

# *Association of Southeast Asian Nations*

Lorraine Carlos Salazar and Shelah D. Lardizabal

## **ICT: Opportunities and challenges for ASEAN**

The digital divide is a recognised reality not merely between but also within member states of the Association of Southeast Asian Nations (ASEAN). Estimates in 1999 indicated that the aggregate number of individual Internet users in Indonesia, Malaysia, the Philippines, Thailand and Singapore was only 3.74 million or 1 percent of the total population of these countries combined. ASEAN has formulated various policy pronouncements in recognition of the opportunities as well as challenges posed by ICT. The leaders of ASEAN nations have agreed to promote collective efforts to implement national development strategies in the ICT sector. They have also agreed to provide essential legal and policy frameworks, develop skills, and encourage the use of the new technologies in business, society and government.

This chapter surveys the policy initiatives of ASEAN in response to the opportunities and challenges raised by developments in ICT. It also looks at how the regional grouping is working towards bridging the digital divide that is markedly present in the region. The chapter is organised in two major parts. The first section reviews the main policy announcements and regional initiatives launched by ASEAN. It focuses on the e-ASEAN Initiative, the e-ASEAN Framework Agreement, the programmes that grew out of these initiatives, and the institutional bodies responsible for the achievement of the e-ASEAN goals. The second section considers what some member countries have done thus far as a result of, or in the context of, these regional initiatives. It also looks at the pilot projects and other regional programmes launched in response to the e-ASEAN Initiative. Finally, the chapter concludes with a brief assessment of the progress of these regional initiatives and provides some recommendations.

## **ICT policy announcements and regional initiatives**

### Hanoi Plan of Action

The first time ASEAN heads of state and governments acknowledged the need to continue to cooperate and strengthen ASEAN's capacity in science and technology, particularly in IT, and also the need to develop an ASEAN information infrastructure (AII) was in December 1998 via the Hanoi Declaration.<sup>1</sup> The declaration was accompanied by the Hanoi Plan of Action, which enumerated eight goals for promoting science and technology and developing IT infrastructure:<sup>2</sup>

1. To forge agreement among member countries on the design, standardisation, interconnection and interoperability of IT systems by 2001, as well as to ensure the protection of intellectual property rights and consumer rights.
2. To develop the information content of the AII by 2004.
3. To establish networks of science and technology centres of excellence and academic institutions by 2001.
4. To intensify R&D in the application of strategic and enabling technologies.
5. To establish a technology scan mechanism and institutionalise a system of science and technology indicators by 2001.
6. To develop innovative systems for programme management and revenue generation to support ASEAN science and technology.
7. To promote greater public and private sector collaboration in science and technology, particularly in IT.
8. To undertake studies on the evolution of new working conditions and living environments resulting from widespread use of IT by 2001.

## e-ASEAN Initiative

To oversee the achievement of the above goals, the Working Group on AII was established. In September 1999, the working group presented its recommendations to the 31st ASEAN Economic Ministers Meeting (AEM) in Singapore. The centrepiece of its effort was the e-ASEAN Initiative,<sup>3</sup> which contains proposals on what ASEAN member states could commit themselves to doing individually and collectively in order to seize the opportunities created by ICT. The economic ministers agreed with the working group's proposals and at the same time endorsed the creation of a public-private sector task force that would help to develop a comprehensive blueprint for the establishment of an ASEAN e-space, look into ways to develop competencies within ASEAN that would enable the region to compete in the global market, and serve as the primary advisory body to ASEAN on the development and implementation of an ASEAN e-space.

Two months later, in November 1999, ASEAN leaders formally endorsed the e-ASEAN Initiative in Manila. The initiative aimed to develop a broad-base and comprehensive action plan, encompassing the physical, legal, logistical, social and economic infrastructures, needed to promote an ASEAN e-space as a central part of an ASEAN positioning and branding strategy, covering the economy, society and government.<sup>4</sup> The e-ASEAN Initiative was the grouping's response to the global information revolution, with the goal of transforming ASEAN into one seamless and borderless market of 500 million consumers instead of ten fragmented ones.

