immigration officials about the rights of ABTC holders.

Figure 8. Which of the following things about the ABTC would you most like to see improved?



The Client Satisfaction Survey also offered respondents the opportunity to provide additional comments regarding the ABTC scheme. The following discussion includes only a sample of the comments received that best represent the main themes. (A complete set of all the comments received through the survey has been provided separately to the BMG.)

Some respondents took the opportunity to express their appreciation towards the ABTC scheme and the benefits it provides, as illustrated by the following comments:

- “This scheme has made business travel to the member countries much more convenient and less painful - it's great.”
- “The card has been fantastic. Especially for trips on very short notice. I no longer have to waste time getting a visa and delaying travel because they have not been processed. Thanks for the effort put in by the people who organised!”
- “It is an excellent scheme and makes travelling more pleasant and it is much easier to move through the airports.”
- “I love the card! It saves me up to a week a year of wasted time to obtain visas. The ease of going through the airport is a real bonus.”
- “I could not cope without my APEC card. It is, by far, the most valuable item in my bag every trip.”
- “I would be lost without my APEC card. As a frequent business traveler I find it invaluable to be able to get around the Asia region with less fuss than when I had to apply for visas and being able to be processed through immigration so quickly is a great relief when travelling as much as I do. I wouldn't travel without my APEC card now.”
- “I love the ABTC. Thank you for having such a scheme as it has made it so much easier for us to do business with participating countries.”
- “The APEC card is a superb frequent business travellers' tool!!! Fast processing at the end of a long haul flight is priceless.”
- “I have found the ABTC to be very useful and convenient. An excellent concept and one much appreciated by many business travellers.”

However, many respondents also took the opportunity to flag issues or voice difficulties that they have encountered regarding the ABTC scheme, thereby suggesting areas for improvement. These comments cover the application process, including the renewal process and the validity period of the ABTC, as well as specific experiences in using the ABTC. The following presents a sample of these comments:

- “Although the form was easy to fill out, the amount of supporting documents required was immense!”
- “Some countries take far too long to approve, holding up the whole card issuance process.”
- “It took me over 8 months after application to receive my card. This is way too long.”
- “It took me almost TWO years to get the ABTC card and we did not get any updated status AT ALL. We need to follow up so many times without any response, or response was not in a timely manner. The service level needs to be improved.”
- “Renewal process should be simplified and time for renewal should be shortened.”

- “Very disappointed in renewal process. Have now been waiting 3 months to even hear back re new card. Still have no idea what is happening and when I might receive a new card.”
- “Renewal process is a nightmare - I have been waiting 6 months. If you can fix that and be proactive in prompting the renewal before the card expires, that would be great.”
- “It took me about 6 months to re-new my ABTC, which was very long. This left me without an ABTC for 6 months. There should have been automatic renewal for current holders of ABTC, or at least a much shorter renewal time.”
- “My renew ABTC card took 4 months to receive, it is in fact far too long to process for a renew card, since all related information has been kept in the database for first application, therefore, I do hope to see an improvement on this regard.”
- “Reminder system when cards are due to expire so they can be renewed on time.”
- “Validity for 5 years to match the expiry of the related passport would make the most sense.”
- “5 year Travel Card would be more appropriate.”
- “If the validity period for ABTC is extended to 5 years rather than 3 years, such measure will be much helpful to business.”
- “... I would recommend to set expiry of ABTC same as passport.”
- “The passport number should not be linked to the card because if you need to change your passport the process gets complicated.”
- “... allow ABTC to remain valid even if holder has a new passport; extend validity to 5 years.”
- “... passports have few pages and you need to change them every 2 years thus you need to renew the ABTC card as well. I wish the card could last for 5 years and could be used even if you change your passport.”
- “The ABTC should also be valid until the passport is expired (i.e. up to 5 years) instead of the 3 years. Business travellers have to change passports whenever their ABTC is expired and it is costly.”
- “All APEC countries should have clearly marked APEC lanes at their international airports.”
- “Some countries and their airports don't seem to provide signage at all which is very disappointing.”
- “... The main issue is often trying to find the APEC queue as they are not always marked. One big improvement would be to standardise the signage for APEC lines and make sure immigration officials understand the card rights.”
- “The lack of designated lanes and knowledge on ABTC or APEC led to inconveniences.”
- “The number of APEC windows, their proper signaling, and more information for the immigration officers regarding the program.”

Many respondents also remarked on the requirements needed to obtain an ABTC. Several comments indicated that it is usually those business people in middle management that do the greatest amount of cross-border business travel, in other words, those that are often ineligible for the ABTC since the ABTC scheme is restricted to business people in the top three tiers of a company. In addition, several other comments expressed concern that the ABTC scheme is restricted to large corporations with a substantial amount of turnover – a requirement that could hinder SMEs that also wish to benefit from improved business mobility across the APEC region as provided by the ABTC.

Finally, there were also many comments related to expanding the ABTC scheme, especially to fully include the current transitional members of the scheme, particularly Canada and the United States. Additional comments included that the ABTC scheme should offer priority baggage since much of the time savings from expedited immigration processing was lost waiting for bags to arrive; make current APEC lanes exclusive for ABTC holders; create APEC lanes at customs checkpoints; and establish partnerships with airline alliances to allow access to airport lounges.

4. CONCLUSION AND RECOMMENDATIONS

A. CONCLUSION

The results of the TFAP II Final Assessment reveal that the initiatives and actions of the BMG have been very successful in reducing transaction costs related to cross-border business travel in the APEC region. In just a 12-month period (March-July 2010 through March-July 2011), business travel costs for ABTC holders were reduced by 38% as a result of the ABTC scheme, which translates to total savings of USD 3.7 million.

The study found that, for ABTC holders engaged in cross-border business travel in the APEC region over the 12-month period analyzed, pre-border application time costs were reduced by 43.3% for savings of USD 272,214; at-the-border immigration processing time costs were reduced by 52.4% for savings of USD 1,905,202; and pre-border application fees were reduced by 27.8% for savings of USD 1,520,380.

Expansion of the ABTC scheme to new card holders continues to grow at a fast rate. There were 88,421 active ABTC holders across the APEC region at the end of 2010 – an 11.4% increase from the end of 2009 and a 430% rise from the end of 2006. Additionally, approximately 27.6% of the total ABTC applicants in 2010 were repeat applicants, implying that while there is strong growth in the scheme, there are also a substantial number of card holders re-applying for the ABTC.

The Final Assessment also found that 14 out of 17 APEC economies that reported data are meeting the 30-day processing service standard for intra-company transfers of senior managers and executives, and specialists. Additionally, 15 out of 19 APEC economies that reported data process business visa applications within 15 days, with five economies having e-lodgement facilities to receive online visa applications.

Responses to the Client Satisfaction Survey revealed that ABTC holders continue to be satisfied overall with the ABTC scheme. The convenience that the ABTC provides to business people engaged in cross-border travel, including the facilitation of business travel, particularly business trips on short notice, is extremely valuable to card holders. However, ABTC holders also suggested several areas for improvement, mainly concerning areas which are the focus of the BMG's client service standards.

B. RECOMMENDATIONS

The BMG should continue to monitor and evaluate the KPIs as well as client satisfaction in the ABTC scheme. However, given the amount of resources required to implement the surveys and analyze the results, as well as to reduce the burden on ABTC holders in responding to the survey, the PSU recommends that this assessment be done every three years rather than every year.

Given the savings as a result of the ABTC scheme that the Final Assessment has found, the BMG should continue to work towards expanding the ABTC scheme among new card holders in the APEC region as well as encouraging the three transitional members of the

scheme to become full members. If the transitional members of the ABTC scheme were to pre-clear business travelers from other APEC economies, assuming a conservative pre-clearance ratio of 90% (i.e., the transitional members approve 90% of the ABTC applications from other APEC economies for pre-clearance), then the reduction in total transaction costs would have been 39.5% for an additional savings to ABTC holders of nearly USD 150,000. Additionally, in order for the ABTC scheme to provide the most benefits to the business community, the BMG should target those business people who engage in international business travel most frequently, including middle management. The BMG should also consider ways in which the scheme can benefit small and medium enterprises.

BMG members should strive to achieve all the best practice client service standards as described in the Client Service Framework. To further improve client service, the BMG should endeavor to reduce the processing times for new applicants to receive an ABTC and simplify the renewal process so that ABTC holders are not without the card as a result of processing delays in renewal. Furthermore, the process of re-issuing the ABTC when active card holders require a new passport should be streamlined.

In addition, the PSU highly recommends that the BMG consider extending the validity period of the ABTC to five years from its current validity period of three years. Given the time and resources involved in processing the ABTC by member economies, an extended validity period would decrease the costs that members face in implementing the scheme. It would also answer repeated requests from ABTC holders to extend the validity period.

Consistent client service is a significant challenge under the ABTC scheme since the current arrangements are spread across the APEC member economies, involving numerous processing teams, thousands of border officials, and a variety of application forms, websites and information products. Therefore, to maximize administrative and operational efficiencies and to strengthen the ABTC scheme, the BMG should consider centralizing the processing of ABTC applications. Centralized ABTC processing would also help to improve client service as many new applicants as well as active card holders would find it useful to have a centralized point of contact for any queries they may have. Furthermore, this could help to standardize the requirements to obtain an ABTC across the APEC member economies.

Finally, BMG members should increase the use of information and communications technology to reduce costs and improve client service. Information collected from economies with e-lodgement arrangements reveal that it takes less time to process online visa applications than paper-based applications. Therefore, all member economies should strive to offer online processing of visa applications. To improve client service, Online Status Tracker should also be offered so that ABTC applicants can monitor the progress of their application.

