REGIONAL CONNECTIVITY FOR SHARED PROSPERITY



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ST/ESCAP/2693

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PRELUDE

Connectivity is a cornerstone of regional economic cooperation and integration – and has become a major priority for the countries of Asia and the Pacific, especially in the context of efforts to find new drivers of regional economic growth, and to create additional domestic and aggregate regional demand.

To best unlock the potential of ever-more closely interlinked production networks and value chains, a broader perspective on connectivity will be key. This kind of connectivity should not be considered sector by sector, but rather as part of an integrated whole, encompassing the development of corridors of prosperity through networks of trade, transport, ICT, energy, people, and technology.

This 2014 ESCAP's annual *Theme Study: Regional Connectivity for Shared Prosperity* explores strategies for strengthening regional connectivity.

ACKNOWLEDGEMENTS

This report was prepared under the overall direction and guidance of Shamshad Akhtar, Under-Secretary-General of the United Nations and Executive Secretary of the Economic and Social Commission for Asia and the Pacific (ESCAP), and under the substantive direction of Dong-Woo Ha, Director of the Transport Division. The core team of the Division who contributed substantively included: Pierre Chartier, Sandeep Raj Jain, Fedor Kormilitsyn, Yuwei Li, Peter O'Neill, A.S.M. Abdul Quium, Thanattaporn Rasamit, Madan B. Regmi, Heini Suominen, Mathieu Verougstraete and Jenny Yamamoto.

ESCAP staff who contributed substantively include: Rae Kwon Chung (Director), Masakazu Ichimura, Kohji Iwakami, Sungmin Kim, Hongpeng Liu, Aneta Nikolova, Kareff Rafisura, Hitomi Rankine, Donovan Storey and Sergey Tulinov of the Environment and Development Division; Shamika N. Sirimanne (Director), Tiziana Bonapace, Remi Lang and Dominic Leong of the Information and Communications Technology and Disaster Risk Reduction Division; Nanda Krairiksh (Director), Patrik Andersson, Chol O Han, Maren Jimenez, Manuel Mejido, Ermina Sokou and Vanessa Steinmayer of the Social Development Division; Krisana Boonpriroje, Rikke Munk Hansen, Eric Hermouet, Nongnuch Hiranyapaisansakul, Marko Javorsek, Marisa Limawongpranee, Sean Lovell, Nixie Mabanag, Teerapong Praphotjanaporn and Panpaka Supakalin of the Statistics Division; Ravi Ratnayake (Director), Witada Anukoonwattaka, Yann Duval, Mia Mikic and Heini Salonen of the Trade and Investment Division; Iosefa Maiava (Director), Sanjesh Naidu, Siope Ofa and David Smith of the ESCAP Pacific Office; Kilaparti Ramakrishna (Director), Yejin Ha and Sangmin Nam of the ESCAP Subregional Office for East and North-East Asia; Nikolay Pomoshchnikov (Director) and Bekhzod Rakhmatov of the ESCAP Subregional Office for North and Central Asia; and Nagesh Kumar (Director) and Matthew Hammill of the ESCAP Subregional Office for South and South- West Asia.

Valuable advice, comments and inputs were received from staff of the United Nations who include: Sukti Dasgupta and Phu Huynh of the International Labour Organization.

The following consultants provided inputs: Prabir De, Professor and Coordinator of ASEAN-India Center, Research and information System for Developing Countries, India; and Mark Q. Watson, Scotland, United Kingdom.