## e-ASEAN Task Force and other task groups

A number of groups were formed to undertake tasks relating to the e-ASEAN Initiative. The e-ASEAN Working Group is a senior-level government workgroup set up to implement the e-ASEAN Initiative. Being the main implementing body, it coordinates the implementation of ICT initiatives with other relevant working groups, committees and the private sector and is responsible to the Senior Economic Officials Meeting (SEOM). SEOM, in turn, reports to ASEAN economic ministers and ASEAN leaders.

Five task groups were created within the e-ASEAN Working Group, focusing on different functions:

1. Establishing the AII (led by the Philippines and Singapore)
2. Facilitating e-commerce (led by Singapore, Malaysia and Brunei)
3. Trade liberalisation and facilitation for ICT goods and services (led by Indonesia and Singapore)
4. Capacity building and e-society (led by Thailand, Cambodia, Myanmar, Laos and Vietnam)
5. Promoting e-government (led by Malaysia, Singapore and Brunei)

The e-ASEAN Task Force was a joint public-private sector group set up to serve as an advisory body to ASEAN leaders, assisting ASEAN economic ministers in all matters relating to the implementation of the e-ASEAN Initiative, recommending ways to expedite or improve the initiative, and providing guidance to the e-ASEAN Working Group.<sup>5</sup> It was also tasked to determine the policy, legal and regulatory frameworks that would favour the development of the AII and to recommend policies on the social and cultural aspects of e-ASEAN. The group reviewed and consolidated the recommendations of the Working Group on AII and the IT Private Sector Core Group. The active and central participation of the private sector in the task force demonstrated that the significant role of the private sector in developing the ICT industry in the region was recognised. The task force provided a venue for the private and public sectors to bring together their experiences and knowledge and cooperate to ensure that the task force's policy advice was responsive to the needs of the market.

During the three years of its existence from 1999 to 2002, the task force identified projects to jumpstart the AII and to demonstrate the immediate benefits of using ICT by ordinary people.<sup>6</sup> It also collated a manual on best practices in human resource development and education and promoted e-ASEAN to the people, corporations and governments of ASEAN as well as to other relevant communities outside the region. Its other tasks included drawing up guidelines to clarify policy issues related to e-commerce, devising prescriptive measures to narrow the digital divide, and fostering the growth of indigenous content and services. When the task force was dissolved, its functions were passed on to AEM, TELSOM and TELMIN (discussed later).

## e-ASEAN Framework Agreement

ASEAN leaders signed the e-ASEAN Framework Agreement at the Fourth ASEAN Informal Summit in Singapore in November 2000. The agreement committed ASEAN members to an implementation schedule "to achieve digital readiness for the region in order to develop the basis for ASEAN's competitiveness into the future, better the lives of their citizens through the application of information and communication technologies, and foster the spirit of ASEAN community".<sup>7</sup> The agreement shows ASEAN governments' commitment to promoting collective efforts that complement national ICT strategies to achieve regional connectivity. The agreement has four overarching goals:

1. To develop, strengthen and enhance the competitiveness of the ICT sector in ASEAN.
2. To reduce the digital divide within and among ASEAN members.
3. To strengthen cooperation between the public and private sectors in realising e-ASEAN.
4. To liberalise trade in ICT products, services and investments to support e-ASEAN initiatives.

To achieve these goals, the agreement specifies several areas that will be developed or promoted, including an AII, e-commerce, liberalisation of trade and investment in ICT, e-society, IT capacity building, and e-government. A total of 42 pilot projects were launched in these areas following the signing of the agreement.

Two major institutional responses grew out of the e-ASEAN Initiative: the annual ASEAN Telecommunications Senior Officials Meeting and ASEAN Telecommunications Ministers Meeting.

#### ASEAN Telecommunications Senior Officials Meeting (TELSOM)

The First TELSOM was convened in Brunei, in conjunction with the launch of the e-ASEAN Initiative in October 2000. The meeting followed the Sixth ASEAN Telecommunications Regulators Council Meeting,<sup>8</sup> where a Sectoral Mutual Recognition Arrangement was adopted. This agreement, which took effect in July 2001, put in place region-wide recognition of conformity assessment procedures for telecommunications equipment.

