



# Expanding the Information Technology Agreement

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The Information Technology (IT) sector revolutionized the global economy beginning in the 1990s, facilitating access to information and streamlining our daily activities. Globalization has deepened even more in the years that followed as IT improved connectivity within and across borders and created new services that boosted economic efficiency.

To better promote the IT sector and make these new technologies more widely available to the public, the WTO Information Technology Agreement (ITA) was negotiated in the mid-1990s. Despite its success in reducing trade barriers, the ITA has not kept pace with the rapid development in the IT sector. Since the ITA was signed 16 years ago, some products have become obsolete and new products appeared in the market. To better reflect the current development in the IT sector, a number of ITA signatories have shown increasing interest in expanding the ITA's coverage.

This policy brief will argue for an expanded ITA and show how APEC can play a leading role in that process. We briefly review how the ITA was achieved, elaborate on APEC's role in bringing the agreement into existence, and demonstrate why APEC members should take the lead in the current WTO discussion towards a successful ITA expansion at the WTO Ministerial Conference to be held in Bali in December 2013.

## Achieving the ITA: The role of APEC

Talks on building consensus for trade liberalization in IT products started in February 1996, when Canada, the European Union, Japan and the United States (informally known as "the Quad") began discussions to develop a possible agreement in this sector. The discussions were not easy since it was clear from an early stage that many obstacles stood in the way of achieving consensus.

Reaching an agreement on product coverage proved to be the most daunting task. Negotiators faced strong disagreements over which products to cover, specifically the European Union's insistence on excluding "consumer products"<sup>2</sup>. In addition, there were differing views on how to classify certain products (e.g., multifunctional products).

The "Quad" also realized that the ITA had the potential to create a "free rider" problem as the WTO's most-favored-nation basis would allow non-signatories to benefit from the signatories' tariff reduction without the need to eliminate their own tariffs. In other words, any benefits arising from the agreement would be applicable to all WTO members.

APEC was one of the key players from the early stages of the ITA initiative, starting internal discussions in mid-1996, in line with its vision to promote free and open trade in the Asia-Pacific region. Members recognized the need for flexible negotiations to account for the wide range of views expressed throughout APEC, encouraged member

economies to actively participate in ITA negotiations<sup>3</sup>, and offered political support at the highest level.

Indeed, APEC's 1996 Leaders' Declaration called for "(...) the conclusion of an information technology agreement by the WTO Ministerial Conference that would substantially eliminate tariffs by the year 2000(...)"<sup>4</sup>. The position adopted by APEC Leaders helped to facilitate discussions in Geneva, as well as convince other WTO members to join the initiative. More importantly, APEC was able to position itself as a leader in the promotion of regional and global free trade.

The disagreements on product classification were eventually sorted out by creating two lists under the agreement: one including products listed with their corresponding Harmonized System (HS) subheadings, and another one with specific product descriptions covered by the agreement "wherever they are classified in the Harmonized System (HS)"<sup>5</sup>. Additionally, the proposal recommended that participants meet periodically to review product coverage and build a common classification for products covered in the ITA.

To encourage wide participation, reduce "free-riding" and reach a more balanced outcome, a "critical mass" requirement was included in the agreement, so that the ITA would only be implemented if participants joining the agreement accounted for at least 90 percent of world trade in IT products<sup>6</sup>. On 13 December 1996, the negotiating parties reached an agreement at the WTO Ministerial Conference in Singapore and issued the Ministerial Declaration on Trade in Information Technology Products.

The ITA was initially signed by 14 WTO members or those in process of joining. These early adopters accounted for only 83 percent of global IT trade, requiring thus more parties to join in order to meet the 90 percent mandate<sup>7</sup>. From January to April 1997, technical meetings took place and an additional 11 WTO members eventually joined, fulfilling the 90 percent trade criteria, and giving way for the ITA to enter into force. The ITA became effective as of 1 April 1997<sup>8</sup>.

## Market Size of Current ITA products

Estimating the market size of current ITA products by using trade figures as a reference is not an easy task for two main reasons: 1) 13 products were listed using only a description and were not associated with any HS code, which is the nomenclature used in international trade statistics at the product level; and 2) of the 155 HS codes at the HS 6-digit level (subheadings) listed in the ITA, only 95 were fully covered<sup>9</sup>. Harmonized international trade data is only available at the HS 6-digit level.