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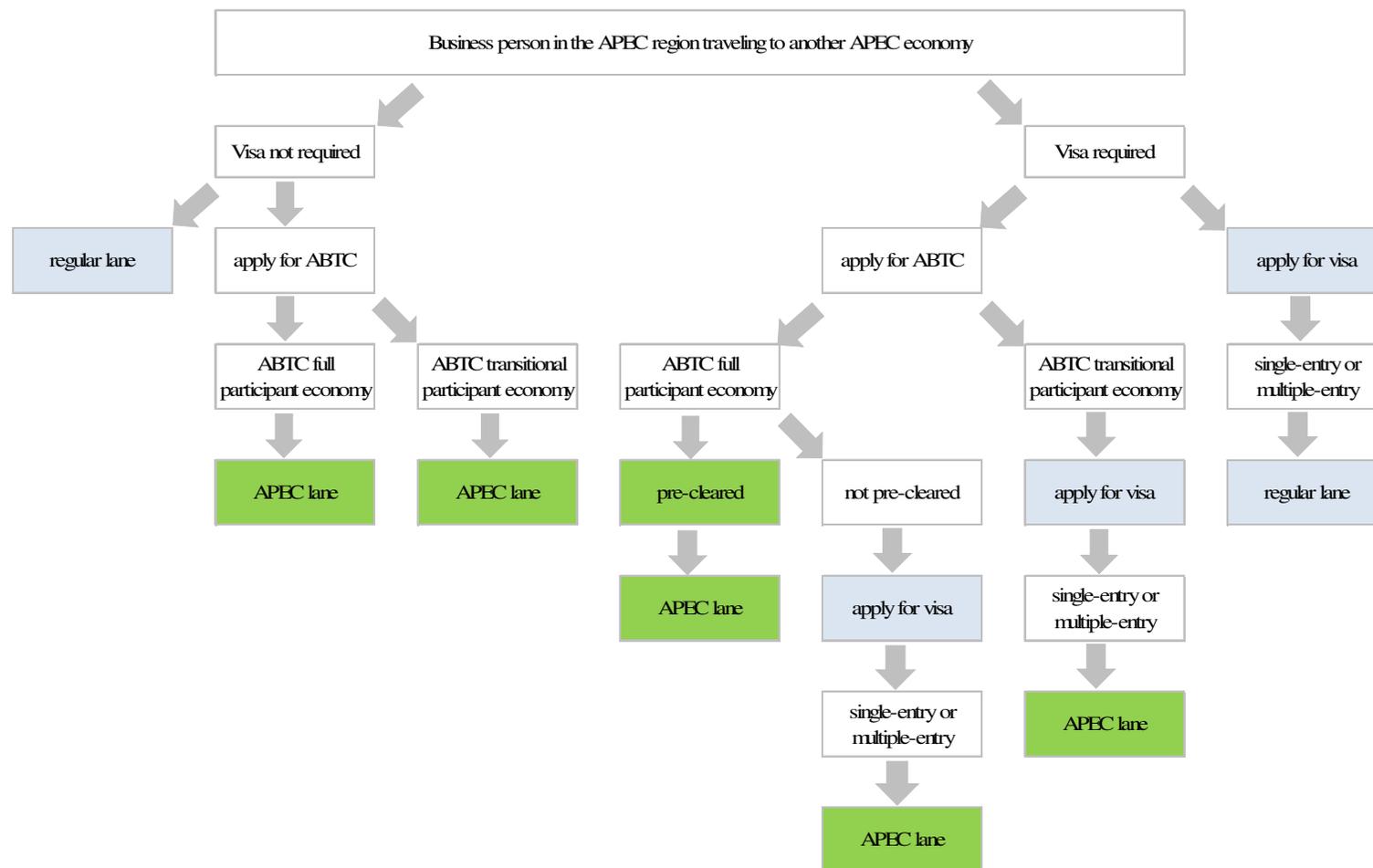
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APPENDIX

A. BUSINESS TRAVEL SCENARIOS IN THE APEC REGION



There are 18 APEC economies that are full members of the APEC Business Travel Card (ABTC) scheme and through which their citizens can apply for ABTC privileges. The three APEC economies that are transitional members of the scheme (Canada; Russia; United States) extend only at-the-border privileges to ABTC holders.

B. TFAP II ACTIONS AND MEASURES FOR BUSINESS MOBILITY

1. Streamline and Standardize Procedures

Objective

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

Actions

- a) Implement standards for
 - i) travel documentation examination;
 - ii) professional service;
 - iii) travel document security (and issuance systems); and
 - iv) immigration legislation.
- b) Streamline arrangements for intra-company transferees in accordance with the agreed APEC 30-day processing standard.
- c) Implement and promote the APEC Business Travel Card and/or visa free or visa waiver arrangements or at least 3 year multiple entry visas for short term business visitors such as those engaged in the negotiation of the sale of services or goods, establishing an investment or participating in business-related conferences, seminars or workshops.

2. Enhance the Use of Information and Communications Technology

Objective

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

Actions

- a) Introduce e-lodgement arrangements for temporary residency applications.
- b) Introduce an advanced passenger information system which pre-clears passengers to ensure faster clearance on arrival.
- c) Introduce machine readable travel documents (MRTDs), if possible with biometrics, by end 2008.
- d) Make available comprehensive information and application forms for short-stay and temporary residence business visas, including through the APEC Business Travel Handbook and official immigration/consular affairs websites, in accordance with Business Mobility Group agreements.
- e) Contribute information on lost and stolen travel documents, on a best endeavors basis, to the database of the International Criminal and Police Organization (ICPO).

C. PREVIOUSLY ENDORSED KPIS FOR BUSINESS MOBILITY (2008)

Area	Action	KPI
Streamline and Standardize Procedures	Implement standards for i) travel documentation examination; ii) professional services; iii) travel document security (and issuance systems); and iv) immigration legislation	Number of economies that have fully implemented the standards for a) travel documentation examination; b) professional services; c) travel document security (and issuance systems); and d) immigration legislation
	Streamline arrangements for intra-company transferees in accordance with the agreed APEC 30 day processing standard	Number of economies which fully meet the agreed 30 day processing standard for visa applications, where complete, of intra-company transferees
	Implement and promote the APEC Business Travel Card (ABTC) and/or visa free or visa waiver arrangements or at least 3 year multiple entry visas for short term business visitors such as those engaged in the negotiation of the sale of services or goods, establishing an investment or participating in business-related conferences, seminars or workshops	Percentage increase in the number of APEC Business Travel Cards issued in this reporting year compared to the number issued in the previous reporting year
		Number of economies that have joined the APEC Business Travel Card scheme (either as a transitional or as a full member) (measures commitment to expansion of scheme)
		Number of APEC Business Travel Cards issued since the end of the last reporting period until the end of this reporting period (measures success of card promotion)
Number of economies that have implemented either visa free/visa waiver arrangements or 3 year multiple entry visas for business visitors (agreed CAP collective) or have joined the ABTC scheme		
Enhance the Use of Information and Communications Technology	Introduce e-lodgement arrangements for temporary residency applications	Number of economies that have introduced e-lodgement arrangements for temporary residency applications (economies with online application facilities)
	Introduce an advanced passenger information system which pre-clears passengers to ensure faster clearance on arrival	Number of economies that have introduced, or plan to introduce, an API system by 2010 to enhance border security and the safety of travelers (measures progress on API Pathfinder Initiative)
	Introduce machine readable travel documents (MRTDs), if possible with biometrics, by end 2008	Number of economies that have introduced machine readable travel documents (MRTDs) (measures progress by BMG against this agreement)
		Number of economies that have MRTDs with biometrics (measures progress by BMG to implement this agreement)
	Make available comprehensive information and application forms for short-stay and temporary residence business visas, including through the APEC Business Travel Handbook and official Immigration/Consular affairs websites, in accordance with Business Mobility Group agreements	Number of economies that make available comprehensive information through the BMG's APEC Business Travel Handbook and official websites
Contribute information on lost and stolen travel documents, on a best endeavors basis, to the database of the International Criminal and Police Organization (ICPO)	Number of economies that contribute information on lost and stolen travel documents to the International Police and Criminal Organization (Interpol ICPO)	

D. ABTC CLIENT SATISFACTION SURVEY

As a holder of an APEC Business Travel Card (ABTC), you are invited to take part in this survey on the ABTC scheme. The purpose of this survey, which is being administered by the APEC Policy Support Unit, is to find out how well this scheme is operating in terms of the benefits it provides to you.

Your feedback is important because it will help us to determine your level of satisfaction with the scheme and to identify ways to improve the scheme. A similar survey conducted in 2008 provided valuable input leading to the development of client service standards for the scheme. We would therefore appreciate a few minutes of your time to complete the survey.

The response you provide will only be used in aggregated form. No individual respondent will be able to be identified.

ABTC Application

1. Which APEC member economy issued your APEC Business Travel Card (ABTC)?

2. How easy was it to complete the ABTC application form?

Please rate 1 = Very difficult 2 3 4 5 6 = Very easy

3. How long did it take to complete the ABTC application form?

(Please provide an estimate of the time taken in MINUTES to fill in the application form.)

ABTC Usage (Most Visited Economy)

4. Which economy have you visited the most number of times on business using the ABTC in the last 12 months?

5. How many times have you visited [Q4] on business using the ABTC in the last 12 months?

6. Although you hold an ABTC, did you have to apply for a business visa to visit [Q4]?
(While ABTC holders are generally exempt from having to apply for a visa to visit other APEC economies, an ABTC holder may have to obtain a visa to visit an economy that has not provided advance permission for the ABTC holder to enter the economy without a visa and that economy is not listed on the ABTC holder's card.)

- Yes
- No

7. *[If respondent selects "Yes"]* Which type of business visa were you issued by [Q4]?

- Single-entry
- Multiple-entry

8. Are the APEC lanes easy to find at immigration checkpoints in [Q4]?

Please rate 1 = Very 2 3 4 5 6 = Very

rate difficult easy

9. Are the APEC lanes always open at immigration checkpoints in [Q4]?

Please 1 = Never 2 3 4 5 6 = Always
rate open open

10. Did you use the APEC lanes at immigration checkpoints in [Q4]?

- Yes
- No

11. *[If respondent selects "Yes"]* On average, how long did it take to be processed through the APEC lanes at immigration checkpoints in [Q4]?
(Please provide an estimate of the time taken in MINUTES from starting to queue until completing the immigration process.)

ABTC Usage (Second Most Visited Economy)

12. Which economy have you visited the second most number of times on business using the ABTC in the last 12 months?
[Respondents can select "Only visited the previous one" and will skip to Question 29.]

13. How many times have you visited [Q12] on business using the ABTC in the last 12 months?

14. Although you hold an ABTC, did you have to apply for a business visa to visit [Q12]?
(While ABTC holders are generally exempt from having to apply for a visa to visit other APEC economies, an ABTC holder may have to obtain a visa to visit an economy that has not provided advance permission for the ABTC holder to enter the economy without a visa and that economy is not listed on the ABTC holder's card.)

- Yes
- No

15. *[If respondent selects "Yes"]* Which type of business visa were you issued by [Q12]?