At the First TELSOM, the senior officials agreed to intensify the role of the ASEAN telecommunications and IT sector in enhancing regional cohesion and competitiveness, to undertake capacity-building programmes, to address universal access and the digital divide, and to enhance intra-ASEAN trade and investment in the telecommunications and IT sector. TELSOM also agreed to cooperate with the e-ASEAN Task Force and the AII Working Group to develop the AII, introduce capacity-building programmes, and launch activities to address telecommunications and IT issues.

#### ASEAN Telecommunications Ministers Meeting (TELMIN)

The first annual TELMIN<sup>9</sup> was held in Kuala Lumpur in July 2001. During this and subsequent meetings, the ministers discussed collaborative efforts in numerous areas towards, generally, closing the digital divide in the region and facilitating trade and investment within ASEAN.<sup>10</sup> These efforts include advancing e-ASEAN, particularly the early realisation of the AII; coordinating and harmonising policies and programmes; strengthening cooperation and joint approaches in addressing international and regional telecommunications and IT issues; promoting efficient e-government; and fostering the development of indigenous content.

At the First TELMIN, it was agreed to create working groups under TELSOM that would be led by different member countries to oversee the development in the following areas: (1) AII: led by the Philippines and Singapore; (2) capacity building: led by Thailand, Cambodia, Laos, Myanmar and Vietnam; (3) universal access and digital divide: led by Malaysia, Vietnam and Indonesia; (4) trade and investment facilitation: led by Indonesia and Singapore;

and (5) positive use of the Internet: led by Malaysia and Thailand. These working groups would focus on creating technical and policy frameworks for the AII to ensure regional interconnectivity and interoperability, developing high-speed direct connections or broadband access for the AII backbone, improving universal access and narrowing the digital divide in the least connected member countries, and introducing capacity building and human resource development programmes.

During the 34th AEM in September 2002, a decision was made to restructure the e-ASEAN Working Group and its role in the implementation of the e-ASEAN Initiative. The implementation of the technical, non-liberalisation elements of the initiative would be transferred to TELSOM and TELMIN, while the e-commerce and liberalisation elements as well as the e-ASEAN Working Group would remain under the purview of SEOM and AEM.

The digital divide concern in ASEAN is being addressed through collaborative efforts that include capacity building and human resource development, enabling universal and affordable access to ICT, promoting e-community and e-learning, building a network of ICT skills competency agencies, and training small and medium enterprises to deploy ICT applications in their operations. An ASEAN digital divide database has been established to promote understanding of the ASEAN digital divide, exchange of information on universal service obligation schemes, and development of joint studies and projects. The database, ASEANconnect,<sup>11</sup> houses key statistics and measurements of ICT indicators.

Intra-ASEAN trade and investment in ICT is being enhanced through identifying and removing barriers, fostering pro-business policies, and establishing transparent, predictable and non-discriminatory regulatory systems. A list of ICT products and the tariff reduction schedule for these products have been drawn up and are updated regularly. The creation of a database of trade and investment policy and regulatory practices is under consideration.

ASEAN cooperation on ICT issues has been strengthened through the establishment of regional ICT centres of excellence for joint R&D in software and content development. Also being considered are the creation of an ASEAN ICT centre and strengthening of the ICT unit in the ASEAN Secretariat.

Encouraging private sector participation as well as public-private sector collaboration in regional programmes and activities is another important item on TELMIN's agenda. Conducive and competitive policy and regulatory environments are essential for attracting investments in infrastructure and technology development. An e-ASEAN Business Council has been established to facilitate dialogue with the private sector on infrastructure and e-learning accreditation. Additionally, TELMIN has urged industry involvement in negotiations for sustainable and fair international charging arrangements for Internet services.

Besides widening linkages with industry, it is also to ASEAN's advantage to engage with global forums such as

the World Summit on Information Society (WSIS). At the Third TELMIN held in Singapore in September 2003, ASEAN agreed to submit a joint statement to the Geneva WSIS meeting held in December that year. The statement advocated a global strategy to realise the information society based on concrete milestones rather than broad visions; a plan of action adapted to each region's unique and diverse needs; and the recognition of existing regional initiatives such as e-ASEAN in implementing ICT programmes.<sup>12</sup>

In the light of frequent and widely damaging attacks on the Internet, TELMIN proposed setting up an ASEAN network security coordinating council and establishing national Computer Emergency Response Teams (CERTs) in all member countries to combat cyber threats. An ASEAN cyber security virtual forum was also proposed with the goal of developing a common framework as well as coordinating information exchange, establishing standards, and guiding cooperation among national enforcement agencies.

