Telecommunications Development in Asia

Edited by John Ure

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About the Authors

John Ure is Associate Professor and Director of the Telecommunications Research Project which he founded in 1993 at the University of Hong Kong. He now lives and works in Singapore as co-director of the TRPC, the consulting and services arm of the TRP- www.trpc.com.hk. He is the editor and co-author of *Telecommunications in Asia: Policy, Planning and Development* (Hong Kong University Press, 1995 and 1997), and a co-author in *Handbook of New Media* (Lievrouw and Livingston, eds., SAGE, 2002). He holds bachelor, master and doctoral degrees in economics from Hull University, Birkbeck College, University of London and the Polytechnic of East London/CNAA. Since moving to Hong Kong in 1989 he has published and consulted extensively in areas of telecoms economics, policy and regulatory issues. His advocacy of a 3G royalty-based auction became Hong Kong policy in 2001. His consultancy work includes major country studies, thematic studies, such as universal service, interconnection, spectrum management, and feasibility studies for the World Bank, the ITU, various UN agencies, the European Commission and regulators and consumer groups in the Asia-Pacific region, and extending to Central and North Asia and North Africa, as well as for the private sector.

Martin Cave is Professor and Director of the Centre for Management under Regulation, Warwick Business School. He holds bachelor, master and doctoral degrees from Oxford University. Until 2001 he was Professor of Economics at Brunel University. He specializes in regulatory economics, especially of the communications sector. He is the co-author of *Understanding Regulation* (1999) and of *Essentials of Modern Spectrum Management* (2007), co-editor of the *Handbook of Telecommunications Economics Vol. 1* (2002) and *Vol. 2* (2005) and of *Digital Broadcasting* (2006), co-author of a web-based guide to spectrum management prepared for the World Bank and the ITU, and author of many journal articles. His consulting work includes studies on broadband and international roaming for the European Commission, advisory work for regulatory agencies across Europe and in Asia, and two studies on spectrum management for

the Chancellor of the Exchequer in the UK. From 1996–2002 he was a member of the UK Competition Commission and in 2006 was appointed special adviser to the European Commissioner for Information Society and Broadcasting. He is also the president of ThinkTel, an international think tank on telecommunications based in Milan.

Robert W. Crandall is a Senior Fellow in the Economic Studies Program of the Brookings Institution and a Founder of Criterion Economics, a Washington, DC, consulting firm. He holds a master's degree and a Ph.D. in economics from Northwestern University. His research interests embrace telecommunications and cable TV regulation, trade and environmental policy and industrial economics and the changing regional structure of the US economy. His current research focus is on competition in the telecommunications sector and the development of broadband services. His recent books include *Competition and Chaos: U.S. Telecommunications since the 1996 Act* (Brookings, 2005), co-edited with James Alleman *Broadband: Should We Regulate High-Speed Internet Access?* (Brookings, 2002), co-authored with Leonard Waverman *Who Pays for "Universal Service"?* (Brookings, 2000). and *Talk Is Cheap: The Promise of Regulatory Reform in North American Telecommunications.* He was a Johnson Research Fellow at the Brookings Institution and has taught economics at Northwestern University, MIT, the University of Maryland, and the George Washington University, and the Stanford in Washington program. Prior to assuming his current position at Brookings, he served as assistant, acting, and deputy director for the Council on Wage and Price Stability.

Terence Graham is a researcher with the Telecommunications Research Project at the University of Hong Kong. He graduated from Swarthmore College in Pennsylvania and in 1996 helped establish the United States Information Technology Office (USITO) in Beijing, China. In 2002, while a fellow at the Institute for the Future (IFTF), Menlo Park, California, he contributed several chapters to the *China Five Year Forecast* published by the Centre for the Future of China (CFC), a collaboration between the IFTF and Peking University, Beijing. His other publications include 'Voice over Internet Telephony; Voice over Broadband' *Info,* v.7.4, co-authored in 2004 with John Ure, Director of the TRP, many contributions to the *Background Briefing Papers* of the Telecoms InfoTechnology Forum (TIF) of the TRP — see http://www.trp.hku.hk/tif/home.php — and research support for the papers of the TRPC (TRP Corporate) including *Mobile Payments in Asia Pacific* and *The Video Games Market in China: Moving Online*, jointly published by the TRPC and KPMG. He is fluent in Mandarin Chinese, French and German.