- Single-entry
- Multiple-entry

16. Are the APEC lanes easy to find at immigration checkpoints in [Q12]?

Please 1 = Very 2 3 4 5 6 = Very
rate difficult easy

17. Are the APEC lanes always open at immigration checkpoints in [Q12]?

Please 1 = Never 2 3 4 5 6 = Always
rate open open

18. Did you use the APEC lanes at immigration checkpoints in [Q12]?

- Yes
- No

19. [If respondent selects “Yes”] On average, how long did it take to be processed through the APEC lanes at immigration checkpoints in [Q12]?
(Please provide an estimate of the time taken in MINUTES from starting to queue until completing the immigration process.)

ABTC Usage (Third Most Visited Economy)

20. Which economy have you visited the third most number of times on business using the ABTC in the last 12 months?
[Respondents can select “Only visited the previous two” and will skip to Question 29.]
21. How many times have you visited [Q20] on business using the ABTC in the last 12 months?
22. Although you hold an ABTC, did you have to apply for a business visa to visit [Q20]?
(While ABTC holders are generally exempt from having to apply for a visa to visit other APEC economies, an ABTC holder may have to obtain a visa to visit an economy that has not provided advance permission for the ABTC holder to enter the economy without a visa and that economy is not listed on the ABTC holder’s card.)
- Yes
 No
23. [If respondent selects “Yes”] Which type of business visa were you issued by [Q20]?
- Single-entry
 Multiple-entry

24. Are the APEC lanes easy to find at immigration checkpoints in [Q20]?

Please rate 1 = Very difficult 2 3 4 5 6 = Very easy

25. Are the APEC lanes always open at immigration checkpoints in [Q20]?

Please rate 1 = Never open 2 3 4 5 6 = Always open

26. Did you use the APEC lanes at immigration checkpoints in [Q20]?

- Yes
 No

27. [If respondent selects “Yes”] On average, how long did it take to be processed through the APEC lanes at immigration checkpoints in [Q20]?
(Please provide an estimate of the time taken in MINUTES from starting to queue until completing the immigration process.)

ABTC Usage [Other Visited Economies]

28. Besides the three most visited economies, how many times have you visited the other APEC economies on business using the ABTC in the last 12 months?

(Please leave blank if you have not visited any other APEC economies.)

- Australia _____
- Brunei Darussalam _____
- Canada _____
- Chile _____
- People's Republic of China _____
- Hong Kong, China _____
- Indonesia _____
- Japan _____
- Republic of Korea _____
- Malaysia _____
- Mexico _____
- New Zealand _____
- Papua New Guinea _____
- Peru _____
- The Philippines _____
- Russia _____
- Singapore _____
- Chinese Taipei _____
- Thailand _____
- The United States _____
- Viet Nam _____

ABTC Experience

29. How would you describe your overall level of satisfaction with the ABTC scheme?

Please rate 1 = Not satisfied 2 3 4 5 6 = Extremely satisfied

30. How useful to you is the ABTC in allowing you to travel without having to apply for a visa/s?

Please rate 1 = Not useful 2 3 4 5 6 = Extremely useful

31. How useful to you is the ABTC in helping you to avoid long queues at immigration checkpoints?

Please rate 1 = Not useful 2 3 4 5 6 = Extremely useful

32. What do you think is the best thing about the ABTC?

(Please choose only one answer.)

- I don't have to apply for a visa/s
- I don't have to pay for a visa/s
- I avoid long queues at immigration checkpoints

33. Which of the following things about the ABTC would you most like to see improved?

(Please choose up to three answers.)

- Cost of the ABTC
 - Time it takes to obtain an ABTC
 - Process to renew an ABTC
 - Validity period of the ABTC
 - Signage for APEC lanes at immigration checkpoints
 - Number of immigration checkpoints with APEC lanes
 - Number of APEC lanes at each immigration checkpoint
 - Knowledge of immigration officials about the rights of ABTC holders
- Other comments: _____

Profile

The following questions will be used for classification purposes only.

34. Please provide information on your employment status and company.

Employment status	Position level	Company size	Company type
<input type="radio"/> Employed	<input type="radio"/> Senior executive	<input type="radio"/> SME	<input type="radio"/> Domestic
<input type="radio"/> Self-employed	<input type="radio"/> Middle manager	<input type="radio"/> Large enterprise	<input type="radio"/> Multinational

35. Please select in which economic sector your business primarily operates.

- Agriculture, forestry and fishing
- Mining and quarrying
- Manufacturing
- Electricity, gas, steam and air conditioning supply
- Water supply; sewerage, waste management and remediation activities
- Construction
- Wholesale and retail trade
- Transportation and storage
- Accommodation and food service activities
- Information and communication
- Financial and insurance activities
- Real estate activities
- Professional, scientific and technical activities
- Administrative and support service activities
- Public administration and defense
- Education
- Human health and social work activities
- Arts, entertainment and recreation
- Other service activities
- Activities of households as employers
- Activities of extraterritorial organizations and bodies

36. Please indicate your gender.

- Male
- Female

Thank you for participating in this survey. We appreciate your feedback. The results of this survey will be made available by the end of the year.

E. ABTC NEW APPLICANT SURVEY

As a new applicant for the APEC Business Travel Card (ABTC), you are invited to take part in this survey, which is being administered by the APEC Policy Support Unit. The purpose of this survey is to understand business travel patterns in the APEC region.

Your response is important because it will help us to assess the benefits that the ABTC scheme provides to business travelers in the region. We would therefore appreciate a few minutes of your time to complete the survey.

The response you provide will only be used in aggregated form. No individual respondent will be able to be identified.

APEC Business Travel Card (ABTC)

1. Through which APEC member economy are you applying for an APEC Business Travel Card (ABTC)?
2. Why are you applying for an ABTC?
(Please choose only one answer.)
 - To avoid having to apply for a visa/s
 - To avoid having to pay for a visa/s
 - To avoid long queues at immigration checkpoints
3. How did you learn about the ABTC scheme?
(Please choose only one answer.)
 - Colleague or business associate
 - Industry association or chamber of commerce
 - Government agency responsible for the ABTC scheme
 - APEC website
 - Media coverage of the ABTC
 - Immigration lanes at international entry points
 - Other (please specify): _____

Business Travel (Most Visited Economy)

4. Which economy have you visited the most number of times on business in the last 12 months?
5. How many times have you visited [Q4] on business in the last 12 months?
6. Did you have to apply for a business visa to visit [Q4]?
7. [If respondent selects "Yes"] Which type of business visa were you issued by [Q4]?
 - Single-entry
 - Multiple-entry

8. *[If respondent selects “Yes”]* How long did it take to complete the visa application form for [Q4]?
(Please provide an estimate of the time taken in MINUTES to fill in the application form.)
9. On average, how long did it take to be processed through the passenger lanes at immigration checkpoints in [Q4]?
(Please provide an estimate of the time taken in MINUTES from starting to queue until completing the immigration process.)

Business Travel (Second Most Visited Economy)

10. Which economy have you visited the second most number of times on business in the last 12 months?
[Respondents can select “Only visited the previous one” and will skip to Question 23.]
11. How many times have you visited [Q10] on business in the last 12 months?
12. Did you have to apply for a business visa to visit [Q10]?
13. *[If respondent selects “Yes”]* Which type of business visa were you issued by [Q10]?
 Single-entry
 Multiple-entry
14. *[If respondent selects “Yes” to Q12]* How long did it take to complete the visa application form for [Q10]?
(Please provide an estimate of the time taken in MINUTES to fill in the application form.)
15. On average, how long did it take to be processed through the passenger lanes at immigration checkpoints in [Q10]?
(Please provide an estimate of the time taken in MINUTES from starting to queue until completing the immigration process.)

Business Travel (Third Most Visited Economy)

16. Which economy have you visited the third most number of times on business in the last 12 months?
[Respondents can select “Only visited the previous two” and will skip to Question 23.]
17. How many times have you visited [Q16] on business in the last 12 months?
18. Did you have to apply for a business visa to visit [Q16]?
19. *[If respondent selects “Yes”]* Which type of business visa were you issued by [Q16]?
 Single-entry
 Multiple-entry
20. *[If respondent selects “Yes” to Q12]* How long did it take to complete the visa application form for [Q16]?
(Please provide an estimate of the time taken in MINUTES to fill in the application form.)

21. On average, how long did it take to be processed through the passenger lanes at immigration checkpoints in [Q16]?
 (Please provide an estimate of the time taken in MINUTES from starting to queue until completing the immigration process.)

Business Travel [Other Visited Economies]

22. Besides the three most visited economies, how many times have you visited the other APEC economies on business in the last 12 months?
 (Please leave blank if you have not visited any other APEC economies.)

- Australia _____
- Brunei Darussalam _____
- Canada _____
- Chile _____
- People's Republic of China _____
- Hong Kong, China _____
- Indonesia _____
- Japan _____
- Republic of Korea _____
- Malaysia _____
- Mexico _____
- New Zealand _____
- Papua New Guinea _____
- Peru _____
- The Philippines _____
- Russia _____
- Singapore _____
- Chinese Taipei _____
- Thailand _____
- The United States _____
- Viet Nam _____

Profile

The following questions will be used for classification purposes only.

23. Please provide information on your employment status and company.

Employment status	Position level	Company size	Company type
<input type="radio"/> Employed	<input type="radio"/> Senior executive	<input type="radio"/> SME	<input type="radio"/> Domestic
<input type="radio"/> Self-employed	<input type="radio"/> Middle manager	<input type="radio"/> Large enterprise	<input type="radio"/> Multinational

24. Please select in which economic sector your business primarily operates.

- Agriculture, forestry and fishing
- Mining and quarrying
- Manufacturing
- Electricity, gas, steam and air conditioning supply

- Water supply; sewerage, waste management and remediation activities
- Construction
- Wholesale and retail trade
- Transportation and storage
- Accommodation and food service activities
- Information and communication
- Financial and insurance activities
- Real estate activities
- Professional, scientific and technical activities
- Administrative and support service activities
- Public administration and defense
- Education
- Human health and social work activities
- Arts, entertainment and recreation
- Other service activities
- Activities of households as employers
- Activities of extraterritorial organizations and bodies

25. Please indicate your gender.

- Male
- Female

Thank you for participating in this survey. We appreciate your response. The results of this survey will be made available by the end of the year.

