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ENHANCING ASEAN'S CONNECTIVITY

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ENHANCING ASEAN'S CONNECTIVITY

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FOREWORD

ASEAN is the only organization of its kind in the vast region that stretches from the Indian Subcontinent to the Kamchatka Peninsula. Geographically, it covers Southeast Asia, where there are more seas and islands than continuous land mass. In the past four decades, economic development and trade have flourished impressively amongst the ten ASEAN member states, culminating in a combined Gross Domestic Product (GDP) of nearly US\$2 trillion in 2011. Going forward, future economic growth and prosperity will depend on greater and improved connectivity not only within ASEAN, but between ASEAN and its trading partners as well. A well-connected ASEAN with good connections to the wider region will create a much larger and integrated market with more production and distribution networks. This will help to realize the full potential of the ASEAN Free Trade Area (AFTA), as well as the various ASEAN Plus One Free Trade Agreements (FTAs), and the envisioned Regional Comprehensive Economic Partnership.

However, the imperative for enhancing connectivity in ASEAN is not merely economic. More importantly, ASEAN is building a community from among the diverse nations of Southeast Asia. To do so, they must have mutual trust and understanding, and in turn develop greater cohesion and solidarity. If ASEAN remains separated by the mountains and seas, and if its people cannot interact easily with each other, the feeling of togetherness and the sharing of a common future cannot be forged and developed. More time and attention must therefore be given to one another, and it is through greater connectivity that this can be achieved.

History is full of remarkable success stories about how diverse nations were connected to develop trade and other relations across vast distances.

For example, the Roman Empire had more than 400,000 kilometres of roads, covering more than one hundred provinces around the whole of the Mediterranean Sea. Of these, 80,500 kilometres were paved roads, allowing the Roman authorities to reach a considerably extended territory. The different multiracial communities within the Roman Empire were able to leverage on each other's strengths to expand economic activities, especially in trade. Another example would be the Persian Empire, which built roads and canals to link the land mass from the Persian Gulf to the Black and Mediterranean Seas. The most famous of these Persian construction projects was the "Royal Road" that stretched 2,700 kilometres, from the south-western part of present-day Iran to the north-western coast of Turkey. We also have the Mongols who effectively organized their transcontinental communications and connectivity through their unique "Yam" postal system, which stretched on land from the Pacific Ocean to Eastern Europe. In modern times, we have the Asian Highway Network developed by UNESCAP, which covers more than thirty-two countries across the Asian continent to Europe, and includes more than 140,000 kilometres of vehicular roads. Big countries like the United States of America and China have also built extensive road networks to connect their citizens over vast territories. In India, there are as many as 4.32 million kilometres of roads and highways, connecting the huge subcontinent as a unified state.

ASEAN is of course not building any empire. What the ASEAN Leaders do wish to sustain is the economic competitiveness of their region, and to provide a strong foundation for continued peace and prosperity in Asia. History has taught us that connectivity is essential in this endeavour, and this can explain why the ASEAN leaders have embarked on the purposeful development of the necessary physical, institutional and people-to-people links to support ASEAN's integration. The key to this concerted effort was the ASEAN Connectivity initiative, which was first endorsed by the ASEAN leaders in October 2009. This was followed by the landmark Master Plan on ASEAN Connectivity that was formulated and adopted a year later. Today, the challenge for ASEAN is to implement the ambitious elements in this Master Plan. If we can accomplish a 50 per cent implementation of the Master Plan by 2015, ASEAN will already be well positioned for an unprecedented era of regional economic expansion and progress.

In fact, individual pieces of physical infrastructure and frameworks are already in place, and what is urgently needed is to connect the

respective existing facilities and projects. There is also the other challenge of reconciling the different mindsets and priorities of the different ASEAN member states, which thus far have complicated the implementation of the Connectivity initiative. Nevertheless, the will of the political leadership remains evident, and a constant monitoring effort to supervise and review the well-thought through plans should produce a level of connectivity that will be the basis for a strong ASEAN Community.

