# Asia-Pacific Economic Cooperation

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# INTRODUCTION

Founded in 1989 with 12 member economies, the Asia-Pacific Economic Cooperation (APEC) has since grown to become a 21-member inter-governmental body that aims to promote economic growth, cooperation, trade, and investment in the Asia Pacific region. APEC's goals are articulated in the 1994 Bogor Declaration of Goals, which envisions free and open trade for industrialized economies by 2010 and for developing economies by 2012. The Bogor Declaration also calls for the building of an environment where economies can grow; trade can flourish; skills training can be provided; and job opportunities can be created.

To achieve the Bogor Goals, APEC identified three areas of cooperation that are sometimes referred to as the 'Three Pillars' of APEC: trade and investment liberalization, business facilitation, and economic and technical cooperation. Trade and investment liberalization focuses on opening markets by reducing and eventually eliminating tariff and non-tariff barriers to trade and investment. Business facilitation focuses on reducing the cost of business transactions and improving access to trade information. Economic and technical cooperation focuses on providing training and cooperation to build capacities in all APEC member economies. Information and communication technology (ICT) is recognized as an important tool in APEC's work in all three pillars.

This chapter briefly reviews some of the key APEC policies and activities in the area of ICT development and the use of ICT for development, particularly in the context of APEC's work mechanisms and processes in pursuit of the organization's goals.

# DIRECTION-SETTING AND PROGRAM IMPLEMENTATION

APEC works on the basis of non-binding commitments, open dialogue, and equal respect for the views of all of its 21 member economies. All decisions are by consensus, and commitments are made on a voluntary basis. Members have no treaty obligations; they take individual and collective action to open their markets and promote economic growth in a manner that is consistent with APEC's vision.

APEC's policy direction is set by the 21 APEC Economic Leaders. The APEC Ministers and the APEC Business Advisory Council (ABAC) make strategic recommendations and are considered by the APEC Economic Leaders as part of the policy-making process. It is at the Economic Leaders' Meetings that APEC's policy agenda is shaped.

Sectoral Ministerial Meetings are held regularly on key areas such as education, energy, environment and sustainable development, finance, human resource development, regional science and technology cooperation, small and medium enterprises (SMEs), telecommunications and information industry, tourism, trade, transportation, and women's affairs.

There are four high-level committees: the Committee on Trade and Investment (CTI), the Senior Officials' Meeting (SOM) Steering Committee on Economic and Technical Cooperation (SCE), the Economic Committee (EC), and the Budget and Management Committee (BMC). They are supported by subcommittees, experts' groups, working groups, and task forces.

Working groups carry out APEC's work in specific sectors as directed by the APEC Economic Leaders, APEC Ministers, APEC Sectoral Ministers and Senior Officials. There are currently 11 working groups. Special Task Groups are formed by senior officials to identify issues and make recommendations about important areas for APEC's consideration. Ad-hoc groups have also been established to provide topical and relevant information on critical issues or to fulfil important tasks not covered by other groups.

In addition, APEC has built partnerships with various stakeholders, namely, the business sector, industry, academia, policy and research institutions, and interest groups. It has also invited the Association of the Southeast Asian Nations (ASEAN), Pacific Economic Cooperation Council (PECC), and Pacific Islands Forum (PIF) Secretariat to APEC Meetings to provide insights and expertise on specific issues.

Member economies make annual contributions to support centrally funded APEC activities. Since 1997, Japan has provided additional funds to support APEC's trade and investment liberalization and facilitation projects. Other key resources shared include professional staff assigned to the APEC Secretariat. The APEC Secretariat, based in Singapore, provides coordination, technical, and advisory support.

#### **APEC'S ICT INITIATIVES**

Taking cognizance of the profound impact of ICT, notably the Internet, on the pace and process of economic development and globalization, APEC Leaders have articulated and pursued several ICT initiatives over the years. As early as 1990, APEC formed the APEC Telecommunications and Information Working Group (APEC TEL) to focus on ICT concerns. The APEC TEL is committed to improving telecommunications and information infrastructure in the region. To implement and monitor its projects, APEC TEL created three steering groups — on liberalization, ICT development, and security.