The report benefited from extensive comments and suggestions from an eminent group of policymakers, scholars and development practitioners, acting as external peer reviewers, namely: Bakhodur Eshonov, Director, Center for Economic Research, Uzbekistan; Saman Kelegama, ExecutiveDirector, Institute of Policy Studies, Sri Lanka; Abu Saeed Khan, Senior Policy Fellow, LIRNEasia, Sri Lanka; Ashfaque H. Khan, Principal and Dean, NUST Business School, Pakistan; Tagir Khuziyatov, Deputy Vice-President for International Affairs, Far Eastern Federal University, the Russian Federation; Sangkyom Kim, Vice President, Korea Institute for International Economic Policy, Republic of Korea; Pisit Puapan, Director of Macroeconomic Analysis Division, Fiscal Policy Office, Ministry of Finance, Thailand; Rathin Roy, Director, National Institute of Public Finance and Policy, India; Peter Warr, John Crawford Professor of Agricultural Economics and Head, Arndt-Corden Department of Economics, Australian National University, Australia; John Weeks, Professor Emeritus, School of Oriental and African Studies, University of London, United Kingdom; Christian Wilk, General Manager, Metacognition Consulting, Thailand; and Shunli Yao, Director, Institute for Applied International Trade, China.

Srisakul Kanjanabus and Trygve Morset provided research assistance. The manuscript was edited by Orestes Plasencia, Robert Blackwell, Alan Cooper and John Loftus, Editorial Unit of ESCAP. The graphic design was created by Natthakhom Jira, and the layout and printing were originally provided by Clung Wicha Press and reproduced by Advanced Printing Company.

Francyne Harrigan, Katie Elles, Francesca Ross and Chavalit Boonthanom of the ESCAP Strategic Communications and Advocacy Section coordinated the launch and dissemination of the report.

CONTENTS

	Page
Prelude	iii
Acknowledgements	
Abbreviations	xi
Executive Summary	xiii
Chapter 1. Regional connectivity for shared prosperity	1
Introduction	
Connecting countries creates new opportunities for development	
Understanding "regional connectivity"	
The role of regional connectivity in supporting growth and development	
Regional integration efforts drive initial trade growth	
Emergence of regional production networks and value chains	
Explaining differences in subregional performance	
The role of trade and transport connectivity	
Economies of scale in transport, competition and non-physical barriers to tra	
New drivers of growth shaping development patterns into the future	
Trade and transport connectivity remains a priority	
ICT connectivity as an enabler and driver of growth	
Expanding the region's trade in services	12
Energy connectivity and security	13
Responding to population dynamics	15
Transitioning to knowledge-based economies	16
Regional strategies for strengthening connectivity in the ESCAP region	16
Annex I. Measuring the impact of broadband infrastructure	
on economic growth	
Chapter 2. Regional strategies for strengthening regional connectivity	23
Trade and transport connectivity	24
The status of trade and transport connectivity in the region	
Upgrading and integration of regional transport networks	25
Enhancing cooperation at border crossings	
Harnessing ICT connectivity for trade and transport facilitation	
Developing competitive regional transport and logistics services	
Information and communications technology connectivity	
The evolution of the "digital divide" in Asia and the Pacific	
Towards an Asia-Pacific information superhighway.	
Harnessing cross-sectoral synergies for infrastructure development	
Strengthening the ICT connectivity of Pacific island economies	
Energy connectivity	39

CONTENTS (Continued)

	Page
Current status of energy connectivity in the region	39
Towards an Asian Energy Highway	
The need for a strong institutional framework	44
People-to-people connectivity	45
Increasing mobility in the ESCAP region	45
Benefits and challenges of international labour migration	45
Cooperative approaches to managing international labour migrant flows	47
Strengthening knowledge networks of people and institutions	
Strengthening business networks and associations	49
Putting individuals at the heart of people-to-people connectivity	51
Chapter 3. Strengthening institutional coordination and regional cooperation	57
Strengthening institutional responses to regional connectivity	58
Coordination at the regional level	60
Statistical standards for strengthened accountability and better policymaking	63
Strengthening statistical capacity in the Asian and Pacific region	66
Regional solutions for financing regional infrastructure networks	66
Regional projects as "regional public goods"	66
Regional infrastructure funds	67
Regional Project Preparatory Facility	67
Asian Multi-donor Platform	68
Public-Private Partnerships	68
Chapter 4. Conclusions	73
References	78

