CENTRE FOR NON-TRADITIONAL SECURITY STUDIES

INSIGHT

AN OCCASIONAL PUBLICATION BY THE CENTRE FOR NON-TRADITIONAL SECURITY (NTS) STUDIES

NTS Insight January 2010 (Issue 1)

ASEAN's Journey in Cyberspace: A Tale of 'Divided' Cities

In 1997, ASEAN leaders envisaged Information and Communication Technologies (ICT) as the technology that would foster the region's economic integration and has since commissioned numerous projects and resources to that end. More than a decade later, it has emerged that the impediment towards a more integrated region lies neither in the vision nor in the collective political will, but rather in the consumption of technology itself. It appears that technology has the capacity to simultaneously integrate societies and 'divide' the people within them.

By Nur Azha Putra

Introduction

Cyberspace in the lexicon of the Association of Southeast Asian Nations (ASEAN) is largely discoursed in the language of national and regional economic development. The Information and Communication Technologies (ICT) which underline cyberspace is seen as the 'enabler' that would propel economic development within the region in the future. In 1997, ASEAN leaders envisaged ICT as the technology that would foster regional economic integration.

However, the implementation and application of ICT for the business community and public sector alone may not sustain economic development, especially in the absence of a 'whole-of-society' approach. Unless ICT is implemented extensively and penetrates every strata of society, the issue of the 'digital divide' would mar the ideals of the ASEAN Vision 2020 statement.

^ To the top

Mapping ASEAN's Cyberspace Journey: Regional Institutions and Mechanisms on ICT

'e-ASEAN'

The Heads of state and government of ASEAN adopted 'The ASEAN Vision 2020' in Kuala Lumpur, Malaysia, on 15 December 1997. This

document 'imagines', among others, a regional community which is economically integrated. One of the strategies identified in achieving this is the use of ICT which was seen as a platform to establish a regional network that provides easy access, as well as the distribution of data and information.

By 2000, ASEAN leaders committed to an e-ASEAN Framework Agreement which laid the foundation for the development of an ASEAN Information Infrastructure (AII). AII is a region-wide implemention of telecommunication networks which would link the various national information infrastructure of member states. In due time, AII would link ASEAN with other regional information infrastructures. According to the e-ASEAN Initiative document, AII would 'promote the growth of electronic commerce in the region.' In the larger scheme of things,

> 'e-ASEAN aims for the liberalization of trade in ICT products and services and the promotion of investments in the production of ICT products and in the provision of ICT services. ASEAN countries will eliminate duties and non-tariff barriers on intra-ASEAN trade in ICT products.'

A high-level e-ASEAN Task Force comprising government and private sector representatives was formed to identify pilot projects and recommend guidelines on policy issues related to the establishment of an electronic marketplace in ASEAN.

In addition to this, the Task Force was also assigned to look into other factors which could facilitate the growth of ASEAN e-commerce. It studied and offered recommendations on issues such as cyber laws, secure messaging infrastructure, payment gateways, and on-line services and products for regional development.

It appeared, as pointed out by Raijeli Nicole, that the e-ASEAN initiatives would create a new kind of economy within ASEAN, one where the quality of knowledge and the quantity of information become the key determinants of productivity and economic performance.

'It involves fostering the development of a knowledge-based society, narrowing the digital divide, enhancing workforce competitiveness, facilitating the workflow of knowledge, and using technology to enhance the spirit of the ASEAN community,' elaborated Nicole in her observation of the impact of ICT on the socio-economic and political developments on the societies within the ASEAN member states.

Institutions

There are three institutions within the ASEAN setup that represent the states' collective interests on regional ICT matters. They are the:

- Telecommunications and IT Ministers' Meeting (TELMIN)
- Telecommunications & IT Senior Officials' Meeting (TELSOM)
- ASEAN Telecommunications Regulators' Council (ATRC)

TELMIN was inaugurated in 2001 by ASEAN with the intent to foster stronger regional ties amongst the telecommunication communities within the region. TELMIN provides ministerial policy direction for ASEAN cooperation in ICT. Prior to this, telecommunication and Information Technology issues were under the purview of the ASEAN Economic Ministers Meeting and the ASEAN Senior Economic Officials Meeting. As with the tradition in ASEAN, the TELMIN chair is rotated annually amongst member countries.