If the trade flows of ITA products are calculated by including all HS subheadings appearing in the agreement, there is a risk of overestimating trade figures.

On the contrary, if only the HS subheadings fully covered are included, these figures will be underestimated. This paper follows an approach previously used by the WTO, called “second model list”, by taking all subheadings fully covered plus some of those partially covered by the ITA<sup>10</sup>.

Under this approach, when ITA discussions started in 1996, world trade of ITA products totaled USD 478.7 billion. By 2011, this figure tripled to USD 1,478.6 billion<sup>11</sup>. However, in the same period, ITA products’ share in total world trade declined from 11.3% to 9.9%, an indication that the ITA is not keeping pace with global trade. As an example, the share of trade for semiconductors and telecommunications equipment increased during that period, while those for computers and parts and accessories declined (see Chart 1).

APEC’s participation in the global trade of ITA products has been significant throughout the years. By 2011, APEC exports and imports of ITA products reached USD 1,174.1 billion (79.4 percent of ITA products’ world trade) and USD 1,218 billion (82.4 percent of ITA products’ world trade), respectively. Similarly, APEC’s trade showed a similar pattern to world trade by product category.

### Attempts to expand ITA coverage

Previous attempts to expand the ITA coverage have proven unsuccessful. Formal and informal negotiations, referred to as ITA II, took place from February to December 1998, though continued disagreements on product coverage and other sensitive issues meant that no consensus was reached.

In 2008, the European Union proposed to conduct a review of the ITA. In 2011, the United States Trade Representative called for comments on possible WTO negotiations to expand the ITA. In the same year, APEC Leaders agreed to “play a leadership role in launching negotiations to

*expand the product coverage and membership of the WTO Information Technology Agreement, in order to build on the contribution this Agreement has made to promoting trade and investment and driving innovation in APEC economies.*<sup>12</sup> Despite these efforts, little progress was made towards expanding the ITA product coverage.

To commemorate the ITA’s 15th anniversary in 2012 and build momentum behind its expansion, the WTO called for a review of the liberalization and evolution of global trade in ICT products so that membership and product expansion within ITA can be achieved<sup>13</sup>. Responding to this call, ITA participants have been engaging in bilateral and plurilateral technical consultations to find possible areas for expansion. This presents an opportunity for APEC to be at the forefront of the process, reprising the important role it once played in achieving the original ITA and helping its members who currently account for around 80 percent of ITA products’ trade. The following sections discuss the motivations for expanding the ITA in greater detail.

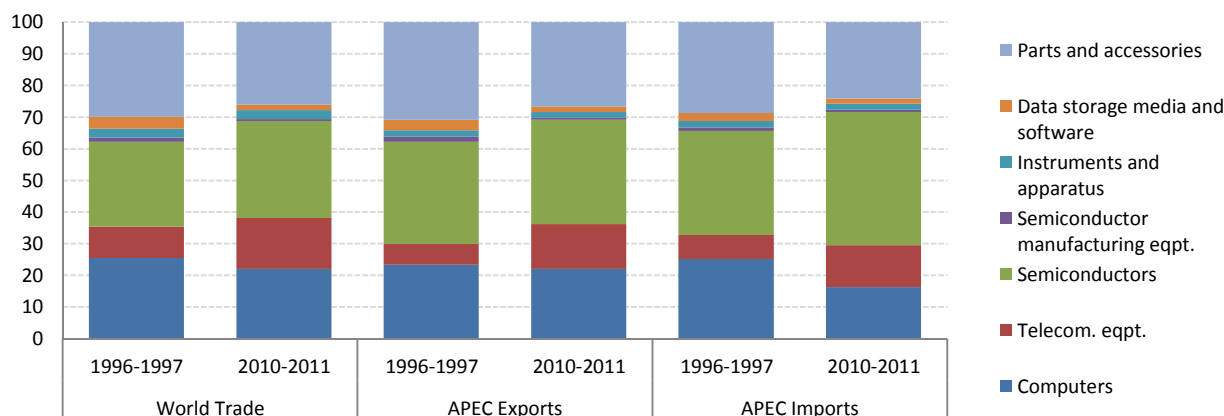
### Reasons to expand the ITA

#### a) Declining growth rates of ITA products’ trade flows

Our analysis revealed that the rate of expansion of ITA products’ trade has dwindled in recent years. Table 1 allows the comparison of the growth rates of average trade flows during the period 1996-2011 in two sub-periods with similar length: 1) from the years when the ITA was agreed and entered into force (1996-97) to years 2003-04; and 2) from 2003-04 to when the most recent data was available (2010-11).