F. ABTC ECONOMY SURVEY

Application Processing

ABTC Applications

1. How much is the official fee to apply for an ABTC?
(Please specify the currency.)
2. On average, how long does it take for a home economy applicant to complete the ABTC application form?
(Please provide an estimate of the time taken in MINUTES to fill in the application form.)
3. On average, how long does it take (in days) for home processing of an ABTC application?

Business Visa Applications

4. How much is the official fee for a business person from each APEC economy to apply for a business visa?
(Please specify the currency. If your economy does not require a visa for a short-stay visit for business people from another APEC economy, then please enter N/A.)

Paper Application		Online Application (if applicable)	
Single-entry	Multiple-entry	Single-entry	Multiple-entry

5. On average, how long does it take for a business person from each APEC economy to complete the business visa application form?
(Please provide an estimate of the time taken in MINUTES to fill in the application form. If your economy does not require a visa for a short-stay visit for business people from another APEC economy, then please enter N/A.)

Paper Application		Online Application (if applicable)	
Single-entry	Multiple-entry	Single-entry	Multiple-entry

6. On average, how long does it take to process a business visa application from each APEC economy?
(Please provide an estimate of the time taken in DAYS. If your economy does not require a visa for a short-stay visit for business people from another APEC economy, then please enter N/A.)

Paper Application		Online Application (if applicable)	
Single-entry	Multiple-entry	Single-entry	Multiple-entry

7. Approximately what proportion (%) of business visas issued to business people from each APEC economy for the last three years (2010, 2009, 2008) were multiple-entry visas?
*(a. If only single-entry visas are issued for a short-stay business visit, then the answer to this question should be 0%.
b. If only multiple-entry visas are issued for a short-stay business visit, then the answer to this question should be 100%.*

- c. If either single- or multiple-entry visas may be issued for a short-stay business visit, then estimate the proportion if it is not possible to calculate the exact percentage.
- d. If your economy does not require a visa for a short-stay visit for business people from another APEC economy, then please enter N/A.)

8. What is the average length of validity of multiple-entry business visas issued to business people from each APEC economy?
(Please specify years or months. If your economy does not require a visa for a short-stay visit for business people from another APEC economy, then please enter N/A.)
9. Approximately what proportion (%) of business visa applications from each APEC economy are submitted online (if applicable)?
(If your economy does not require a visa for a short-stay visit for business people from another APEC economy, then please enter N/A.)

Intra-Company Transfer (ICT) Applications

10. On average, how long does it take (in days) to process an intra-company transfer (ICT) application from each APEC economy?

Immigration Processing

ABTC Holders

11. What is the percentage (%) of immigration checkpoints (airports and/or seaports) that have an APEC lane?
12. Are there signs at immigration checkpoints (airports and/or seaports) to show ABTC holders the way to the APEC lanes?
- Yes
 No
13. Are the APEC lanes at immigration checkpoints (airports and/or seaports) open at all times?
- Yes
 No
14. On average, how long does it take for an ABTC holder to be processed through the APEC lanes at immigration checkpoints (airports and/or seaports)?
(Please provide an estimate of the time taken in MINUTES from starting to queue until completing the immigration process.)

Non-ABTC Holders

15. On average, how long does it take for a business person to be processed through the passenger lanes at immigration checkpoints (airports and/or seaports)?
(Please provide an estimate of the time taken in MINUTES from starting to queue until completing the immigration process.)

G. SURVEY DESIGN, IMPLEMENTATION AND RESULTS

This section discusses in detail how the ABTC Client Satisfaction Survey, ABTC New Applicant Survey, and ABTC Economy Survey were designed and implemented as well as the data received through the surveys.

Survey design

In order to measure the KPIs recommended during the TFAP II Interim Assessment, the BMG developed two questionnaires that would be the key mechanisms through which the data required to calculate the KPIs could be captured – a revised ABTC Client Satisfaction Survey based on one that had previously been implemented in 2008 and a new survey of the BMG member economies (an Economy Survey)¹⁴.

At the request of the BMG, the APEC Policy Support Unit (PSU) and the Institute for Economic and Social Research at the University of Indonesia (LPEM) assessed these questionnaires and the methodology proposed to calculate the KPIs. In general, the questionnaires developed by the BMG were found to include questions relevant to most of the KPIs in order to collect the data required for their calculation.

However, the PSU and LPEM had several suggestions to improve both the surveys and the methodology to measure the KPIs as well as to address whether the TFAP II goal of a reduction in transaction costs had been achieved. These recommendations were submitted to the BMG on 5 January 2011.

Since many of the KPIs focus on the savings as result of the ABTC scheme, it is important that this scheme be fully understood. Through a single application form, the ABTC allows accredited business people to obtain multiple short-term business visitor entry to participating economies for three years. This saves card holders time and fees involved in applying for individual visas or entry permits. Card holders may also access specially designated “APEC lanes” at border checkpoints which fast-track immigration processing on arrival and departure.

In addition to these general features of the ABTC scheme, it is important to take note of the following considerations, which allowed the PSU and LPEM to design survey questions that would more accurately estimate the KPIs and the contribution of the ABTC scheme in reducing business travel costs:

- Pre-clearance (i.e., no need for a visa) is not guaranteed for all ABTC holders to all economies that are full participants of the scheme. Those card holders that have not received pre-clearance to a particular economy will therefore still need to apply for a visa, if applicable.
- ABTC holders who did not receive pre-clearance to a particular economy must follow the regular procedures and do not receive any special privileges, such as lower visa fees, when they apply for a visa to visit that economy.
- If a visa is required to visit an economy, then a single- or multiple-entry visa can be issued and the validity of a multiple-entry visa can be less or greater than one year.

¹⁴ APEC (2010a).

- Transitional members of the ABTC scheme (Canada; Russia; and United States) extend only at-the-border (i.e., fast lane) privileges to ABTC holders. Pre-border privileges (i.e., pre-clearance) are not offered.

Constructing the correct type of question is crucial for a survey to be successful. Questions can be either open-ended or closed-ended. Open-ended questions allow respondents to answer fully and also give the researcher the opportunity to obtain as much information as possible, while closed-ended questions that use a scaling method with intervals are often easier for respondents to answer. The PSU and LPEM recommended that a mix of open-ended and closed-ended questions be used in the surveys.

Given that a very specific type of information (time spent and number of visits) was being sought in the surveys, open-ended questions were used to collect this information so that respondents would provide exact figures that could be used in the calculation of the KPIs. Additionally, without prior information, it would have been extremely difficult to construct an appropriate and realistic time interval if these questions were closed-ended. Therefore, closed-ended questions were used only for those questions related to client satisfaction with the ABTC scheme.

Many surveys also allow respondents to select an “I don’t remember” option. However, allowing for this option could result in a potentially large amount of missing data. Given that the information that the respondents provide is crucial in order to accurately estimate the KPIs and the reduction in transaction costs, this option was not included in the surveys and respondents were therefore required to enter a numerical estimate for all questions related to data. In addition, all questions were made mandatory so that respondents could not skip a question.

In general, the survey questions recommended by the PSU and LPEM addressed the following key deficits in the questions and methodology that had been proposed by the BMG:

- Ensured that the questions and calculation methodology addressed the specific considerations of the ABTC scheme as discussed above.
- Took into account the average length of validity of multiple-entry visas granted since the longer the validity of a multiple-entry visa, the greater the expected time and cost savings under the ABTC scheme since applicants would otherwise need to complete the visa application and pay the application fee fewer times.
- Ensured that all questions are neutral and do not assume that the ABTC scheme saves holders time and fees.
- Ensured that all questions are clear and concise and that respondents are not asked to make more than a one-step calculation to answer the questions.

In the questionnaires proposed by the BMG, nearly all the questions related to time were asked only in the Economy Survey. Although government officials may have an estimate of how long it should take applicants to complete an application, for example, it is possible that these time estimates would be understated. Since business travelers should be better able to provide estimates of the actual time spent based on their experiences, the PSU and LPEM recommended that such questions also be asked in the Client Satisfaction Survey. Additionally, in order to allow for an apple-to-apple comparison, we recommended that such information also be requested from non-ABTC holders based on their experience of business travel without the ABTC. For this reason, we proposed adding a New Applicant Survey in

order to collect such information from non-ABTC holders to make the methodology more robust.

It was recommended that questions concerning average times to complete applications and to complete immigration processing also remain in the Economy Survey. Including such questions in the Economy Survey serves two purposes: (1) to enrich the comparison made between time estimates provided by ABTC holders and non-holders and by the economies; and (2) to serve as an alternate data source in case the proposed New Applicant Survey did not provide a sufficient number of responses.

These three surveys therefore provided complementary information that enabled the researchers to quantify the extent to which the ABTC scheme saves time and money for ABTC holders by comparison to the usual visa and entry requirements they would otherwise need to undertake in absence of the scheme. Finally, the PSU and LPEM recommended that questions that address KPI 6 (intra-company transfer processing time) and KPI 7 (business visa application processing time and e-lodgement arrangements) be included in the Economy Survey.

The PSU and LPEM also recommended a methodology to calculate the KPIs and the reduction in transaction costs as a result of the ABTC scheme as well as how the time saved by the scheme should be converted into an equivalent monetary value since total transaction costs include both time and cost components. This methodology used in the analysis is discussed in detail at Appendix J.

Survey implementation

In general, there are four steps to survey implementation: (1) deciding the targeted respondents; (2) choosing a distribution technique; (3) controlling the responses received; and (4) managing the data collected from the survey.

The sampling frame is the actual set of units from which a sample has been drawn. Ideally, the sampling frame should coincide with the population of interest. The objective of the surveys is to collect the data required to measure the KPIs that were developed to determine the reduction in transaction costs as a result of the ABTC scheme. Therefore, the relevant information is the cross-border mobility of business people and the target population would be business travelers in the APEC region.

There are then two parameters to be compared – those business travelers with an ABTC and those without an ABTC. Parameters comparison can be made from either independent populations or from related populations. In related populations, only one sample frame from the population of ABTC holders is needed. Using this method, we would then ask the ABTC holders about the conditions before and after their use of the ABTC. However, recall bias may present a problem under this method, in which the respondent cannot precisely and accurately recall past information. Another problem may also arise if changes in cross-border regulations, procedures, time and costs have taken place after one becomes an ABTC holder.

To avoid these issues, the PSU and LPEM recommended that an independent population be used. Consequently, samples should be drawn from both the population of ABTC holders and from the population of non-ABTC holders. Therefore, two sample frames were used – one that includes all current ABTC holders and another that includes all business travelers in the

APEC region who are not currently ABTC holders. Although this method is more reliable, it is also more complicated because it is difficult to identify the sampling frame for the non-ABTC holders.