Besides the annual dialogue session, TELMIN also engages with ASEAN Dialogue Partners on a Plus Three basis i.e. China, Japan and Korea and on a Plus One basis with India. Since 2003, TELMIN has engaged youths from ASEAN in dialogue, as part of its annual programme. The most recent TELMIN meeting was held in Vientiane, Laos in October 2009.

TELSOM was conceptualised following the Asia Pacific Economic Cooperation Ministers of Communication and Technology meeting in Cancun, Mexico, in 2000. The TELSOM forum comprise senior telecommunications officials from ASEAN member states. It serves to supervise, coordinate and implement policies and related activities for ICT cooperation in ASEAN. TELMIN sets the directions and priorities while TELSOM acts as the coordinating arm of TELMIN. TELSOM convenes annually or when required by TELMIN. By 2001 TELSOM started to work with ATRC, which formally became its advisor.

To achieve its objectives, TELSOM works with the e-ASEAN Business Council (e-ABC) and ASEAN Dialogue Partners as well. The e-ABC was established in 2004 by TELMIN. It is a committee of industry leaders and CEO-level representatives from the private sector. The council provides feedback and advice on ICT policy and regulatory issues. It collates feedback from the business community by organising forums, discussions, roundtable discussions and other networking activities. It submits its report to TELMIN annually. However, e-ABC is self-funded and conducts its own meetings.

ATRC was formed in July 1995 by the ASEAN telecommunications regulators. ATRC was then not formally linked to ASEAN but it was subsequently roped in as an advisor to TELMIN in 2001. According to its website, the ASEAN CONNECT, the ATRC Chair is rotated

annually amongst its members and it is customary for the incoming chair to host the annual meeting. The 15th ATRC (2009) meeting was held in Chiang Rai, Thailand. The main functions of ATRC are:

- To organise discussions and formulate policies, strategise and regulate issues in telecommunications pertaining to the telecommunications administration of the ASEAN nations
- Identify and promote potential areas for cooperation in telecommunications and to facilitate the exchange of information in these areas through activities such as seminars, training and workshops

Mechanisms

Over the last 10 years, several agreements and action plans have been developed, implemented and renewed in the interests of realising an ASEAN Information Society. The most recent agreement made by TELMIN is the 'Vientiane Declaration on Promoting the Realisation of Broadband Across ASEAN' in October 2009 (please refer to the appendix for a list of ASEAN agreements, initiatives and documents).

TELMIN met in Vientiane on 16 October 2009 to promote an ASEAN-wide broadband initiative, which would further enable ICT as a 'major empowering and transformative force in the ASEAN community building process.'

This document, which is known as the 'Vientiane Declaration on Promoting The Realisation of Broadband Across ASEAN' outlines its intentions to construct an ASEAN broadband infrastructure, which is the supposed next-generation digital telecommunition network that could deliver digitalised data further and faster.

In addition, TELMIN also called for the development of a strategic document, the ASEAN ICT Masterplan 2015, which would reinforce the role of ICT for ASEAN integration. TELSOM was tasked to prepare the document in time for consideration at its next meeting, which will be held in Malaysia in 2010. It was decided that the document should aspire to the vision of 'Towards an Empowering and Transformational ICT: Creating an Inclusive, Vibrant and Integrated ASEAN'.

The Vientiane Declaration is one of a series of TELMIN's latest initiatives and agreements. The other initiative is the 'ICT for Disaster Mitigation'. TELSOM was tasked to offer recommendations on how ICT could be used to further enhance disaster relief communications in emergency situations and relief operations, as well as in early warning systems.

Previous ASEAN mechanisms on ICT include the Hanoi Plan of Action (1999), ASEAN Plan of Action on Science and Technology (2001-2004), Brunei Action Plan (2006) and the ASEAN Plan of Action on Science and Technology (2007-2011).

Over the years, in addition to the ASEAN broadband initiative, these mechanisms have led towards the formulation of other initiatives such as the ASEAN ICT Fund, ASEAN Computer Emergency Response Teams (CERTs) and the ASEAN Connect.