#### Toward an Information Society

As it works toward the attainment of an information society that is 'people-centered, inclusive and development-oriented' (World Summit on the Information Society, Tunis 2006), APEC TEL focuses on the following priority areas: reducing the digital divide, next generation networks and technologies, e-government, mutual recognition arrangements, regulatory reform, capacity-building, protecting information and communications infrastructure and cyber security, and advancing the Asia Pacific Information Society. Specifically, APEC TEL:

- assists developing economies in reforming their policy and regulatory structures and become World Trade Organization (WTO) compliant;
- implements the Digital Divide Blueprint for Action and other initiatives that encourage greater access to basic communications and build-out of the Internet, so as to promote greater broadband accessibility, availability, and use;
- develops a collaborative approach to cyber security (such as providing cybercrime legislation and enforcement, and capacity-building opportunities); and
- 4. works toward creating sustainable markets through both convergent and new technologies.

In June 1998, it was recognized that there was a need to update APEC-wide processes for the testing and approval of telecommunications equipment. APEC TEL facilitated what became known as the Mutual Recognition Agreement for Conformity Assessment of Telecommunications Equipment (MRA). The first such multilateral agreement, it streamlines testing and equipment certification procedures and provides for the mutual recognition, by an importing economy, of Conformity Assessment Bodies. To date, 16 out of 21 economies have committed to Phase 1 (Mutual Recognition of Test Reports) and five economies have committed to Phase 2 (Mutual Recognition of Equipment Certification). The MRA Task Force is also working on a new MRA of technical requirements. Issues being considered include potential costs and benefits to industry and regulators, and multilateral versus bilateral approaches.

Equal importance is being given to combating cyber threats. APEC TEL members have synchronized efforts under the APEC Cyber-Security Strategy, a set of measures adopted in 2002 to protect business and consumers from cybercrime and strengthen consumer trust in the use of e-commerce. A notable initiative is the development of key public infrastructure guidelines to facilitate cross-jurisdictional e-commerce. Economies are currently implementing and enacting cyber-security laws, consistent with the UN General Assembly Resolution 55/63² and the Convention on Cybercrime.³ The TEL Cybercrime Legislation Initiative and Enforcement Capacity-Building Project will provide support to institutions in implementing new laws.

APEC members are also working together to implement the Computer Emergency Response Teams (CERTs) as an early warning defence system against cyber attacks. Guidelines for establishing and operating CERTs have been developed, and various training workshops provided to member economies to enhance capacity in understanding the technical, forensic, and legal issues related to cybercrime and critical infrastructure protection. The protection of SMEs is considered a priority under this strategy. Practical tools to protect small busiesses — as well as home users — from attacks and viruses have been developed, including advice on how to use the Internet securely, safety issues relating to wireless technologies, and safe email exchanges. Work on reducing the criminal misuse of information continues to be a priority for the APEC TEL, with emphasis on the importance of sharing information, developing procedures and mutual assistance laws, and measures to protect business and citizens.

APEC member economies are encouraged to implement e-government applications. Some of the activities in this regard are the APEC e-Government Strategy, APEC e-Government Work Program, Electronic Certification Services for e-Government, e-Government High Level Symposium, e-Government University Network in HRD for e-Government, e-Government Research Project, and Integrated e-Government for Local Government Project.

The private sector is actively involved in the activities of all three TEL steering groups. Many projects are both initiated and driven solely by the private sector or in cooperation with the public sector. The APEC TEL also works with international groups, such as the International Telecommunication Union (ITU) and the Organisation for Economic Cooperation and Development (OECD).

#### Paperless Cross-Border Trading

Another APEC committee working on ICT initiatives is the Committee on Trade and Investment (CTI) under which are the Electronic Commerce Steering Group (ECSG) and Sub-Committee on Customs Procedures (SCCP). The CTI is the coordinating body for all of APEC's work on trade and investment liberalization and business facilitation. Established in 1999, the ECSG coordinates activities pertaining to the development and use of e-commerce within APEC. The SCCP, which was established in 1994, is tasked with simplifying and harmonizing regional customs procedures to ensure that goods and services move safely and efficiently within the APEC region.