As seen from Table 1, the growth rate for ITA products’ world trade declined by two-thirds during the second half of the period 1996-2011 (115.7 percent vs. 43.2 percent). Trade for APEC and the original ITA signatories showed a similar trend, but APEC growth rates remained higher than those for the original ITA signatories and the world.

Chart 1: ITA Products – Share of Trade by Category (HS 1996)



Source: UN COMTRADE, WITS

**Table 1: ITA Products – Trade Flows and Growth (HS 1996)**

	Average Flows (USD billion)			Growth 1996 - 2011	
	A: 1996-97	B: 2003-04	C: 2010-11	1st half	2nd half
World Trade	478.7	1,032.6	1,478.6	115.7	43.2
Original ITA signatories – Exports	431.8	762.7	853.6	76.6	11.9
Original ITA signatories – Imports	472.6	772.8	1,092.6	63.5	41.4
APEC – Exports	297.6	743.7	1,174.1	149.9	57.9
APEC - Imports	318.1	701.1	1,218.0	120.4	73.7

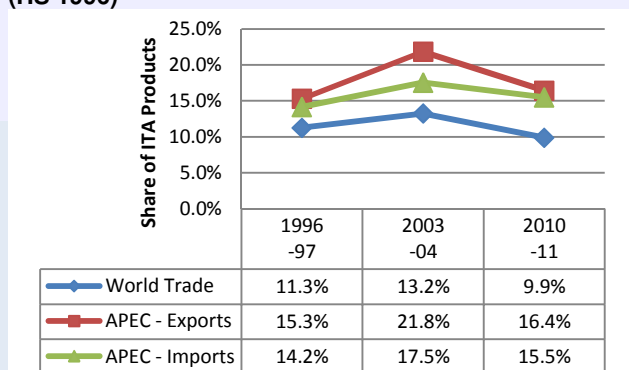
Source: UN COMTRADE; WITS

Note: The Original ITA signatories were Australia; Canada; EU-15; Hong Kong, China; Iceland; Indonesia; Japan; Korea; Norway; Chinese Taipei; Singapore; Switzerland; Turkey; and the United States.

For example, while imports of ITA products increased in APEC by 73.7 percent during the second half of this period, those of the original ITA signatories grew by 41.4 percent only. This may be explained by the fact that eight of the APEC members who are among the 30 more important IT trading economies in the world were not original signatories of the ITA, although most of them joined later<sup>14</sup>.

The slower rate of growth has also led to a decline in ITA products' share of total world trade. In 2003-04, ITA products explained 13.2 percent of world trade; in 2010-11, that share had fallen to 9.9 percent. For APEC economies, exports of ITA products fell from 21.8 percent to 16.4 percent of total trade and imports went down from 17.5 percent to 15.5 percent.