For the Client Satisfaction Survey, the sample frame was the BMG's records of ABTC holders from each issuing economy. The targeted respondent was a business traveler who holds a valid ABTC. A business traveler with a recently expired ABTC who is re-applying for a new ABTC was also considered to be a targeted respondent for this survey.

For the New Applicant Survey, the sample frame is the BMG's records of new ABTC applicants to each issuing economy. The targeted respondent is a business traveler who is applying for a new ABTC. Also considered to be a targeted respondent for this survey are those business people in the APEC region who frequently travel for business purposes throughout the region. The respondents to this survey were treated as representative of all non-ABTC holders in the APEC region.

The next step is to draw the sample in order to represent the population. The sample size is an important issue and is strongly related to the sample frame. Considering the scope of the surveys, stratified sampling was used as the relevant sampling design for this study. The population of business travelers in the APEC region was stratified into ABTC holders and non-ABTC holders and then random sampling from each strata of the population was performed.

The formula used to calculate sample sizes is as follows:

$$n^* = \left(\frac{Z_{\alpha/2} \times s}{MOE} \right)^2$$

n^* – the sample size before considering the population size

$Z_{\alpha/2}$ – the value of the confidence interval in a normal distribution

(for a 95% confidence interval, the corresponding $Z_{\alpha/2}$ value is 1.96)

s – the variation of the variable of interest

MOE – margin of error

In the case of finite populations (e.g., ABTC holders), the formula needs to take into account the size of the population as follows:

$$n = \frac{n^*}{1 + n^*/N}$$

N = size of the population

Thus, using the assumptions that $s = 1$, a confidence interval of 95%, and various margins of error, we obtain the following minimal response target (i.e., sample size) for the Client Satisfaction Survey and the New Applicant Survey based on the number of ABTC holders in each APEC economy as at 1 February 2011:

Required sample size by economy

Economy	ABTC holders	Best scenario (MOE=5%)	Second-best scenario	Worst scenario
---------	--------------	------------------------	----------------------	----------------

			(MOE=10%)	(MOE>10%)
Australia	23,594	171	43	30
Brunei Darussalam	43	35	11	11
Chile	430	123	36	30
China	3,965	165	42	30
Hong Kong, China	10,673	169	43	30
Indonesia	1,500	154	41	30
Japan	2,593	161	42	30
Korea	8,798	169	43	30
Malaysia	4,475	166	43	30
Mexico	198	92	29	29
New Zealand	6,552	168	43	30
Papua New Guinea	22	20	7	7
Peru	1,252	151	41	30
Philippines	497	128	37	30
Singapore	8,233	168	43	30
Chinese Taipei	1,652	156	41	30
Thailand	5,552	167	43	30
Viet Nam	8,696	169	43	30

The worst-case scenario uses quota sample size of at least 30 ABTC holders from each APEC economy, with the exception of economies with small populations of ABTC holders. In general, any sample size above 30 is considered large enough to assume normal sampling distribution. With this approach, we have to accept any margin of error value as a result of the small sample size. However, as illustrated in the table above, any sample size less than the second-best scenario will generate a margin of error greater than 10%.

To ensure a robust estimation of the KPIs related to the experience of using the ABTC across economies, at least 30 responses are also required from each APEC economy to each destination economy. However, we are unable to control this aspect of the sampling distribution. Therefore, the capacity of the surveys to derive quantitative data for measuring the KPIs and the reduction in transaction costs depends to a large extent on the quality of the responses obtained during the survey period.

To ensure broad coverage of ABTC holders and non-holders in the APEC region and to simplify the burden on the respondents, potentially improving the response rate, the PSU had the English surveys professionally translated into five languages – Chinese, Japanese, Korean, Spanish, and Vietnamese. Relevant BMG members were then given a chance to comment on the translated versions before they were final.

The Client Satisfaction Survey and the New Applicant Survey were implemented through the Internet. An online survey has several advantages: it is easy for respondents to complete; it allows for a wide coverage of respondents; and it is cost efficient by minimizing the human resource time needed to implement the survey. However, online surveys also have some limitations: there may be a low response rate given that it is voluntary; and it may result in bias in the responses due to a lack of control of selected respondents. Also, since the respondents will be unable to clarify the questions and the researcher also cannot verify the answers, it is crucial that questions in an online survey be self-explanatory, clear and concise.

The ABTC Client Satisfaction Survey and the ABTC New Applicant Survey were made available online from 25 March 2011 through 18 July 2011 through Survey Monkey. The surveys were not distributed directly to the respondent. Instead, links to the surveys were embedded on the APEC website and the BMG members were also encouraged to e-mail their current ABTC holders and to notify chambers of commerce in their economies in order to help promote participation in the surveys.

Throughout the survey period, the PSU evaluated the progress of the responses received through the surveys and informed the BMG members of the number of survey respondents by economy each week of the survey period. This was done to try to enlist the help of the BMG members to contact international business travelers in their economy, including ABTC holders, to ensure that all members met their targeted sample size.

Survey results

The table below shows the breakdown in completed survey responses by home economy of the respondents upon conclusion of the survey period. Respondents that started, but did not finish the survey, were considered as incomplete responses and were removed from the data set. As shown below, there was only one ABTC respondent to the Client Satisfaction Survey from Chinese Taipei. Since this is an insufficient sample size of ABTC holders from Chinese Taipei, that economy was therefore not included in the analysis of KPIs 3, 4, 5 and in the estimation of the reduction in transaction costs as a result of the ABTC scheme.

Number of survey respondents by economy

Economy	Client Satisfaction Survey	New Applicant Survey
Australia	381	33
Brunei Darussalam	12	3
Chile	15	7
China	24	11
Hong Kong, China	30	23
Indonesia	10	7
Japan	42	32
Korea	216	35
Malaysia	38	31
Mexico	27	28
New Zealand	273	2
Papua New Guinea	5	3
Peru	62	32
Philippines	27	2
Singapore	13	9
Chinese Taipei	1	3
Thailand	282	14
Viet Nam	5	3
TOTAL	1,463	278

The resultant data set was then checked for any peculiarities, such as outliers or inconsistencies, so that a “clean” data set could be used in the analysis. In general, data outliers were found in the responses to two types of questions: (1) those related to time spent

filling in application forms or clearing immigration processing; and (2) those related to the number of visits. The following table provides the cut-off points that were used to remove outliers from the data set:

Removal of data outliers

Question	Cut-off point	Valid responses	Non-valid responses	Valid responses as a share of total
<i>Client Satisfaction Survey</i>				
time spent to complete ABTC application (Question 3)	60	1,417	46	96.9%
number of visits (Questions 5, 13, 21, 28)	60	6,220	2	100%
time spent in immigration processing using the APEC lane (Questions 11, 19, 27)	30	2,792	25	99.1%
<i>New Applicant Survey</i>				
number of visits (Questions 5, 11, 17, 22)	60	667	3	100%
time spent to complete visa application (Questions 8, 14, 20)	60	192	11	94.6%
time spent in immigration processing using the regular lane (Questions 9, 15, 21)	60	645	20	97.0%

Note: For questions related to the number of visits (Client Satisfaction Survey Questions 5, 13, 21, 28; New Applicant Survey Questions 5, 11, 17, 22), most of the responses were under 15 visits; however, to account for the possibility of weekly trips (e.g., between China and Hong Kong, China), visits of up to 60 times were included in the analysis.

The BMG distributed the Economy Survey to members and requested that all 21 APEC members complete the survey and provide the required data. In order to ensure completeness and consistency in the data that were collected from the economies, the finalized Economy Survey was formatted in Microsoft Excel. The PSU received Economy Surveys from 19 APEC members.

In the case of incomplete data in the Economy Survey (two economies did not submit their survey and some economies were unable to provide estimates for some of the questions), the following default responses were used for those questions in which a response was crucial for the calculation of the KPIs. These default responses are considered to be the most conservative estimates and were determined in consultation with the relevant member economies. In the case of incomplete information related to fees, the PSU used official websites to determine these fees and include them in the analysis.

- time spent to complete application forms (Questions 2 and 5): 10 minutes
- proportion of multiple-entry business visas issued (Question 7): 50%
- average length of validity of multiple-entry business visas issued (Question 8): 12 months
- proportion of business visa applications submitted online, if applicable (Question 9): 50%

Finally, given the very low number of responses to the New Applicant Survey, responses on the time spent to complete visa applications were found to be insufficient to use in the calculation of KPI 3. Thus, information related to the time spent by business travelers to complete both single- and multiple-entry visa applications was instead sourced from the Economy Survey. However, responses on the time spent to complete immigration processing through the passenger lanes at immigration checkpoints in each destination economy were found to be sufficient. Therefore, for the calculation of KPI 4, information related to time spent by business travelers to complete immigration through the passenger lanes was sourced from the New Applicant Survey.

Margin of error

The margin of error provides a statistical measure to show how well a survey sample reflects the entire population, assuming that the sample is chosen randomly within that population. It is the range of values above and below a sample statistic, assuming a certain level of confidence. In general, a low margin of error implies that the results of the estimation are more robust, i.e., more indicative of the actual value. Sample size is an important factor in determining the margin of error; larger sampling coverage tends to yield a smaller margin of error. In addition, if a result is derived from more than one variable, then the margin of error is typically larger than the margin of error of each of the variables involved in the calculation.

For quantitative data, the margin of error can be calculated as follows:

$$\text{margin of error} = \text{critical value} * \text{standard deviation of the statistic}$$

Assuming the sample distribution of a statistic (e.g., total savings) is normal or nearly normal, the critical value can be expressed as either a t-score or a z-score. The standard deviation of a statistic is its variation from the sample average. In general, when the standard deviation of the population is unknown or when the sample size is small, the t-score is used for the critical value, which is what we have used in our analysis.

Since total savings as a result of the ABTC scheme are estimated as the sum of three variables (KPIs 3, 4 and 5), the variance of each of those KPIs was first calculated. These variances were then summed in order to determine the variance of total savings. Given that there is no correlation between any of these three variables, the number of values in the final calculation of total savings that are free to vary, the degrees of freedom, is $(n*3-3)$.