By the Fourth TELMIN held in Bangkok in August 2004, much progress has been made. The information infrastructures in ASEAN had been strengthened through the establishment of CERTs and the development of a standard operating procedure for information sharing among ASEAN members as a minimum requirement for CERTs to respond to cyber threats. In terms of the implementation of the Sectoral Mutual Recognition Arrangement (MRA) on conformity assessment for telecommunications equipment, Singapore would implement bilateral MRAs with Brunei, with Indonesia, and with Malaysia by end 2004. Meanwhile, bilateral MRAs between Malaysia and Brunei were being negotiated. These MRAs will benefit end-users as telecommunications equipment becomes more accessible and affordable within member countries.

One of the most important outcomes of the fourth meeting was the establishment of an ASEAN ICT Fund, with a seed fund of US\$5 million. All members made equal contributions to the fund. It will be used to accelerate the implementation of ASEAN ICT projects.

Another significant milestone achieved at the meeting was the start of ASEAN's dialogues with its Asian neighbours on ICT issues, with the first ASEAN +3 (China, Japan and South Korea) and ASEAN-India meetings being held.<sup>13</sup> In view of the many common issues, cooperation is beneficial to both ASEAN and its partners. Key areas identified for cooperation are broadband deployment, capacity building in cyber security, ICT for the disabled and the elderly, a network for the disabled, radio frequency identification technology, developing network software in local languages, and e-learning initiatives.<sup>14</sup>

### Intellectual property initiatives

ASEAN has institutionalised consultation with WIPO, through regular dialogues between WIPO and ASEAN ambassadors posted in Geneva, as early as 1993. These

consultations provide a venue for discussions to identify areas of cooperation, institution strengthening and capacity building, legislative assistance, as well as human resource development and training. The most recent WIPO-ASEAN consultation meeting was held in May 2003, when the main topic of discussion was how to use intellectual property as a tool for promoting economic growth and the possibility of establishing an ASEAN regional collective copyright management system. ASEAN has established a Working Group on Intellectual Property Cooperation to look into these issues.<sup>15</sup>

Another ASEAN engagement on intellectual property issues is its cooperation with the European Union, which also began in 1993. The European Community-ASEAN Intellectual Property Rights Co-operation Programme provides European expertise to ASEAN member states on how to protect and enforce intellectual property rights, such as patents and industrial designs, trademarks, copyrights and related rights, geographical indications, layout designs of integrated circuits, and protection of undisclosed information.<sup>16</sup>

## e-ASEAN pilot projects and initiatives

This section considers two themes. Firstly, it highlights what some member countries have done thus far in the context of the regional initiatives on ICT. Secondly, it considers the pilot projects and other initiatives launched in response to the e-ASEAN Initiative.

### CLMV initiatives

A positive outcome of the e-ASEAN Framework Agreement is the setting up of an ICT department or an ICT commission within an existing government department in all the ASEAN states. We will highlight the efforts Cambodia, Myanmar and Vietnam have made in developing their nation's ICT capacity.

Cambodia set up its own e-ASEAN working group after the 34th AEM in 2002. It also has a National ICT Development Authority, which was established in 2001 and is headed by the prime minister. The agency is tasked to draft Cambodia's ICT master plan and to establish the Government Administration Information System. The ICT master plan identifies four key areas as its focus: e-government, e-residence, e-real estate and e-development. The main challenge facing Cambodia is its people's low level of technical skills and know-how.

In Myanmar, the government recognises that ICT is key to the country's economic and social development and thus has committed itself to developing its ICT sector. It set up an Internet task force, established an ICT park to centralise ICT-related infrastructures in one place, and is in the process of formulating e-commerce laws. Myanmar needs technical assistance on drafting these laws. As with Cambodia, the

lack of skills and expertise in ICT is a major obstacle.