Another big challenge for ASEAN is the ability to mobilize the necessary resources to sustain the implementation of the Master Plan on ASEAN Connectivity. In the wake of global economic difficulties and financial woes, ASEAN's major trading partners are encountering their own fiscal and public policy problems. Inevitably, there are not much extra resources to go around, let alone provide completely for ASEAN's connectivity projects. Accordingly, ASEAN must develop creative and innovative ways to mobilize resources from all potential donors and collaborators to execute its Connectivity plan. This also means that it will be necessary for ASEAN to go beyond the concept of "other people's money" to develop its own agenda. In the early days of ASEAN's development, the organization was an aid recipient, and the traditional donors from the West were happy to help in the development of the member states. Today, the more developed economies of ASEAN must be prepared to make increased contributions to the Connectivity initiative to incentivize other donors and collaborators to provide sufficient funding for the relevant projects. The private sector and other capable non-governmental organizations should also be roped in, through mutually beneficial policy measures and frameworks. The institutional capacity of the ASEAN Secretariat and other ASEAN-centric bodies also need to be strengthened to enable them to play useful roles in resource mobilization.

ASEAN is fortunate in having its Connectivity initiative supported by its major trading partners, who see a more connected ASEAN as bearing positive results for their respective national interest *vis-à-vis* the region. The immediate neighbours surrounding ASEAN will reap significant economic benefits, particularly increased trade, with ASEAN's member states. Such benefits will not just help the growth of ASEAN but also its immediate neighbours, and will contribute to broader initiatives for global economic development. At the same time, it is also important to manage the expectations of ASEAN's partners, particularly when the specific priorities for ASEAN and its friends may not be completely

aligned. In this respect, the various ASEAN-centric mechanisms, such as the ASEAN Plus Three, the East Asia Summit, and the ASEAN Regional Forum, should help and facilitate the efforts on both sides to map out mutually beneficial time schedules and cooperative projects.

Connectivity is the basis for realizing a community from among the different existing cultural, social, economic and political systems in Southeast Asia. To this end, the implementation of the Master Plan on ASEAN Connectivity must require a significant expansion of capacity-building programmes in the region. The human capital of ASEAN must be equipped with the necessary knowledge and wherewithal to undertake the Connectivity initiative in a concerted and sustained manner. Leadership and stewardship continue to be important, but specific frameworks and institutions have equally important roles to play as well, given the current paucity of ASEAN-wide organizations that could help generate enthusiasm and practical projects to push the Connectivity agenda forward. As the momentum to strengthen connectivity increase, basic issues of ASEAN's organizational structure and mandate must also be addressed. The best champion for ASEAN Community building and the implementation of ASEAN Connectivity is in fact the ASEAN Secretariat based in Jakarta. The Secretary-General of ASEAN must be empowered to take the lead and harness all available technology and resources to deliver the ASEAN Connectivity initiative. He should also work closely with the ASEAN Connectivity Coordinating Committee to streamline efforts and clear identified roadblocks as early as possible.

For now, it is imperative that ASEAN steps up the pace of implementation, and spur the momentum needed to accomplish the identified prioritized projects in the Connectivity initiative. ASEAN has to stay focused and keep to its consistent and systematic building block approach, harvesting low-lying fruits where it can — such as completing the various “missing links” in the physical sectors like road networks, rail infrastructure and a regional power grid — before steadily progressing to new targets. More efforts should be undertaken to lower, if not remove, the existing barriers to trade, as well as to align national procedures, rules and regulations to rigorous, world-class standards. The private sector also needs to be better informed and more involved through tangible and bankable public-private partnerships.

The people-to-people factor of ASEAN Connectivity needs to be particularly emphasized. More effort and resources should be placed in youth exchanges, cultural programmes and tertiary institutional

collaborations, which thus far have proven to be useful strategies to help promote the growth of cultural and educational networks and linkages among our people. The easing of visa requirements for ASEAN nationals travelling amongst ASEAN member states meanwhile would not only be a boon for the regional tourism industry, but would also help to facilitate greater intra-ASEAN people mobility and interaction. Looking ahead, it will be useful for ASEAN to consider moving the Connectivity initiative from a people-oriented to a people-centred one, with the necessary reviews and stocktake conducted to see if the people have benefitted from the various measures undertaken, and if more can be done. Here, the ASEAN Secretariat and National Coordinators are especially well-placed to carry out public outreach and feedback surveys to better involve the people of ASEAN and give them a sense of ownership to ASEAN Connectivity.