Nick Ingelbrecht is Research Director for Gartner Inc., an IT research and advisory services company. He is currently based in Perth, Australia, and has worked in and researched the telecom and Internet sectors for more than 20 years, and was a co-author of *Telecommunications in Asia: Policy, Planning and Development* (Hong Kong University Press, 1995 and 1997). He holds a bachelor's degree from the University of Hull in England, and has lectured on e-commerce policy at Murdoch University, Western Australia, where he is researching his doctoral thesis on innovation in mobile telecommunications. He has operated as a research analyst and consultant for many of the major research and consulting companies, was previously editor of the *Financial Times'* Asia Pacific Telecoms Analyst and has been involved in numerous regional telecom research projects, licence bids and market studies for industry clients. He is an associate of the Telecommunications Research Project at Hong Kong University and has represented Hong Kong at the Pacific Economic Co-operation Council.

Peter Lovelock is co-Director of the TRPC, the consulting and services arm of the Telecommunications Research Project, founded in 1993 at the University of Hong Kong. He lives and works in Singapore from where he has established a regional consulting operation with offices in China, working with emerging IT companies in China, India and Vietnam. He has a bachelor degree in economics from the University of Sydney, and a Ph.D. from the University of Hong Kong, the dissertation subject being telecoms and information infrastructure policy making in East Asia, with particular focus on China. He is a co-author of *Telecommunications in Asia: Policy, Planning and Development* (Hong Kong University Press, 1995 and 1997). From 1997 to 1998 he worked as a policy analyst at the ITU in Geneva. Between 1999 and 2004, he built and ran China's leading IT research consultancy, MFC Insight. Headquartered in Beijing, Insight provided strategic guidance to international telecom and IT clients as well as to the Singapore government, to China's Ministry of Information Industry, and China's Informatization Leading Group. He has subsequently consulted for a wide range of companies on developments in China and India and has published and co-authored numerous research papers and book chapters.

William H. Melody is Managing Director, *Learning Initiatives on Reforms for Network Economies* (LIRNE.NET), www.lirne.net, and the *World Dialogue on Regulation for Network Economies* (WDR), www.regulateonline.org. He is the former Chief Economist of the Federal Communications Commission, USA and is currently Visiting Professor, Technical University of Denmark,

London School of Economics, University of Witwatersrand, South Africa, and Emeritus Professor, Delft University of Technology, Netherlands. In addition, he has held leading academic posts in Australia and Canada to promote ICT programme development. In April 2001, he was awarded the honorary degree of *doctor technices, honoris causa*, as recognition of "outstanding research contributions on the interaction between technology, economics and regulation in the area of communications, with emphasis on telecommunications" by the Technical University of Denmark, the highest honour the university can confer. He is the former editor of *Telecommunications Policy*, and policy review editor of *info*. He is also the editor and author of six chapters *Telecom Reform: Principles, Policies and Regulatory Practices* (Technical University of Denmark, 1997) which has been used in regulatory training and university programmes in more than 100 countries.

Jenny Wan is Research Officer at the Telecommunications Research Project of the University of Hong Kong. She holds a bachelor and a doctoral degree from the University of Hong Kong. Her Ph.D. thesis was a study of customer loyalty and customer satisfaction in the mobile cellular phone market in Hong Kong. She has over 10 years experience in the planning and execution of various telecommunication research projects and in conducting qualitative and quantitative analyses. Research projects undertaken include residential and business customer surveys on telecommunications services in Hong Kong, computer and internet usage in Hong Kong households, assessment of e-business development services for SMEs in selected ASEAN countries and southern China, EU-China trade in the telecom services and telecom equipment sectors. Before joining the Telecommunication Research Project, she was a research and development executive for a management consultancy company conducting large scale surveys for corporate clients and she began her career with a multinational office automation company.