BOXES

		Page
1.1	Containerization and the growth of international trade	8
1.2	Measuring the contribution of broadband to economic growth	11
1.3	Growing energy demand fuels China's regional energy connectivity efforts	14
2.1	Integrated check post at Attari, India-Pakistan border	28
2.2	ICT applications for smooth cross-border transport	29
2.3	Towards cross-border paperless trade in Asia and the Pacific	32
2.4	Impact of deregulation on aviation in the Pacific	33
2.5	Laying broadband cable along highways and railways	36
2.6	Gobitec and the Asian Super Grid	43
2.7	ICT connectivity enhances educational opportunities in the Pacific	50
2.8	The "global Argonauts" of Hsinchu, Taiwan Province of China	51
3.1	Strengthening national trade and transport coordination committees	62
3.2	Statistical connectivity in ASEAN	64
3.3	Measuring progress towards the Millennium Development Goals	64
3.4	ASEAN Infrastructure Fund: a possible "best practice" for future regional	
	infrastructure financing	68
1.1 1.2	Trade agreements in Asia and the Pacific	4
	developing countries and Malaysia	7
1.3	Growth in container throughput, selected ports in Asia	
1.4	Broadband indicators, selected Asian and Pacific economies, 2012	
1.5	Top five importers and exporters by energy resource in Asia and the Pacific, 2010 (ktoe)	
1.6	Stock of international migrants in the ESCAP region, selected years	
2.1	Progress in upgrading routes of the Asian Highway Network, 2004-2010	
2.2	Current status of the Trans-Asian Railway network, 2014.	27
2.3	A single window road map in five evolutionary stages	
2.4	Annual average growth in bandwidth vs. distribution of bandwidth added,	
	by region (2008-2012)	34
2.5	Fibre-optic ducts and conduits are placed alongside a highway in the Republic of Korea	38
2.6	Mobile subscriptions per 100 people in selected Pacific island economies, 2000-2012	39
2.7	Energy self-sufficiency indices for selected ESCAP member States and associate	
	members, as projected for 2035	40
2.8	Subregional initiatives on power grids and markets projected for 2035	41
2.9	Road map for an Asian Energy Highway	44

FIGURES (continued)

		rage
2.10 2.11 3.1 3.2	Migrant workers deployed from selected Asian countries (2000, 2005, 2008 and 2010) Number of outbound internationally mobile students, 1999-2012 Example from the ASEAN Economic Scorecard, Competitive Economic Region (Pillar II) Percentage of compliance of legal frameworks for selected ESCAP countries (2008, 2011)	49 60
	TABLES	
1.1	Trends in intraregional merchandise trade of developing Asia and Pacific countries (2000, 2008 and 2012)	5
1.2	Intraregional and extraregional comprehensive trade costs (excluding tariff costs) in the Asian and Pacific region, 2006-2011	6
1.3	International tourism trends, 1990-2012	
3.1	Key elements of the ASEAN and APEC connectivity frameworks	

ABBREVIATIONS

ACSS ASEAN Community Statistical System

ADB Asian Development Bank

ADBI Asian Development Bank Institute
AEC ASEAN Economic Community

AEH Asian energy highway

AHSOM ASEAN Heads of Statistical Offices Meeting

AIF ASEAN Infrastructure Fund

AIIB Asian Infrastructure Investment Bank

APAIE Asia-Pacific Association for International Education

APEC Asia-Pacific Economic Cooperation
ASEAN Association of Southeast Asian Nations

ASEAN+3 ASEAN plus China, Japan and the Republic of Korea

ASW ASEAN Single Window Initiative

BIMSTEC Bay of Bengal Initiative for Multi-Sectoral Technical and Economic

Cooperation

BRICS Brazil, Russian Federation, India, China and South Africa

CAREC Central Asia Regional Economic Cooperation

CLMV Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam

CO₂ carbon dioxide

ECO Economic Cooperation Organisation

ESCAP Economic and Social Commission for Asia and the Pacific

EU European Union

EURASEC Eurasian Economic Community

FATS Framework for Action on Transport Services

FDI foreign direct investment

G20 Group of Twenty

GDP gross domestic product GMS Greater Mekong Subregion GPS Global Positioning System