In Vietnam, the government has launched an IT master plan, which identifies five key areas for development: (1) ICT human resources, (2) ICT infrastructure, (3) software industry, (4) hardware industry, and (5) accelerating the deployment and development of ICT. In order to attract foreign investment in the ICT sector, incentives are provided to investors, such as tax preferences. One of the challenges for the future is how to develop the ICT sector in the country, particularly its human resources. Its current university graduates cannot meet the high demand of industry for ICT-trained personnel. The other challenge is the prohibitive cost of Internet access, which leads to low utilisation.

The preceding discussion on these three transitional economies is especially significant in the light of the Vientiane meeting of ASEAN leaders in November 2004 when the ASEAN-6 Assistance to CLMV Countries (Cambodia, Laos, Myanmar and Vietnam) programme under the rubric of the Initiative for ASEAN Integration (IAI) was launched.<sup>17</sup> Under this new programme, which aims to bridge the development gap within ASEAN, members of ASEAN-6 commit themselves to helping CLMV countries develop by focusing on four priority areas, one of which is the development of the ICT sector.<sup>18</sup> With respect to ICT, and in line with the e-ASEAN Initiative, the CLMV countries will be given assistance to put into place the necessary policy, institutional, legal and regulatory frameworks for developing and deploying ICT.

### Pilot projects

The 42 pilot projects endorsed since the signing of the e-ASEAN Framework Agreement in November 2000 were launched under the management of the e-ASEAN Task Force. All the projects went through an initial phase of development involving the project initiator and at least two other ASEAN member countries. The second phase involves the rollout of the project to all members of ASEAN. Of the 42 pilot projects, 19 are currently ongoing or have been completed.<sup>19</sup> These 19 projects, most of which have an online presence, are as follows:

1. ASEAN regional electronic payment gateway: A gateway for cross-border electronic clearance of retail payments in ASEAN using agreed currencies (<http://www.bcsis.com/products11.html>)
2. GM SupplyPower: A portal for current suppliers of General Motors in Southeast Asia to conduct their business online (<http://www.gm.com.sg>)
3. WeASEAN.com: A portal for small and medium enterprises in ASEAN to engage in B2B commerce (<http://www.weasean.com>)
4. Sesami.com: An e-commerce exchange for organisations of all sizes to conduct B2B transactions (<http://www.sesami.com>)
5. ASEAN auction portal: An online auction marketplace for the ASEAN region (<http://www.lelong.com.my>)
6. ASEAN trade and business directory: A portal that provides business and trade information for small and medium enterprises worldwide (<http://www.tradesearch.com>)
7. Accelerating e-learning in ASEAN schools (I-Tutoring Online): An e-learning solution that enables primary schools and their teachers to interact online (<http://www.i-tutor.com>)
8. ASEAN Institute of Business Technology: A collaboration between ASEAN and international partners whereby academics from established and recognised educational institutions throughout the region share their professional knowledge (<http://www.multiversity-digital.com.au>)
9. ASEAN Training Network: A virtual organisation that brings together human resource professionals to provide training at all levels (<http://www.aseantraining.net>)
10. Knowledge Worker Exchange (KWX): An exchange that provides recruitment services, career and job market guidance and other related services (<http://www.kwxasean.com>)
11. ArtPostAsia: A portal that seeks to create a broader and more active audience for Southeast Asian art (<http://www.artpostasia.com/web>)
12. VirtualMalaysia.com: A tourism portal that provides information for tourists to Malaysia (<http://www.virtualmalaysia.com>)
13. ASEAN service access platform: A pan-ASEAN infrastructure for member countries to launch services that other countries can leverage on to build even more complex services (<http://www.ecquaria.com>)
14. ASEAN bio-tropical agricultural portal: A portal to network communities in the agricultural sector (<http://www.akisnet.com.my>)
15. Alpha Investment Bank: A portal that consolidates government networks and information services to promote the development of entrepreneurs, the venture capitalist industry, science and technology, foreign investment and technology exports (<http://www.alphainvestmentbank.com>)
16. Lanabiz: An e-commerce infrastructure and software technology solution provider that provides services to corporations (<http://www.lanabiz.com>)
17. E-entrepreneurship training programme: A programme (not online) that aims to build a critical mass of ICT-empowered entrepreneurs, particularly in CLMV countries
18. ASEAN incubator network: Completed in 2002, an initiative designed to help ASEAN countries kick-start entrepreneurial activities by providing participating companies networking opportunities, conducting training seminars, and giving start-ups the chance to market their products and services and to build their brand profile