**Chart 2: Share of ITA Products in Trade Flows (HS 1996)**



Source: UN COMTRADE; WITS

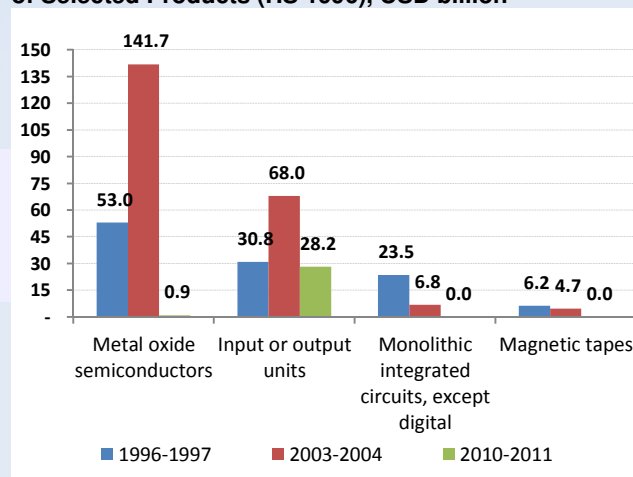
*b) Obsolescence of ITA products*

Obsolete products are a key reason for the declining rate of ITA trade. Rapid innovation and the ever-quickenning technological cycle have significantly reduced the use of some products, causing global demand to plummet in recent years. For example, word-processing machines (HS 846911); accounting machines (HS 847040); teleprinters (HS 851722); telephonic and telegraphic switching apparatuses (HS 851730); and magnetic tapes (HS 852311, 852312, 852313 and 852440), among others are rarely produced and traded nowadays. These subheadings accounted for less than USD 200,000 in the period 2010-11.

Other products are still being produced and traded but their trade flows have fallen sharply over time. This list includes products such as electronic calculators (HS 847010 and 847021); analogue or hybrid computers (HS 847110); input or output units (HS 847160); facsimile machines (HS 851721); telephone answering machines (HS 852020); recorded discs for laser reading systems (HS 852431); metal oxide semiconductors (HS 854213); other monolithic integrated circuits (HS 854219); direct electrostatic photocopiers (HS 900911); and part and accessories for photo-copying apparatuses (HS 900990).

In order to show the impact of ITA's obsolete products on trade flows, we selected a group of 32 HS subheadings whose trade worldwide showed a significant decline in recent years<sup>15</sup>. For this group, the average world trade was USD 287.6 billion in 2003-04, explaining 27.9 percent of the total ITA products' world trade. By 2010-11, these products totaled an average of USD 33.7 billion (a sharp fall of 88.3 percent in comparison to the 2003-04 figures), representing only 2.3 percent of ITA products' world trade. A dramatic example of this decline is the hybrid integrated circuit (HS 854240) whose world trade declined from an average of USD 17.1 billion in 2003-04 to only USD 2 million in 2010-11.

**Chart 3: Obsolescence of ITA Products – World Trade of Selected Products (HS 1996), USD billion**



Source: UN COMTRADE; WITS

A similar pattern was found in APEC as well. In 2003-04, these subheadings averaged USD 218 billion and represented 29.4 percent of APEC exports of ITA products; whereas in 2010-11, these exports dwindled to USD 28 million, explaining only 2.4 percent of APEC exports of ITA products. The decline in the exports of metal oxide semiconductor, going from an average of USD 109.3 billion to only USD 1.7 billion was one of the main factors behind this fall.

In the case of APEC imports, these subheadings also followed the same path. Their share altogether plunged from an average of USD 203.3 billion or 29 percent of APEC imports of ITA products in 2003-04 to USD 22.5 billion in 2010-11, equivalent to just 1.9 percent of APEC's ITA imports. Similarly, metal oxide semiconductors are the main reason explaining this fall, going from USD 114.4 billion to USD 1.5 billion. Other illustrative subheadings with significant import cuts are input or output units from USD 35.2 billion to USD 18.3 billion; hybrid integrated circuits from USD 23.3 billion to USD 27.3 million; and parts and accessories for photo-copying apparatuses from USD 3.2 billion to USD 24 million.

**Table 2: Obsolescence of ITA Products – APEC Exports of Selected Products (HS 1996)**

Product Description	Amount (USD billion)			Share in ITA products' exports(%)		
	1996-97	2003-04	2010-11	1996-97	2003-04	2010-11
Electronic calculators	0.7	1.9	0.8	0.2	0.3	0.1
Input or output units	18.6	50.0	21.8	6.2	6.7	1.9
Telephonic or telegraphic switching apparatuses	2.1	1.8	0.0	0.7	0.2	0.0
Facsimile machines	2.0	1.6	0.0	0.7	0.2	0.0
Telephone answering machines	0.5	0.1	0.0	0.2	0.0	0.0
Magnetic tapes	3.8	3.2	0.0	1.3	0.4	0.0
Metal oxide semiconductors	36.2	109.3	1.7	12.2	14.7	0.1
Hybrid integrated circuits	3.5	15.9	0.0	1.2	2.1	0.0
Electronic microassemblies	3.6	11.5	2.0	1.2	1.5	0.2
Parts and accessories for photo-copying apparatuses	4.3	4.1	0.0	1.4	0.6	0.0