The first, the ASEAN ICT Fund, was established in 2004 with an initial sum of US$ 5 million dollars. The fund was meant to finance the ICT work programme which comprise activities, programmes, projects and events in the telecommunications and IT areas. The emphases of these programmes are on ICT cooperation and can be broadly categorised into policymaking and development, and information and knowledge sharing.

The second, the ASEAN Connect, is a website portal which provides publicly accessible data statistics and indicators, analyses of initiatives and other information relating to the e-ASEAN project. Under the ASEAN Certs initiative, individual countries will set up their respective national computer incident response teams with the objective of protecting their national information infrastructures. In 2004, TELMIN developed a Standard Operating Procedure for the purpose of information sharing amongst ASEAN Certs. It is an attempt to formulate a regional response towards cyber threats. In 2006 and 2007, ASEAN Certs conducted two joint exercises to assess their level of emergency preparedness. These exercises were named ASEAN Computer Emergency Response Team Incidence Drills - ACID I and ACID II.

However, cybersecurity is just one of the issues that could threaten the success of the e-ASEAN project. If ASEAN is to realise the ideals as outlined in the 'ASEAN Vision 2020', then the issue of the 'digital divide' and therefore by implication, poverty, must be addressed with as much rigour.

^ To the top

Poverty in Southeast Asia

According to the United Nations (UN), about 1.6 billion people do not have access to electricity while almost half the world, or over three billion people, live on less than US$ 2.50 a day. According to a 2008 World Bank (WB) report, Asia accounts for approximately half

of the world's poor. Out of a population of 1.8 billion, 54 per cent are considered extremely poor or vulnerable to poverty. Asia also has one of the highest illiteracy rates in the world.

Although the WB report shows that the Southeast Asia (SEA) region has managed to reduce the number of the extremely poor from 192.9 million to 93.4 million between 1981 and 2005, there is a significant degree of income inequality, with most people still vulnerable to poverty. In fact, the report went on to suggest that social development and growth appears to be 'limited on inclusiveness', which is perhaps an euphemism for unequal distribution of wealth. This is also one of the explanations that can be drawn upon to theorise about the widening income gap as experienced by a number of countries, developing and developed alike. In 2005, 53.8 per cent of the population in Indonesia still lived on US$ 2 a day, with 45 per cent in the Philippines, and 50.5 per cent in Vietnam. Thailand and Malaysia were the two countries highlighted as being the most successful in eradicating extreme income poverty within the same period. Approximately 0.5 per cent and 0.4 per cent of the population in Malaysia and Thailand respectively are considered extremely poor.

Looking ahead, the WB report concluded that the region will not be free of poverty by 2020 unless economic growth and wealth distribution are spread more evenly. The WB estimated that in SEA, more than two-thirds of the population in Cambodia and Laos, about half of the population in Indonesia, Philippines and Vietnam, and less than 10 per cent of the population in Malaysia and Thailand, will be living on less than US$ 2 a day.

^ To the top

Digital Divide

The UN International Telecommunication Union's (ITU) latest report on the global ICT industry, *The World in 2009: ICT Facts and Figures*, revealed that global mobile subscriptions and mobile broadband subscriptions would reach 4.6 billion and 600 million respectively by the end of 2009. Furthermore, the report showed that more than a quarter of the world's population was online and connected to the Internet in 2009.

However, one unfortunate consequence of the surge towards this 'e-society' – an ICT-driven economy – is the repercussion on those who have been left behind in the race. Samir Al-Basheer, Director at the ITU, warned that despite the enormous growth in the use of ICT-based applications, there is still a large digital divide between the societies of developed and developing economies.

'We are encouraged to see so much growth across developed and developing regions, but there is still a large digital divide, and an impending broadband divide, which needs to be addressed urgently,' said Basheer in a press release issued by the ITU.

The Organisation for Economic Co-operation and Development (OECD) refers to the 'digital divide' as the gap between individuals and household consumers across different geographic locations and socio-economic levels with opportunities to access ICT and their use of the Internet. This divide occurs when opportunities are limited by individual and household income, education, age, gender and linguistic backgrounds, according to some experts. Others consider class, gender, age and poverty as the determinants.