Thus, the following formula was used to calculate the margin of error of total savings as a result of the ABTC scheme for each APEC economy (i), where n is the sample size and N is the number of ABTC holders:

$$\text{margin of error}_i = t_{\alpha/2(df)_i} * \frac{\sqrt{\text{total savings variance}_i}}{\sqrt{n_i * 3}} * N_i$$

The following table shows the margin of error of total savings estimated for ABTC holders from each economy as well as total savings estimated across the APEC region as a result of the ABTC scheme:

Margin of error by economy

Economy	Survey respondents (#)	ABTC holders (#)	Total savings (USD)	Total savings variance (USD)	Confidence interval (95%)	Margin of error (+/- USD)	Margin of error (+/- %)
Australia	381	24,286	1,134,325	11,805	1.96	153,136	13.5
Brunei Darussalam	12	43	1,696	3,709	2.03	888	52.4
Chile	15	416	12,584	2,207	2.02	5,879	46.7
China	24	3,895	226,108	15,610	1.99	114,413	50.6
Hong Kong, China	30	10,659	390,295	17,757	1.99	297,584	76.2
Indonesia	10	1,495	25,235	1,596	2.05	22,373	88.7
Japan	42	2,541	181,869	9,182	1.98	42,937	23.6
Korea	216	8,422	523,141	3,596	1.96	38,958	7.4
Malaysia	38	4,140	100,954	2,915	1.98	41,481	41.1
Mexico	27	185	5,552	5,736	1.99	3,099	55.8
New Zealand	273	6,538	516,858	9,137	1.96	42,864	8.3
Papua New Guinea	5	22	2,637	417	2.18	253	9.6
Peru	62	1,277	-141,661	2,324	1.97	8,906	6.3
Philippines	27	476	4,377	938	1.99	3,226	73.7
Singapore	13	8,137	478,252	7,768	2.03	232,897	48.7
Thailand	282	5,564	-81,007	965	1.96	11,661	14.4
Viet Nam	5	8,730	316,579	674	2.18	127,492	40.3
Total	1,462	86,826	3,697,796	96,335	1.96	797,765	21.6

The margins of error of total savings estimated for ABTC holders from each APEC economy varies widely, ranging from 6.3% to 88.7%. Economies with larger sample sizes tend to have relatively smaller margins of error, including Australia, Korea, New Zealand, and Thailand. For those economies in which the sample size represents a relatively high proportion of the total number of ABTC holders, including Papua New Guinea and Peru, the margins of error are also relatively smaller.

At the regional level, the margin of error of estimated total savings experienced by ABTC holders across the APEC region is USD 797,765, which translates into a maximum bias of 21.6%. This implies that, based on estimated total savings of USD 3,697,796 for ABTC holders across the region, the true total savings as a result of the ABTC scheme falls between USD 2,900,031 and USD 4,495,561 (assuming a 95% confidence level). Thus, the reduction in business travel costs for ABTC holders in the 12-month period between March-July 2010 and March-July 2011 is between 29.8% and 46.1%.

H. BUSINESS TRAVEL PATTERNS IN THE APEC REGION

Based on the results of the Client Satisfaction Survey, the following table reveals the total number of business travelers from each home economy to each destination economy.

From:	AUS	BD	CHL	PRC	HKC	INA	JPN	ROK	MAS	MEX	NZ	PNG	PE	PHL	SIN	CT	THA	VN
To:																		
Australia	--	5	6	5	8	3	8	17	13	2	171	4	7	8	5	0	67	1
Brunei Darussalam	12	--	0	1	1	0	1	0	6	0	3	1	1	2	1	0	7	1
Canada	42	0	0	0	2	0	4	10	3	2	18	1	9	3	1	0	10	0
Chile	22	0	--	1	0	0	0	6	0	4	16	0	42	1	1	0	0	0
China	262	6	10	--	21	8	28	158	29	14	175	1	24	18	9	0	152	2
Hong Kong, China	237	7	10	9	--	3	15	76	15	12	134	1	16	18	6	1	141	0
Indonesia	153	5	2	5	10	--	11	60	23	4	62	1	1	7	9	0	42	0
Japan	106	4	5	9	14	3	--	81	16	7	49	0	16	11	5	1	128	2
Korea	84	3	3	6	11	1	11	--	11	1	39	0	10	5	4	0	51	1
Malaysia	166	9	3	9	12	1	9	31	--	2	66	2	2	6	9	0	66	1
Mexico	10	0	2	3	2	0	0	11	0	--	9	0	19	1	1	0	3	0
New Zealand	106	0	3	2	2	1	5	2	4	4	--	0	3	0	2	0	26	0
Papua New Guinea	21	0	0	0	0	0	1	0	0	0	2	--	0	1	0	0	2	0
Peru	10	0	7	2	0	0	0	4	0	2	3	0	--	1	1	0	0	0
Philippines	82	6	1	3	13	0	3	26	9	2	41	0	3	--	4	0	24	0
Russia	12	0	1	1	0	0	0	12	0	1	6	0	0	0	0	0	7	0
Singapore	205	10	2	7	20	6	12	46	20	3	97	3	9	14	--	0	118	4
Chinese Taipei	55	5	3	3	10	4	13	36	11	2	31	1	5	7	1	--	54	1
Thailand	176	9	3	7	20	2	15	50	20	6	93	2	5	13	9	1	--	1
United States	139	2	5	5	12	4	13	58	5	18	76	2	45	10	4	0	57	0
Viet Nam	114	4	2	5	7	0	11	46	16	3	64	2	3	7	5	0	57	--

Based on the results of the Client Satisfaction Survey, the following table reveals the total number of trips business travelers took from each home economy to each destination economy.

From:	AUS	BD	CHL	PRC	HKC	INA	JPN	ROK	MAS	MEX	NZ	PNG	PE	PHL	SIN	CT	THA	VN
To:																		
Australia	--	12	8	10	18	9	14	22	36	3	798	20	12	10	18	0	111	1
Brunei Darussalam	14	--	0	1	1	0	1	0	9	0	4	1	1	3	2	0	16	1
Canada	70	0	0	0	4	0	6	15	3	2	21	1	25	3	1	0	11	0
Chile	53	0	--	1	0	0	0	6	0	12	26	0	162	1	2	0	0	0
China	1,252	28	35	--	183	23	156	947	158	47	722	3	72	83	65	0	523	6
Hong Kong, China	1,045	29	51	34	--	9	72	276	107	28	546	2	42	78	25	5	359	0
Indonesia	554	14	3	18	31	--	64	191	96	18	220	2	1	9	53	0	83	0
Japan	247	5	6	24	41	6	--	303	35	14	114	0	29	27	17	4	256	4
Korea	228	3	7	23	73	1	20	--	20	2	75	0	13	12	8	0	84	2
Malaysia	536	48	3	23	25	6	22	83	--	6	176	2	2	11	51	0	139	3
Mexico	19	0	4	3	6	0	0	30	0	--	14	0	40	1	1	0	3	0
New Zealand	236	0	5	11	2	4	16	2	5	7	--	0	3	0	2	0	35	0
Papua New Guinea	62	0	0	0	0	0	5	0	0	0	2	--	0	1	0	0	2	0
Peru	13	0	33	2	0	0	0	6	0	3	5	0	--	1	3	0	0	0
Philippines	231	16	1	17	26	0	5	54	22	10	117	0	5	--	14	0	47	0
Russia	33	0	1	1	0	0	0	23	0	3	11	0	0	0	0	0	8	0
Singapore	882	51	2	28	63	60	29	97	100	20	309	11	12	38	--	0	261	11
Chinese Taipei	135	8	7	5	19	9	38	106	19	9	73	3	7	11	4	--	88	1
Thailand	695	31	4	26	44	19	33	125	104	11	349	4	18	27	31	1	--	1
United States	359	3	11	27	32	5	30	152	7	171	174	6	197	20	9	0	99	0
Viet Nam	338	6	4	17	15	0	36	139	38	7	195	4	3	13	14	0	122	--

I. SHORT-STAY BUSINESS VISA REQUIREMENTS IN THE APEC REGION, 2011

This matrix forms the basis of the analysis to calculate the savings (time and fees) as a result of the ABTC scheme. (All cases in which a traveler does not require a business visa for at least a 7-day visit are considered to be visa-free.)

for citizens of: to enter:	AUS	BD	CDA	CHL	PRC	HKC	INA	JPN	ROK	MAS	MEX	NZ	PNG	PE	PHL	RUS	SG	CT	THA	US	VN	
Australia	--	yes	no	yes																		
Brunei Darussalam	yes	--	yes	no	yes	yes	yes	yes	yes	yes	no	yes	yes	yes	yes	yes						
Canada	no	no	--	yes	yes	no	yes	no	no	yes	yes	no	no	yes	yes	yes	no	no	yes	no	yes	yes
Chile	no	yes	no	--	yes	no	yes	no	yes	no	no	yes	no	no	no	yes						
China	yes	yes	yes	yes	--	yes																
Hong Kong, China	no	no	no	no	no	--	no	yes	no	no	no	yes										
Indonesia	yes	no	yes	no	yes	no	--	yes	yes	no	yes	yes	yes	no	no	yes	no	yes	no	yes	no	no
Japan	no	no	no	no	yes	no	yes	--	no	yes	no	no	yes	yes	yes	yes	no	no	yes	no	yes	yes
Korea	yes	no	--	no	no	no	yes	no	yes	yes	no	yes	no	no	no	yes						
Malaysia	no	no	no	no	yes	no	no	no	no	--	no											
Mexico	no	yes	no	no	yes	no	yes	no	no	yes	--	no	yes	yes	yes	yes	no	yes	yes	yes	no	yes
New Zealand	no	no	no	no	yes	no	yes	no	no	no	no	--	yes	yes	yes	yes	no	no	yes	no	yes	yes
Papua New Guinea	yes	--	yes																			
Peru	yes	--	yes																			
Philippines	no	no	no	no	yes	no	--	no	no	yes	no	no	no	no								
Russia	yes	yes	yes	yes	yes	no	yes	--	yes	yes	no	yes	yes	yes								
Singapore	no	no	no	no	yes	no	yes	--	no	no	no	no	no									
Chinese Taipei	no	yes	no	yes	yes	yes	yes	no	no	no	yes	no	yes	yes	yes	yes	no	--	yes	no	yes	yes
Thailand	yes	yes	yes	no	yes	no	yes	yes	no	no	yes	yes	yes	no	no	no	no	yes	--	yes	no	no
United States	no	no	no	yes	yes	yes	yes	no	no	yes	yes	no	yes	yes	yes	yes	no	yes	yes	--	yes	yes
Viet Nam	yes	no	yes	yes	yes	yes	no	no	no	no	yes	yes	yes	yes	no	no	no	yes	no	yes	no	--

1) The following passport holders arriving to Chile (Santiago airport) are required to pay a reciprocity tax: Australia (USD 61, valid for 3 months); Canada (USD 132, valid until passport expires); Mexico (USD 23, valid for 3 months); United States (USD131, valid until passport expires). Since ABTC holders are exempt from these reciprocity fees, they have therefore been included in the analysis.