Source: UN COMTRADE; WITS

**Table 3: Obsolescence of ITA Products – APEC Imports of Selected Products (HS 1996)**

Product Description	Amount (USD billion)			Share in ITA products' imports (%)		
	1996-97	2003-04	2010-11	1996-97	2003-04	2010-11
Electronic calculators	1.4	1.1	0.7	0.5	0.2	0.1
Input or output units	22.2	35.2	18.3	7.0	5.0	1.5
Telephonic or telegraphic switching apparatuses	2.3	1.8	0.0	0.7	0.3	0.0
Facsimile machines	1.6	1.3	0.0	0.5	0.2	0.0
Telephone answering machines	0.4	0.1	0.0	0.1	0.0	0.0
Magnetic tapes	3.2	2.5	0.0	1.0	0.4	0.0
Metal oxide semiconductors	46.5	114.4	1.5	14.6	16.3	0.1
Hybrid integrated circuits	5.2	23.3	0.0	1.6	3.3	0.0
Electronic microassemblies	0.7	2.1	0.0	0.2	0.3	0.0
Parts and accessories for photo-copying apparatuses	3.6	3.2	0.0	1.1	0.5	0.0

Source: UN COMTRADE; WITS

### c) Important goods and services are currently out of the ITA

Many new products that currently account for a sizeable amount of world trade – commonly used items such as DVDs, VCDs, MP3 and MP4 players – have appeared after the ITA came into force and are not part of the agreement. Other transformational technologies such as the Global Positioning System (GPS) which have been very useful in our daily life by providing location-based information are also not included.

In addition, a number of consumer electronic products such as TV monitors and CD players are also excluded<sup>16</sup>. The exclusion of many consumer electronic products and the rapid technological cycle has led to some problems in determining whether the products are exempted from tariff duties. For example, the ITA includes computer monitors, but not TV monitors. Modern LCD screens can have both functions and this multi-functionality feature could represent a dilemma to customs officials when deciding whether the products are exempted from tariff duties or not<sup>17</sup>.

Other examples of products that are not part of the ITA are some multifunctional devices that print, scan and copy at the same time. Scientific, medical and analytical instruments with IT applications, such as compound optical microscopes, oscilloscopes and magnetic resonance imaging (MRI) equipment are also not part of the ITA<sup>18</sup>.

The current expansion discussions should also take into account the increasing importance of services trade in the IT sector. Many cross-border service transactions require

the application of IT (e.g., providing professional advisory services through videoconference). The medium of transactions is increasingly changing from goods to services (e.g., buying and downloading software online, rather than buying it off-the-shelf in computer stores). Some IT products, like mobile phones, require a connection with telecommunications network services to operate<sup>19</sup>. Innovation in IT goods and services is creating positive spillovers in other economic sectors by improving efficiency. Including services in the liberalization discussions will help create a modern, more flexible agreement that better fits the modern trading system.

### d) Growing interdependence of global production chains for IT products

IT manufacturing is a prime example of a global production chain where parts, components, and accessories are sourced from many different places and final assembly accounts for only a fraction of the total value-added, allowing firms to improve efficiency and keep costs low. Eliminating tariffs and other barriers to trade affecting IT products helps strengthen large firms' global production chains, makes it easier for SMEs to join the process, and encourages raw and intermediate goods to be shipped across the border, ready to be processed at the next phase in the global production line.

The dependency of multiple international linkages in the production of IT goods has been analyzed in recent years by several studies. A joint effort by the OECD and WTO analyzed the i-Phone, which is assembled in China using

components from around the world. For example, the touchscreen and camera are manufactured in Chinese Taipei; the baseband, power management and transceiver come from Germany; the applications processor, display and DRAM memory from Korea; and the GPS, audio codec, memory and touchscreen controller are manufactured in the United States, among others<sup>20</sup>. Some of these components are currently not covered by the ITA and including them in a future expansion would facilitate higher levels of trade and international economic integration.

#### e) Encouraging others to join the ITA

The expansion of the ITA should not only focus on product coverage, but also on non-ITA participants joining the agreement. Within APEC, four member economies are not parties to the agreement (Brunei Darussalam, Chile, Mexico and Papua New Guinea) and another (Russia) is working on its ITA schedule of commitments after becoming a WTO member. Other important markets that are not part of the ITA are located in South America and Africa, and include Argentina, Brazil and South Africa, among others.