To Korupp and Szydlik (2005), the issue of the digital divide reflects the emergence of a new form of social inequality which exists on two different levels. On the first level, the digital divide refers to issues of access to computers and the Internet, while the second level refers to the user profile of new technologies. Thus, it can be surmised that, in their opinion, the digital divide occurs at the level of access versus non-access. They also observed that the digital divide occurs due to the way technology diffuse into society, that is, in a systematic rather than haphazard manner. Elaborating further, technology diffuse vertically along socio-economic lines beginning from the highest to the lowest strata in society. Furthermore, they also observe that technology makes its way into private households when it is also used at work. They surmise that 'inequalities in the labour market are transmitted into private households and reinforces computer access disparity.'

^ To the top

Technological Determinism

Another issue worth pointing out is the tendency in mainstream narratives to suggest that technology would bring about social and economic developments. The argument which is often made is that the implementation of ICT and its application in society would empower the consumers as information and data become more readily available. However, upon deeper analysis, such narratives appear simplistic because it posits socio-economic development as a direct function of technology. Instead, one may fault such narratives for its reductionist tendencies on two points.

Firstly, it can be argued that the impact of technology on society is dependent on *how* technology is *managed*, as opposed to how it is *consumed*. Technology should be made available and affordable for all levels of society. In fact, the price of technological products and

services should be pegged below the level of the national average income so that it may appeal to a larger consumer base. In an 'Information Society', the Internet should be treated as a staple good where demand is resilient towards price changes. Otherwise, it would remain a luxury for the affluent and priviliged. After all, in such a society, information is a necessary precondition for human security.

Secondly, it can also be argued that the impact of technology on society is determined by how society conditions itself as a consumer. This point places society as an *active* rather than as a *passive* consumer. For instance, a society which places a high premium on the humanistic aspects of 'Knowledge' would create the necessary social services and support structure to ensure that basic 'Information' services are provided as public goods.

In any case, both these points argue that technology is not the *only* determinant of socio-economic development. Instead, technology is at best a facilitator or enabler of change. Thus, socio-economic development may not necessarily happen simply with the introduction and consumption of technology. Technology in an Information Society requires policies which are pro-poor and pro-development for all.

^ To the top

Final Discussion: Technology for Whom?

Much has been said and written about e-society and how ICT would serve as the driving force behind the international community's surge towards an integrated global society. Goverments throw their weight behind this ideal and mobilise international and regional organisations to lay the technological groundwork towards achieving it. Most narratives suggest that an integrated ICT world would bring about social and economic development. People would become empowered and more intelligent in decision-making while governments could formulate more informed policies, and that the decision-making process would become more transparent and consultative. At the same time, bureaucracies would become more effective and responsive in delivering public services. Democracy in the Information Society is one which is of a higher quality, as most would argue.

Indeed, the world is 'shrinking' but perceptions of spatial dimensions are subjective. An interconnected world leaves people who are not plugged in, outside of it. Furthermore, computers and broadband connections are irrelevant for those who are energy-poor or deprived.

ASEAN's attempt to spur future economic growth in the region by riding on the ICT wave resonates with the current global trend as highligted by the ITU report. Inevitably, the world is shrinking but only in cyberspace. Out of the global human population, there are still 1.6 billion who do not have access to electricity and therefore are also excluded from cyberspace. In Southeast Asia, 93.4 million people are on the 'wrong' end of the income gap. Nevertheless, the ASEAN Minister for TELMIN is privy to the issue of poverty and the digital divide. Reducing the digital divide has, right from the beginning, been a prominent feature of the e-ASEAN agenda. In fact, it is a recurring theme in most of the agreements and initiatives since TELMIN was inaugurated in 2001. Nevertheless, it is worth noting that the success of the e-ASEAN project lies in mitigating the digital divide as much as it does with implementing the various TELMIN agreements and initiatives.

^ To the top

Selected Bibliography

ASEAN Telecommunication Regulators' Council, ASEAN CONNECT. Available at <http://www.aseanconnect.gov.my/index.php?option=com_wrapper&Itemid=59>.

Hew, Denis, 'Towards an ASEAN Economic Community by 2020: Vision or Reality?' *Viewpoints*, Institute of Southeast Asian Studies, 16 June 2003.

e-ASEAN Business Council. Available at <http://www.eabc.biz/>.

'The World Bank's New Poverty Data: Implications for the Asian Development Bank', Asian Development Bank, November 2008.