Björn Wellenius is an independent consultant on telecommunications policy, regulation, and economics in emerging markets. He advises the World Bank Group (Washington, DC), law and consulting firms in Europe and North America, and governments and regulatory authorities. Until 1999 he was the World Bank's Telecommunications Adviser. Current interests include spectrum management reform, regulatory capacity building, public and private sector roles in market failures, and the political economy of sectoral change. A paper on *Managing the Radio Spectrum: Framework for Reform in Developing Countries* (2007) discusses how reliance on spectrum markets can accelerate the wireless revolution in poor

countries. Other publications have included five books on telecommunications and economic development, book chapters on sector reform and regulation, and papers on universal service, rural infrastructure financing, competition policy, and reform strategy. *Telecommunications and Economic Development* (1994, 1983), translated into Japanese, Chinese, and Spanish, was for two decades the standard reference book on this subject. An Adjunct Faculty at Michigan State University, he lectures occasionally at Columbia, Georgetown, and other universities. Before joining the World Bank, he was Professor of Telecommunications at Universidad de Chile. He has a Ph.D. in Physical Sciences from the University of Essex, England and an engineering degree from Universidad de Chile.

Introduction

This book is a sequel to *Telecommunications in Asia: Policy, Planning and Development* published in 1995 by Hong Kong University Press, but it covers different ground in at least four major respects.

First, in addition to the countries covered in the 1995 volume, this book includes India and Japan. China and India are compared and contrasted directly as the emerging giants of the region. The inclusion of Japan completes the list of high-income developed economies, alongside Hong Kong and Macau (both Special Administrative Regions of China), Singapore, South Korea and Taiwan. ASEAN countries (ex-Singapore) are grouped as original members Indonesia, Malaysia and Brunei, Thailand and the Philippines, and the new members of IndoChina, Cambodia, Laos, Myanmar (Burma) and Vietnam. Not covered are South Asia apart from India, North Korea and Mongolia in North Asia, nor Central Asia.[1]

Second, the 1995 book, as its title suggests, was reflecting or anticipating major shifts in telecom policies that would open up markets, and it argued that in general these shifts were not primarily a reaction to growing neo-liberalism in a global economy, but in many cases were the product of national development strategies, which themselves were the political products of what might be termed 'developmentalist nationalism', that could be traced back earlier for at least a decade or more. For this reason the book also argued that it was wrong to see the developing countries of the Asia Pacific region as passive receivers of foreign investment in networks and services. Such a misguided vision led astray many foreign strategic investors in the gold rush era before the Asian financial crisis of 1997 as too often they had to lobby, and in some cases bribe, their way

into Asian markets only to find country/political, policy/regulatory and partnership/management risk all too daunting before currency risk finished them off.[2]

The current book, as its title suggests — *Telecommunications Development in Asia* — takes as its starting point the development that has occurred as a result of those previous shifts in policy, and examines them against accounts of international 'best practice' and global trends (Part I), and within the economic, industrial and political environments in which these developments are taking place (Part II). It should be noted that while 'best practice' is an ideal to be aimed at, for example, liberal licensing policies, transparent regulation and interconnection of competing networks at cost-oriented charges, in reality policy makers and regulators are confronted with numerous constraints. For example, in many countries there may be a shortage of management skills, equipment and financial resources, on the one hand, but on the other hand, no shortage of political interference and influence peddling. Under such circumstances there is often a sub-optimal 'muddle through' approach which to outside observers can seem frustratingly inefficient and slow. From a policy perspective, the issue is therefore not so much a theoretical 'best practice' but rather a locally workable 'good practice' which may be judged by the extent to which local policies create a momentum that can edge a country closer to 'best practice'.[3]

Third, this book involves guest authors. The 1995 book was the result of a collaboration between several authors, and this book likewise, but in addition four chapters which take a more theoretical perspective and examine trends in 'best practice' have been introduced in Part I, each written by an internationally recognized scholar in their field. The purpose of these chapters is to provide the insights that can only come from the guidance of a clear conceptual framework, and since the focus of Part II is upon the developments that have and are taking place, the question arises how should they be judged? What lens can be brought to bear upon these countries in their efforts to extend a modern telecommunications system to all their citizens?