Increasing ITA membership will allow covered products to have duty-free access to a much larger market. Table 4 shows the distribution of tariff rates for ITA products by range in a selected group of non-ITA economies with a combined population of 438 million inhabitants. Although applied MFN tariffs are duty-free or very low in many cases (especially in non-ITA APEC participants), some ITA products still face high tariff rates with peaks of 20% to 30%.

### Current proposals to expand ITA

After the WTO called for a review of the ITA on the occasion of the agreement's 15th anniversary, participants put forward several proposals which suggested additional products to the ITA. The United States International Trade Commission (USITC) prepared a recent compilation of proposals presented in Geneva on this matter, which included 357 HS 2007 subheadings for discussion<sup>21</sup>. However, this compilation also included 154 subheadings with ex-outs and 10 full subheadings that were already part of the ITA. A conservative estimate, after removing those 164 subheadings, showed that the compiled list would represent at least USD 923.3 billion in terms of world trade,

which would increase in 62.4 percent the amount of world trade of ITA products, a significant contribution to the product coverage expansion of the ITA.

Similarly, these subheadings would have added APEC exports on ITA products by USD 566.8 billion (48.2 percent) and APEC imports by USD 542 billion (44.5 percent), respectively.

Creating a more flexible, forward-looking ITA requires a document which can automatically adapt to changes in the global trade environment. The current ITA list and the expansion proposals offer a rigid structure of commitments which hinder opportunities to accommodate technological changes and new products, particularly due to ex-outs. In this sense, it is important to consider new approaches which offer the possibility of incorporating future technological developments.

One promising approach would be to expand coverage by moving away from specific subheadings to broader category coverage. The European Centre for International Political Economy (ECIPE) has proposed a reform to the ITA that not only expands its product coverage but also makes it easier to incorporate upgraded or new products in the ITA<sup>22</sup>. They suggested extending commitments to include entire headings (categories) at HS four-digit level, plus a limited number of subheadings for IT products not covered by the selected categories<sup>23</sup>. By including entire categories, updated or newly created IT products will stand a better chance of being automatically incorporated into the ITA.

The ECIPE proposal included 41 HS headings, totaling 229 sub-headings plus 20 subheadings included on a case-by-case basis<sup>24</sup>. Nevertheless, 71 of these subheadings were already covered by the existing ITA. An estimate of how much trade would be affected by the ECIPE's proposal to the current ITA, after removing these repeated subheadings, would cover 63.8 percent more of world trade flows of ITA products (equivalent to USD 942.9 billion). Under the same assumptions, 49.8 percent more of APEC exports and 47.1 percent of APEC imports of ITA products would be covered, equivalent to USD 584.6 billion and USD 573.7 billion, respectively.

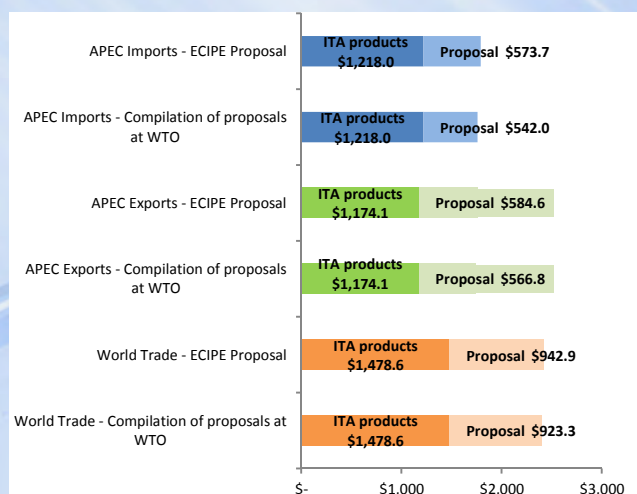
**Table 4: ITA Products – Applied MFN Tariffs in Selected Non-ITA Economies (HS 2007)**