'The e-ASEAN Initiative', Association of Southeast Asian Nations (ASEAN), 2009. Available at <http://www.aseansec.org/7659.htm>

'9th ASEAN Telecommunications and Information Technology Ministers Meeting and Its Related Meetings with Dialogue Partners', Joint Media Statement, ASEAN, 16 October 2009.

'Building e-Learning Culture towards Knowledge-based ASEAN, Fourth ASEAN Telecommunications and IT Ministers Meeting (4TH ASEAN

TELMIN)', Joint Media Statement, ASEAN, 5 August 2004.

Korupp, Sylvia E., and Marc Szydlik, 'Causes and trends of digital divide', *European Sociological Review*, vol 21., no. 4. September 2005, pp. 409-22.

'Information Technology Outlook', OECD, Paris, 2002.

Salazar, Lorraine C., and Shelah Lardizabal-Vallarino, 'Review of subregional associations: Association of Southeast Asian Nations', *Digital Review of Asia Pacific 2007-2008*, Sage Publications, 2008.

^ To the top

Appendix: ASEAN Telecommunications and IT Ministers' Meeting (TELMIN)

Agreements

- e-ASEAN Framework Agreement, 2000.
- Ministerial Understanding on ASEAN Cooperation in Telecommunications and Information Technology, 2001.
- ASEAN Sectoral Integration Protocol for e-ASEAN, 2004.
- Vientiane Action Programme on Telecommunications and IT Sector, 2004.
- Ha Noi Agenda on Promoting Online Services and Applications to Realize e-ASEAN, 2005.
- Brunei Action Plan, 'Enhancing ICT Competitiveness: Capacity Building', 2006.
- Plan of Action to Implement the Beijing Declaration on ASEAN-China ICT Cooperative Partnership for Common Development, 2007.
- Siem Reap Declaration on Enhancing Universal Access of ICT Services in ASEAN, 'ICT Reaching out to the Rural', 2007.
- Bali Declaration in Forging Partnership to Advance High Speed Connection to Bridge Digital Divide in ASEAN, Bali, Indonesia, 2008.
- Vientiane Declaration on Promoting the Realisation of Broadband Across ASEAN, Vientiane, 15 October 2009.

Initiatives

- ASEAN Information Infrastructure (AII).
- ASEAN-China Information Superhighway.
- Greater Mekong Sub-region (GMS) Information Superhighway Project.
- Hanoi Plan of Action 1999-2004 (on Information Technology and Infrastructure).
- ASEAN Connect website, 2003.
- ASEAN ICT Fund, 2004.
- e-ASEAN Business Council, 2004.
- ASEAN ICT Centre, 2004.
- National Computer Emergency Response Team (CERTS,2004/2005).
- Vientiane Action Programme on Telecommunications and the IT Sector.
- Roadmap for Integration of e-ASEAN sector.
- ASEAN ICT Focus 2005-2010.
- ASEAN Computer Emergency Response Team Incidence Drills (ACID), 2006.
- ASEAN Computer Emergency Response Team Incidence Drills (ACID II), 2007.
- ASEAN-wide Broadband Initiatives (announced in 2009).

Documents

- Hanoi Plan of Action 1999-2004.
- ASEAN Plan of Action on Science and Technology 2001-2004. Extended to 2006.
- ASEAN ICT Focus 2005-2010 (2005).
- ASEAN Plan of Action on Science and Technology 2007-2011.
- ASEAN ICT Master Plan 2015 (announced in 2009).
- ASEAN Vision 2020.

^ To the top

Pitsuwan in May 2008. The Centre maintains research in the fields of Climate Change, Energy Security, Health Security, as well as Internal and Cross Border Conflict. It produces policy-relevant analyses aimed at furthering awareness and building capacity to address NTS issues and challenges in the Asia Pacific region and beyond. The Centre also provides a platform for scholars and policymakers within and outside Asia to discuss and analyse NTS issues in the region.

In 2009, the Centre was chosen by the MacArthur Foundation as a lead institution for the MacArthur Asia Security Initiative, to develop policy research capacity and recommend policies on the critical security challenges facing the Asia-Pacific.

The Centre is also a founding member and the Secretariat for the Consortium of Non-Traditional Security (NTS) Studies in Asia (NTS-Asia). More information on the Centre can be found at www.rsis.edu.sg/nts