It needs to be stressed very strongly that not every theorist or field practitioner will agree with the approaches adopted by the guest authors. That does not matter, because any policy making and regulatory process needs to be guided by some conceptual framework, and it is always open to theoretical, political and social argument which framework is the most appropriate. For example how should the concept of 'sustainability' of universal service projects, such as telecentres, be defined: in narrow financial terms, in wider economic terms or as part of the social infrastructure like health and education? Policy advisors will differ in

their philosophies and predilections, but they can agree about the internal logic of an argument. Of course there are some frameworks that defy all good economic and social logic, for example, the framework that guides the military rulers in Burma (Myanmar) may be widely regarded as such. Clarity of thinking serves clarity of purpose and the chapters of Part I serve this end. Included also in Part I is a chapter on trends in the telecom vendor equipment industry. This chapter corresponds to a similar chapter in the 1995 book, but is included in Part I because trends such as all-IP Next Generation Networks that underpin the possibilities of network and services convergence across the telecom, new media and new technologies sectors are genuinely global and in that sense are common reference points for all country policy, regulatory and market developments.

Fourth, the book simultaneously recognizes the enormous differences between countries, the particularities that mediate global trends in their own ways, and seeks to provide a basis for comparisons that are more specific than simply acknowledging that all countries face the same global pressures — such as the impact of new technologies — and do experience similar pressure points — such as trade negotiations. For this reason the country chapters are organized along the same thematic lines. They each start with an historical overview. The more developed the economy, the more known its policies and the more sophisticated its regulatory structure then in general the shorter the historical overview. On the contrary, the introduction to a country such as Burma (Myanmar) is rather lengthy. The reason for this is not so much that the reader is possibly less informed about the country, although that will be true in many cases, but to investigate in a little bit of depth what are the discernible dynamics of the country and in particular of the thinking of its policy makers. So for example in the case of Burma (Myanmar) it is easy to dismiss the ruling junta as a mafia in uniform, but is that all there is to it? That alone cannot tell us much about how policy making takes place, what drives it, and whether, for example, political influence and material incentives would be necessary conditions for foreign companies to enter the market, and if so would they be sufficient conditions? The answer to that question requires a better understanding, and this book attempts to provide some alternative perspectives.

The rest of each country chapter is organized under the headings 'policy and regulation', 'licensing', 'interconnection', 'tariffs', 'scarce resources', 'universal service and the digital divide' and 'looking forward'.[4] In each case the reader can judge country performance against 'good practice' in three ways: by reference to the 'best practice' as outlined by the authors of the chapters in Part I, by comparison with other countries at a comparable level of development that are covered in this book, and

by the examination presented in the country chapter itself. Each of these headings relates to a crucial development issue because they refer to issues that affect the ability of new entrants to compete and attract investment. This is even true of the universal service issue because underserved areas in developing countries are proving very clearly the demand for telecom access and services is usually strong. The wildfire spread of pre-paid mobile phones is one good example. For scholars of policy making and regulation, for strategic or financial investors looking at the region, and for researchers of regional trends in telecommunications this chapter structure should prove helpful.

The 1995 book was followed in 1997 by an edition with an Afterword that acknowledged that in the first edition the Internet had been overlooked as one of major new developments and drivers impacting upon the industry. Another major development at that time was the Basic Agreement on Telecommunications, signed in 1997 by 69 of the WTO's 148 Member States and coming into force February, 1998. The WTO agreement did not so much *create* the momentum towards liberalization as *sustain* it through codification, thus providing an official benchmarking and reference point for other countries planning to open their markets. For example, the BTA Reference Paper proposes the creation of independent telecom regulators,[5] of which in 1990 there were only 13, but by 2002 the number had risen to 132.[6]

For much of the 1990s, most of the established telecommunications community (the so-called 'Bell-Heads') were in conflict with the Internet community (the so-called 'Net-Heads') arguing the technology was incapable of supporting guaranteed quality of service levels, but in reality all too aware of the threat IP posed by lowering the barriers to entry. In practice, many regulators and policy makers were driven to relax their restrictions on the use of the Internet and on IP-based services by two considerations: first, because it was unstoppable. Among the pioneers of IP for telecommunications were callback companies, using the Internet to avoid high international tariffs. In some jurisdictions, such as Mainland China, callback of any kind was prohibited, yet maybe up to one-third of traffic from China by the mid-late 1990s was callback. In other jurisdictions such as Singapore advertising callback was prohibited although there were no prosecutions for using it, and in others, such as Hong Kong, it was positively encouraged by the regulator to bring greater competition to the market. Before long even the licensed national carriers were using IP to route calls so they could match the lower tariffs of callback companies.