	MFN Tariffs		MFN Tariffs - # of Subheadings by Range				
	Average	Maximum	Duty Free	0<X<=5	5<X<=10	10<X<=15	X>15
<b>APEC</b>							
Brunei Darussalam	8.0	20.0	46.6%	11.0%	9.6%	0.0%	32.9%
Chile	6.0	6.0	0.0%	0.0%	100.0%	0.0%	0.0%
Mexico	0.9	15.0	87.7%	6.8%	2.7%	2.7%	0.0%
Papua New Guinea	0.0	0.0	100.0%	0.0%	0.0%	0.0%	0.0%
<b>Non-APEC</b>							
Argentina	11.5	20.0	5.5%	12.3%	17.8%	26.0%	38.4%
Brazil	11.2	20.0	8.2%	12.3%	13.7%	28.8%	37.0%
South Africa	0.9	15.0	89.0%	4.1%	4.1%	2.7%	0.0%
Tunisia	4.2	30.0	75.3%	0.0%	6.8%	9.6%	8.2%

Source: WTO, Tariff Download Facility.

Note: Only 73 HS 2007 sub-headings with no ex-outs from the ITA Model List were taken into account for this table.

**Chart 4: Current ITA Products and Potential ITA Products' Trade. Average Values 2010-11 in USD billion**



Source: UN COMTRADE; WITS

### Concluding remarks: APEC as key player in the ITA expansion talks

APEC accounts for nearly 80 percent of the world trade of ITA products, demonstrating the importance of the IT sector to member economies and why it is critical for APEC to take a leading role in the current WTO talks to expand the ITA. In 1996, APEC was instrumental in the negotiations that gave birth to the ITA. This time, APEC can play the same role to expand the coverage of both products and member participants and also, to make the ITA more relevant now and in the future.

A successful conclusion of an expanded ITA is in line with APEC's commitment to strengthen the multilateral system. It also takes on an increased significance as the Doha Round of negotiations have failed to make progress in recent years. APEC could become the catalyst to reach an agreement on the ITA expansion which would be one of the key deliverables at the WTO Ministerial Conference that Indonesia will be hosting in December 2013, two months after the APEC Leaders convene in Bali for their annual meeting.

Rapid technological changes, obsolescence of IT products, and growing IT interdependence of global production chains are compelling reasons for the need to expand the ITA. Economic activities are also becoming increasingly more dependent on IT than ever before, both in the goods and services sectors. A modern, flexible ITA should consider these trends and include both goods and services in its final version.

Better market access for IT products and services is critical to foster innovation, spur productivity and boost economic growth. APEC's support at the highest level for an expanded ITA represents a unique opportunity for its members to demonstrate APEC's value by bringing a common understanding to ITA expansion talks, showing its capacity to build consensus and achieving positive outcomes at the multilateral level.

### Notes:

1. The authors would like to thank Denis Hew, Aveline Low Bee Hui and Collin Gerst for their useful comments and suggestions. The views expressed in this policy brief are those of the authors and do not necessarily represent those of APEC member economies.
2. WTO, "15 Years of the Information Technology Agreement", 2012, p. 13. The European Union referred to "consumer products" as those such as microphones and speakers, CD players, VCRs, computer games, set-top boxes, still-image video cameras, audio equipment, DVD players, satellite receivers and television sets.
3. APEC, "Summary Conclusions of the Fourth APEC Senior Officials Meeting (SOM) for the Eight Ministerial Meeting", 18-20 October 1996, p.3.
4. APEC, "1996 Leaders' Declaration: Subic Declaration – From Vision to Action", paragraph 13.
5. WTO, "Ministerial Declaration on Trade in Information Technology Products", WT/MIN(96)/16, Singapore, 13 December 1996
6. WTO, 2012, *Op Cit*, p.15.
7. United States International Trade Commission, "The Information Technology Agreement: An Assessment of World Trade Information Technology Products", 210, p3.
8. *Ibid*, p. 4-6. Among APEC economies, Australia; Canada; Hong Kong, China; Indonesia; Japan; Korea; Singapore; Chinese Taipei and the United States signed the ITA in 1996. Malaysia; New Zealand; Philippines and Thailand became members when the ITA entered into force in 1997. China joined in 2003, whereas Viet Nam and Peru did so in 2003 and 2007, respectively.
9. Subheadings are disaggregated by tariff lines at the 8 or 10-digit level and the description of HS codes at the tariff line level differs for each WTO member. For some subheadings, the ITA negotiating partners considered that not all tariff lines belonging to them could be taken as part of the list of IT products that will be subject to the elimination of tariffs. Therefore, the subheadings facing this situation were listed with the term "ex-out".
10. WTO, 2012, *Op.Cit.*, p. 99-105. The "second model list" included 97 HS 1996 subheadings.
11. Biannual average data was used for each year to estimate trade values in order to attenuate the effect in trade data influenced by exogenous events such as the Asian Crisis and the Global Financial Crisis.
12. APEC, "2011 APEC Leaders' Declaration: The Honolulu Declaration – Towards a Seamless Regional Economy".
13. WTO News, "Lamy says Information Technology Agreement success could inspire further trade opening in other sectors", 14 May 2012, available at: [http://www.wto.org/english/news\\_e/sppl\\_e/sppl228\\_e.htm](http://www.wto.org/english/news_e/sppl_e/sppl228_e.htm)