2) The entry requirements between China; Hong Kong, China; and Chinese Taipei are rather complex. Since ABTC holders are not exempt from these requirements, they have therefore been excluded from the analysis.

J. CALCULATION METHODOLOGY

This section presents the methodology that was used to calculate each KPI and the reduction in transaction costs as a result of the ABTC scheme. In the discussion of KPIs 3, 4, 5 and the reduction in transaction costs, the codes provided in brackets at the end of each variable refer to the corresponding survey question from which the response data was used in the calculation. (For example, CS1 refers to Question 1 of the ABTC Client Satisfaction Survey, AS9 refers to Question 9 of the New Applicant Survey, and ES1 refers to Question 1 of the Economy Survey.)

KPI 1 – number of ABTC holders and variation from previous year

Using data from the ABTC Processing System, the percentage change in the total number of ABTC holders in each economy between 31 December 2009 and 31 December 2010 is calculated.

KPI 2 – percentage of expired ABTC holders who have re-applied for a new ABTC

Given the limitations of the data that could be obtained from the ABTC Processing System, KPI 2 is calculated as the number of repeat applicants as a share of the total number of applicants between 1 January 2010 and 31 December 2010. To determine the number of repeat applicants, the names of applicants between 1 January 2010 and 31 December 2010 were matched to the names of applicants between 1 January 2005 and 31 December 2009.

An applicant was found to be a repeat applicant only when an exact match was found in an applicant name in both periods. Therefore, any slight difference in the way a name had been recorded (for example, in the ordering of a name or whether a second first name had been entered) means that a match will not have been found. Also, some economies enter all applications into the ABTC Processing System, while others enter only those applications that have been approved for assessment by other economies, resulting in incomparable data across APEC member economies.

KPI 3 – total pre-border application time saved by the ABTC scheme

At the economy level, using data obtained through the Client Satisfaction Survey and the Economy Survey, pre-border application time (in minutes) saved by ABTC holders in the 12-month period between March-July 2010 and March-July 2011 is estimated as follows:

i – Issuing economy of ABTC holder [CS1]

j – Destination economy of ABTC holder [CS4, CS12, CS20, CS28]

P_{ij}

– Probability an ABTC holder from economy i obtains preclearance from economy j [CS6, CS14, CS22]

P_j – Probability an ABTC holder obtains preclearance from economy j
(used when responses to calculate P_{ij} are insufficient)

M_{ij}

– Ratio of multiple entry visas to single entry visas issued to applicants from economy i by

economy j [ES7]

L_{ij}

– Average length of validity of multiple entry visas issued to applicants from economy i by economy j [ES8]

V_j^*

– Average time for an applicant to complete a multiple entry visa application to economy j [ES5]

V_j

– Average time for an applicant to complete a single entry visa application to economy j [ES5]

N_{ij}

– Average number of visits of an ABTC holder from economy i to economy j [CS4, CS12, CS20, CS28]

C_{ij} – Average time an ABTC holder from economy i saves from preclearance by economy j

$$C_{ij} = P_{ij} \left[\frac{M_{ij}V_j^*}{L_{ij}} + (1 - M_{ij})V_jN_{ij} \right]$$

R_{ij}

– Probability an ABTC holder from economy i travels to economy j [CS4, CS12, CS20, CS28]

A_i

– Average time to complete an ABTC application of economy i , which is valid for 3 years [CS3]

$$\text{KPI } 3_i = \text{KPI } 1_i \left[\sum_{j=1}^{20} R_{ij} C_{ij} - \frac{A_i}{3} \right]$$

At the regional level, total pre-border application time (in minutes) saved by ABTC holders in the 12-month period between March-July 2010 and March-July 2011 is estimated as follows:

$$\text{KPI } 3 = \sum_{i=1}^{18} \text{KPI } 3_i$$

KPI 4 – total time saved (hours/minutes) by using the ABTC to clear immigration at the border

At the economy level, using data obtained through the Client Satisfaction Survey and the Economy Survey, immigration processing time (in minutes) saved by ABTC holders in the 12-month period between March-July 2010 and March-July 2011 is estimated as follows:

i – Issuing economy of ABTC holder [CS1]

j – Destination economy of ABTC holder [CS4, CS12, CS20, CS28]

N_{ij}

– Average number of visits of an ABTC holder from economy i to economy j [CS4, CS12, CS20, CS28]

R_{ij}
– Probability an ABTC holder from economy i travels to economy j [CS4, CS12, CS20, CS28]

B_j^* – Average time for immigration processing of an ABTC holder using the APEC lane in economy j [CS11, CS19, CS27]

B_j
– Average time for immigration processing of a business traveler using the regular passenger lane in economy j [AS9, AS15, AS21]

AL_i – Probability an ABTC holder from economy i uses the APEC lane [CS11, CS19, CS27]

$$\text{KPI } 4_i = \text{KPI } 1_i \left[AL_i \sum_{j=1}^{20} R_{ij} [N_{ij} (B_j - B_j^*)] \right]$$

At the regional level, total immigration processing time (in minutes) saved by ABTC holders in the 12-month period between March-July 2010 and March-July 2011 is estimated as follows:

$$\text{KPI } 4 = \sum_{i=1}^{18} \text{KPI } 4_i$$

KPI 5 – total business/entry fees (in USD) saved by the ABTC scheme

At the economy level, using data obtained through the Client Satisfaction Survey and the Economy Survey, visa fees (in USD) saved by ABTC holders in the 12-month period between March-July 2010 and March-July 2011 is estimated as follows:

i – Issuing economy of ABTC holder [CS1]

j – Destination economy of ABTC holder [CS4, CS12, CS20, CS28]

P_{ij} –
Probability an ABTC holder from economy i obtains preclearance from economy j [CS6, CS14, CS22]

P_j – Probability an ABTC holder obtains preclearance from economy j
(used when responses to calculate P_{ij} are insufficient)

M_{ij}
– Ratio of multiple entry visas to single entry visas issued to applicants from economy i by economy j [ES7]

L_{ij}
– Average length of validity of multiple entry visas issued to applicants from economy i by economy j [ES8]

F_{ij}^*
– Official multiple entry visa fee charged to applicants from economy i by economy j [ES4]

F_{ij} – Official single entry visa fee charged to applicants from economy i by economy j [ES4]

N_{ij}

– Average number of visits of an ABTC holder from economy i to economy j [CS4, CS12, CS20, CS28]

D_{ij} – Average fees an ABTC holder from economy i saves from preclearance by economy j

$$D_{ij} = P_{ij} \left[\frac{M_{ij}F_{ij}^*}{L_{ij}} + (1 - M_{ij})F_{ij}N_{ij} \right]$$

R_{ij}

– Probability an ABTC holder from economy i travels to economy j [CS4, CS12, CS20, CS28]

S_i – ABTC application fee charged by economy i , which is valid for 3 years [ES1]

$$\text{KPI } 5_i = \text{KPI } 1_i \left[\sum_{j=1}^{20} R_{ij}D_{ij} - \frac{S_i}{3} \right]$$

At the regional level, total visa fees (in USD) saved by ABTC holders in the 12-month period between March-July 2010 and March-July 2011 is estimated as follows:

$$\text{KPI } 5 = \sum_{i=1}^{18} \text{KPI } 5_i$$

KPI 6 – average intra-company transfer (ICT) application processing time (in days) and variation from previous year

Using the responses to Question 10 of the Economy Survey, the current average intra-company transfer processing time for each economy is obtained. These figures are to be used to set the baseline numbers for future measurement and assessment of KPI 6. In order to measure future performance, it will be necessary to calculate a baseline number for those economies in which there is a range of ICT processing times (e.g., processing times vary depending on the home economy of the applicant). In such cases, a simple average of the processing times across all economies could be calculated.

KPI 7 – average business visa/entry application processing time (in days or hours) and variation from previous year

Using the responses to Question 6 of the Economy Survey, the current average business visa application processing time for each economy is obtained. These figures are to be used to set the baseline numbers for future measurement and assessment of KPI 7. In order to measure future performance, it will be necessary to calculate a baseline number for those economies in which there is a range of business visa processing times (e.g., processing times vary depending on the home economy of the applicant). In such cases, an average of the processing times across the economies from which a visa is required could be calculated that also takes into account any differences in the processing times for single-/multiple-entry visas and for paper-based/online applications, if applicable.

Reduction in total transaction costs

Since the goal of TFAP II is a reduction in transaction costs, we compare total savings as a result of the ABTC scheme with a counterfactual (i.e., what transaction costs would have been assuming there was no ABTC scheme). This allows us to estimate how much the ABTC scheme has reduced business travel costs for ABTC holders over the 12-month period between March-July 2010 and March-July 2011.