The CTI, ECSG, and SCCP are working together toward a paperless cross-border trading environment. At the 1999 APEC Leaders Meeting in Auckland, member economies agreed on a 'voluntary basis to move toward paperless trading and eliminate the need for paper based documents in cross border trading by 2005 in developed countries and 2010 in developing economies'. It is projected that paperless trading would lower the cost of shipping goods, reduce communication charges, speed up the processing of payments, and lower paper handling costs. Paperless trading is also expected to encourage greater

participation by developing economies and SMEs in crossborder trade.

The ECSG, through the APEC Blueprint for Action on Electronic Commerce, has facilitated the preparation of Paperless Trading Individual Action Plans of 17 member economies. It has also developed a Data Privacy Pathfinder Initiative, 4 which was launched and formally adopted at the APEC Ministerial Meeting and APEC Economic Leaders Meeting in September 2007. The Pathfinder will enable stakeholders (officials, regulators, industry and consumers) to work together to better protect private information in the APEC region and build confidence and trust in e-commerce. Thirteen APEC members (Australia, Canada, Chile, Hong Kong China, Japan, Republic of Korea, Mexico, New Zealand, Peru, Chinese Taipei, Thailand, United States, and Vietnam) have agreed to participate and other members are actively considering joining the Initiative. The APEC Data Privacy Pathfinder will promote consumer trust and business confidence in cross-border data flows. It will support business needs, reduce compliance costs, provide consumers with effective remedies, allow regulators to operate efficiently, and minimize regulatory burdens.

In collaboration with the SCCP and the United Nations Centre for Trade Facilitation and Electronic Business, the ECSG undertakes work to enhance trade facilitation through technical cooperation and information sharing, specifically in electronic standards for paperless trading. Moreover, the ECSG is collaborating with the International Chamber Commerce on the development of a Framework for ICT-enabled Growth.

In 2007, the CTI formulated APEC's Second Trade Facilitation Plan, which provides the framework and schedule for implementing actions to meet APEC's objective of reducing transaction costs to business. It focuses on customs procedures, standards and conformance, e-commerce and mobility of business people. The SCCP meanwhile has formulated the Single Window Strategic Plan and Single Window Development Plan to achieve paperless trading targets and enable seamless data sharing. To further enhance paperless trading, the APEC Ministers agreed during their 19th APEC Ministerial Meeting in Sydney (2007) to work toward interoperability of systems through the use of recognized international instruments and standards.

E-Commerce capacity-building and knowledge exchange activities (i.e. symposia, technical assistance, training workshops, and seminars) have been conducted to focus on issues like intellectual property rights, data privacy, and cyber security. In 2007 the following activities were held: APEC Symposium on Paperless Trading Capacity Building and Intellectual Property Protection, Seminar on International Implementation of the APEC Privacy Framework, APEC Women's eBiz Training,

APEC Training Program on e-Trade and Supply Chain Management, and the APEC Project on Paperless Trading Capacity Building and IPR Protection.

#### Capacity-Building in APEC Member Economies

In 1990, APEC established the Human Resources Development Working Group (HRDWG) to coordinate and implement programs in education, labour, and capacity-building. The HRDWG is focused on narrowing the skills gap and preparing individuals for the knowledge-based economy. It has identified eight medium-term priorities in the areas of basic education; labour market; training for executives and SMEs; lifelong learning, skills and development; mobility; labour force and workplace; human resource development for trade; and investment liberalization and facilitation.

The HRDWG undertakes various programs through its three networks: the Education Network (1992), Labour and Social Protection Network (2000), and Capacity Building Network. The APEC Education Network (EDNET), formerly called the APEC Education Forum, was formed to coordinate and strengthen the collaborative activities of member economies in the field of education. It has four priority areas: Mathematics and Science Instruction, Using IT to Support Teaching and Learning, Learning Each Other's Language, and Governance and Systemic Reform. The Labour and Social Protection Network (LSPN), which first met in Brunei in May 2000, aims to foster strong and flexible labour markets and strengthen social protection, including safety nets through evidence-based interventions, collaboration, technical cooperation, and the provision of labour market social protection information and analysis to address sustainable human resource development across APEC member economies. The Capacity Building Network (CBN) promotes human capacity-building and the strengthening of markets through improved productive processes, enterprise productivity and adaptability, management and technical skill development, and corporate governance in the public, private, and voluntary sectors of APEC member economies.