Notes (cont.):

14. Among these IT trading economies, China, Malaysia, New Zealand, Philippines, Thailand and Viet Nam joined ITA between 1997 and 2006. Russia is currently working on its ITA tariff liberalization schedule and Mexico has not joined yet. The list of the 30 main worldwide IT trading economies is available at WTO, 2012, *Op.Cit.*, p. 54-55.
15. The selected 32 HS 1996 subheadings are the following: 845691, 846911, 847010, 847021, 547090, 847040, 847110, 847160, 851711, 851721, 851722, 851730, 852020, 852311, 852312, 852313, 852431, 852440, 852491, 854213, 854214, 854219, 854240, 854250, 854311, 854381, 900911, 900921, 900990, 901041, 901042 and 901049.
16. Dreyer, Iana and Brian Hindley, "Trade in Information Technology Goods: Adapting the ITA to 21st Century Technological Change". ECIPE Working Paper No. 06/2008, p. 8.
17. For instance, in August 2008, the United States, Japan and Chinese Taipei requested WTO to establish a Panel with respect to the treatment given by the European Union on certain multifunctional IT products, namely flat-panel display devices, set-top boxes with a communication function and multifunctional digital machines. The complainants claimed that the European Union was not respecting their commitments to provide duty-free access to these products as agreed in the ITA. In August 2010, the Panel found that the European Union had acted inconsistently by charging duties to these products. For additional information, please see WTO, Dispute Settlement, DS375, DS376 and DS377, [http://www.wto.org/english/tratop\\_e/dispu\\_e/dispu\\_status\\_e.htm](http://www.wto.org/english/tratop_e/dispu_e/dispu_status_e.htm)
18. On September 6, 2012, the U.S. Technology Industry submitted comments to the U.S. International Trade Commission on the proposed ITA expansion. Some of the examples of products that are not covered by the ITA were taken from this submission, which is available in the following link: <http://content.aristotle.com/cea/USTechIndustrySubmission.pdf>
19. Lee-Makiyama, Hosuk, "Future-Proofing World Trade in Technology: Turning the WTO IT Agreement into the International Digital Agreement", ECIPE Working Paper No. 04/2011, p.17.
20. Joint OECD/WTO Note, Trade in Value-Added: Concepts, Methodologies and Challenges, 2012, available at: <http://www.oecd.org/sti/ind/49894138.pdf>
21. United States International Trade Commission, "The Information Technology Agreement: Advice and Information on the Proposed Expansion", 2012, Chapter 2. Some of the proposed products include machines which perform two/more of the functions of printing, copying/facsimile transmission, machines and appliances used for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays, media for the recording of sound, instruments for physical or chemical analysis, among others. Nevertheless, some proposed products seem not to have an IT function. For instance: air conditioning devices, refrigerators, laundry machines and electric transformers.
22. Dreyer, Iana and Brian Hindley, *Op.Cit.*, p. 19-21.
23. Some of the proposed categories include printing machines, telephone sets, mobile and fixed lines, sound recording and storage devices, transmission devices for radio-broadcasting or television, radars, radio navigational aid and radio remote control devices, video recorders, televisions and displays and optical fibers, among others.
24. Lee-Makiyama, Hosuk, *Op.Cit.*, annex 2.

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