GW gigawatt

HVDC high-voltage direct current ICD inland container depot ICP integrated check posts

ICT information and communications technology

IEA International Energy Agency
IFC International Finance Corporation
ILO International Labour Organization
IMF International Monetary Fund

IP. Internet protocol

IRU International Road Transport Union

IT information technology

ITU International Telecommunication Union

LDCs least developed countries

LLDCs landlocked developing countries

LNG liquefied natural gas

MDGs Millennium Development Goals

ABBREVIATIONS (continued)

OECD Organisation for Economic Co-operation and Development

PAA Pan Asian E-commerce Alliance

PIF Pacific Islands Forum
PPP purchasing power parity
PPPs public-private partnerships

RCEP Regional Comprehensive Economic Partnership

Rio+20 United Nations Conference on Sustainable Development

SAARC South Asian Association for Regional Cooperation

SAFTA South Asian Free Trade Agreement

SASEC South Asia Subregional Economic Cooperation

SCO Shanghai Cooperation Organisation
SIDS small island developing States
SPC Secretariat of the Pacific Community

TAR Trans-Asian Railway

TASIM Trans-Eurasian Information Superhighway
TPP Trans-Pacific Partnership Agreement
UNDP United Nations Development Programme

UNECE United Nations Economic Commission for Europe

UNESCO United Nations Educational, Scientific and Cultural Organization

UNNExT United Nations Network of Experts

UNWTO United Nations World Tourism Organization

US\$ United States dollar
WCF World Chamber Federation
WHO World Health Organization
WTO World Trade Organization

EXECUTIVE SUMMARY

The role of regional connectivity in supporting economic growth and development

Over the past 50 years, the Asia-Pacific region has experienced unprecedented economic growth. That growth, along with better standards of education and health, has contributed to dramatic falls in poverty. However, the region's growing prosperity has not been shared equally, and there are clear signs of rising income inequality, both within and between countries. Inequality is also becoming more pronounced in other ways, in terms of access to transport, information and communications technology (ICT) and energy resources, for example.

The region's recent economic growth has been driven largely by international trade, foreign direct investment and the emergence of global and regional production networks, as well as global value chains. These drivers, in turn, were facilitated by the progressive liberalization of trade, expansion of the maritime tran port sector and diffusion of information and communications technologies and the Internet. These processes enabled multinational companies and smaller producers to connect with each other and develop new types of production and distribution networks. Meanwhile, Governments have supported these processes by investing in infrastructure and human capital development.

Enhanced connectivity has therefore played an influential role in shaping regional integration in Asia and the Pacific. Clearly, the contribution of "hard", or physical, infrastructure networks to economic and social development has depended on "soft" infrastructure, including the policy, legal, regulatory and institutional frameworks in which they are located. In the current study, regional connectivity is regarded as the level and effectiveness of regional networks to facilitate flows of goods, services, people and knowledge. This extends the traditional focus of public policies beyond either physical or non-physical parameters to encompass both dimensions.

Into the future, trade and transport connectivity within the region will continue to be important, particularly as countries look towards regional markets to counterbalance the slowdown in the global economy. At the same time, new drivers of growth are expected to shape future patterns of economic and social development in the region, and with them, other types of regional networks will become increasingly important. Given that the effectiveness of each network is increasingly dependent on the connectivity of other networks, it is clear that any analysis of regional connectivity can no longer be confined to one or other type of network.

Key drivers shaping the future of regional connectivity

Trade and transport connectivity remains a priority: The recent economic slowdown has exposed the region's vulnerability to fluctuations in the global economy and has shifted attention to domestic and regional markets as a means of stimulating growth and raising living standards. Despite significant investment in transport infrastructure at the national level, however, cross-border and regional land transport infrastructure networks remain underutilized for international trade. In addition to increasing investment in "hard" infrastructure, countries in the region can improve the "soft" infrastructure underpinning trade and transport, as well as implement other means of reducing logistics costs. In particular, countries can capitalize on various technological advances – which requires trade and transport connectivity to be pursued in conjunction with other forms of connectivity, such as information and communications technology (ICT).