Some of the major projects of the HRDWG that supports its objective of enhancing education, IT, and partnerships for development are the following:

 APEC Education Foundation, a non-profit foundation that provides grants focusing on utilizing ICT to advance education and human capacity-building cooperation in the Asia Pacific region. Among its projects are: ICT4D and disadvantaged populations in Vietnam's northern mountainous area; developing capabilities to use ICT in the improvement of educational access and quality for young people in disadvantaged zones of Peru; the establishment of eSkwela centres for disadvantaged youth in urban areas in the Philippines; enhancing the ICT capacity of disadvantaged youth affected by social and economic factors such as low income, geographical isolation, and disability using the APEC network of certified small business counsellors in Korea; creation of digital educational resources and network access to knowledge for young people living in the Pacific Ocean zone of the Russian far east; and APEC cyber vocational education system on environmental technology in Korea.

- APEC Cyber Education Network (ACEN), a regional cooperative project that aims to narrow the digital divide among APEC member economies through the sharing of ICT knowledge and skills education.
- APEC Cyber Academy Project, an online learning environment designed for K-12 students that provides for collaborative learning across cultures and continents.
- Knowledge Bank of Policy and Practice, a Web-based repository of education policy and practical resources from the Asia Pacific region, including links to websites and documents on math and science education, language instruction, technology, and governance, for education policymakers, school administrators, and researchers.
- Seminar on best practices and innovations in the teaching and learning of science and mathematics at the secondary level where participants share pedagogic tools to increase the skills and knowledge of educators and enhance the quality of education in the APEC region.
- ICT Model School Network participated in by 16 member economies<sup>5</sup> to provide opportunities and means to share best practices and exchange ideas on the use of ICT in classrooms among the 71 participating schools.
- APEC Future Education Forum, a yearly meeting since 2005 that is participated in by prominent scholars, experts, education administrators from 15 member economies, to deliberate theoretical and practical strategies to formulate the vision of APEC Future Education.

#### Bridging the Digital Divide

In 2000, APEC Leaders set out the Brunei Goals to lay down the framework for maximizing access to the Internet and pursuing an action agenda for the new economy. Recognizing the impact of ICT and the Internet on economic development in the region. A year later, in Shanghai, China, APEC Leaders agreed 'to develop and implement a policy framework which will enable the people of urban, provincial and rural communities in every economy to have individual or community-based access to information

and services offered via the internet by 2010' (APEC 2001). As a first step toward this goal, the number of people within the region with individual and community-based access to the Internet would be tripled by 2005.

In support of the Brunei Goals, APEC Leaders meeting in Bangkok in 2003 instructed their Ministers to 'step up efforts to build knowledge-based economies' by partnering with the business sector, educational institutions, citizens groups, and government and semi-government agencies. The Brunei Goals were also affirmed with the adoption in 2001 of the long-term, forward-looking and more action-oriented eAPEC Strategy that sets a framework for bringing together an enabling environment for strengthening market structures and institutions, investment and infrastructure, and human capacity-building.<sup>6</sup>

In general, although APEC has yet to achieve its goal of tripling Internet access across the region, APEC economies have made significant improvements in infrastructure, as evidenced by improved teledensity and better telecommunications services. As of January 2005 six economies have more than tripled Internet access and nine economies have exceeded 50 percent Internet access. At the end of 2002, the average per capita penetration rate for fixed lines in the APEC region reached 31 percent, far above the world average of 17.9 percent. Mobile telephony increased to an unprecedented level: the mobile penetration rate exceeds 40 percent, making the APEC region the leader in mobile access. The quality of Internet access has improved with the installation of broadband infrastructure. Newer ICT infrastructure is emerging in the form of satellite connections, fibre to the home, wide area networks, and wireless networks. Public Internet access points (e.g. schools, libraries, communities/villages) have also been made available.