The second consideration was that the use of the Internet and access to the World Wide Web was fast becoming a measure of a country's attraction as an international centre for business.[7] The equivalent of the impact of IP today may prove to be P2P (peer-to-peer) software on the

Web that allows users to file-swap. P2P software is currently in its infancy, but it has already progressed from being used to pirate real-time TV programmes, movies and music CDs and DVDs — and therefore by-pass retail prices — to provide over-the-Internet real time audio and video communications and to help build online community sites. Soon P2P will become a tool for sophisticated enterprise applications and commercial distribution channels in a telecommunications world in which convergence is beginning to become real. Among the early manifestations of convergence are TV and telecoms, IPTV in the wired world and mobile TV in the wireless world, and the convergence of fixed and mobile services (FMC) where the same handset can be used on a fixed line network in the home or office, on a 3G network on the streets and connecting to a WiFi (Wireless Fidelity) access point in a coffee shop or airport. Some vendors and telecom companies, looking forward to the revenue possibilities of providing content services across a FMC platform (using an all IP-NGN network) refer to this as broadband wireless convergence (BWC). FMC can be thought of as convergence at the service level, BWC at the network level.

But at this point there needs to be a caveat. The 1995 book drew a distinction between convergence of technologies and the synergies of business: just because different types of traffic can go down the same pipe does not mean that business synergies exist. For example, the core competencies of a telecom company are to operate a network, deliver traffic and bill for it, and do not lie in media content creation or in the operations of enterprise applications. The history of telecom companies that overlooked this basic point is often one of failure.[8]

Ex-post regulation and competition policy are trends for the future. They include many emerging technologies, which may or may not prove enduring, some of which will have an impact by cutting the cost of network operations, for example 3G,[9] and some by broadening the range and quality of services that can be offered, for example IP Multimedia Subsystem or IMS which is the middle layer of an NGN that allows operators to manage any IP-supported application or service. What is an important issue for this book is whether policies and regulations are flexible enough to accommodate and facilitate these changes resulting in some form of 'convergence'. Until recently, the dominance of the incumbent has tended to persuade regulators to restrict or place constraints upon their ability to freely introduce new pricing bundles or new service bundles for fear they will exercise 'significant market power' (SMP) and undermine competition. This remains a threat in many markets where the incumbent is often best placed to take advantage of convergence to offer 'triple play' and 'quadruple play'. However, this is uncharted business and technology

territory where 'risk' and 'return' replace the certainties of the past, and this is not an easy place for regulators. For these reasons, we are seeing in the more developed economies a trend away from *ex ante* and towards *ex post* regulation, for example in Hong Kong. At the same time there is evidence of a growing interest in subjecting the telecoms sector to the general surveillance of competition law and treating it less as a special case to be subjected to economic regulation. Again, Hong Kong is an example of this.

Due to the dynamic nature of the telecoms industry, the need for flexible and evolving policy and regulatory approaches, and trends towards convergence of telecom, IT and new media services, and the networks and devices that support them, any book about the industry is always going to be 'work in progress'. What the 1995 book aimed to do, and what this book aims to do, is to present the general dynamics within a framework of country environments to identify the mediating local factors, and in this way maintain the relevance of the text for some years to come despite changes in particular technologies, markets and regulation. Looking back a decade to the 1995 book it is gratifying that much of what was written then still helps to frame subsequent developments in a clear perspective, but looking forward it is time to assess how far the policy, planning and development programmes of the 1990s have successfully translated into relevant policies, regulatory frameworks and market achievements for the 2000s.

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