At the regional level, total savings in USD from the ABTC scheme are estimated as follows:

Total Savings with ABTC (USD)

$$= \sum_{i=1}^{18} \left[\text{KPI } 3_i \frac{\text{GDP / worker (USD)}_i}{\text{minute}} + \text{KPI } 4_i \frac{\text{GDP / worker (USD)}_i}{\text{minute}} + \text{KPI } 5_i \right]$$

At the regional level, total transaction costs that would have been experienced without the ABTC scheme are estimated as follows:

i – Issuing economy of ABTC holder [CS1]

j – Destination economy of ABTC holder [CS4, CS12, CS20, CS28]

M_{ij}

– Ratio of multiple entry visas to single entry visas issued to applicants from economy i by economy j [ES7]

L_{ij}

– Average length of validity of multiple entry visas issued to applicants from economy i by economy j [ES8]

V_j^*

– Average time for an applicant to complete a multiple entry visa application to economy j [ES5]

V_j

– Average time for an applicant to complete a single entry visa application to economy j [ES5]

N_{ij}

– Average number of visits of an ABTC holder from economy i to economy j [CS4, CS12, CS20, CS28]

E_{ij}

– Total time an ABTC holder from economy i would have spent to complete visa applications had they not received preclearance to economy j

$$E_{ij} = \left[\frac{M_{ij}V_j^*}{L_{ij}} + (1 - M_{ij})V_jN_{ij} \right]$$

G_{ij}

– Total time an ABTC holder from economy i would have spent for immigration processing using the regular passenger lane had they not been able to use the APEC lane in economy j [ES15]

$$G_{ij} = B_j N_{ij}$$

F_{ij}^*

– Official multiple entry visa fee charged to applicants from economy i by economy j [ES4]

F_{ij} – Official single entry visa fee charged to applicants from economy i by economy j [ES4]

H_{ij}

– Total fees an ABTC holder from economy i would have paid for visa applications had they not received preclearance by economy j

$$H_{ij} = \left[\frac{M_{ij} F_{ij}^*}{L_{ij}} + (1 - M_{ij}) F_{ij} N_{ij} \right]$$

R_{ij}

– Probability an ABTC holder from economy i travels to economy j [CS4, CS12, CS20, CS28]

Total Transaction Costs without ABTC (USD)

$$= \sum_{i=1}^{18} \text{KPI1}_i \left[\left(\sum_{j=1}^{20} R_{ij} (E_{ij} + G_{ij}) \right) \frac{\text{GDP / worker (USD)}_i}{\text{minute}} + \sum_{j=1}^{20} R_{ij} H_{ij} \right]$$

Thus, the percentage reduction in total business travel costs experienced by ABTC holders over the 12-month period between March-July 2010 and March-July 2011 as a result of the ABTC scheme are calculated as follows:

Total Transaction Costs Reduction (%)

$$= \frac{\text{Total Savings with ABTC}}{\text{Total Transaction Costs without ABTC}} \times 100\%$$

Conversion factors

As illustrated in the equations above, KPIs 3 and 4 are in minutes. This time is converted into a monetary equivalent (USD) in order to calculate total savings as a result of the ABTC scheme. The proxy measure used to represent the opportunity cost of time of the ABTC holder is GDP per worker.

GDP per worker for each APEC economy is calculated by dividing the 2010 nominal GDP in each economy (from the International Monetary Fund's April 2011 World Economic Outlook database) by the number of persons employed in 2010 (from the International Labour Organization's Economically Active Population Estimates and Projections). GDP per worker is then divided by the number of minutes spent working in a year to obtain GDP per worker per minute. This approach applies the commonly used United States standard of 8 working hours per day multiplied by 5 days per week multiplied by 52.2 weeks per year, resulting in 2,088 working hours per year, or 125,280 working minutes per year.

Although GDP per worker may to some extent underestimate the income of the ABTC holders, and therefore the opportunity cost of time for these travelers, it is still a more appropriate measure than GDP per capita which is sometimes used as a proxy to convert time into opportunity cost. The approach used in the analysis is also consistent with that used in

the TFAP II Final Assessment component of the aggregate measurement of the reduction in total trade transaction costs in which the time spent on document preparation is converted into opportunity cost using GDP per worker.

The ABTC fee and the visa fees in local currencies that were collected through Questions 1 and 4, respectively, of the Economy Survey are also converted into USD. The exchange rates used in the analysis are the period averages of the market rates in 2010 (from the International Monetary Fund's International Financial Statistics database).

The following table shows the conversion factors used in the analysis for the opportunity cost of time (GDP per worker per minute) and the exchange rates used to convert local currencies (LC) into USD:

Conversion factors

Economy	GDP (USD billions)	Employment (millions)	GDP per worker	GDP per worker per minute	LC to USD exchange rate
Australia	1,235.5	11.4	108,542	0.87	.91730
Brunei Darussalam	13.0	0.2	64,529	0.52	.73340
Canada	not applicable				.97072
Chile	203.3	7.7	26,513	0.21	.00196
China	5,878.3	797.6	7,370	0.06	.14770
Hong Kong, China	225.0	3.7	60,224	0.48	.12871
Indonesia	706.7	117.6	6,011	0.05	.00011
Japan	5,458.9	65.2	83,787	0.67	.01139
Korea	1,007.1	24.7	40,807	0.33	.00087
Malaysia	238.0	12.3	19,425	0.16	.31045
Mexico	1,039.1	49.0	21,201	0.17	.07914
New Zealand	140.4	2.4	59,533	0.48	.72076
Papua New Guinea	9.7	3.0	3,182	0.03	.36774
Peru	152.8	13.9	11,007	0.09	.35397
Philippines	188.7	39.6	4,761	0.04	.02217
Russia	not applicable				.03293
Singapore	222.7	2.6	84,607	0.68	.73340
Chinese Taipei	430.6	11.1	38,896	0.31	.03160
Thailand	318.9	39.0	8,180	0.07	.03156
Viet Nam	103.6	47.9	2,161	0.02	.00005

Notes:

(1) GDP figures are estimates for the following economies: Brunei Darussalam; Korea; New Zealand; Papua New Guinea; Thailand.

(2) Employment figures for Chinese Taipei are from the National Statistics Office; NTD/USD exchange rate is from the Central Bank.

Scope of the analysis

Application processing and/or waiting times are excluded from the analysis of KPI 3 and in the calculation of the total transaction costs reduction as a result of the ABTC scheme. Given that applications are assessed on a case-by-case basis, processing times can be highly variable and a more in-depth data collection approach (e.g., going through a sample of application

records) rather than a self-administered online survey would be a more appropriate way to estimate comparable average application processing times.

Additionally, excluding these processing and/or waiting times will result in a more conservative estimate of the time savings, such that in reality the time savings from not having to apply for a business visa are actually greater. The questions in the Economy Survey regarding application processing times [ES3, ES6, and ES10] are included so that the BMG could use this information to monitor progress under the Client Service Framework.

Information on e-lodgement of business visa applications is also not considered in the analysis of KPI 3 and in the calculation of the total transaction costs reduction as a result of the ABTC scheme. The questions in the Economy Survey regarding online applications [ES4, ES5, ES6, and ES9] are included so that the BMG could use this information to monitor progress under the Client Service Framework. However, this information should be included in future calculations if it is found that e-lodgement offers a faster visa application completion time and/or a lower fee than do paper-based applications.

In the analysis, there are 18 home economies (*i*) representing the 18 APEC members that are full participants of the ABTC scheme (i.e., those economies that issue cards and extend before-the-border pre-clearance privileges). There are 20 destination economies (*j*) since the three APEC members that are transitional participants of the ABTC scheme extend at-the-border privileges by way of expedited immigration processing through specially designated APEC lanes – resulting in time savings that are included in the analysis.

Although the survey revealed that there are ABTC holders residing abroad and travelling back to their home economy for business purposes (i.e., *j* would equal a maximum of 21), these trips were excluded from the analysis, even though these travelers would have enjoyed at-the-border privileges (expedited immigration processing through APEC lanes), resulting in time savings under KPI 4. However, since the objective of the ABTC scheme is to reduce barriers for cross-border business travel, we decided that these ABTC holders are not exactly facing the same barriers on these trips as other business travelers and these trips are therefore excluded from the analysis. (This resulted in the exclusion of 463 trips, so that a total of 20,312 trips by business travelers in the APEC region are used in the analysis.)

The scope of the analysis includes only official fees sourced from the Economy Survey. Ideally, both official and unofficial fees would be used in the calculation of total transaction costs as this reflects the full extent of the costs faced by business travelers. Moreover, if unofficial fees are directly proportional to the number of transactions, then using only official fees will provide a conservative estimate of the savings as a result of the ABTC scheme such that the actual fee savings are likely to be higher since the ABTC scheme also reduces the number of travel-related transactions.

K. ABTC CLIENT SERVICE FRAMEWORK

The following table provides the best practice benchmark for the client service objectives in each of the three priority areas under the ABTC Client Service Framework.

Service	Objective
<i>ABTC Processing Arrangements</i>	
Application Forms and Lodgement	ensure that application forms are clear, accurate and easy to obtain
	ensure that the process to lodge applications is simple and that clients can easily contact us if they have any questions
	ensure that clients are not required to re-apply for their ABTC where they have obtained a new passport
Processing Times	ensure that application processing times for home and foreign nationals are within the agreed APEC standards
Priority Processing	ensure that priority processing is made available to home clients and that foreign applicants are assessed as a priority
Online Status Tracker	ensure that Online Status Tracker is available to clients so they may view their pre-clearance status at any time
Interim Card	ensure that clients can obtain an interim ABTC until all economies have finalized their assessment, and that they are also issued with a final card
Expired Pre-Clearances	ensure that any expired pre-clearances notified through the ABTC system are re-assessed as a priority so that clients retain pre-clearance status for the 3-year period of their card
Compliments and Complaints	ensure that a simple process exists for clients to pay a compliment or to lodge a complaint about the service
<i>APEC Signs and Fast Lane Arrangements</i>	
APEC Signs	ensure that an APEC lane is available at both entry and departure points
	ensure that all APEC lanes are clearly identified at all times and conform with any agreed standards for APEC signage
Fast Lane Availability	ensure that a fast lane for ABTC holders is available and manned by a border officer at all times
Border Officers	ensure that border officers recognize the ABTC and understand the fast lane arrangements
Compliments and Complaints	ensure that a simple process exists for clients to pay a compliment or to lodge a complaint about the service at entry and departure points
<i>Client Information and Contact</i>	
Client Information	<p>ensure that the major information needs of clients, and important information that should be brought to their attention, are identified and delivered:</p> <ul style="list-style-type: none"> • the core benefits of the scheme: immigration pre-clearance and fast lane processing • eligibility requirements and fees • processing times (home and foreign) and possible delays

	<ul style="list-style-type: none"> • availability of Priority Processing • availability and process to obtain an interim card • availability of Online Status Tracker • the process when a new passport is obtained • the process when an ABTC expires • APEC lane availability and signage
BMG Website	ensure that the BMG has comprehensive and up-to-date information regarding the ABTC scheme on its website
	ensure that the BMG website includes an FAQ document to provide answers to common questions asked by clients
	ensure that the BMG website includes information translated into the official language of all APEC member economies
Client Contact	ensure that clients are able to contact each economy by e-mail or phone for any enquiries they may have
	ensure that clients receive a letter of acknowledgement upon lodgement of their application
	ensure that clients are notified of a decision to approve or decline an application
	ensure that clients are notified at least 3 months before expiry of their ABTC
Processing Staff	ensure that our processing staff are trained properly and understand the success of the scheme relies heavily on their client service
Compliments and Complaints	ensure that a simple process exists for clients to pay a compliment or to lodge a complaint about the service