However, the overall development of ICT infrastructure in the APEC region has been slower than expected, and disparities between the rural and urban areas are still a major issue that needs to be addressed. Mobile telephony, which is the most pervasive, is not yet able to provide Internet access at affordable rates, and in most APEC economies, Internet access remains relatively low. The slow progress in ICT infrastructure development has been attributed to the lack of regulatory policies in many APEC member economies, as well as lack of financial and technical capabilities in developing countries. The affordability of ICT infrastructure remains an issue in some APEC economies.

On the other hand, developments in ICT infrastructure have been attributed to liberalization and sound regulation policies. An extensive survey conducted by the APEC TEL (2003) found that majority of the member economies have implemented the WTO regulatory principles of competitive safeguards, interconnection, public availability of licencing criteria, independent regulators, and allocation and use of scarce resources.

Complementing infrastructure development as a strategy for addressing the digital divide is developing digital and related skills for the knowledge economy and society. In 2001, the APEC High Level Meeting on Human Capacity Building adopted the Beijing Initiative, which called for a collaborative effort among member economies and stakeholders to share experiences and practices, explore better approaches, and identify strategic options in human capacity-building.

### CHALLENGES AND OPPORTUNITIES

Effective governance requires the active involvement of all sectors. This is also true for APEC where the member economies' commitment is as important as stakeholders' participation in APEC activities. APEC's working method also reflects its desire to be inclusive in its engagements inasmuch as APEC member economies have diverse socio, political, and economic conditions. It promotes collaborative initiatives and the sharing of practices among its members, stakeholders, and partners.

However, while staying true to its commitment to consensusbuilding and stakeholder participation, APEC needs to come up with clear-cut, effective, and enforceable agreements and decisions, and a strategy for implementing these in a timely fashion.

APEC is faced with many challenges and its usefulness in the region and its comparative advantage relative to other regional organizations are constantly tested. Internally, APEC needs to address structural issues concerning the APEC Secretariat and encourage member economies to increase their financial contributions. Since its creation almost two decades ago, APEC's scope of work has continuously expanded while its support mechanisms have remained the same. The 3rd APIAN Policy Report (2002, p. 15) states that 'APEC's financial structure is woefully inadequate in comparison to APEC's goals and objectives' and its 'management structures have grown both too complex and too weak to meet the growing demands of a growing organization and need a thorough overhaul'. However, as the 2007-2008 State of the Region Report (SOR) of the PECC notes, efforts to strengthen the Secretariat are routinely met with resistance.

The PECC report also observes that there is overlapping of activities, and there is no coordinating mechanism to eliminate the wasteful duplication of resources. This is especially true in human capacity-building as almost all of the APEC working groups undertake capacity-building activities. Furthermore, while 'some capacity-building has taken place ... there is no systematic institutional commitment to technical assistance across the range of issues on of Leaders' agendas' (PECC 2008).

'Strategically, APEC stabilizes relations among its diverse membership by providing a unique forum for regular discussions among leaders, ministers, technical experts and corporate executives' (APIAN 2002, p. 13). What is needed is for APEC to extend its philosophy of openness to include making the necessary internal changes that will make it an effective regional organization able to maintain its relevance in the region.

#### NOTES

- The 21 member economies are 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, Philippines, Russia, Singapore, Chinese Taipei, Thailand, United States, and Vietnam.
- 'Combating the criminal misuse of information', which recognizes that one of the implications of technological advances is increased criminal activity in the virtual world (United Nations 2001).
- An agreement forged in Budapest that aims to uphold the integrity of computer systems by considering as criminal acts any action that violates this integrity (Council of Europe 2001).
- 4. The Pathfinder Initiative is an approach adopted by APEC to enable groups of member economies to pilot the implementation of cooperative initiatives prior to their adoption by all APEC member economies. This approach allows APEC member economies who are ready and willing to commit to move faster in specific areas to do so and it is seen as a way to invigorate progress toward the free trade and investment goals.
- Australia, Brunei Darussalam, Canada, Chile, People's Republic of China, Indonesia, Hong Kong China, Japan, Korea, Malaysia, Mexico, Philippines, Singapore, Chinese Taipei, Thailand, and Vietnam.
- A detailed description is provided in the report of the Pacific Economic Cooperation Council to APEC Ministers entitled 'Implementing the eAPEC Strategy: Progress and recommendations for further action' (APEC Secretariat 2004).

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