ICT as an enabler and driver of growth: The Internet and mobile communications connectivity will continue to radically transform ways in which businesses operate and people interact, as they drive productivity and efficiency improvements in almost every sector of the economy. Increased ICT connectivity is also opening doors on knowledge generation and sharing, particularly for people living in remote or rural areas. Instant communications will be increasingly important in determining the efficiency of trade, including financial services, information and data management services and transport and logistics services.

Growth in trade in services: The Asian and Pacific region has become an important player in commercial services exports, broadly categorized as transportation, travel and other commercial services, as reflected in its growing share of world exports of commercial services. Tourism in particular has been expanding rapidly, with the region capturing nearly one quarter of total global tourist arrivals in 2013. As these sevice sectors will rely more and more on access to fast and reliable Internet and telecommunications systems into the future, they offer alternative sources of growth for countries which are physically located away from regional production and consumption centres.

Energy connectivity and security: The region's recent economic growth and rising affluence has resulted in a growing demand for energy resources and with that expanding demand, higher levels of greenhouse gas emissions. The region accounted for more than half the global total of such emissions in 2010. The Asia-Pacific region as a whole is well endowed with energy resources, but they are distributed unevenly. Access to clean energy also varies widely from country to country and even within countries. Against the backdrop of rising fuel prices, countries need to consider new forms of energy cooperation which will help balance the gaps in supply and demand across countries.

Responding to population dynamics: The Asia-Pacific region is undergoing population change of a ma nitude and pace never before witnessed in human history. Although the size of its population has almost tripled in 60 years, nearly all countries in the region are now experiencing population ageing, albeit at different paces. As such, the region has countries with both ageing and shrinking populations, as well as countries with large populations of young people. Meanwhile, improved access to transport and inform tion has led to greater cross-border mobility; the region is now host to 59 million international migrants, or one quarter of the world's total stock of migrants. The implications of these trends are significant for the future social and economic development of the region, and point to the urgent need for effective policy responses.

Transitioning to knowledge-based economies: In order to diversify their economies and move up value chains, countries need people who have the skills and knowledge, as well as the innovative spirit, to develop both new products and processes. Strengthening knowledge networks for tertiary education, knowledge generation and knowledge sharing can help build the region's knowledge and skills base. Sharing of knowledge and research between universities, researchers and industry also contributes to the development of "high-tech" clusters in some industries, such as those developing computer software. Recent economic history shows that "knowledge clusters" initially emerged in lower-cost countries with good availability of skilled labour that responded quickly to the global demand for standardized, less firm-specific knowledge services. By strengthening regional knowledge-sharing networks, more countries could participate in different types of clusters.

Regional strategies for enhancing regional connectivity

The issue for the Asia and Pacific region is not so much whether connectivity will increase across countries, but what forms those connections will take. While countries in the region have made significant progress in improving their domestic connectivity, the future of regional connectivity depends on how closely they can work together to strengthen networks in four critical areas: trade and transport connectivity; ICT connectivity; energy connectivity and people-to-people connectivity.

Regional connectivity is multifaceted, with the connectivity of one sector influenced by the connectivity of others. This gives rise to new challenges in terms of the need for greater coordination, not only across

borders but also across sectors involving all stakeholders, including business and trade associations, social networks and civil society organizations. At the same time, it creates new opportunities for different elements to be combined in ways which will enhance the quality of these networks.

As they are still in the development stage, countries in the Asian and Pacific region have the chance to develop regional networks in an integrated and coordinated manner, which can reduce the costs and spread the benefits to a wider group of countries. Regional approaches can help countries look beyond their national boundaries and consider the "public goods" aspects of networks, while at the same time, help to identify and harness synergies across sectors. In this context, countries in the region need to put into place regional strategies for developing critical regional networks.