This book, *Enhancing ASEAN Connectivity*, is an excellent example of “people-to-people” sharing as it brings together the experts and thinkers from various ASEAN member states (as well as the partners of ASEAN) to discuss and review the cooperation and collaboration needed to achieve the goals laid down in the Master Plan. This book is also a useful reference to policy-makers across ASEAN, who could use the studies compiled in it to fine-tune their programmes and policies where necessary. The publication of this book is timely. It will stimulate an assessment of the current state of the Connectivity initiative and identify the implementation gaps that can be addressed by the stakeholders. Indeed, a number of chapters in *Enhancing ASEAN Connectivity* have made considerable effort in this regard, having looked at issues like capacity, bandwidth, infrastructural disparities and private sector financing.

An important dimension that *Enhancing ASEAN Connectivity* addresses is Information and Communication Technology (ICT) connectivity. The significance of ICT is two-fold as it is not only a key driver in the modern economy surrounding us, but it is also the medium of personal communication and messaging today, particularly for the younger generation. How ICT connectivity is developed within each ASEAN member state and the grouping as a whole will determine the future connectedness of this region and its people with the rest of the world. The impact and reach of ICT is also considerably greater and more immediate compared to physical roads and highways, as people can save costs and travelling time to communicate with one another across borders. One chapter of this book also noted that the youth of ASEAN are

at the forefront of the “global social network revolution”. Looking ahead, it will be useful to consider how the creativity and passion of the young people can further energize the Connectivity agenda in ASEAN.

In conclusion, ASEAN Connectivity has been widely billed as the twenty-first century “passport” to regional economic growth, but what will clearly, and must, remain core is its contribution to the viability and cohesion of ASEAN. As a comprehensive, ambitious and far-reaching endeavour, just the implementation of the Connectivity initiative alone will bring the ten ASEAN member states and its people closer than ever before, as they unite towards a common purpose and prepare collectively for a positive future. Mutual trust and understanding will grow and strengthen, and a deeper sense of belonging to a regional “community” will be forged. This, I believe, is the true essence and vision of ASEAN Connectivity, and is something that every one of us must aspire towards.

Ong Keng Yong
Singapore High Commissioner to Malaysia
Secretary-General of ASEAN (2003–07)

MESSAGE

I have a couple of thoughts on connectivity in the Association of Southeast Nations, or ASEAN.

The first is that an ASEAN Community, including an ASEAN Economic Community, which ASEAN has proclaimed as a goal, cannot be realized without connectivity, without the connectivity as comprehensively conceived in the Master Plan on ASEAN Connectivity. Connectivity is essential for achieving ASEAN's objectives of closer political cohesion, deeper economic integration, and more effective regional cooperation. Connectivity has to be attained comprehensively, in all its three inter-dependent dimensions.

The leaders of the ASEAN member states, gathered at their annual summit meeting in Hanoi, adopted the Master Plan on 28 October 2010. In it, connectivity has three interconnected components — physical, institutional and people-to-people. Physical connectivity is the infrastructure required to link the ASEAN countries together, mainly in terms of transport, information and communications technology, and energy. Institutional connectivity consists of the measures agreed upon and implemented by governments to facilitate trade and investments within the region. People-to-people connectivity means personal exchanges through education, culture and tourism.

This is the second idea: that these three elements of the Master Plan are interrelated, interdependent and interconnected. Infrastructure is of little use if institutional, legal, practical and other barriers prevent trade, investment, information and people from flowing more freely over it. Trade, investment, information and people cannot flow more freely or flow at all if the requisite infrastructure is not improved or built. Infrastructure will not be built or improved and facilitating measures

will not be agreed upon and carried out if people do not have contact with and know one another across national boundaries.

It is with these in mind that one should regard the chapters in this volume and the ASEAN Roundtable 2011 at which they were presented.