19. Cyber law training workshop: Completed in 2002, a physical workshop held to provide legislators, government counsels, and judges of CLMV countries an overview of the issues, and proposed solutions, posed by e-commerce and the advent of the information industry

### E-government initiatives

In addition to the above pilot projects, a number of key initiatives in e-government and human capacity development were implemented by ASEAN in 2002. One of them was an in-country seminar on e-government opportunities and challenges, which was aimed at impressing upon government officials the benefits of using ICT in administration and in the delivery of public services. Another was an e-government strategic planning workshop organised for government officials of CLMV countries to equip them with a clear understanding of how the proper use of ICT and the Internet can improve efficiency, increase productivity and transform public service delivery. Another activity, the ASEAN executive seminar on e-government, was targeted at senior government officials with decision-making power that would allow them to implement e-government initiatives within their respective ministries or departments as e-government "champions".

## Conclusion

ASEAN has launched numerous initiatives since 1998 in response to the opportunities and challenges presented by ICT. The grouping adopted the e-ASEAN Initiative in 1999 and formalised the e-ASEAN Framework Agreement in 2000. It launched 42 pilot projects to demonstrate the benefits that can be reaped from the use of ICT. The creation of an e-ASEAN ICT Fund is an important step towards accelerating the ICT sector's development in the region.

The e-ASEAN Task Force was established as an advisory group and the e-ASEAN Working Group as the implementing body under the purview of SEOM/AEM to oversee the achievement of the e-ASEAN goals. Along with this, annual meetings of ASEAN telecommunications ministers (TELMIN) and senior officials (TELSOM) were commenced as institutions responsible for the achievement of the technological and infrastructural goals of e-ASEAN. Meanwhile, AEM is responsible for trade and intellectual property rights issues. Much of the achievement thus far has been at the level of policy dialogues between and among top-level officials and the private sector of member states. The dialogues signal increased cooperation, consultation, and standardisation of approaches to ICT development within the region. They have resulted in the development of the necessary policy and regulatory frameworks for ICT. A clearly positive development is the creation of a new ICT department or an ICT commission within an existing department in member countries. This is proof of recognition

that ICT is vital for a country's development. In addition, ASEAN has actively pursued negotiations with its East and South Asian neighbours on ICT issues of common interest and mutual benefit. It also engages with WSIS, WIPO and the European Union.

The work on achieving the goals of the e-ASEAN Framework Agreement is divided between TELMIN for infrastructure and technology issues and AEM for trade-related issues. While such specialisation and division of labour makes sense at one level, viewing ICT issues in such a bifurcated manner leads to a lopsided focus on trade while downplaying infrastructure and access issues. In particular, the digital divide issue risks playing second fiddle to trade-related issues.

One concrete way to further solidify ASEAN's commitment to ICT development in the region is to create a permanent ASEAN body that deals with ICT. Such a move will highlight ASEAN's commitment by creating a clear line of institutional responsibility. Such a body could also be tasked with assessing, benchmarking and monitoring the progress of the ICT initiatives of ASEAN members, individually and collectively, in order to know where exactly efforts are succeeding and where more needs to be done. Also, a review of the e-ASEAN Framework Agreement is essential to ensure its continued relevance.<sup>20</sup>

ASEAN needs to improve the documentation and assessment of the progress of its ICT pilot projects. A depository of all documents and information on the progress of the e-ASEAN Initiative and the e-ASEAN Framework Agreement should be established. The depository can be housed at the ASEAN Secretariat website or at the website of a permanent ICT body. The depository should also contain records of the activities of the e-ASEAN Working Group, AEM, TELMIN and TELSOM as well as the progress of the activities and programmes of the former e-ASEAN Task Force.

Much has been done in the past few years. But more remains to be carried out by ASEAN and its member states to fully seize the opportunities offered by ICT for the benefit of their people. The ICT sector is highly dynamic, so ASEAN is faced with the challenge of being flexible and with the need to constantly cope with the changes and the accompanying perils and opportunities. The leaders of ASEAN have already stated their political commitment to ICT development. Hopefully, the commitment would enable the region to cope with the challenges it faces.