Trade and transport connectivity: While there are wide variations across countries in the quality of infrastructure, the region is already relatively well connected in terms of its transport infrastructure networks. However, its transport networks are not fully operationalized or integrated, leading to underutilization of networks, especially railways. Non-physical barriers at borders also persist, increasing trade and transport costs and delaying the movement of goods and people. By investing in intermodal facilities, such as dry ports, as well as in better physical linkages between different modes, Governments could increase transport options for shippers and traders. Regional intermodal transport networks will play a particularly important role in trade from landlocked developing countries and small island developing States, supporting these countries in participating more actively in international and regional trade. Greater use of ICT applications for trade and transport facilitation, both behind and at borders, would also improve the efficiency of freight movements and pave the way for the development of paperless trade and e-logistics.

ICT connectivity: While ICT connectivity is rapidly improving in the region, there is still a large "digital divide" both within and between countries. This is partly due to the region's reliance on submarine cables and lack of sufficient terrestrial fibre-optic cables. A cohesive "meshed" regional network, combining terrestrial with submarine optical fibre, would provide cost-effective broadband access on both an intraregional and intercontinental basis as it would link Asia to Europe. Such an "Asia-Pacific information superhighway" should be based on a set of common principles; its development would require the active involvement of private sector partners and international organizations. There are also significant opportunities for the "co-habitation" of ICT and transport infrastructure networks. Already, fibre-optic cables are being laid along some national highway and railway systems. Such synergistic approaches can reduce the cost of developing a regional ICT network and facilitate maintenance of the network.

Energy connectivity: With recent advances in high-voltage transmission technology, it is now possible to envisage a regional energy network, which could reduce the gap in supply and demand by transferring power from energy-rich or lower-cost power countries to energy-poor or high-cost power countries. An "Asian energy highway" network could combine different types of energy transmission networks, including pipelines and cross-border power grids. The most efficient may be the development of a regional electricity power grid, connected to a regional electricity market. A regional grid could also link renewable energy sources to a large enough market to justify investments, thereby enhancing the viability of such projects.

People-to-people connectivity: Increased mobility across borders, as well as greater ICT connectivity, would open up vast new opportunities for international labour migration but also raise new challenges. Migrant origin and destination countries need to work together to take advantage of such labour flows and mitigate the risks which may accompany greater labour mobility. Meanwhile, improvements in ICT connectivity and transport links are making it easier for people to study abroad or enroll in distance learning programmes, as well as contribute to the growth of business and civil society networks. By promoting people-to-people connectivity, Governments could help their people access the region's vast knowledge resources, as well as foster better understanding about the region's diverse cultures and value systems.

Strengthening institutional coordination and regional cooperation

The private sector has been leading the economic integration of the region, as the individuals, institutions and companies compete to boost productivity, relocate production activities to take advantage of cost differentials between countries, and try to gain access to major markets in the region. Ultimately, however, the main driving force behind regional connectivity is the political will of national Governments. To support the further integration of the region, therefore, Governments must take the lead in establishing robust institutional frameworks to plan and implement the regional connectivity agenda.

Strengthening institutional responses to regional connectivity

The increasingly complex nature of regional networks requires Governments to reach across sectoral boundaries to develop cross-sectoral policies, both at the national and regional levels. To achieve this, they will need to strengthen institutional mechanisms and make better use of existing forums, such as those provided by intergovernmental organizations. The Asian and Pacific region is home to a wide variety of intergovernmental organizations, many of which are already implementing various initiatives relating to regional connectivity. With the emergence of so many subregional initiatives, policy coordination among these organizations has become an urgent challenge. In this regard, regional institutions such as ESCAP have an important role to play in supporting and coordinating subregional integration efforts, as well as in serving as a vital link between subregional and global initiatives.

The experience of ESCAP shows that there are a variety of mechanisms, ranging from formal intergovernmental agreements and international conventions, to voluntary commitments by Governments which can be used to move the region's connectivity agenda at the regional level. Given the significant role played by the private sector and civil society in shaping the region's economic and social development, Governments also need to explore ways to reach out and involve other stakeholders in the development and implementation of such mechanisms.