Rodolfo C. Severino
Head, ASEAN Studies Centre
Institute of Southeast Asian Studies
Secretary-General of ASEAN (1998–2002)

PREFACE

This book is a result of the ASEAN Roundtable 2011 on “Enhancing ASEAN’s Connectivity” organized by the ASEAN Studies Centre (ASC) at the Institute of Southeast Asian Studies (ISEAS), along with the Konrad Adenauer Stiftung (KAS) on 5 May 2011 at Shangri-La Hotel, Singapore. The primary objective is to examine the current state of infrastructure development across ASEAN and to discuss how greater connectivity can contribute to the process of ASEAN economic integration. The ASC hopes that the roundtable would produce a set of policy recommendations that would help ASEAN to address the national- and regional-level challenges to build a robust infrastructure and to suggest approaches to resource mobilization for this purpose.

The roundtable focused on four areas: *transportation* for the movement of goods and people, *telecommunications* for business and people, *information and communication technology (ICT)* for businesses, education and other developments in the region, and *energy infrastructure* for better use and distribution of resources.

Road, rail, water and aviation corridors assume importance for the movement of goods and people. The development of transnational transport projects, such as the ASEAN Highway Network and the Singapore–Kunming Rail Link, is also key to realizing a seamless ASEAN. In the dynamic global telecommunications environment, ASEAN needs to promote telecommunications as a fundamental infrastructure in accomplishing its vision of an AEC. Given the importance of the Internet in business and other economic and social development, it is crucial to promote the utilization of ICT. The absence of such linkages will threaten to accentuate the already existing gaps between

different countries both within ASEAN and around the world. Finally, integrated power grids and gas pipelines for ASEAN countries aim to improve energy efficiency and develop indigenous energy resources. It is expected to bring huge economic efficiency, creating opportunities to expand the power market, stimulate investment, and contribute to member countries' energy security.

At the end of the one-day roundtable discussion, it was concluded that:

1. For ASEAN, to build an economic community, even though the tariff cutting component is on track on paper, there exist many non-tariff barriers which would lower the potential benefits under the economic integration. One such barrier is the lack of physical and personal connectivity across the ASEAN region. Hence, it is a crucial time for ASEAN to enhance regional connectivity.
2. Greater connectivity results in better cooperation not only among the member countries, but also between the ASEAN region and the rest of the world. It would also help in the multifaceted growth of the region and would significantly narrow the development gap within ASEAN.
3. In ASEAN, the physical infrastructure, particularly in the less developed members, is characterized by structural weaknesses — low responsiveness to users, organizational inefficiencies, insufficient funding, heavy dependence on official development assistance, low foreign direct investments, and lack of environmental awareness. Most ASEAN countries are also short of the “soft” infrastructure (ICT), which are important prerequisites for the next stage of development. This calls for the upgrading of existing infrastructure, the construction of new infrastructure and the harmonization of regulatory framework.
4. The MPAC can potentially transform the ASEAN region, providing the conditions for a single market and production base. It is an expensive initiative, and funding remains a major challenge. The private sector should be actively involved as a number of infrastructure projects identified in the MPAC are still waiting for substantial investment. Hence, what is needed is to develop economically viable and bankable projects.

This book is divided into three parts. The first part contains three chapters which present an overview of ASEAN's state of physical connectivity and challenges in building better infrastructure. The second part hosts a collection of chapters that discuss specific issues pertaining to each kind of physical connectivity — a) transportation infrastructure; b) telecom connectivity; c) ICT, and d) energy infrastructure. The third part covers the issues in implementing the MPAC and gives concrete policy recommendations.

The book has several distinguished writers from academia, private sector and government bodies: Dato' Michael Yeoh (Asian Strategy and Leadership Institute), Nguyen The Phuong (Ministry of Planning and Investment, Vietnam), Fukunari Kimura (ERIA), Bambang Susantono (Transportation Department, Republic of Indonesia), Andre Levisse (McKinsey & Company), Lee Yu Kit (IBM), Emmanuel C. Lallana (Ideacorp), Nguyen Manh Hung (ASEAN Centre for Energy), Tilak K. Doshi (Energy Studies Institute) and Somsak Pipoppinyo (ASEAN Secretariat). The ASC would like to thank all of them for making the roundtable a success and this publication possible.