## Notes

1. See <http://www.aseansec.org/686.htm>.
2. See <http://www.aseansec.org/687.htm>. The goals stated for the telecommunications sector were: (1) to achieve interoperability and interconnectivity of the national information infrastructures of member states by 2010; (2) to develop and implement an ASEAN plan of action on regional broadband interconnectivity

- by 2000; and (3) to intensify cooperation in ensuring seamless wireless communication within the region as well as in facilitating intra-ASEAN trade in telecommunications equipment and services.
3. <http://www.aseansec.org/7659.htm>.
  4. At this meeting, ASEAN leaders were also presented with a white paper *Building the Bridge to the Future* prepared by the IT Private Sector Core Group, which analysed the readiness of countries in the region for the digital economy. The white paper also provided policy and regulatory recommendations as well as concrete pilot project proposals to make the region competitive in the “new digital age”. See the white paper at <http://www.fit-ed.org/easean/aii/all.php>.
  5. Roberto R. Romulo, former Foreign Affairs Secretary of the Philippines, served as chairman of the task force. In addition, ASEAN leaders appointed representatives from the private and the public sectors to the task force. The remaining members were the head of the e-ASEAN Working Group and a representative from the ASEAN Secretariat. The task force met quarterly, with the first meeting held during the first quarter of 2000.
  6. Among the task force’s early pilot projects was the establishment of an ASEAN SchoolNet to link students, teachers, researchers and education administrators within ASEAN and to their counterparts worldwide. For a summary of the task force’s projects, see <http://www.aseansec.org/14467.htm>.
  7. <http://www.aseansec.org/6267.htm>.
  8. The council was established in 1994 in recognition of the importance of telecommunications as a fundamental infrastructure for the development of the ASEAN Free Trade Area. It meets to harmonise ASEAN’s regulatory policies on spectrum management as well as type-approval standards and processes, to intensify cooperation among ASEAN members to develop common positions at international forums such as ITU and the Asia-Pacific Telecommunity, to promote interconnection and interoperability of ASEAN national information infrastructures, and to develop ASEAN human resources.
  9. The chairmanship of TELMIN is rotated annually in alphabetical order among the member states. TELSOM is mandated to act as the operating arm of TELMIN to supervise, coordinate and implement programmes and policy directions set by ASEAN telecommunications ministers.
  10. For information on the first to the fourth TELMIN, see <http://www.aseansec.org/7393.htm> and <http://www.aseansec.org/7379.htm> (first), <http://www.aseansec.org/12586.htm> and <http://www.aseansec.org/12595.htm> (second), <http://www.aseansec.org/15123.htm> (third), and <http://www.aseansec.org/16296.htm> (fourth).
  11. See <http://www.aseanconnect.gov.my>.
  12. See <http://www.aseansec.org/6269.htm>.
  13. <http://www.aseansec.org/16294.htm>.
  14. An earlier meeting with China in 2003 led to the signing of a memorandum of understanding with China on cooperation in ICT. The areas of cooperation are human resources, information infrastructure, technology, ICT application, e-ASEAN project implementation, exchange of information, and an ASEAN–China ICT seminar. See <http://www.aseansec.org/15147.htm>.
  15. <http://www.wipo.int/aspac/en/cooperation/cooperation.htm#asean>.
  16. [http://www.ecap-project.org/ecap/site/en/ecapii\\_prog](http://www.ecap-project.org/ecap/site/en/ecapii_prog).
  17. At the time of research for this chapter, it was unfortunate that no data on Laos were accessible and so Laos is not included in the discussion. For information on the IAI, see <http://www.aseansec.org/14683.htm>.
  18. The other three priority areas are infrastructure development, human resource development, and promoting regional economic integration.
  19. This does not mean that the other projects no longer exist. Further research and documentation of all the pilot projects is needed. One of the main reasons for the discontinuation of some of the projects after the pilot phase was a lack of financial support.
  20. One of the suggestions broached during the e-ASEAN Working Group Strategic Meeting in July 2002 was to set up an ASEAN centre for ICT patterned after the ASEAN Centre for Energy.

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