Statistical standards for strengthened accountability and better policymaking

Official statistics help Governments to track progress and ensure that their decisions are based on evidence. They also enable Governments to develop a shared understanding of trends, issues and bottlenecks, which is fundamental for building consensus on cross-border issues, such as trade, labour mobility, immigration, educational qualifications, transport and tourism. However, in order to be comparable across countries, over time and across different data sources, statistics must adhere to internationally agreed standards.

To move forward the regional connectivity agenda, national Governments are strongly encouraged to adopt global statistical standards and build their capacities for collecting and disseminating their official statistics. They should also work more closely together through established forums, such as the United Nations Statistical Commission and the ESCAP Committee on Statistics, to define the type of statistics needed by policymakers, as well as identify new and innovative sources for these data.

Regional solutions for financing regional infrastructure networks

Infrastructure development invariably involves high capital costs, with benefits accruing over the longer run. The pace of infrastructure development is therefore progressing unevenly across the region and tends to be directed towards satisfying domestic needs. Yet the benefits of regional infrastructure networks extend over and beyond national borders, pointing to the need to reconsider the networks as a type of "regional public good". Such approaches can target the "weakest links" of these networks which affect the efficiency and coherence of the whole network, while at the same time enhancing the connectivity of the disadvantaged countries.

Countries should therefore explore regional mechanisms to pool the region's financial resources, such as a regional infrastructure fund, a regional project preparatory facility, or an "Asian multi-donor platform". There is also scope for greater private involvement in financing infrastructure projects, but most countries still lack the appropriate policy frameworks to develop and manage public-private partnership projects effectively. In this regard, Governments can learn from each other's experiences in such partnerships, as well as how to manage and maintain their infrastructure networks more effectively.

Next steps in strengthening regional connectivity

This report looks at the ways in which better regional connectivity can contribute to the sustainable and inclusive development of the Asian and Pacific region. It finds that regional connectivity is inherently multifaceted, and that the benefits of this connectivity may be enhanced by combining different elements. Moreover, it suggests that networks are likely to become more integrated and interdependent as they evolve. Governments therefore have to develop cross-sectoral policies on connectivity, at national, subregional and regional levels.

Into the future, connectivity will certainly increase across countries. But what forms will those connections take and who will they benefit? The aim should be to ensure that they open new opportunities for all, especially for the region's disadvantaged countries – the least developed countries, the landlocked developing countries, and the small island developing States.

These countries may wish to consider how to use their current endowments to build up their capacities in those industries which have the potential to grow. By taking advantage of new technologies, disadvantaged countries can become more integrated into the global economy. In particular, they should make greater use of communications technology, and particularly the Internet, to develop commercial services, such as transport, telecommunications, and financing, as these sectors in turn can support trade and manufacturing. Meanwhile, all countries in the region can support the disadvantaged countries by enhancing people-to-people connectivity – for example, by encouraging more interactions between students and workers.

As globalization continues, the region's future will depend on how countries work together. Developing and managing regional networks therefore requires cross-country consensus. Governments need to further study and refine the strategies outlined in this study, and agree on the most appropriate sequencing of actions. And to better respond to the rapid evolution of these networks, national Governments and international organizations alike will have to strengthen institutional coordination. This should extend to people-to-people networks involving academia, the private sector and civil society – which can influence the direction and effectiveness of intergovernmental cooperation.

Ultimately, national Governments must take the lead in forging regional connectivity, both by making the necessary changes in their national policies, as well as by actively participating in regional initiatives on connectivity. ESCAP can support their efforts by providing a neutral platform for frank and informed discussions among relevant stakeholders. In this regard, the multi-sectoral Expert Working Groups being established in accordance with the 2013 Ministerial Declaration on Regional Economic Cooperation and Integration in Asia and the Pacific can help Governments to identify the best approaches for implementing these regional strategies.