The ASC would also like to thank Ambassador Pradap Pibulsonggram (Thailand's Representative to the ASEAN Connectivity Coordinating Committee, Ministry of Foreign Affairs of Thailand), Dr Denis Hew (Director, Policy Support Unit, APEC, Singapore) and Dr K. Venkat Ramani (Senior Advisor for ASEAN-UN Partnership, ESCAP, Thailand), who shared their thoughts and research during the roundtable.

On behalf of Mr Rodolfo C. Severino, head of the ASC, we would like to sincerely thank Ambassador K. Kesavapany for his encouragement and support. We also thank Dr Wilhelm Hofmeister, Director, Regional Program "Political Dialogue with Asia", Konrad Adenauer Stiftung, Singapore, for his interest in the ASEAN Roundtable 2011. We are grateful that both Ambassador K. Kesavapany and Dr Hofmeister delivered the opening remarks at the roundtable, highlighting the need for better infrastructure in ASEAN to realize its ultimate goal of "single market and production base".

Personally, I would like to thank H.E. Ong Keng Yong for writing the foreword for this volume. I would like to thank Mr Rodolfo Severino who oversaw the whole project and shared his insights

for enrichful discussion. I was assisted by Lily Koh and Hnin Wint Nyunt Hman at critical junctures of the roundtable and production of this book and I thank them for that. Last, but not least, I thank the staff of the ISEAS Publications Unit, especially its head, Mrs Triena Ong, for their professionalism in getting this book published. Finally, I wish to thank the contributors of the volume who made the conference a success and the publication of its material possible.

I hope this book will help the ASEAN stakeholders and other interested public in understanding ways to strengthen ASEAN's connectivity both internally and externally. I hope that the policy-makers are benefited by the recommendations.

Sanchita Basu Das
Editor

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LIST OF ABBREVIATIONS

ABC	ASEAN Broadband Corridor
ADB	Asian Development Bank
AEC	ASEAN Economic Community
AFTA	ASEAN Free Trade Area
AGC	ASCOPE Gas Centre
AHN	ASEAN Highway Network
AIF	ASEAN Infrastructure Fund
APAEC	ASEAN Plans of Action on Energy Cooperation
APG	ASEAN Power Grid
APSC	ASEAN Political Security Community
ASAM	ASEAN Single Aviation Market
ASCC	ASEAN Socio Cultural Community
ASCOPE	ASEAN Council on Petroleum
ASEAN	Association of Southeast Asian Nations
ASEAN+3	ASEAN, China, Japan and South Korea
ASEAN+6	ASEAN+3, India, Australia and New Zealand
ASTP	ASEAN Strategic Transport Plan
ATAP	ASEAN Transport Action Plan
ATM	ASEAN Transport Ministers
AVLRC	ASEAN Virtual Learning Resource Centres
BIMP-EAGA	Brunei–Indonesia–Malaysia–Philippines East ASEAN Growth Area
BOO	Build-Own-Operate
BOT	Build-Operate-Transfer
CADP	Comprehensive Asia Development Plan
CCC	Connectivity Coordinating Committee
CGIF	Credit Guarantee Investment Facility

CLMV	Cambodia, Laos, Myanmar and Vietnam
EE&C	Energy Efficiency and Conservation
ERIA	Economic Research Institute for ASEAN and East Asia
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GMS	Greater Mekong Subregion
GNI	Gross National Income
GSM	Geographical Simulation Model
HAPUA	Heads of ASEAN Power Utilities/ Authorities
ICT	Information and Communication Technology
IMT-GT	Indonesia-Malaysia-Thailand Growth Triangle
LCCs	Low Cost Carriers
LPI	Logistics Performance Index
MNEs	Multi-National Enterprises
MPAC	Master Plan on ASEAN Connectivity
MRAs	Mutual Recognition Arrangements
MRC	Mekong River Commission
NTB	Non-tariff barriers
ODA	Official Development Assistance
PPP	Public-Private Partnership
Ro-Ro	Roll-on/Roll-off
SEZs	Special Economic Zones
SKRL	Singapore-Kunming Rail Link
TAGP	Trans-ASEAN Gas Pipeline
TELMIN	Telecommunications and Information Technology Ministers
TELSOM	Telecommunications and Information Technology Senior Officers Meeting
TTRs	Transit Transport Routes
USD	US Dollar
UNCTAD	United Nations Conference on Trade and Development